March 1, 2023

Brian Jankauskas, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau A
625 Broadway
12th Floor
Albany, NY 12233-7015

Subject: **2022 Groundwater and Surface Water Monitoring Report**
Former Ciba-Geigy/Hercules Site, Glens Falls, NY
(Site No. 557011; EPA ID NYD002069748)

Dear Mr. Jankauskas:

On behalf of Hercules LLC ("Hercules") (a wholly-owned subsidiary of Ashland Inc.) and CIBA Corporation ("CIBA") (previously acquired by BASF Corporation), EHS Support LLC is submitting the enclosed 2022 *Groundwater and Surface Water Monitoring Report* for the Main Plant Site (MPS) and Pretreatment Plant (PTP) at the former Ciba-Geigy Corporation pigments manufacturing facility ("Site") located at 89 Lower Warren Street in the Town of Queensbury near Glens Falls, New York.

In March 2021, Hercules and CIBA submitted a revised *Groundwater and Surface Water Monitoring Plan* (GSMP) and *Quality Assurance Project Plan (QAPP)* for the Site. The revised GSMP provided a proposed approach for groundwater and surface water sampling at the MPS and PTP in the fall and additional focused groundwater sampling at the MPS in the spring of each year. NYSDEC approved the GSMP and QAPP in a letter dated August 24, 2021. If you have questions or would like to discuss this report, please contact me at 608-558-6795.

I, Cassie R. Johnson, P.E., certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this *Groundwater and Surface Water Monitoring Report* dated March 2023 for the former Ciba-Geigy/Hercules Site located in Queensbury, New York, was prepared in accordance with all applicable statutes and regulations and with DER *Technical Guidance for Site Investigation and Remediation* (DER-10).

Regards,

Cassie R. Johnson, P.E.
Wisconsin Professional Engineer No. E-39526
EHS Support LLC

cc: Eamonn O'Neil, New York State Department of Health
Jim Vondracek, Ashland Inc.
Steve Havlik, BASF Corporation
Laura McMahon, BASF Corporation
Kristin VanLandingham, EHS Support LLC
Jim Breza, EHS Support LLC
Elena Dadukova, EHS Support LLC
Cameron Dixon, EHS Support LLC
Bob O'Neill, Brown & Caldwell
Jeff Caputi, Brown & Caldwell
Katie Angel, Antea Group

Enclosure

Enclosure

2022 Groundwater and Surface Water Monitoring Report

Former Ciba-Geigy/
Hercules Site
Glens Falls, NY

Prepared for:

HERCULES

Prepared by:

EHS Support

March 2023

Certification Page – Permittee, Hercules LLC

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

James Vondracek

Name/Title

3/1/2023

Date

Certification Page – Permittee, BASF Corporation

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

S K

Name/Title BASF SR. REMEDIATION PROJECT MANAGER

3/1/2023

Date

Certification Page

I, Kristin A. VanLandingham, P.E., certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kristin A. VanLandingham, P.E.
NYS Professional Engineer License No. 089610

03-01-2023
Date



Table of Contents

1 Introduction 1

2 Environmental Setting 3

2.1 Site Geology 3
2.2 Site Hydrogeology 3

3 Groundwater and Surface Water Sampling Field Activities 5

3.1 Water Level Gauging 5
3.2 Groundwater and Surface Water Sampling 5
3.2.1 Groundwater Sampling 5
3.2.2 Surface Water Sampling 6
3.3 Sample Laboratory Analysis 7
3.4 Quality Control Sampling and Analysis 7
3.5 Water Quality Standards and GWES Performance Criteria 8
3.6 Data Quality Review 8

4 Water Levels and Groundwater Hydraulics 10

5 Groundwater and Surface Water Sampling Results 11

5.1 Field-Monitored Water Quality Parameters 11
5.2 Surface Water Analytical Results and Comparison to Standards 11
5.3 Groundwater Analytical Results and Comparison to Standards 12
5.3.1 Overburden Groundwater 12
5.3.2 Shallow Bedrock Groundwater 13
5.3.3 Intermediate Bedrock Groundwater 13
5.3.4 Deep Bedrock Groundwater 14
5.3.5 Pretreatment Plant 14

6 References 16

List of Tables

Table 1 Sampling and Gauging Summary – Groundwater and Surface Water Monitoring
Table 2A Water Level Gauging and Purging Data Summary – May 2022
Table 2B Water Level Gauging and Purging Data Summary – Ocotber 2022
Table 3 Field-Monitored Parameters
Table 4 Laboratory Method Summary
Table 5 Groundwater Analytical Results – Chromium and Cyanide
Table 6 Groundwater Analytical Results – Dichlorobenzenes
Table 7 Surface Water Analytical Results
Table 8 Equipment Blank Analytical Results
Table 9 Surface Water Quality Criteria for Dissolved Chromium
Table 10 Historical Groundwater Sample Results for PTP Area – 1993 to 2017
Table 11 Mann-Kendall Calculations – Well MW-OB23

List of Figures

Figure 1 Groundwater Extraction System Components and Surface Water Sampling Locations
Figure 2 Hydro-Stratigraphic Units and Geologic Cross Section
Figure 3 Overburden Well Locations and Potentiometric Surface: October 2022
Figure 4 Shallow Bedrock Well Locations and Potentiometric Surface: October 2022
Figure 5 Intermediate Bedrock Well Locations and Bedrock Potentiometric Surface: October 2022
Figure 6 Deep Bedrock Well Locations and Potentiometric Surface: October 2022
Figure 7 Pretreatment Plant Area Sampling
Figure 8 Chromium Results – November 2021 through October 2022
Figure 9 Cyanide Results – November 2021 through October 2022
Figure 10 Monitoring Well Locations: MW-OB25, MW-OB26, MW-OB30, MW-OB34, AW-A11, AW-A14, AW-B4, EW-B5, and AW-C11
Figure 11 Chromium Concentration Plots: MW-OB30 (Overburden) and AW-A11 (Shallow Bedrock)
Figure 12 Chromium Concentration Plots: MW-OB25 (Overburden), AW-A14 (Shallow Bedrock), AW-B4 (Intermediate Bedrock), and AW-C11 (Deep Bedrock)
Figure 13 Chromium Concentration Plots: MW-OB26 (Overburden), MW-OB34 (Overburden), and EW-B5 (Intermediate Bedrock)
Figure 14 Cyanide Concentrations in Groundwater versus Time

List of Appendices

Appendix A Field Sampling Logs and Barometric Pressure Graph
Appendix B Laboratory Analytical Reports
Appendix C Tier II Validation Reports
Appendix D Historical Trends – MW-OB14 and AW-C11 (Antea, 2014)

Acronyms

µg/L	micrograms per liter
µm	micrometer
bgs	below ground surface
CGW	Groundwater Concentration Performance Criteria
DCB	dichlorobenzene
DER	Division of Environmental Remediation
DO	dissolved oxygen
ELAP	Environmental Laboratory Approval Program
GSMP	Groundwater and Surface Water Monitoring Plan
GSMR	Groundwater and Surface Water Monitoring Report
GWES	groundwater extraction system
MPS	Main Plant Site
MS/MSD	matrix spike/matrix spike duplicate
NGVD29	National Geodetic Vertical Datum of 1929
NTU	nephelometric turbidity units
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ORP	oxidation-reduction potential
PTP Area	Pretreatment Plant Area property
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
ROP	Remedy Optimization Plan
SM	Standard Method
SWQC	surface water quality criteria
TOGS	Technical and Operational Guidance Series
USEPA	United States Environmental Protection Agency

Trademarks, trade names, company, or product names referenced herein are used for identification purposes only and are the property of their respective owners.

Executive Summary

This *2022 Groundwater and Surface Water Monitoring Report* (GSMR) presents sampling data collected in May and October 2022 for the Main Plant Site (MPS) and the Pretreatment Plant Area property (PTP Area) at the former Ciba-Geigy Corporation pigments manufacturing facility located at 89 Lower Warren Street in Queensbury, New York, just east of the City of Glens Falls and adjacent to the Hudson River ("the Site"). EHS Support LLC ("EHS Support") is submitting this report to the New York State Department of Environmental Conservation (NYSDEC) on behalf of Hercules LLC ("Hercules," a wholly-owned subsidiary of Ashland Inc.) and CIBA Corporation ("CIBA", previously acquired by BASF Corporation) ("the Parties"). The Parties are the Site permittees and share responsibility for ongoing environmental activities.

Groundwater and surface water monitoring were performed in accordance with the sampling program presented in the *Groundwater and Surface Water Monitoring Plan (GSMP) and Quality Assurance Project Plan (QAPP)* (EHS Support, 2021). The GSMP provided an approach for focused groundwater sampling at the MPS each spring and for Site-wide groundwater and surface water sampling at the MPS and PTP Area each fall. NYSDEC approved the GSMP and QAPP in a letter dated August 24, 2021 (NYSDEC, 2021). The approach detailed in the GSMP is consistent with the *Rationale for Proposed Reduction in Fall Groundwater Sampling Scope* letter (EHS Support, 2020) that was approved by NYSDEC in September 2020 (NYSDEC, 2020).

During this reporting period, groundwater elevation data and flow conditions were consistent with previous data and interpretations, with groundwater flow predominantly to the south, except where overburden groundwater is intercepted by the French Drain System. Based on the data, the French Drain operations influence the groundwater gradient and achieve extraction of overburden groundwater in the vicinity of former Buildings 56 and 8. A detailed assessment of groundwater hydraulic data, including a presentation of pressure transducer data and a discussion of the effectiveness of the groundwater extraction system (GWES), was provided in the *Remedy Optimization Repor*t in October 2017 (EHS Support, 2017) and in the *Revised Remedy Optimization Report* in March 2019 (EHS Support, 2019). The *Revised Remedy Optimization Report* was approved by the NYSDEC in May 2019 (NYSDEC, 2019).

The analytical results for the Hudson River surface water samples collected adjacent to the MPS in October 2022 were below applicable surface water quality standards. The results are consistent with the Conceptual Site Model, which indicates that attenuation processes are occurring on-site and within the hyporheic zone prior to discharge to the river, such that the potential flux of constituents from groundwater to the river is not sufficient to result in an exceedance of surface water quality standards. This is supported by the results of the surface water sampling conducted in the river immediately adjacent to and downstream of impacted groundwater areas on-site.

Chromium and cyanide concentrations in groundwater samples collected at the MPS during this reporting period were within the range of concentrations measured during recent sampling events. The long-term trend at the MPS has been an overall decline in groundwater concentrations since the Corrective Measures were implemented in 2003. Groundwater concentrations above the New York Codes, Rules, and Regulations (NYCRR) 6 NYCRR 703 Class GA fresh groundwater (GA) standards are generally limited to the areas of the Site where overburden French Drain Sumps A and B and

intermediate bedrock extraction well EW-B5 continue to operate. Groundwater on-site is not used, and usage is precluded via institutional control (Deed Notice).

Historically, in the overburden groundwater horizon near the former source areas (i.e., upgradient of the French Drain), a maximum chromium concentration was measured at well MW-OB14 in 1993 (54,000 micrograms per liter [µg/L]). During sampling events in 2022, the hexavalent chromium concentrations at this well were three orders of magnitude lower (under 10 µg/L).

For the riverbank wells at the MPS (wells MW-OB30 through MW-OB34), there remained discrete well locations where concentrations exceeded the conservative Groundwater Concentration Performance Criteria (CGW) values in 2022 (i.e., at wells MW-OB30, MW-OB32 and MW-OB33). However, these wells exhibit temporal fluctuations, and concentrations were of a similar magnitude as the most recent sampling events. Multiple lines of evidence, including the localized nature of the concentrations, demonstrate that the chromium and cyanide concentrations in Site groundwater are not adversely impacting surface water quality (EHS Support, 2019). Further, as detailed in the *Revised Remedy Optimization Report* (EHS Support, 2019), hydraulic data demonstrates that overburden groundwater at these wells is within the capture zone of the French Drain.

The hexavalent chromium concentrations measured at intermediate bedrock extraction well EW-B5 in 2022 (i.e., 26,000 to 38,000 µg/L) were consistent with the magnitude of concentrations measured since pumping was reinitiated in December 2018 and were an order of magnitude lower than those measured during the cessation of bedrock pumping between 2016 and 2018 (i.e., generally in the range of 110,000 to 140,000 µg/L). Extraction well EW-B5 is operational and has been fully integrated into the Site telemetry system for remote monitoring. The Parties are not planning shut-down periods for this extraction well during the upcoming reporting period.

Total chromium concentrations at deep groundwater horizon well AW-C11 (470 and 1,300 µg/L) were lower than, but of a similar magnitude to, the concentration measured in 2002, and hexavalent chromium concentrations (380 and 1,200 µg/L) were a similar magnitude as the total chromium concentrations. Groundwater in the deep bedrock is not used, and usage is precluded via institutional control (Deed Notice).

For the PTP Area, the 2022 cyanide concentrations continue to be on a declining trend, which is supported by the Mann-Kendall statistical analysis performed on well MW-OB23 analytical data.

The groundwater and surface water data collected in 2022 demonstrate that the Corrective Measures implemented for groundwater at the Site, as modified in 2016 per the *Remedy Optimization Plan* (ROP; EHS Support, 2016), continue to be protective. The Parties will continue to evaluate long-term trends in constituent concentrations through groundwater and surface water sampling in 2023 per the GSMP.

1 Introduction

This *Groundwater and Surface Water Monitoring Report* (GSMR) presents groundwater and surface water monitoring data collected in 2022 for the Main Plant Site (MPS) and the Pretreatment Plant Area property (PTP Area) at the former Ciba-Geigy Corporation pigments manufacturing facility located at 89 Lower Warren Street in Queensbury, New York ("the Site"), just east of the City of Glens Falls and adjacent to the Hudson River (**Figure 1**). Corrective measure operations are conducted at the facility under a New York State Department of Environmental Conservation (NYSDEC) Hazardous Waste Management Post Closure Permit (NYSDEC Site No. 557011).

EHS Support LLC ("EHS Support") prepared this GSMR on behalf of Hercules LLC ("Hercules," a wholly-owned subsidiary of Ashland Inc.), and CIBA Corporation ("CIBA", previously acquired by BASF Corporation). Hercules and CIBA are the Site permittees and share responsibility for ongoing environmental activities. Groundwater and surface water monitoring were performed in accordance with the sampling program presented in the *Rationale for Proposed Reduction in Fall Groundwater Sampling Scope* letter (EHS Support, 2020) and approved by the NYSDEC in September 2020 (NYSDEC, 2020), and the revised *Groundwater and Surface Water Monitoring Plan (GSMP) and Quality Assurance Project Plan (QAPP)* submitted in March 2021 (EHS Support, 2021). The sampling program includes Site-wide groundwater and surface water sampling at the MPS and PTP each fall, along with focused groundwater sampling at the MPS each spring.

A groundwater extraction system (GWES) is in operation at the Site, which includes the extraction of overburden groundwater from Sumps A and B in the French Drain System, and bedrock groundwater from extraction well EW-B5. Details of the GWES operations, including discharge monitoring and groundwater extraction volumes, are reported annually under separate cover in the *Operations and Maintenance Report*. As detailed in the *Remedy Optimization Plan* (ROP; EHS Support, 2016) pumping was discontinued at one of three sumps in the French Drain System (Sump C, located in the Eastern Area of the Site) and at the 20 bedrock extraction wells in November 2016 (as described below, pumping at one bedrock extraction well [well EW-B5] was later reinitiated).

Operation of the GWES French Drain in the Central and Western Areas of the Site (including Sumps A and B) continues as described in the ROP (EHS Support, 2016). Details regarding the construction of the French Drain System and the basis for optimized operations were provided in the ROP (EHS Support, 2016). The location of the French Drain sumps and descriptors for the Western, Central, and Eastern Areas are shown in **Figure 1.**

As detailed in the *Revised Remedy Optimization Report* (EHS Support, 2019), on December 12, 2018, pumping was reinitiated at well EW-B5, a Horizon B bedrock groundwater extraction well, and pumping has continued since that time, except for a scheduled one-month shut-down in October to November 2019 to allow for an evaluation of water levels and constituent concentrations during non-pumping conditions. Prior to reinitiating pumping, well EW-B5 was integrated into the Site telemetry system.

The following are the objectives of the current groundwater and surface water monitoring program:

- Implement low-flow sampling to provide high-quality groundwater samples for the assessment of monitored parameter concentrations against water quality criteria and GWES performance goals.

- Monitor key Site constituents (cyanide, chromium, and hexavalent chromium) in groundwater to assess trends in concentrations.
- Monitor dichlorobenzene (DCB) concentrations in groundwater at one well to assess trends in concentrations.
- Conduct surface water sampling to:
  - Assess the potential presence of monitored constituents from possible upstream sources.
  - Demonstrate that potential constituent mass flux from the Site is not leading to exceedances of NYSDEC surface water quality standards.
- Conduct groundwater and surface water level monitoring at the MPS to assess hydraulic conditions in groundwater and surface water, including the performance of GWES operations.

A discussion of the environmental setting, including the Site geology and hydrogeology, is provided in **Section 2**. Details regarding field activities and quality control sampling, laboratory methods, water quality, and GWES performance criteria used for assessment and data validation are provided in **Section 3**. A summary of water level monitoring and groundwater hydraulics at the Site is provided in **Section 4.** Sample analytical results and comparison to criteria are discussed in **Section 5**. A list of documents referenced in this report is provided in **Section 6.**

2 Environmental Setting

This section summarizes the geologic and hydrogeologic settings at the Site. In-depth review and evaluation of the Site's geologic and hydrogeologic settings were presented in the *Site Conceptualization and Groundwater Corrective Measures Effectiveness Evaluation Report* dated January 2015 (EHS Support, 2015). An illustration of the Site's stratigraphic and hydrogeologic units, as well as the geologic cross section, is shown in **Figure 2.**

2.1 Site Geology

The Site lies on the bank of the Hudson River. The unconsolidated and consolidated lithologies beneath the Site consist of glaciolacustrine and fluvial sediments (overburden) and underlying limestone bedrock. The overburden is a combination of industrial fill and fluvial/glaciolacustrine sands (with some silt and clay), with glaciolacustrine clay (and locally glacial till) at its base.

The bedrock is primarily limestone comprising three geologic formations: Glens Falls Limestone, Isle La Motte Formation (predominantly limestone), and Fort Ann Formation (predominantly calcitic dolostone or dolomitic limestone) (**Figure 2**). The limestone bedrock can be characterized as massive, with limited to no intergranular porosity and with groundwater movement concentrated in fracture (secondary) porosity.

The historical structural forces that have acted upon the regional geology in the study area have created an enhanced secondary porosity of the limestone rock in the form of joints and fractures. Structural fractures formed parallel to bedding planes. The sub-horizontal bedding plane fractures are typically the main contributor to active groundwater flow through secondary porosity development. The more open and continuous these features are, the greater the influence they have on groundwater flow direction. Sub-vertical fractures may influence localized groundwater flow. High-angle joints, which formed almost 90 degrees to the bedding planes, also occur and are mostly mineralized; and hydraulic conductivity associated with these features is likely to be low. Relief of lithostatic load due to erosion during uplift (including isostatic uplift following glaciation) is likely to have been a significant contributor to the opening of horizontal or low-angle bedding fractures to form the water-bearing zones.

2.2 Site Hydrogeology

Four groundwater units have been characterized at the Site, with groundwater flow in the limestone bedrock controlled primarily by three zones of open, sub-horizontal, bedding-parallel fracture networks. The four groundwater units are listed below, from shallow to deep, and are shown in **Figure 2**:

- Overburden – unconsolidated sediments
- Horizon A (shallow) – limestone
- Horizon B (intermediate) – limestone
- Horizon C (deep) – limestone

The typical depth of the groundwater unit's fracture zones for the western part of the Site is shown in **Figure 2**. In summary, the Horizon A fracture zone occurs approximately 40 feet below ground surface (bgs), the Horizon B fracture zone occurs approximately 60 feet bgs, and the Horizon C fracture zone occurs approximately 160 feet bgs. Note, the bedding plane fracture zones generally become shallower

towards the east, with Horizons A and B likely intersecting the top of the bedrock surface in the central and eastern parts of the Site, respectively (**Figure 2**).

The groundwater flow within the four units is described as follows:

- *Overburden*: Groundwater flow in the overburden is to the south towards the Hudson River, with groundwater likely to discharge to the river under natural (pre-remediation) conditions. The overburden material (native lacustrine sediments, till, and fill) is variably saturated. The overburden water-bearing zone includes the saturated portions of the fill and lacustrine sands and silts situated above the lacustrine clay unit (and local underlying till) or, where the clay unit is absent, above the bedrock surface. The water-bearing zone is locally thin and discontinuous, with unsaturated areas occurring near the Hudson River. The extent and/or existence of these areas varies with seasonal fluctuations in the groundwater table elevation.
- *Horizon A (shallow)*: Groundwater flow within Horizon A is generally in a southerly direction towards the Hudson River.
- *Horizon B (intermediate)*: Groundwater flow within Horizon B is generally in a southerly direction, with groundwater elevations below the elevation of the Hudson River.
- *Horizon C (deep)*: Horizon C groundwater elevations are below the elevation of the Hudson River, with groundwater flow generally to the west-southwest across the Site. There is a possibility that local dewatering of a quarry located southwest of the Site (on the south side of the Hudson River) may influence the direction of groundwater flow within Horizon C.

3 Groundwater and Surface Water Sampling Field Activities

Two monitoring events were conducted during this reporting period. The sampling program includes Site-wide groundwater and surface water sampling at the MPS and PTP each fall, along with focused groundwater sampling at the MPS each spring. The spring event occurred in May 2022, and the fall event occurred in October 2022. Groundwater level gauging and groundwater and surface water sampling were performed in accordance with the summary provided in **Table 1. Table 2** through **Table 7** present field and laboratory data.

Surface water monitoring locations for MPS are shown on **Figure 1**. Groundwater monitoring locations for MPS are shown in **Figure 3** through **Figure 6**. Groundwater and surface water monitoring locations for the PTP Area are shown in **Figure 7.** The field activities, quality control sampling, laboratory analysis, and water quality criteria used for data evaluation are summarized in this section. The results of monitoring and data evaluations are discussed in **Section 4** and **Section 5** of this report.

3.1 Water Level Gauging

Depth-to-groundwater measurements were collected during each monitoring event using an electronic level meter/interface probe. The measurements were converted to groundwater elevations using the top-of-casing elevations, surveyed relative to the National Geodetic Vertical Datum of 1929 (NGVD29), also known as the sea level datum. The surface water level in the Hudson River at staff gauge SG-12, located adjacent to the Central Area of the MPS, was also recorded during the May and October 2022 monitoring events. The surface water elevation was calculated using the measured level (water height) at the staff gauge and the surveyed gauge reference point elevation. Water level measurements and calculated elevation data are summarized in **Table 2A** and **Table 2B**.

The water elevation data from the October 2022 monitoring event was used to develop groundwater elevation contour maps for the overburden, shallow bedrock, intermediate bedrock, and deep bedrock horizons at the MPS (**Figure 3** through **Figure 6**, respectively). An evaluation of groundwater and surface water hydraulics is provided in **Section 4**.

3.2 Groundwater and Surface Water Sampling

Groundwater and surface water sampling were conducted in accordance with the field sampling methodology approved in the GSMP (EHS Support, 2021). The scope of the groundwater and surface water sampling events detailed in the GSMP is consistent with *Rationale for Proposed Reduction in Fall Groundwater Sampling Scope* letter (EHS Support, 2020), which was approved by the NYSDEC in September 2020 (NYSDEC, 2020). Supporting field documents are included in the appendices referenced in this section through **Section 3.6**.

3.2.1 Groundwater Sampling

Groundwater samples were collected in accordance with the schedule in **Table 1**. Groundwater purging and well sampling were conducted using low-flow methodology, with purging and sampling conducted using bladder pumps or, in select small diameter/low-yielding wells, peristaltic pumps. At Sumps A and B and well EW-B5, samples for field parameter measurements and laboratory analysis were collected

using disposable bailers. Clean/dedicated tubing, new (clean) disposable pump bladders, and/or new (clean) bailers were used at each location.

During purging, groundwater quality parameters including temperature, pH, conductivity, dissolved oxygen (DO), turbidity, and oxidation-reduction potential (ORP) were monitored using a Horiba flow-through cell. Purging continued until the monitored field parameter readings stabilized, or at low-yielding wells until the water level dropped below the pump and the well was dry/near dry. Where low yield was encountered, wells were allowed to recover until recharge of sufficient water for sampling was achieved. The barometric pressure was also recorded over the course of the monitoring events. Copies of the field sampling logs are included in **Appendix A**, along with graphs illustrating barometric pressure readings over the course of the May 2022 and October 2022 sampling events. Purging data (including the water column height in wells before purging, pump depths, purge flow rates, drawdown (i.e., pre- and post-purge water levels), and water volumes removed are summarized in **Table 2A** and **Table 2B.**

Samples were collected directly following purging, except where insufficient water was present, then samples were collected the next day or as soon as sufficient water recharge occurred. Field-measured water quality parameters (same as those monitored during purging) were recorded just before sample collection. Samples for laboratory analysis were pumped or poured (from bailers) directly into sample containers provided by the laboratory. Field water quality parameter measurements for each sample were recorded on the sampling logs (**Appendix A**) and are summarized in **Table 3**.

3.2.2 Surface Water Sampling

Surface water samples were collected at the MPS in accordance with the schedule in **Table 1.** The sampling locations are as follows (see **Figure 1** for locations):

- Upstream location SW-04 is located approximately 45 feet upstream of the Site western boundary.
- Adjacent location SW-03 is located in the river south of former Site Building 56.
- Adjacent location SW-02 is located in the river south of former Building 8 and the Weir Brook discharge area.
- Downstream location SW-01 is located near the eastern boundary of the Site.

The GSMP includes the collection of a surface water sample at one PTP Area location in the fall (i.e., SG-11, which is located near the Glens Falls Feeder Canal).

Surface water samples were collected in areas accessible from shore. Samples were collected using a peristaltic pump with tubing lowered approximately 1 foot below the water surface, except for the sample at SG-11 which was collected using a disposable bailer. Samples were visually observed to be clear and colorless.

Field parameters (temperature, pH, conductivity, DO, turbidity, and ORP) were measured before the collection of samples for analysis. Samples were pumped directly into clean sample containers provided by the laboratory. Field parameters were recorded on field sampling logs included in **Appendix A,** and measurements collected just before sampling are included in **Table 3**.

3.3 Sample Laboratory Analysis

Laboratory analysis was conducted by Eurofins, with applicable New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certification for the analyses performed. Clean sample containers were supplied by the laboratories with preservatives as applicable. The analysis performed and sample preservations completed in the field are detailed in **Table 4** and summarized below.

Groundwater samples were analyzed in accordance with the schedule in **Table 1,** using the following methods:

- Dissolved chromium by United States Environmental Protection Agency (USEPA) Method SW846 6020A, on samples field-filtered with a 0.45 micrometer (µm) filter.
- Dissolved hexavalent chromium by USEPA Method 218.6, on samples field-filtered with 0.45 µm filter.
- Total cyanide by USEPA Method SW846 9012B on unfiltered samples.
- DCB (1,2-; 1,3-; and 1,4- isomers) for one sample location (well AW-B18) using USEPA Method SW846 8260C.

Surface water samples were analyzed for the following parameters:

- Dissolved vanadium and dissolved chromium by USEPA Method SW846 6020A, on samples field-filtered with a 0.45 µm filter.
- Dissolved hexavalent chromium by USEPA Method 218.6, on samples field-filtered with 0.45 µm filter.
- Free cyanide by USEPA Method OIA-1677, with sample collection and preservation procedures including:
    - Test for the presence of sulfide by pouring the surface water sample into a glass vial with a lead acetate test strip.
    - No change in test strip color was observed (no indication of excess sulfide), allowing for a 14-day hold time rather than a 24-hour hold time.
- Hardness by Standard Method (SM) 2340C.
- Total dissolved solids by SM 2540C.

Upon collection, samples were placed in coolers with ice for transport to the laboratory under chain-of-custody documentation. The analytical results for the samples are summarized in **Table 5** and **Table 6** (groundwater results) and **Table 7** (surface water results). The laboratory analytical reports are included in **Appendix B**. Results are discussed in **Section 5**.

3.4 Quality Control Sampling and Analysis

Quality control (QC) samples were collected in accordance with the procedures detailed in the GSMP (EHS Support, 2021), including duplicate and matrix spike/matrix spike duplicate (MS/MSD) samples at a minimum frequency of 5 percent. Equipment blank samples were collected daily.

Equipment blanks were used to assess the effectiveness of decontamination procedures. Following decontamination of the bladder pump, a clean bladder and tubing were installed, and a blank was collected by submerging the pump into laboratory-grade water in a clean container and pumping water through the sample train into sample containers provided by the laboratory.

Duplicate samples collected during the May 2022 monitoring event included the following:

- One duplicate groundwater sample (from well EW-B5)

Duplicate samples collected during the October 2022 monitoring event included the following:

- Two duplicate groundwater samples at MPS (from wells EW-B5 and AW-B18)

One duplicate surface water sample (from location SW-03), MS/MSD, equipment blank, and field blank samples were collected and analyzed using the same methods used for groundwater and surface water samples. Analytical results for the duplicate samples are included in **Table 7** through **Table 7** and analytical results for the equipment blank samples are included in **Table 8**. Results for QC samples, including MS/MSD and other laboratory method QC samples are provided in the laboratory reports in **Appendix B**.

3.5 Water Quality Standards and GWES Performance Criteria

Surface water and groundwater quality standards and guidance values for comparison to groundwater and surface water data are derived from 6 NYCRR 703.5 Table 1 and NYSDEC Technical and Operational Guidance Series (TOGS 1.1.1) (NYSDEC, 1998). Available water quality standards/guidance values (also referred to herein as criteria) for each analyte were provided in the ROP (EHS Support, 2016). The water quality criteria selected for comparison with the Site monitoring data are comprised of the following:

- Class GA groundwater quality standards protective of fresh groundwater for drinking water sources: The GA standards are included in **Table 5** and **Table 6**.
- Surface water quality criteria (SWQC) for Class C waters, selected based on New York's classification of the Hudson River in the Site vicinity as "Class C" water: The available criteria for screening include standards/guidance values for the protection of human health (based on water supply or fish consumption) and/or protection of aquatic life from chronic and acute effects (designated as A(C) and A(A), respectively). The available aquatic protection values (A(C), which are the lowest surface water criteria available for fresh Class C waters) were used for screening and are included in **Table 7** for hexavalent chromium, free cyanide, and vanadium, and in **Table 9** for chromium (criteria derived based on Site-specific water hardness measurements).

It is noted that the comparison of groundwater data to Class GA standards is for reference. Groundwater on-site is not used and use of on-site groundwater is precluded (pursuant to the Deed Notice filed with Warren County).

GWES performance criteria were developed and presented in the ROP groundwater concentration performance criteria (CGW) values in ROP Table 4-2 (EHS Support, 2016). These values represent conservative groundwater concentrations for the protection of surface water quality, as calculated using dilution attenuation factors. The CGW values for hexavalent chromium and free cyanide are:

- Hexavalent Chromium: 2,838 micrograms per liter (µg/L) for overburden horizon; 80,828 µg/L for bedrock.
- Free Cyanide: 1,602 µg/L for overburden horizon; 69,586 µg/L for bedrock.

3.6 Data Quality Review

Analytical reports generated for the sampling events completed during this reporting period meet

NYSDEC requirements for a Category B data package.

Data review and validation were performed by EHS Support in accordance with Division of Environmental Remediation (DER)-10 guidelines (NYSDEC, 2010). The laboratory data were evaluated according to the quality assurance (QA) and QC requirements of the NYSDEC Analytical Services Protocols. Based on the results of the QA/QC review, analytical data were deemed usable and technically defensible. Copies of the Tier II Validation Reports are included in **Appendix C**.

4 Water Levels and Groundwater Hydraulics

In October 2022, a comprehensive gauging event was performed at the MPS and the Hudson River staff gauge adjacent to the MPS (SG-12). Water level measurements and elevations (relative to NGVD29) are summarized in **Table 2B**. Well locations and potentiometric surface maps for each groundwater horizon are provided in **Figure 3** through **Figure 6** [overburden, Horizon A (shallow bedrock), Horizon B (intermediate bedrock), Horizon C (deep bedrock)], respectfully. In October 2022, gauging was also performed at the PTP Area for those wells included in the sampling program (i.e., the well locations illustrated on **Figure 7**).

The October 2022 groundwater elevation data for the MPS show groundwater flow conditions consistent with historical data and interpretations, with groundwater flow predominantly to the south except for the deep bedrock where flow is generally southwest. Operation of the French Drain, as well as variation in the Hudson River stage, influence overburden gradients along the southern boundary of the Site. The French Drain System captures overburden groundwater flowing toward the Hudson River and creates a downgradient capture zone that extends up to 60 feet from the trench toward the river. This observation is supported by the hydraulic data presented in **Figure 3** through **Figure 6** and the evaluation presented in the *Revised Remedy Optimization Repor*t (EHS Support, 2019).

The October 2022 groundwater elevation data for the PTP Area was consistent with historical data. Previous monitoring events demonstrated that groundwater generally flows to the east across the PTP Area, with localized southerly flow in the southwest corner of the property. Shallow groundwater (overburden) is perched, occurring in the thin saturated zone above the lacustrine clay, and lateral groundwater flow is influenced by the configuration and undulations of the surface of the lacustrine clay beneath the property.

5 Groundwater and Surface Water Sampling Results

This section discusses the results of the groundwater and surface water sampling. Field-monitored water quality parameters and laboratory analytical results for groundwater and surface water samples collected during this reporting period are summarized in tabular format (**Table 3** through **Table 8**) and graphical formats (**Figure 8** and **Figure 9**) to support the discussions below.

5.1 Field-Monitored Water Quality Parameters

The field measurements of temperature, pH, conductivity, DO, turbidity, and ORP, which were collected in groundwater and surface water, are included on the field data sheets (**Appendix A**). The values measured just before sampling are included in **Table 3**.

Groundwater geochemical conditions were relatively stable except within localized areas. During this reporting period, groundwater chemistry in the overburden and the shallow and intermediate bedrock horizons displayed a circum-neutral pH (pH 6 to pH 9), except at certain wells where moderately alkaline (higher pH) levels were measured, primarily in the overburden wells. Deep bedrock groundwater pH was circum-neutral. Temperature, pH, DO, ORP, and electrical conductivity in monitoring wells were generally observed to decrease with depth.

Turbidity was low (0 to 10 nephelometric turbidity units [NTU]) in samples collected during this reporting period, except for the sample collected at MW-OB26 (35.5 NTU). Wells MW-OB25, MW-OB26, and MW-OB30 were purged dry while sampling, and grab samples were collected after sufficient recharge.

Consistent with previous monitoring events, the chemistry of surface water samples was oxidizing, and turbidity and conductivity were low (**Table 3**). In general, DO and ORP remained aerobic and oxidizing. The sample groundwater pH was circum-neutral and ranged from 6.21 to 7.37, which is within the range of pH values recorded since 2015 (i.e., range of 5 to 10). During discrete events, the pH is generally similar at sampling locations upgradient, adjacent, and downgradient from the Site; therefore, there does not appear to be detectable influences on surface water chemistry from groundwater discharging from the Site or surface water discharging from Weir Brook.

5.2 Surface Water Analytical Results and Comparison to Standards

Surface water sampling was designed to provide surface water quality data at four locations in the Hudson River, including nearshore locations upstream, adjacent to, and downstream of the Site (SW-01 through SW-04; **Figure 1**).

No surface water sample results were above surface water quality standards. Field-monitored surface water quality parameters are included in **Table 3**. Analytical results are summarized in **Table 7** and presented on **Figure 8** and **Figure 9**. Calculated surface water quality standards for dissolved chromium (dependent on hardness) are included in **Table 9**.

No vanadium was detected in the surface water samples (i.e., no concentrations were detected above the laboratory detection limit of 4 µg/L). For free cyanide there were J-qualified[1] detections below the A(C) criterion (locations SW-01, SW-02, and SW-03, range of 0.98J to 1.2J µg/L). During all previous events conducted at the MPS since free cyanide analysis began (since 2015), free cyanide has been near or below the laboratory analytical detection limit of 2 µg/L (or below 6 µg/L in 2021, as explained in the 2021 monitoring report [EHS Suport, 2022]) (**Table 7**); therefore, many years of sample data demonstrate free cyanide concentrations below the A(C) criterion.

The dissolved chromium and hexavalent chromium results also demonstrate compliance with the applicable surface water standards, with both dissolved chromium and hexavalent chromium not detected above the laboratory reporting limits of 1.5 µg/L and 10 µg/L, respectively.

5.3 Groundwater Analytical Results and Comparison to Standards

The analytical results for chromium and cyanide in groundwater are summarized in **Table 5**, as well as in **Figure 8** and **Figure 9**, respectively. For ease in reference and understanding the lateral and vertical distribution, **Figure 8** and **Figure 9** show results for the discrete groundwater horizons (i.e., overburden, and shallow, intermediate, and deep bedrock horizons). Well location markers are color-coded to indicate which horizon the well is screened in, and results that exceed the groundwater GA standards are denoted by orange text.

Chromium and cyanide concentrations in groundwater samples collected during this reporting period were within the range of concentrations measured during recent previous sampling events. GA standard exceedances are present at certain wells; however, groundwater on-site is not used, usage is precluded via institutional control (Deed Notice), and comprehensive hydraulic evaluations have demonstrated that the residual groundwater concentrations are not impacting surface water quality.

The long-term trend at the MPS has been an overall decline in chromium and cyanide concentrations in groundwater since the Corrective Measures were implemented in 2003. A detailed discussion of the sample results for each groundwater horizon and area on-site is provided below, and **Figure 10** through **Figure 13** depict the locations and graphic illustration of the constituent of concern concentration trends in select wells on-site. Further discussion regarding trends at key locations was provided in the NYSDEC-approved *Revised Remedy Optimization Report* (EHS Support, 2019).

5.3.1 Overburden Groundwater

Per the GSMP, three overburden monitoring wells were sampled in May 2022 (wells MW-OB14, MW-OB-30, and MW-OB32), and in October 2022, these wells were sampled along with eight additional overburden monitoring wells and two French Drain sumps (IP-4, MW-28, MW-31, MW-OB25, MW-OB26, MW-OB31, MW-OB33, MW-OB34, Sump A, and Sump B). Key observations for overburden groundwater quality are as follows:

- Hexavalent chromium concentrations in overburden groundwater in historical source areas (i.e., upgradient of the French Drain) can vary by as much as an order of magnitude depending on Site conditions at the time of sampling. The hexavalent chromium concentrations at well MW-OB14 in 2022 were at the lower end of the range of concentrations observed during recent

[1] J qualifier indicates the value is estimated.

monitoring events (2015 to 2022). Hexavalent chromium concentrations during previous monitoring events between 2015 and 2022 ranged from below the GA standard of 50 µg/L to 8,900 µg/L at this well. In 2022, the hexavalent chromium at well MW-OB14 was detected at 2 µg/L during May 2022 event and was not detected during October 2022 event, which is orders of magnitude below the historical maximum chromium concentration measured in this well in 1993 (54,000 µg/L) (see historical trend graph in **Appendix D** [Antea Group, 2014]).

- Consistent with previous sampling rounds, exceedances of the GA standards for chromium and/or cyanide were present in the riverbank wells (wells MW-OB30 through MW-OB34). Also consistent with previous sampling rounds, samples at discrete well locations exceeded the conservative CGW values for hexavalent chromium and cyanide during the sampling rounds performed in May and October 2022 (i.e., at wells MW-OB30, MW-OB32 and MW-OB33). These wells exhibit temporal fluctuations, and concentrations were of a similar magnitude as most recent sampling events. Multiple lines of evidence, including the localized nature of the concentrations, demonstrate that the chromium and cyanide concentrations in Site groundwater are not adversely impacting surface water quality (EHS Support, 2019). Further, as detailed in the *Revised Remedy Optimization Report* (EHS Support, 2019), hydraulic data demonstrates that overburden groundwater at these wells is within the capture zone of the French Drain.
- In the Eastern Area (well MW-31), where groundwater extraction at Sump C was suspended in November 2016, the chromium concentration in groundwater was below the GA standard, and the cyanide concentration of 220 µg/L was near the GA standard of 200 µg/L. The concentrations are below the respective ROP CGW values developed for overburden groundwater.

5.3.2 Shallow Bedrock Groundwater

Three shallow bedrock monitoring wells were sampled in October 2022 (wells AW-A11, AW-A14, and MW-25S). Concentrations of chromium and cyanide were below or near GA standards. All concentrations are orders of magnitude below the ROP CGW values developed for groundwater in the shallow bedrock horizon. Groundwater on-site is not used, and usage is precluded via institutional control (Deed Notice).

5.3.3 Intermediate Bedrock Groundwater

In May 2022, extraction well EW-B5 was sampled, and in October 2022, three intermediate bedrock wells were sampled (wells EW-B5, AW-B4, and AW-B18). Observations for intermediate bedrock groundwater are as follows:

- Chromium and cyanide concentrations were below GA standards at wells AW-B4 and AW-B18 and were also orders of magnitude below the ROP CGW values developed for groundwater in the intermediate bedrock horizon.
- The hexavalent chromium concentrations measured at well EW-B5 in 2022 (i.e., 26,000 to 38,000 µg/L) were consistent with the magnitude of concentrations measured since pumping was reinitiated in December 2018.[2] This represents a reduction in the hexavalent chromium concentrations measured during the period of cessation of bedrock pumping between November 2016 and November 2018 (i.e., generally in the range of 110,000 to 140,000 µg/L).

[2] Except for the March 2019 sampling, when concentrations may have been reduced due to snow melt.

The impacted intermediate horizon bedrock groundwater at well EW-B5 is not presenting an impact to surface water quality. The ROP included a conservative CGW value of approximately 81,000 µg/L for hexavalent chromium in the intermediate bedrock horizon for the protection of surface water. Further, the groundwater elevation in well EW-B5 is lower than the river even under non-pumping conditions; therefore, the intermediate bedrock groundwater is not discharging to the river.

- The cyanide concentrations of 230 µg/L at well EW-B5 in May 2022 were above the GA standard of 200 µg/L while the October 2022 concentrations were below the GA standard. These concentrations were consistent with those of previous sampling rounds.
- Extraction well EW-B5 is operational at this time, and no additional shut-down periods are proposed for the upcoming reporting period.
- Dichlorobenzene analysis was performed on a sample collected at intermediate bedrock well AW-B18, which is located to the south of the Corrective Action Management Unit. While the sample results were higher than the results of recent annual sampling events (**Table 6**), they were within historical ranges. GA standard exceedances were present (130 µg/L of 1,2-DCB and 17 µg/L of 1,4-DCB, as compared to the GA standard of 3 µg/L for each isomer). These results are similar to concentrations at AW-B18 in March 2017, when the concentration of 1,2-DCB was 130 µg/L, and the concentration of 1,4-DCB was 15 µg/L. The historical maximum concentration in intermediate bedrock groundwater in this area of the Site was 370 µg/L of 1,2-DCB in May 1992 (at well MW-36D).

5.3.4 Deep Bedrock Groundwater

In May 2022, one deep bedrock well was sampled (AW-C11), and in October 2022, two deep bedrock wells were sampled (AW-C2 and AW-C11). At well AW-C11, total chromium concentrations were of similar magnitude as compared to recent sampling events (470 and 1,300 µg/L), while the hexavalent chromium concentration was variable (1,200 µg/L in May 2022 and 380 µg/L in October 2022). Sample results from well AW-C2, located further downgradient than AW-C11, were below GA standards.. Concentrations at well AW-C11 remain lower than the historical range of concentrations measured at this well (see historical trend graph in **Appendix D**). An assessment of long-term groundwater concentration trends at the Site is ongoing. Groundwater in the deep bedrock is not used, and usage is precluded via institutional control (Deed Notice).

5.3.5 Pretreatment Plant

In accordance with the GSMP, groundwater samples were collected from two wells in the PTP Area in October 2022 (wells MW-OB19 and MW-OB23) and analyzed for total cyanide. The sample results are included in **Table 5**.

The groundwater sample results were similar to recent annual sampling events, with a higher concentration of total cyanide measured at well MW-OB23 (3,000 µg/L) and a lower concentration at well MW-OB19 (270 µg/L) (**Table 5**).

Previous groundwater sampling events demonstrated that cyanide concentrations detected in groundwater at the PTP Area boundary and downgradient of the area have been below the GA standard of 200 µg/L for at least a decade (**Table 10**). These wells include the following:

- MW-OB18 since 2002 (eastern property line)
- MW-OB21 since 2010 (off-property, south of Glens Falls Feeder Canal)

- MW-OB22 since 2006 (off-property, south of Glens Falls Feeder Canal)

On the property, concentrations of cyanide in groundwater declined following cessation of the historical operations and have been stable to declining for more than a decade (**Figure 14**). Mann-Kendall calculations were performed for well MW-OB23, which is the well where samples historically have had the highest cyanide concentrations. The calculations confirm a declining trend in cyanide concentrations over the past 25 years (**Table 11**).

The results of the groundwater samples collected during the annual sampling event conducted in October 2022 demonstrate that although the cyanide concentration at MW-OB23 was higher than in the previous event, cyanide concentrations in groundwater at the PTP Area continue to be on a declining trend, which is supported by the Mann-Kendall statistical analysis for well MW-OB23.

6 References

Antea Group. 2014. *2013 Groundwater Monitoring Report*. Former CIBA-GEIGY/HERCULES Plant Site, 89 Lower Warren Street, Queensbury, NY. February 28.

EHS Support LLC. 2015. *Site Conceptualization and Groundwater Corrective Measures Effectiveness Evaluation Report*. Former Ciba-Geigy Facility, Glens Falls, NY. January.

EHS Support LLC. 2016. *Remedy Optimization Plan*. Former Ciba-Geigy Facility, Glens Falls, NY. August 2016. *Revised November 2016.*

EHS Support LLC. 2017. *Remedy Optimization Report*. Former Ciba-Geigy Facility, Glens Falls, NY. October.

EHS Support LLC. 2019. *Revised Remedy Optimization Report*. Former Ciba-Geigy Facility, Glens Falls, NY. March.

EHS Support LLC. 2020. *Rationale for Proposed Reduction in Fall Groundwater Sampling Scope*. Former Ciba-Geigy Facility, Glens Falls, New York. September 21.

EHS Support LLC. 2021. *Groundwater and Surface Water Monitoring Plan (GSMP) and Quality Assurance Project Plan (QAPP)*. March.

EHS Support LLC. 2022. *Groundwater and Surface Water Monitoring Report.* March.

NYSDEC. 1998. Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (October 22, 1993, Reissue Date June 1998, as modified and supplemented by the January 1999 Errata Sheet and the April 2000 and June 2004 Addenda).

NYSDEC. 2010. Technical Guidance for Site Investigation and Remediation. May 3.

NYSDEC. 2019. Letter from Brian Jankauskas at NYSDEC to James Vondracek at Ashland LLC, and Stephen Havlik at BASF Corporation. May 15.

NYSDEC. 2020. Letter from Brian Jankauskas at NYSDEC to James Vondracek at Ashland LLC, and Stephen Havlik at BASF Corporation. September 30.

NYSDEC. 2021. Ciba Geigy Main Plant/Pretreatment Plant. August 24.

Tables

Table 1
Sampling and Gauging Summary - Groundwater and Surface Water Monitoring
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

Gauge & Sample	Area of the Property	Sampling Frequency	Total Cyanide[1]	Chromium and Hexavalent Chromium[2]	Free Cyanide[3]	Vanadium[2]	1,2-, 1,3-, and 1,4-Dichlorobenzenes	Total Dissolved Solids[4]	Hardness	Sampling Pump
Overburden Groundwater Wells										
IP-4	MPS - Western	Annual	1	1						0.75" Bladder or Peristaltic Pump
MW-26 or MW-28 [5]	MPS - Western	Annual	1	1						Peristaltic Pump
MW-31	MPS - Eastern	Annual	1	1						1.75" Bladder Air Tank or Peristaltic Pump
MW-OB14	MPS - Central	Semi-Annual	1	1						1.75" Bladder Pump or Peristaltic Pump
MW-OB25	MPS - Central	Annual	1	1						1.75" Bladder Pump or Peristaltic Pump
MW-OB26	MPS - Central	Annual	1	1						1.75" Bladder Pump or Peristaltic Pump
MW-OB30	MPS - Central	Semi-Annual	1	1						Peristaltic Pump
MW-OB31	MPS - Central	Annual	1	1						Peristaltic Pump
MW-OB32	MPS - Central	Semi-Annual	1	1						Peristaltic Pump
MW-OB33	MPS - Central	Annual	1	1						Peristaltic Pump
MW-OB34	MPS - Central	Annual	1	1						Peristaltic Pump
MW-OB19	PTP	Annual	1							Peristaltic Pump
MW-OB23	PTP	Annual	1							Peristaltic Pump
AP-2	MPS - Annual Gauging Only									
BP-6										
BP-9										
MW-9										
MW-26										
MW-OB2										
MW-OB5										
MW-OB7										
MW-OB13										
MW-OB15										
MW-OB24										
MW-OB27										
WP-CC-12										
Sumps - Groundwater										
Sump A	MPS - Central	Annual	1	1						Grab
Sump B	MPS - Central	Annual	1	1						Grab
Shallow Groundwater Bedrock Wells										
AW-A11	MPS - Central	Annual	1	1						1.75" Bladder Normal
AW-A14	MPS - Central	Annual	1	1						1.75" Bladder Normal
MW-25S	MPS - Western	Annual	1	1						1.75" Bladder Normal
AW-A2	MPS - Annual Gauging Only									
AW-A4										
AW-A10										
AW-A15										
MW-19										
MW-27S										
MW-36S										
P-A1										

Table 1
Sampling and Gauging Summary - Groundwater and Surface Water Monitoring
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

Gauge & Sample	Area of the Property	Sampling Frequency	Total Cyanide[1]	Chromium and Hexavalent Chromium[2]	Free Cyanide[3]	Vanadium[2]	1,2-, 1,3-, and 1,4-Dichlorobenzenes	Total Dissolved Solids[4]	Hardness	Sampling Pump
Intermediate Groundwater Bedrock Wells										
AW-B4	MPS - Central	Annual	1	1						0.75" Bladder
EW-B5	MPS - Central	Semi-Annual	1	1						Grab
AW-B18	MPS - Western	Annual	1	1			1			1.75" Bladder Normal
AW-B2	MPS - Annual Gauging Only									
AW-B3										
AW-B11										
AW-B17										
AW-B19										
AW-B20										
MW-10B										
MW-20D										
MW-25D										
MW-30D										
MW-36D										
MW-40B										
Deep Groundwater Bedrock Wells										
AW-C2	MPS - Western	Annual	1	1						1.75" Bladder Air Tank
AW-C11	MPS - Central	Semi-Annual	1	1						1.75" Bladder Air Tank
AW-C1	MPS - Annual Gauging Only									
AW-C7										
AW-C8										
AW-C9										
AW-C10										
MW-20C										
MW-36C										
Surface Water Samples										
SW-01	MPS - Downriver	Annual		1	1	1		1	1	Grab
SW-02	MPS - Central	Annual		1	1	1		1	1	Grab
SW-03	MPS - Central	Annual		1	1	1		1	1	Grab
SW-04	MPS - Upriver	Annual		1	1	1		1	1	Grab
SG-11	PTP	Annual			1					Grab
SG-12	MPS	Semi-Annual	Gauging Only							

Notes:
MPS = Main Plant Site
PTP = Pretreatment Plant Site
1 = Total cyanide is an unfiltered sample.
2 = Chromium, hexavalent chromium, and vanadium samples filtered in the field using 0.45 micrometer (µm) filters
3 = Free Cyanide is an unfiltered sample. Free Cyanide samples are to be collected per lab instructions.
4 = Total Dissolved Solids are to be laboratory-derived, not calculated.
5 = MW-28 has produced insufficient water for sampling during some previous groundwater sampling events. If well MW-28 is unable to be sampled, well MW-26 will be sampled as a substitute.

Table 2A
Water Level Gauging and Purging Data Summary - May 2022
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

Well Name	Gauging Date	Gauging Time	Total Depth (ft btoc)	DTW (ft btoc)	TOC Elev (ft NGVD29)	Water Elevation (ft NGVD29)	Sample Pump Depth (ft btoc)	Purge Date	Sample Pump rate (mL/min)	Pre- Purge WL (ft btoc)	Post Purge WL (ft btoc)	Water Vol. Purged (gal)	Pump Type	Comments
OVERBURDEN														
MW-OB14	5/24/22	9:10	19.41	10.50	241.65	231.15	14.96	5/24/22	100-120	10.50	16.00	2.00	P	
MW-OB30	5/24/22	9:00	18.55	10.01	225.71	215.70	14.43	5/25/22	100	10.30	15.97	1.5	P	
MW-OB32	5/24/22	9:08	13.30	8.87	227.96	219.09	11.09	5/24/22	150	8.87	10.15	2.0	P	
INTERMEDIATE BEDROCK														
EW-B5	5/24/22	9:21	53.75	41.60	235.75	194.15	n/a	05/25/22	n/a	n/a	47.20	n/a	HB	Grab sample bailer
DEEP BEDROCK														
AW-C11	5/24/22	8:57	158.85	41.36	238.45	197.09	153.85	05/26/22	125	41.27	41.26	2.5	B	
SURFACE WATER					**Reference Point (ft NGVD29)**	**Water Elevation (ft NGVD29)**								
SG-12*	5/25/22	8:50	NA	3.00	210.47	207.47	gauged only							Below gauge (below 3'), gauge broke off

Notes:

* The gauge reference point for surface water gauge SG-12 is the elevation of the 3-foot mark on the gauge.

B = bladder pump

DTW = Depth to water

ft btoc = feet below top of casing

ft NGVD29 = feet relative to National Vertical Geodetic Datum of 1929

gal = gallons

HB = hand bailer

mL/min = milliliters per minute

n/a = not applicable

NA = not available

NG = not gauged

P = peristaltic pump

TOC = top of casing

WL = water level

Table 2B
Water Level Gauging and Purging Data Summary - October 2022
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

Well Name	Gauging Date	Gauging Time	Total Depth (ft btoc)	DTW (ft btoc)	TOC Elev (ft NGVD29)	Water Elevation (ft NGVD29)	Sample Pump Depth (ft btoc)	Purge Date	Sample Pump rate (mL/min)	Pre- Purge WL (ft btoc)	Post Purge WL (ft btoc)	Water Vol. Purged (gal)	Pump Type	Comments
OVERBURDEN														
AP-2	10/24/22	13:06	19.89	14.03	240.04	226.01	gauged only							
BP-6	10/24/22	10:42	2.07	2.07	236.74	234.67	gauged only							
BP-9	10/24/22	13:12	18.52	18.45	232.52	214.07	gauged only							
IP-4	10/24/22	11:25	12.83	4.19	249.40	245.21	10.83	10/24/22	100	4.19	4.22	1.0	P	
MW-9	10/24/22	9:44	16.06	7.42	246.25	238.83				gauged only				
MW-26	10/24/22	9:29	13.27	7.97	242.10	234.13				gauged only				
MW-28	10/24/22	10:41	11.74	1.66	240.20	238.54	9.24	10/25/22	130	1.67	10.02	1.5	P	
MW-31	10/24/22	10:19	17.13	8.98	217.58	208.60	14.63	10/26/22	200	8.95	9.00	1.25	P	
MW-OB2	10/24/22	10:00	19.29	17.50	284.70	267.20	gauged only							
MW-OB5	10/24/22	10:33	14.43	7.14	263.70	256.56	gauged only							
MW-OB7	10/24/22	10:22	15.81	7.09	249.20	242.11	gauged only							
MW-OB13	10/24/22	13:25	14.73	10.50	244.50	234.00	gauged only							
MW-OB14	10/24/22	11:13	19.46	11.06	241.65	230.59	15.26	10/24/22	50	11.06	12.28	2.0	B	
MW-OB15	10/24/22	11:28	7.33	1.79	262.35	260.56	gauged only							
MW-OB24	10/24/22	10:08	17.46	14.91	270.55	255.64	gauged only							
MW-OB25	10/24/22	11:04	10.97	8.18	238.45	230.27	9.70	10/26/22	150	8.42	10.12	0.08	P	dry, grab sample
MW-OB26	10/24/22	11:08	18.04	12.35	238.45	226.10	16.57	10/27/22	150	16.45	18.00	1.00	P	dry, grab sample
MW-OB27	10/24/22	9:58	11.35	11.35	239.15	227.80	gauged only							
MW-OB30	10/24/22	10:31	18.50	9.35	225.71	216.36	12.85	10/27/22	150	14.22	14.93	0.08	P	dry, grab sample
MW-OB31	10/24/22	13:09	13.84	8.70	226.02	217.32	11.29	10/26/22	150	8.65	9.43	1.0	P	
MW-OB32	10/24/22	10:39	13.10	8.38	227.96	219.58	10.60	10/26/22	150	8.36	10.10	2.0	P	
MW-OB33	10/24/22	10:48	15.44	7.86	224.03	216.17	11.67	10/26/22	150	7.90	7.84	2.1	P	
MW-OB34	10/24/22	10:44	16.25	15.02	223.58	208.56	15.58	10/26/22	100	14.90	16.20	0.5	P	
Sump A	10/24/22	9:00	NA	28.96	239.89	210.93	n/a	10/26/22	n/a	n/a	27.85	1.0	HB	grab sample bailer
Sump B	10/24/22	8:47	NA	24.64	236.39	211.75	n/a	10/26/22	n/a	n/a	23.55	1.0	HB	grab sample bailer
WP-CC-12	10/24/22	12:09	20.08	dry	251.64	dry	gauged only							
SHALLOW BEDROCK														
AW-A2	10/24/22	10:19	40.12	23.74	249.10	225.36	gauged only							
AW-A4	10/24/22	12:42	39.11	21.54	238.43	216.89	gauged only							
AW-A10	10/24/22	13:18	45.37	25.54	239.05	213.51	gauged only							
AW-A11	10/24/22	10:55	56.27	28.08	239.60	211.52	51.27	10/26/22	130	28.08	28.16	1.50	B	
AW-A14	10/24/22	11:10	32.80	17.00	236.82	219.82	27.80	10/26/22	200	16.49	20.52	3.50	B	
AW-A15	10/24/22	15:08	34.06	15.54	246.90	231.36	gauged only							
MW-19	10/24/22	11:34	18.68	11.65	249.10	237.45	gauged only							
MW-25S	10/24/22	9:35	42.10	26.51	241.55	215.04	37.10	10/26/22	150	26.20	27.02	1.75	B	
MW-27S	10/24/22	10:42	33.52	18.69	240.57	221.88	gauged only							
MW-36S	10/24/22	10:40	27.48	20.75	264.85	244.10	gauged only							
P-A1	10/24/22	10:03	18.48	12.86	283.30	270.44	gauged only							

Table 2B
Water Level Gauging and Purging Data Summary - October 2022
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

Well Name	Gauging Date	Gauging Time	Total Depth (ft btoc)	DTW (ft btoc)	TOC Elev (ft NGVD29)	Water Elevation (ft NGVD29)	Sample Pump Depth (ft btoc)	Purge Date	Sample Pump rate (mL/min)	Pre- Purge WL (ft btoc)	Post Purge WL (ft btoc)	Water Vol. Purged (gal)	Pump Type	Comments
INTERMEDIATE BEDROCK														
AW-B2	10/24/22	10:12	53.39	23.10	248.80	225.70	gauged only							
AW-B3	10/24/22	12:24	60.69	27.00	244.70	217.70	gauged only							
AW-B4	10/24/22	13:02	46.13	29.85	238.25	208.40	41.13	10/25/22	100	30.20	30.27	0.50	B	
AW-B11	10/24/22	13:20	59.01	28.00	238.65	210.65	gauged only							
AW-B17	10/24/22	10:30	47.10	26.09	236.42	210.33	gauged only							
AW-B18	10/24/22	15:05	55.14	37.50	247.30	209.80	50.19	10/24/22	150	38.22	38.20	2.50	B	
AW-B19	10/24/22	11:22	52.33	35.62	245.48	209.86	gauged only							
AW-B20	10/24/22	13:29	36.59	17.18	243.65	226.47	gauged only							
EW-B5	10/24/22	12:59	54.89	48.53	235.75	187.22	n/a	10/26/22	n/a	n/a	44.30	n/a	HB	grab sample bailer
MW-10B	10/24/22	11:10	34.80	27.32	254.70	227.38	gauged only							
MW-20D	10/24/22	10:20	49.89	43.83	266.90	223.07	gauged only							
MW-25D	10/24/22	9:37	59.98	24.43	241.30	216.87	gauged only							
MW-30D	10/24/22	10:23	44.02	11.12	217.10	205.98	gauged only							
MW-36D	10/24/22	10:45	52.10	39.58	266.40	226.82	gauged only							
MW-40B	10/24/22	9:50	55.00	50.12	284.55	234.43	gauged only							
DEEP BEDROCK														
AW-C1	10/24/22	9:55	125.57	37.34	283.50	246.16	gauged only							
AW-C2	10/24/22	9:31	175.82	51.50	241.10	189.60	170.82	10/25/22	150	51.93	51.81	2.00	B	
AW-C7	10/24/22	12:20	158.82	80.47	245.31	164.84	gauged only							
AW-C8	10/24/22	10:17	161.75	58.92	249.10	190.18	gauged only							
AW-C9	10/24/22	11:20	43.24	dry	251.60	dry	gauged only							
AW-C10	10/24/22	11:13	137.34	53.34	254.95	201.61	gauged only							
AW-C11	10/24/22	13:00	158.86	43.30	238.45	195.15	153.96	10/25/22	150.00	43.30	43.28	3.8	B	
MW-20C	10/24/22	10:15	168.10	75.02	269.25	194.23	gauged only							
MW-36C	10/24/22	10:27	166.33	76.30	266.60	190.30	gauged only							
PRETREATMENT AREA														
MW-OB19	10/24/22	11:41	9.25	8.82	287.82	279.00	9.04	10/24/22	100	8.12	8.87	1.5	P	
MW-OB23	10/24/22	11:36	8.42	5.91	287.05	281.14	7.17	10/24/22	150	5.87	6.51	1.0	P	
SURFACE WATER					**Reference Point (ft NGVD29)**	**Water Elevation (ft NGVD29)**								
SW-01	10/24/22	10:10	NG	NG	NG	NG	1.00	10/25/22	--	n/a	n/a	1.00	P	grab sample
SW-02	10/24/22	12:10	NG	NG	NG	NG	2.00	10/25/22	--	n/a	n/a	1.00	P	grab sample
SW-03	10/24/22	14:17	NG	NG	NG	NG	1.50	10/25/22	--	n/a	n/a	2.50	P	grab sample
SW-04	10/24/22	16:00	NG	NG	NG	NG	2.50	10/25/22	--	n/a	n/a	1.00	P	grab sample
SG-11	10/24/22	11:15	NA	0.50	272.75	272.25	1.00	10/24/22	--	n/a	n/a	1.00	HB	grab sample bailer
SG-12	10/24/22	12:56	NA	0.70	210.47	209.77	gauged only							

Notes:
The gauge reference point for surface water gauge SG-12 is the elevation of the 3-foot mark on the gauge.
B = bladder pump
DTW = Depth to water
ft btoc = feet below top of casing
ft NGVD29 = feet relative to National Vertical Geodetic Datum of 1929
gal = gallons
HB = hand bailer
mL/min = milliliters per minute
n/a = not applicable
NA = not available
NG = not gauged
P = peristaltic pump
TOC = top of casing
WL = water level

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
Overburden								
IP-4	IP-4_20150723	07/23/15	0.41	0.49	-137	7.03	15.13	0.0
IP-4	IP-4-20151209	12/09/15	0.68	0.42	-211	7.87	9.58	0.0
IP-4	IP-4_20160727	07/27/16	0.50	0.00	-129	7.04	19.24	0.0
IP-4	IP-4_20161129	11/29/16	0.62	0.69	-173	6.80	10.29	0.0
IP-4	IP-4_20170301	03/01/17	0.39	0.61	-220	6.72	9.22	1.5
IP-4	IP-4_20170621	06/21/17	0.56	0.00	-166	9.77	14.72	0.0
IP-4	IP-4_20170913	09/13/17	0.43	0.94	-270	9.31	16.03	0.0
IP-4	IP-4_20171213	12/13/17	0.65	0.21	-170	7.12	9.88	5.1
IP-4	IP-4_20180321	03/21/18	0.50	0.00	-195	7.58	7.10	0.0
IP-4	IP-4_20180614	06/14/18	0.56	0.00	-214	8.95	15.15	0.0
IP-4	IP-4_20180919	09/19/18	0.60	0.00	-200	7.65	18.10	0.0
IP-4	IP-4_20190911	09/11/19	0.50	0.00	-133	8.72	20.01	0.0
IP-4	IP-4_20201026	10/26/20	0.70	1.26	-137	9.79	13.10	1.70
IP-4	IP-4-20211202	12/02/21	0.77	1.61	-201	7.62	10.16	5.0
IP-4	IP_4_20221024	10/24/22	0.71	0.00	-179	7.75	15.53	0.0
MW-26	MW-26_20150727	07/27/15	0.71	0.50	-14	7.27	19.61	0.4
MW-26	MW-26-20151208	12/08/15	1.17	0.70	-84	7.44	10.86	0.0
MW-26	MW-26_20160727	07/27/16	0.87	0.00	-174	7.50	15.58	0.0
MW-26	DUP-20160727	07/27/16	-	-	-	-	-	-
MW-26	MW-26_20161129	11/29/16	0.75	1.66	-129	7.59	8.73	0.0
MW-26	MW-26_20170228	02/28/17	0.67	1.08	105	6.59	9.72	0.0
MW-26	MW-26_20170620	06/20/17	0.89	0.00	-9	7.84	14.52	0.0
MW-26	MW-26_20170912	09/12/17	0.80	2.09	-59	8.17	14.09	0.9
MW-26	MW-26_20171212	12/12/17	1.18	0.72	-145	7.89	11.44	1.8
MW-26	MW-26_20180320	03/20/18	0.79	0.00	104	7.41	7.86	0.0
MW-26	MW-26_20180612	06/12/18	0.83	0.00	0	8.03	12.88	2.6
MW-26	MW-26_20180918	09/18/18	0.64	0.00	19	7.95	18.63	0.0
MW-26	MW-26_20190909	09/09/19	0.88	0.00	173	8.34	15.96	0.0
MW-26	MW-26_20201027	10/27/20	0.917	0.77	-72	10.98	14.50	1.8
MW-26	MW-26-20211202	12/02/21	0.87	7.04	230	6.42	12.47	8.3
MW-28	MW-28_20160727	07/27/16	0.38	1.19	163	6.79	19.97	7.8
MW-28	- [2]	11/29/16	-	-	-	-	-	-
MW-28	MW-28_20170228	02/28/17	0.00	8.58	149	5.54	13.40	0.0
MW-28	- [2]	06/22/17	-	-	-	-	-	-
MW-28	- [2]	07/24/17	-	-	-	-	-	-
MW-28	- [2]	09/12/17	-	-	-	-	-	-
MW-28	- [2]	12/12/17	-	-	-	-	-	-
MW-28	- [2]	03/21/18	-	-	-	-	-	-
MW-28	- [2]	06/12/18	-	-	-	-	-	-
MW-28	- [2]	09/20/18	-	-	-	-	-	-
MW-28 [3]	MW-28_20190910	09/09/19	0.27	0.00	-60	7.05	18.41	85.7

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
MW-28	- [9]	10/27/20	0.37	3.97	182	7.62	13.95	25.7
MW-28	MW_28_20221025	10/25/22	0.29	0.00	127	6.99	18.83	4.2
MW-31	MW-31_20150805	08/05/15	1.08	0.40	-255	5.71	15.39	1.6
MW-31	MW-31-20151209	12/09/15	1.09	1.86	-268	6.44	12.38	0.0
MW-31	MW-31_20160727	07/27/16	0.97	0.00	-266	6.39	18.61	0.0
MW-31	MW-31_20161201	12/01/16	1.30	0.81	-290	6.37	12.41	0.0
MW-31	MW-31_20170301	03/01/17	1.23	0.53	-187	6.36	10.43	0.0
MW-31	MW-31_20170622	06/22/17	1.05	0.00	-284	6.60	14.07	1.0
MW-31	MW-31_20170913	09/13/17	1.31	0.00	-330	6.75	17.88	0.0
MW-31	MW-31_20171214	12/14/17	1.17	0.00	-148	6.81	10.91	0.0
MW-31	MW-31_20180321	03/21/18	1.03	0.52	-284	6.73	7.96	0.0
MW-31	MW-31_20180613	06/13/18	1.06	0.00	-126	6.75	12.84	2.2
MW-31	MW-31_20180919	09/19/18	1.38	0.61	-203	6.58	22.22	3.5
MW-31	MW-31_20190319	03/19/19	0.92	0.00	-87	6.73	8.42	0.0
MW-31	MW-31_20190910	09/10/19	1.19	0.00	-108	6.69	16.16	0.0
MW-31	MW-31_20200326	03/26/20	1.30	6.00	-249	6.66	8.94	2.9
MW-31	MW-31_20201027	10/27/20	1.05	0.00	-295	6.97	12.38	0.0
MW-31	MW-31-20211130	11/30/21	1.45	0.21	-241	7.10	11.05	1.8
MW-31	MW_31_20221026	10/26/22	1.11	0.00	-280	6.71	15.33	0.0
MW-OB7	MW-OB7_20150723	07/23/15	1.20	2.34	50	10.76	13.55	153.0
MW-OB7	MW-OB7-20151209	12/09/15	1.58	4.17	-65	10.04	11.03	0.0
MW-OB7	MW-OB7_20160728	07/28/16	0.88	0.00	-115	9.78	16.60	1.6
MW-OB7	MW-OB7_20161129 [2]	11/29/16	-	-	-	-	-	-
MW-OB7	MW-OB7_20170301	03/01/17	0.61	0.76	-27	9.59	14.24	3.8
MW-OB7	MW-OB7_20170622	06/22/17	0.47	0.00	47	8.84	17.54	0.0
MW-OB7	MW-OB7_20170912	09/12/17	0.45	2.09	-178	11.86	19.18	2.7
MW-OB7	MW-OB7_20171212 [3]	12/12/17	0.94	5.47	-156	8.47	8.30	9.8
MW-OB7	MW-OB7_20180320 [3]	03/20/18	0.39	0.00	9	8.13	8.57	4.2
MW-OB7	MW-OB7_20180613	06/13/18	0.54	0.22	-189	7.53	17.12	0.4
MW-OB7	MW-OB7_20180917	09/17/18	0.47	5.96	-137	9.39	27.18	1.4
MW-OB7 [3]	MW-OB7_20190910	09/10/19	0.44	0.00	-133	7.57	21.98	69.7
MW-OB14	MW-OB14_20150805	08/05/15	0.67	7.30	80	9.98	15.96	1.4
MW-OB14	MW-OB14A_A(1.0)-20150805 DISSOLV	08/05/15	-	-	-	-	-	-
MW-OB14	MW-OB14B_B(0.1)-20150805 DISSOLV	08/05/15	-	-	-	-	-	-
MW-OB14	MW-OB14_20160727	07/27/16	0.59	4.23	199	9.69	17.46	0.0
MW-OB14	MW-OB14_20161129	11/29/16	0.82	1.18	163	8.87	10.69	0.0
MW-OB14	MW-OB14_20170228	02/28/17	0.40	4.28	6	8.76	11.55	0.0
MW-OB14	MW-OB14_20170621	06/21/17	0.39	0.00	157	9.87	13.92	0.0
MW-OB14	MW-OB14_20170913	09/13/17	0.88	0.00	-118	10.59	15.26	1.6
MW-OB14	MW-OB14_20171212	12/12/17	1.46	4.02	3	11.69	10.24	3.1
MW-OB14	MW-OB14_20180321	03/21/18	0.49	0.74	23	10.02	8.41	0.0
MW-OB14	MW-OB14_20180613	06/13/18	0.43	1.84	66	10.11	15.04	3.3
MW-OB14	MW-OB14_20180918	09/18/18	0.63	1.49	22	9.64	15.67	0.7

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
MW-OB14	MW-OB14_20181210	12/10/18	0.42	8.24	208	9.80	9.80	0.0
MW-OB14	MW-OB14_20190321	03/21/19	0.38	0.12	-98	9.18	6.86	9.7
MW-OB14	MW-OB14_20190618	06/18/19	0.26	0.00	134	9.37	15.89	2.7
MW-OB14 [3]	MW-OB14_20190911	09/11/19	0.46	7.33	84	9.60	16.47	10.9
MW-OB14	MW-OB14_20191209	12/09/19	0.33	0.00	43	9.05	9.18	0.0
MW-OB14	MW-OB14_20200325	03/25/20	0.33	7.75	83	7.83	7.36	0.0
MW-OB14	MW-OB14-20200616	06/16/20	0.39	7.22	33	8.36	18.12	0.0
MW-OB14	MW-OB14_20201029	10/28/20	0.56	6.02	-32	9.97	10.85	6.2
MW-OB14	MW-OB14_20210503	05/03/21	0.82	6.46	161	10.39	11.11	0.0
MW-OB14	MW-OB14-20211202	12/02/21	0.41	0.56	-103	8.84	9.64	3.0
MW-OB14	MW-OB14-20220524	05/24/22	0.33	3.59	46	7.86	23.27	1.7
MW-OB14	MW_OB14_20221024	10/24/22	1.11	0.00	-137	8.09	15.26	0.0
MW-OB25	MW-OB25-20151209	12/09/15	0.88	4.28	163	6.93	10.81	0.0
MW-OB25	MW-OB25_20160728	07/28/16	0.76	4.09	167	7.66	20.57	37.2
MW-OB25	MW-OB25_20161201	12/01/16	0.73	8.14	-4	8.94	9.43	0.0
MW-OB25	MW-OB25_20170228	02/28/17	0.32	5.34	74	7.99	10.10	0.0
MW-OB25	MW-OB25_20170621	06/21/17	0.85	4.56	220	9.89	17.22	0.0
MW-OB25	MW-OB25_20170913	09/13/17	0.52	3.14	12	9.30	23.38	6.1
MW-OB25	MW-OB25_20171212[3]	12/12/17	1.08	13.71	19	7.44	8.41	9.5
MW-OB25	MW-OB25_20180320	03/20/18	0.72	8.03	119	7.90	6.42	1.2
MW-OB25	MW-OB25_20180613[3]	06/13/18	0.60	4.86	182	7.89	16.40	13.8
MW-OB25	MW-OB25_20180919[3]	09/19/18	0.48	1.03	-14	8.25	23.75	1.4
MW-OB25	MW-OB25_20181210	12/10/18	0.48	4.99	181	8.08	7.43	1.1
MW-OB25	MW-OB25_20190319	03/19/19	0.32	5.21	202	7.11	6.35	7.1
MW-OB25	MW-OB25_20190619 [3]	06/19/19	0.79	22.87	289	6.93	17.16	0.0
MW-OB25 [3]	MW-OB25_20190912 [3]	09/12/19	0.76	2.56	230	7.67	23.27	14.9
MW-OB25	MW-OB25_20191209	12/09/19	0.57	0.00	148	7.73	8.56	0.0
MW-OB25	MW-OB25_20200324	03/24/20	0.59	7.23	194	7.23	5.56	2.7
MW-OB25[8]	MW-OB25_20200617	06/16/20	0.73	6.19	126	7.30	22.38	0.0
MW-OB25[8]	MW-OB25_20201028	10/28/20	0.94	4.52	-39	7.78	12.99	2.7
MW-OB25	MW-OB25-20211130	11/30/21	0.60	4.34	138	7.56	8.40	0.0
MW-OB25	MW_OB25_20221026	10/26/22	1.64	5.28	263	7.61	18.94	1.1
MW-OB26	MW-OB26_20160728	07/28/16	1.16	0.00	251	7.15	17.39	49.9
MW-OB26	MW-OB26_20161201	12/01/16	1.51	2.39	7	12.21	8.63	12.5
MW-OB26	MW-OB26_20170228	02/28/17	1.40	3.38	159	8.18	11.06	0.0
MW-OB26	MW-OB26_20170622	06/22/17	1.20	5.30	193	10.69	19.82	0.0
MW-OB26	MW-OB26_20170914	09/14/17	0.96	1.66	-215	9.88	17.49	1.2
MW-OB26	MW-OB26_20171213 [2]	12/13/17	-	-	-	-	-	-
MW-OB26	MW-OB26_20180320	03/20/18	1.14	1.35	119	8.53	9.88	1.5
MW-OB26	MW-OB26_20180614 [3]	06/14/18	0.81	7.69	86	9.11	18.81	8.3
MW-OB26	MW-OB26_20180919 [3]	09/19/18	1.07	2.92	-3	8.05	23.46	4.9
MW-OB26	MW-OB26_20181211 [3]	12/11/18	1.02	7.13	251	8.58	9.62	9.8

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
MW-OB26	MW-OB26_20190320 [3]	03/20/19	0.44	7.04	82	9.12	12.72	5.7
MW-OB26[3]	MW-OB26_20190619 [3]	06/19/19	1.07	12.82	212	7.18	17.80	2.7
MW-OB26[3]	MW-OB26_20190911	09/11/19	1.53	4.38	0	9.51	20.21	29.3
MW-OB26[3]	MW-OB26_20191209[3]	12/09/19	1.69	1.94	-107	9.13	9.75	5.2
MW-OB26[3]	MW-OB26_20191210	12/10/19	1.25	0	110	9.89	10.51	6.4
MW-OB26[3]	MW-OB26_20200326[3]	03/26/20	0.91	4.17	181	8.13	13.58	0.0
MW-OB26[8]	MW-OB26_20200617	06/17/20	1.55	5.94	112	6.16	16.15	12.2
MW-OB26	MW-OB26_20201029	10/29/20	1.74	13.78	-268	8.96	11.22	42.0
MW-OB26	MW-OB26_20201030	10/29/20	1.74	13.78	-268	8.96	11.22	42.0
MW-OB26	MW-OB26-20211202	12/02/21	0.87	7.04	230	6.42	12.47	8.3
MW-OB26	MW_OB26_20221027	10/27/22	2.00	1.01	159	8.98	15.23	35.5
MW-OB30	MW-OB30-20151209[3]	12/09/15	3.87	2.17	-161	11.08	8.92	60.4
MW-OB30	MW-OB30-20151209F	12/10/15	-	-	-	-	-	-
MW-OB30	MW-OB30-20151209A(1.0)	12/09/15	-	-	-	-	-	-
MW-OB30	MW-OB30-20151209A(1.0)	12/10/15	-	-	-	-	-	-
MW-OB30	MW-OB30-20151209B(0.1)	12/09/15	-	-	-	-	-	-
MW-OB30	MW-OB30-20151209B(0.1)	12/10/15	-	-	-	-	-	-
MW-OB30	MW-OB30_20160727	07/27/16	2.37	2.95	-110	11.54	28.48	0.0
MW-OB30	MW-OB30_20161130[3]	11/30/16	1.93	3.55	87	10.48	11.99	137.0
MW-OB30	MW-OB30_20170118	01/18/17	2.31	5.33	-95	11.45	12.62	2.2
MW-OB30	MW-OB30_20170302	03/02/17	1.45	2.73	-140	11.10	6.72	0.0
MW-OB30	MW-OB30_20170425	04/25/17	1.84	6.86	-39	11.87	9.75	0.8
MW-OB30	MW-OB30_20170622	06/22/17	1.68	0.00	-157	11.99	21.78	0.0
MW-OB30	MW-OB30_20170724[4]	07/24/17	2.02	1.09	-32	12.77	14.44	0.6
MW-OB30	MW-OB30_20170913	09/13/17	1.70	0.00	-212	11.85	23.78	1.2
MW-OB30	MW-OB30_20190320	03/20/19	0.71	0.00	59	10.96	11.46	3.1
MW-OB30	MW-OB30_20171220	12/20/17	2.32	1.90	-9	10.88	10.80	4.0
MW-OB30	MW-OB30_20180321	03/21/18	1.17	2.14	-121	10.07	8.27	0.0
MW-OB30	MW-OB30_20180614	06/14/18	1.34	2.69	-72	9.17	17.65	0.2
MW-OB30	MW-OB30_20180919	09/19/18	1.31	0.00	21	10.66	17.23	0.0
MW-OB30	MW-OB30_20180910	09/10/19	0.96	0.00	3	10.28	17.87	6.1
MW-OB30	MW-OB30_20200326	03/26/20	0.92	2.11	95	10.13	10.99	0.0
MW-OB30	MW-OB30_20201029	10/29/20	1.09	2.12	-142	10.73	11.34	8.5
MW-OB30	MW-OB30_20210504	05/04/21	1.40	4.03	62	9.90	9.79	6.0
MW-OB30	MW-OB30-20211201	12/01/21	1.08	1.51	181	8.59	8.12	0.0
MW-OB30	MW-OB30-20220525	05/25/22	0.85	3.43	201	9.30	15.91	0.0
MW-OB30	MW_OB30_20221027	10/27/22	1.38	2.58	7	10.07	17.59	10.0
MW-OB31	MW-OB31-20151209	12/09/15	0.99	1.30	-272	9.20	11.40	1.8
MW-OB31	MW-OB31-20151209F	12/09/15	-	-	-	-	-	-
MW-OB31	MW-OB31-20151209F	12/10/15	-	-	-	-	-	-
MW-OB31	MW-OB31-20151209A(1.0)	12/09/15	-	-	-	-	-	-
MW-OB31	MW-OB31-20151209A(1.0)	12/10/15	-	-	-	-	-	-
MW-OB31	MW-OB31-20151209B(0.1)	12/09/15	-	-	-	-	-	-

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
MW-OB31	MW-OB31-20151209B(0.1)	12/10/15	-	-	-	-	-	-
MW-OB31	MW-OB31_20160727	07/27/16	0.74	1.66	-176	6.71	20.32	40.9
MW-OB31	MW-OB31_20161201	12/01/16	0.85	0.85	-138	8.30	11.84	51.3
MW-OB31	MW-OB31_20170118	01/18/17	2.01	1.50	-240	9.32	9.43	2.5
MW-OB31	MW-OB31_20170302	03/02/17	0.84	2.30	-141	9.02	5.31	0.0
MW-OB31	MW-OB31_20170425	04/25/17	1.86	0.00	219	10.40	10.27	1.5
MW-OB31	MW-OB31_20170622	06/22/17	1.72	0.00	-273	10.57	22.95	0.0
MW-OB31	MW-OB31_20170725	07/25/17	1.29	0.00	-246	11.26	14.46	3.0
MW-OB31	MW-OB31_20170913	09/13/17	1.53	0.02	-412	10.10	18.64	2.5
MW-OB31	MW-OB31_20171214	12/14/17	2.82	0.61	-367	9.07	10.70	0.9
MW-OB31	MW-OB31_20180321	03/21/18	1.29	0.00	-312	9.02	6.08	0.0
MW-OB31	MW-OB31_20180614	06/14/18	1.15	0.00	-329	9.64	20.00	0.0
MW-OB31	MW-OB31_20180919	09/19/18	0.90	0.00	-271	9.44	18.80	3.2
MW-OB31	MW-OB31_20190320	03/20/19	0.93	3.44	-116	10.51	7.36	1.4
MW-OB31	MW-OB31_20190910	09/10/19	1.11	0.00	164	8.16	23.14	4.3
MW-OB31	MW-OB31_20200326	03/26/20	1.22	0.00	-267	10.47	15.58	0.0
MW-OB31	MW-OB31_20201028	10/28/20	1.52	0.53	158	10.22	11.59	1.0
MW-OB31	MW-OB31-20211130	11/30/21	1.66	0.52	-268	10.42	7.16	0.0
MW-OB31	MW_OB31_20221026	10/26/22	1.08	0.00	-267	9.91	16.05	0.0
MW-OB32	MW-OB32-20151208	12/08/15	1.24	2.78	212	7.79	11.25	0.0
MW-OB32	MW-OB32-20151208F	12/08/15	-	-	-	-	-	-
MW-OB32	MW-OB32-20151208-A(1.0)	12/08/15	-	-	-	-	-	-
MW-OB32	MW-OB32-20151208-B(0.1)	12/08/15	-	-	-	-	-	-
MW-OB32	MW-OB32_20160726	07/26/16	0.90	0.00	202	7.79	17.06	0.0
MW-OB32	MW-OB32_20161201	12/01/16	1.15	2.81	163	7.14	11.84	0.0
MW-OB32	MW-OB32_20170302	03/02/17	0.85	5.36	218	7.18	4.59	0.0
MW-OB32	MW-OB32_20170425	04/25/17	1.20	2.15	292	7.57	8.98	0.0
MW-OB32	MW-OB32_20170622	06/22/17	1.44	0.17	247	7.65	15.48	0.0
MW-OB32	MW-OB32_20170725	07/25/17	1.06	0.22	261	8.18	14.54	1.2
MW-OB32	MW-OB32_20170913	09/13/17	1.61	0.00	54	7.85	22.22	0.0
MW-OB32	MW-OB32_20171214	12/14/17	3.66	0.41	150	6.90	8.85	0.4
MW-OB32	MW-OB32_20180321	03/21/18	0.76	5.81	252	7.62	9.32	0.0
MW-OB32	MW-OB32_20180614	06/14/18	1.43	0.00	177	8.05	14.16	0.9
MW-OB32	MW-OB32_20180919	09/19/18	0.95	0.00	177	7.54	16.64	0.0
MW-OB32	MW-OB32_20190320	03/20/19	0.53	7.92	332	7.83	7.54	0.0
MW-OB32	MW-OB32_20190910	09/10/19	1.11	0.00	164	8.16	23.14	4.3
MW-OB32	MW-OB32_20200326	03/26/20	0.67	2.82	247	7.35	14.45	0.0
MW-OB32	MW-OB32_20201028	10/28/20	1.40	0.67	187	7.99	11.61	0.8
MW-OB32	MW-OB32_20210503	05/03/21	1.08	4.23	302	8.13	14.74	0.0
MW-OB32	MW-OB32-20211130	11/30/21	0.78	0.41	226	7.32	9.84	4.5
MW-OB32	MW-OB32-20220524	05/24/22	0.998	0.34	146	7.02	24.66	0.0
MW-OB32	MW_OB32_20221026	10/26/22	1.090	0.00	122	8.83	19.67	0.0
MW-OB33	MW-OB33-20151208	12/08/15	0.63	1.61	156	9.12	12.16	0.0

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
MW-OB33	DUP-20151208-2	12/08/15	-	-	-	-	-	-
MW-OB33	MW-OB33-20151208F	12/08/15	-	-	-	-	-	-
MW-OB33	DUP20151208-2F	12/08/15	-	-	-	-	-	-
MW-OB33	MW-OB33-20151208A(1.0)	12/08/15	-	-	-	-	-	-
MW-OB33	MW-OB33-20151208B(0.1)	12/08/15	-	-	-	-	-	-
MW-OB33	MW-OB33_20160726	07/26/16	0.53	0.82	265	8.35	17.05	620.0
MW-OB33	MW-OB33_20161201	12/01/16	0.56	4.19	190	8.09	14.43	152.0
MW-OB33	MW-OB33_20170302	03/02/17	0.74	3.83	158	8.32	6.91	4.7
MW-OB33	MW-OB33_20170622	06/22/17	0.85	0.00	233	9.37	14.54	0.0
MW-OB33	MW-OB33_20170725	07/25/17	0.45	0.00	132	7.38	18.45	0.0
MW-OB33	MW-OB33_20170913	09/13/17	0.47	1.82	-134	11.26	17.86	0.6
MW-OB33	MW-OB33_20171214	12/14/17	0.52	1.96	241	6.45	10.26	1.6
MW-OB33	MW-OB33_20180321	03/21/18	0.69	2.40	199	8.91	6.68	2.5
MW-OB33	MW-OB33_20180614	06/14/18	0.74	0.00	261	10.31	12.99	1.0
MW-OB33	MW-OB33_20180919	09/19/18	0.49	1.35	274	8.04	14.86	0.0
MW-OB33	MW-OB33_20190320	03/20/19	0.49	3.14	302	9.36	7.61	4.0
MW-OB33	MW-OB33_20190910	09/10/19	0.37	2.09	238	10.11	25.22	2.6
MW-OB33	MW-OB33_20200326	03/26/20	0.79	2.92	245	8.82	8.95	1.2
MW-OB33	MW-OB33_20201028	10/28/20	0.61	5.05	-67	9.69	12.82	3.3
MW-OB33	MW-OB33-20211130	11/30/21	0.69	1.44	230	8.18	10.67	0.7
MW-OB33	MW_OB33_20221026	10/26/22	0.68	1.84	299	8.75	27.65	0.0
MW-OB34	MW-OB34-20151208	12/08/15	5.81	7.81	-235	7.69	10.88	0.9
MW-OB34	MW-OB34-20151208F	12/08/15	-	-	-	-	-	-
MW-OB34	MW-OB34-20151208A(1.0)	12/08/15	-	-	-	-	-	-
MW-OB34	MW-OB34-20151208B(0.1)	12/08/15	-	-	-	-	-	-
MW-OB34	MW-OB34_20160726	07/26/16	3.03	0.00	-45	7.08	21.31	0.0
MW-OB34	MW-OB34_20161201	12/01/16	3.47	0.73	-145	6.74	11.42	0.0
MW-OB34	MW-OB34_20170302	03/02/17	0.89	5.45	6	6.13	8.46	0.0
MW-OB34	MW-OB34_20170622	06/22/17	1.65	0.00	-24	6.93	24.67	0.0
MW-OB34	MW-OB34_20170725	07/25/17	1.61	3.56	95	7.30	13.49	2.6
MW-OB34	MW-OB34_20170913	09/13/17	2.48	1.32	-72	8.16	15.67	0.0
MW-OB34	MW-OB34_20171214	12/14/17	2.36	0.00	142	6.14	8.98	9.9
MW-OB34	MW-OB34_20180321	03/21/18	1.89	0.47	11	6.95	5.89	0.0
MW-OB34	- [2]	06/14/18	-	-	-	-	-	-
MW-OB34	MW-OB34_20180919	09/19/18	2.74	0.00	-22	6.96	20.96	0.0
MW-OB34	MW-OB34_20190320	03/20/19	0.78	0.00	121	6.50	7.99	0.0
MW-OB34	MW-OB34_20190910	09/10/19	1.89	0.00	-17	7.06	23.33	6.1
MW-OB34	MW-OB34_20200326	03/26/20	0.67	0.00	118	6.86	12.27	0.2
MW-OB34	MW-OB34_20201028	10/28/20	3.19	1.32	44	6.93	11.37	0.9
MW-OB34	MW-OB34-20211130	11/30/21	1.16	0.00	-1	6.45	10.50	3.2
MW-OB34	MW_OB34_20221026	10/26/22	2.39	0.00	24	6.39	26.16	0.0
SUMP A	Sump_A_20160726	07/26/16	0.76	3.84	247	7.86	20.37	38.1
SUMP A	SUMPA_20161130	11/30/16	1.29	10.03	183	7.17	10.92	0.0

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
SUMP A	Sump_A_20170228	02/28/17	0.46	3.90	180	5.86	17.70	85.4
SUMP A	Sump_A_20170425	04/25/17	0.94	4.67	67	8.19	10.20	0.3
SUMP A	Sump_A_20170621	06/21/17	0.90	11.09	259	10.36	16.32	0.0
SUMP A	Sump_A_20170724	07/24/17	0.81	11.52	258	6.94	14.48	340
SUMP A	Sump_A_20170912	09/12/17	0.98	2.38	118	7.46	16.03	10.9
SUMP A	Sump_A_20171212	12/12/17	1.44	4.17	164	7.90	10.52	13.7
SUMP A	Sump_A_20180322	03/22/18	0.45	7.29	86	7.27	12.82	329
SUMP A	Sump_A_20180614	06/14/18	0.85	27.53	155	8.20	13.31	6.4
SUMP A	Sump_A_20180918	09/18/18	1.12	6.73	84	7.98	19.58	31.8
SUMP A	Sump_A_20181211	12/11/18	1.27	3.33	155	7.73	11.69	1.7
SUMP A	SumpA_20190320	03/20/19	0.60	4.61	252	8.25	11.81	4.2
SUMP A	SumpA_20190618	06/18/19	0.73	18.36	303	8.26	15.44	0.0
SUMP A	SumpA_20190912	09/12/19	0.30	3.97	166	7.36	18.53	1.0
SUMP A	SumpA_20191210	12/10/19	1.09	12.35	228	7.76	11.06	0.0
SUMP A	SumpA_20200325	03/25/20	0.57	3.31	264	8.16	11.68	3.9
SUMP A	SumpA_20200617	06/17/20	0.01	5.96	452	7.68	44.06	0.0
SUMP A	SUMP-A_20201028	10/28/20	0.83	2.78	126	8.33	11.36	0.1
SUMP A	SUMP-A-20211130	11/30/21	0.59	8.87	21	9.19	10.49	78.6
SUMP A	SUMP_A_20221026	10/26/22	0.73	6.84	151	8.02	19.11	0.0
SUMP B	Sump_B_20160726	07/26/16	0.38	4.28	235	6.54	21.18	0.0
SUMP B	SUMPB_20161130	11/30/16	0.36	7.33	180	5.99	10.12	1.8
SUMP B	SUMPB_20170228	02/28/17	0.43	4.86	183	6.10	18.08	0.2
SUMP B	SUMPB_20170621	06/21/17	0.48	9.64	247	10.52	19.17	0.0
SUMP B	SUMPB_20170724	07/24/17	0.30	8.41	279	7.92	17.16	0.4
SUMP B	SUMPB_20170912	09/12/17	0.92	5.42	-5	6.81	21.55	0.0
SUMP B	SUMPB_20171212	12/12/17	0.63	5.27	178	7.00	10.85	1.7
SUMP B	SUMPB_20180322	03/22/18	1.03	6.64	189	7.52	12.72	42.2
SUMP B	SUMPB_20180614	06/14/18	0.26	5.50	232	7.96	19.79	3.5
SUMP B	SUMPB_20180918	09/18/18	0.42	7.05	185	7.90	22.15	2.9
SUMP B	SUMPB_20181210	12/10/18	0.74	14.70	335	8.46	8.87	0.5
SUMP B	SUMPB_20190320	03/20/19	0.60	6.35	277	8.10	13.11	8.4
SUMP B	SUMPB_20190618	06/18/19	0.55	14.34	285	8.22	20.22	0.0
SUMP B	SUMPB_20190912	09/12/19	0.34	8.56	262	8.04	20.35	3.1
SUMP B	SUMPB_20191210	12/10/19	0.68	27.73	102	7.32	8.21	0.0
SUMP B	SUMPB_20200325	03/25/20	0.64	9.46	247	7.72	10.31	0.3
SUMP B	SUMPB_20200617	06/17/20	1.19	8.45	153	7.44	17.33	0.0
SUMP B	SUMP-B_20201028	10/28/20	0.38	5.59	169	8.07	12.78	1.6
SUMP B	SUMP-B-20211130	11/30/21	0.68	8.17	136	9.04	7.79	40.5
SUMP B	SUMP_B_20221026	10/26/22	0.52	6.42	237	7.64	18.46	0.0
Shallow Bedrock								
AW-A2	AW-A2-20151209	12/09/15	1.32	0.61	-138	7.40	10.49	0.0
AW-A2	AW-A2_20160728	07/28/16	0.95	0.00	-203	7.83	18.80	0.0
AW-A2	AW-A2_20161129	11/29/16	1.31	0.80	-179	6.86	9.33	0.0
AW-A2	AW-A2_20170228	02/28/17	1.20	1.50	-151	6.74	9.69	0.0

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
AW-A2	AW-A2_20170620	06/20/17	0.92	0.00	-142	7.68	16.45	0.0
AW-A2	AW-A2_20170914	09/14/17	0.81	1.41	-221	8.04	13.14	0.3
AW-A2	AW-A2_20171214	12/14/17	1.15	0.00	-156	7.87	7.99	2.5
AW-A2	AW-A2_20180321	03/21/18	0.90	0.00	-187	7.49	9.08	0.0
AW-A2	AW-A2_20180613	06/13/18	0.96	0.00	-168	7.17	13.85	0.6
AW-A2	AW-A2_20180918	09/19/18	0.52	0.00	-143	8.33	16.80	6.8
AW-A2	AW-A2_20190911	09/11/19	0.91	0.00	-57	7.90	17.00	9.1
AW-A10	AW-A10_20150729	07/29/15	1.29	0.41	-222	8.22	16.29	2.1
AW-A10	AW-A10-20151209	12/09/15	1.40	0.87	-235	8.08	10.78	0.0
AW-A10	AW-A10_20160728	07/28/16	1.25	0.00	-155	8.52	16.65	4.3
AW-A10	AW-A10_20161202	12/02/16	1.50	1.08	-253	8.29	13.12	9.1
AW-A10	AW-A10_20170301	03/01/17	2.03	0.92	-216	7.08	10.29	3.5
AW-A10	AW-A10_20170621	06/21/17	1.63	1.53	-45	8.64	13.69	1.9
AW-A10	AW-A10_20170915	09/15/17	1.72	0.00	-217	7.61	16.95	0.0
AW-A10	AW-A10_20171213	12/13/17	1.78	0.36	-133	7.24	9.17	8.0
AW-A10	AW-A10_20180322	03/22/18	1.63	0.00	-158	7.51	12.68	4.7
AW-A10	AW-A10_20180614	06/14/18	1.48	0.00	-85	7.60	13.71	9.6
AW-A10	AW-A10_20180920	09/20/18	1.57	0.00	-108	7.35	13.89	9.2
AW-A10	AW-A10_20180912	09/12/19	1.46	0.00	25	7.36	14.91	9.2
AW-A11	AW-A11_20150730	07/30/15	1.04	0.39	54	8.65	16.50	0.6
AW-A11	AW-A11-20151209	12/09/15	1.15	2.45	-30	8.77	11.39	0.0
AW-A11	AW-A11_20160728	07/28/16	0.86	0.00	56	9.01	16.87	0.0
AW-A11	AW-A11_20161202	12/02/16	0.85	0.86	3	8.67	11.47	0.0
AW-A11	AW-A11_20170301	03/01/17	1.18	1.00	-19	8.34	11.03	0.0
AW-A11	AW-A11_20170621	06/21/17	0.77	0.00	63	8.53	15.40	0.0
AW-A11	AW-A11_20170724	07/24/17	0.56	0.00	89	9.64	14.76	1.2
AW-A11	AW-A11_20170914	09/14/17	0.80	0.00	-212	8.84	16.01	0.0
AW-A11	AW-A11_20171212	12/12/17	0.76	4.61	-154	8.80	8.92	8.8
AW-A11	AW-A11_20180320	03/20/18	0.75	0.00	-104	8.80	11.31	0.0
AW-A11	AW-A11_20180614	06/14/18	0.50	0.00	69	8.81	16.85	2.1
AW-A11	AW-A11_20180919	09/19/18	0.53	3.56	94	8.84	14.71	0.0
AW-A11	AW-A11_20190319	03/19/19	0.43	0.00	-18	8.70	11.51	0.0
AW-A11	AW-A11_20190912	09/12/19	0.61	0.00	242	8.63	13.96	4.9
AW-A11	AW-A11_20200324	03/24/20	0.59	0.00	70	8.90	9.02	4.1
AW-A11	AW-C11_20201027	10/27/20	0.85	0.56	-39	8.82	11.60	0.0
AW-A11	AW-A11-20211202	12/02/21	0.62	1.54	-55	8.99	11.08	4.8
AW-A11	AW_A11_20221026	10/26/22	0.80	0.00	29	8.41	17.37	5.3
AW-A14	AW-A14_20150730	07/30/15	0.83	0.83	-4	8.74	15.72	1.7
AW-A14	AW-A14-20151209	12/09/15	0.64	8.96	-165	8.78	10.21	0.0
AW-A14	AW-A14_20160727	07/27/16	0.61	0.00	-77	7.36	15.16	0.0
AW-A14	AW-A14_20161130	11/30/16	0.95	1.41	-191	7.39	9.74	0.0
AW-A14	AW-A14_20170228	02/28/17	1.00	0.79	-244	8.29	12.55	0.0
AW-A14	AW-A14_20170621	06/21/17	0.86	0.00	-91	8.21	13.90	0.0

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
AW-A14	AW-A14_20170914	09/14/17	0.77	0.96	-170	9.68	13.95	0.0
AW-A14	AW-A14_20171212	12/12/17	1.05	0.00	-152	7.97	10.97	2.3
AW-A14	AW-A14_20180322	03/22/18	0.86	0.30	-186	8.31	9.06	0.0
AW-A14	AW-A14_20180614	06/14/18	0.80	0.00	-82.00	9.17	19	0.80
AW-A14	AW-A14_20180919	09/19/18	0.73	0.00	-138	9.08	15.21	1.7
AW-A14	AW-A14_20181211	12/11/18	1.21	6.49	-80	8.52	9.62	2.8
AW-A14	AW-A14_20190320	03/20/19	0.50	5.71	-87	8.32	11.18	8.2
AW-A14	AW-A14_20190618	06/18/19	0.75	0.00	-212	8.52	11.26	1.8
AW-A14	AW-A14_20190912	09/12/19	0.90	0.00	-134	8.76	12.62	4.3
AW-A14	AW-A14_20191209	12/09/19	1.20	4.30	-14	8.31	7.27	0.0
AW-A14	AW-A14_20200324	03/24/20	0.68	0.00	-154	8.58	10.48	0.0
AW-A14	AW-A14_20200617	06/17/20	1.11	0.27	297	7.70	13.87	-0.6
AW-A14	AW-A14_20201027	10/27/20	1.21	0.52	-94	8.22	11.35	0.8
AW-A14	AW-A14-20211201	12/01/21	0.73	0.31	-175	8.16	11.19	2.5
AW-A14	AW_A14_20221026	10/26/22	0.91	0.00	-125	8.28	13.76	0.0
AW-A15	AW-A15_20150724	07/24/15	1.45	6.26	-112	6.95	15.94	5.1
AW-A15	AW-A15-20151209	12/09/15	1.25	0.71	-155	7.20	10.18	0.0
AW-A15	AW-A15_20160728	07/28/16	1.04	0.08	-83	6.46	19.73	0.0
AW-A15	AW-A15_20161130	11/30/16	0.94	0.77	-149	6.66	9.78	2.8
AW-A15	AW-A15_20170301	03/01/17	1.21	0.99	-253	5.73	12.36	1.5
AW-A15	AW-A15_20170620	06/20/17	1.10	0.00	-76	9.36	13.67	0.0
AW-A15	AW-A15_20170912	09/12/17	1.10	0.00	-148	7.34	12.64	4.4
AW-A15	AW-A15_20171211	12/11/17	1.05	0.00	-94	7.00	10.07	0.0
AW-A15	AW-A15_20180319	03/19/18	0.71	0.61	-89	7.05	10.63	0.0
AW-A15	AW-A15_20180613	06/13/18	0.71	0.02	-73	7.21	18.43	0.0
AW-A15	AW-A15_20180918	09/18/18	0.66	0.00	-90	7.85	15.60	5.3
AW-A15	AW-A15_20190911	09/11/19	0.93	0.00	-78	7.02	15.40	8.8
MW-25S	MW-25S_20150728	07/28/15	0.82	0.90	-100	7.94	16.30	1.2
MW-25S	MW-25S-20151210	12/10/15	1.21	1.52	-124	7.78	13.36	0.0
MW-25S	MW-25S_20160728	07/28/16	1.17	0.28	-88	6.90	16.53	41.7
MW-25S	MW-25S_20161129	11/29/16	1.33	0.75	-196	7.95	9.79	0.0
MW-25S	MW-25S_20170301	03/01/17	1.09	0.62	-286	8.04	12.98	0.1
MW-25S	MW-25S_20170620	06/20/17	1.23	0.00	-205	10.75	14.01	0.0
MW-25S	MW-25S_20170915	09/15/17	0.50	1.89	-2	9.09	16.33	0.1
MW-25S	MW-25S_20171213	12/13/17	1.05	5.54	-155	8.56	9.12	0.6
MW-25S	MW-25S_20180322	03/22/18	1.00	0.00	-242	8.39	9.92	0.0
MW-25S	MW-25S_20180614	06/14/18	0.67	0.00	-134	8.57	15.37	4.1
MW-25S	MW-25S_20180920	09/20/18	0.24	1.69	134	7.91	14.56	0.3
MW-25S	MW-25S_20190911	09/11/19	1.21	0.40	-167	8.28	12.72	0.0
MW-25S	MW-25S_20201028	10/27/20	0.69	0.00	-296	8.80	9.87	1.0
MW-25S	MW-25S-20211202	12/02/21	0.63	0.31	-199	9.76	10.80	9.0
MW-25S	MW_25S_20221026	10/26/22	0.51	0.00	-164	8.83	20.81	6.6
Intermediate Bedrock								

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
AW-B2	AW-B2_20150723	07/23/15	1.50	0.49	-157	7.33	12.96	1.7
AW-B2	DUP-M1_20150723	07/23/15	-	-	-	-	-	-
AW-B2	AW-B2-20151210	12/10/15	1.61	1.28	-174	7.24	10.26	0.0
AW-B2	AW-B2_20160728	07/28/16	0.40	0.00	-179	7.24	18.75	0.0
AW-B2	AW-B2_20161129	11/29/16	0.36	2.26	-116	6.33	9.10	0.0
AW-B2	AW-B2_20170228	02/28/17	0.20	0.82	-157	6.32	13.33	0.0
AW-B2	AW-B2_20170621	06/21/17	0.24	6.97	165	6.93	14.22	13.9
AW-B2	AW-B2_20170914	09/14/17	0.17	1.17	-248	10.30	13.52	2.4
AW-B2	AW-B2_20171214	12/14/17	0.35	0.00	-196	7.71	7.39	3.0
AW-B2	AW-B2_20180321	03/21/18	0.28	0.00	-151	7.43	9.16	9.0
AW-B2	AW-B2_20180614	06/14/18	0.30	0.00	-154	7.64	17.42	9.4
AW-B2	AW-B2_20180918	09/18/18	0.81	0.00	-135	7.53	16.20	8.2
AW-B2 [7]	AW-B2_20190912	09/12/19	0.38	3.44	246	7.70	14.66	41.1
AW-B4	AW-B4_20150731	07/31/15	2.53	5.85	-34	7.15	17.33	1.0
AW-B4	AW-B4_A(1.0)-20150731 Diss	07/31/15	-	-	-	-	-	-
AW-B4	AW-B4_B(0.1)-20150731 Diss	07/31/15	-	-	-	-	-	-
AW-B4	AW-B4-20151209	12/09/15	2.85	0.98	-120	6.87	8.12	0.0
AW-B4	AW-B4_20160729	07/29/16	1.10	0.00	-7	7.30	25.62	0.0
AW-B4	AW-B4_20161130	11/30/16	0.66	2.83	21	6.95	10.31	3.2
AW-B4	AW-B4_20170302	03/02/17	0.93	9.32	-54	6.92	8.75	0.0
AW-B4	AW-B4_20170621	06/21/17	0.83	0.00	-124	7.21	18.67	0.0
AW-B4	AW-B4_20190319	03/19/19	0.61	0.39	228	6.87	7.15	8.2
AW-B4	AW-B4_20170913	09/13/17	0.76	0.00	-40	7.50	22.47	2.9
AW-B4	AW-B4_20171214	12/14/17	0.84	0.00	-18	7.00	6.45	8.3
AW-B4	AW-B4_20180321	03/21/18	0.91	0.00	-108	7.30	9.14	0.0
AW-B4	AW-B4_20180613	06/13/18	0.89	0.05	-117	6.90	17.14	0.6
AW-B4	AW-B4_20180918	09/18/18	0.60	5.65	144	8.36	19.71	9.2
AW-B4	AW-B4_20181211	12/11/18	0.74	0.00	292	7.18	8.62	2.2
AW-B4	AW-B4_20190319	03/19/19	0.61	0.39	228	6.87	7.15	8.2
AW-B4	AW-B4_20190618	06/18/19	0.97	3.03	248	7.25	16.17	1.7
AW-B4	AW-B4_20190910	09/10/19	0.88	0.00	50	7.63	14.85	1.6
AW-B4	AW-B4_20191210	12/10/19	0.83	0.00	38	7.70	10.38	0.0
AW-B4	AW-B4_20200324	03/24/20	0.81	7.51	47	7.82	7.35	3.6
AW-B4	AW-B4_20200616	06/16/20	1.11	11.14	103	7.57	19.62	1.1
AW-B4	AW-B4_20201027	10/27/20	1.21	8.10	198	7.68	11.16	2.1
AW-B4	AW-B4-20211201	12/01/21	1.00	0.46	-120	6.91	11.10	6.4
AW-B4	AW_B4_20221025	10/25/22	1.10	2.06	171	7.49	22.72	3.3
AW-B11	AW-B11_20150727	07/27/15	0.81	0.82	-90	8.76	13.90	0.0
AW-B11	AW-B11-20151209	12/09/15	1.02	6.95	-227	10.12	10.90	0.7
AW-B11	AW-B11_20160728	07/28/16	0.64	0.00	-202	10.66	20.22	13.3
AW-B11	AW-B11_20161201	12/01/16	1.05	1.73	-302	10.53	11.21	0.0
AW-B11	AW-B11_20170301	03/01/17	1.14	0.69	-263	8.93	11.05	1.8
AW-B11	AW-B11_20170622	06/22/17	1.59	0.00	-192	7.85	16.27	0.70

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
AW-B11	AW-B11_20170914	09/14/17	0.56	0.00	-328	8.58	24.11	5.6
AW-B11	AW-B11_20171213	12/13/17	1.70	0.94	-230	7.68	6.09	4.0
AW-B11	AW-B11_20180322	03/22/18	0.30	0.00	-225	9.32	9.82	2.0
AW-B11	AW-B11_20180614	06/14/18	1.26	0.00	-162	8.80	14.09	3.7
AW-B11	AW-B11_20180920	09/20/18	0.95	0.13	-192	8.73	17.40	1.4
AW-B11	AW-B11_20190911	09/11/19	3.02	0.23	-139	7.44	21.66	0.0
AW-B17	AW-B17_20150806	08/06/15	1.26	0.23	-192	7.24	14.89	14.0
AW-B17	AW-B17-20151209	12/09/15	1.23	0.61	-131	6.87	10.23	0.0
AW-B17	AW-B17_20160727	07/27/16	0.97	0.00	-100	6.46	20.53	0.0
AW-B17	AW-B17_20161130	11/30/16	0.89	0.81	-174	6.97	10.64	2.5
AW-B17	AW-B17_20170301	03/01/17	1.15	0.62	-266	7.30	10.99	1.8
AW-B17	AW-B17_20170620	06/20/17	0.95	0.00	-119	7.67	15.39	1.3
AW-B17	AW-B17_20170912	09/12/17	1.03	0.30	-175	7.88	18.25	14.1
AW-B17	AW-B17_20171214	12/14/17	2.52	0.55	-165	6.46	7.06	3.5
AW-B17	AW-B17_20180320	03/20/18	0.98	0.00	-204	7.41	10.67	0.0
AW-B17	AW-B17_20180613	06/13/18	-0.81	0.00	-100	7.97	18.60	7.7
AW-B17	AW-B17_20180918	09/18/18	0.75	5.25	-71	7.58	21.09	9.7
AW-B17	AW-B17_20190319	03/19/19	0.67	0.00	-110	7.84	11.08	0.0
AW-B17	AW-B17_20190911	09/11/19	1.00	0.00	-95	7.68	16.17	9.7
AW-B17	AW-B17_20200325	03/25/20	0.74	0.00	-150	7.83	11.52	9.9
AW-B18	AW-B18_20150724	07/24/15	0.81	0.75	-74	6.85	12.15	0.0
AW-B18	AW-B18-20151207	12/07/15	1.25	1.60	-143	7.10	9.59	0.0
AW-B18	AW-B18_20160726	07/26/16	1.09	0.00	-80	6.42	16.49	2.6
AW-B18	AW-B18_20161130	11/30/16	1.45	1.76	-144	6.49	11.92	12.5
AW-B18	AW-B18_20170302	03/02/17	1.36	6.22	-184	6.69	9.44	0.0
AW-B18	AW-B18_20170620	06/20/17	1.29	0.00	-74	8.32	17.62	3.5
AW-B18	AW-B18_20170913	09/13/17	1.19	0.00	-221	7.36	14.77	2.5
AW-B18	AW-B18_20171211	12/11/17	1.23	0.00	-100	6.91	10.66	2.9
AW-B18	AW-B18_20180322	03/22/18	1.25	0.35	-129	7.26	10.72	4.7
AW-B18	AW-B18_20180612	06/12/18	1.14	2.57	-71	7.90	15.95	22.2
AW-B18	AW-B18_20180917	09/17/18	1.27	0.00	-95	7.16	18.51	5.8
AW-B18	AW-B18_20190909	09/09/19	0.89	3.06	-28	7.61	14.74	0.0
AW-B18	AW-B18_20201026	10/26/20	1.08	0.00	-77	7.37	10.09	3.8
AW-B18	DUP_20201026	10/26/20	1.08	0.00	-77	7.37	10.09	3.8
AW-B18	AW-B18-20211201	12/01/21	1.01	0.45	-120	6.93	11.11	6.9
AW-B18	DUP-02-20211201	12/01/21	1.01	0.45	-120	6.93	11.11	6.9
AW-B18	AW_B18_20221024	10/24/22	1.14	0.00	-40	7.30	11.78	0.0
AW-B20	AW-B20_20150805	08/05/15	2.14	8.57	-107	8.57	16.58	0.0
AW-B20	AW-B20_A(1.0)-20150805 Diss	08/05/15	-	-	-	-	-	-
AW-B20	AW-B20_B(0.1)-20150805 Diss	08/05/15	-	-	-	-	-	-
AW-B20	AW-B20_20161130	11/30/16	1.96	1.34	-94	8.36	10.35	0.0
AW-B20	AW-B20_20170301	03/01/17	2.23	0.81	-220	6.94	11.17	0.3
AW-B20	AW-B20_20170621	06/21/17	2.20	0.00	149	8.46	17.53	0.0

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
AW-B20	AW-B20_20170913	09/13/17	2.21	0.00	-208	8.43	17.06	0.3
AW-B20	AW-B20_20171212	12/12/17	2.13	0.00	-95	7.95	9.20	2.1
AW-B20	AW-B20_20180320	03/20/18	2.18	0.00	-119	8.26	9.55	0.0
AW-B20	AW-B20_20180613	06/13/18	2.02	0.00	-109	8.58	17.35	3.1
AW-B20	AW-B20_20180918	09/18/18	2.40	0.00	-130	8.44	18.19	3.2
AW-B20	AW-B20_20190911	09/09/19	2.41	0.00	-78	8.19	22.14	0.2
EW-B5	EW-B5_20160726	07/28/16	2.59	1.60	788	8.17	21.25	10.3
EW-B5	EW-B5_20161202	12/02/16	2.50	0.81	47	7.89	11.08	0.0
EW-B5	EW-B5_20170118	01/18/17	3.49	1.01	-5	8.55	10.03	1.8
EW-B5	EW-B5_20170301	03/01/17	2.77	0.84	-74	6.89	13.36	3.0
EW-B5	EW-B5_20170621	06/21/17	3.32	0.00	-17	9.37	16.32	0.0
EW-B5	EW-B5_20170725	07/25/17	3.59	0.00	220	8.59	11.98	0.7
EW-B5	EW-B5_20170914	09/14/17	3.62	0.26	106	8.65	12.99	1.9
EW-B5	DUP_20170914	09/14/17	3.62	0.26	106	8.65	12.99	1.9
EW-B5	EW-B5_20171212	12/12/17	3.90	0.44	62	8.46	9.48	5.3
EW-B5	Dup_20171212	12/12/17	3.90	0.44	62	8.46	9.48	5.3
EW-B5	EW-B5_20180322	03/22/18	3.68	0.59	-104	9.16	11.91	1.2
EW-B5	DUP01_20180322	03/22/18	3.68	0.59	-104	9.16	11.91	1.2
EW-B5	EW-B5_20180613	06/13/18	3.52	0.00	-25	9.10	12.06	1.8
EW-B5	DUP01_20180613	06/13/18	3.52	0.00	-25	9.10	12.06	1.8
EW-B5	EW-B5_20180918	09/18/18	3.42	1.48	83	8.53	13.41	0.8
EW-B5	DUP_20180918	09/18/18	3.42	1.48	83	8.53	13.41	0.8
EW-B5	EW-B5_20181210	12/10/18	1.99	0.00	180	8.30	8.70	1.6
EW-B5	DUP_20181210	12/10/18	1.99	0.00	180	8.30	8.70	1.6
EW-B5	EW-B5_20190114	01/14/19	2.73	3.00	266	6.89	12.24	0.0
EW-B5	EW-B5_20190320	03/20/19	2.43	11.80	81	8.14	14.83	0.3
EW-B5	DUP_20190320	03/20/19	2.43	11.80	81	8.14	14.83	0.3
EW-B5 [6]	EW-B5_20190618	06/18/19	2.54	14.88	302	8.16	17.42	0.0
EW-B5 [6]	DUP_D_20190618	06/18/19	2.54	14.88	302	8.16	17.42	0.0
EW-B5	EW-B5_20190912	09/12/19	2.43	7.02	105	8.17	17.28	0.0
EW-B5	DUP-02_20190912	09/12/19	2.43	7.02	105	8.17	17.28	0.0
EW-B5	EW-B5_20191001	10/01/19	2.61	1.94	172	7.14	17.40	0.7
EW-B5	EW-B5_20191111	11/11/19	2.58	0.00	124	8.33	10.96	3.7
EW-B5	EW-B5_20191210	12/10/19	2.57	5.10	131	9.38	11.81	0.0
EW-B5	DUP-01_20191210	12/10/19	2.57	5.10	131	9.38	11.81	0.0
EW-B5	EW-B5_20200325	03/25/20	2.41	12.39	149	8.13	11.92	0.7
EW-B5	DUP_20200325	03/25/20	2.41	12.39	149	8.13	11.92	0.7
EW-B5 [8]	EW-B5_2020617	06/17/20	2.18	1.47	384	7.27	15.73	-1.1
EW-B5	EW-B5_20201028	10/28/20	2.67	3.83	-6	8.28	10.75	1.5
EW-B5	DUP-02_20201028	10/28/20	2.67	3.83	-6	8.28	10.75	1.5
EW-B5	EW-B5_20210504	05/04/21	2.70	3.44	159	8.60	13.40	2.2
EW-B5	DUP_20210504	05/04/21	2.70	3.44	159	8.60	13.40	2.2
EW-B5	EW-B5-20211202	12/02/21	2.27	8.43	147	7.16	11.36	7.1

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
EW-B5	DUP-20211202	12/02/21	2.27	8.43	147	7.16	11.36	7.1
EW-B5	EW-B5-20220525	05/25/22	2.63	9.39	250	6.62	14.32	0.0
EW-B5	EW_B5_20221026	10/26/22	2.46	5.35	47	7.89	17.26	0.0
MW-25D	MW-25D_20150728	07/28/15	0.52	0.26	-101	7.27	19.94	0.0
MW-25D	MW-25D-20151210	12/10/15	1.07	1.91	-151	6.90	11.36	0.0
MW-25D	DUP-20151210	12/10/15	-	-	-	-	-	-
MW-25D	MW-25_20160728	07/28/16	0.83	0.00	-94	6.43	19.88	0.9
MW-25D	MW-25_20161129	11/29/16	0.72	2.30	-119	7.06	9.37	0.0
MW-25D	MW-25D-20170228	02/28/17	0.78	0.63	-196	7.21	11.00	0.0
MW-25D	MW-25D-20170621	06/21/17	0.93	0.00	-91	10.72	12.86	0.0
MW-25D	MW-25D-20170915	09/15/17	1.02	1.37	-200	7.45	25.00	1.2
MW-25D	MW-25D-20171213	12/13/17	1.04	8.90	-139	7.81	8.07	8.0
MW-25D	MW-25D-20180322	03/22/18	0.98	0.00	-186	7.27	12.41	4.6
MW-25D	MW-25D-20180614	06/14/18	0.87	0.00	-127	7.58	17.70	0.2
MW-25D	MW-25D-20180920	09/20/18	0.93	0.00	-124	7.54	16.63	3.1
MW-25D	MW-25D-20190912	09/12/19	0.46	0.00	213	7.60	13.86	9.7
MW-36D	MW-36D_20150805	08/05/15	4.37	0.40	-304	10.00	15.39	4.2
MW-36D	MW-36D-20151207	12/07/15	4.36	0.22	-353	10.07	9.37	0.0
MW-36D	MW-36D_20160726	07/26/16	3.71	0.00	-284	9.89	14.62	0.0
MW-36D	DUP-20160726	07/26/16	-	-	-	-	-	-
MW-36D	DUP1_20161130	11/30/16	-	-	-	-	-	-
MW-36D	MW-36D_20161130	11/30/16	3.07	2.29	-193	8.57	10.73	2.0
MW-36D	MW-36D_20170302	03/02/17	3.39	0.98	-336	8.41	7.09	0.0
MW-36D	DUP_20170302	03/02/17	3.39	0.98	-336	8.41	7.09	0.0
MW-36D	MW-36D_20170620	06/20/17	3.53	0.00	-303	11.98	17.75	0.0
MW-36D	DUP3_20170620	06/20/17	3.53	0.00	-303	11.98	17.75	0.0
MW-36D	MW-36D_20170913	09/13/17	4.51	0.00	-397	10.49	14.10	2.4
MW-36D	DUP-01_20170913	09/13/17	4.51	0.00	-397	10.49	14.10	2.4
MW-36D	MW-36D_20171211	12/11/17	4.18	0.48	-194	8.64	8.17	1.9
MW-36D	DUP-01_20171211	12/11/17	4.18	0.48	-194	8.64	8.17	1.9
MW-36D	MW-36D_20180322 [5]	03/22/18	4.10	0.39	-333	10.16	11.64	1.5
MW-36D	DUP02_20180322 [5]	03/22/18	4.10	0.39	-333	10.16	11.64	1.5
MW-36D	MW-36D_20180612 [5]	06/12/18	4.18	0.00	-304	11.21	15.49	0.0
MW-36D	DUP1_20180612 [5]	06/12/18	4.18	0.00	-304	11.21	15.49	0.0
MW-36D	MW-36D_20180917	09/17/18	3.94	0.00	-235	10.49	15.96	4.7
MW-36D	DUP_20180917	09/17/18	3.94	0.00	-235	10.49	15.96	4.7
MW-36D	DUP_20190909	09/10/19	4.57	0.00	-229	10.44	12.58	0.0
Deep Bedrock								
AW-C2	AW-C2_20150806	08/06/15	1.72	0.52	-104	6.66	15.51	5.3
AW-C2	AW-C2-20151210	12/10/15	1.89	4.17	-179	7.10	11.57	5.6
AW-C2	AW-C2_20160728	07/28/16	1.62	0.00	-140	7.22	17.33	0.0
AW-C2	AW-C2_20161129	11/29/16	1.73	1.09	-141	6.59	10.10	0.0
AW-C2	AW-C2_20170228	02/28/17	1.73	0.44	-205	6.00	10.50	0.0

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
AW-C2	AW-C2_20170621	06/21/17	1.53	0.00	-93	7.49	16.68	0.0
AW-C2	AW-C2_20170913	09/13/17	1.56	6.47	-230	7.17	14.08	2.8
AW-C2	AW-C2_20171213	12/13/17	1.57	0.00	-148	7.40	7.26	2.8
AW-C2	AW-C2_20180322	03/22/18	1.35	0.81	-140	7.22	10.14	1.0
AW-C2	AW-C2_20180612	06/12/18	1.23	7.33	-57	7.28	12.80	2.6
AW-C2	AW-C2_20180918	09/18/18	1.64	1.15	-112	6.99	12.95	5.0
AW-C2	AW-C2_20190910	09/10/19	1.60	0.00	-12	7.08	13.08	0.0
AW-C2	AW-C2_20201027	10/27/20	1.26	5.06	-119	7.50	10.12	2.6
AW-C2	AW-C2-20211202	12/02/21	1.57	0.41	-119	7.52	10.57	8.3
AW-C2	AW_C2_20221025	10/25/22	0.84	0.00	-28	7.83	18.26	3.7
AW-C11	AW-C11_20150806	08/06/15	1.55	0.55	-75	6.80	14.27	7.5
AW-C11	AW-C11_A(1.0)-20150806 Diss	08/06/15	-	-	-	-	-	-
AW-C11	AW-C11_B(0.1)-20150806 Diss	08/06/15	-	-	-	-	-	-
AW-C11	AW-C11-20151210	12/10/15	1.40	6.00	-42	6.25	10.87	16.3
AW-C11	AW-C11_20160728	07/28/16	1.61	0.00	72	5.71	17.90	38.1
AW-C11	AW-C11_20161130	11/30/16	1.61	0.58	-16	6.37	10.94	20.4
AW-C11	AW-C11_20170915	09/15/17	1.50	0.00	-48	7.16	19.99	0.5
AW-C11	AW-C11_20171212	12/12/17	1.58	0.43	37	6.69	7.34	9.9
AW-C11	AW-C11_20180322	03/22/18	1.43	0.00	-51	7.20	12.38	7.1
AW-C11	AW-C11_20180614	06/14/18	1.49	0.00	134	7.45	14.52	5.7
AW-C11	AW-C11_20180919	09/19/18	1.65	0.78	103	7.07	19.97	6.0
AW-C11	AW-C11_20181211	12/11/18	1.07	5.00	-1	7.58	9.08	8.3
AW-C11	AW-C11_20190321	03/21/19	1.14	0.43	-39	7.43	11.34	2.9
AW-C11	AW-C11_20190618	06/18/19	1.29	0.00	73	6.60	13.46	4.7
AW-C11	AW-C11_20190911	09/11/19	2.60	0.58	33	5.48	14.31	7.3
AW-C11	AW-C11_20191210	12/10/19	1.86	6.41	-48	6.62	8.54	4.8
AW-C11	AW-C11_20200324	03/24/20	1.24	0.94	-80	7.04	7.88	5.0
AW-C11	AW-C11-20200616	06/16/20	1.59	0.22	366	6.60	14.94	8.2
AW-C11	AW-C11_20201027	10/27/20	1.17	0.00	14	7.57	10.75	2.9
AW-C11	AW-C11_20210503	05/03/21	1.03	0.00	-24	8.41	11.98	0.0
AW-C11	AW-C11-20211130	11/30/21	1.89	0.32	-17	7.19	9.39	3.6
AW-C11	AW-C11-20220526	05/26/22	1.70	0.67	156	7.05	15.27	2.3
AW-C11	AW_C11_20221025	10/25/22	1.48	5.38	109	7.35	15.33	7.1
Pretreatment Plant								
MW-OB19	MW-OB19-20211130	11/30/21	0.37	6.47	213	7.60	6.12	0.0
MW-OB19	MW_OB19_20221024	10/24/22	0.36	1.95	18	6.80	17.00	0.0
MW-OB23	MW-OB23-20211130	11/30/21	0.84	0.80	-74	6.64	6.83	1.4
MW-OB23	DUP-20211130	11/30/21	0.84	0.80	-74	6.64	6.83	1.4
MW-OB23	MW_OB23_20221024	10/24/22	1.85	0.00	273	6.53	15.03	0.0
Surface Water								
SW-01	SW-01_20150729	07/29/15	0.08	4.84	217	6.03	23.03	1.3
SW-01	SW-01-20151208	12/08/15	0.09	11.57	164	6.07	1.78	0.0
SW-01	SW-01_20160726	07/26/16	0.13	6.39	227	6.02	25.66	26.4

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
SW-01	SW-01_20161201	12/01/16	0.11	7.07	199	4.87	15.56	0.0
SW-01	SW-01_20170227	02/27/17	0.08	18.61	171	5.28	3.05	0.0
SW-01	SW-01_20170622	06/22/17	0.12	5.87	187	6.44	22.02	0.3
SW-01	SW-01_20170724	07/24/17	0.10	6.76	234	4.77	19.75	0.9
SW-01	SW-01_20170912	09/12/17	0.25	5.57	108	6.39	16.80	0.8
SW-01	SW-01_20171213	12/13/17	0.16	13.11	264	5.47	0.68	4.0
SW-01	SW-01_20180320	03/20/18	0.08	10.50	142	5.83	2.42	0.0
SW-01	SW-01_20180612	06/12/18	0.17	7.45	64	9.05	25.04	0.0
SW-01	SW-01_20180920	09/20/18	0.21	6.10	280	5.75	16.34	0.4
SW-01	SW-01_20190321	03/21/19	0.07	12.62	333	5.25	4.90	4.9
SW-01	SW-01_20190912	09/12/19	0.10	2.87	192	5.86	16.91	3.4
SW-01	SW-01_20200325	03/25/20	0.10	12.64	110	9.17	8.07	0.0
SW-01	SW-1_20201029	10/29/20	0.17	9.25	356	5.37	10.93	0.0
SW-01	SW-1-20201029	10/29/20	0.17	9.25	356	5.37	10.93	0.0
SW-01	SW-01-20211201	12/01/21	0.10	10.01	207	4.98	3.80	0.0
SW-01	SW_01_20221025	10/25/22	0.11	7.56	255	6.21	14.25	1.2
SW-02	SW-02_20150729	07/29/15	0.08	3.51	205	6.47	25.97	1.0
SW-02	DUP-M3_20150729	07/29/15	-	-	-	-	-	-
SW-02	SW-02-20151208	12/08/15	0.09	10.91	137	6.81	5.68	0.0
SW-02	SW-02_20160726	07/26/16	0.91	5.71	281	4.96	32.45	0.0
SW-02	SW-02_20161201	12/01/16	0.12	8.14	248	4.73	10.80	0.0
SW-02	SW-02_20170622	06/22/17	0.11	5.76	144	8.04	24.93	1.5
SW-02	SW-02_20170724	07/24/17	0.07	6.93	192	8.00	17.70	1.5
SW-02	SW-02_20170912	09/12/17	0.24	6.26	112	6.71	17.82	0.5
SW-02	SW-02_20171213	12/13/17	0.10	10.36	275	6.11	1.58	3.5
SW-02	SW-02_20180320	03/20/18	0.09	9.40	128	6.23	3.80	0.0
SW-02	SW-02_20180612	06/12/18	0.13	6.65	120	9.54	24.63	0.0
SW-02	SW-02_20180920	09/20/18	0.14	6.99	126	6.55	21.15	3.7
SW-02	SW-02_20190321	03/21/19	0.07	8.52	373	5.35	5.32	4.6
SW-02	SW-02_20190912	09/12/19	0.10	4.79	198	6.00	17.39	5.4
SW-02	SW-02_20200325	03/25/20	0.08	13.24	146	8.16	6.57	0.0
SW-02	SW-2_20201029	10/29/20	0.15	12.45	346	5.66	9.44	0.0
SW-02	SW-2-20201029	10/29/20	0.15	12.45	346	5.66	9.44	0.0
SW-02	SW-02-20211201	12/01/21	0.10	10.77	156	5.36	4.15	0.0
SW-02	SW_02_20221025	10/25/22	0.10	6.38	276	6.90	17.89	0.7
SW-03	SW-03_20150729	07/29/15	0.07	3.67	170	6.74	27.77	0.0
SW-03	SW-03-20151208	12/08/15	0.07	14.31	139	6.52	6.63	0.0
SW-03	DUP-20151208	12/08/15	-	-	-	-	-	-
SW-03	SW-03_20160726	07/26/16	0.04	5.80	131	8.03	31.62	0.0
SW-03	DUP-20160726	07/26/16	-	-	-	-	-	-
SW-03	SW-03_20161201	12/01/16	0.12	11.01	171	5.91	5.32	0.0
SW-03	SW-03_20170118	01/18/17	0.10	13.13	27	8.55	1.82	0.2
SW-03	SW-03_20170227	02/27/17	0.05	12.24	118	6.09	3.68	1.0

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
SW-03	SW-03_20170425	04/25/17	0.08	8.39	199	5.47	19.53	0.0
SW-03	SW-03_20170622	06/22/17	0.08	5.93	126	7.39	28.59	0.7
SW-03	SW-03_20170724	07/24/17	0.06	7.18	196	8.12	17.01	1.0
SW-03	SW-03_20170912	09/12/17	0.22	5.78	-10	6.92	21.71	0.1
SW-03	SW-03_20171213	12/13/17	0.08	10.21	191	6.45	4.50	0.0
SW-03	SW-03_20180320	03/20/18	0.07	9.32	124	6.25	5.07	0.0
SW-03	DUP-20180320	03/20/18	0.07	9.32	124	6.25	5.07	0.0
SW-03	SW-03_20180612	06/12/18	0.14	8.23	195	10.00	24.65	0.0
SW-03	DUP02-20180612	06/12/18	0.14	8.23	195	10.00	24.65	0.0
SW-03	SW-03_20180920	09/20/18	0.14	8.29	93	7.07	23.77	0.2
SW-03	DUP-20180920	09/20/18	0.14	8.29	93	7.07	23.77	0.2
SW-03	SW-03_20190321	03/21/19	0.05	7.17	312	6.01	6.55	4.3
SW-03	DUP-20190321	03/21/19	0.05	7.17	312	6.01	6.55	4.3
SW-03	SW-03_20190912	09/12/19	0.10	6.06	183	6.14	17.60	4.9
SW-03	DUP-20190912	09/12/19	0.10	6.06	183	6.14	17.60	4.9
SW-03	SW-03_20200325	03/25/20	0.07	4.88	166	7.56	6.45	1.1
SW-03	DUP-20200325	03/25/20	0.07	4.88	166	7.56	6.45	1.1
SW-03	SW-3_20201029	10/29/20	0.16	11.70	292	5.98	9.62	0.0
SW-03	SW-3-20201029	10/29/20	0.16	11.70	292	5.98	9.62	0.0
SW-03	DUP_20201029	10/29/20	0.16	11.70	292	5.98	9.62	0.0
SW-03	DUP-20201029	10/29/20	0.16	11.70	292	5.98	9.62	0.0
SW-03	SW-03-20211201	12/01/21	0.09	10.83	131	5.41	4.80	0.0
SW-03	DUP-01-20211201	12/01/21	0.09	10.83	131	5.41	4.80	0.0
SW-03	SW_03_20221025	10/25/22	0.08	5.53	260	7.10	22.56	1.7
SW-04	SW-04_20150729	07/29/15	0.07	4.34	152	6.82	32.57	0.0
SW-04	SW-04-20151208	12/08/15	0.08	9.76	139	6.92	5.24	0.0
SW-04	SW-04_20160726	07/26/16	0.09	8.01	121	7.79	27.91	0.0
SW-04	SW-04_20161201	12/01/16	0.12	9.51	162	5.76	6.51	0.0
SW-04	SW-04_20170622	06/22/17	0.09	5.82	127	9.23	25.01	0.0
SW-04	SW-04_20170912	09/12/17	0.22	5.32	-15	7.04	23.25	0.0
SW-04	SW-04_20171213	12/13/17	0.08	10.95	206	6.41	3.56	0.0
SW-04	SW-04_20180320	03/20/18	0.06	6.71	130	6.09	15.22	0.0
SW-04	SW-04_20180612	06/12/18	0.13	5.70	81	9.29	30.19	0.1
SW-04	SW-04_20180920	09/20/18	0.14	8.16	87	7.01	24.95	1.2
SW-04	SW-04_20190321	03/21/19	0.05	9.47	261	6.55	4.68	2.9
SW-04	SW-04_20190912	09/12/19	0.09	6.95	190	6.37	22.89	3.0
SW-04	SW-04_20200325	03/25/20	0.07	14.27	169	7.51	6.01	0.0
SW-04	SW-4_20201029	10/29/20	0.08	13.29	278	5.77	9.26	0.0
SW-04	SW-4-20201029	10/29/20	0.08	13.29	278	5.77	9.26	0.0
SW-04	SW-04-20211201	12/01/21	0.09	10.36	131	5.10	6.68	0.0

Table 3
Field-Monitored Parameters
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Sample Location	Sample ID [1]	Sample Date	Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV	pH s.u.	Temperature °C	Turbidity NTU
SW-04	SW_04_20221025	10/25/22	0.09	6.20	261	7.12	20.17	0.0
SG-11	SG_11_20221024	10/24/22	0.65	8.06	195	7.37	15.07	0.0

Notes:

(1) = Field parameters are collected for the purpose of evaluating overall Site geochemistry. There are no Groundwater GA Standards in 6 NYCRR 703.5, Table 1 Water Quality Standards (or Water Quality Guidance Values from New York State Division of Water TOGS 1.1.1) for these parameters.

(2) = Insufficient water - field parameters not collected.

(3) = Due to low water yield, samples were collected the day following purging and turbidity levels may have increased over the course of sampling.

(4) = pH readings collected using two different probes, with one reading 14.0, and the other reading 12.77.

(5) = Sample analyzed at dilution due to a "foaming issue" with sample.

(6) = Field log erroneously noted pH = 18.16; confirmed to be 8.16 by Antea.

(7) = High turbidity despite long purging time; therefore, sample not analyzed.

(8) = Grab Sample

°C = degrees Celsius
mg/L = milligrams per liter
mS/cm = milliSiemens per centimeter
mV = millivolts
NTU = Nephelometric turbidity unit
NYCRR = New York Codes, Rules, and Regulations
s.u. = standard units
'--' = not applicable

Table 4
Laboratory Method Summary
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

Analyte	Groundwater Quality Standard GA standard[1] (µg/L)	Surface Water Quality Standard[1] Class A, B, C (µg/L)	Method Number	Media	Anticipated Reporting Limit (µg/L)	Sample Container Type	Container Volume (each in mL)*	No. Containers per sample	Preservation	Holding Time
Geochemistry Parameters										
Total Dissolved Solids	not screened	not screened	SM 2540C	Water	10,000	Plastic	500	1	Cool, < 6 deg. C.	7 days
Hardness	not screened	not screened	SM 2340C	Water	2,000	Plastic	250	1	HNO3 to pH<2	6 Months
Dissolved Metals										
Chromium	50	calculated*	SW846 6020A	Water	1.5	Plastic	250	1	Filtration + HNO_3 to pH<2	6 Months
Vanadium	n/a	190 A(A) 14 A(C)			2					
Hexavalent Chromium	50	16 A(A) 11 A(C)	USEPA 218.6	Water	0.3	Plastic	125	1	Filtration + NH4OH/(NH4)2SO4	28 days
Cyanide										
Total Cyanide	200	9000 H(FC)	SW846 9012B	Water	10	Plastic	250	1	NaOH to pH>12, Cool, < 6 deg. C.	14 Days
Volatile Organic Compounds										
Dichlorobenzenes (1,2-; 1,3-; and 1,4-)**	3	5	SW846 8260C	Water	1	Glass VOA	40	3	HCl to pH<2, Cool, < 6 deg. C.	14 Days
Free Available Cyanide										
Free Cyanide	n/a	5.2 A(A) 22 A(C)	OIA-1677	Water	2	Glass VOA	40	1	lead-acetate strip test for sulfide 40 mL VOA with NaOH or if sulfide detected 40 mL VOA no preservative	14 Days or 24 hrs

Notes:
1 = 6 NYCCR 703.5, Table 1 Water Quality Standards Surface Waters (or Water Quality Guidance Values from NYS Dept. of Water TOGS 1.1.1 as noted).
not screened = indicates not a site-related constituent; data used for geochemical assessment/developing surface water criteria only
n/a indicates no screening value available. Total metals criteria may be used for screening dissolved metals that have no screening value available.
A(C) = protective of fish propogation in fresh waters - applicable to dissolved phases only (acid soluble phase for vanadium)
A(A) = protective of fish survival in fresh waters - applicable to dissolved phases only (acid soluble phase for vanadium)
* = indicates A(A) and A(C) values are calculated based on hardness
GA = protective of fresh groundwaters for drinking water source
H(FC) = protective of human health for fish consumption
** = GA standard for dichlorobenzenes (DCB) applies individually to isomers (1,2-DCB; 1,3-DCB; and 1,4-DCB). Surface water A(C) value applies to the sum of the isomers.
DCB method will allow reporting to less than 3 µg/L with applicable qualification

µg/L = micrograms per liter
deg C = degrees Celsius
HCl = hydrochloric acid
HNO3 = nitric acid
hrs = hours
NaOH = sodium hydroxide
(NH4)2SO4 = ammonium sulfate
NH4OH = ammonium hydroxide
NYCRR = New York Codes, Rules, and Regulations
mL = milliliters
NYS = New York State
TOGS = Technical and Operational Guidance Series
USEPA = United States Environmental Protection Agency
VOA = volatile organic analysis

Table 5
Groundwater Analytical Results – Chromium and Cyanide
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

			Chromium, hexavalent µg/L 18540-29-9	Chromium, total µg/L 7440-47-3	Cyanide µg/L 57-12-5
NYSDEC Class GA Groundwater Quality Standards (µg/L) [1]			50	50	200
Location ID	Sample Name	Sample Date [5]			
AW-A11	AW-A11_20180320	3/20/2018	**670**	**680**	57
AW-A11	AW-A11_20180614	6/14/2018	**640**	**610**	53
AW-A11	AW-A11_20180919	9/19/2018	**300**	**290**	56
AW-A11	AW-A11_20190319	3/19/2019	22	36	50
AW-A11	AW-A11_20190912	9/12/2019	50	**64**	49
AW-A11	AW-A11_20200324	3/24/2020	**68**	**68 J**	37
AW-A11	AW-A11_20201027	10/27/2020	38	41	49
AW-A11	AW-A11-20211202	12/2/2021	**76**	**70** J	46
AW-A11	AW_A11_20221026	10/26/2022	**65**	**70**	37 U
AW-A14	AW-A14_20180322	3/22/2018	10 U	11	61
AW-A14	AW-A14_20180614	6/14/2018	10 U	3.1	100
AW-A14	AW-A14_20180919	9/19/2018	10 U	3.1 J	90
AW-A14	AW-A14_20181211	12/11/2018	10 U	2.8 U	73 J
AW-A14	AW-A14_20190320	3/20/2019	10 U	3.7	38 J
AW-A14	AW-A14_20190618	6/18/2019	10 U	3.6 U	46
AW-A14	AW-A14_20190912	9/12/2019	0.27 J	3.4	84
AW-A14	AW-A14_20191209	12/9/2019	0.3 U	2.8	68 J
AW-A14	AW-A14_20200324	3/24/2020	0.3 U	2.7 J	48
AW-A14	AW-A14_20200617	6/17/2020	0.31	2.9 U	51
AW-A14	AW-A14_20201027	10/27/2020	0.3 U	3.1	46
AW-A14	AW-A14-20211201	12/1/2021	0.28 J	2.3 J	44
AW-A14	AW_A14_20221026	10/26/2022	10 U	3 U	34 U
AW-B4	AW-B4_20180321	3/21/2018	33	**57**	190
AW-B4	AW-B4_20180613	6/13/2018	10 U	21	200
AW-B4	AW-B4_20180918	9/18/2018	24	32	200 T
AW-B4	AW-B4_20181211	12/11/2018	28 U	27	99 J
AW-B4	AW-B4_20190319	3/19/2019	10 U	10	130
AW-B4	AW-B4_20190518	6/18/2019	12	16	30
AW-B4	AW-B4_20190910	9/10/2019	0.3 J	6.7	150
AW-B4	AW-B4_20191210	12/10/2019	1.8	9.9	110 J
AW-B4	AW-B4_20200324	3/24/2020	0.84	4.6 J	96
AW-B4	AW-B4_20200616	6/16/2020	3.4 J	7.2	110
AW-B4	AW-B4_20201027	10/27/2020	3.3	7.5	110
AW-B4	AW-B4-20211201	12/1/2021	0.3 U	4.9 J	74
AW-B4	AW_B4_20221025	10/25/2022	10 U	6	80
AW-B17	AW-B17_20180320	3/20/2018	10 U	2.3	33
AW-B17	AW-B17_20180613	6/13/2018	10 U	3	30
AW-B17	AW-B17_20180918	9/18/2018	10 U	2.4 J	30
AW-B17	AW-B17_20190319	3/19/2019	10 U	3	29
AW-B17	AW-B17_20190911	9/11/2019	0.3 U	2.1	25
AW-B17	AW-B17_20200325	3/25/2020	0.3 U	2 J	22
AW-B18	AW-B18_20150724	7/24/2015	10 U	4.4	**206**
AW-B18	AW-B18-20151207	12/7/2015	--	--	**214**
AW-B18	AW-B18-20151207F	12/7/2015	10 U	2.1 U	--
AW-B18	AW-B18_20160726	7/26/2016	10 U	1.8 U	**270**
AW-B18	AW-B18_20161130	11/30/2016	10 UJ	2.7	**450**
AW-B18	AW-B18_20170228	2/28/2017	10 U	2.5	200
AW-B18	AW-B18_20170620	6/20/2017	10 U	1.2 J	**270**
AW-B18	AW-B18_20170913	9/13/2017	50 U	2.8	**260**
AW-B18	AW-B18_20171211	12/11/2017	10 U	13	200 J
AW-B18	AW-B18_20180319	3/19/2018	10 U	2.1	170
AW-B18	AW-B18_20180612	6/12/2018	10 U	0.61 J	--
AW-B18	AW-B18_20180917	9/17/2018	10 U	5 U	**240**
AW-B18	AW-B18_20190909	9/9/2019	0.3 U	1.1 J	**210**
AW-B18	AW-B18_20201026	10/26/2020	0.3 U	3	140 J
AW-B18	DUP_20201026	10/26/2020	0.3 U	1.2 J	120
AW-B18	AW-B18-20211201	12/1/2021	0.3 U	2.7	170
AW-B18	DUP-02-20211201	12/1/2021	0.3 U	3.5	150
AW-B18	AW_B18_20221024	10/24/2022	10 U	1.3 J	100 J
AW-B18	DUP_20221024	10/24/2022	10 U	1.2 J	110 J
AW-C2	AW-C2_20150806	8/6/2015	10 U	19	19
AW-C2	AW-C2-20151210	12/10/2015	10 U	**73.9**	22
AW-C2	AW-C2_20160728	7/28/2016	10 U	13	10
AW-C2	AW-C2_20161129	11/29/2016	10 U	13	23
AW-C2	AW-C2_20170228	2/28/2017	10 U	27	42
AW-C2	AW-C2_20170621	6/21/2017	10 U	21	18
AW-C2	AW-C2_20170913	9/13/2017	10 U	13	29
AW-C2	AW-C2_20171213	12/13/2017	10 U	15	31
AW-C2	AW-C2_20180322	3/22/2018	10 U	22	32
AW-C2	AW-C2_20180612	6/12/2018	10 U	17 J	25 J
AW-C2	AW-C2_20180918	9/18/2018	10 U	21	48
AW-C2	AW-C2_20190910	9/10/2019	0.3 U	17	26
AW-C2	AW-C2_20201027	10/27/2020	0.3 U	12	24
AW-C2	AW-C2-20211202	12/2/2021	0.3 U	19 J	26
AW-C2	AW_C2_20221025	10/25/2022	10 U	16	26 U

Table 5
Groundwater Analytical Results – Chromium and Cyanide
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

			Chromium, hexavalent µg/L 18540-29-9	Chromium, total µg/L 7440-47-3	Cyanide µg/L 57-12-5	
NYSDEC Class GA Groundwater Quality Standards (µg/L) [1]			50	50	200	
Location ID	Sample Name	Sample Date [5]				
AW-C11	AW-C11_20180322	3/22/2018	**6200**	**6900**	130	
AW-C11	AW-C11_20180614	6/14/2018	**7100**	**6900**	140	
AW-C11	AW-C11_20180919	9/19/2018	**5300**	**4900**	120	
AW-C11	AW-C11_20181211	12/11/2018	**3200**	**3800**	54 J	
AW-C11	AW-C11_20190320	3/20/2019	**260**	**830**	83 J	
AW-C11	AW-C11_20190618	6/18/2019	**4700**	**5400**	88	
AW-C11	AW-C11_20190911	9/11/2019	**1000 J**	**1300**	68 J	
AW-C11	AW-C11_20191210	12/10/2019	0.48	**100**	56	
AW-C11	AW-C11_20200324	3/24/2020	0.32	**57 J**	39	
AW-C11	AW-C11_20200616	6/16/2020	**3000 J**	**3200**	65 J	
AW-C11	AW-C11_20201027	10/27/2020	**1600**	**1600**	52	
AW-C11	AW-C11_20210503	5/3/2021	**1700 J**	**2200**	43 U	
AW-C11	AW-C11-20211130	11/30/2021	25	**1300 J**	40	
AW-C11	AW-C11-20220526	5/26/2022	**1200**	**1300**	44	
AW-C11	AW_C11_20221025	10/25/2022	**380 J**	**470**	21 U	
EW-B5 DUP	DUP01_20180322	3/22/2018	**130000**	**140000**	**760**	(3)
EW-B5	EW-B5_20180322	3/22/2018	**130000**	**140000**	**640**	(3)
EW-B5 DUP	DUP_20180613	6/13/2018	**130000 J**	**100000**	**520**	(3)
EW-B5	EW-B5_20180613	6/13/2018	**130000 J**	**100000**	**580**	(3)
EW-B5 DUP	DUP_20180918	9/18/2018	**110000**	**110000**	**540**	(3)
EW-B5	EW-B5_20180918	9/18/2018	**120000**	**110000**	**550**	(3)
EW-B5 DUP	DUP_20181210	12/10/2018	**35000**	**38000 J**	87	(3)
EW-B5	EW-B5_20181210	12/10/2018	**37000**	**24000 J**	87	(3)
EW-B5	EW-B5_20190114	1/14/2019	**46000**	**68000**	**490**	(3)
EW-B5	EWB5 _ 20190218	2/18/2019	**52000**	**53000**	**420**	(3)
EW-B5 DUP	DUP_20190320	3/20/2019	**150 J**	**9600**	**320 J**	(3)
EW-B5	EW-B5_20190320	3/20/2019	6.6 J	**9800**	**350 J**	(3)
EW-B5	EW-B5_20190618	6/18/2019	**46000**	**58000**	**910 J**	(3)
EW-B5 DUP	DUP_20190618	6/18/2019	**48000**	**61000**	**920**	(3)
EW-B5 DUP	DUP-02_20190912	9/12/2019	**38000 J**	**47000**	**280**	(3)
EW-B5	EW-B5_20190912	9/12/2019	**39000 J**	**48000**	**280**	(3)
EW-B5	EW-B5_20191001	10/1/2019	**39000**	**40000**	**210**	(4)
EW-B5	EW-B5_20191111	11/11/2019	**60000**	**67000**	**350 J**	(4)
EW-B5 DUP	DUP-01_20191210	12/10/2019	**56000**	**54000**	**300 J**	(3)
EW-B5	EW-B5_20191210	12/10/2019	**52000**	**53000**	**300 J**	(3)
EW-B5 DUP	DUP 2_20200325	3/25/2020	**41000**	**52000 J**	**300**	(3)
EW-B5	EW-B5_20200325	3/25/2020	**40000**	**49000 J**	**290**	(3)
EW-B5 DUP	DUP03_20200617	6/17/2020	**39000 J**	**48000**	**210**	(3)
EW-B5	EW-B5_20200617	6/17/2020	**38000 J**	**49000**	180	(3)
EW-B5	EW-B5_20201028	10/28/2020	**42000**	**43000**	190	(3)
EW-B5 DUP	DUP-02_20201028	10/28/2020	**41000**	**44000**	**210**	(3)
EW-B5	EW-B5_20210504	5/4/2021	**41000 J**	**48000**	**260**	(3)
EW-B5 DUP	DUP_20210504	5/4/2021	**39000 J**	**46000**	**230**	(3)
EW-B5	EW-B5-20211202	12/2/2021	**55000**	**47000**	**250**	(3)
EW-B5 DUP	DUP-20211202	12/2/2021	**54000**	**48000**	**250**	(3)
EW-B5 DUP	DUP-20220525	5/25/2022	**35000 J**	**38000**	**240**	
EW-B5	EW-B5-20220525	5/25/2022	**38000 J**	**41000**	**230**	
EW-B5 DUP	DUP_20221026	10/26/2022	**34000**	**34000**	180	
EW-B5	EW_B5_20221026	10/26/2022	**26000**	**36000**	180	
IP-4	IP-4_20150723	7/23/2015	10 U	8.1	**1380**	
IP-4	IP-4-20151209	12/9/2015	10 UJ	3.3 U	**843**	
IP-4	IP-4_20160727	7/27/2016	10 U	3.9	**710**	
IP-4	IP-4_20161129	11/29/2016	10 U	2	**760**	
IP-4	IP-4_20170301	3/1/2017	10 U	3.9	**640**	
IP-4	IP-4_20170621	6/21/2017	19 U	7.4	**1200**	
IP-4	IP-4_20170913	9/13/2017	10 U	5.4	**1400**	
IP-4	IP-4_20171213	12/13/2017	10 U	5.2 U	**1100**	
IP-4	IP-4_20180321	3/21/2018	10 U	2.5	**830**	
IP-4	IP-4_20180614	6/14/2018	10 U	13	**2100**	
IP-4	IP-4_20180919	9/19/2018	10 U	10	**2000**	
IP-4	IP-4_20190911	9/11/2019	0.97 J	24	**3500**	
IP-4	IP-4_20201026	10/26/2020	0.29 J	7.3	**930**	
IP-4	IP-4-20211202	12/2/2021	0.3 U	3.5 J	**880**	
IP-4	IP_4_20221024	10/24/2022	10 U	4.8	**1100** J	
MW-23D	MW-23D 20220119	1/19/2022	7.1	7.4	10 U	
MW-23S	MW-23S 20220118	1/18/2022	0.34	0.52 J	10 U	
MW-24	MW-24-20220110	1/10/2022	0.66	0.99 J	10 U	

Table 5
Groundwater Analytical Results – Chromium and Cyanide
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

			Chromium, hexavalent µg/L 18540-29-9	Chromium, total µg/L 7440-47-3	Cyanide µg/L 57-12-5	
NYSDEC Class GA Groundwater Quality Standards (µg/L) [1]			50	50	200	
Location ID	Sample Name	Sample Date [5]				
MW-25S	MW-25S_20150728	7/28/2015	10 U	6.6	90	
MW-25S	MW-25S-20151210	12/10/2015	10 U	4.7 J	89	
MW-25S	MW-25S_20160728	7/28/2016	10 U	3.9	66	
MW-25S	MW-25S_20161129	11/29/2016	10 U	3.3	58	
MW-25S	MW-25S_20170301	3/1/2017	10 U	7.3	84	
MW-25S	MW-25S_20170620	6/20/2017	10 U	8.6	130	
MW-25S	MW-25S_20170915	9/15/2017	**250**	**220**	27	
MW-25S	MW-25S_20171213	12/13/2017	26	**56**	160	
MW-25S	MW-25S_20180322	3/22/2018	10 U	20	**220**	
MW-25S	MW-25S_20180614	6/14/2018	10 U	10	140	
MW-25S	MW-25S_20180920	9/20/2018	10 U	5.4	10 U	
MW-25S	MW-25S_20190911	9/11/2019	1.5 J	22	**390** J	
MW-25S	MW-25S_20201028	10/28/2020	4.7	18	**220**	
MW-25S	MW-25S-20211202	12/2/2021	1.7 U	22 J	**270**	
MW-25S	MW_25S_20221026	10/26/2022	10 U	11 U	140	
MW-26	MW-26_20150727	7/27/2015	10 U	7.8	74	
MW-26	MW-26-20151208	12/8/2015	10 U	7.1	68	
MW-26	MW-26_20160727	7/27/2016	10 U	3.2	77	
MW-26-DUP	DUP1_20160727	7/27/2016	10 UJ	3.4	71	
MW-26	MW-26_20161129	11/29/2016	10 U	3.1	81	
MW-26	MW-26_20170228	2/28/2017	5.1 J	7.3	94	
MW-26	MW-26_20170620	6/20/2017	10 U	8.4	63	
MW-26	MW-26_20170912	9/12/2017	10 U	3.1	95	
MW-26	MW-26_20171212	12/12/2017	10 U	5 U	75	
MW-26	MW-26_20180320	3/20/2018	36	39	87	
MW-26	MW-26_20180612	6/12/2018	10 U	11 J	62 J	
MW-26	MW-26_20180918	9/18/2018	10 U	3.2 J	89	
MW-26	MW-26_20190909	9/9/2019	0.3 U	2.9	70	
MW-26	MW-26_20201027	10/27/2020	0.3 U	2.9	56	
MW-26	MW-26-20211202	12/2/2021	0.3 U	2.7 J	110	
MW-28	MW-28_20160727	7/27/2016	10 U	24	9.1 J	
MW-28	MW-28_20170228	2/28/2017	10 U	17	**350**	
MW-28	MW-28_20180321	3/21/2018	13	**140**	--	
MW-28	MW-28_20190910	9/10/2019	0.98 U	27	49	
MW-28	MW_28_20221025	10/25/2022	10 U	9.9	14 U	
MW-31	MW-31_20180321	3/21/2018	10 U	8.1	180	
MW-31	MW-31_20180613	6/13/2018	10 U	9.5	**220**	
MW-31	MW-31_20180919	9/19/2018	10 U	11	**230**	
MW-31	MW-31_20190319	3/19/2019	10 U	11	**220**	
MW-31	MW-31_20190910	9/10/2019	0.49 J	8.2	160	
MW-31	MW-31_20200326	3/26/2020	0.3 U	8.9 J	180	
MW-31	MW-31_20201027	10/27/2020	0.39	8.1	**210**	
MW-31	MW-31-20211130	11/30/2021	1.7	14 J	**220**	
MW-31	MW_31_20221026	10/26/2022	10 U	9.5 U	**220**	
MW-OB14	MW-OB14_20180321	3/21/2018	**3400**	**3700**	**710**	
MW-OB14	MW-OB14_20180613	6/13/2018	**4500**	**4300**	**1200**	
MW-OB14	MW-OB14_20180918	9/18/2018	**2700**	**4500**	**800**	
MW-OB14	MW-OB14_20181210	12/10/2018	**2000**	**3700 J**	**610**	
MW-OB14	MW-OB14_20190321	3/21/2019	**290**	**420**	**270**	[2]
MW-OB14	MW-OB14_20190618	6/18/2019	**120**	**160**	10 U	
MW-OB14	MW-OB14_20190912	9/12/2019	**860**	**1300**	**770**	
MW-OB14	MW-OB14_20191209	12/9/2019	**610**	**670**	**290 J**	
MW-OB14	MW-OB14_20200325	3/25/2020	31	42 J	170	
MW-OB14	MW-OB14_20200616	6/16/2020	44	**54**	200	
MW-OB14	MW-OB14_20201029	10/29/2020	**5000**	**5500**	**440**	
MW-OB14	MW-OB14_20210503	5/3/2021	**280 J**	**340**	**220 J**	
MW-OB14	MW-OB14-20211202	12/2/2021	**140**	**140 J**	150	
MW-OB14	MW-OB14-20220524	5/24/2022	2	9.7	61	
MW-OB14	MW_OB14_20221024	10/24/2022	10 U	7.3	--	[6]
MW-OB19	MW-OB19-20211130	11/30/2021	--	--	**210**	
MW-OB19	MW_OB19_20221024	10/24/2022	--	--	**270** J	
MW-OB23	MW-OB23-20211130	11/30/2021	--	--	**780**	
MW-OB23	DUP-20211130	11/30/2021	--	--	**660**	
MW-OB23	MW_OB23_20221024	10/24/2022	--	--	**3000** J	
MW-OB25	MW-OB25_20180320	3/20/2018	**400**	**360**	58	
MW-OB25	MW-OB25_20180613	6/13/2018	**630**	**570**	110	
MW-OB25	MW-OB25_20180919	9/19/2018	**670**	**760**	110	
MW-OB25	MW-OB25_20181210	12/10/2018	**270**	**280 J**	23	
MW-OB25	MW-OB25_20190319	3/19/2019	**380**	**410**	20	
MW-OB25	MW-OB25_20190619	6/19/2019	**250 J**	**230 J**	68 J	
MW-OB25	MW-OB25_20190912	9/12/2019	**780**	**790**	170	
MW-OB25	MW-OB25_20191209	12/9/2019	**290**	**320**	69 J	
MW-OB25	MW-OB25_20200324	3/24/2020	**180**	**190 J**	34	
MW-OB25	MW-OB25_20200617	6/17/2020	**360 J**	**420**	77	
MW-OB25	MW-OB25_20201028	10/28/2020	**2400**	**2600**	**360**	
MW-OB25	MW-OB25-20211130	11/30/2021	**250**	**280 J**	41	
MW-OB25	MW_OB25_20221026	10/26/2022	**710**	**520**	160	

Table 5
Groundwater Analytical Results – Chromium and Cyanide
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

			Chromium, hexavalent µg/L 18540-29-9	Chromium, total µg/L 7440-47-3	Cyanide µg/L 57-12-5
NYSDEC Class GA Groundwater Quality Standards (µg/L) [1]			50	50	200
Location ID	Sample Name	Sample Date [5]			
MW-OB26	MW-OB26_20180320	3/20/2018	10 U	6.3	**300**
MW-OB26	MW-OB26_20180614	6/14/2018	33	**140**	**300**
MW-OB26	MW-OB26_20180919	9/19/2018	6.2 J	5.6	**250**
MW-OB26	MW-OB26_20181211	12/11/2018	**62**	50	160 J
MW-OB26	MW-OB26_20190320	3/20/2019	24	37	93 J
MW-OB26	MW-OB26_20190619	6/19/2019	26 J	18 J	65 J
MW-OB26	MW-OB26_20190912	9/12/2019	18	22	**260**
MW-OB26	MW-OB26_20191210	12/10/2019	29	34	190 J
MW-OB26	MW-OB26_20200326	3/26/2020	25	32 J	160
MW-OB26	MW-OB26_20200617	6/17/2020	40	20	140
MW-OB26	MW-OB26_20201029	10/29/2020	12	21	--
MW-OB26	MW-OB26_20201030	10/30/2020	--	--	**220**
MW-OB26	MW-OB26-20211202	12/2/2021	25	15 J	150
MW-OB26	MW_OB26_20221027	10/27/2022	5.4 J	13	150
MW-OB30	MW-OB30_20180321	3/21/2018	**17000**	**19000**	**600**
MW-OB30	MW-OB30_20180614	6/14/2018	**9500**	**9500**	**430**
MW-OB30	MW-OB30_20180919	9/19/2018	**4400**	**4000**	**240**
MW-OB30	MW-OB30_20190320	3/20/2019	**290**	**290**	29 J
MW-OB30	MW-OB30_20190910	9/10/2019	29 J	**97**	26
MW-OB30	MW-OB30_20200326	3/26/2020	**2400**	**3300 J**	75
MW-OB30	MW-OB30_20201029	10/29/2020	**140**	**220**	23 U
MW-OB30	MW-OB30_20210504	5/4/2021	**600 J**	**4300**	**220**
MW-OB30	MW-OB30-20211201	12/1/2021	35	**1400 J**	150
MW-OB30	MW-OB30-20220525	5/25/2022	**1300 J**	**1500**	130
MW-OB30	MW_OB30_20221026	10/26/2022	--	**5300**	81
MW-OB30	MW_OB30_20221027	10/27/2022	**5500**	--	--
MW-OB31	MW-OB31_20180321	3/21/2018	40	**300**	160
MW-OB31	MW-OB31_20180614	6/14/2018	10 U	**270**	66
MW-OB31	MW-OB31_20180919	9/19/2018	7.4 J	**140**	45
MW-OB31	MW-OB31_20190320	3/20/2019	10	**200**	68 J
MW-OB31	MW-OB31_20190910	9/10/2019	4.8 J	**110**	39
MW-OB31	MW-OB31_20200326	3/26/2020	13	**240 J**	77
MW-OB31	MW-OB31_20201028	10/28/2020	5.5	**110**	48
MW-OB31	MW-OB31-20211130	11/30/2021	8.6	**140 J**	150
MW-OB31	MW_OB31_20221026	10/26/2022	10 U	**100**	67
MW-OB32	MW-OB32_20180321	3/21/2018	**400**	**460**	**1200**
MW-OB32	MW-OB32_20180614	6/14/2018	10 U	**57**	**5400**
MW-OB32	MW-OB32_20180919	9/19/2018	10 U	**59**	**5300**
MW-OB32	MW-OB32_20190320	3/20/2019	**450**	**460**	**880 J**
MW-OB32	MW-OB32_20190910	9/10/2019	1 UJ	**92**	**9400**
MW-OB32	MW-OB32_20200326	3/26/2020	**280**	**300 J**	**2500**
MW-OB32	MW-OB32_20201028	10/28/2020	1.5	**110**	**6800**
MW-OB32	MW-OB32_20210503	5/3/2021	**390 J**	**650**	**880**
MW-OB32	MW-OB32-20211130	11/30/2021	**260**	**270 J**	**4200**
MW-OB32	MW-OB32-20220524	5/24/2022	4.9	**95**	**4400**
MW-OB32	MW_OB32_20221026	10/26/2022	10 U	**75**	**3400**
MW-OB33	MW-OB33_20180321	3/21/2018	**1900**	**2100**	**370**
MW-OB33	MW-OB33_20180614	6/14/2018	**5200**	**4900**	**730**
MW-OB33	MW-OB33_20180919	9/19/2018	**2500**	**2200**	180
MW-OB33	MW-OB33_20190320	3/20/2019	**1100**	**1300**	**390 J**
MW-OB33	MW-OB33_20190910	9/10/2019	**2300 J**	**2500**	**270**
MW-OB33	MW-OB33_20200326	3/26/2020	**2100**	**2300 J**	**280**
MW-OB33	MW-OB33_20201028	10/28/2020	45	**2500**	140
MW-OB33	MW-OB33-20211130	11/30/2021	**4600**	**4200 J**	**320**
MW-OB33	MW_OB33_20221026	10/26/2022	**2900**	**2200**	**250**
MW-OB34	MW-OB34_20180321	3/21/2018	10 U	**95**	**550**
MW-OB34	MW-OB34_20180615	6/15/2018	10 U	**53 B**	**650**
MW-OB34	MW-OB34_20180919	9/19/2018	10 U	**95**	**550**
MW-OB34	MW-OB34_20190320	3/20/2019	21	**130**	**330 J**
MW-OB34	MW-OB34_20190910	9/10/2019	0.3 U	**61**	**1200**
MW-OB34	MW-OB34_20200326	3/26/2020	**67**	**160 J**	**590**
MW-OB34	MW-OB34_20201028	10/28/2020	0.88	**100**	**590**
MW-OB34	MW-OB34-20211130	11/30/2021	0.88	**81 J**	**760**
MW-OB34	MW_OB34_20221026	10/26/2022	10 U	**91**	**570**
SUMP A	SUMP A_20180322	3/22/2018	**400**	**470**	**1300**
SUMP A	SUMP-A_20180614	6/14/2018	**120**	**150**	**470**
SUMP A	SUMP-A_20180918	9/18/2018	**1100**	**1200**	**660**
SUMP A	SUMP-A_20181211	12/11/2018	**410**	**410**	**680 J**
SUMP A	SUMP-A_20190320	3/20/2019	**350**	**420**	**420 J**
SUMP A	SUMP-A_20190618	6/18/2019	**350**	**380**	70
SUMP A	SUMP-A_20190912	9/12/2019	**260**	**320**	**840**
SUMP A	SUMP-A_20191210	12/10/2019	**290**	**320**	**370 J**
SUMP A	SUMP-A_20200325	3/25/2020	35	**380 J**	**410**
SUMP A	SUMP-A_20200617	6/17/2020	**300 J**	**360**	**360**
SUMP A	SUMP-A_20201028	10/28/2020	**200**	**190**	**380**
SUMP A	SUMP-A-20211130	11/30/2021	**330**	**230 J**	**320**
SUMP A	SUMP_A_20221026	10/26/2022	**130**	**130**	**330**

Table 5
Groundwater Analytical Results – Chromium and Cyanide
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

			Chromium, hexavalent µg/L 18540-29-9	Chromium, total µg/L 7440-47-3	Cyanide µg/L 57-12-5
NYSDEC Class GA Groundwater Quality Standards (µg/L) (1)			50	50	200
Location ID	Sample Name	Sample Date (5)			
SUMP B	SUMP B_20180322	3/22/2018	**160**	**190**	**1200**
SUMP B	SUMP-B_20180614	6/14/2018	**620**	**610**	**340**
SUMP B	SUMP-B_20180918	9/18/2018	**130**	**150**	**710**
SUMP B	SUMP-B_20181210	12/10/2018	**240**	**270 J**	**920**
SUMP B	SUMP-B_20190320	3/20/2019	**100**	**140**	**660 J**
SUMP B	SUMP-B_20190618	6/18/2019	**120**	**160**	140
SUMP B	SUMP-B_20190912	9/12/2019	**140**	**160**	**1100**
SUMP B	SUMP-B_20191210	12/10/2019	**140**	**150**	**460 J**
SUMP B	SUMP-B_20200325	3/25/2020	**170**	**190 J**	**450**
SUMP B	SUMP-B_20200617	6/17/2020	**130 J**	**140**	**330**
SUMP B	SUMP-B_20201028	10/28/2020	**96**	**100**	**280**
SUMP B	SUMP-B-20211130	11/30/2021	**250**	**170 J**	**740**
SUMP B	SUMP_B_20221026	10/26/2022	**150**	**150**	**660**

Notes:
(1) = Groundwater GA Standard from 6 NYCRR 703.5, Table 1 Water Quality Standards (or Water Quality Guidance Values from NYS Division of Water TOGS 1.1.1). GA standards are for protective of fresh groundwaters for drinking water source.
There is no GA standard for hexavalent chromium. The value of 50 µg/L is the GA standard for total chromium.
(2) = Water was ponded on the ground surface around MW-OB14, due to snow melt. The water level in MW-OB14 was approximately 9 feet lower after 1 hour of purging. Sample results may have been affected by meltwater.
(3) = Sample collected from well EW-B5 under pumping conditions.
(4) = Sample collected from well EW-B5 under non-pumping conditions.
(5) = Table includes data for 2018 to present. Historical data was included in reports previously submitted to the NYSDEC.
(6) = The laboratory was not able to perform the analysis because the contaoner with sample for cyanide analysis was misplaced by the laborator
BOLD value indicates concentration above GA standard
'--' = not applicable
µg/L = micrograms per liter
B = Compound was found in the blank and sample
J = indicates value is estimated
NYCRR = New York Codes, Rules, and Regulations
NYSDEC = New York State Department of Environmental Conservation
NYS = New York State
U = indicates analyte was not detected above reporting limit shown
T = MS and/or MSD Recovery is outside acceptance limits. Represented as “T” in electronic data, as “F1” in the laboratory report pdf.
TOGS = Technical and Operational Guidance Series

Table 6
Groundwater Analytical Results – Dichlorobenzenes
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

			1,2-Dichlorobenzene µg/L	1,3-Dichlorobenzene µg/L	1,4-Dichlorobenzene µg/L	
NYSDEC Class GA Groundwater Quality Standards (µg/L) [1]			3	3	3	
Location ID	Sample Name	Sample Date [2]				
AW-B18	AW-B18_20180322-20180322	3/22/2018	**47**	< 2.0 U	**5**	
AW-B18	AW-B18_20180612-20180612	6/12/2018	**20**	< 2.0 U	2.1	
AW-B18	AW-B18_20180917-20180917	9/17/2018	**56** J	< 2.0 U	**6.3**	
AW-B18	AW-B18_20190909	9/9/2019	**36**	< 1.0 U	**3.7**	
AW-B18	DUP_20201026	10/26/2020	**37**	< 1 U	**4.1**	
AW-B18	AW-B18_20201026	10/26/2020	**34 J**	< 1 U	**3.6**	
AW-B18	AW-B18-20211201	12/1/2021	**32**	< 1 U	**3.5**	
AW-B18	DUP-02-20211201	12/1/2021	**35**	< 1 U	**3.9**	
AW-B18	AW_B18_20221024	10/24/2022	**130**	2.5	**17**	
AW-B18	DUP_20221024	10/24/2022	**120**	2.4	**17**	

Notes:
(1) = Groundwater GA Standard from 6 NYCRR 703.5, Table 1 Water Quality Standards (or Water Quality Guidance Values from NYS Division of Water TOGS 1.1.1). GA standards are for protective of fresh groundwaters for drinking water source.
(2) = Table includes data for 2018 to present. Historical data was included in reports previously submitted to the NYSDEC.
BOLD value indicates concentration above GA standard
µg/L = micrograms per liter
J = indicates value is estimated
NYCRR = New York Codes, Rules, and Regulations
NYS = New York State
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
U = indicates analyte was not detected above reporting limit shown

Table 7
Surface Water Analytical Results
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

Chemical Name		Chromium, hexavalent	Chromium, total	Cyanide (Free)	Hardness (As CaCO3)	Total Dissolved Solids	Vanadium
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
CAS #		18540-29-9	7440-47-3	FREE CN	HARD	E-10173	7440-62-2
Surface Water Quality Criteria A(C) [1]		11	See Table 9	5.2	--	n/a	14
Location ID	Sample Date [2]						
SW-01	3/20/2018	10 U	1.5 U	2 U	28000	48000	4 U
SW-01	6/12/2018	10 U	0.82 J	2 U	40000	130000	4 U
SW-01	9/20/2018	10 U	5 U	2 U	48000	110000 J	10 U
SW-01	3/21/2019	10 U	1.5 U	2 U	20000	68000	4 U
SW-01	9/12/2019	0.29 J	1.5 U	2 U	32000	330000 U	4 U
SW-01	3/25/2020	0.3 U	0.4 J	2 U	20000	38000	4 U
SW-01	10/29/2020	0.3 U	0.38 J	--	88000 U	150000 U	4 U
SW-01	10/29/2020	--	--	1.3 J	--	--	--
SW-01	12/1/2021	0.3 U	1.5 UJ	6 U	12000	22000	4 U
SW-01	10/25/2022	10 U	1.5 U	1.2 J	36000 J	800000 J	4 U
SW-02	3/20/2018	10 U	1.5 U	2 U	36000	87000	4 U
SW-02	6/12/2018	10 U	0.52 J	2 U	36000	100000	4 U
SW-02	9/20/2018	10 U	5 U	2 U	36000	94000 J	10 U
SW-02	3/21/2019	10 U	1.5 U	2 U	24000	67000	4 U
SW-02	9/12/2019	0.4	1.5 U	2 U	36000	330000 U	4 U
SW-02	3/25/2020	0.3 U	0.39 J	2 U	20000	35000	4 U
SW-02	10/29/2020	0.3 U	1.5 U	--	88000 U	150000 U	4 U
SW-02	10/29/2020	--	--	1.1 J	--	--	--
SW-02	12/1/2021	0.29 J	1.5 UJ	6 U	24000	45000	4 U
SW-02	10/25/2022	10 U	1.5 U	0.98 J	44000 J	280000 J	4 U
SW-03	3/20/2018	10 U	1.5 U	2 U	24000	78000	4 U
SW-03 DUP	3/20/2018	10 U	1.5 U	2 U	28000	89000	4 U
SW-03	6/12/2018	10 U	1.5 U	2 U	32000	100000	4 U
SW-03 DUP	6/12/2018	8.3 J	1.5 UJ	2 U	32000	110000	4 U
SW-03	9/20/2018	6.2 J	5 U	2 U	32000	81000 J	10 U
SW-03 DUP	9/20/2018	5 J	5 U	2 U	32000	100000 J	10 U
SW-03	3/21/2019	10 U	1.5 U	2 U	20000	60000	4 U
SW-03 DUP	3/21/2019	10 U	1.5 U	2 U	16000	52000	4 U
SW-03	9/12/2019	0.3 U	1.5 U	2 U	32000	330000 U	4 U
SW-03 DUP	9/12/2019	0.3 U	1.5 U	2 U	32000	330000 U	4 U
SW-03	3/25/2020	0.3 U	1.5 U	2 U	16000	6000 J	4 U
SW-03 DUP	3/25/2020	0.3 U	0.36 J	2 U	16000	18000	4 U
SW-03	10/29/2020	0.3 U	0.39 J	--	88000 U	150000 U	4 U
SW-03	10/29/2020	--	--	1.6 J	--	--	--
SW-03 DUP	10/29/2020	0.3 U	0.71 J	--	88000 U	150000 U	4 U
SW-03 DUP	10/29/2020	--	--	1 J	--	--	--
SW-03	12/1/2021	0.63	1.5 UJ	6 U	20000	22000	4 U
SW-03 DUP	12/1/2021	0.3 U	13 J	6 U	24000	8000 J	4 U
SW-03	10/25/2022	10 U	1.5 U	1.1 J	48000 J	540000 J	4 U
SW-03	10/25/2022	10 U	1.5 U	2 U	32000 J	600000 J	4 U
SW-04	3/20/2018	10 U	1.5 U	2 U	24000	63000	4 U
SW-04	6/12/2018	10 U	0.37 J	2 U	32000	110000	4 U
SW-04	9/20/2018	6.2 J	5 U	2 U	32000	93000 J	10 U
SW-04	3/21/2019	10 U	1.5 U	2 U	20000	56000	4 U
SW-04	9/12/2019	0.3 U	1.5 U	2 U	32000	330000 U	4 U
SW-04	3/25/2020	0.3 U	1.5 U	2 U	20000	30000	4 U
SW-04	10/29/2020	0.3 U	1.5 U	--	88000 U	150000 U	4 U
SW-04	10/29/2020	--	--	1.8 J	--	--	--
SW-04	12/1/2021	0.3 U	1.5 UJ	6 U	28000	20000	4 U
SW-04	10/25/2022	10 U	1.5 U	2 U	56000 J	530000 J	4 U
SG-11	10/24/2022	--	--	0.81 J	--	--	--

Notes:
(1) Surface water quality criteria (SWQC) from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations from NYS Division of Water TOGS 1.1.1. Hudson River is classified as Class C waters in site vicinity.

Table 7
Surface Water Analytical Results
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site - Glens Falls, NY
Hercules

(2) Table includes data for 2018 to present. Historical data was included in reports previously submitted to the NYSDEC.
'--' = not applicable
µg/L = micrograms per liter
A(C) = protective of fish propagation in fresh waters - applicable to dissolved phases only (or acid soluble phase for vanadium).
CaCO3 = calcium carbonate

CAS # = Chemical Abstracts Service registry number
CN = cyanide
DUP = duplicate
J = indicates value is estimated
NYS = New York State
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
U = indicates analyte was not detected above reporting limit shown

Table 8
Equipment Blank Analytical Results
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

		Chromium, hexavalent µg/L	Chromium, total µg/L	Cyanide µg/L	Cyanide (Free) µg/L	Vanadium µg/L
NYSDEC Class GA Groundwater Quality Standards		50	50	200		
Sample Name	Sample Date [1]					
EB_20180319	3/19/2018	10 U	1.5 U	10 U	--	4 U
EB_20180320	3/20/2018	10 U	1.5 U	10 U	2 U	4 U
EB_20180321	3/21/2018	10 U	0.47 J	5.1 J	--	4 U
EB_20180322	3/22/2018	10 U	14	10 U	--	4 U
EB_20180611	6/11/2018	--	--	10 UJ	2 U	--
EB_20180612	6/12/2018	10 U	7.5 UJ	10 UJ	2 U	20 U
EB_20180613	6/13/2018	10 U	1.5 U	10 U	--	4 U
EB_20180614	6/14/2018	10 U	1.5 U	10 U	--	4 U
EB_20180615	6/15/2018	10 U	1.5 U	10 U	--	4 U
EB_20180917	9/17/2018	10 U	5 U	10 U	--	10 U
EB_20180918	9/18/2018	10 U	5 U	4.9 J	--	10 U
EB_20180919	9/19/2018	10 U	2.3 J	10 U	--	10 U
EB_20180920	9/20/2018	10 U	5 U	10 U	2 U	10 U
EB_20181210	12/10/2018	10 U	0.51 J	3.3 J	--	--
EB_20181211	12/11/2018	8.6 J	1.1 J	10 U	--	4 U
EB_20190319	3/19/2019	10 U	0.46 J	10 U	--	--
EB_20190320	3/20/2019	10 UJ	0.52 J	10 U	--	--
EB_20190321	3/21/2019	10 U	0.47 J	10 U	2 U	4 U
EB_20190618	6/18/2019	10 U	0.84 J	10 U	--	--
EB_20190619	6/19/2019	10 UJ	1.5 U	10 U	--	--
EB_20190624	6/24/2019	--	--	3.4 J	2 U	--
EB_20190909	9/9/2019	0.3 UJ	1.5 U	10 UJ	--	--
EB_20190910	9/10/2019	--	1.5 U	10 U	--	--
EB_20190911	9/11/2019	0.3 UJ	1.5 U	10 UJ	--	--
EB-20190912	9/12/2019	0.3 UJ	0.36 J	10 U	2 U	4 U
EB_20191111	11/11/2019	17	4.5	10 U	--	--
EB_20191209	12/9/2019	0.3 U	1.5 U	10 U	--	--
EB_20191210	12/10/2019	0.3 U	1 J	8.9 J	--	--
EB_20200324	3/24/2020	0.3 U	0.38 J	10 U	--	--
EB-01_20200325	3/25/2020	0.3 U	1.5 U	10 U	--	--
EB-02_20200325	3/25/2020	0.3 U	1.5 U	--	2 U	4 U
EB_20200326	3/26/2020	0.3 U	0.45 J	10 U	--	--
EB02_20200615	6/15/2020	--	--	10 U	2 U	--
EB03_20200616	6/16/2020	0.3 U	1.5 U	10 U	--	--
EB04_20200617	6/17/2020	0.3 U	0.9 J	10 U	--	--
EB_20201026	10/26/2020	0.3 U	1.5 U	10 U	--	--
EB_20201027	10/27/2020	0.3 U	0.57 J	10 U	--	--
EB_20201028	10/28/2020	0.3 U	1.5 U	10 U	--	--
EB_20201029	10/29/2020	0.3 U	1.5 U	8.2 J	--	4 U
EB-20201029	10/29/2020	--	--	--	2 U	--
EB_20201030	10/30/2020	--	--	10 U	--	--
EB_20210503	5/3/2021	< 0.3 U	< 1.5 U	< 10 U	--	--
EB_20210504	5/4/2021	< 0.3 U	1.5	< 10 U	--	--
EB-20211130	11/30/2021	< 0.3 U	< 1.5 U	< 10 U	--	--
EB-20211201	12/1/2021	< 0.3 U	< 1.5 U	< 10 U	< 6 U	< 4 U
EB-20211202	12/2/2021	2.6	< 1.5 U	< 10 U	--	--
EB-20220110	1/10/2022	0.3 U	1.5 U	10 U	--	4 U
EB-20220118	1/18/2022	0.3	1.5 U	18 B	--	4 U
EB-20220119	1/19/2022	0.3 U	1.5 U	6.2 JB	--	4 U
EB-20220524	5/24/2022	0.3 U	1.5 U	10 U	--	4 U
EB-20220525	5/25/2022	0.3 U	1.5 U	5.6 JB	--	4 U
EB-20220526	5/26/2022	0.3 UJ	1.5 U	10 U	--	4 U
EB_20221024	10/24/2022	10 U	1.5 U	10 U	2 U	--
EB_20221025	10/25/2022	10 U	0.51 J	--	2 U	4 U
EB_20221026	10/26/2022	10 U	2.6	10 U	--	--
EB_20221027	10/27/2022	10 U	1.5 U	10 U	--	--

Notes:
(1) Table includes data for 2018 to present. Historical data was included in reports previously submitted to the NYSDEC.
Dashed cells indicate that sample was not analyzed for that constituent.
µg/L = micrograms per liter
B = blank contamination
EB = equipment blank
J = indicates value is estimated
NYSDEC = New York State Department of Environmental Conservation
U = indicates analyte was not detected above reporting limit shown

Table 9
Surface Water Quality Criteria for Dissolved Chromium
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

Location	Sample ID	Date [1]	Hardness (As CaCO3)	Total Dissolved Solids (Residue, Filterable)	Calculated Chromium (dissolved)	
	Surface Water Quality Criteria (SWQC) [2]		µg/L	µg/L	A(C)	A(A)
SW-01	SW-01_20180320	3/20/2018	28000	48000	26	201
SW-01	SW-01_20180612	6/12/2018	40000	130000	35	269
SW-01	SW-01_20180920	9/20/2018	48000	110000	41	312
SW-01	SW-01_20190321	3/21/2019	20000	68000	20	152
SW-01	SW-01_20190912	9/12/2019	32000	48000	29	224
SW-01	SW-01_20200325	3/25/2020	20000	38000	20	152
SW-01	SW-1_20201029	10/29/2020	88000	150000	67	513
SW-01	SW-01-20211201	12/1/2021	12000	22000	13	100
SW-01	SW_01_20221025	10/25/22	36000	800000	32	247
SW-02	SW-02_20180320	3/20/2018	36000	87000	32	247
SW-02	SW-02_20180612	6/12/2018	36000	100000	32	247
SW-02	SW-02_20180920	9/20/2018	36000	94000	32	247
SW-02	SW-02_20190321	3/21/2019	24000	67000	23	177
SW-02	SW-02_20190912	9/12/2019	36000	62000	32	247
SW-02	SW-02_20200325	3/25/2020	20000	35000	20	152
SW-02	SW-2_20201029	10/29/2020	88000	150000	67	513
SW-02	SW-02-20211201	12/1/2021	24000	45000	23	177
SW-02	SW_02_20221025	10/25/2022	44000	280000	38	291
SW-03	SW-03_20180320	3/20/2018	24000	78000	23	177
SW-03	SW-03_20180612	6/12/2018	32000	110000	29	224
SW-03	SW-03_20180920	9/20/2018	32000	81000	29	224
SW-03	DUP_20180920	9/20/2018	32000	100000	29	224
SW-03-DUP	SW-03_20190321	3/21/2019	16000	52000	17	127
SW-03	SW-03_20190321	3/21/2019	20000	60000	20	152
SW-03	SW-03_20190912	9/12/2019	32000	64000	29	224
SW-03-DUP	DUP-01_20190912	9/12/2019	32000	37000	29	224
SW-03	SW-03_20200325	3/25/2020	16000	6000 J	17	127
SW-03 DUP	DUP 01_20200325	3/25/2020	16000	18000	17	127
SW-03	SW-3_20201029	10/29/2020	88000	150000	67	513
SW-03 DUP	DUP_20201029	10/29/2020	88000	150000	67	513
SW-03 DUP	SW-03-20211201	12/1/2021	20000	22000	20	152
SW-03	DUP-01-20211201	12/1/2021	24000	8000	23	177
SW-03	SW_03_20221025	10/25/2022	48000	540000	41	312
SW-03 DUP	DUP_20221025	10/25/2022	32000	600000	29	224
SW-04	SW-04_20180320	3/20/2018	24000	63000	23	177
SW-04	SW-04_20180612	6/12/2018	32000	110000	29	224
SW-04	SW-04_20180920	9/20/2018	32000	93000	29	224
SW-04	SW-04_20190321	3/21/2019	20000	56000	20	152
SW-04	SW-04_20190912	9/12/2019	32000	88000	29	224
SW-04	SW-04_20200325	3/25/2020	20000	30000	20	152
SW-04	SW-4_20201029	10/29/2020	88000	150000	67	513
SW-04	SW-04-20211201	12/1/2021	28000	20000	26	201
SW-04	SW_04_20221025	10/25/2022	56000	530000	46	354

Notes:
(1) Table includes values calculated for 2018 to present. Historical calculated values were included in reports previously submitted to the NYSDEC.
(2) Surface water quality criteria (SWQC) from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations from NYS Division of Water TOGS 1.1.1. Hudson River is classified as Class C waters in site vicinity.

A(C) = protective of fish propagation in fresh waters - applicable to dissolved phases only (or acid soluble phase for vanadium).

A(A) = protective of fish survival in fresh waters - applicable to dissolved phases only (acid soluble phase for vanadium).
Calculated values based on hardness (per TOGS 1.1.1):
Chromium A(C) = (0.86) exp(0.819 [ln (ppm hardness)] + 0.6848)
Chromium A(A) = (0.316) exp(0.819 [ln (ppm hardness)] + 3.7256)
Chromium aquatic standard applies to dissolved form and does not include hexavalent chromium.
µg/L = micrograms per liter
NYS = New York State
NYSDEC = New York State Department of Environmental Conservation
ppm = parts per million
TOGS = Technical and Operational Guidance Series
NYSDEC. 1998. Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. Previous Date: October 1993. Reissued Date: June 1998.

Table 10
Historical Groundwater Sample Results for PTP Area - 1993 to 2017
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

SAMPLE	GROUNDWATER - TOTAL CYANIDE CONCENTRATIONS (mg/L)							
DATE	MW-OB17	MW-OB18	MW-OB19	MW-OB20	MW-OB21	MW-OB22	MW-OB23	P-1
Jun-93	0.083	0.237	2	-	-	-	-	-
Sep-93	0.928	0.387	1.08	-	-	-	-	-
Sep-96	0.67	0.33	-	-	-	-	-	0.66
Mar-97	0.12	0.34	-	0.062	0.49	0.46	3.1	0.35
Sep-97	0.49	ND	-	0.06	0.48	0.088	2.4	0.51
Mar-98	0.12	0.35	-	0.049	0.51	0.046	1.6	0.26
Sep-98	0.52	0.39	-	0.058	0.72	0.14	1.9	0.54
Mar-99	0.12	0.28	-	0.027	0.57	0.061	2	0.24
Sep-99	0.419	0.3	-	0.145	0.87	0.12	5	0.36
Mar-00	0.1	0.29	-	0.019	0.69	0.07	7.2	0.3
Sep-00	0.28	0.19	-	0.098	0.47	0.12	2.5	0.2
Apr-01	0.19	0.24	-	0.021	0.42	0.19	1	0.28
Aug-02	0.14	0.18	0.9	0.1	0.54	0.3	4.5	0.22
May-04	0.11	0.14	0.63	0.046	0.36	0.077	2.2	0.14
Jan-05	0.15	0.14	0.47	0.094	0.48	0.046	1.5	0.11
Jul-05	0.34	0.15	0.69	0.073	0.41	0.34	2.9	0.14
Jan-06	0.16	0.18	0.096	0.062	0.33		1.1	0.096
Jul-06	0.084	0.086	0.38	0.33	0.36	0.084	0.04	0.12
Dec-06	0.16	0.16	0.089	-	0.36	0.036	1.6	0.077
Sep-07	0.34	0.2	-	0.056	0.29	0.04	2.1	0.18
Sep-08	0.63	-	0.28	0.04	0.28	0.01	4	0.14
Dec-08	0.14	-	0.17	0.05	0.3	ND	-	0.06
Dec-09	0.09	-	0.17	0.05	0.26	0.03	0.98	0.06
Jun-10	0.066	-	0.25	0.03	0.21	0.017	1.7	0.089
Dec-10	0.21	-	0.041	-	0.19	0.024	2.3	0.073
Dec-11	0.075	0.054	0.054	0.16	0.18	0.019	0.91	0.036
Dec-12	0.2	0.059	0.059	0.17	0.076	0.021	1.9	0.11
Dec-13	0.19	0.083	0.18	-	0.14	0.017	1.1	0.078
Dec-14	0.2	0.035	0.096	0.087	0.100	0.016	0.69	0.051
Jul-15	0.182	0.102	0.182	DRY	0.119	-	1.8	-
Jul-16	0.370	0.057	0.140	-	0.097	-	2.5	-
Jun-17	0.070 J	0.093	0.250 J	0.051 J	0.110 J	-	1.4 J	-

Notes:

1) Available data obtained from historical monitoring reports; majority of samples analyzed were not field-filtered.

2) Prior to July 2015, samples were collected using 3-volume purge and sample methods.

3) Low flow sampling methods were employed beginning July 2015.

mg/L - milligrams per liter

ND - indicates not detected above laboratory reporting limits

J - indicates result is estimated

"-" - not sampled

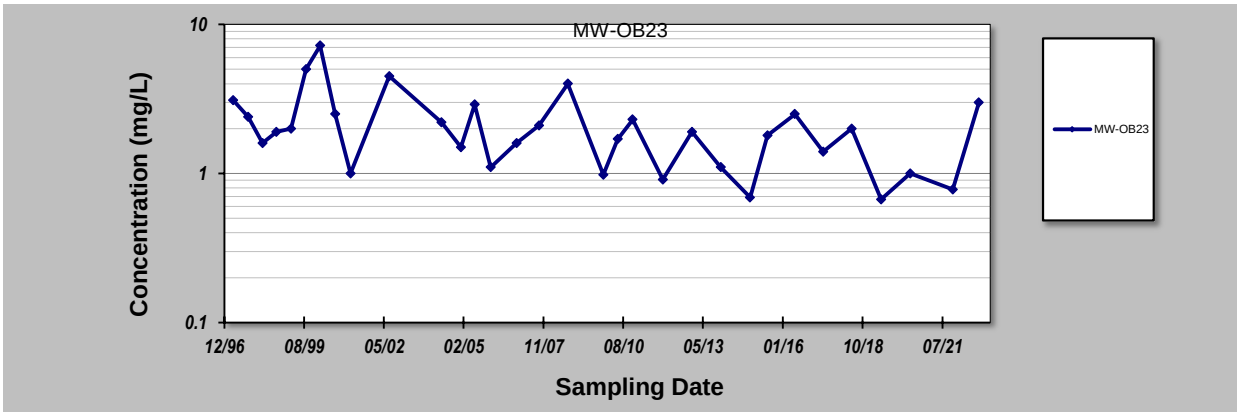
Table 11 - Mann-Kendall Calculations – Well MW-OB23
2022 Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy/Hercules Site, Glens Falls, NY

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	6-Feb-23	Job ID:	C16262_2023-400
Facility Name:	Glens Falls - Pretreatment Plant Area	Constituent:	Total Cyanide
Conducted By:	Elena Dadukova	Concentration Units:	mg/L

Sampling Point ID:	MW-OB23						

Sampling Event	Sampling Date	TOTAL CYANIDE CONCENTRATION (mg/L)						
1	21-Mar-97	3.1						
2	26-Sep-97	2.4						
3	25-Mar-98	1.6						
4	17-Sep-98	1.9						
5	18-Mar-99	2						
6	24-Sep-99	5						
7	16-Mar-00	7.2						
8	21-Sep-00	2.5						
9	3-Apr-01	1						
10	2-Aug-02	4.5						
11	17-May-04	2.2						
12	14-Jan-05	1.5						
13	5-Jul-05	2.9						
14	23-Jan-06	1.1						
15	14-Dec-06	1.6						
16	20-Sep-07	2.1						
17	17-Sep-08	4						
18	4-Dec-09	0.98						
19	2-Jun-10	1.7						
20	7-Dec-10	2.3						
21	21-Dec-11	0.91						
22	18-Dec-12	1.9						
23	16-Dec-13	1.1						
24	17-Dec-14	0.69						
25	23-Jul-15	1.8						
26	1-Jul-16	2.5						
27	20-Jun-17	1.4						
28	13-Jun-18	2						
29	17-Jun-19	0.67						
30	15-Jun-20	1						
31	30-Nov-21	0.78						
32	24-Oct-22	3						
33								
34								
35								
Coefficient of Variation:		0.68						
Mann-Kendall Statistic (S):		-113						
Confidence Factor:		97.7%						
Concentration Trend:		Decreasing						

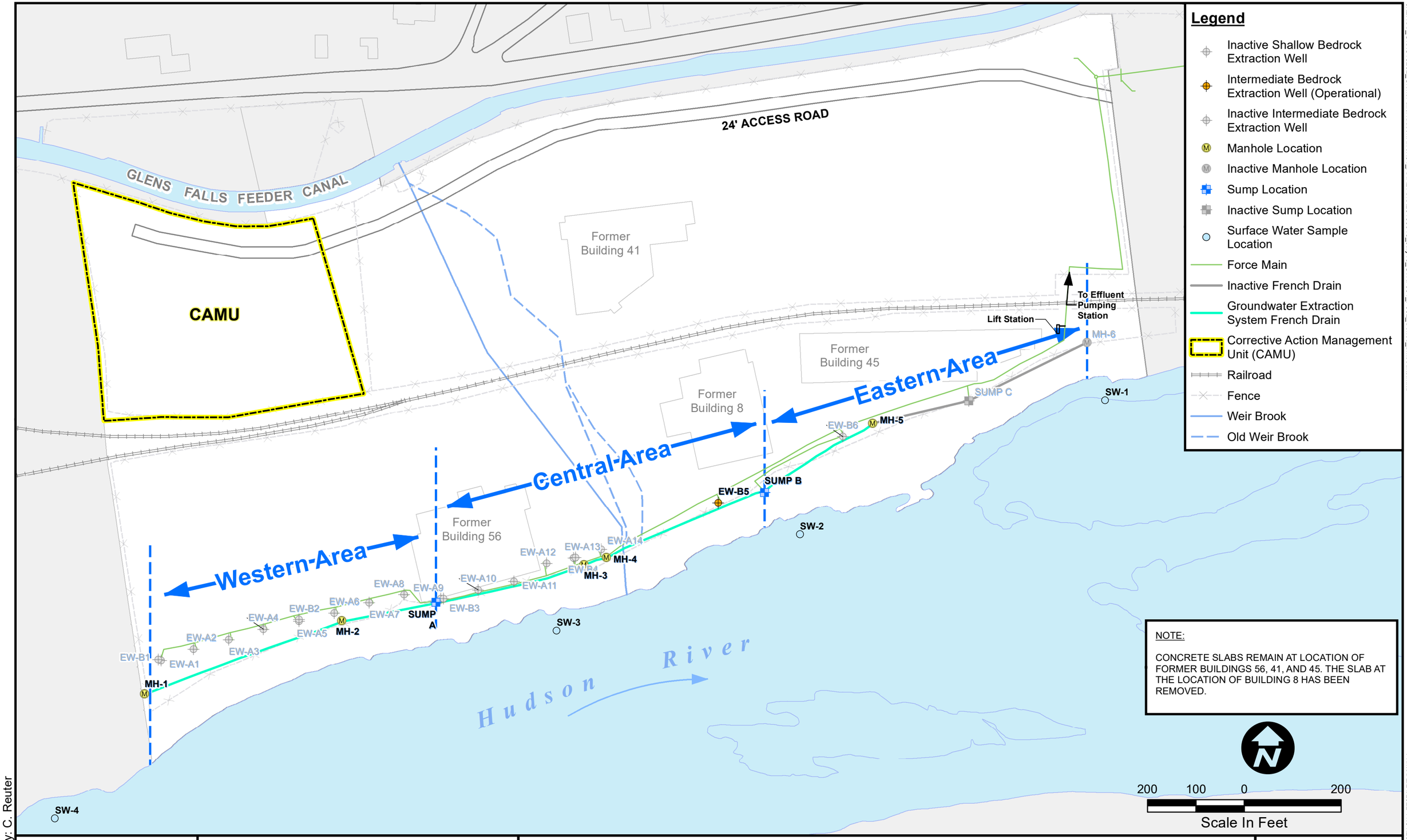


Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

DISCLAIMER: *The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.*
GSI Environmental Inc., www.gsi-net.com

Figures

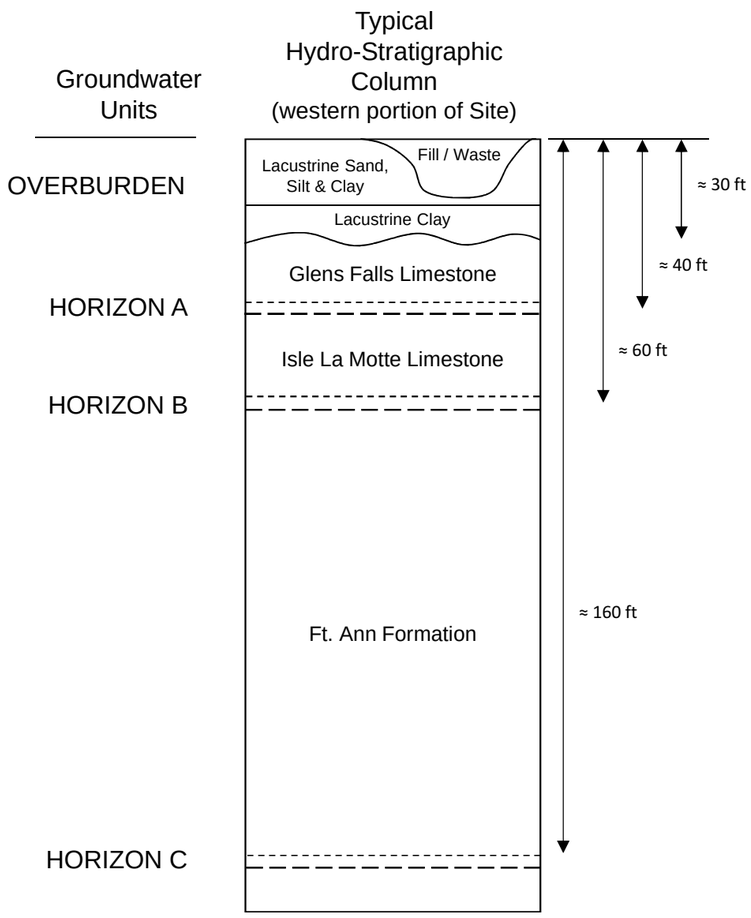


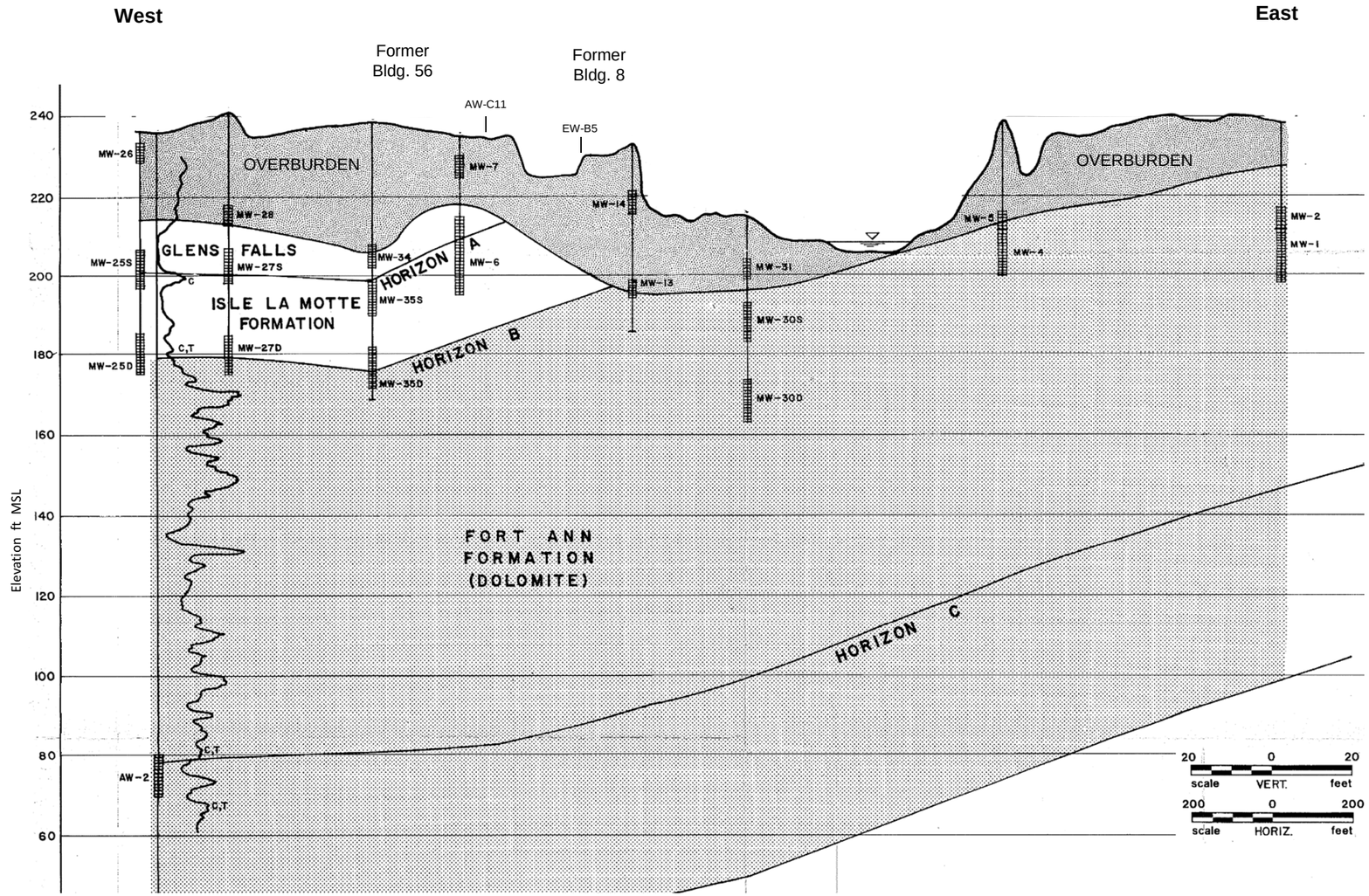
EHS Support	FORMER CIBA-GEIGY / HERCULES SITE GLENS FALLS, NY	GROUNDWATER EXTRACTION SYSTEM COMPONENTS AND SURFACE WATER SAMPLING LOCATIONS	FIGURE 1

Reviewed By: C. Reuter

J:\EHSS_GIS\C16262_GlensFallsHudsonRiver\01_ANALYSIS\20160913_July16_GWF001_F002_Series_bmsedits.mxd

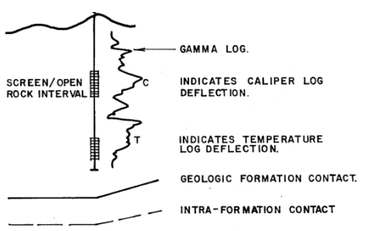
Printed 2/24/2022 11:01:26 AM by Mick.Osburn





Map Source: AWARE Incorporated, January 1989. Hydrostratigraphic Cross Section D-D'.
Cross section placed along the northern banks of the Hudson River.

Legend



Former Ciba-Geigy / Hercules
Glens Falls, NY
EHS Support July 2018

Hydro-Stratigraphic Units and Geologic Cross Section

Figure 2

RIVER STREET

24' ACCESS ROAD

GLENS FALLS FEEDER CANAL

MW-OB2
267.20

MW-OB15
260.56

Former
Building 41

260

250

240

230

220

210

MW-OB24
255.64

MW-OB5
256.56

IP-4
245.21

MW-OB13
234.00

MW-OB27
227.80

Former
Building 8

Sump C
NG

MW-OB14
230.59

MW-OB26
226.10

BP-6*
234.67

MW-31
208.60

Sump B
211.75

MW-OB34
208.56

Former
Building 56

MW-OB25
230.27

MW-OB33
216.17

SG-12*
209.77

MW-OB7
242.11

MW-9
238.83

AP-2
226.01

Sump A
210.93

MW-OB31
217.32

BP-9
214.07

MW-OB32
219.58

MW-28
238.54

MW-OB30
216.36

MW-26
234.13

WP-CC-12
DRY

Hudson River

200 100 0 200

Scale In Feet

Legend

- Stream Gauge
- Overburden (OB) Well
- Shallow Bedrock (SB) Well
- Intermediate Bedrock (IB) Well
- Deep Bedrock (DB) Well
- Manhole Location
- Sump Location

"EW-" in Well ID Indicates Extraction Well. All Other Wells are Monitoring Wells.

- Groundwater Contour in 10-foot intervals; elevations in feet (NGVD 1929)
- Groundwater Flow Direction
- Inferred Groundwater Contour
- Groundwater Extraction System French Drain
- Corrective Action Management Unit (CAMU)
- Railroad
- Fence
- Weir Brook
- Old Weir Brook
- River Flow Direction

Notes:
1. Concrete Slabs remain at location of former buildings 56, 41, and 45. The slab at the location of building 8 has been removed.
2. Water levels measured on October 24, 2022.
3. Potentiometric surface contour interpretations around the French Drain System based on the analysis presented in the Remedy Optimization Report dated October 2017.
4. French Drain Sumps A and B pumping when water levels measured. Sump C was not pumping (off).
5. EW-B5 was the only extraction well pumping when water levels measured. Extraction wells have not been pumping (off) since November 10, 2016, with exception of EW-B5, which was restarted on December 12, 2018.
6. Local precipitation history prior to the October 24, 2022 water level measurement event is presented below. Daily precipitation measured at Station KGFL located at Glens Falls, New York Bennet Memorial Airport. The airport is located approximately 2 miles north of the site.

Date	Inches
October 18	0.00
October 19	0.00
October 20	0.00
October 21	0.00
October 22	0.00
October 23	0.00
October 24	0.03

7. NG = not gauged
8. * = water level measurement suspect; not used in contouring.

EHS Support

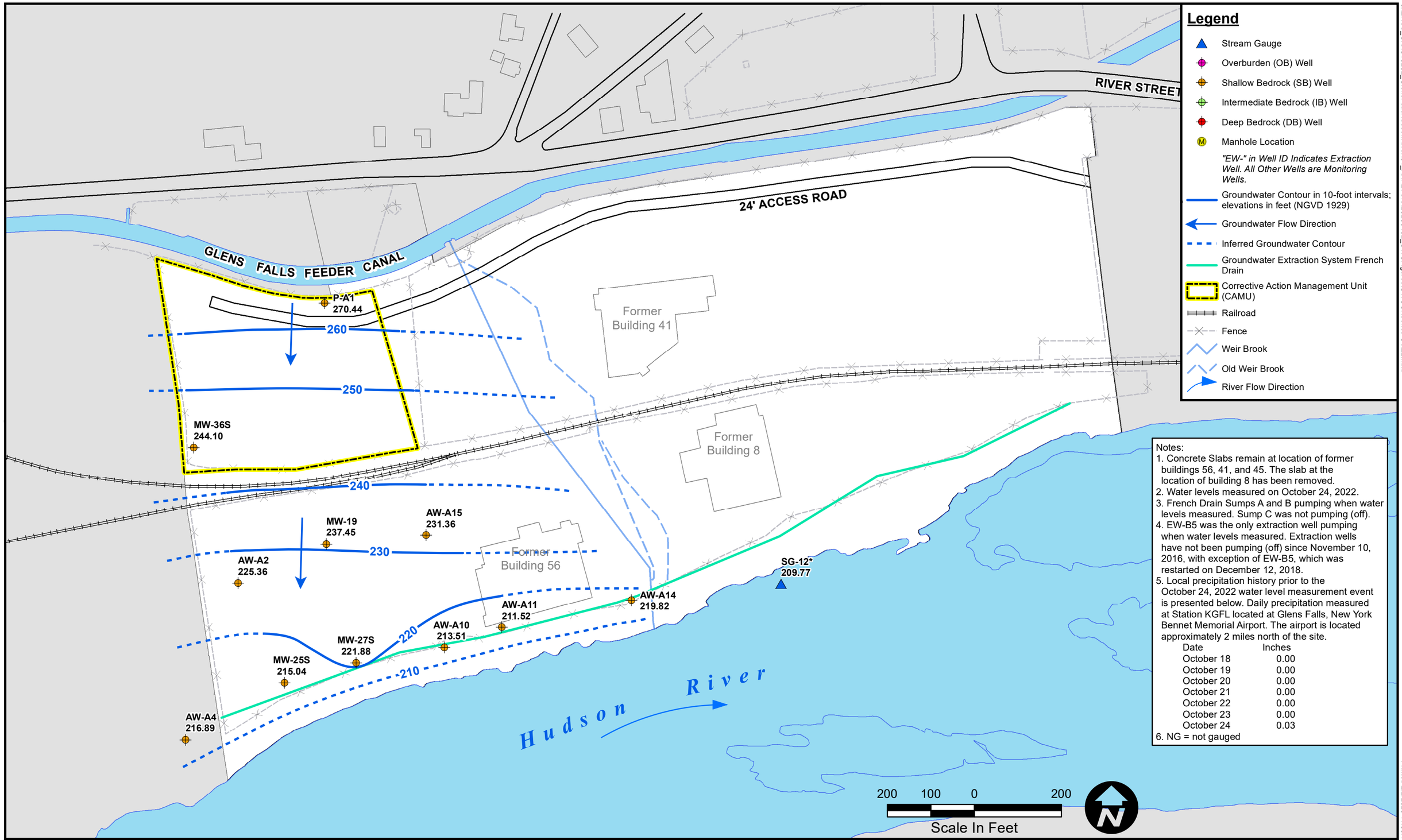
FORMER CIBA-GEIGY / HERCULES SITE
GLENS FALLS, NY

OVERBURDEN WELL LOCATIONS AND POTENTIOMETRIC SURFACE: OCTOBER 2022

Figure 3

J:\EHSS_GIS\C16262_GlensFallsHudsonRiver\01_ANALYSIS\20200402_GWCFigures\GWCONseries-Oct22.mxd

Printed 2/2/2023 11:39:05 AM by Mick Osburn



Legend

- Stream Gauge
- Overburden (OB) Well
- Shallow Bedrock (SB) Well
- Intermediate Bedrock (IB) Well
- Deep Bedrock (DB) Well
- Manhole Location

"EW-" in Well ID Indicates Extraction Well. All Other Wells are Monitoring Wells.

- Groundwater Contour in 10-foot intervals; elevations in feet (NGVD 1929)
- Groundwater Flow Direction
- Inferred Groundwater Contour
- Groundwater Extraction System French Drain
- Corrective Action Management Unit (CAMU)
- Railroad
- Fence
- Weir Brook
- Old Weir Brook
- River Flow Direction

Notes:
1. Concrete Slabs remain at location of former buildings 56, 41, and 45. The slab at the location of building 8 has been removed.
2. Water levels measured on October 24, 2022.
3. French Drain Sumps A and B pumping when water levels measured. Sump C was not pumping (off).
4. EW-B5 was the only extraction well pumping when water levels measured. Extraction wells have not been pumping (off) since November 10, 2016, with exception of EW-B5, which was restarted on December 12, 2018.
5. Local precipitation history prior to the October 24, 2022 water level measurement event is presented below. Daily precipitation measured at Station KGFL located at Glens Falls, New York Bennet Memorial Airport. The airport is located approximately 2 miles north of the site.

Date	Inches
October 18	0.00
October 19	0.00
October 20	0.00
October 21	0.00
October 22	0.00
October 23	0.00
October 24	0.03

6. NG = not gauged

EHS Support

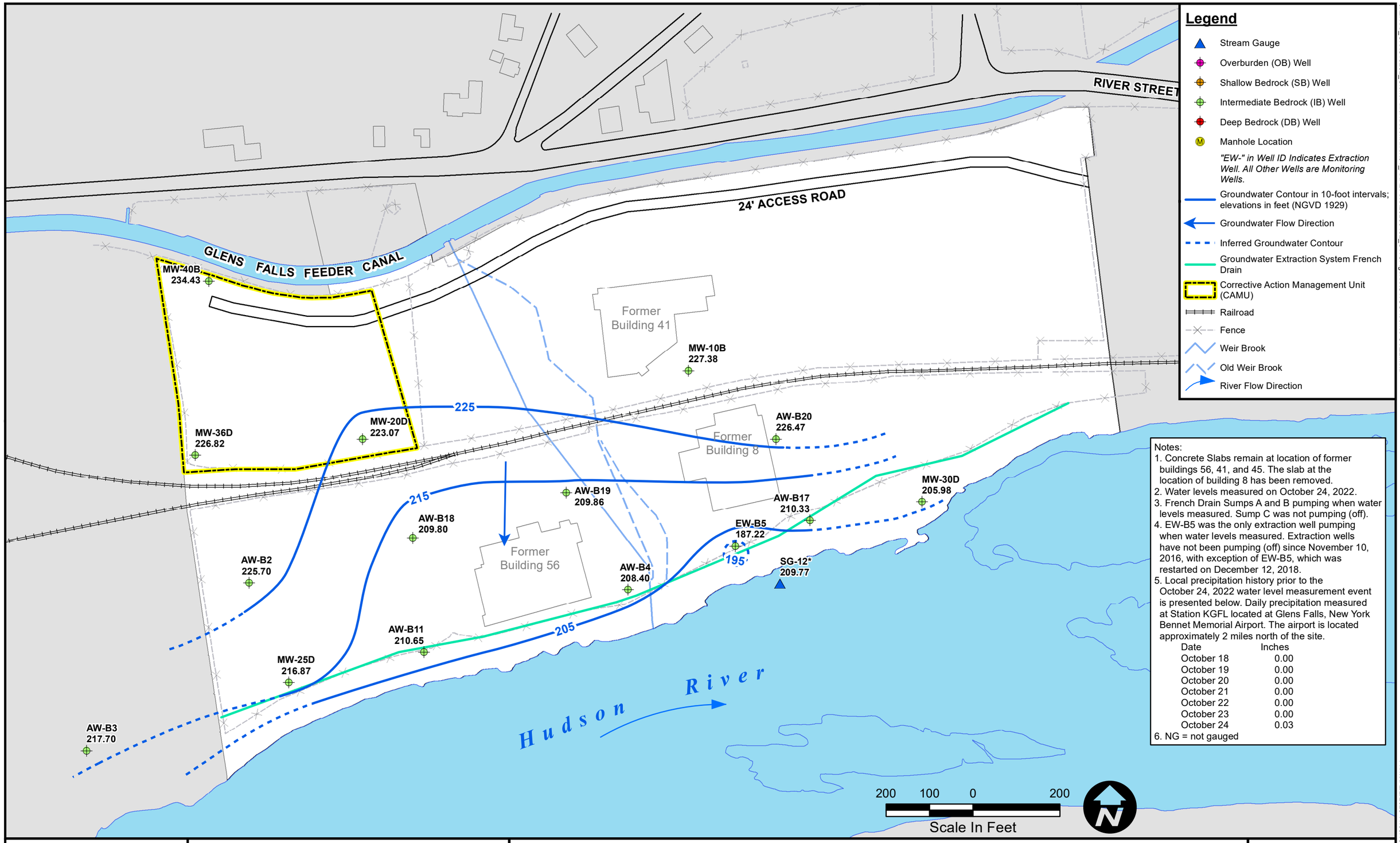
FORMER CIBA-GEIGY / HERCULES SITE
GLENS FALLS, NY

SHALLOW BEDROCK WELL LOCATIONS AND POTENTIOMETRIC SURFACE: OCTOBER 2022

Figure 4

J:\EHSS_GIS\C16262_GlensFallsHudsonRiver\01_ANALYSIS\20200402_GWCFigures\GWCONseries-Oct22.mxd

Printed 2/2/2023 11:39:10 AM by Mick.Osburn



Legend

- Stream Gauge
- Overburden (OB) Well
- Shallow Bedrock (SB) Well
- Intermediate Bedrock (IB) Well
- Deep Bedrock (DB) Well
- Manhole Location

"EW-" in Well ID Indicates Extraction Well. All Other Wells are Monitoring Wells.

- Groundwater Contour in 10-foot intervals; elevations in feet (NGVD 1929)
- Groundwater Flow Direction
- Inferred Groundwater Contour
- Groundwater Extraction System French Drain
- Corrective Action Management Unit (CAMU)
- Railroad
- Fence
- Weir Brook
- Old Weir Brook
- River Flow Direction

Notes:
1. Concrete Slabs remain at location of former buildings 56, 41, and 45. The slab at the location of building 8 has been removed.
2. Water levels measured on October 24, 2022.
3. French Drain Sumps A and B pumping when water levels measured. Sump C was not pumping (off).
4. EW-B5 was the only extraction well pumping when water levels measured. Extraction wells have not been pumping (off) since November 10, 2016, with exception of EW-B5, which was restarted on December 12, 2018.
5. Local precipitation history prior to the October 24, 2022 water level measurement event is presented below. Daily precipitation measured at Station KGFL located at Glens Falls, New York Bennet Memorial Airport. The airport is located approximately 2 miles north of the site.

Date	Inches
October 18	0.00
October 19	0.00
October 20	0.00
October 21	0.00
October 22	0.00
October 23	0.00
October 24	0.03

6. NG = not gauged

EHS Support

FORMER CIBA-GEIGY / HERCULES SITE
GLENS FALLS, NY

INTERMEDIATE BEDROCK WELL LOCATIONS AND BEDROCK POTENTIOMETRIC SURFACE: OCTOBER 2022

Figure 5

J:\EHSS_GIS\C16262_GlensFallsHudsonRiver\01_ANALYSIS\20200402_GWCFigures\GWCONseries-Oct22.mxd

Printed 2/2/2023 11:39:13 AM by Mick.Osburn

RIVER STREET

24' ACCESS ROAD

GLENS FALLS FEEDER CANAL

AW-C1
246.16

240

230

220

210

200

MW-36C
190.30

MW-20C
194.23

Former
Building 41

AW-C10
201.61

AW-C9
DRY

Former
Building 8

Former
Building 56

AW-C8
190.18

190

AW-C11
195.15

SG-12*
209.77

AW-C2
189.60

AW-C7
164.84

Hudson River

Legend

- Stream Gauge
- Overburden (OB) Well
- Shallow Bedrock (SB) Well
- Intermediate Bedrock (IB) Well
- Deep Bedrock (DB) Well
- Manhole Location

"EW-" in Well ID Indicates Extraction Well. All Other Wells are Monitoring Wells.

- Groundwater Contour in 10-foot intervals; elevations in feet (NGVD 1929)
- Groundwater Flow Direction
- Inferred Groundwater Contour
- Groundwater Extraction System French Drain
- Corrective Action Management Unit (CAMU)
- Railroad
- Fence
- Weir Brook
- Old Weir Brook
- River Flow Direction

Notes:
1. Concrete Slabs remain at location of former buildings 56, 41, and 45. The slab at the location of building 8 has been removed.
2. Water levels measured on October 24, 2022.
3. French Drain Sumps A and B pumping when water levels measured. Sump C was not pumping (off).
4. EW-B5 was the only extraction well pumping when water levels measured. Extraction wells have not been pumping (off) since November 10, 2016, with exception of EW-B5, which was restarted on December 12, 2018.
5. Local precipitation history prior to the October 24, 2022 water level measurement event is presented below. Daily precipitation measured at Station KGFL located at Glens Falls, New York Bennet Memorial Airport. The airport is located approximately 2 miles north of the site.

Date	Inches
October 18	0.00
October 19	0.00
October 20	0.00
October 21	0.00
October 22	0.00
October 23	0.00
October 24	0.03

6. NG = not gauged

200 100 0 200
Scale In Feet

N

EHS Support

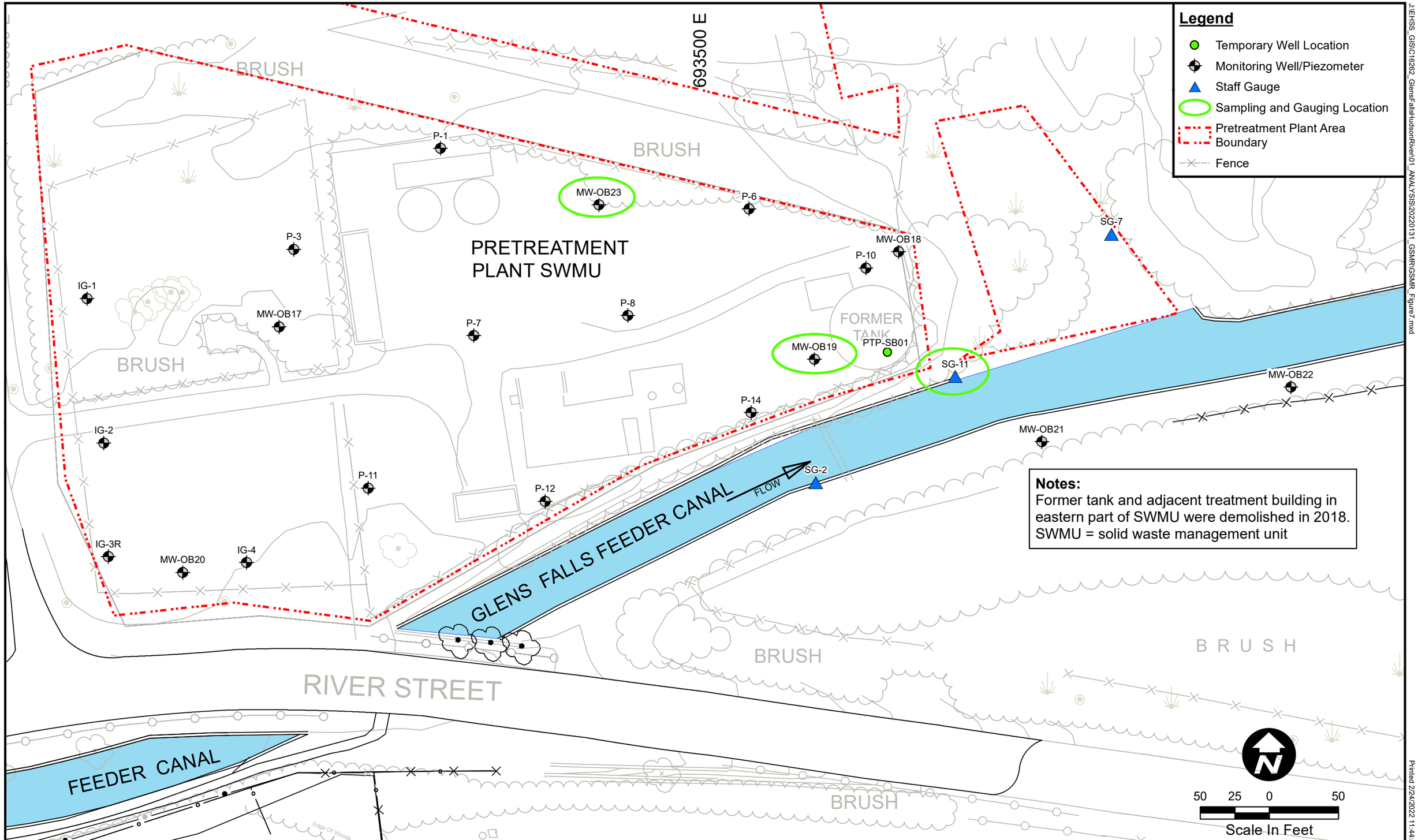
FORMER CIBA-GEIGY / HERCULES SITE
GLENS FALLS, NY

DEEP BEDROCK WELL LOCATIONS AND POTENTIOMETRIC SURFACE: OCTOBER 2022

Figure 6

J:\EHSS_GIS\C16262_GlensFallsHudsonRiver\01_ANALYSIS\20200402_GWCFigures\GWCONseries-Oct22.mxd

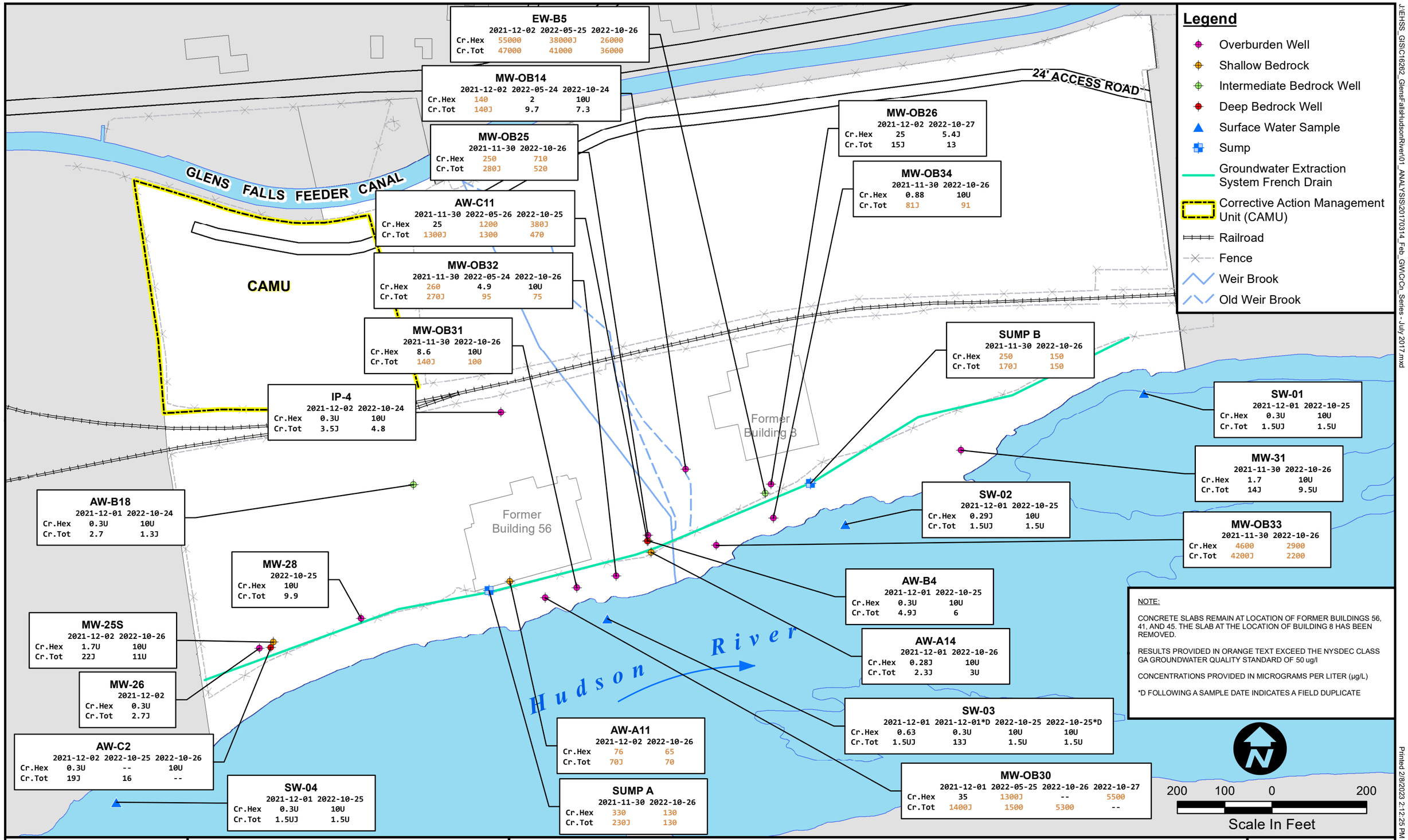
Printed 2/2/2023 11:39:18 AM by Mick.Osburn



EHS Support	FORMER CIBA-GEIGY FACILITY GLENS FALLS, NY	PRETREATMENT PLANT AREA SAMPLING	FIGURE 7

J:\EHSS_GIS\C16262_GlensFallsHudsonRiver\01_ANALYSIS\20220131_GSMR\GSMR_Figure7.mxd

Printed 2/24/2022 11:44:46 AM by Mick.Osburn



EHS Support

FORMER CIBA-GEIGY / HERCULES SITE
GLENS FALLS, NY

CHROMIUM RESULTS - NOVEMBER 2021 THROUGH OCTOBER 2022

FIGURE 8

J:\EHS_GIS\C16262_GlensFallsHudsonRiver\01_ANALYSIS\20170314_Feb_GWCrCn_Series - July 2017.mxd

Printed 2/8/2023 2:12:25 PM by Kaitlyn.Buffington

EW-B5
2021-12-02 2022-05-25 2022-10-26
Cn.Tot 250 230 180

MW-OB14
2021-12-02 2022-05-24
Cn.Tot 150 61

AW-B4
2021-12-01 2022-10-25
Cn.Tot 74 80

MW-OB25
2021-11-30 2022-10-26
Cn.Tot 41 160

AW-C11
2021-11-30 2022-05-26 2022-10-25
Cn.Tot 40 44 21U

MW-OB31
2021-11-30 2022-10-26
Cn.Tot 150 67

IP-4
2021-12-02 2022-10-24
Cn.Tot 880 1100J

AW-B18
2021-12-01 2022-10-24
Cn.Tot 170 100J

MW-28
2022-10-25
Cn.Tot 14U

MW-25S
2021-12-02 2022-10-26
Cn.Tot 270 140

MW-26
2021-12-02
Cn.Tot 110

AW-C2
2021-12-02 2022-10-25
Cn.Tot 26 26U

SW-04
2021-12-01 2022-10-25
Cn.Fr 6U 2U

MW-OB26
2021-12-02 2022-10-27
Cn.Tot 150 150

SUMP B
2021-11-30 2022-10-26
Cn.Tot 740 660

SW-01
2021-12-01 2022-10-25
Cn.Fr 6U 1.2J

MW-31
2021-11-30 2022-10-26
Cn.Tot 220 220

MW-OB34
2021-11-30 2022-10-26
Cn.Tot 760 570

SW-02
2021-12-01 2022-10-25
Cn.Fr 6U 0.98J

MW-OB33
2021-11-30 2022-10-26
Cn.Tot 320 250

AW-A14
2021-12-01 2022-10-26
Cn.Tot 44 34U

MW-OB32
2021-11-30 2022-05-24 2022-10-26
Cn.Tot 4200 4400 3400

MW-OB30
2021-12-01 2022-05-25 2022-10-26
Cn.Tot 150 130 81

SW-03
2021-12-01 2021-12-01*D 2022-10-25 2022-10-25*D
Cn.Fr 6U 6U 1.1J 2U

AW-A11
2021-12-02 2022-10-26
Cn.Tot 46 37U

SUMP A
2021-11-30 2022-10-26
Cn.Tot 320 330

GLENS FALLS FEEDER CANAL

24' ACCESS ROAD

CAMU

Former Building 8

Former Building 56

Hudson River

Legend

- Overburden Well
- Shallow Bedrock
- Intermediate Bedrock Well
- Deep Bedrock Well
- Surface Water Sample
- Sump
- Groundwater Extraction System French Drain
- Corrective Action Management Unit (CAMU)
- Railroad
- Fence
- Weir Brook
- Old Weir Brook

NOTE:

CONCRETE SLABS REMAIN AT LOCATION OF FORMER BUILDINGS 56, 41, AND 45. THE SLAB AT THE LOCATION OF BUILDING 8 HAS BEEN REMOVED.

RESULTS PROVIDED IN ORANGE TEXT EXCEED THE NYSDEC CLASS GA GROUNDWATER QUALITY STANDARD OF 200 ug/l (TOTAL CYANIDE)

CONCENTRATIONS PROVIDED IN MICROGRAMS PER LITER (µg/L)

*D FOLLOWING A SAMPLE DATE INDICATES A FIELD DUPLICATE

N

200 100 0 200

Scale In Feet

EHS Support

FORMER CIBA-GEIGY / HERCULES SITE
GLENS FALLS, NY

CYANIDE RESULTS - NOVEMBER 2021 THROUGH OCTOBER 2022

FIGURE 9

J:\EHSS_GIS\C16262_GlensFallsHudsonRiver\01_ANALYSIS\20170314_Feb_GWCrCn_Series - July 2017.mxd

Printed 2/8/2023 2:12:29 PM by Kaitlyn.Buffington

Legend

- Overburden (OB) Well
- Shallow Bedrock (SB) Well
- Intermediate Bedrock (IB) Well
- Deep Bedrock (DB) Well

"EW-" in Well ID Indicates Extraction Well. All Other Wells are Monitoring Wells.

- Stream Gauge Location
- River flow direction
- Groundwater Extraction System French Drain
- Railroad
- Fence
- Weir Brook
- Old Weir Brook

Former Building 8

Former Building 56

IP-4
IP-5
AW-B19
AW-A6
BP-4
BP-2
AW-B16
MW-OB14
BP-3
AW-B17
BP-6
SUMP-B
MW-OB26
EW-B5
French Drain System
BP-7
BP-8
TW-2
BP-5
AW-B14
MW-OB34
AW-B15
SG-12
MW-OB25
AW-A13
AW-B4
AW-C11
EW-A14
MW-OB33
MH-4
BP-9
EW-B4
EW-A13
MH-3
AW-A14
AP-5
EW-A12
AW-A12
AP-1
AW-B12
EW-A11
French Drain System
AP-2
EW-A10
MW-OB32
AP-4
EW-A8
AP-3
AW-A11
AW-B13
AW-A9
EW-B3
MW-OB31
EW-A7
SUMP-A
EW-A9
MW-OB30
AW-B10
AW-A10
AP-7
AP-6
MH-2
AW-B11

MW-OB26 (Overburden)
MW-OB34 (Overburden)
EW-B5 (Intermediate Bedrock)

MW-OB25 (Overburden)
AW-A14 (Shallow Bedrock)
AW-B4 (Intermediate Bedrock)
AW-C11 (Deep Bedrock)

MW-OB30 (Overburden)
AW-A11 (Shallow Bedrock)

Hudson River

N

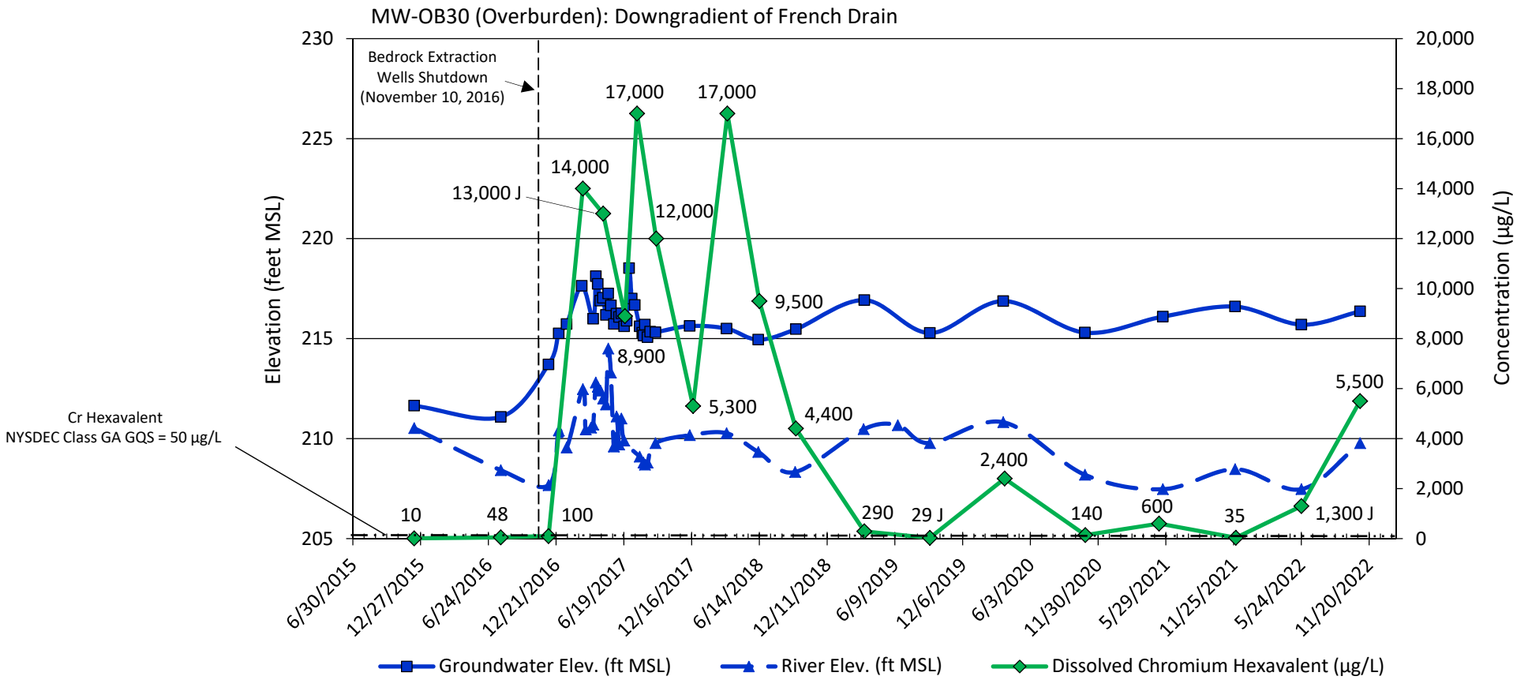
60 30 0 60

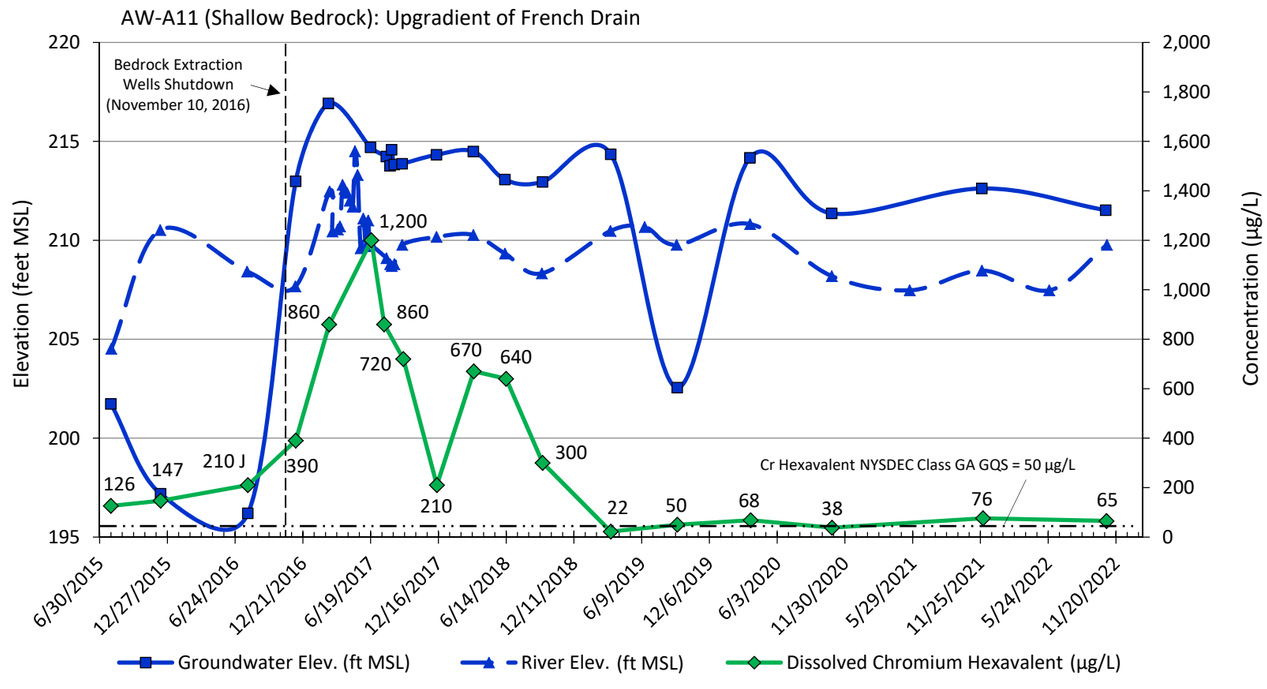
Scale In Feet

Former Ciba-Geigy / Hercules
Glens Falls, NY
EHS Support *February 2023*

Monitoring Well Locations: MW-OB25, MW-OB26, MW-OB30, MW-OB34, AW-A11, AW-A14, AW-B4, EW-B5, and AW-C11

Figure 10





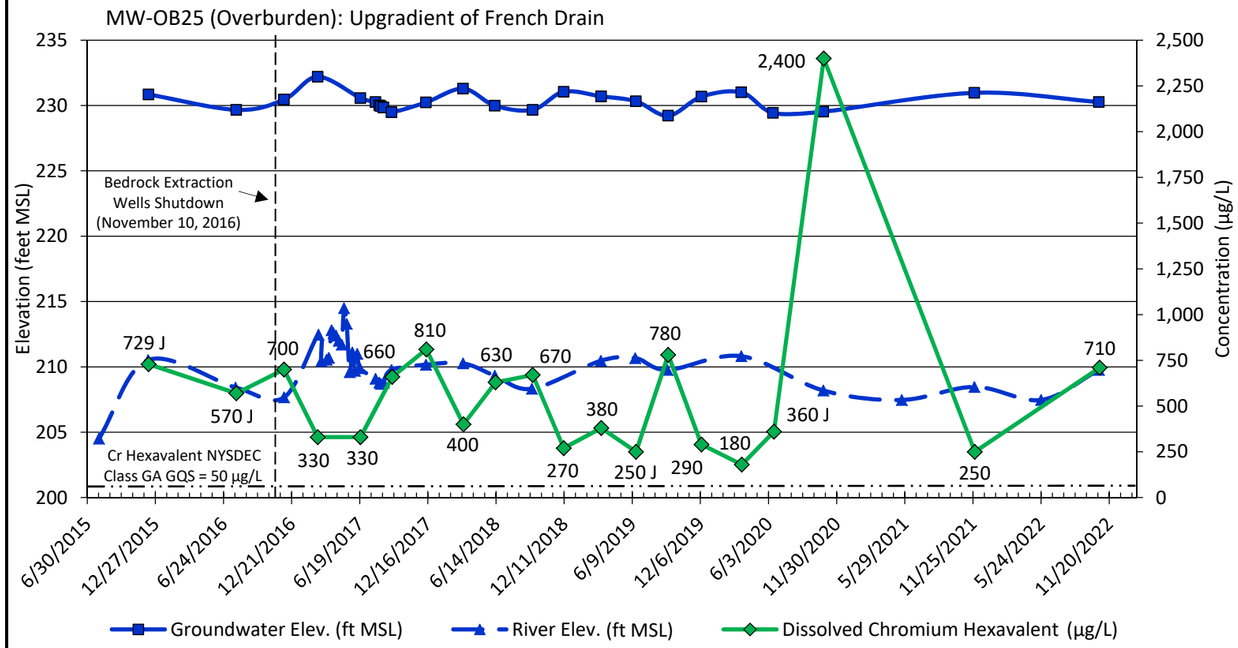
Notes:

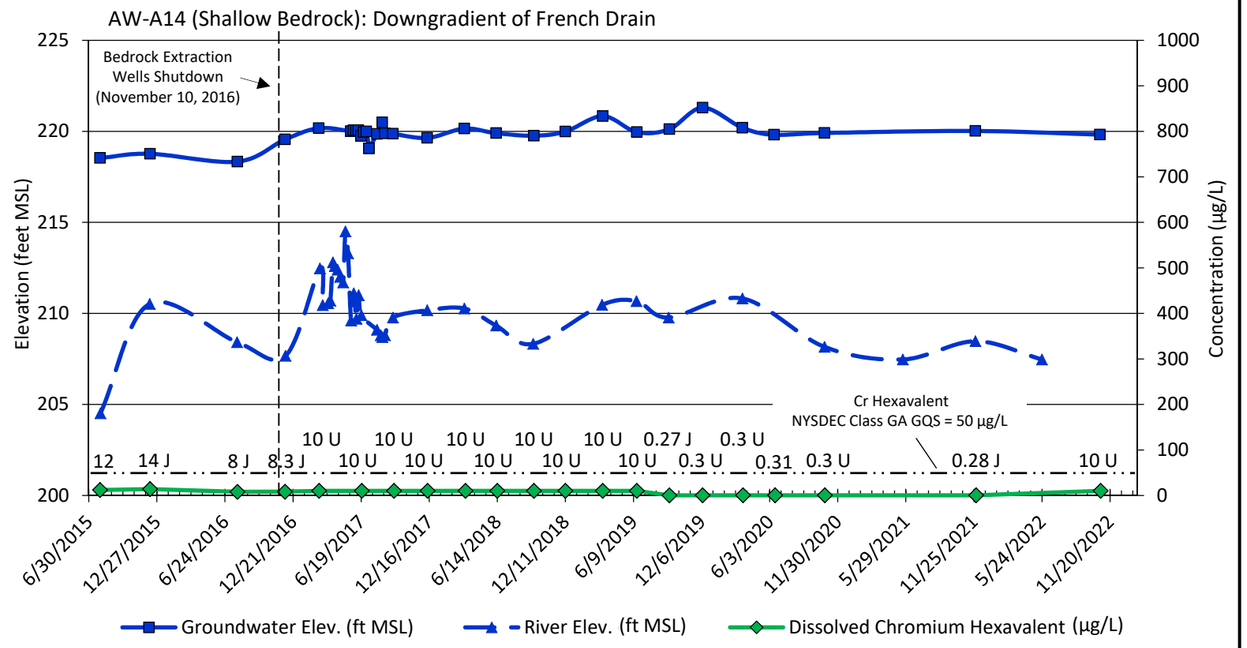
1. Groundwater (monitoring well) and surface water (Hudson River) hydraulic data points plotted on the graph are manual field measurements.
2. NYSDEC Class GA groundwater quality standard (GQS) from 6 NYCRR 703.5, Table 1 Water Quality Standards and Water Quality Guidance Values from NYS Division of Water TOGS 1.1.1.
3. U = indicates analyte was not detected above reporting limit shown
4. J = indicates value is estimated
5. µg/L = micrograms per liter
6. ft = feet
7. MSL = mean sea level

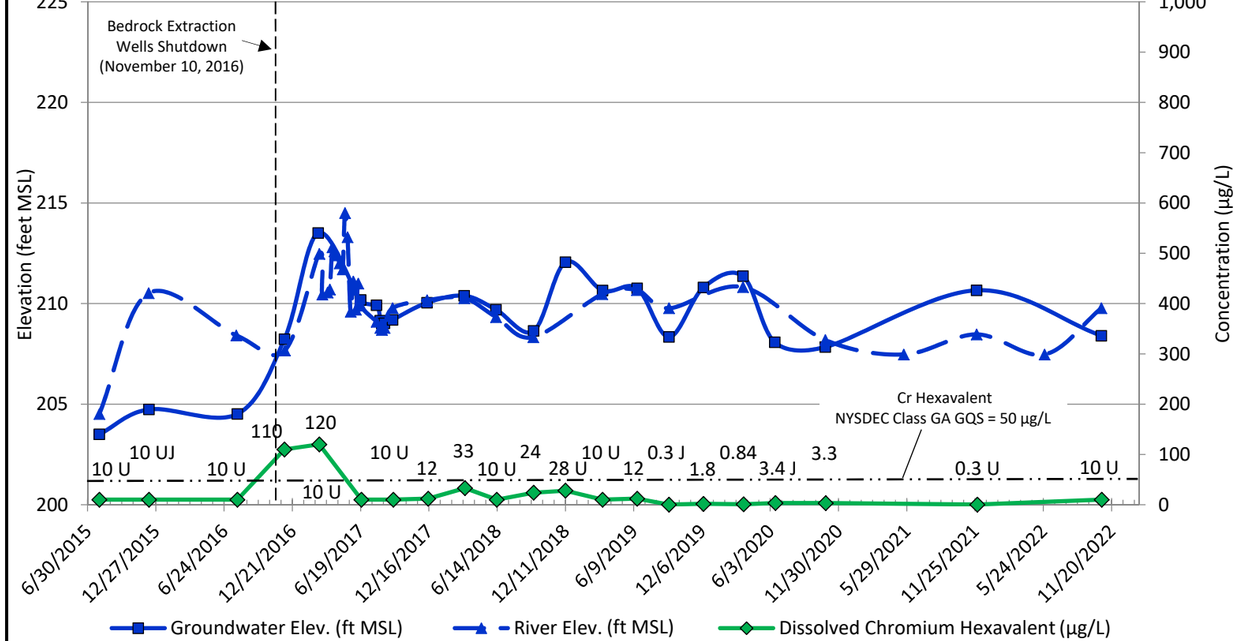
Former Ciba-Geigy / Hercules
Glens Falls, NY
EHS Support *February 2023*

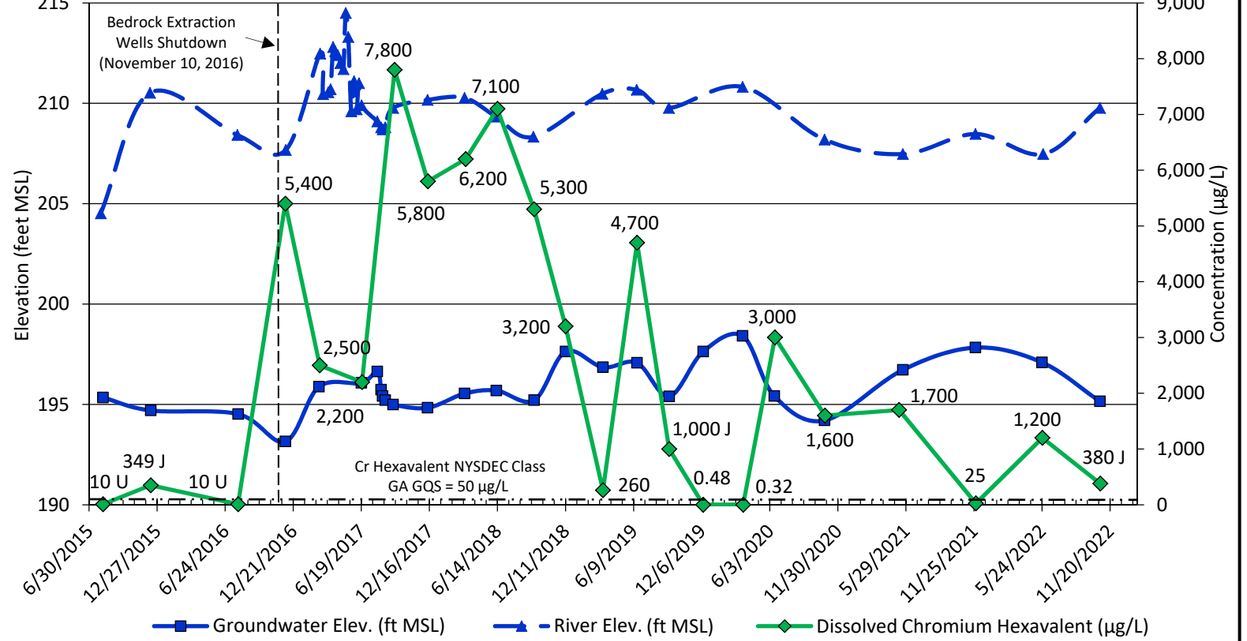
Chromium Concentration Plots: MW-OB30 (Overburden) and AW-A11 (Shallow Bedrock)

Figure 11









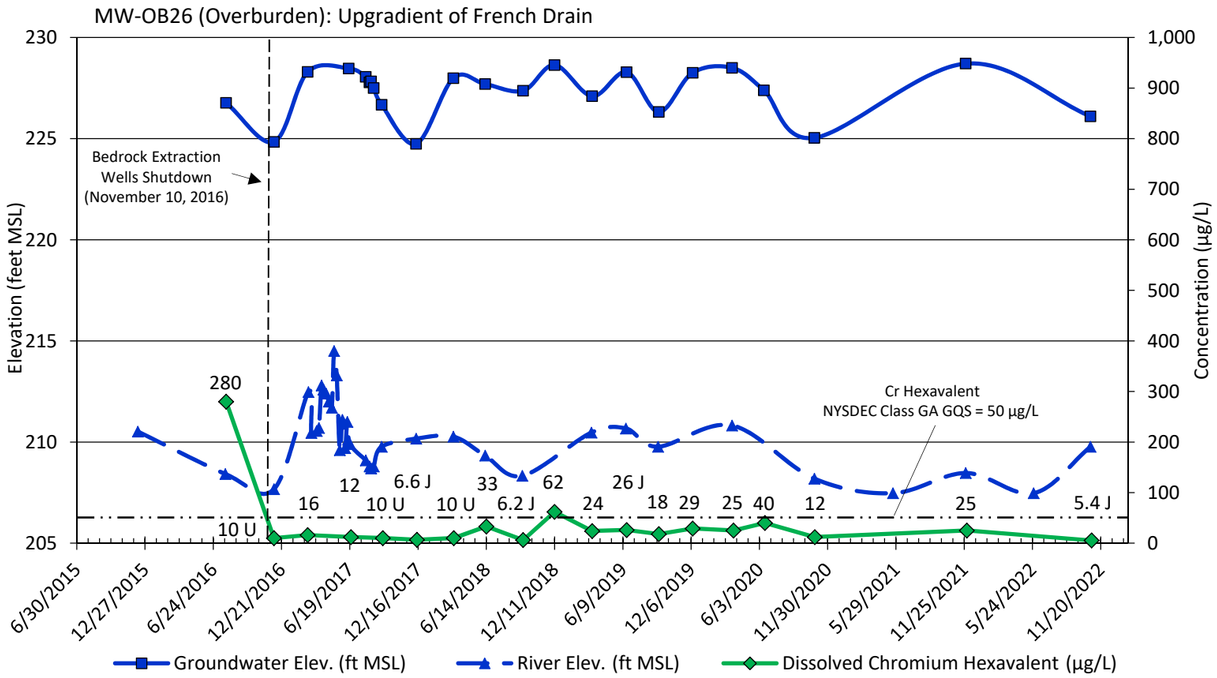
Notes:

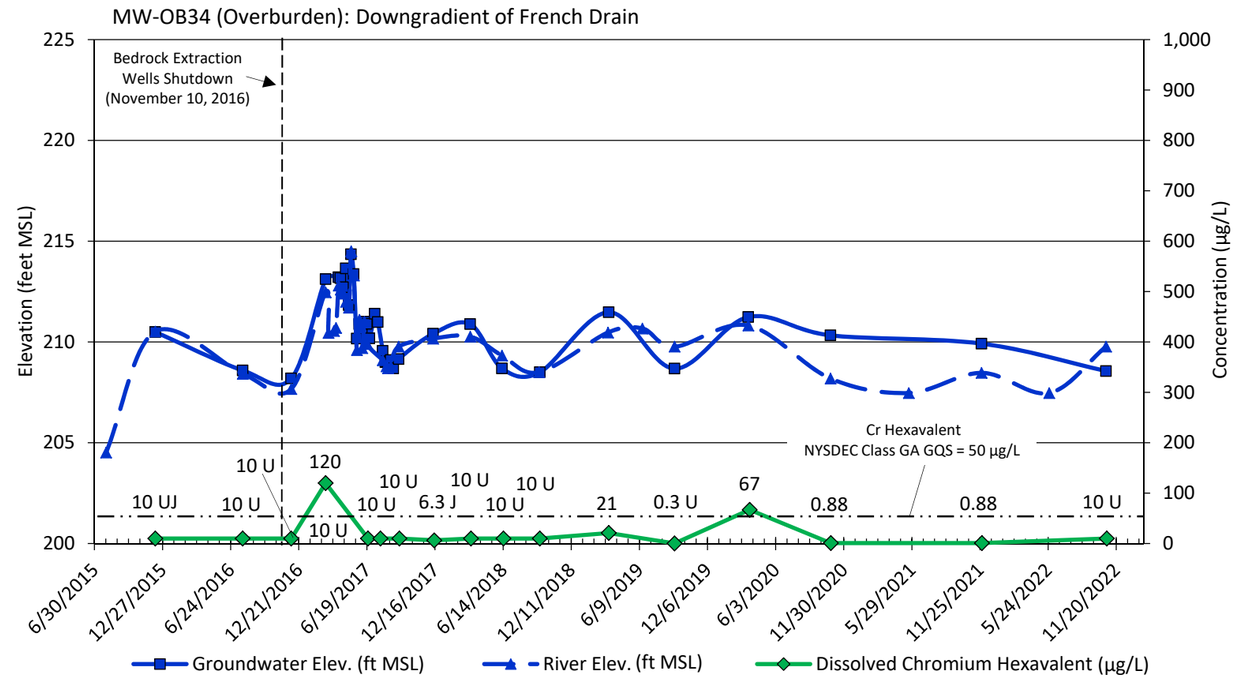
1. Groundwater (monitoring well) and surface water (Hudson River) hydraulic data points plotted on the graph are manual field measurements.
2. NYSDEC Class GA groundwater quality standard (GQS) from 6 NYCRR 703.5, Table 1 Water Quality Standards and Water Quality Guidance Values from NYS Division of Water TOGS 1.1.1
3. U = indicates analyte was not detected above reporting limit shown
4. J = indicates value is estimated
5. µg/L = micrograms per liter
6. ft = feet
7. MSL = mean sea level

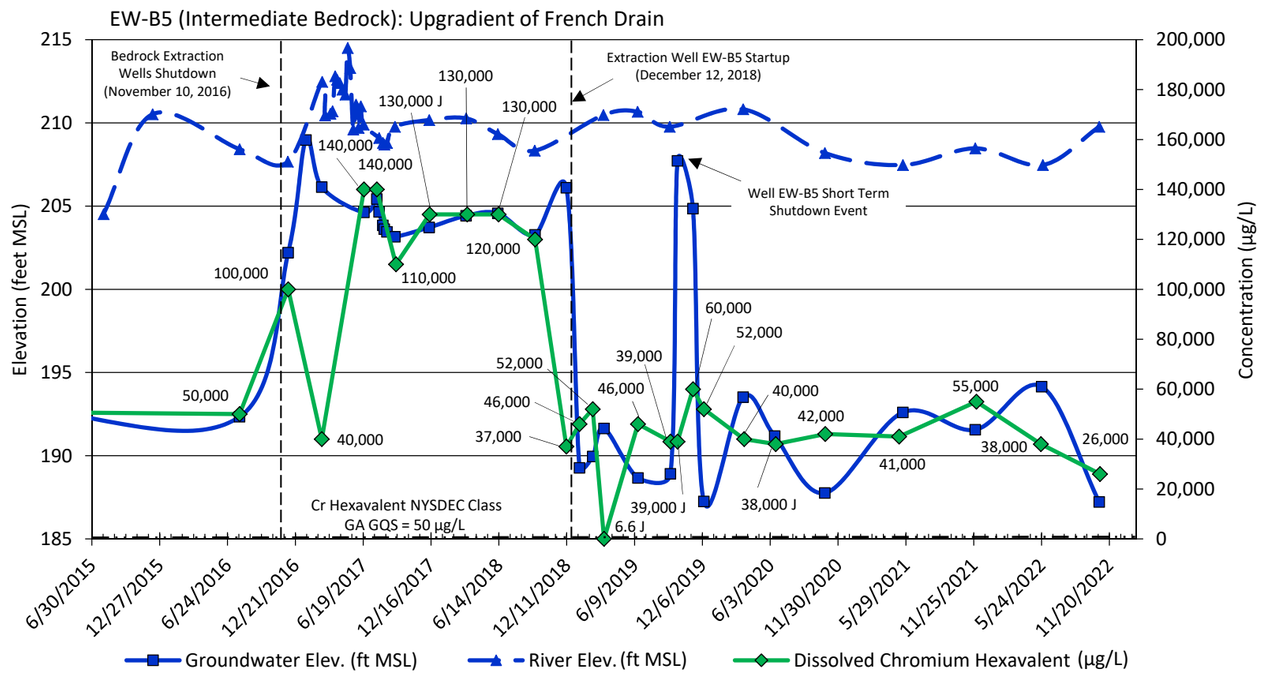
Former Ciba-Geigy / Hercules
Glens Falls, NY
EHS Support February 2023

Chromium Concentration Plots: MW-OB25 (Overburden), AW-A14 (Shallow Bedrock), AW-B4 (Intermediate Bedrock), and AW-C11 (Deep Bedrock)

Figure 12







Notes:

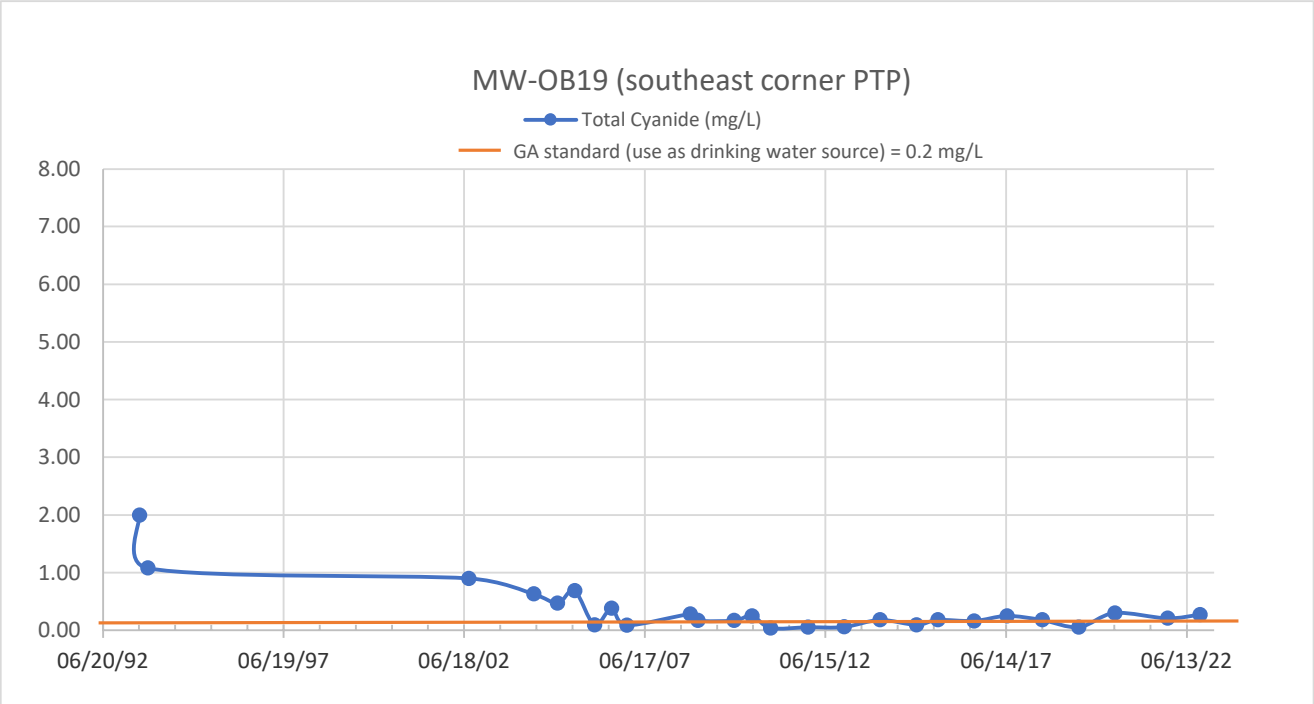
1. Groundwater (monitoring well) and surface water (Hudson River) hydraulic data points plotted on the graph are manual field measurements.
2. NYSDEC Class GA groundwater quality standard (GQS) from 6 NYCRR 703.5, Table 1 Water Quality Standards and Water Quality Guidance Values from NYS Division of Water TOGS 1.1.1.
3. U = indicates analyte was not detected above reporting limit shown
4. J = indicates value is estimated
5. µg/L = micrograms per liter
6. ft = feet
7. MSL = mean sea level

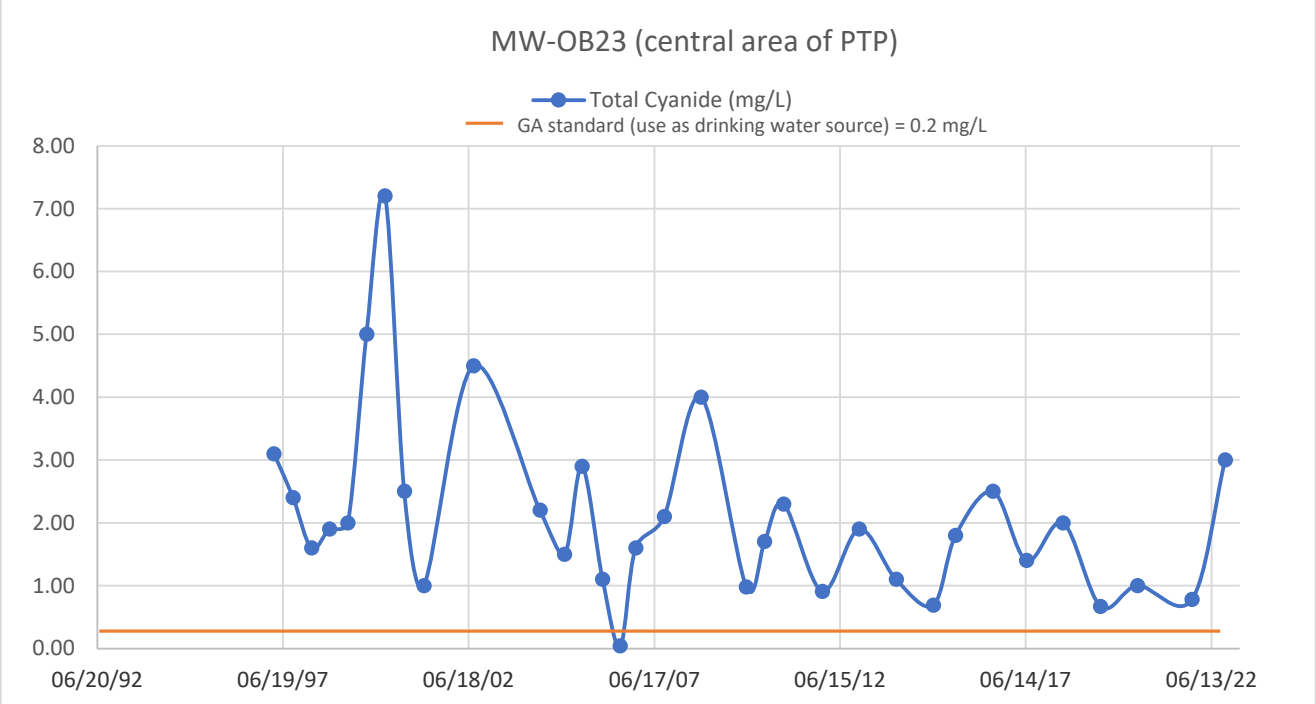
Former Ciba-Geigy / Hercules
Glens Falls, NY
EHS Support *February 2023*

Chromium Concentration Plots: MW-OB26 (Overburden), MW-OB34 (Overburden), and EW-B5 (Intermediate Bedrock)

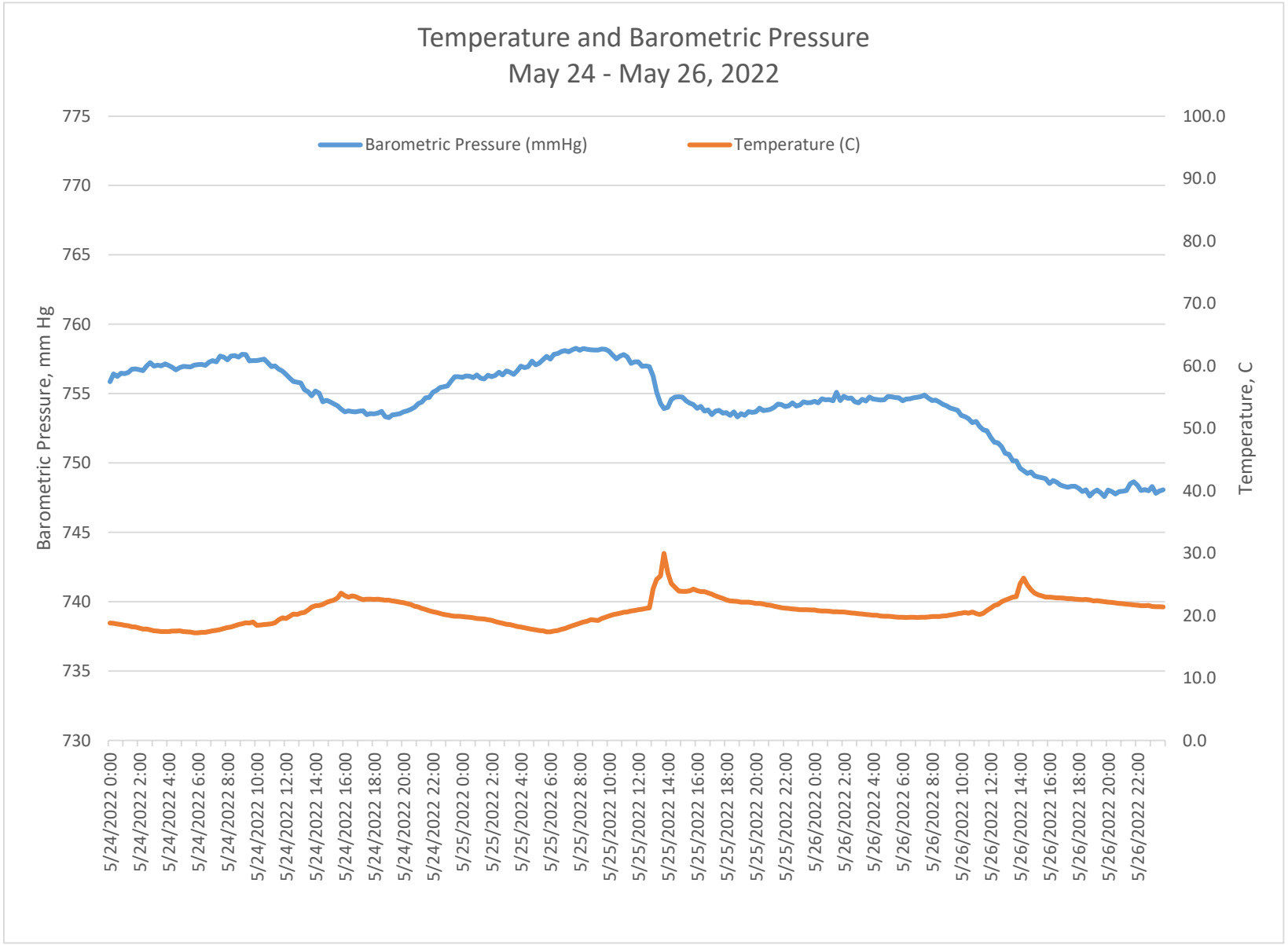
Figure 13

Figure 14
Cyanide Concentrations in Groundwater versus Time
Groundwater and Surface Water Monitoring Report
Former Ciba-Geigy Facility, Glens Falls, NY





Appendix A Field Sampling Logs and Barometric Pressure Graph


Temperature and Barometric Pressure
May 24 - May 26, 2022
Barometric Pressure (mmHg)
Temperature (C)
Barometric Pressure, mm Hg
Temperature, C
775
770
765
760
755
750
745
740
735
730
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
5/24/2022 0:00
5/24/2022 2:00
5/24/2022 4:00
5/24/2022 6:00
5/24/2022 8:00
5/24/2022 10:00
5/24/2022 12:00
5/24/2022 14:00
5/24/2022 16:00
5/24/2022 18:00
5/24/2022 20:00
5/24/2022 22:00
5/25/2022 0:00
5/25/2022 2:00
5/25/2022 4:00
5/25/2022 6:00
5/25/2022 8:00
5/25/2022 10:00
5/25/2022 12:00
5/25/2022 14:00
5/25/2022 16:00
5/25/2022 18:00
5/25/2022 20:00
5/25/2022 22:00
5/26/2022 0:00
5/26/2022 2:00
5/26/2022 4:00
5/26/2022 6:00
5/26/2022 8:00
5/26/2022 10:00
5/26/2022 12:00
5/26/2022 14:00
5/26/2022 16:00
5/26/2022 18:00
5/26/2022 20:00
5/26/2022 22:00

Ashland - Glens Falls, NY

Sample Team Members: John S. Abby W. Lacureft C.

QA/QC Tracking Sheet

Date	Time	Sample ID	Sample Type	Comments (i.e. Pump ID, or Parent Sample)
5/24/22	1715	EB-20220524	Equipment Blank	collected @ 4668 after MW-801A
5/25/22	1500	EB-20220525	Equipment Blank	collected @ 4668 after MW-801B
5/25/22	—	DUP-20220525	Duplicate	taken @ MW-B3
5/26/22	1136	MW-C11-20220526	MS/MSD	collected @ MW-C11
5/26/22	1300	EB-20220526	Equipment Blank	collected w/ 1431B after MW-C11

Sample Types:
EB - Equipment blank Record wells sampled directly before and after blank collection and equipment blank collected from
DUP - Duplicate sample. Record sample location where duplicate collected
MS/MSD - Matrix spike, Record sample location where collected
Other - record details of sample and where and why collected

Ashland - Glens Falls, NY
Daily Calibrations

Date: 5/24/22 Quarter/Year: 2022

Personnel: AW/JS

Parameter	Horiba Calibration Standards
pH	4.0
Conductivity	4.51 ms/cm
Turbidity	0 ntu
Diss. Oxygen	Varies per Temp., mg/L

Calibrations are to be conducted daily. Unsuccessful calibrations will be followed with second and third attempts. If calibrations remain unsuccessful, equipment will be removed from service, and spare equipment used in it's place. Calibration considered successful if within 2% of Calibration standards (NTU must be under 5 for turbidity).

Time	1016	Staff: AW
Model:	Horiba U53	Successful?
Meter Serial #:	20532	
pH	4.01	yes
Conductivitiy	4.49 mS/cm	↓
Turbiduty	0.0 NTU	↓
DO	8.94 mg/L	✓
Temperature	20.86	N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time	1206	Staff: AW
Model:	Horiba U53	Successful?
Meter Serial #:	20532	
pH	~~4.00~~ 3.99	yes
Conductivitiy	4.48	↓
Turbiduty	0.00	↓
DO	13.01	✓
Temperature	22.05	N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Ashland - Glens Falls, NY
Daily Calibrations

Date: 5/25/22 Quarter/Year: 2Q 22

Personnel: JJ

Parameter	Horiba Calibration Standards
pH	4.0
Conductivity	4.51 ms/cm
Turbidity	0 ntu
Diss. Oxygen	Varies per Temp., mg/L

Calibrations are to be conducted daily. Unsuccessful calibrations will be followed with second and third attempts. If calibrations remain unsuccessful, equipment will be removed from service, and spare equipment used in it's place. Calibration considered successful if within 2% of Calibration standards (NTU must be under 5 for turbidity).

Time		Staff:
Model:	Horiba U-53	Successful?
Meter Serial #:	20532	
pH	3.99	Y
Conductivitiy	4.49	Y
Turbiduty	0.0	Y
DO	9.61	Y
Temperature	19.18	N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Ashland - Glens Falls, NY
Daily Calibrations

Date: 1/26/22 Quarter/Year: 1# 22

Personnel: Garrett C.

Parameter	Horiba Calibration Standards
pH	4.0
Conductivity	4.51 ms/cm
Turbidity	0 ntu
Diss. Oxygen	Varies per Temp., mg/L

Calibrations are to be conducted daily. Unsuccessful calibrations will be followed with second and third attempts. If calibrations remain unsuccessful, equipment will be removed from service, and spare equipment used in it's place. Calibration considered successful if within 2% of Calibration standards (NTU must be under 5 for turbidity).

Time	930	Staff: GC
Model:	Horiba U-53	Successful?
Meter Serial #:	20532	
pH	4.06	Yes
Conductivitiy	4.50	Yes
Turbiduty	0.0	Yes
DO	8.68	Yes
Temperature	14.55	N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Water Level Measurements
Ashland - Glens Falls, NY

Date 5/24/22 Quarter/Year: 2022
Personnel: TS/AD/GC

Well Name	Install Depth (ft bgs)	Well Screen Length	Time	DTW (ft btoc)	Total Depth (ft btoc)	Comments
MAIN PLANT SITE						
AW-C11	158.0	10	0857	41.36	158.85	
MW-OB14	18.0	10	0910	10.50	19.41	
MW-OB30	18.25	12	0900	10.01	18.55	
MW-OB32	13.05	5	0908	8.87	13.30	
SG-12	NA	N/A	0850	—	—	Below gauge - Below 3.0' gauge broke off
REMEDIATION SYSTEM						
EW-B5	51.8	15.8	921	41.60	53.75	

Note: MW-9 - No log available, assumed to have 10' screen.
SG-11 Canal gauge no longer in place. Feeder Canal depth to water and total depth to be measured from canal wall by trail near former location of SG-2.

1140

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Laura H Crowe	Well ID:	AW-C11		
Date:	5/26/22	Original Install Depth:	158.0	feet	
Weather:	60° Sunny	Screen Length:	10	feet	
Time In:	Time Out: 1220	Well Diameter:	3"	inches	

		5/24	5/26
Depth to Water (from TOC):	(feet)	41.36	41.27
Depth to Water(From TOC) With Pump in place:	(feet)	41.27	
Total Depth (from TOC):	(feet)	158.85	
Length of Water Column :	(feet)	117.58	

WELL INFORMATION

Well Type:	Flushmount	☒	Stick-Up	☐	
Well Locked:	Yes	☒	No	☐	
Measuring Point Marked:	Yes	☒	No	☐	
Well Condition:	Good	☒	Poor	☐	
Well Condition Comments:					

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	19.17
Pumping Rate of Pump:	(mL/min)	125
Total Volume Removed:	(mL or gal)	2.5

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	14312	Pump Size:	1.75	Depth of Pump Intake:	153.85		
Evacuation Method:	Bailer	☐	Peristaltic	☐	Bladder	☒	Other ☐
Tubing Used:	Teflon	☐	Polyethylene	☒	N/A	☐	
Water Quality Meter (type/Serial Number):	Horiba U-53 20532						
Sampling Method:	Bailer	☐	Peristaltic	☐	Bladder	☒	Other ☐
Did well go dry?	Yes	☐	No	☒			
Final Depth to Water (prior to turning off pump):	41.26						
Barometric Pressure (At time of sampling) in mm/Hg:	752.379						

FIELD PARAMETER READINGS:

	1025	1027	1029	1031	1033	1035	1040	1045	1050	1055	1100	1105	1110	1115
Time	~~1014~~	~~1023~~	~~1025~~	~~1027~~	~~1019~~	~~1021~~								
Rate (ml/min)	~~100~~	125	125	125	125	125	125	125	125	125	125	125	125	125
Depth to Water (ft. TOC)	41.13	41.20	41.21	41.18	41.22	41.20	41.20	41.20	41.20	41.25	41.22	41.27	41.27	41.25
Temperature (°C)	19.37	18.92	18.47	17.82	17.21	16.79	16.13	15.01	19.89	18.66	18.17	15.92	15.10	14.54
pH	6.26	6.60	6.80	6.95	7.02	7.02	7.00	6.94	7.04	6.92	6.98	6.99	7.02	7.00
Conductivity (mS/cm)	1.63	1.60	~~1.58~~ 1.58	1.58	1.59	1.61	1.63	1.63	0.831	1.25	1.32	1.63	1.67	1.69
Dissolved Oxygen (mg/L)	11.78	10.45	7.84	5.62	4.78	4.52	3.53	1.98	15.76	5.80	3.76	1.47	1.17	1.06
Turbidity (NTU)	15.3	16.0	17.9	17.4	17.7	17.5	19.6	22.6	10.5	12.6	11.0	9.54	7.54	7.06
ORP (mV)	270	257	246	236	228	223	214	22.6	266	239	272	195	183	176

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & ~~Vanadium~~ ☑
- Diss. Hexavalent Chromium ☑
- Total Cyanide ☑
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	AW-C11 20220526	Duplicate ID:	
Start Time:	1136	Sample Time:	
End Time:	1200	Total Bottles:	
MS/MSD: Yes ☑	No ☐	Sampled By:	
Duplicate: Yes ☐	No ☑	MS/MSD ID:	AW-C11 20220526
Total Bottles:	3	Sample Time:	3
Sampled By:	GC	Total Bottles:	
		Sampled By:	

Observations (water color, clarity, etc.):

1045 after reading Horiba cleaned

1055 after reading change air tank

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Garrett Crowe	Well ID:	AW-C11		
Date:	5/26/22	Original Install Depth:	158.0	feet	
Weather:	60's Sun	Screen Length:	10	feet	
Time In:	945 Time Out: 1220	Well Diameter:	2"	inches	

		5/24		WELL INFORMATION				
Depth to Water (from TOC):	(feet)	41.36	41.27	Well Type:	Flushmount ☒	Stick-Up ☐		
Depth to Water(From TOC) With Pump in place:	(feet)	41.27		Well Locked:	Yes ☒	No ☐		
Total Depth (from TOC):	(feet)	158.85		Measuring Point Marked:	Yes ☒	No ☐		
Length of Water Column :	(feet)	117.58		Well Condition:	Good ☒	Poor ☐		
				Well Condition Comments:				

WELL WATER INFORMATION				EVACUATION INFORMATION				
Volume of Water in Well:	(mL or gal)	19.17		Pump ID: 14312	Pump Size: 1.75	Depth of Pump Intake: 153.85		
Pumping Rate of Pump:	(mL/min)	125		Evacuation Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐
Total Volume Removed:	(mL or gal)	2.5		Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐	
Volume Measurements	(gal)	(ml)	Tubing/Well Size	Water Quality Meter (type/Serial Number):	Horiba U-53 20532			
Tubing Volume per foot	0.003	11.36	1/4" ID tubing	Sampling Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐
Well Volume per foot	0.041	155.18	1" diam. well	Did well go dry?	Yes ☐	No ☒		
	0.163	616.95	2" diam. well	Final Depth to Water (prior to turning off pump):	41.56			
	0.653	2,471.60	4" diam. well	Barometric Pressure (At time of sampling) in mm/Hg:	752.379			

FIELD PARAMETER READINGS:														
Time	1120	1125	1130	1135										
Rate (ml/min)	125	125	125	125										
Depth to Water (ft. TOC)	41.26	41.27	41.27	41.26										
Temperature (°C)	14.33	14.48	15.14	15.27										
pH	7.02	7.03	7.06	7.05										
Conductivity (mS/cm)	1.70	1.70	1.70	1.70										
Dissolved Oxygen (mg/L)	0.90	0.65	0.68	0.67										
Turbidity (NTU)	5.63	4.11	2.73	2.25										
ORP (mV)	170	165	159	156										

SAMPLE INFORMATION				Observations (water color, clarity, etc.):
Sample List:	Sample ID: AW-C11_20220526	Duplicate ID:		after 1125 Reading change on tank
Diss. Chromium & Vanadium ☒	Start Time: 1136	Sample Time:		
Diss. Hexavalent Chromium ☒	End Time: 1206	Total Bottles:		
Total Cyanide ☒	MS/MSD: Yes ☒ No ☐	Sampled By:		
Free Cyanide ☐	Duplicate: Yes ☐ No ☒	MS/MSD ID: AW-C11_20220526		Free Cyanide Sulfide Test Strip: Positive (Black) / Negative (No change)
Total Dissolved Solids ☐	Total Bottles: 3	Sample Time: 1136		
Hardness ☐	Sampled By: GC	Total Bottles: ~~3~~ 3		
VOCs (Dichlorobenzenes) ☐		Sampled By: GC		

UNIT STABILITY				
pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	BW/GC	Well ID:	AW-C11		
Date:	5/26/22	Original Install Depth:	158.0	feet	
Weather:	Sunny 70's	Screen Length:	10	feet	
Time In:	1300 Time Out: 1800	Well Diameter:	2"	inches	

WELL INFORMATION

		5/24	5/25
Depth to Water (from TOC):	(feet)	41.36	41.25
Depth to Water(From TOC) With Pump in place:	(feet)	41.25	
Total Depth (from TOC):	(feet)	158.85	
Length of Water Column :	(feet)	117.6	

Well Type:	Flushmount ☑		Stick-Up ☐		
Well Locked:	Yes ☑		No ☐		
Measuring Point Marked:	Yes ☑		No ☐		
Well Condition:	Good ☑		Poor ☐		
Well Condition Comments:					

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	19.169 gallon
Pumping Rate of Pump:	(mL/min)	100 mL/min
Total Volume Removed:	(mL or gal)	3 gallons

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	X 14312	Pump Size:	1.75"	Depth of Pump Intake:	153.85		
Evacuation Method:	Bailer ☐	Peristaltic ☐	Bladder ☑	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	Horiba U-53 20532						
Sampling Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	41.42						
Barometric Pressure (At time of sampling) in mm/Hg:	—						

FIELD PARAMETER READINGS:

Time	1552	1554	1556	1558	1600	1602	1607	1612	1617	1622	1627	1632	1637	1642
Rate (ml/min)	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Depth to Water (ft. TOC)	41.26	41.43	41.45	41.45	41.43	41.38	41.40	41.40	41.40	41.40	41.40	41.42	41.40	41.42
Temperature (°C)	39.03	38.95	32.33	22.54	20.14	19.95	19.27	18.00	16.65	16.59	17.23	17.35	17.12	19.91
pH	8.07	7.97	7.59	7.12	6.93	6.92	6.97	7.06	7.25	7.24	7.21	7.21	7.19	7.27
Conductivity (mS/cm)	0.00	0.136	0.554	0.925	1.13	1.21	1.26	1.37	1.48	1.49	1.58	1.58	1.64	1.08
Dissolved Oxygen (mg/L)	7.01	7.01	8.59	10.63	7.96	5.15	4.18	3.33	1.58	1.37	0.83	0.83	0.68	4.33
Turbidity (NTU)	10.3	85.1	1000	1000	701	501	251	196	127	120	106	106	106	68
ORP (mV)	59	101	123	54	14	7	10	23	108	108	110	114	120	163

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & ~~Vanadium~~ ☑
- Diss. Hexavalent Chromium ☑
- Total Cyanide ☑
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	AW-C11_20220524	Duplicate ID:	
Start Time:	—	Sample Time:	
End Time:	—	Total Bottles:	
MS/MSD: Yes ☑ No ☐		Sampled By:	
Duplicate: Yes ☐ No ☑		MS/MSD ID:	AW-C11_20220524
Total Bottles:	3	Sample Time:	—
Sampled By:	—	Total Bottles:	—
		Sampled By:	—

Observations (water color, clarity, etc.):

* Cleaned Horiba at 1615
* problem getting the pump to start

↑ cleaned Horiba

Free Cyanide Sulfide Test Strip: Positive (Black) / ~~Negative (No change)~~

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	DS/LC	Well ID:	AW-C11		
Date:	5/25/22	Original Install Depth:	158.0	feet	
Weather:	Sunny 70's	Screen Length:	10	feet	
Time In:	1300 Time Out: 1800	Well Diameter:	2"	inches	

		5/24	5/25
Depth to Water (from TOC):	(feet)	41.36	41.25
Depth to Water(From TOC) With Pump in place:	(feet)	41.25	
Total Depth (from TOC):	(feet)	158.85	
Length of Water Column :	(feet)	117.6	

WELL INFORMATION

Well Type:	Flushmount ☒	Stick-Up ☐		
Well Locked:	Yes ☒	No ☐		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	19.169 gal.
Pumping Rate of Pump:	(mL/min)	100 mL/min
Total Volume Removed:	(mL or gal)	3 gallons

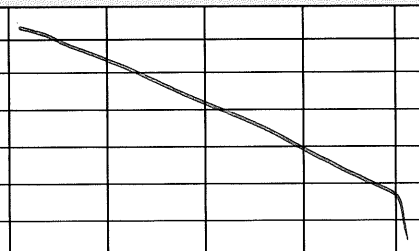
Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	* 14312	Pump Size:	1.75"	Depth of Pump Intake:	153.85		
Evacuation Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	Horiba U-53	26532					
Sampling Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	41.42						
Barometric Pressure (At time of sampling) in mm/Hg:	—						

FIELD PARAMETER READINGS:

Time	1647	1652	1657	1702	1707	1712	1717	1722	1727
Rate (ml/min)	100	100	100	100	100	100	100	100	100
Depth to Water (ft. TOC)	41.42	41.42	41.42	41.42	41.42	41.42	41.42	41.42	41.42
Temperature (°C)	16.46	16.6	15.99	15.57	15.62	15.45	15.36	15.47	15.62
pH	7.23	7.24	7.23	7.23	7.26	7.30	7.30	7.30	7.32
Conductivity (mS/cm)	1.56	1.61	1.68	1.69	1.55	1.59	1.65	1.71	1.70
Dissolved Oxygen (mg/L)	1.08	0.99	0.71	0.67	1.39	1.11	0.61	0.42	0.35
Turbidity (NTU)	76.4	60.1	53.4	47.1	35.1	34.6	31.2	31.2	27.9
ORP (mV)	164	159	149	146	165	161	156	149	143



SAMPLE INFORMATION

Sample List:

- Diss. Chromium & ~~Vanadium~~ ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	
Start Time:	
End Time:	
MS/MSD: Yes ☐ No ☐	
Duplicate: Yes ☐ No ☐	
Total Bottles:	
Sampled By:	

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

↑ stop? Recalculate to time

Not Sampled

Free Cyanide Sulfide Test Strip: Positive (Black) / Negative (No change)

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	AW	Well ID:	EW-BS		
Date:	5/25/22	Original Install Depth:	51.8	feet	
Weather:	60° Sunny	Screen Length:	15.8	feet	
Time In:	0830 Time Out: 1030	Well Diameter:	6"	inches	

		4/5/24	5/25
Depth to Water (from TOC):	(feet)	41.60	47.07
Depth to Water(From TOC) With Pump in place:	(feet)	—	
Total Depth (from TOC):	(feet)	53.75	
Length of Water Column :	(feet)	6.68	

WELL INFORMATION

Well Type:	Flushmount ☐	Stick-Up ☒		
Well Locked:	Yes ☒	No ☐		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	—
Pumping Rate of Pump:	(mL/min)	—
Total Volume Removed:	(mL or gal)	—

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	Bladder	Pump Size:	2"	Depth of Pump Intake:	—	
Evacuation Method:	Bailer ☒	Peristaltic ☐	Bladder ☐	Other ☐		
Tubing Used:	Teflon ☐	Polyethylene ☐	N/A ☒			
Water Quality Meter (type/Serial Number):	Horiba U-52	20532				
Sampling Method:	Bailer ☒	Peristaltic ☐	Bladder ☐	Other ☐		
Did well go dry?	Yes ☐	No ☒				
Final Depth to Water (prior to turning off pump):	47.20					
Barometric Pressure (At time of sampling) in mm/Hg:	758.197					

FIELD PARAMETER READINGS:

Time	0935													
Rate (ml/min)	—													
Depth to Water (ft. TOC)	47.07													
Temperature (°C)	14.32													
pH	6.62													
Conductivity (mS/cm)	2.63													
Dissolved Oxygen (mg/L)	9.39													
Turbidity (NTU)	0.00													
ORP (mV)	250													

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	EW-BS_20220525	Duplicate ID:	DUP_20220525
Start Time:	945	Sample Time:	—
End Time:	955	Total Bottles:	3
MS/MSD: Yes ☐ No ☒		Sampled By:	AW
Duplicate: Yes ☒ No ☐		MS/MSD ID:	
Total Bottles:	3	Sample Time:	
Sampled By:	AW	Total Bottles:	
		Sampled By:	

Observations (water color, clarity, etc.): Grab

Free Cyanide Sulfide Test Strip: Positive (Black) / ~~Negative (No change)~~

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	John S.	Well ID:	MW-OB14		
Date:	5/24/22	Original Install Depth:	18	feet	
Weather:	Sunny	Screen Length:	10	feet	
Time In:	1533 Time Out: 1645	Well Diameter:	2"	inches	

WELL INFORMATION

Depth to Water (from TOC):	(feet)	10.50	Well Type:	Flushmount ☒	Stick-Up ☐	
Depth to Water(From TOC) With Pump in place:	(feet)	10.50	Well Locked:	Yes ☒	No ☐	
Total Depth (from TOC):	(feet)	19.41	Measuring Point Marked:	Yes ☒	No ☐	
Length of Water Column :	(feet)	8.91	Well Condition:	Good ☒	Poor ☐	
			Well Condition Comments:			

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	1.45	Pump ID:	4068	Pump Size:	1/4 x 3/8"	Depth of Pump Intake: 14.96
Pumping Rate of Pump:	(ml/min)	100-120	Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐
Total Volume Removed:	(mL or gal)	2 gallons	Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐	

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

Water Quality Meter (type/Serial Number): Horiba U-53 / 20532

Sampling Method: Bailer ☐ Peristaltic ☒ Bladder ☐ Other ☐

Did well go dry? Yes ☐ No ☒

Final Depth to Water (prior to turning off pump): 16.00

Barometric Pressure (At time of sampling) in mm/Hg: 753.759

FIELD PARAMETER READINGS:

Time	1540	1542	1544	1546	1548	1550	1553	1600	1605	1610	1615			
Rate (ml/min)	120	120	120	120	120	110	110	100	100	100	100			
Depth to Water (ft. TOC)	12.10	12.48	12.72	13.08	13.32	13.64	14.00	14.14	14.36	14.86	15.20			
Temperature (°C)	28.19	27.19	25.39	23.39	23.14	22.44	21.88	20.77	23.05	23.14	23.27			
pH	8.34	8.28	8.17	8.08	8.08	8.05	8.04	8.01	7.82	7.84	7.86			
Conductivity (mS/cm)	0.371	0.352	0.316	0.316	0.316	0.316	0.318	0.322	0.317	0.325	0.333			
Dissolved Oxygen (mg/L)	4.17	3.10	1.70	0.79	0.77	0.72	0.71	0.90	3.56	3.83	3.59			
Turbidity (NTU)	6.50	5.22	4.15	4.09	2.90	3.14	2.64	2.64	1.89	2.38	1.70			
ORP (mV)	181	179	171	159	157	151	135	82	48	47	46			

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & ~~Vanadium~~ ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-OB14-20220524	Duplicate ID:	
Start Time:	1620	Sample Time:	
End Time:	1640	Total Bottles:	
MS/MSD:	Yes ☐ No ☒	Sampled By:	
Duplicate:	Yes ☐ No ☒	MS/MSD ID:	
Total Bottles:	3	Sample Time:	
Sampled By:	JS	Total Bottles:	
		Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	JS	Well ID:	MW-0830		
Date:	5/25/22	Original Install Depth:	18.25	feet	
Weather:	60s Sunny	Screen Length:	12	feet	
Time In:	1010 Time Out: 1110	Well Diameter:	2	inches	

		5/24/22	5/25/22
Depth to Water (from TOC):	(feet)	10.01 (5/24/22)	10.30 (5/25/22)
Depth to Water(From TOC) With Pump in place:	(feet)	10.30	
Total Depth (from TOC):	(feet)	18.55	
Length of Water Column :	(feet)	8.25	

WELL INFORMATION

Well Type:	Flushmount ☐	Stick-Up ☒		
Well Locked:	Yes ☒	No ☐		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	1.34
Pumping Rate of Pump:	(mL/min)	100
Total Volume Removed:	(mL or gal)	1.5 gallons

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	4068	Pump Size:	1/4 x 3/8"	Depth of Pump Intake:	14.43		
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	Horiba U-53 / 20532						
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	15.97						
Barometric Pressure (At time of sampling) in mm/Hg:	757.697						

FIELD PARAMETER READINGS:

Time	1022	1024	1026	1028	1030	1032	1037	1042						
Rate (ml/min)	100	100	100	100	100	100	100	100						
Depth to Water (ft. TOC)	11.91	12.07	12.28	12.47	12.70	12.91	13.56	14.08						
Temperature (°C)	19.46	18.58	17.23	16.69	16.53	16.47	16.33	15.91						
pH	9.21	9.23	9.26	9.27	9.27	9.28	9.28	9.30						
Conductivity (mS/cm)	0.878	0.865	0.857	0.865	0.867	0.865	0.858	0.851						
Dissolved Oxygen (mg/L)	4.74	4.61	4.45	4.23	3.99	3.75	3.57	3.43						
Turbidity (NTU)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
ORP (mV)	173	176	184	189	192	195	197	201						

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0830_20220525
Start Time:	1045
End Time:	1100
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	JS

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: Positive (Black) / Negative (No change)

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
±0.1	±10%	±10%, <10NTU	±3%	±10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	DS	Well ID:	MW-0830		
Date:	5/24/20	Original Install Depth:	18.75	feet	
Weather:	Sunny 70's	Screen Length:	12	feet	
Time In:	1400 Time Out: 1456	Well Diameter:	2"	inches	

WELL INFORMATION

Depth to Water (from TOC):	(feet)	10.01	Well Type:	Flushmount ☐	Stick-Up ☒	
Depth to Water(From TOC) With Pump in place:	(feet)	10.02	Well Locked:	Yes ☒	No ☐	
Total Depth (from TOC):	(feet)	18.55	Measuring Point Marked:	Yes ☒	No ☐	
Length of Water Column :	(feet)	8.54	Well Condition:	Good ☒	Poor ☐	
			Well Condition Comments:			

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	1.39	Pump ID:	402 8	Pump Size:	1/4-5/8	Depth of Pump Intake: 14.28
Pumping Rate of Pump:	(mL/min)	100	Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐
Total Volume Removed:	(mL or gal)	1.50	Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐	

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

Water Quality Meter (type/Serial Number): Horiba U-52 / 20552

Sampling Method: Bailer ☐ Peristaltic ☒ Bladder ☐ Other ☐

Did well go dry? Yes ☒ No ☐

Final Depth to Water (prior to turning off pump): 14.50

Barometric Pressure (At time of sampling) in mm/Hg:

FIELD PARAMETER READINGS:

Time	1422	1429	1426	1428	1430	1432	1437	1442	1447					
Rate (ml/min)	120	120	120	120	120	120	120							
Depth to Water (ft. TOC)	~~12.15~~	12.80	13.04	13.13	13.48	13.90	14.15							
Temperature (°C)	27.86	26.03	23.01	22.26	21.45	20.74	20.12							
pH	8.20	8.20	8.19	8.18	8.17	8.16	8.15							
Conductivity (mS/cm)	0.640	0.617	0.621	0.644	0.654	0.664	0.672							
Dissolved Oxygen (mg/L)	6.21	5.93	5.87	5.84	5.89	5.85	5.80							
Turbidity (NTU)	5.43	4.38	4.61	5.02	4.58	4.55	4.08							
ORP (mV)	176	197	213	215	218	226	239							

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0830_20200524	Duplicate ID:	
Start Time:	—	Sample Time:	
End Time:	—	Total Bottles:	
MS/MSD: Yes ☐ No ☒		Sampled By:	
Duplicate: Yes ☐ No ☒		MS/MSD ID:	
Total Bottles:	—	Sample Time:	
Sampled By:	—	Total Bottles:	
		Sampled By:	

Observations (water color, clarity, etc.): DRY

Free Cyanide Sulfide Test Strip: ~~Positive (Black)~~ / Negative (No change)

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	AW	Well ID:	MW-0832		
Date:	5/24/22	Original Install Depth:	13.05	feet	
Weather:	65° Sunny	Screen Length:	5	feet	
Time In:	1150 Time Out: 1325 5/24/22	Well Diameter:	2"	inches	

WELL INFORMATION

Depth to Water (from TOC):	(feet)	8.87	Well Type:	Flushmount ☒	Stick-Up ☐
Depth to Water(From TOC) With Pump in place:	(feet)	8.87	Well Locked:	Yes ☒	No ☐
Total Depth (from TOC):	(feet)	13.30	Measuring Point Marked:	Yes ☒	No ☐
Length of Water Column :	(feet)	4.43	Well Condition:	Good ☒	Poor ☐
			Well Condition Comments:		

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	0.722	Pump ID:	Pur. 4052	Pump Size: 1/4 x 3/8 Depth of Pump Intake: 11.09
Pumping Rate of Pump:	(mL/min)	150	Evacuation Method:	Bailer ☐	Peristaltic ☒ Bladder ☐ Other ☐
Total Volume Removed:	(mL or gal)	2 gal	Tubing Used:	Teflon ☐	Polyethylene ☒ N/A ☐

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

Water Quality Meter (type/Serial Number):	Horiba U-52 20532		
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐ Other ☐
Did well go dry?	Yes ☐	No ☒	
Final Depth to Water (prior to turning off pump):	10.15		
Barometric Pressure (At time of sampling) in mm/Hg:	755.772		

FIELD PARAMETER READINGS:

Time	1211	1213	1215	1217	1219	1221	1226	1231	1236	1241	1246	1251	1256	1301
Rate (ml/min)	125	125	125	125	125	125	125	125	125	125	125	125	125	125
Depth to Water (ft. TOC)	9.35	9.43	9.47	9.50	9.56	9.61	9.70	9.80	9.86	9.91	9.97	10.01	10.07	10.14
Temperature (°C)	24.10	24.53	24.60	24.53	24.41	24.30	24.14	24.06	24.06	24.07	24.27	24.44	24.49	24.66
pH	6.50	6.76	6.89	6.93	6.95	6.95	6.95	6.94	6.98	6.95	6.90	7.04	6.99	7.02
Conductivity (mS/cm)	1.31	1.17	1.10	1.07	1.04	1.02	1.00	0.992	0.978	0.980	0.982	0.987	0.990	0.998
Dissolved Oxygen (mg/L)	2.82	1.50	1.23	1.05	1.01	0.97	0.76	0.70	0.63	0.60	0.48	0.46	0.41	0.34
Turbidity (NTU)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ORP (mV)	174	177	180	177	172	169	168	162	164	169	174	150	147	146

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

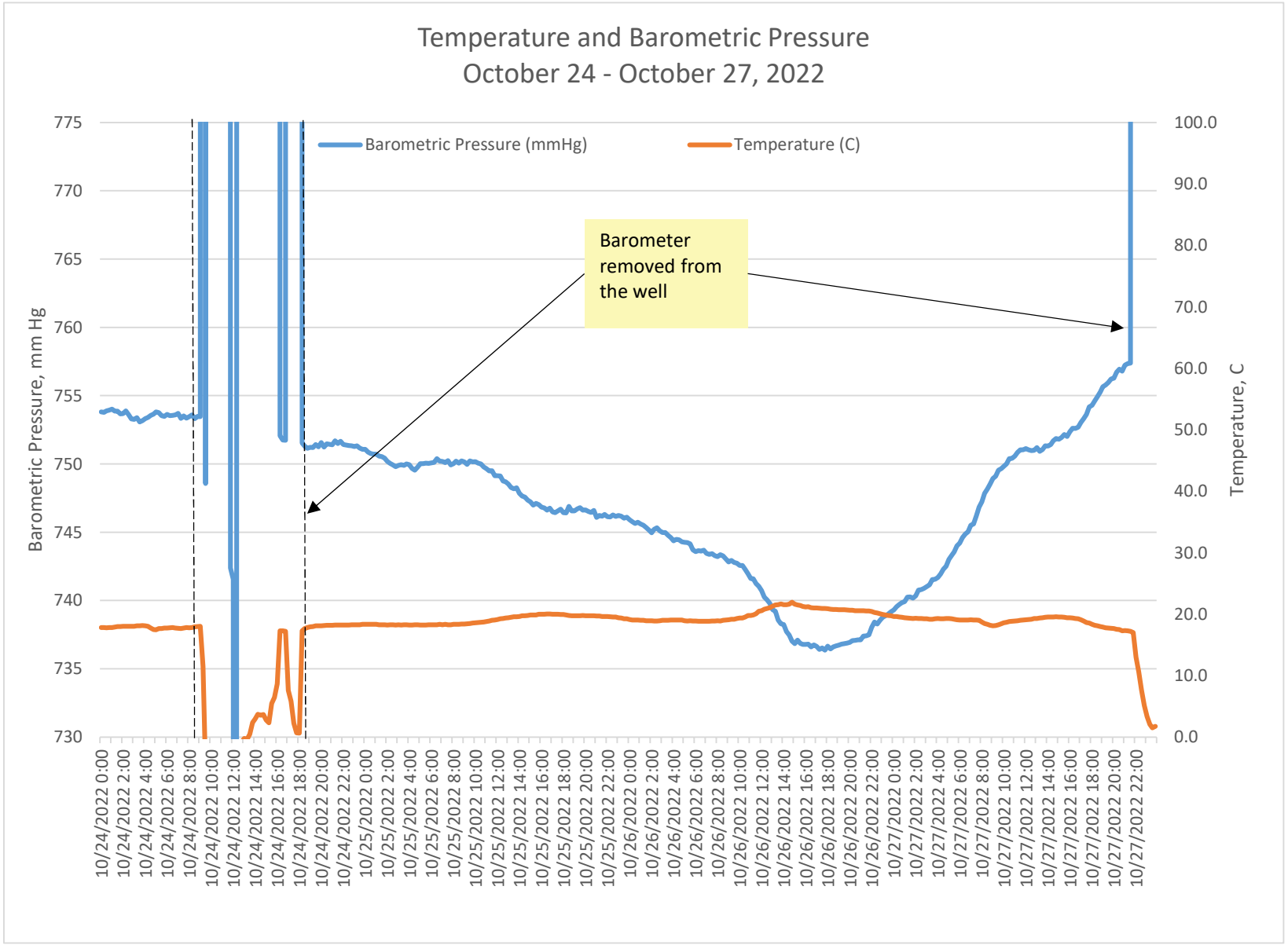
Sample ID:	MW-0832-20220524	Duplicate ID:	
Start Time:	1302	Sample Time:	1307
End Time:	1307	Total Bottles:	
MS/MSD: Yes ☐ No ☒		Sampled By:	
Duplicate: Yes ☐ No ☒		MS/MSD ID:	
Total Bottles:	3	Sample Time:	
Sampled By:	AW	Total Bottles:	
		Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV


Temperature and Barometric Pressure
October 24 - October 27, 2022
Barometric Pressure (mmHg)
Temperature (C)
Barometer removed from the well
Barometric Pressure, mm Hg
Temperature, C
775
770
765
760
755
750
745
740
735
730
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
10/24/2022 0:00
10/24/2022 2:00
10/24/2022 4:00
10/24/2022 6:00
10/24/2022 8:00
10/24/2022 10:00
10/24/2022 12:00
10/24/2022 14:00
10/24/2022 16:00
10/24/2022 18:00
10/24/2022 20:00
10/24/2022 22:00
10/25/2022 0:00
10/25/2022 2:00
10/25/2022 4:00
10/25/2022 6:00
10/25/2022 8:00
10/25/2022 10:00
10/25/2022 12:00
10/25/2022 14:00
10/25/2022 16:00
10/25/2022 18:00
10/25/2022 20:00
10/25/2022 22:00
10/26/2022 0:00
10/26/2022 2:00
10/26/2022 4:00
10/26/2022 6:00
10/26/2022 8:00
10/26/2022 10:00
10/26/2022 12:00
10/26/2022 14:00
10/26/2022 16:00
10/26/2022 18:00
10/26/2022 20:00
10/26/2022 22:00
10/27/2022 0:00
10/27/2022 2:00
10/27/2022 4:00
10/27/2022 6:00
10/27/2022 8:00
10/27/2022 10:00
10/27/2022 12:00
10/27/2022 14:00
10/27/2022 16:00
10/27/2022 18:00
10/27/2022 20:00
10/27/2022 22:00

Ashland - Glens Falls, NY

Sample Team Members: JS, AW, EC, LH, GC

QA/QC Tracking Sheet

Date	Time	Sample ID	Sample Type	Comments (i.e. Pump ID, or Parent Sample)
10/24/22	1102	AW-B1R_20221024	MS/MSD	
10/24/22	1105	EB_20221024	EB 20221024	taken at AW-B1R
10/24/22	—	~~MW-08AW-B1R 20221024~~	Duplicate	take with Pump 14311 after MW-08 14
10/24/22	—	DUP_20221024		
10/25/22	1700	EB_20221025	EB blank	taken with Pump 4068 after SW-04
~~10/24/22~~	—	DUP_20221025	Duplicate	taken@ SW-02
10/25/22	1418	SW-02_20221025	MS/MSD	taken@ SW-04
10/27/22	1242	AW-C11_20221025	MS/MSD	taken@ AW-C11
10/26/22	—	DUP_20221026	Duplicate	taken@ EW-155
10/26/22	1500	EB 20221026	Equipment blank	taken w/ Pump 14312 ~~after MW-B3R~~ after MW-255
10/27/22	1100	EB_20221027	EB blank	taken w/ 4068 after MW-01B30

Sample Types:
EB - Equipment blank Record wells sampled directly before and after blank collection and equipment blank collected from
DUP - Duplicate sample. Record sample location where duplicate collected
MS/MSD - Matrix spike, Record sample location where collected
Other - record details of sample and where and why collected

Ashland - Glens Falls, NY
Daily Calibrations

Date: 10/24/22 Quarter/Year: Fall 2022

Personnel: AW

Parameter	Horiba Calibration Standards
pH	4.0
Conductivity	4.51 ms/cm
Turbidity	0 ntu
Diss. Oxygen	Varies per Temp., mg/L

Calibrations are to be conducted daily. Unsuccessful calibrations will be followed with second and third attempts. If calibrations remain unsuccessful, equipment will be removed from service, and spare equipment used in it's place. Calibration considered successful if within 2% of Calibration standards (NTU must be under 5 for turbidity).

Time	1240	Staff: AW	
Model:	U-52		Successful?
Meter Serial #:	21290		
pH	3.97		Y
Conductivitiy	4.55		Y
Turbiduty	0.0		Y
DO	8.53		Y
Temperature	18.23		N/A

Time	1243	Staff: AW	
Model:	U-52		Successful?
Meter Serial #:	41040		
pH	3.96		Y
Conductivitiy	4.49		Y
Turbiduty	0.0		Y
DO	10.79		Y
Temperature	18.57		N/A

Time	1250	Staff: AW	
Model:	320944		Successful?
Meter Serial #:	U-52		
pH	3.97		Y
Conductivitiy	4.49		Y
Turbiduty	0.0		Y
DO	9.61		Y
Temperature	18.29		N/A

Time	1250	Staff: AW	
Model:	U-52		Successful?
Meter Serial #:	459726		
pH	3.9		Y
Conductivitiy	4.52		Y
Turbiduty	0.0		Y
DO	10.71		Y
Temperature	19.01		N/A

Time		Staff:	
Model:			Successful?
Meter Serial #:			
pH			
Conductivitiy			
Turbiduty			
DO			
Temperature			N/A

Time		Staff:	
Model:			Successful?
Meter Serial #:			
pH			
Conductivitiy			
Turbiduty			
DO			
Temperature			N/A

Ashland - Glens Falls, NY
Daily Calibrations

Date: 10/25/22 Quarter/Year: Fall 2022

Personnel: AW

Parameter	Horiba Calibration Standards
pH	4.0
Conductivity	4.51 ms/cm
Turbidity	0 ntu
Diss. Oxygen	Varies per Temp., mg/L

Calibrations are to be conducted daily. Unsuccessful calibrations will be followed with second and third attempts. If calibrations remain unsuccessful, equipment will be removed from service, and spare equipment used in it's place. Calibration considered successful if within 2% of Calibration standards (NTU must be under 5 for turbidity).

Time	0815	Staff: AW	
Model:	U-52		Successful?
Meter Serial #:	5M370022		
pH	3.98		Y
Conductivitiy	4.51		Y
Turbiduty	0.0		Y
DO	9.44		Y
Temperature	18.52		N/A

Time	0820	Staff: AW	
Model:	U-52		Successful?
Meter Serial #:	XFUHW76		
pH	3.98		Y
Conductivitiy	4.49		Y
Turbiduty	0.0		Y
DO	8.90		Y
Temperature	19.21		N/A

Time	0825	Staff: AW	
Model:	U-52		Successful?
Meter Serial #:	XCYA38V7		
pH	3.97		Y
Conductivitiy	4.50		Y
Turbiduty	0.0		Y
DO	9.05		Y
Temperature	18.76		N/A

Time	0830	Staff: AW	
Model:	U-52		Successful?
Meter Serial #:	832HFK3		
pH	3.99		Y
Conductivitiy	4.49		Y
Turbiduty	0.0		Y
DO	9.54		Y
Temperature	18.82		N/A

Time		Staff:	
Model:			Successful?
Meter Serial #:			
pH			
Conductivitiy			
Turbiduty			
DO			
Temperature			N/A

Time		Staff:	
Model:			Successful?
Meter Serial #:			
pH			
Conductivitiy			
Turbiduty			
DO			
Temperature			N/A

Ashland - Glens Falls, NY
Daily Calibrations

Date: 10/26/22 Quarter/Year: Fall 2022

Personnel: AW, JS

Parameter	Horiba Calibration Standards
pH	4.0
Conductivity	4.51 ms/cm
Turbidity	0 ntu
Diss. Oxygen	Varies per Temp., mg/L

Calibrations are to be conducted daily. Unsuccessful calibrations will be followed with second and third attempts. If calibrations remain unsuccessful, equipment will be removed from service, and spare equipment used in it's place. Calibration considered successful if within 2% of Calibration standards (NTU must be under 5 for turbidity).

Time	0815	Staff: JS	
Model:	Horiba U-52		Successful?
Meter Serial #:	X1FUHW7G		
pH	3.97		Y
Conductivitiy	4.48		Y
Turbiduty	0.0		Y
DO	8.62		Y
Temperature	20.94		N/A

Time	0820	Staff: AW	
Model:	Horiba U-52		Successful?
Meter Serial #:	882HYFK3		
pH	3.99		Y
Conductivitiy	4.49		Y
Turbiduty	0.0		Y
DO	8.90		Y
Temperature	20.52		N/A

Time	0825	Staff: AW	
Model:	Horiba U-52		Successful?
Meter Serial #:	XC1A38V7		
pH	3.99		Y
Conductivitiy	4.49		Y
Turbiduty	0.0		Y
DO	8.41		Y
Temperature	20.21		N/A

Time	825	Staff: EC	
Model:	Horiba U-52		Successful?
Meter Serial #:	SM370U22		
pH	3.95		Y
Conductivitiy	4.53		Y
Turbiduty	0.0		Y
DO	8.82		Y
Temperature	19.88		N/A

Time		Staff:	
Model:			Successful?
Meter Serial #:			
pH			
Conductivitiy			
Turbiduty			
DO			
Temperature			N/A

Time		Staff:	
Model:			Successful?
Meter Serial #:			
pH			
Conductivitiy			
Turbiduty			
DO			
Temperature			N/A

Ashland - Glens Falls, NY
Daily Calibrations

Date: 10/28/22 Quarter/Year: Fall 2022

Personnel: GC, EC, LH

Parameter	Horiba Calibration Standards
pH	4.0
Conductivity	4.51 ms/cm
Turbidity	0 ntu
Diss. Oxygen	Varies per Temp., mg/L

Calibrations are to be conducted daily. Unsuccessful calibrations will be followed with second and third attempts. If calibrations remain unsuccessful, equipment will be removed from service, and spare equipment used in it's place. Calibration considered successful if within 2% of Calibration standards (NTU must be under 5 for turbidity).

Time	815	Staff: GC
Model:	Horiba U-52	Successful?
Meter Serial #:	862HYFK3	
pH	4.01	✓
Conductivitiy	4.47	✓
Turbiduty	0.6	✓
DO	8.85	✓
Temperature	14.15	N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time	820	Staff: GC
Model:	Horiba U-52	Successful?
Meter Serial #:	SM37002 2	
pH	4.0	✓
Conductivitiy	3.98	✓
Turbiduty	0.0	✓
DO	10.20	✓
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Time		Staff:
Model:		Successful?
Meter Serial #:		
pH		
Conductivitiy		
Turbiduty		
DO		
Temperature		N/A

Water Level Measurements
Ashland - Glens Falls, NY

Date 10/24/22 Quarter/Year: Fall 22
Personnel: EC + LH + JS + AW

Well Name	Install Depth (ft bgs)	Well Screen Length	Time	DTW (ft btoc)	Total Depth (ft btoc)	Comments
MAIN PLANT SITE						
AP-2	20.0	10	1306	14.03	19.87	
AW-A2	32.0	10	1019	23.74	40.12	
AW-A4	37.0	10	1242	21.54	39.11	
AW-A10	46.0	10	1318	25.54	48.37	
AW-A11	58.0	10	1055	28.08	56.27	
AW-A14	34.5	10	1110	17.0	32.80	
★ ~~AW-A15~~ MW-15	31.0	10	1134	11.65	18.68	
AW-B2	55.0	24	1012	25.10	53.39	
AW-B3	58.5	10	1224	27.00	60.69	
AW-B4	47.5	10	~~1302~~	29.85	46.13	
AW-B11	67.0	10	1320	28.00	59.01	
AW-B17	47.7	10	1030	26.09	47.10	
★ AW-B18	50.5	10	1505	37.50	55.14	
AW-B19	46.9	10	1122	35.62	52.33	
★ AW-B20	31.0	10	1324	17.18	36.59	
AW-C1	144.0	10	955	37.34	125.57	
AW-C2	169.0	10	0731	51.50	~~173.82~~	~~More water into well~~
AW-C7	155.0	10	1220	80.47	158.82	
AW-C8	162.0	15	1017	58.92	~~161.15~~	~~[illegible]~~
AW-C9	127.0	10	1120	DRY	43.24	
AW-C10	137.0	10	1113	53.34	137.34	
AW-C11	158.0	10	1300	113.30	158.86	
BP-6	23.0	10	~~1222~~	2.07	2.07	time: 1042 IP signal @ bottom
BP-9	16.0	10	1312	18.45	18.52	
~~IP-4~~ unsure	8.5	4	1125	4.19	12.83	
MW-9	49.4	10*	944	~~[illegible]~~	16.06	DTW = 7.42
MW-10B	35.0	10	1110	27.32	34.80	
★ ~~MW-19~~	41.5	31.5	1508	15.54	34.06	AW-A15
MW-20C	160.0	10	1015	75.62	168.10	
MW-20D	~~55.1~~	10	1020	43.83	49.89	
MW-25D	60.7	10	~~0931~~ 0937	~~51.50~~ 26.71	42.	Wrong entry for AW-C2 24.43 DTW TD=59.98
MW-25S	39.4	10	0935	26.51	42.10	
MW-26	~8	5	0929	7.97	13.27	
MW-27S	42.5	10	1042	18.69	33.52	
MW-28	~12	5	1041	1.66	11.74	
MW-30D	51.5	10	1023	11.12	44.02	
MW-31	15.0	5	1019	8.98	17.13	
MW-36C	160.0	10	1027	76.30	166.33	
MW-36D	57.2	10	1045	39.58	52.10	
MW-36S	33.0	9	1040	20.75	27.48	
MW-40B	53.0	10	0950	50.12	55.00	
MW-OB2	17.0	10	1000	17.50	19.29	
MW-OB5	12.0	7	1033	7.14	14.43	
MW-OB7	9.0	5	1022	7.09	15.81	
★ MW-OB13	8.0	5	1325	10.90	14.73	

Water Level Measurements
Ashland - Glens Falls, NY

Date 10/24/22 Quarter/Year: Fall 22
Personnel: EG, LH, SS, AW

Well Name	Install Depth (ft bgs)	Well Screen Length	Time	DTW (ft btoc)	Total Depth (ft btoc)	Comments
MW-OB14	18.0	10	1113	11.06	19.46	
MW-OB15	8.0	5	1178	1.79	7.33	
MW-OB24	10.5	5	1008	14.91	17.46	
MW-OB25	10.0	5	1104	8.18	10.97	
MW-OB26	14.0	5	1108	12.35	18.04	
MW-OB27	11.0	5	958	11.35	11.35	IP signal @ bottom of well
MW-OB30	18.25	12	1031	9.35	18.50	
MW-OB31	13.67	8	13:09	8.70	13.84	~~unable to open lock~~
MW-OB32	13.05	5	1039	8.38	13.10	
MW-OB33	15.21	10	1048	7.86	15.44	
MW-OB34	16.04	10	1044	15.02	16.25	
P-A1	34.5	10	1003	12.86	18.48	
WP-CC-12	21.2	5	1209	DRY	20.08	
SG-12	NA	N/A	1256	0.7	NA	
REMEDIATION SYSTEM						
Sump A	~31.5	N/A	900	28.96	NA	
Sump B	~29.2	N/A	847	24.64	NA	
EW-B5	51.8	15.8	1259	48.53	54.89	

Note: MW-9 - No log available, assumed to have 10' screen.
SG-11 Canal gauge no longer in place. Feeder Canal depth to water and total depth to be measured from canal wall by trail near former location of SG-2.

PRE-TREATMENT PLANT										
MW-OB19	10.0	5.0	1141	8.82	9.25					
MW-OB23	6.5	4.0	1136	5.91	8.42					
Canal (~~SG-2~~)	NA	NA	1115	0.50	NA					
~~SG-11~~	NA	NA	1136	5.70	NA					

Note: MW-9 - No log available, assumed to have 10' screen.
SG-11 Canal gauge no longer in place. Feeder Canal depth to water and total depth to be measured from canal wall by trail near former location of SG-2.

* ↑ unsure

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	John S.	Well ID:	AW-A11		
Date:	10/26/22	Original Install Depth:	58.0	feet	
Weather:		Screen Length:	10	feet	
Time In:	0910 Time Out: 1025	Well Diameter:	2	inches	

		10/24	10/26
Depth to Water (from TOC):	(feet)	28.08	28.08
Depth to Water(From TOC) With Pump in place:	(feet)	28.08	
Total Depth (from TOC):	(feet)	56.27	
Length of Water Column :	(feet)	28.19	

WELL INFORMATION

Well Type:	Flushmount	☒	Stick-Up	☐
Well Locked:	Yes	☒	No	☐
Measuring Point Marked:	Yes	☒	No	☐
Well Condition:	Good	☒	Poor	☐
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	459 mL
Pumping Rate of Pump:	(mL/min)	150
Total Volume Removed:	(mL or gal)	1.5 gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	QED 14312	Pump Size:	1.75	Depth of Pump Intake:	51.27		
Evacuation Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	Horiba U-52	~~X1FUHW76~~					
Sampling Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	28.16						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	0924	0926	0928	0930	0932	0934	0939	0944	0949	0954				
Rate (ml/min)	150	150	150	150	150	150	150	150	150	150				
Depth to Water (ft. TOC)	28.08	28.08	28.08	28.08	28.10	28.10	28.12	28.14	28.15	28.16				
Temperature (°C)	16.46	16.31	16.33	16.43	16.51	16.68	16.99	17.06	17.13	17.37				
pH	7.25	7.54	7.70	7.84	7.89	8.02	8.22	8.31	8.37	8.41				
Conductivity (mS/cm)	0.605	0.647	0.666	0.690	0.697	0.726	0.762	0.782	0.793	0.796				
Dissolved Oxygen (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Turbidity (NTU)	11.3	11.3	6.8	6.8	6.7	6.1	5.4	5.4	5.5	5.3				
ORP (mV)	9	-28	-32	-28	-24	-6	24	35	38	29				

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & ~~Manganese~~ ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	AW-A11_2422/026
Start Time:	0958
End Time:	1015
MS/MSD: Yes ☐ No	~~☒~~
Duplicate: Yes ☐ No	☒
Total Bottles:	3
Sampled By:	JS

~~Duplicate ID:~~	
~~Sample Time:~~	
~~Total Bottles:~~	
~~Sampled By:~~	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Ezra Cowen
Date:	10/26/22
Weather:	60° + cloudy
Time In:	912
Time Out:	1030

Well ID:	AW-A14	
Original Install Depth:	34.5	feet
Screen Length:	10	feet
Well Diameter:	2	inches

		10/24	10/26/22
Depth to Water (from TOC):	(feet)	17.00	16.44
Depth to Water(From TOC) With Pump in place:	(feet)	16.49	
Total Depth (from TOC):	(feet)	32.80	
Length of Water Column :	(feet)	16.36	

WELL INFORMATION

Well Type:	Flushmount	☒	Stick-Up	☐
Well Locked:	Yes	☒	No	☐
Measuring Point Marked:	Yes	☒	No	☐
Well Condition:	Good	☒	Poor	☐
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	1.68
Pumping Rate of Pump:	(mL/min)	200
Total Volume Removed:	(mL or gal)	3.5 gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	14310		Pump Size:	1.75"	Depth of Pump Intake:	27.80	
Evacuation Method:	Bailer	☐	Peristaltic	☐	Bladder	☒	Other ☐
Tubing Used:	Teflon	☐	Polyethylene	☒	N/A	☐	
Water Quality Meter (type/Serial Number):	SM370022						
Sampling Method:	Bailer	☐	Peristaltic	☐	Bladder	☒	Other ☐
Did well go dry?	Yes	☐	No	☒			
Final Depth to Water (prior to turning off pump):	20.52						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	927	929	931	933	935	937	942	947	952	957	1002	1007		
Rate (ml/min)	200	200	200	200	200	200	200	200	200	200	200	200		
Depth to Water (ft. TOC)	18.41	18.98	19.36	19.51	19.75	19.86	20.15	20.32	20.45	20.53	20.52	20.52		
Temperature (°C)	15.25	14.60	14.03	13.65	13.60	13.47	13.33	13.28	13.43	13.55	13.74	13.76		
pH	7.89	8.06	8.16	8.19	8.21	8.22	8.23	8.26	8.28	8.28	8.29	8.28		
Conductivity (mS/cm)	.872	.862	.841	.813	.805	.810	.832	.853	.870	.894	.906	.914		
Dissolved Oxygen (mg/L)	5.23	4.78	4.11	3.52	3.23	3.05	2.52	1.75	1.22	1.06	0.76	.00		
Turbidity (NTU)	4.2	4.7	4.1	3.6	1.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0		
ORP (mV)	-23	-47	-65	-72	-71	-72	-86	-99	-107	-118	-128	-125		

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒ FF
- Diss. Hexavalent Chromium ☒ FF
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	AW-14 20221026
Start Time:	1006
End Time:	1020
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	EC

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Abby	Well ID:	MW-84		
Date:	10/25/22	Original Install Depth:	47.5	feet	
Weather:	50s cloudy	Screen Length:	10	feet	
Time In:	1400 Time Out: 1630	Well Diameter:	2	inches	

WELL INFORMATION

		10/24	10/25
Depth to Water (from TOC):	(feet)	29.85	29.90
Depth to Water(From TOC) With Pump in place:	(feet)	30.20	
Total Depth (from TOC):	(feet)	46.13	
Length of Water Column :	(feet)	16.53	

Well Type:	Flushmount ☒	Stick-Up ☐		
Well Locked:	Yes ☐	No ☒		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	2.70
Pumping Rate of Pump:	(mL/min)	100
Total Volume Removed:	(mL or gal)	0.5

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.66	4" diam. well

EVACUATION INFORMATION

Pump ID:	~~14311~~ 10454	Pump Size:	~~3/8"~~ 1/4" 1.75"	Depth of Pump Intake:	41.13
Evacuation Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐	
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐		
Water Quality Meter (type/Serial Number):	832HYFK3				
Sampling Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐	
Did well go dry?	Yes ☐	No ☒			
Final Depth to Water (prior to turning off pump):	30.27				
Barometric Pressure (At time of sampling) in mm/Hg:					

FIELD PARAMETER READINGS:

Time	1531	1533	1535	1537	1539	1541	1546	1551	1556					
Rate (ml/min)	100	100	100	100	100	100	100	100	100					
Depth to Water (ft. TOC)	30.20	30.30	30.29	30.25	30.25	30.25	30.30	30.28	30.29					
Temperature (°C)	23.26	23.05	22.92	23.01	23.00	22.98	22.77	22.76	22.72					
pH	7.57	7.57	7.56	7.54	7.53	7.54	7.51	7.50	7.49					
Conductivity (mS/cm)	1.07	1.07	1.09	1.09	1.08	1.09	1.10	1.10	1.10					
Dissolved Oxygen (mg/L)	2.93	2.40	2.43	2.27	2.03	2.00	2.28	2.15	2.06					
Turbidity (NTU)	4.0	4.0	4.4	4.0	3.3	3.5	3.4	3.2	3.3					
ORP (mV)	166	166	166	170	170	170	171	171	171					

SAMPLE INFORMATION

Sample List:

- Diss. Chromium ~~& Hexavalent Chromium~~ ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-84-20221025
Start Time:	1600
End Time:	1615
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	AW

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Bluish) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Jamy Hood		**Well ID:**	AW-818	
Date:	10/24/22		**Original Install Depth:**	50.5	feet
Weather:	Rainy 60s		**Screen Length:**	10	feet
Time In:	1500	**Time Out:**	1700 ~~1745~~	**Well Diameter:**	2 inches

		10/24
Depth to Water (from TOC):	(feet)	37.50
Depth to Water(From TOC) With Pump in place:	(feet)	38.22
Total Depth (from TOC):	(feet)	55.19
Length of Water Column :	(feet)	17.69

WELL INFORMATION

Well Type:	Flushmount ☒	Stick-Up ☐		
Well Locked:	Yes ☒	No ☐		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	2.89
Pumping Rate of Pump:	(mL/min)	150
Total Volume Removed:	(mL or gal)	2.5

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	14310	**Pump Size:**	~~1.75~~ 1"	**Depth of Pump Intake:**	50.19	
Evacuation Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐		
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐			
Water Quality Meter (type/Serial Number):	Horiba U-52 # SM3 20022					
Sampling Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐		
Did well go dry?	Yes ☐	No ☒				
Final Depth to Water (prior to turning off pump):	38.20					
Barometric Pressure (At time of sampling) in mm/Hg:						

FIELD PARAMETER READINGS:

Time	~~0814~~ 1544	1546	1548	1550	1552	1554	1559	1604	1609	1614	1619	1624	1629	1634
Rate (ml/min)	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Depth to Water (ft. TOC)	38.24	38.15	38.15	38.15	38.15	38.15	38.17	38.19	38.21	38.24	38.20	38.22	38.24	38.26
Temperature (°C)	13.66	13.45	13.17	13.15	12.86	12.67	12.46	12.33	12.17	12.15	12.08	11.94	11.96	11.99
pH	~~6.80~~ 6.44	7.08	7.11	7.18	7.19	7.18	7.22	~~7.23~~ 7.03	7.25	7.26	7.25	7.27	7.26	7.29
Conductivity (mS/cm)	1.03	1.07	1.07	1.07	1.07	1.07	1.06	1.07	1.09	1.10	1.10	1.12	1.12	1.13
Dissolved Oxygen (mg/L)	6.76	5.78	5.59	5.20	5.16	4.92	4.27	~~5.78~~ 3.70	3.07	2.61	2.12	1.80	1.35	1.03
Turbidity (NTU)	45.6	39.9	34.4	27.8	26.6	25.3	12.5	~~39.6~~ 4.8	1.9	0	0	0	0	0
ORP (mV)	57	40	32	21	17	14	3	-4	-13	-18	-22	-26	-29	-32

SAMPLE INFORMATION

Sample List:	
Diss. Chromium (Filtered)	☒
Diss. Hexavalent Chromium	☒
Total Cyanide	☐
Free Cyanide	☐
Total Dissolved Solids	☐
Hardness	☐
VOCs (Dichlorobenzenes)	☒

Sample ID:	AW-818_20221024
Start Time:	1702
End Time:	1727
MS/MSD:	Yes ☒ No ☐
Duplicate:	Yes ☒ No ☐
Total Bottles:	6
Sampled By:	LH

Duplicate ID:	DUP_20221024
Sample Time:	—
Total Bottles:	6
Sampled By:	LH
MS/MSD ID:	AW-818_20221024MS
Sample Time:	1702
Total Bottles:	6
Sampled By:	LH

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: Positive (Black) / ~~Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Larry Hood		Well ID:	AW-B18	
Date:	10/24/22		Original Install Depth:	50.5	feet
Weather:	Rainy 60's		Screen Length:	10	feet
Time In:	1550	Time Out: 1702 1745	Well Diameter:	2	inches

		10/24
Depth to Water (from TOC):	(feet)	37.50
Depth to Water(From TOC) With Pump in place:	(feet)	38.22
Total Depth (from TOC):	(feet)	55.19
Length of Water Column :	(feet)	17.69

WELL INFORMATION

Well Type:	Flushmount	☒	Stick-Up	☐
Well Locked:	Yes	☒	No	☐
Measuring Point Marked:	Yes	☒	No	☐
Well Condition:	Good	☒	Poor	☐
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	2.84
Pumping Rate of Pump:	(mL/min)	150
Total Volume Removed:	(mL or gal)	2.50

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	14310		Pump Size:	1.75	Depth of Pump Intake:	50.19	
Evacuation Method:	Bailer	☐	Peristaltic	☐	Bladder	☒	Other ☐
Tubing Used:	Teflon	☐	Polyethylene	☒	N/A	☐	
Water Quality Meter (type/Serial Number):	Horiba U-52 SM370 V22						
Sampling Method:	Bailer	☐	Peristaltic	☐	Bladder	☒	Other ☐
Did well go dry?	Yes	☐	No	☒			
Final Depth to Water (prior to turning off pump):	38.20						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1639	1644	1649	1654										
Rate (ml/min)	150	150	150	150										
Depth to Water (ft. TOC)	38.26	38.27	38.25	38.25										
Temperature (°C)	11.88	11.86	11.86	11.78										
pH	7.29	7.29	7.30	7.30										
Conductivity (mS/cm)	1.13	1.14	1.14	1.14										
Dissolved Oxygen (mg/L)	0.74	0.52[48]	0.25	0										
Turbidity (NTU)	0	0	0	0										
ORP (mV)	-34	-36	-38	-40										

SAMPLE INFORMATION

Sample List:

- Diss. Chromium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☒

Sample ID:	AW-B18_20221024	Duplicate ID:	DUP_20221024
Start Time:	1707	Sample Time:	—
End Time:	1729	Total Bottles:	6
MS/MSD:	Yes ☒ No ☐	Sampled By:	LH
Duplicate:	Yes ☒ No ☐	MS/MSD ID:	AW-B18_20221024
Total Bottles:	6	Sample Time:	1702
Sampled By:	LH	Total Bottles:	6
		Sampled By:	LH

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: Positive (Black) / Negative (No change) — NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Larry H	Well ID:	AW-C2		
Date:	10-25-2022	Original Install Depth:	169.6	feet	
Weather:	60's / Cloudy	Screen Length:	10	feet	
Time In:	1459 Time Out: 1653	Well Diameter:	2	inches	

WELL INFORMATION

	10/24	10/25
Depth to Water (from TOC): (feet)	51.50	51.84
Depth to Water(From TOC) With Pump in place: (feet)	~~51.93~~	51.93
Total Depth (from TOC): (feet)	175.82	
Length of Water Column : (feet)	123.89	

Well Type:	Flushmount	X	Stick-Up			
Well Locked:	Yes	X	No			
Measuring Point Marked:	Yes	X	No			
Well Condition:	Good	X	Poor			
Well Condition Comments:						

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	20.194 gal
Pumping Rate of Pump:	(mL/min)	150 mL
Total Volume Removed:	(mL or gal)	7,500 mL

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID: 1431 Pump Size: 1.75" Depth of Pump Intake: 170.82

Evacuation Method:	Bailer		Peristaltic		Bladder	X	Other
Tubing Used:	Teflon		Polyethylene	X	N/A		

Water Quality Meter (type/Serial Number): SM370V

Sampling Method:	Bailer		Peristaltic		Bladder	X	Other
Did well go dry?	Yes		No	X			

Final Depth to Water (prior to turning off pump): 51.81

Barometric Pressure (At time of sampling) in mm/Hg:

FIELD PARAMETER READINGS:

Time	1514	1516	1518	1520	1522	1527	1532	1537	1542	1547	1552	1602 1557	1607 1602	1612 1607
Rate (mL/min)	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Depth to Water (ft. TOC)	51.90	51.90	51.86	51.86	51.86	51.90	51.85	51.90	51.85	51.87	51.85	51.87	51.82	51.81
Temperature (°C)	19.66	19.46	19.50	19.45	18.67	17.94	17.68	17.68	17.21	17.11	16.93	18.56	18.31	18.26
pH	7.86	7.75	7.61	7.49	7.46	7.42	7.39	7.38	7.37	7.37	7.30	7.31	7.33	7.33
Conductivity (mS/cm)	0.716	0.671	0.661	0.708	0.732	0.682	0.585	0.569	0.628	0.673	0.726	0.814	0.825	0.835
Dissolved Oxygen (mg/L)	6.64	6.52	6.24	6.18	6.32	6.26	5.95	5.65	5.44	5.25	4.98	0	0	0
Turbidity (NTU)	6.1	5.8	5.8	6.5	7.4	7.7	9.0	9.4	9.7	10.3	10.5	4.0	3.7	3.7
ORP (mV)	230	175	100	49	32	12	12	3	-9	-13	-18	-24	-27	-28

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & ~~Vanadium~~: X
- Diss. Hexavalent Chromium: X
- Total Cyanide: X
- Free Cyanide: ☐
- Total Dissolved Solids: ☐
- Hardness: ☐
- VOCs (Dichlorobenzenes): ☐

Sample ID:	AW-C2-20221025
Start Time:	1627
End Time:	1634
MS/MSD:	Yes X / No X
Duplicate:	Yes ~~X~~ / No X
Total Bottles:	3
Sampled By:	LH

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Horiba cleaned at 1555 due to increasing turbidity levels

~~MS/MSD~~ LH

Free Cyanide Sulfide Test Strip: Positive (Black) / Negative (No change)

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Larry Hood		Well ID:	AW-C11	
Date:	10/24/22		Original Install Depth:	158.0	feet
Weather:	60's Sunny		Screen Length:	10	feet
Time In:	1025	Time Out: 1305	Well Diameter:	2	inches

		10/24	10/25
Depth to Water (from TOC):	(feet)	43.30	43.30
Depth to Water(From TOC) With Pump in place:	(feet)	~~153.90~~	43.30
Total Depth (from TOC):	(feet)	158.40	
Length of Water Column :	(feet)	115.6	

WELL INFORMATION

Well Type:	Flushmount	X	Stick-Up	☐
Well Locked:	Yes	X	No	☐
Measuring Point Marked:	Yes	X	No	☐
Well Condition:	Good	X	Poor	☐
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	~~14,250 mL~~ 18,843 gal
Pumping Rate of Pump:	(mL/min)	150 mL
Total Volume Removed:	(mL or gal)	14,250 mL

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	1431		Pump Size:	1.75"	Depth of Pump Intake:	153.90	
Evacuation Method:	Bailer	☐	Peristaltic	☐	Bladder	X	Other ☐
Tubing Used:	Teflon	☐	Polyethylene	X	N/A	☐	
Water Quality Meter (type/Serial Number):	SM 3700 72						
Sampling Method:	Bailer	☐	Peristaltic	☐	Bladder	X	Other ☐
Did well go dry?	Yes	☐	No	X			
Final Depth to Water (prior to turning off pump):	43.28						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1042	1046	1048	1050	1052	1057	1102	1107	1113	1117	1122	1127	1132	1137
Rate (ml/min)	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Depth to Water (ft. TOC)	43.30	43.30	43.30	43.29	43.30	43.20	43.30	43.30	43.33	43.28	43.30	43.32	43.28	43.26
Temperature (°C)	13.92	13.61	13.52	13.44	13.36	13.47	13.46	13.69	13.97	14.02	13.97	14.00	13.92	13.73
pH	7.73	8.02	7.94	7.43	7.27	7.29	7.29	7.31	7.31	7.31	7.31	7.32	7.31	7.31
Conductivity (mS/cm)	1.35	1.32	1.21	1.06	1.08	1.15	1.19	1.20	1.26	1.46	1.46	1.46	1.46	1.47
Dissolved Oxygen (mg/L)	10.27	9.99	8.77	7.31	7.29	6.47	5.87	5.21	6.32	6.14	5.75	5.45	4.95	6.58
Turbidity (NTU)	2.6	2.8	5.2	7.8	12.3	16.8	17.2	16.7	15.6	16.6	15.7	15.0	14.8	10
ORP (mV)	296	284	181	92	23	-13	-17	-19	14	29	39	45	52	109

SAMPLE INFORMATION

Sample List:

- Diss. Chromium ~~& Hexavalent~~ium: X
- Diss. Hexavalent Chromium: X
- Total Cyanide: X
- Free Cyanide: ☐
- Total Dissolved Solids: ☐
- Hardness: ☐
- VOCs (Dichlorobenzenes): ☐

Sample ID:	AW-C11_20221025
Start Time:	1230
End Time:	1242
MS/MSD:	Yes X No ☐
Duplicate:	Yes ☐ No X
Total Bottles:	6
Sampled By:	LH

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	AW-C11_20221025
Sample Time:	1230
Total Bottles:	2
Sampled By:	LH

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Larry Hood		Well ID:	AW-C11	
Date:	10/25/2022		Original Install Depth:	150	feet
Weather:	60's Sunny		Screen Length:	10	feet
Time In:	1025	Time Out: 1305	Well Diameter:	2	inches

		10/24	10/25
Depth to Water (from TOC):	(feet)	43.30	43.30
Depth to Water(From TOC) With Pump in place:	(feet)	153.9	
Total Depth (from TOC):	(feet)	158.90	
Length of Water Column :	(feet)	115.60	

WELL INFORMATION

Well Type:	Flushmount	☒	Stick-Up	☐
Well Locked:	Yes	☒	No	☐
Measuring Point Marked:	Yes	☒	No	☐
Well Condition:	Good	☒	Poor	☐
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	~~14,250 mL~~ 18.843 gal
Pumping Rate of Pump:	(mL/min)	150 mL
Total Volume Removed:	(mL or gal)	14,250 mL

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	14311	Pump Size:	1.75"	Depth of Pump Intake:	153.96		
Evacuation Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	SM370022						
Sampling Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	43.28						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1142	1147	1152	1157	1202	1207*	1210	1215	1220					
Rate (ml/min)	150	150	150	156	150	-	150	150	150					
Depth to Water (ft. TOC)	43.30	43.30	43.33	43.31	43.27	-	43.27	43.29	43.30					
Temperature (°C)	13.92	13.67	13.55	13.60	13.38	-	15.70	15.88	15.33					
pH	7.34	7.32	7.33	7.33	7.30	-	7.34	7.35	7.35					
Conductivity (mS/cm)	1.48	1.47	1.47	1.47	1.47	-	1.60	1.49	1.48					
Dissolved Oxygen (mg/L)	6.08	5.32	5.01	4.62	4.04	-	5.01	5.03	5.38					
Turbidity (NTU)	9.1	9.6	8.6	9.0	8.7	-	7.8	7.1	7.81*					
ORP (mV)	87	80	79	80	81	-	99	102	109					

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	AW-C11_20221025
Start Time:	LH1025 1230
End Time:	1242
MS/MSD:	Yes ☒ No ☐
Duplicate:	Yes ☐ No ☒
Total Bottles:	6
Sampled By:	LH

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	AW-C11_20221025
Sample Time:	1230
Total Bottles:	2
Sampled By:	LH

Observations (water color, clarity, etc.):

Bladder Pump tank exchanged

*missed reading

Free Cyanide Sulfide Test Strip: ~~Positive (black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Erin Coyne	Well ID:	EW-B5
Date:	10/26/22	Original Install Depth:	51.8 feet
Weather:	65° + Sunny	Screen Length:	15.8 feet
Time In:	1315 Time Out: 1955	Well Diameter:	8" inches

		10/24	10/26
Depth to Water (from TOC):	(feet)	48.53	44.38
Depth to Water(From TOC) With Pump in place:	(feet)	—	
Total Depth (from TOC):	(feet)	—	
Length of Water Column :	(feet)	—	

WELL INFORMATION

Well Type:	Flushmount	☑	Stick-Up	☐
Well Locked:	Yes	☑	No	☐
Measuring Point Marked:	Yes	☑	No	☐
Well Condition:	Good	☑	Poor	☐
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	—
Pumping Rate of Pump:	(mL/min)	—
Total Volume Removed:	(mL or gal)	1 gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	—	Pump Size:	8"	Depth of Pump Intake:	N/A		
Evacuation Method:	Bailer	☑	Peristaltic	☐	Bladder	☐	Other ☐
Tubing Used:	Teflon	☐	Polyethylene	☐	N/A	☒	
Water Quality Meter (type/Serial Number):	SM3700 22						
Sampling Method:	Bailer	☑	Peristaltic	☐	Bladder	☐	Other ☐
Did well go dry?	Yes	☐	No	☒			
Final Depth to Water (prior to turning off pump):	44.30						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1327
Rate (ml/min)	NA
Depth to Water (ft. TOC)	44.38
Temperature (°C)	17.26
pH	7.69
Conductivity (mS/cm)	2.46
Dissolved Oxygen (mg/L)	5.35
Turbidity (NTU)	0.0
ORP (mV)	47

SAMPLE INFORMATION

Sample List:

- Diss. Chromium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	EW-B5_20221026
Start Time:	1329
End Time:	1346
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☒ No ☐
Total Bottles:	3
Sampled By:	EC

Duplicate ID:	DUP_20221026
Sample Time:	10/26/22
Total Bottles:	3
Sampled By:	EC
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Grab

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	~~John S.~~ Ezra Coyne	Well ID:	~~IW-4~~		
Date:	10/24/22	Original Install Depth:	8.5	feet	
Weather:	Rainy 60	Screen Length:	4	feet	
Time In:	1605 Time Out: 1700	Well Diameter:	2"	inches	

WELL INFORMATION

		10/24/				
Depth to Water (from TOC):	(feet)	4.19	Well Type:	Flushmount ☒	Stick-Up ☐	
Depth to Water(From TOC) With Pump in place:	(feet)	4.19	Well Locked:	Yes ☒	No ☐	
Total Depth (from TOC):	(feet)	12.83	Measuring Point Marked:	Yes ☒	No ☐	
Length of Water Column :	(feet)	8.64	Well Condition:	Good ☒	Poor ☐	
			Well Condition Comments:			

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	1.408 gal	
Pumping Rate of Pump:	(mL/min)	100	
Total Volume Removed:	(mL or gal)	1gallon	

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	4052	Pump Size:	1/4" x 3/8"	Depth of Pump Intake:	10.83
Evacuation Method:	Bailer ☐	Peristaltic ☑	Bladder ☐	Other ☐	
Tubing Used:	Teflon ☐	Polyethylene ☑	N/A ☐		
Water Quality Meter (type/Serial Number):	~~Aquaread~~	AP1000			
Sampling Method:	Bailer ☐	Peristaltic ☑	Bladder ☐	Other ☐	
Did well go dry?	Yes ☐	No ☒			
Final Depth to Water (prior to turning off pump):	4.22				
Barometric Pressure (At time of sampling) in mm/Hg:					

FIELD PARAMETER READINGS:

Time	1612	1614	1616	1618	1620	1622	1627	1632	1637	~~1642~~	~~1647~~			
Rate (ml/min)	100	100	100	100	100	100	100	100	100					
Depth to Water (ft. TOC)	4.19	4.19	4.19	4.20	4.21	4.21	4.21	4.23	4.22					
Temperature (°C)	17.68	15.64	15.70	15.68	15.60	15.56	15.55	15.56	15.53					
pH	6.33	7.71	7.73	7.73	7.72	7.78	7.71	7.73	7.75					
Conductivity (mS/cm)	.692	.707	.708	.709	.710	.711	.712	.713	.713					
Dissolved Oxygen (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Turbidity (NTU)	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
ORP (mV)	-144	-164	-167	-167	-168	-166	-171	-176	-179					

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	IW-4_20221024
Start Time:	1640
End Time:	1700
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	Ezra Coyne

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	J. Stanzel		Well ID:	MW-255	
Date:	10/26/22		Original Install Depth:	39.40	feet
Weather:	60s Cloudy		Screen Length:	10	feet
Time In:	1135	Time Out: 1250	Well Diameter:	4	inches

		10/24	10/26
Depth to Water (from TOC):	(feet)	26.51	26.21
Depth to Water(From TOC) With Pump in place:	(feet)	26.20	
Total Depth (from TOC):	(feet)	42.10	
Length of Water Column :	(feet)	15.89	

WELL INFORMATION

Well Type:	Flushmount ☒	Stick-Up ☐		
Well Locked:	Yes ☒	No ☐		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	2.59
Pumping Rate of Pump:	(mL/min)	150
Total Volume Removed:	(mL or gal)	1.75 gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	QED 14312	Pump Size:	1.75	Depth of Pump Intake:	37.10		
Evacuation Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	Horiba U-52 X1FUHV76						
Sampling Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	27.02						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1150	1152	1154	1156	1158	1200	1205	1210	1215	1220	1225			
Rate (ml/min)	150	150	150	150	150	150	150	150	150	150	150			
Depth to Water (ft. TOC)	26.58	26.64	26.67	26.70	26.74	26.78	26.85	26.92	26.99	27.04	27.04			
Temperature (°C)	22.43	21.90	21.63	21.35	20.80	20.57	20.28	20.29	20.41	20.52	20.81			
pH	8.81	8.76	8.74	8.72	8.70	8.73	8.72	8.76	8.80	8.81	8.83			
Conductivity (mS/cm)	0.498	0.501	0.501	0.501	0.500	0.502	0.504	0.513	0.508	0.507	0.506			
Dissolved Oxygen (mg/L)	0.08	0.00	0.00	0.00	1.55	0.69	0.46	0.22	0.00	0.00	0.00			
Turbidity (NTU)	10.2	9.1	8.7	12.1	12.0	11.8	6.8	6.1	6.6	7.0	6.6			
ORP (mV)	-87	-106	-116	-125	-127	-135	-143	-150	-156	-160	-164			

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-255
Start Time:	1228
End Time:	1246
MS/MSD: Yes ☐ No ☒	
Duplicate: Yes ☐ No ☒	
Total Bottles:	3
Sampled By:	JS

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ N/A

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Abby	Well ID:	MW-28		
Date:	10/25/22	Original Install Depth:	~12	feet	
Weather:	50s cloudy	Screen Length:	5	feet	
Time In:	1140 Time Out: 1240	Well Diameter:	2	inches	

		10/24	10/25
Depth to Water (from TOC):	(feet)	1.66	1.67
Depth to Water(From TOC) With Pump in place:	(feet)	1.67	
Total Depth (from TOC):	(feet)	11.74	
Length of Water Column :	(feet)	10.08	

WELL INFORMATION

Well Type:	Flushmount ☒	Stick-Up ☐		
Well Locked:	Yes ☒	No ☐		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	1.64 gal
Pumping Rate of Pump:	(mL/min)	130
Total Volume Removed:	(mL or gal)	1.5

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	H1600465	Pump Size:	1/4 3/8	Depth of Pump Intake:	9.24	
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐			
Water Quality Meter (type/Serial Number):	832HFK3	Horiba U-52				
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Did well go dry?	Yes ☐	No ☒				
Final Depth to Water (prior to turning off pump):	10.02					
Barometric Pressure (At time of sampling) in mm/Hg:						

FIELD PARAMETER READINGS:

Time	1148	1150	1152	1154	1156	1158	1203	1208	1213	1218	1223	1228	
Rate (ml/min)	150	150	150	150	150	150	150	150	150	115	115	115	
Depth to Water (ft. TOC)	2.40	2.94	3.35	3.85	4.12	4.55	5.58	6.67	7.51	8.80	9.46	9.96	
Temperature (°C)	21.10	19.46	19.15	18.96	18.91	18.89	18.85	18.72	18.69	18.70	18.85	18.83	
pH	7.70	7.16	7.10	7.05	7.03	7.01	7.01	7.01	7.00	6.99	6.99	6.99	
Conductivity (mS/cm)	0.312	0.312	0.309	0.301	0.298	0.295	0.294	0.294	0.292	0.292	0.290	0.290	
Dissolved Oxygen (mg/L)	2.60	1.60	0.96	0.33	0.21	0.03	0.00	0.00	0.00	0.00	0.00	0.00	
Turbidity (NTU)	17.5	19.1	21.5	20.7	18.7	13.0	13.5	13.1	11.9	4.9	3.6	4.2	
ORP (mV)	157	156	156	155	165	152	146	143	140	135	129	127	

SAMPLE INFORMATION

Sample List:
- Diss. Chromium & [redacted] ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☐
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-28
Start Time:	1230
End Time:	1245
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	AW

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ N/A

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Ella Coyne	Well ID:	MW-31		
Date:	10/26/22	Original Install Depth:	15.50	feet	
Weather:	65 + sunny	Screen Length:	5	feet	
Time In:	1144 Time Out:	Well Diameter:	2	inches	

		10/24	10/26
Depth to Water (from TOC):	(feet)	8.98	8.90
Depth to Water(From TOC) With Pump in place:	(feet)	8.95	
Total Depth (from TOC):	(feet)	17.13	
Length of Water Column :	(feet)	8.23	

WELL INFORMATION

Well Type:	Flushmount ☐	Stick-Up ☒		
Well Locked:	Yes ☒	No ☐		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	1.34
Pumping Rate of Pump:	(mL/min)	200
Total Volume Removed:	(mL or gal)	1.25 gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	14310	Pump Size:	1/4 x 3/8	Depth of Pump Intake:	14.65		
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	SM3701122	Horiba U-52					
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	9.00						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1151	1153	1155	1157	1159	1201	1206	1211	~~1216~~	1221				
Rate (ml/min)	200	200	200	200	200	200	200	200	200	~~200~~				
Depth to Water (ft. TOC)	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00						
Temperature (°C)	16.52	15.40	15.21	15.04	14.97	15.20	15.30	15.33						
pH	6.84	6.79	6.75	6.76	6.73	6.71	6.71	6.71						
Conductivity (mS/cm)	1.14	1.13	1.11	1.10	1.10	1.10	1.11	1.11						
Dissolved Oxygen (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Turbidity (NTU)	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
ORP (mV)	-151	-265	-279	-279	-280	-281	-283	-280						

SAMPLE INFORMATION

Sample List:
- Diss. Chromium ~~Speciation~~ ☐ FF
- Diss. Hexavalent Chromium ☒ FF
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-31-20221026
Start Time:	1214
End Time:	1219
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	EC

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

* DTW didn't change, likely b/c right next to the river so quick recharge

Free Cyanide Sulfide Test Strip: ~~Positive (black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	John S.	Well ID:	MW-08I4		
Date:	10/24/22	Original Install Depth:	18.0	feet	
Weather:	60s Rain	Screen Length:	10	feet	
Time In:	1525 Time Out: 1725	Well Diameter:	1	inches	

		10/24
Depth to Water (from TOC):	(feet)	11.06
Depth to Water(From TOC) With Pump in place:	(feet)	11.06
Total Depth (from TOC):	(feet)	19.46
Length of Water Column :	(feet)	8.46

WELL INFORMATION

Well Type:	Flushmount	☒	Stick-Up	☐
Well Locked:	Yes	☒	No	☐
Measuring Point Marked:	Yes	☒	No	☐
Well Condition:	Good	☒	Poor	☐
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	1.37
Pumping Rate of Pump:	(mL/min)	50
Total Volume Removed:	(mL or gal)	2 gallons

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION 1431

Pump ID:	QED 25027	Pump Size:	1.75"	Depth of Pump Intake:	15.26		
Evacuation Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	Horiba U-52	XC1A38V7					
Sampling Method:	Bailer ☐	Peristaltic ☐	Bladder ☒	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	12.24						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1542	1544	1546	1548	1550	1552	1554	1556/1602	1607	1612	1617	1622	1627	1632
Rate (ml/min)	100	100	50	50	50	50	50	50	50	50	50	50	50	50
Depth to Water (ft. TOC)	11.56	13.25	13.40	13.18	12.72	12.32	12.30	12.28	12.28	12.28	12.28	12.28	12.28	12.28
Temperature (°C)	14.43	14.44	14.51	14.91	14.91	14.98	15.14	15.26	15.30	15.31	15.31	15.30	15.30	15.26
pH	8.30	8.36	8.47	8.42	8.42	8.43	8.41	8.34	8.28	8.25	8.20	8.12	8.09	8.09
Conductivity (mS/cm)	1.12	1.11	1.10	1.09	1.09	1.08	1.07	1.07	1.06	1.06	1.06	1.08	1.09	1.11
Dissolved Oxygen (mg/L)	1.23	1.09	0.75	0.60	0.58	0.62	0.56	0.46	0.38	0.35	0.29	0.18	0.03	0.00
Turbidity (NTU)	33.3	32.8	32.3	27.6	26.2	23.3	25.0	19.0	11.2	2.5	0.2	0.0	0.0	0.0
ORP (mV)	-112	-110	-107	-102	-102	-102	-104	-102	-100	-107	-120	-130	-135	-137

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-08I4_20221024
Start Time:	1638
End Time:	1715
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	JS

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: Positive (Black) / ~~Negative (No change)~~ N/A

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Ezra	Well ID:	MW-0019		
Date:	10/24/2022	Original Install Depth:	16.60	feet	
Weather:	60's Raining	Screen Length:	N/A	feet	
Time In:	1425 Time Out: 1530	Well Diameter:	2"	inches	

		10/24
Depth to Water (from TOC):	(feet)	8.82
Depth to Water(From TOC) With Pump in place:	(feet)	8.12
Total Depth (from TOC):	(feet)	9.25
Length of Water Column :	(feet)	0.43

WELL INFORMATION

Well Type:	Flushmount ☐	Stick-Up ☒		
Well Locked:	Yes ☒	No ☐		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:	Good			

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	.07 gal
Pumping Rate of Pump:	(mL/min)	100
Total Volume Removed:	(mL or gal)	1.5 gallons

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	[redacted] 405	Pump Size:	1/4 x 5/8	Depth of Pump Intake:	9.04
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐	
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐		
Water Quality Meter (type/Serial Number):	[redacted] X1FUHW7G				
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐	
Did well go dry?	Yes ☐	No ☒			
Final Depth to Water (prior to turning off pump):	8.87				
Barometric Pressure (At time of sampling) in mm/Hg:					

FIELD PARAMETER READINGS:

	1433	1435	1437	1439	1441	1443	1448	1453	1458	1503	1508	1513	1518	
Time	1425	1435	1437	1439	1443	1443	1448	1453	1458	1503	1508	1513	1518	
Rate (ml/min)	100	100	100	100	100	100	100	100	100	100	100	100		
Depth to Water (ft. TOC)	8.82	8.12	8.20	8.24	8.30	8.35	8.52	8.63	8.75	8.78	8.81	8.85		
Temperature (°C)	17.58	17.60	17.27	17.30	17.34	17.35	17.30	17.21	16.92	16.99	17.01	17.00		
pH	4.04	6.60	6.65	6.73	6.78	6.84	6.83	6.83	6.81	6.80	6.79	6.80		
Conductivity (mS/cm)	0.001	.336	.334	.334	.335	.336	.338	.342	.350	.360	.357	.356		
Dissolved Oxygen (mg/L)	6.85	31.3	29.2	28.0	25.6	22.0	1.04	0.92	2.30	2.05	2.00	1.95		
Turbidity (NTU)	182	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
ORP (mV)	379	282	277	269	238	230	160	109	48	15	19	18		

First 6 readings were accidentally in DO% not mg/L

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☐
- Diss. Hexavalent Chromium ☐
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0019-102422
Start Time:	~~1435~~ 1515
End Time:	~~1505~~ 1530
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	1
Sampled By:	Ezra Coyne

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No Change)~~ N/A

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	ABG	Well ID:	MW-DB23		
Date:	10/24/22	Original Install Depth:	6.5	feet	
Weather:	Rainy 60	Screen Length:	NA	feet	
Time In:	1400 Time Out: 1530	Well Diameter:	2"	inches	

		10/24
Depth to Water (from TOC):	(feet)	5.91
Depth to Water(From TOC) With Pump in place:	(feet)	5.87
Total Depth (from TOC):	(feet)	8.42
Length of Water Column :	(feet)	2.51

WELL INFORMATION

Well Type:	Flushmount ☐		Stick-Up	☒
Well Locked:	Yes	☒	No	☐
Measuring Point Marked:	Yes	☒	No	☐
Well Condition:	Good	☒	Poor	☐
Well Condition Comments:	Good			

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	0.4 gal
Pumping Rate of Pump:	(mL/min)	150
Total Volume Removed:	(mL or gal)	191

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	H1600 4652	Pump Size:	1/4x3/8	Depth of Pump Intake:	7.17		
Evacuation Method:	Bailer ☐	Peristaltic	☒	Bladder	☐	Other	☐
Tubing Used:	Teflon ☐	Polyethylene	☒	N/A	☐		
Water Quality Meter (type/Serial Number):		F32HY FK3					
Sampling Method:	Bailer ☐	Peristaltic	☒	Bladder	☐	Other	☐
Did well go dry?	Yes ☐	No	☒				
Final Depth to Water (prior to turning off pump):		6.51					
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1428	1430	1432	1434	1436	1438	1443	1448	1453					
Rate (ml/min)	150	150	150	150	150	150	150	150	150					
Depth to Water (ft. TOC)	6.03	6.19	6.30	6.30	6.30	6.30	6.33	6.39	6.42					
Temperature (°C)	16.74	16.26	15.91	15.77	15.60	15.49	15.33	15.12	15.03					
pH	6.42	6.57	6.58	6.59	6.58	6.56	6.55	6.64	6.53					
Conductivity (mS/cm)	2.13	2.09	1.95	1.90	1.85	1.83	1.86	1.85	1.85					
Dissolved Oxygen (mg/L)	4.37	0.76	0.15	0.00	0.00	0.00	0.00	0.00	0.00					
Turbidity (NTU)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
ORP (mV)	316	319	309	286	264	253	268	274	273					

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☐
- Diss. Hexavalent Chromium ☐
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-DB23-20221024	Duplicate ID:	
Start Time:	~~1420~~ 1515	Sample Time:	
End Time:	ST: 1455	Total Bottles:	
MS/MSD: Yes ☐	No ☒	Sampled By:	
Duplicate: Yes ☐	No ☒	MS/MSD ID:	
Total Bottles:	1	Sample Time:	
Sampled By:	AW	Total Bottles:	
		Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Lily
Date:	10/25/22
Weather:	50c Rainy
Time In:	0910
Time Out:	1020

Well ID:	MW-08S		
Original Install Depth:	10	feet	
Screen Length:	5	feet	
Well Diameter:	2	inches	

		10/24/22	10/25/22
Depth to Water (from TOC):	(feet)	8.18	8.20
Depth to Water (From TOC) With Pump in place:	(feet)	8.24	
Total Depth (from TOC):	(feet)	10.94	8
Length of Water Column:	(feet)	2.74	

WELL INFORMATION

Well Type:	Flushmount	☒	Stick-up	☐
Well Locked:	Yes	☐	No	☒
Measuring Point Marked:	Yes	☒	No	☐
Well Condition:	Good	☒	Poor	☐

Well Condition Comments:

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	0.44 gal
Pumping Rate of Pump:	(ml/min)	160
Total Volume Removed:	(mL or gal)	1.15 gal

Volume Measurements:	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	H1600 4655	Pump Size:	1 1/4 x 3/4	Depth of Pump Intake:	9.57	
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐			
Water Quality Meter (Type/Serial Number):	832HYFK3					
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Did well go dry?	Yes ☒	No ☐				
Final Depth to Water (prior to turning off pump):	10.94					
Barometric Pressure (At time of sampling) in mm/hg:						

FIELD PARAMETER READINGS:

Time	0920	0922	0924	0926	0928	0930	0935	0940	0945	950				
Rate (ml/min)	150	160	150	150	150	160	160	150	150	156				
Depth to Water (ft. TOC)	8.78	8.88	8.95	9.19	9.38	9.60	9.90	10.20	10.79	10.94				
Temperature (°C)	17.02	16.55	16.43	16.30	16.20	16.17	16.27	16.34	16.29	16.02				
pH	6.63	7.32	7.36	7.39	7.39	7.39	7.39	7.40	7.40	7.40				
Conductivity (mS/cm)	0.973	0.965	0.958	0.951	0.945	0.942	0.934	0.932	0.933	0.941				
Dissolved Oxygen (mg/L)	5.52	4.86	4.69	4.42	4.29	4.14	5.53	4.20	4.40	3.84				
Turbidity (NTU)	0.4	0.9	3.3	1.5	0.5	0.5	0.2	0.0	0.6	10.0				
ORP (mV)	2783	276	279	285	289	289	290	293	295	303				

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-08S-20221025
Start Time:	0920
End Time:	
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	
Sampled By:	

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

DRY

Free Cyanide Sulfide Test Strip: NA

UNIT STABILITY

pH	DO	Turb.	Cond.	ORP
± 0.1	± 10%	± 10% <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Abby		Well ID:	MW-0825	
Date:	10/25/22		Original Install Depth:	10	feet
Weather:	50c Rainy		Screen Length:	5	feet
Time In:	0910	Time Out: 1020	Well Diameter:	2	inches

		10/24/22	10/25/22
Depth to Water (from TOC):	(feet)	8.18	8.20
Depth to Water(From TOC) With Pump in place:	(feet)	8.46	
Total Depth (from TOC):	(feet)	10.94	
Length of Water Column :	(feet)	2.74	

WELL INFORMATION

Well Type:	Flushmount ☒	Stick-Up ☐		
Well Locked:	Yes ☐	No ☒		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	0.44 gal
Pumping Rate of Pump:	(mL/min)	160
Total Volume Removed:	(mL or gal)	1.159 gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	H1600 4655	Pump Size:	1/4x3/8	Depth of Pump Intake:	9.57	
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐			
Water Quality Meter (type/Serial Number):	832HYFK3					
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Did well go dry?	Yes ☒	No ☐				
Final Depth to Water (prior to turning off pump):	10.94					
Barometric Pressure (At time of sampling) in mm/Hg:						

FIELD PARAMETER READINGS:

Time	0920	0922	0924	0926	0928	0930	0935	0940	0945	950				
Rate (ml/min)	150	150	150	150	150	160	160	150	150	156				
Depth to Water (ft. TOC)	8.78	8.88	8.95	9.19	9.38	9.60	9.90	10.20	10.79	10.94				
Temperature (°C)	17.02	16.55	16.43	16.30	16.26	16.17	16.27	16.34	16.29	16.02				
pH	6.63	7.32	7.36	7.39	7.39	7.39	7.39	7.40	7.40	7.40				
Conductivity (mS/cm)	0.973	0.965	0.958	0.951	0.945	0.942	0.929	0.932	0.933	0.941				
Dissolved Oxygen (mg/L)	5.52	4.86	4.69	4.42	4.29	4.14	5.53	4.20	4.40	3.84				
Turbidity (NTU)	0.4	0.9	3.3	1.5	0.5	0.5	0.2	0.0	0.6	10.0				
ORP (mV)	2783	276	279	285	289	289	290	293	295	303				

SAMPLE INFORMATION

Sample List:
- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0825-2022 1025
Start Time:	1025
End Time:	
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	
Sampled By:	

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

DRY

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No Change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Larry Hood Jr	Well ID:	MW-0825		
Date:	10/26/2022	Original Install Depth:	18	feet	
Weather:	70's / Sunny	Screen Length:	5	feet	
Time In:	1441 Time Out: 1514	Well Diameter:	2	inches	

		10/24	10/25
Depth to Water (from TOC):	(feet)	8.18	8.42
Depth to Water(From TOC) With Pump in place:	(feet)		8.47
Total Depth (from TOC):	(feet)		10.97
Length of Water Column :	(feet)		2.55

WELL INFORMATION

Well Type:	Flushmount	☒	Stick-Up	☐
Well Locked:	Yes	☒	No	☐
Measuring Point Marked:	Yes	☒	No	☐
Well Condition:	Good	☒	Poor	☐
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	0.34 gal
Pumping Rate of Pump:	(mL/min)	150 mL
Total Volume Removed:	(mL or gal)	300 ~~600~~ mL

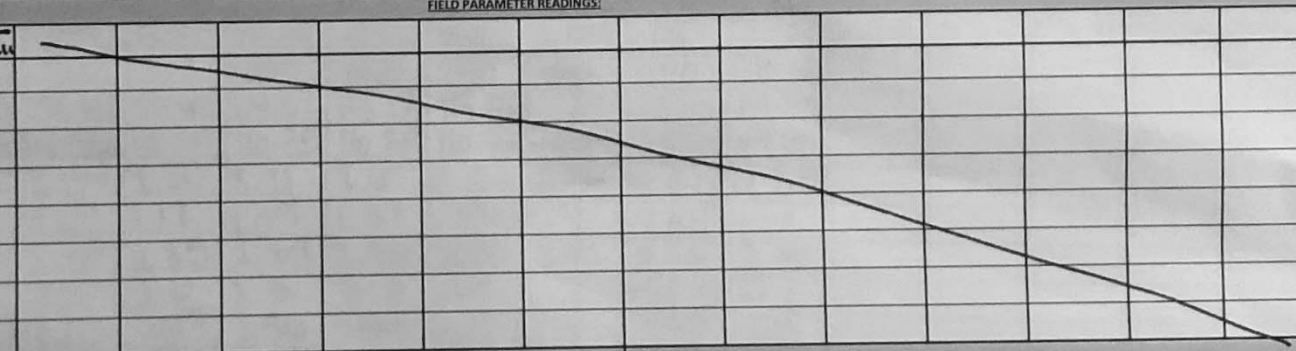
Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	AI6004655	Pump Size:	1/4x3/8	Depth of Pump Intake:	9.70		
Evacuation Method:	Bailer	☐	Peristaltic	☒	Bladder	☐	Other ☐
Tubing Used:	Teflon	☐	Polyethylene	☒	N/A	☐	
Water Quality Meter (type/Serial Number):	XC1A38V7						
Sampling Method:	Bailer	☐	Peristaltic	☒	Bladder	☐	Other ☐
Did well go dry?	Yes	☐	No	☒			
Final Depth to Water (prior to turning off pump):	~~10.44~~ 10.12						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

	1453
Time	~~1453~~
Rate (ml/min)	150
Depth to Water (ft. TOC)	8.42
Temperature (°C)	18.94
pH	7.61
Conductivity (mS/cm)	1.64
Dissolved Oxygen (mg/L)	5.28
Turbidity (NTU)	1.1
ORP (mV)	263



SAMPLE INFORMATION

Sample List:

- Diss. Chromium & ~~Vanadium~~ ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0825_20221026	Duplicate ID:	
Start Time:	~~1502~~ 1502	Sample Time:	
End Time:	~~1509~~ 1509	Total Bottles:	
MS/MSD:	Yes ☐ No ☒	Sampled By:	
Duplicate:	Yes ☐ No ☒	MS/MSD ID:	
Total Bottles:	3	Sample Time:	
Sampled By:	LH	Total Bottles:	
		Sampled By:	

Observations (water color, clarity, etc.):

Grab

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	AW	Well ID:	MW-0826		
Date:	10/25/22	Original Install Depth:	14.0	feet	
Weather:	50s Cloudy	Screen Length:	5	feet	
Time In:	1026 Time Out:	Well Diameter:	3	inches	

		10/24	10/25
Depth to Water (from TOC):	(feet)	12.35	12.34
Depth to Water (from TOC) With Pump in place:	(feet)	17.97	
Total Depth (from TOC):	(feet)	18.04	
Length of Water Column:	(feet)	5.7	

WELL INFORMATION

Well Type:	Flushmount ☒	Stick-Up ☐		
Well Locked:	Yes ☐	No ☒		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	0.93 gal
Pumping Rate of Pump:	(mL/min)	150
Total Volume Removed:	(mL or gal)	2 gallons

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	H1600 4655	Pump Size:	1/4 x 3/8	Depth of Pump Intake:	~~15.54~~ 15.19		
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (Type/Serial Number):	832HFK3						
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Did well go dry?	Yes ☒	No ☐					
Final Depth to Water (prior to turning off pump):	17.97						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1038	1040	1042	1044	1046	1048	1053	1058	1103					
Rate (ml/min)	150	150	150	150	150	150	150	150	150					
Depth to Water (ft. TOC)	13.59	13.66	14.45	14.82	15.18	15.56		16.13	~~17.91~~					
Temperature (°C)	17.98	16.56	16.40	16.35	16.39	16.35	~~17.65~~	17.85	17.97					
pH	9.03	8.94	8.80	8.71	8.67	8.64	~~9.04~~	9.04	9.35					
Conductivity (mS/cm)	1.12	1.13	1.12	1.09	1.07	1.06		1.04	1.12					
Dissolved Oxygen (mg/L)	2.34	1.80	1.85	2.39	2.50	3.03		3.19	2.28					
Turbidity (NTU)	2.7	38	2.6	3.3	3.4	2.7		4.0	4.0					
ORP (mV)	205	229	247	256	259	262		227	165					

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0826-2022 1025
Start Time:	
End Time:	
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	AW

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

missed bc/ tubing issues
DRY

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	J. Stengel	Well ID:	MW-08R
Date:	10/27/22	Original Install Depth:	~~14~~ 16 feet
Weather:	50s, sunny	Screen Length:	5 feet
Time In:	0915 Time Out: 1015	Well Diameter:	2 inches

		10/24	10/26	10/27
Depth to Water (from TOC):	(feet)	12.35	15.50	15.10
Depth to Water(From TOC) With Pump in place:	(feet)	16.45		
Total Depth (from TOC):	(feet)	18.04		
Length of Water Column :	(feet)	2.94		

WELL INFORMATION

Well Type:	Flushmount ☒	Stick-Up ☐		
Well Locked:	Yes ☒	No ☐		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:	Good			

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	0.48
Pumping Rate of Pump:	(mL/min)	150
Total Volume Removed:	(mL or gal)	1 gal

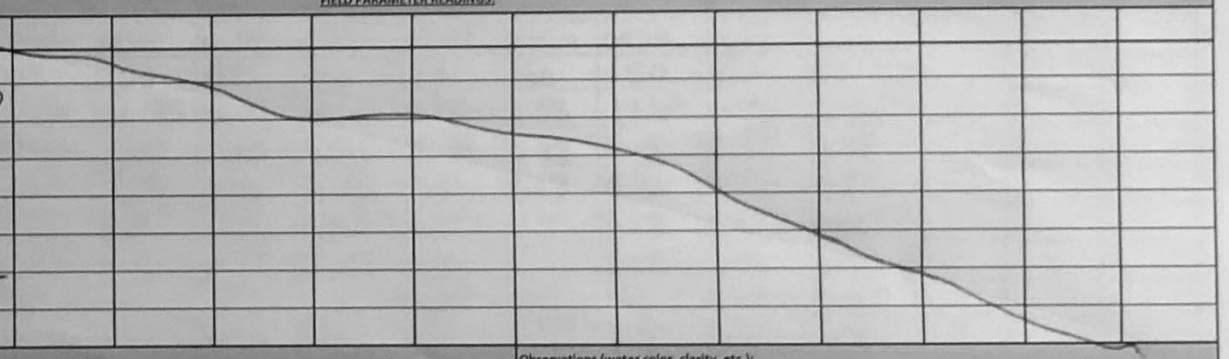
Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	Geopump 4052	Pump Size:	1/4, 3/8	Depth of Pump Intake:	~~16.77~~ 16.57
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐	
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐		
Water Quality Meter (type/Serial Number):	Horiba U-52	852HYFK3			
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐	
Did well go dry?	Yes ☒	No ☐			
Final Depth to Water (prior to turning off pump):	18.00				
Barometric Pressure (At time of sampling) in mm/Hg:					

FIELD PARAMETER READINGS:

Time	0930	~~0940~~
Rate (ml/min)	150	150
Depth to Water (ft. TOC)	16.10	16.50
Temperature (°C)	15.55	15.23
pH	9.06	9.98
Conductivity (mS/cm)	2.13	2.00
Dissolved Oxygen (mg/L)	2.53	1.01
Turbidity (NTU)	44.4	85.5
ORP (mV)	135	157



SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-08R-20221027
Start Time:	1000
End Time:	1010
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	JS

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Grab

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Carry Hood	Well ID:	MW-0830		
Date:	10/26/2022	Original Install Depth:	18.75	feet	
Weather:	60's / Cloudy	Screen Length:	12	feet	
Time In:	0907 Time Out:	Well Diameter:	2	inches	

		10/24	10/26
Depth to Water (from TOC):	(feet)	9.35	9.46
Depth to Water(From TOC) With Pump in place:	(feet)	9.44	
Total Depth (from TOC):	(feet)	18.50	
Length of Water Column :	(feet)	9.04	

WELL INFORMATION

Well Type:	Flushmount ☐		Stick-Up ☒	
Well Locked:	Yes ☒		No ☐	
Measuring Point Marked:	Yes ☒		No ☐	
Well Condition:	Good ☒		Poor ☐	
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	~~1.39 gal~~ 1.45 gal	
Pumping Rate of Pump:	(mL/min)	150 mL	
Total Volume Removed:	(mL or gal)	6000 mL	
Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	H160041655	Pump Size:	~~Series 5~~ 1/4" x 3/8" ~~0.350 HP~~	Depth of Pump Intake:	18.98	
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐			
Water Quality Meter (type/Serial Number):	XC1A38V7					
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Did well go dry?	Yes ☒	No ☐				
Final Depth to Water (prior to turning off pump):	8.22					
Barometric Pressure (At time of sampling) in mm/Hg:						

FIELD PARAMETER READINGS:

Time	0931	0933	0935	0937	0939	0944	0949	0954	0959	1004	1009			
Rate (ml/min)	150	150	150	150	150	150	150	150	150	150	150			
Depth to Water (ft. TOC)	11.25	11.73	12.24	12.75	13.30	14.65	15.30	16.58	17.69	17.50	18.20			
Temperature (°C)	17.58	17.29	17.21	17.14	17.08	17.06	16.97	16.43	16.21	16.72	16.85			
pH	9.50	9.60	9.63	9.65	9.66	9.72	9.74	9.73	9.72	9.75	9.82			
Conductivity (mS/cm)	1.54	1.53	1.51	1.50	1.49	1.48	1.49	1.48	1.47	1.45	1.46			
Dissolved Oxygen (mg/L)	3.55	3.31	3.25	3.26	3.19	3.03	2.98	3.05	2.12	1.99	2.08			
Turbidity (NTU)	0	0	0	0	0	0	~~7.3~~	6.9	7.9	~~7.8~~	8.0			
ORP (mV)	204	209	215	220	223	227	233	239	243	239	234			

SAMPLE INFORMATION

Sample List:

- Diss. Chromium ~~Hexavalent~~ ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:
Start Time:
End Time:
MS/MSD: Yes ☐ No ☒
Duplicate: Yes ☐ No ☒
Total Bottles:
Sampled By:

Duplicate ID:
Sample Time:
Total Bottles:
Sampled By:

MS/MSD ID:
Sample Time:
Total Bottles:
Sampled By:

Observations (water color, clarity, etc.):

Mounting depth Purged dry, inserted at a deeper depth and turbidity went up

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Larry Hood		Well ID:	MW-0B3D	
Date:	10/27/2022		Original Install Depth:	18.25	feet
Weather:	60s / Sunny		Screen Length:	12	feet
Time In:	0943	Time Out: 1010	Well Diameter:	2	inches

		10/24	10/27
Depth to Water (from TOC):	(feet)	9.35	10.19
Depth to Water(From TOC) With Pump in place:	(feet)	14.22	
Total Depth (from TOC):	(feet)	15.50	
Length of Water Column :	(feet)	6.15	5.31

WELL INFORMATION

Well Type:	Flushmount ☐		Stick-Up ☒	
Well Locked:	Yes ☒		No ☐	
Measuring Point Marked:	Yes ☒		No ☐	
Well Condition:	Good ☒		Poor ☐	
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	1.602 gal
Pumping Rate of Pump:	(mL/min)	150
Total Volume Removed:	(mL or gal)	300

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	~~HT0004652~~ 4068		Pump Size:	1/4 x 3/8	Depth of Pump Intake:	12.85	
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	SM370U22						
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	14.93						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	0959													
Rate (ml/min)	150													
Depth to Water (ft. TOC)	14.21													
Temperature (°C)	17.59													
pH	10.07													
Conductivity (mS/cm)	~~0~~1.38													
Dissolved Oxygen (mg/L)	2.58													
Turbidity (NTU)	10.0													
ORP (mV)	7													

SAMPLE INFORMATION

Sample List:

- Diss. Chromium ~~& Vanadium~~ ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0B3D_20221027
Start Time:	1003
End Time:	1008
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	LH

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Grab

Free Cyanide Sulfide Test Strip: ~~Positive (Purple) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	AW	Well ID:	MW-0831		
Date:	10/26/22	Original Install Depth:	13.67	feet	
Weather:	50s Sunny	Screen Length:	8	feet	
Time In:	0900 Time Out: 1015	Well Diameter:	2	inches	

		10/24	10/26
Depth to Water (from TOC):	(feet)	8.70	8.70
Depth to Water(From TOC) With Pump in place:	(feet)	8.65	
Total Depth (from TOC):	(feet)	13.84	
Length of Water Column :	(feet)	5.17	

WELL INFORMATION

Well Type:	Flushmount ☐		Stick-Up ☒		
Well Locked:	Yes ☒		No ☐		
Measuring Point Marked:	Yes ☒		No ☐		
Well Condition:	Good ☒		Poor ☐		
Well Condition Comments:					

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	0.84 gal
Pumping Rate of Pump:	(mL/min)	150
Total Volume Removed:	(mL or gal)	1 gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	H160004652	Pump Size:	1/4 x 3/8	Depth of Pump Intake:	11.29		
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	832HYFK3	Horiba U-52					
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	9.43						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	0923	0925	0927	0929	0931	0933	0938	0943	0948					
Rate (ml/min)	150	150	150	150	150	150	150	150	150					
Depth to Water (ft. TOC)	9.02	9.02	9.07	9.11	9.15	9.18	9.25	9.29	9.30					
Temperature (°C)	16.60	16.35	16.27	16.15	16.12	16.15	16.04	16.10	16.05					
pH	9.86	9.85	9.84	9.80	9.75	9.74	9.79	9.85	9.91					
Conductivity (mS/cm)	1.14	1.09	1.08	1.07	1.06	1.04	1.03	1.04	1.08					
Dissolved Oxygen (mg/L)	1.74	0.40	0.23	0.00	0.00	0.00	0.00	0.00	0.06					
Turbidity (NTU)	1.2	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0					
ORP (mV)	-249	-253	-253	-254	-256	-256	-263	-265	-267					

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & ~~Vanadium~~ ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0831-20221026
Start Time:	0950
End Time:	1000
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	AW

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: Positive (Black) / Negative (No change) NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	AW		Well ID:	MW-0B32	
Date:	10/26/22		Original Install Depth:	13.05	feet
Weather:	60's Sunny		Screen Length:	5	feet
Time In:	1030	Time Out: 1210	Well Diameter:	2	inches

		10/24	10/26
Depth to Water (from TOC):	(feet)	8.38	8.36
Depth to Water(From TOC) With Pump in place:	(feet)	8.36	
Total Depth (from TOC):	(feet)	13.10	
Length of Water Column :	(feet)	4.74	

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	0.77 gal
Pumping Rate of Pump:	(mL/min)	150
Total Volume Removed:	(mL or gal)	2 gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

WELL INFORMATION

Well Type:	Flushmount ☐		Stick-Up ☒	
Well Locked:	Yes ☒		No ☐	
Measuring Point Marked:	Yes ☒		No ☐	
Well Condition:	Good ☒		Poor ☐	
Well Condition Comments:				

EVACUATION INFORMATION

Pump ID:	H1260046 52	Pump Size:	1/4 x 3/8	Depth of Pump Intake:	10.60	
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐			
Water Quality Meter (type/Serial Number):	832 H4FL3					
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Did well go dry?	Yes ☐	No ☒				
Final Depth to Water (prior to turning off pump):	10.10					
Barometric Pressure (At time of sampling) in mm/Hg:						

FIELD PARAMETER READINGS:

Time	1100	1102	1104	1106	1108	1110	1115	1120	1125	1130	1135	1140	1145
Rate (ml/min)	150	150	150	150	150	150	150	150	150	150	150	150	150
Depth to Water (ft. TOC)	8.71	8.81	8.89	8.99	9.02	9.08	9.22	9.38	9.51	9.58	9.68	9.77	9.84
Temperature (°C)	20.40	19.17	18.66	18.48	18.37	18.33	18.40	18.41	18.78	18.75	19.04	19.32	19.67
pH	9.05	9.04	9.02	9.00	8.97	8.95	8.84	8.69	8.77	8.64	8.86	8.77	8.83
Conductivity (mS/cm)	1.16	1.14	1.13	1.12	1.11	1.11	1.10	1.10	1.10	1.10	1.10	1.09	1.09
Dissolved Oxygen (mg/L)	6.02	1.47	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0
Turbidity (NTU)	1.4	1.5	2.4	2.3	2.2	2.2	2.0	2.0	2.0	1.5	0.4	0.0	0.0
ORP (mV)	-92	-65	-8	32	56	70	102	122	135	118	125	131	122

SAMPLE INFORMATION

Sample List:

- Diss. Chromium ~~+ Extraction~~ ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0B32-20221026
Start Time:	1150
End Time:	1155
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	AW

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	AW
Date:	10/26/22
Weather:	60's Sunny
Time In:	1030
Time Out:	1210

Well ID:	MW-0B32		
Original Install Depth:	13.05	feet	
Screen Length:	5	feet	
Well Diameter:	2	inches	

		10/24	10/26
Depth to Water (from TOC):	(feet)	8.38	8.36
Depth to Water(From TOC) With Pump in place:	(feet)		8.36
Total Depth (from TOC):	(feet)		13.10
Length of Water Column :	(feet)		4.74

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	0.77 gal
Pumping Rate of Pump:	(mL/min)	150
Total Volume Removed:	(mL or gal)	2 gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

WELL INFORMATION

Well Type:	Flushmount ☐		Stick-Up ☒	
Well Locked:	Yes ☒		No ☐	
Measuring Point Marked:	Yes ☒		No ☐	
Well Condition:	Good ☒		Poor ☐	
Well Condition Comments:				

EVACUATION INFORMATION

Pump ID:	H1260041652	Pump Size:	1/4 x 3/8	Depth of Pump Intake:	10.60	
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐			
Water Quality Meter (type/Serial Number):	832 HYFK3					
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐		
Did well go dry?	Yes ☐	No ☒				
Final Depth to Water (prior to turning off pump):	10.10					
Barometric Pressure (At time of sampling) in mm/Hg:						

FIELD PARAMETER READINGS:

Time	1100	1102	1104	1106	1108	1110	1115	1120	1125	1130	1135	1140	1145
Rate (ml/min)	150	150	150	150	150	150	150	150	150	150	150	150	150
Depth to Water (ft. TOC)	8.71	8.81	8.89	8.99	9.02	9.08	9.22	9.38	9.51	9.58	9.68	9.77	9.84
Temperature (°C)	20.40	19.17	18.66	18.48	18.37	18.33	18.40	18.41	18.78	18.75	19.04	19.32	19.67
pH	9.05	9.04	9.02	9.00	8.97	8.95	8.84	8.69	8.77	8.64	8.86	8.77	8.83
Conductivity (mS/cm)	1.16	1.14	1.13	1.12	1.11	1.11	1.10	1.10	1.10	1.10	1.10	1.09	1.09
Dissolved Oxygen (mg/L)	6.02	1.47	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0
Turbidity (NTU)	1.4	1.5	2.4	2.3	2.2	2.2	2.0	2.0	2.0	1.5	0.4	0.0	0.0
ORP (mV)	-92	-65	-8	32	56	70	102	122	135	118	125	131	122

SAMPLE INFORMATION

Sample List:
- Diss. Chromium ~~& Ferrochrom~~ ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0B32-20221026
Start Time:	1150
End Time:	1155
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	AW

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Larry Hoad		Well ID:	MW-0833	
Date:	10/26/2022		Original Install Depth:	15.21	feet
Weather:	70's / Sunny		Screen Length:	10	feet
Time In:	1131	Time Out: 1330	Well Diameter:	2	inches

		10/24	10/26
Depth to Water (from TOC):	(feet)	7.86	7.90
Depth to Water(From TOC) With Pump in place:	(feet)	7.90	
Total Depth (from TOC):	(feet)	15.44	
Length of Water Column :	(feet)	7.54	

WELL INFORMATION

Well Type:	Flushmount ☐		Stick-Up	☒
Well Locked:	Yes ☒		No	☐
Measuring Point Marked:	Yes ☒		No	☐
Well Condition:	Good ☒		Poor	☐
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	1.23 gal
Pumping Rate of Pump:	(mL/min)	150 mL
Total Volume Removed:	(mL or gal)	7850 mL

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	H1600465	Pump Size:	1/4x3/8	Depth of Pump Intake:	11.67		
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	XC1A38V7						
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	22.84						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

	1212	1214	1216	1218	1220	1225	1230	1235	1240	1245	1250	1255	1300	1305
Time	~~1206~~	~~1208~~	~~1210~~	~~1218~~										
Rate (ml/min)	150	150	150	150	150	150	150	150	150	150	~~150~~ 150	150	150	150
Depth to Water (ft. TOC)	7.81	7.83	7.85	7.86	7.86	7.89	~~7.84~~ 7.89	7.89	7.91	7.86	7.84	7.87	7.89	7.86
Temperature (°C)	23.24	23.14	21.64	21.38	23.42	23.96	24.62	25.21	25.49	25.92	26.30	26.44	27.19	27.65
pH	8.86	8.85	8.64	8.61	8.72	8.43	8.39	8.45	8.51	~~8.57~~	8.66	8.69	8.73	8.75
Conductivity (mS/cm)	0.799	0.786	0.765	0.734	0.734	0.734	0.734	0.723	0.713	0.706	0.690	0.682	0.678	0.679
Dissolved Oxygen (mg/L)	3.75	3.47	3.45	3.21	3.11	3.02	3.00	2.72	2.60	2.50	2.32	2.01	1.82	1.84
Turbidity (NTU)	11.1	10.7	6.4	5.5	4.3	4.5	4.4	3.7	2.7	1.7	0	0	0	0
ORP (mV)	263	264	272	273	279	286	299	304	304	300	303	303	297	299

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & [illegible] ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☐
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0833-20221026
Start Time:	1312
End Time:	1319
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	LH

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water colof, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ N/A

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	AW		Well ID:	MW-0B34	
Date:	10/26/22		Original Install Depth:	16.04	feet
Weather:	60s Sunny		Screen Length:	10	feet
Time In:	1258	Time Out: 1340	Well Diameter:	2	inches

		10/24	10/26
Depth to Water (from TOC):	(feet)	15.02	14.90
Depth to Water(From TOC) With Pump in place:	(feet)		14.90
Total Depth (from TOC):	(feet)		16.25
Length of Water Column :	(feet)		1.35

WELL INFORMATION

Well Type:	Flushmount ☐		Stick-Up ☒	
Well Locked:	Yes ☒		No ☐	
Measuring Point Marked:	Yes ☑		No ☐	
Well Condition:	Good ☑		Poor ☐	
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	0.22 gal
Pumping Rate of Pump:	(mL/min)	
Total Volume Removed:	(mL or gal)	.5 gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	H1600 4652	Pump Size:		Depth of Pump Intake:	15.58		
Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐				
Water Quality Meter (type/Serial Number):	832HYFK3						
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	16.20						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1314	1310	1318	1320	1322									
Rate (ml/min)	100	100	100	100	100									
Depth to Water (ft. TOC)	15.30	15.35	15.42	15.54	16.15									
Temperature (°C)	28.23	27.96	27.80	26.42	26.16									
pH	6.93	6.80	6.57	6.62	6.39									
Conductivity (mS/cm)	2.56	2.49	2.44	2.41	2.39									
Dissolved Oxygen (mg/L)	0.71	0.11	0.0	0.0	0.0									
Turbidity (NTU)	6.0	6.8	4.2	1.2	0.0									
ORP (mV)	45	42	36	31	24									

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & ~~Vanadium~~ ☒
- Diss. Hexavalent Chromium ☑
- Total Cyanide ☑
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	MW-0B34-20221026	Duplicate ID:	
Start Time:	1325	Sample Time:	
End Time:	1335	Total Bottles:	
MS/MSD: Yes ☐ No ☒		Sampled By:	
Duplicate: Yes ☐ No ☒		MS/MSD ID:	
Total Bottles:	3	Sample Time:	
Sampled By:	AW	Total Bottles:	
		Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black)~~ / Negative (No ~~change~~) NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	AW	Well ID:	SG-11		
Date:	10/24/22	Original Install Depth:	—	feet	surface water
Weather:	60s Rainy	Screen Length:	—	feet	
Time In:	1530 Time Out: 1600	Well Diameter:	—	inches	

WELL INFORMATION

Depth to Water (from TOC):	(feet)	~~0.5~~ & NA	Well Type:	Flushmount ☐	Stick-Up ☐	surface water
Depth to Water(From TOC) With Pump in place:	(feet)	1 ft from bottom	Well Locked:	Yes ☐	No ☐	
Total Depth (from TOC):	(feet)	1.5	Measuring Point Marked:	Yes ☐	No ☐	
Length of Water Column :	(feet)	1.5	Well Condition:	Good ☐	Poor ☐	
			Well Condition Comments:			

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)		Pump ID:	—	Pump Size: —	Depth of Pump Intake: NA
Pumping Rate of Pump:	(mL/min)		Evacuation Method:	Bailer ☒	Peristaltic ☐	Bladder ☐	Other ☐
Total Volume Removed:	(mL or gal)	1 gallon	Tubing Used:	Teflon ☐	Polyethylene ☐	N/A ☒

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Water Quality Meter (type/Serial Number): 8S2HYFK3 Horiba U-52

Sampling Method: Bailer ☒ Peristaltic ☐ Bladder ☐ Other ☐

Did well go dry? Yes ☐ No ☒

Final Depth to Water (prior to turning off pump): NA

Barometric Pressure (At time of sampling) in mm/Hg:

FIELD PARAMETER READINGS:

Time	1555													
Rate (ml/min)	—													
Depth to Water (ft. TOC)	0.5													
Temperature (°C)	15.07													
pH	7.37													
Conductivity (mS/cm)	0.650													
Dissolved Oxygen (mg/L)	8.06													
Turbidity (NTU)	0.0													
ORP (mV)	195													

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☐
- Diss. Hexavalent Chromium ☐
- Total Cyanide ☐
- Free Cyanide ☒
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	SG-11-20221024
Start Time:	1555
End Time:	1615
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	2
Sampled By:	AW

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Ezra Cowan	Well ID:	SUMP-A		
Date:	10/26/22	Original Install Depth:	~31.5	feet	
Weather:	65+ sunny	Screen Length:	NA	feet	
Time In:	1438 Time Out: 1441	Well Diameter:	NA	inches	

		10/24	10/26
Depth to Water (from TOC):	(feet)	28.96	27.87
Depth to Water(From TOC) With Pump in place:	(feet)	—	
Total Depth (from TOC):	(feet)	~	
Length of Water Column :	(feet)	~	

WELL INFORMATION

Well Type:	Flushmount ☒	Stick-Up ☐		
Well Locked:	Yes ☒	No ☐		
Measuring Point Marked:	Yes ☒	No ☐		
Well Condition:	Good ☒	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	~
Pumping Rate of Pump:	(mL/min)	~
Total Volume Removed:	(mL or gal)	1 gallon

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	~	Pump Size:	2"	Depth of Pump Intake:	~		
Evacuation Method:	Bailer ☒	Peristaltic ☐	Bladder ☐	Other ☐			
Tubing Used:	Teflon ☐	Polyethylene ☐	N/A ☒				
Water Quality Meter (type/Serial Number):	SM370U 22						
Sampling Method:	Bailer ☒	Peristaltic ☐	Bladder ☐	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	27.85						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1430													
Rate (ml/min)	~													
Depth to Water (ft. TOC)	27.87													
Temperature (°C)	19.11													
pH	8.02													
Conductivity (mS/cm)	.728													
Dissolved Oxygen (mg/L)	6.84													
Turbidity (NTU)	0.0													
ORP (mV)	151													

SAMPLE INFORMATION

Sample List:

- Diss. Chromium ~~Hexavalent~~ ☐ FF
- Diss. Hexavalent Chromium ☒ FF
- Total Cyanide ☒
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	SUMP-A_20221026
Start Time:	1432
End Time:	1441
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	EC

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Grab

Free Cyanide Sulfide Test Strip: Positive (black) / Negative (No change) N/A

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Ezra Coyne		Well ID:	SUMP-B	
Date:	10/26/22		Original Install Depth:	~24.2	feet
Weather:	65° + Sunny		Screen Length:	ND	feet
Time In:	1500	Time Out: 1530	Well Diameter:	NA	inches

		10/24	10/26
Depth to Water (from TOC):	(feet)	24.44	23.59
Depth to Water(From TOC) With Pump in place:	(feet)	NA	
Total Depth (from TOC):	(feet)	NA	
Length of Water Column :	(feet)	NA	

WELL INFORMATION

Well Type:	Flushmount	☒	Stick-Up	☐
Well Locked:	Yes	☒	No	☐
Measuring Point Marked:	Yes	☒	No	☐
Well Condition:	Good	☒	Poor	☐
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	NA
Pumping Rate of Pump:	(mL/min)	NA
Total Volume Removed:	(mL or gal)	gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	NA		Pump Size:	2-1	Depth of Pump Intake:	NA	
Evacuation Method:	Bailer	☒	Peristaltic	☐	Bladder	☒	Other ☐
Tubing Used:	Teflon	☐	Polyethylene	☐	N/A	☐	
Water Quality Meter (type/Serial Number):	SM370022						
Sampling Method:	Bailer	☒	Peristaltic	☐	Bladder	☒	Other ☐
Did well go dry?	Yes	☐	No	☒			
Final Depth to Water (prior to turning off pump):	23.55						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1512	[illegible]
Rate (ml/min)	—	
Depth to Water (ft. TOC)	23.59	
Temperature (°C)	18.46	
pH	7.64	
Conductivity (mS/cm)	.524	
Dissolved Oxygen (mg/L)	6.42	
Turbidity (NTU)	0.0	
ORP (mV)	237	[illegible]

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & ~~Vanadium~~ ☒ FF
- Diss. Hexavalent Chromium ☒ FF
- Total Cyanide ☐
- Free Cyanide ☐
- Total Dissolved Solids ☐
- Hardness ☐
- VOCs (Dichlorobenzenes) ☐

Sample ID:	SUMP-B-20221026
Start Time:	1515
End Time:	1521
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	3
Sampled By:	EC

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.): 6 GRAB

Free Cyanide Sulfide Test Strip: Positive (Black) / Negative (No change) NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	Ezra Coyne + JS	Well ID:	SW-01		
Date:	~~2024~~ 10/25/22	Original Install Depth:		feet	River
Weather:	55 + cloud/rain	Screen Length:		feet	
Time In:	945 Time Out: 1028	Well Diameter:		inches	

WELL INFORMATION

Depth to Water (from TOC):	(feet)	3	Well Type:	Flushmount ☐	Stick-Up ☐
Depth to Water(From TOC) With Pump in place:	(feet)	N/A on river	Well Locked:	Yes ☐	No ☐
Total Depth (from TOC):	(feet)	5	Measuring Point Marked:	Yes ☐	No ☐
Length of Water Column :	(feet)	2	Well Condition:	Good ☐	Poor ☐
			Well Condition Comments:		

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)	—
Pumping Rate of Pump:	(mL/min)	—
Total Volume Removed:	(mL or gal)	1 gal

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	4068	Pump Size:	1/4 x 3/8"	Depth of Pump Intake:	1'
Evacuation Method:	Bailer ☐	Peristaltic ☑	Bladder ☐	Other ☐	
Tubing Used:	Teflon ☐	Polyethylene ☑	N/A ☐		
Water Quality Meter (type/Serial Number):	XIFUHW7G Horiba U-52				
Sampling Method:	Bailer ☐	Peristaltic ☑	Bladder ☐	Other ☐	
Did well go dry?	Yes ☐	No ☑			
Final Depth to Water (prior to turning off pump):	3'				
Barometric Pressure (At time of sampling) in mm/Hg:					

FIELD PARAMETER READINGS:

Time	1010														
Rate (ml/min)	100														
Depth to Water (ft. TOC)	3														
Temperature (°C)	14.25														
pH	6.21														
Conductivity (mS/cm)	0.107														
Dissolved Oxygen (mg/L)	7.56														
Turbidity (NTU)	1.2														
ORP (mV)	255														

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒
- Diss. Hexavalent Chromium ☒
- Total Cyanide ☐
- Free Cyanide ☒
- Total Dissolved Solids ☒
- Hardness ☒
- VOCs (Dichlorobenzenes) ☐

Sample ID:	SW-01_20221025
Start Time:	1013
End Time:	1026
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	5
Sampled By:	EC + JS

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Grab Sample

Free Cyanide Sulfide Test Strip: ~~Purple (Blank) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	EC + JS	Well ID:	SW-02		
Date:	10/25/22	Original Install Depth:		feet	river
Weather:	60 + sunny / clouds	Screen Length:		feet	
Time In:	1205 Time Out: 1235	Well Diameter:		inches	

WELL INFORMATION

Depth to Water (from TOC):	(feet)	1	Well Type:	Flushmount ☐	Stick-Up ☐	
Depth to Water(From TOC) With Pump in place:	(feet)	1	Well Locked:	Yes ☐	No ☐	
Total Depth (from TOC):	(feet)	4	Measuring Point Marked:	Yes ☐	No ☐	
Length of Water Column :	(feet)	3'	Well Condition:	Good ☐	Poor ☐	
			Well Condition Comments:			

WELL WATER INFORMATION

Volume of Water in Well:	(mL or gal)		
Pumping Rate of Pump:	(mL/min)		
Total Volume Removed:	(mL or gal)	1 gallon	

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	4068	Pump Size: 1/4 x 3/8"	Depth of Pump Intake:		
Evacuation Method:	Bailer ☐	Peristaltic ☑	Bladder ☐	Other ☐	
Tubing Used:	Teflon ☐	Polyethylene ☑	N/A ☐		
Water Quality Meter (type/Serial Number):		X1 FUHW 7G			
Sampling Method:	Bailer ☐	Peristaltic ☑	Bladder ☐	Other ☐	
Did well go dry?	Yes ☐	No ☑			
Final Depth to Water (prior to turning off pump):		3'			
Barometric Pressure (At time of sampling) in mm/Hg:					

FIELD PARAMETER READINGS:

Time	1210														
Rate (ml/min)	100														
Depth to Water (ft. TOC)	1														
Temperature (°C)	17.89														
pH	6.90														
Conductivity (mS/cm)	.099														
Dissolved Oxygen (mg/L)	6.38														
Turbidity (NTU)	0.7														
ORP (mV)	276														

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☒ FIL
- Diss. Hexavalent Chromium ☒ FIL
- Total Cyanide ☐
- Free Cyanide ☒
- Total Dissolved Solids ☒ FIL
- Hardness ☒
- VOCs (Dichlorobenzenes) ☐

Sample ID:	SW-02_20221025
Start Time:	1213
End Time:	1231
MS/MSD:	Yes ☐ No ☒
Duplicate:	Yes ☐ No ☒
Total Bottles:	5
Sampled By:	EC + JS

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	
MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Grab Sample

Free Cyanide Sulfide Test Strip: ~~Positive (Black) / Negative (No change)~~ NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	EC + JS	Well ID:	SW-03		
Date:	10/25/22	Original Install Depth:		feet	RIVER
Weather:	60's + sunny	Screen Length:		feet	
Time In:	1330	Time Out: 1515	Well Diameter:		inches

WELL INFORMATION

Depth to Water (from TOC): (feet)	2.5	
Depth to Water(From TOC) With Pump in place: (feet)	2.5	
Total Depth (from TOC): (feet)	~~4~~ 4.5	
Length of Water Column : (feet)	2.5	

Well Type:	Flushmount ☐	Stick-Up ☐		
Well Locked:	Yes ☐	No ☐		
Measuring Point Marked:	Yes ☐	No ☐		
Well Condition:	Good ☐	Poor ☐		
Well Condition Comments:				

WELL WATER INFORMATION

Volume of Water in Well: (mL or gal)		
Pumping Rate of Pump: (mL/min)		
Total Volume Removed: (mL or gal)	2.5 gallons	

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

EVACUATION INFORMATION

Pump ID:	4068	Pump Size: 1/4 x 3/8"		Depth of Pump Intake:	1.5	
Evacuation Method:	Bailer ☐	Peristaltic ☑	Bladder ☐	Other ☐		
Tubing Used:	Teflon ☐	Polyethylene ☑	N/A ☐			
Water Quality Meter (type/Serial Number):	XIFUHW7G					
Sampling Method:	Bailer ☐	Peristaltic ☑	Bladder ☐	Other ☐		
Did well go dry?	Yes ☐	No ☑				
Final Depth to Water (prior to turning off pump):	2.5					
Barometric Pressure (At time of sampling) in mm/Hg:						

FIELD PARAMETER READINGS:

Time	1417													
Rate (ml/min)	100													
Depth to Water (ft. TOC)	2.5													
Temperature (°C)	22.56													
pH	7.10													
Conductivity (mS/cm)	.083													
Dissolved Oxygen (mg/L)	5.53													
Turbidity (NTU)	1.7													
ORP (mV)	260													

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☑ FIL
- Diss. Hexavalent Chromium ☑ FIL
- Total Cyanide ☐
- Free Cyanide ☑
- Total Dissolved Solids ☑ FIL
- Hardness ☑
- VOCs (Dichlorobenzenes) ☐

Sample ID:	SW-03_20221025
Start Time:	1418
End Time:	1505
MS/MSD:	Yes ☑ No ☐
Duplicate:	Yes ☑ No ☐
Total Bottles:	5
Sampled By:	EC + JS

Duplicate ID:	DUP_20221025
Sample Time:	10/25/22
Total Bottles:	5
Sampled By:	EC + JS

MS/MSD ID:	SW-03_20221025
Sample Time:	1418
Total Bottles:	5
Sampled By:	EC + JS

Observations (water color, clarity, etc.):

Grab Sample

Free Cyanide Sulfide Test Strip: Positive (black) / Negative (No change) NA

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

GROUNDWATER SAMPLING LOG

Ashland Glens Falls, NY

Quarterly Groundwater & Surface Water Sampling Event

Sampling Personnel:	EC+JS		Well ID:	SW-04	
Date:	10/25/22		Original Install Depth:		feet
Weather:	72 + sunny		Screen Length:		feet
Time In:	1550	Time Out: 1615	Well Diameter:		inches

WELL INFORMATION

Depth to Water (from TOC):	(feet)	.5	Well Type:	Flushmount ☐	Stick-Up ☐	
Depth to Water(From TOC) With Pump in place:	(feet)	.5	Well Locked:	Yes ☐	No ☐	
Total Depth (from TOC):	(feet)	3.5	Measuring Point Marked:	Yes ☐	No ☐	
Length of Water Column:	(feet)	3.5	Well Condition:	Good ☐	Poor ☐	
			Well Condition Comments:			

WELL WATER INFORMATION

Volume of Water in Well:	(ml. or gal)	1 gallon	Pump ID:	4068	Pump Size: 1/4 x 3/8"	Depth of Pump Intake:	2.5
Pumping Rate of Pump:	(ml/min)		Evacuation Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐
Total Volume Removed:	(ml. or gal)		Tubing Used:	Teflon ☐	Polyethylene ☒	N/A ☐	

Volume Measurements	(gal)	(ml)	Tubing/Well Size
Tubing Volume per foot	0.003	11.36	1/4" ID tubing
Well Volume per foot	0.041	155.18	1" diam. well
	0.163	616.95	2" diam. well
	0.653	2,471.60	4" diam. well

Water Quality Meter (type/Serial Number):	XIFUHW7G						
Sampling Method:	Bailer ☐	Peristaltic ☒	Bladder ☐	Other ☐			
Did well go dry?	Yes ☐	No ☒					
Final Depth to Water (prior to turning off pump):	3						
Barometric Pressure (At time of sampling) in mm/Hg:							

FIELD PARAMETER READINGS:

Time	1600												
Rate (ml/min)	100												
Depth to Water (ft. TOC)	0.5												
Temperature (°C)	20.17												
pH	7.12												
Conductivity (mS/cm)	0.087												
Dissolved Oxygen (mg/L)	6.20												
Turbidity (NTU)	0.0												
ORP (mV)	261												

SAMPLE INFORMATION

Sample List:

- Diss. Chromium & Vanadium ☑ FIL
- Diss. Hexavalent Chromium ☑ FIL
- Total Cyanide ☐
- Free Cyanide ☑
- Total Dissolved Solids ☑ FIL
- Hardness ☑
- VOCs (Dichlorobenzenes) ☐

Sample ID:	SW-04_20221025
Start Time:	1602
End Time:	1615
MS/MSD:	Yes ☐ No ☑
Duplicate:	Yes ☐ No ☑
Total Bottles:	5
Sampled By:	EC+JS

Duplicate ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

MS/MSD ID:	
Sample Time:	
Total Bottles:	
Sampled By:	

Observations (water color, clarity, etc.):

Grab

Free Cyanide Sulfide Test Strip: [illegible] N/A

UNIT STABILITY

pH	DO	Turb.	Cond	ORP
± 0.1	± 10%	± 10%, <10NTU	± 3%	± 10 mV

Appendix B Laboratory Analytical Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

Laboratory Job ID: 680-216145-1
Client Project/Site: Hercules Glens Falls Quarterly Event

For:
Antea USA Inc.
5788 Wide Water Parkway
2nd Floor - ANTEA
Syracuse, New York 13214

Attn: Katie Angel

Authorized for release by:
6/13/2022 3:29:16 PM

David Fuller, Project Manager
(770)344-8986
David.Fuller@et.eurofinsus.com

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

Definitions/Glossary

Client: Antea USA Inc. Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Sample Summary

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-216145-1	EB-20220524	Water	05/24/22 17:15	05/27/22 10:00
680-216145-2	EB-20220525	Water	05/25/22 18:00	05/27/22 10:00
680-216145-3	MW-OB14-20220524	Water	05/24/22 16:20	05/27/22 10:00
680-216145-4	MW-OB32-20220524	Water	05/24/22 13:02	05/27/22 10:00
680-216145-5	EW-B5-20220525	Water	05/25/22 09:45	05/27/22 10:00
680-216145-6	MW-OB30-20220525	Water	05/25/22 10:45	05/27/22 10:00
680-216145-7	DUP-20220525	Water	05/25/22 00:00	05/27/22 10:00
680-216145-8	AW-C11-20220526	Water	05/26/22 11:36	05/27/22 10:00
680-216145-9	EB-20220526	Water	05/26/22 13:00	05/27/22 10:00

Job ID: 680-216145-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-216145-1

Receipt
The samples were received on 5/27/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.5º C.

Metals
Method 6020A: The low level continuing calibration verification (CCVL) for analytical batch 480-629375 recovered above the upper control limit for (analyte). The samples associated with this CCVL were ND; therefore, re-analysis of samples EB-20220524 (680-216145-1) and EB-20220525 (680-216145-2) was not performed. EB-20220524 (680-216145-1) and EB-20220525 (680-216145-2)

Method 6020A: The low level continuing calibration verification (CCVL) for analytical batch 480-629375 recovered above the upper control limit for (analyte). The sample associated with this CCVL contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples MW-OB32-20220524 (680-216145-4) was not performed.

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

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

Detection Summary

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EB-20220524 — Lab Sample ID: 680-216145-1

No Detections.

Client Sample ID: EB-20220525 — Lab Sample ID: 680-216145-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.0056	J B F1	0.010	0.0050	mg/L	1		9012B	Total/NA

Client Sample ID: MW-OB14-20220524 — Lab Sample ID: 680-216145-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Chromium	9.7		1.5	0.36	ug/L	1		6020A	Dissolved
Dissolved Vanadium	21		4.0	1.2	ug/L	1		6020A	Dissolved
Cyanide, Total	0.061		0.010	0.0050	mg/L	1		9012B	Total/NA

Client Sample ID: MW-OB32-20220524 — Lab Sample ID: 680-216145-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Chromium	95	^+	1.5	0.36	ug/L	1		6020A	Dissolved
Dissolved Vanadium	62		4.0	1.2	ug/L	1		6020A	Dissolved
Cyanide, Total	4.4		0.010	0.0050	mg/L	1		9012B	Total/NA

Client Sample ID: EW-B5-20220525 — Lab Sample ID: 680-216145-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Chromium	41000		150	36	ug/L	100		6020A	Dissolved
Dissolved Vanadium	160		4.0	1.2	ug/L	1		6020A	Dissolved
Cyanide, Total	0.23	B	0.010	0.0050	mg/L	1		9012B	Total/NA

Client Sample ID: MW-OB30-20220525 — Lab Sample ID: 680-216145-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Chromium	1500		15	3.6	ug/L	10		6020A	Dissolved
Dissolved Vanadium	110		4.0	1.2	ug/L	1		6020A	Dissolved
Cyanide, Total	0.13	B	0.010	0.0050	mg/L	1		9012B	Total/NA

Client Sample ID: DUP-20220525 — Lab Sample ID: 680-216145-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Chromium	38000		150	36	ug/L	100		6020A	Dissolved
Dissolved Vanadium	170		4.0	1.2	ug/L	1		6020A	Dissolved
Cyanide, Total	0.24	B	0.010	0.0050	mg/L	1		9012B	Total/NA

Client Sample ID: AW-C11-20220526 — Lab Sample ID: 680-216145-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Chromium	1300		15	3.6	ug/L	10		6020A	Dissolved
Dissolved Vanadium	62		4.0	1.2	ug/L	1		6020A	Dissolved
Cyanide, Total	0.044		0.010	0.0050	mg/L	1		9012B	Total/NA

Client Sample ID: EB-20220526 — Lab Sample ID: 680-216145-9

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Savannah

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EB-20220524
Lab Sample ID: 680-216145-1
Date Collected: 05/24/22 17:15
Matrix: Water
Date Received: 05/27/22 10:00

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.5	U ^+	1.5	0.36	ug/L		06/08/22 08:36	06/08/22 16:21	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		06/08/22 08:36	06/08/22 16:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U F1	0.010	0.0050	mg/L		06/03/22 10:48	06/03/22 13:34	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EB-20220525
Lab Sample ID: 680-216145-2
Date Collected: 05/25/22 18:00
Matrix: Water
Date Received: 05/27/22 10:00

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.5	U ^+	1.5	0.36	ug/L		06/08/22 08:36	06/08/22 16:23	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		06/08/22 08:36	06/08/22 16:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0056	J B F1	0.010	0.0050	mg/L		06/07/22 10:05	06/07/22 13:03	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: MW-OB14-20220524
Lab Sample ID: 680-216145-3
Date Collected: 05/24/22 16:20
Matrix: Water
Date Received: 05/27/22 10:00

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	9.7		1.5	0.36	ug/L		06/08/22 08:36	06/09/22 12:42	1
Dissolved Vanadium	21		4.0	1.2	ug/L		06/08/22 08:36	06/08/22 16:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.061		0.010	0.0050	mg/L		06/06/22 12:00	06/07/22 08:44	1

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: MW-OB32-20220524
Lab Sample ID: 680-216145-4
Date Collected: 05/24/22 13:02
Matrix: Water
Date Received: 05/27/22 10:00

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	95	^+	1.5	0.36	ug/L		06/08/22 08:36	06/08/22 16:28	1
Dissolved Vanadium	62		4.0	1.2	ug/L		06/08/22 08:36	06/08/22 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	4.4		0.010	0.0050	mg/L		06/06/22 12:00	06/07/22 08:46	1

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EW-B5-20220525
Lab Sample ID: 680-216145-5
Date Collected: 05/25/22 09:45
Matrix: Water
Date Received: 05/27/22 10:00

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	41000		150	36	ug/L		06/08/22 08:36	06/09/22 12:51	100
Dissolved Vanadium	160		4.0	1.2	ug/L		06/08/22 08:36	06/08/22 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.23	B	0.010	0.0050	mg/L		06/07/22 11:47	06/07/22 13:21	1

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: MW-OB30-20220525
Lab Sample ID: 680-216145-6
Date Collected: 05/25/22 10:45
Matrix: Water
Date Received: 05/27/22 10:00

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1500		15	3.6	ug/L		06/08/22 08:36	06/09/22 12:53	10
Dissolved Vanadium	110		4.0	1.2	ug/L		06/08/22 08:36	06/08/22 16:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.13	B	0.010	0.0050	mg/L		06/07/22 11:47	06/07/22 13:24	1

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: DUP-20220525
Lab Sample ID: 680-216145-7
Date Collected: 05/25/22 00:00
Matrix: Water
Date Received: 05/27/22 10:00

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	38000		150	36	ug/L		06/08/22 08:36	06/09/22 12:56	100
Dissolved Vanadium	170		4.0	1.2	ug/L		06/08/22 08:36	06/08/22 16:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.24	B	0.010	0.0050	mg/L		06/07/22 11:47	06/07/22 13:27	1

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: AW-C11-20220526
Lab Sample ID: 680-216145-8
Date Collected: 05/26/22 11:36
Matrix: Water
Date Received: 05/27/22 10:00

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1300		15	3.6	ug/L		06/08/22 08:36	06/09/22 12:58	10
Dissolved Vanadium	62		4.0	1.2	ug/L		06/08/22 08:36	06/08/22 16:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.044		0.010	0.0050	mg/L		06/09/22 10:13	06/09/22 12:43	1

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EB-20220526
Lab Sample ID: 680-216145-9
Date Collected: 05/26/22 13:00
Matrix: Water
Date Received: 05/27/22 10:00

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.5	U	1.5	0.36	ug/L		06/08/22 08:36	06/09/22 13:10	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		06/08/22 08:36	06/08/22 16:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L		06/09/22 10:13	06/09/22 12:47	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 480-628726/1-A
Matrix: Water
Analysis Batch: 629375

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628726

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.5	U	1.5	0.36	ug/L		06/08/22 08:36	06/08/22 15:50	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		06/08/22 08:36	06/08/22 15:50	1

Lab Sample ID: LCS 480-628726/2-A
Matrix: Water
Analysis Batch: 629375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628726

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Chromium	20.0	20.2		ug/L		101	80 - 120
Dissolved Vanadium	20.0	20.5		ug/L		103	80 - 120

Lab Sample ID: 680-216145-8 MS
Matrix: Water
Analysis Batch: 629375

Client Sample ID: AW-C11-20220526
Prep Type: Dissolved
Prep Batch: 628726

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Vanadium	62		20.0	83.3		ug/L		105	75 - 125

Lab Sample ID: 680-216145-8 MS
Matrix: Water
Analysis Batch: 629479

Client Sample ID: AW-C11-20220526
Prep Type: Dissolved
Prep Batch: 628726

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Chromium	1300		20.0	1340	4	ug/L		215	75 - 125

Lab Sample ID: 680-216145-8 MSD
Matrix: Water
Analysis Batch: 629375

Client Sample ID: AW-C11-20220526
Prep Type: Dissolved
Prep Batch: 628726

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dissolved Vanadium	62		20.0	86.9		ug/L		123	75 - 125	4	20

Lab Sample ID: 680-216145-8 MSD
Matrix: Water
Analysis Batch: 629479

Client Sample ID: AW-C11-20220526
Prep Type: Dissolved
Prep Batch: 628726

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dissolved Chromium	1300		20.0	1470	4	ug/L		860	75 - 125	9	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 480-628679/1-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628679

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L		06/03/22 10:48	06/03/22 13:00	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 480-628679/2-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628679

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.433		mg/L		108	90 - 110

Lab Sample ID: LCS 480-628679/3-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628679

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.273		mg/L		109	90 - 110

Lab Sample ID: 680-216145-1 MS
Matrix: Water
Analysis Batch: 628708

Client Sample ID: EB-20220524
Prep Type: Total/NA
Prep Batch: 628679

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.010	U F1	0.00500	0.00965	J F1	mg/L		193	90 - 110

Lab Sample ID: MB 480-628906/1-A
Matrix: Water
Analysis Batch: 628994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628906

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L		06/06/22 12:00	06/07/22 08:15	1

Lab Sample ID: LCS 480-628906/2-A
Matrix: Water
Analysis Batch: 628994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628906

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.231		mg/L		92	90 - 110

Lab Sample ID: MB 480-629036/1-A
Matrix: Water
Analysis Batch: 629091

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 629036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00602	J	0.010	0.0050	mg/L		06/07/22 10:05	06/07/22 12:28	1

Lab Sample ID: LCS 480-629036/2-A
Matrix: Water
Analysis Batch: 629091

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 629036

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.369		mg/L		92	90 - 110

Lab Sample ID: LCS 480-629036/3-A
Matrix: Water
Analysis Batch: 629091

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 629036

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.243		mg/L		97	90 - 110

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: 680-216145-2 MS
Client Sample ID: EB-20220525
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 629091
Prep Batch: 629036

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0056	J B F1	0.00500	0.0121	F1	mg/L		130	90 - 110

Lab Sample ID: MB 480-629080/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 629097
Prep Batch: 629080

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00727	J	0.010	0.0050	mg/L		06/07/22 11:47	06/07/22 13:17	1

Lab Sample ID: LCS 480-629080/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 629097
Prep Batch: 629080

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.252		mg/L		101	90 - 110

Lab Sample ID: 680-216145-6 MS
Client Sample ID: MW-OB30-20220525
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 629097
Prep Batch: 629080

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.13	B	0.00500	0.145	4	mg/L		260	90 - 110

Lab Sample ID: 680-216145-5 DU
Client Sample ID: EW-B5-20220525
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 629097
Prep Batch: 629080

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.23	B	0.227		mg/L		2	15

Lab Sample ID: MB 480-629398/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 629450
Prep Batch: 629398

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0050	mg/L		06/09/22 10:13	06/09/22 12:39	1

Lab Sample ID: LCS 480-629398/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 629450
Prep Batch: 629398

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.227		mg/L		91	90 - 110

Lab Sample ID: 680-216145-8 MS
Client Sample ID: AW-C11-20220526
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 629450
Prep Batch: 629398

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.044		0.00500	0.0443	4	mg/L		10	90 - 110

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: 680-216145-8 MSD
Client Sample ID: AW-C11-20220526
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 629450
Prep Batch: 629398

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	0.044		0.00500	0.0517	4	mg/L		158	90 - 110	15	15

Metals

Prep Batch: 628726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-1	EB-20220524	Dissolved	Water	3020A	
680-216145-2	EB-20220525	Dissolved	Water	3020A	
680-216145-3	MW-OB14-20220524	Dissolved	Water	3020A	
680-216145-4	MW-OB32-20220524	Dissolved	Water	3020A	
680-216145-5	EW-B5-20220525	Dissolved	Water	3020A	
680-216145-6	MW-OB30-20220525	Dissolved	Water	3020A	
680-216145-7	DUP-20220525	Dissolved	Water	3020A	
680-216145-8	AW-C11-20220526	Dissolved	Water	3020A	
680-216145-9	EB-20220526	Dissolved	Water	3020A	
MB 480-628726/1-A	Method Blank	Total/NA	Water	3020A	
LCS 480-628726/2-A	Lab Control Sample	Total/NA	Water	3020A	
680-216145-8 MS	AW-C11-20220526	Dissolved	Water	3020A	
680-216145-8 MSD	AW-C11-20220526	Dissolved	Water	3020A	

Analysis Batch: 629375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-1	EB-20220524	Dissolved	Water	6020A	628726
680-216145-2	EB-20220525	Dissolved	Water	6020A	628726
680-216145-3	MW-OB14-20220524	Dissolved	Water	6020A	628726
680-216145-4	MW-OB32-20220524	Dissolved	Water	6020A	628726
680-216145-5	EW-B5-20220525	Dissolved	Water	6020A	628726
680-216145-6	MW-OB30-20220525	Dissolved	Water	6020A	628726
680-216145-7	DUP-20220525	Dissolved	Water	6020A	628726
680-216145-8	AW-C11-20220526	Dissolved	Water	6020A	628726
680-216145-9	EB-20220526	Dissolved	Water	6020A	628726
MB 480-628726/1-A	Method Blank	Total/NA	Water	6020A	628726
LCS 480-628726/2-A	Lab Control Sample	Total/NA	Water	6020A	628726
680-216145-8 MS	AW-C11-20220526	Dissolved	Water	6020A	628726
680-216145-8 MSD	AW-C11-20220526	Dissolved	Water	6020A	628726

Analysis Batch: 629479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-3	MW-OB14-20220524	Dissolved	Water	6020A	628726
680-216145-5	EW-B5-20220525	Dissolved	Water	6020A	628726
680-216145-6	MW-OB30-20220525	Dissolved	Water	6020A	628726
680-216145-7	DUP-20220525	Dissolved	Water	6020A	628726
680-216145-8	AW-C11-20220526	Dissolved	Water	6020A	628726
680-216145-9	EB-20220526	Dissolved	Water	6020A	628726
680-216145-8 MS	AW-C11-20220526	Dissolved	Water	6020A	628726
680-216145-8 MSD	AW-C11-20220526	Dissolved	Water	6020A	628726

General Chemistry

Prep Batch: 628679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-1	EB-20220524	Total/NA	Water	9012B	
MB 480-628679/1-A	Method Blank	Total/NA	Water	9012B	
LCS 480-628679/2-A	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-628679/3-A	Lab Control Sample	Total/NA	Water	9012B	
680-216145-1 MS	EB-20220524	Total/NA	Water	9012B	

General Chemistry

Analysis Batch: 628708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-1	EB-20220524	Total/NA	Water	9012B	628679
MB 480-628679/1-A	Method Blank	Total/NA	Water	9012B	628679
LCS 480-628679/2-A	Lab Control Sample	Total/NA	Water	9012B	628679
LCS 480-628679/3-A	Lab Control Sample	Total/NA	Water	9012B	628679
680-216145-1 MS	EB-20220524	Total/NA	Water	9012B	628679

Prep Batch: 628906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-3	MW-OB14-20220524	Total/NA	Water	9012B	
680-216145-4	MW-OB32-20220524	Total/NA	Water	9012B	
MB 480-628906/1-A	Method Blank	Total/NA	Water	9012B	
LCS 480-628906/2-A	Lab Control Sample	Total/NA	Water	9012B	

Analysis Batch: 628994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-3	MW-OB14-20220524	Total/NA	Water	9012B	628906
680-216145-4	MW-OB32-20220524	Total/NA	Water	9012B	628906
MB 480-628906/1-A	Method Blank	Total/NA	Water	9012B	628906
LCS 480-628906/2-A	Lab Control Sample	Total/NA	Water	9012B	628906

Prep Batch: 629036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-2	EB-20220525	Total/NA	Water	9012B	
MB 480-629036/1-A	Method Blank	Total/NA	Water	9012B	
LCS 480-629036/2-A	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-629036/3-A	Lab Control Sample	Total/NA	Water	9012B	
680-216145-2 MS	EB-20220525	Total/NA	Water	9012B	

Prep Batch: 629080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-5	EW-B5-20220525	Total/NA	Water	9012B	
680-216145-6	MW-OB30-20220525	Total/NA	Water	9012B	
680-216145-7	DUP-20220525	Total/NA	Water	9012B	
MB 480-629080/1-A	Method Blank	Total/NA	Water	9012B	
LCS 480-629080/2-A	Lab Control Sample	Total/NA	Water	9012B	
680-216145-6 MS	MW-OB30-20220525	Total/NA	Water	9012B	
680-216145-5 DU	EW-B5-20220525	Total/NA	Water	9012B	

Analysis Batch: 629091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-2	EB-20220525	Total/NA	Water	9012B	629036
MB 480-629036/1-A	Method Blank	Total/NA	Water	9012B	629036
LCS 480-629036/2-A	Lab Control Sample	Total/NA	Water	9012B	629036
LCS 480-629036/3-A	Lab Control Sample	Total/NA	Water	9012B	629036
680-216145-2 MS	EB-20220525	Total/NA	Water	9012B	629036

Analysis Batch: 629097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-5	EW-B5-20220525	Total/NA	Water	9012B	629080
680-216145-6	MW-OB30-20220525	Total/NA	Water	9012B	629080
680-216145-7	DUP-20220525	Total/NA	Water	9012B	629080

General Chemistry (Continued)

Analysis Batch: 629097 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-629080/1-A	Method Blank	Total/NA	Water	9012B	629080
LCS 480-629080/2-A	Lab Control Sample	Total/NA	Water	9012B	629080
680-216145-6 MS	MW-OB30-20220525	Total/NA	Water	9012B	629080
680-216145-5 DU	EW-B5-20220525	Total/NA	Water	9012B	629080

Prep Batch: 629398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-8	AW-C11-20220526	Total/NA	Water	9012B	
680-216145-9	EB-20220526	Total/NA	Water	9012B	
MB 480-629398/1-A	Method Blank	Total/NA	Water	9012B	
LCS 480-629398/2-A	Lab Control Sample	Total/NA	Water	9012B	
680-216145-8 MS	AW-C11-20220526	Total/NA	Water	9012B	
680-216145-8 MSD	AW-C11-20220526	Total/NA	Water	9012B	

Analysis Batch: 629450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216145-8	AW-C11-20220526	Total/NA	Water	9012B	629398
680-216145-9	EB-20220526	Total/NA	Water	9012B	629398
MB 480-629398/1-A	Method Blank	Total/NA	Water	9012B	629398
LCS 480-629398/2-A	Lab Control Sample	Total/NA	Water	9012B	629398
680-216145-8 MS	AW-C11-20220526	Total/NA	Water	9012B	629398
680-216145-8 MSD	AW-C11-20220526	Total/NA	Water	9012B	629398

Lab Chronicle

Client: Antea USA Inc. Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EB-20220524 — Lab Sample ID: 680-216145-1

Date Collected: 05/24/22 17:15 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		1	629375	06/08/22 16:21	BMB	TAL BUF
Total/NA	Prep	9012B			628679	06/03/22 10:48	EJL	TAL BUF
Total/NA	Analysis	9012B		1	628708	06/03/22 13:34	CLT	TAL BUF

Client Sample ID: EB-20220525 — Lab Sample ID: 680-216145-2

Date Collected: 05/25/22 18:00 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		1	629375	06/08/22 16:23	BMB	TAL BUF
Total/NA	Prep	9012B			629036	06/07/22 10:05	NLK	TAL BUF
Total/NA	Analysis	9012B		1	629091	06/07/22 13:03	CLT	TAL BUF

Client Sample ID: MW-OB14-20220524 — Lab Sample ID: 680-216145-3

Date Collected: 05/24/22 16:20 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		1	629375	06/08/22 16:25	BMB	TAL BUF
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		1	629479	06/09/22 12:42	BMB	TAL BUF
Total/NA	Prep	9012B			628906	06/06/22 12:00	NLK	TAL BUF
Total/NA	Analysis	9012B		1	628994	06/07/22 08:44	CLT	TAL BUF

Client Sample ID: MW-OB32-20220524 — Lab Sample ID: 680-216145-4

Date Collected: 05/24/22 13:02 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		1	629375	06/08/22 16:28	BMB	TAL BUF
Total/NA	Prep	9012B			628906	06/06/22 12:00	NLK	TAL BUF
Total/NA	Analysis	9012B		1	628994	06/07/22 08:46	CLT	TAL BUF

Client Sample ID: EW-B5-20220525 — Lab Sample ID: 680-216145-5

Date Collected: 05/25/22 09:45 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		1	629375	06/08/22 16:30	BMB	TAL BUF
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		100	629479	06/09/22 12:51	BMB	TAL BUF

Lab Chronicle

Client: Antea USA Inc. Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EW-B5-20220525 Lab Sample ID: 680-216145-5

Date Collected: 05/25/22 09:45 **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9012B			629080	06/07/22 11:47	NLK	TAL BUF
Total/NA	Analysis	9012B		1	629097	06/07/22 13:21	CLT	TAL BUF

Client Sample ID: MW-OB30-20220525 Lab Sample ID: 680-216145-6

Date Collected: 05/25/22 10:45 **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		1	629375	06/08/22 16:32	BMB	TAL BUF
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		10	629479	06/09/22 12:53	BMB	TAL BUF
Total/NA	Prep	9012B			629080	06/07/22 11:47	NLK	TAL BUF
Total/NA	Analysis	9012B		1	629097	06/07/22 13:24	CLT	TAL BUF

Client Sample ID: DUP-20220525 Lab Sample ID: 680-216145-7

Date Collected: 05/25/22 00:00 **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		1	629375	06/08/22 16:35	BMB	TAL BUF
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		100	629479	06/09/22 12:56	BMB	TAL BUF
Total/NA	Prep	9012B			629080	06/07/22 11:47	NLK	TAL BUF
Total/NA	Analysis	9012B		1	629097	06/07/22 13:27	CLT	TAL BUF

Client Sample ID: AW-C11-20220526 Lab Sample ID: 680-216145-8

Date Collected: 05/26/22 11:36 **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		1	629375	06/08/22 16:44	BMB	TAL BUF
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		10	629479	06/09/22 12:58	BMB	TAL BUF
Total/NA	Prep	9012B			629398	06/09/22 10:13	NLK	TAL BUF
Total/NA	Analysis	9012B		1	629450	06/09/22 12:43	CLT	TAL BUF

Client Sample ID: EB-20220526 Lab Sample ID: 680-216145-9

Date Collected: 05/26/22 13:00 **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		1	629375	06/08/22 16:56	BMB	TAL BUF

Lab Chronicle

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EB-20220526
Lab Sample ID: 680-216145-9
Date Collected: 05/26/22 13:00
Matrix: Water
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3020A			628726	06/08/22 08:36	NBS	TAL BUF
Dissolved	Analysis	6020A		1	629479	06/09/22 13:10	BMB	TAL BUF
Total/NA	Prep	9012B			629398	06/09/22 10:13	NLK	TAL BUF
Total/NA	Analysis	9012B		1	629450	06/09/22 12:47	CLT	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Antea USA Inc. Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

Method Summary

Client: Antea USA Inc.
Job ID: 680-216145-1
Project/Site: Hercules Glens Falls Quarterly Event

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL BUF
9012B	Cyanide, Total andor Amenable	SW846	TAL BUF
3020A	Preparation, Total Metals	SW846	TAL BUF
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

TestAmerica Savannah
5102 LaRoche Avenue
Savannah GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Albany #224

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Garrett Crowe	Lab PM: ~~Barnett, Eddie~~ T David Fuller	Carrier Tracking No(s):	COC No: 680-76228-31646 1
Client Contact: Mr Jim Vondracek	Phone: 560 992 2636	E-Mail: ~~eddie.barnett@testamericainc.com~~ DavidFuller		Page: Page 1 of 1
Company: Ashland Inc				Job #:
Address: 5200 Blazer Parkway DS-4	Due Date Requested:			
City: Dublin	TAT Requested (days): Standard			
State, Zip: OH, 43017				
Phone: 614-790-6146	PO #: 4502471936			
Email: jevondracek@ashland com cassie reuter@ehs support.com	WO #:			
Project Name: Hercules Glens Falls Quarterly Event	Project #: 68000956			
Site: Ashland Glens Falls	SSOW#:			

Analysis Requested

Preservation Codes

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B - Cyanide, Total	218.6 - Chromium, hexavalent (field filtered)	6020A - Dissolved Total Chromium and Vanadium (field filtered)	2540C_Calcd - Total Dissolved Solids (field filtered)	2340C - Hardness as calcium carbonate	8260C - (MOD) TCL list OLM04.2 (Dichlorobenzenes (1,2-, 1,3-, 1,4-))	Total Number of containers	Special Instructions/Note.
			Preservation Code:				B	N	D	N	D	A		
EB_20220524	5/24/22	0715	G	Water	Y	N	X		X				2	
EB_20220525	5/25/22	1800	G	Water	Y	N	X		X				2	
MW-0814_20220524	5/24/22	1620	G	Water	Y	N	X		X				2	
MW-0832_20220524	5/24/22	1302	G	Water	Y	N	X		X				2	
EW-BS_20220525	5/25/22	945	G	Water	Y	N	X		X				2	
~~MW-0832_2022~~ MW-0830_20220525	5/25/22	1045	G	Water	Y	N	X		X				2	
~~EW-CH_20220525~~	~~5/25/22~~		G	Water	Y	Y	X		X				4	~~MS/MSD~~
DUP_20220525	5/25/22	—	G	Water	Y	N	X		X				2	
AW-CH_20220526	5/26/22	1136	G	Water	Y	Y	X		X				4	MS/MSD
EB_20220526	5/26/22	1350	G	Water	Y	N	X		X				2	
				Water										

680-216145 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II III IV, Other (specify)

Special Instructions/QC Requirements: Samples field filter are labled on bottles

Empty Kit Relinquished by:	Date	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		5/26/22 1545	Ander	Karl Zoehn	5/26/22 1545	Eurofins
2	Karl Zoehn	5/26/22 1700	Eurofins		5/27 10.00	
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.	-9	1.3

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 680-216145-1

Login Number: 216145

List Source: Eurofins Savannah

List Number: 1

Creator: Padayao, Abigail

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

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 680-216145-1

Login Number: 216145
List Number: 2
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 06/01/22 12:24 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4 ICE IR GUN #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

Laboratory Job ID: 680-216226-1
Client Project/Site: Hercules Glens Falls Quarterly Event

For:
Antea USA Inc.
5788 Wide Water Parkway
2nd Floor - ANTEA
Syracuse, New York 13214

Attn: Katie Angel

Authorized for release by:
6/21/2022 5:15:37 PM

David Fuller, Project Manager
(770)344-8986
David.Fuller@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Definitions/Glossary

Client: Antea USA Inc. Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Qualifiers

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.
H3	Sample was received and analyzed past holding time.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Sample Summary

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-216226-1	EB-20220524	Water	05/24/22 17:15	05/27/22 10:00
680-216226-2	EB-20220525	Water	05/25/22 18:00	05/27/22 10:00
680-216226-3	MW-OB14-20220524	Water	05/24/22 16:20	05/27/22 10:00
680-216226-4	MW-OB32-20220524	Water	05/24/22 13:02	05/27/22 10:00
680-216226-5	EW-B5-20220525	Water	05/25/22 09:45	05/27/22 10:00
680-216226-6	MW-OB30-20220525	Water	05/25/22 10:45	05/27/22 10:00
680-216226-7	DUP-20220525	Water	05/25/22 00:00	05/27/22 10:00
680-216226-8	AW-C11-20220526	Water	05/26/22 11:36	05/27/22 10:00
680-216226-9	EB-20220526	Water	05/26/22 13:00	05/27/22 10:00

Case Narrative

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Job ID: 680-216226-1

Laboratory: Eurofins Savannah

Narrative

Receipt
The samples were received on 5/27/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice.

General Chemistry
Method 218.6: The reference method requires samples to be preserved to a pH of 9.3-9.7. The following samples were received with insufficient preservation: EW-B5-20220525 (680-216226-5), MW-OB30-20220525 (680-216226-6), DUP-20220525 (680-216226-7) and EB-20220526 (680-216226-9). The sample(s) were preserved to the appropriate pH in the laboratory. As a result the samples are flagged as being run outside of the holding time.

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

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EB-20220524
Lab Sample ID: 680-216226-1
Date Collected: 05/24/22 17:15
Matrix: Water
Date Received: 05/27/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.00030	U	0.00030	0.00023	mg/L			06/09/22 16:08	1

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EB-20220525
Lab Sample ID: 680-216226-2
Date Collected: 05/25/22 18:00
Matrix: Water
Date Received: 05/27/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.00030	U	0.00030	0.00023	mg/L			06/09/22 16:21	1

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: MW-OB14-20220524
Lab Sample ID: 680-216226-3
Date Collected: 05/24/22 16:20
Matrix: Water
Date Received: 05/27/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.0020		0.00030	0.00023	mg/L			06/09/22 16:34	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: MW-OB32-20220524
Lab Sample ID: 680-216226-4
Date Collected: 05/24/22 13:02
Matrix: Water
Date Received: 05/27/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.0049		0.00030	0.00023	mg/L			06/09/22 16:47	1

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EW-B5-20220525
Lab Sample ID: 680-216226-5
Date Collected: 05/25/22 09:45
Matrix: Water
Date Received: 05/27/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	38	H3	0.30	0.23	mg/L			06/16/22 17:27	1000

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: MW-OB30-20220525
Lab Sample ID: 680-216226-6
Date Collected: 05/25/22 10:45
Matrix: Water
Date Received: 05/27/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	1.3	H3	0.015	0.012	mg/L			06/20/22 13:23	50

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: DUP-20220525
Lab Sample ID: 680-216226-7
Date Collected: 05/25/22 00:00
Matrix: Water
Date Received: 05/27/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	35	H3	0.30	0.23	mg/L			06/16/22 17:53	1000

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: AW-C11-20220526
Lab Sample ID: 680-216226-8
Date Collected: 05/26/22 11:36
Matrix: Water
Date Received: 05/27/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	1.2		0.0075	0.0058	mg/L			06/16/22 18:06	25

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EB-20220526
Lab Sample ID: 680-216226-9
Date Collected: 05/26/22 13:00
Matrix: Water
Date Received: 05/27/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.00030	U H3	0.00030	0.00023	mg/L			06/09/22 19:09	1

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Lab Sample ID: MB 500-660672/10
Matrix: Water
Analysis Batch: 660672
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.00030	U	0.00030	0.00023	mg/L			06/09/22 10:58	1

Lab Sample ID: MB 500-660672/38
Matrix: Water
Analysis Batch: 660672
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.00030	U	0.00030	0.00023	mg/L			06/09/22 17:00	1

Lab Sample ID: LCS 500-660672/11
Matrix: Water
Analysis Batch: 660672
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.0250	0.0250		mg/L		100	90 - 110

Lab Sample ID: LCS 500-660672/39
Matrix: Water
Analysis Batch: 660672
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.0250	0.0254		mg/L		101	90 - 110

Lab Sample ID: MB 500-661573/3
Matrix: Water
Analysis Batch: 661573
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.00030	U	0.00030	0.00023	mg/L			06/16/22 17:01	1

Lab Sample ID: LCS 500-661573/4
Matrix: Water
Analysis Batch: 661573
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.0250	0.0255		mg/L		102	90 - 110

Lab Sample ID: MB 500-661998/3
Matrix: Water
Analysis Batch: 661998
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.00030	U	0.00030	0.00023	mg/L			06/20/22 12:57	1

Lab Sample ID: LCS 500-661998/4
Matrix: Water
Analysis Batch: 661998
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	0.0250	0.0252		mg/L		101	90 - 110

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Lab Sample ID: 680-216226-8 MS
Client Sample ID: AW-C11-20220526
Matrix: Water
Prep Type: Dissolved
Analysis Batch: 661573

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chromium, hexavalent	1.2		0.625	1.79	E	mg/L		94	90 - 110		

Lab Sample ID: 680-216226-8 MSD
Client Sample ID: AW-C11-20220526
Matrix: Water
Prep Type: Dissolved
Analysis Batch: 661573

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	1.2		0.625	1.78	E	mg/L		92	90 - 110	0	20

QC Association Summary

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

General Chemistry

Analysis Batch: 660672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216226-1	EB-20220524	Dissolved	Water	218.6	
680-216226-2	EB-20220525	Dissolved	Water	218.6	
680-216226-3	MW-OB14-20220524	Dissolved	Water	218.6	
680-216226-4	MW-OB32-20220524	Dissolved	Water	218.6	
680-216226-9	EB-20220526	Dissolved	Water	218.6	
MB 500-660672/10	Method Blank	Total/NA	Water	218.6	
MB 500-660672/38	Method Blank	Total/NA	Water	218.6	
LCS 500-660672/11	Lab Control Sample	Total/NA	Water	218.6	
LCS 500-660672/39	Lab Control Sample	Total/NA	Water	218.6	

Analysis Batch: 661573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216226-5	EW-B5-20220525	Dissolved	Water	218.6	
680-216226-7	DUP-20220525	Dissolved	Water	218.6	
680-216226-8	AW-C11-20220526	Dissolved	Water	218.6	
MB 500-661573/3	Method Blank	Total/NA	Water	218.6	
LCS 500-661573/4	Lab Control Sample	Total/NA	Water	218.6	
680-216226-8 MS	AW-C11-20220526	Dissolved	Water	218.6	
680-216226-8 MSD	AW-C11-20220526	Dissolved	Water	218.6	

Analysis Batch: 661998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-216226-6	MW-OB30-20220525	Dissolved	Water	218.6	
MB 500-661998/3	Method Blank	Total/NA	Water	218.6	
LCS 500-661998/4	Lab Control Sample	Total/NA	Water	218.6	

Lab Chronicle

Client: Antea USA Inc. Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: EB-20220524 — Lab Sample ID: 680-216226-1

Date Collected: 05/24/22 17:15 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	218.6		1	660672	06/09/22 16:08	EAT	TAL CHI

Client Sample ID: EB-20220525 — Lab Sample ID: 680-216226-2

Date Collected: 05/25/22 18:00 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	218.6		1	660672	06/09/22 16:21	EAT	TAL CHI

Client Sample ID: MW-OB14-20220524 — Lab Sample ID: 680-216226-3

Date Collected: 05/24/22 16:20 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	218.6		1	660672	06/09/22 16:34	EAT	TAL CHI

Client Sample ID: MW-OB32-20220524 — Lab Sample ID: 680-216226-4

Date Collected: 05/24/22 13:02 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	218.6		1	660672	06/09/22 16:47	EAT	TAL CHI

Client Sample ID: EW-B5-20220525 — Lab Sample ID: 680-216226-5

Date Collected: 05/25/22 09:45 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	218.6		1000	661573	06/16/22 17:27	EAT	TAL CHI

Client Sample ID: MW-OB30-20220525 — Lab Sample ID: 680-216226-6

Date Collected: 05/25/22 10:45 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	218.6		50	661998	06/20/22 13:23	EAT	TAL CHI

Client Sample ID: DUP-20220525 — Lab Sample ID: 680-216226-7

Date Collected: 05/25/22 00:00 — **Matrix: Water**
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	218.6		1000	661573	06/16/22 17:53	EAT	TAL CHI

Lab Chronicle

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Client Sample ID: AW-C11-20220526
Lab Sample ID: 680-216226-8
Date Collected: 05/26/22 11:36
Matrix: Water
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	218.6		25	661573	06/16/22 18:06	EAT	TAL CHI

Client Sample ID: EB-20220526
Lab Sample ID: 680-216226-9
Date Collected: 05/26/22 13:00
Matrix: Water
Date Received: 05/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	218.6		1	660672	06/09/22 19:09	EAT	TAL CHI

Laboratory References:

TAL CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Antea USA Inc. Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
California	State	2903	04-29-22 *
Georgia	State	N/A	04-29-22 *
Georgia (DW)	State	939	04-30-23
Hawaii	State	NA	04-29-23
Illinois	NELAP	IL00035	04-30-23
Indiana	State	C-IL-02	04-29-22 *
Iowa	State	082	05-01-22 *
Kansas	NELAP	E-10161	10-31-22
Kentucky (UST)	State	AI # 108083	04-29-22 *
Kentucky (WW)	State	KY90023	12-31-22
Louisiana	NELAP	02046	06-30-22
Mississippi	State	NA	04-30-22 *
North Carolina (WW/SW)	State	291	12-31-22
North Dakota	State	R-194	04-29-22 *
Oklahoma	State	8908	08-31-22
South Carolina	State	77001003	04-29-22 *
USDA	US Federal Programs	P330-18-00018	02-11-24
Wisconsin	State	999580010	08-31-22
Wyoming	State	8TMS-Q	04-30-22 *

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

Method Summary

Client: Antea USA Inc.
Job ID: 680-216226-1
Project/Site: Hercules Glens Falls Quarterly Event

Method	Method Description	Protocol	Laboratory
218.6	Chromium, Hexavalent (Ion Chromatography)	EPA	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Garrett Crowe	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-76228-31646.1
Client Contact: Mr. Jim Vondracek	Phone: 8609922636	E-Mail: David.Fuller / eddie.barnett@testamericainc.com		Page: Page 1 of 1
Company: Ashland Inc				Job #:
Address: 5200 Blazer Parkway DS-4	Due Date Requested:			
City: Dublin	TAT Requested (days): Standard			
State, Zip: OH, 43017				
Phone: 614-790-6146	PO #: 4502471936			
Email: jevondracek@ashland.com, cassie.reuter@ehs support.com	WO #:			
Project Name: Hercules Glens Falls Quarterly Event	Project #: 68000956			
Site: Ashland Glens Falls	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B - Cyanide, Total	218.6 - Chromium, hexavalent (field filtered)	6020A - Dissolved Total Chromium and Vanadium (field filtered)	2540C_Calcd - Total Dissolved Solids (field filtered)	2340C - Hardness as calcium carbonate	8260C - (MOD) TCL list OLM04.2 (Dichlorobenzenes [1,2-, 1,3-, 1,4-])	Total Number of containers	Special Instructions/Note:
			Preservation Code:				B	N	D	N	D	A		
EB_20220524	5/24/22	1715	G	Water	X	N		X						
EB_20220525	5/25/22	1800	G	Water	X	N		X						
MW-0B14_20220524	5/24/22	1620	G	Water	X	N		X						
MW-0B3A 20220524	5/24/22	1367	G	Water	X	N		X						
MW-0B30 20220525	5/25/22	1045	G	Water	X	N		X						
~~AW-CII_20220525~~	~~5/25/22~~		G	Water	X	X		X						~~MS/MSD~~
FW-B5 20220525	5/25/22	945	G	Water	X	N		X						
DUP 20220525	5/25/22	—	G	Water	X	N		X						
AW-CII_20220526	5/26/22	1136	G	Water	Y	Y		X						MS/MSD
EB 20220526	5/26/22	1300	G	Water	Y	N		X						
				Water										

680-216226 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Bottles Field Filter marked on Lable

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/26/22 1545	Ashland	Karl Fowler	5/26/22 1545	Courier
2	Karl Fowler	5/26/22 1700	Courier		5/27 0 W	ETC
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone: 912-354-7858 Fax: 912-352-0165

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Fuller, David	Carrier Tracking No(s):	COC No: 680-696367 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: David.Fuller@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 2
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP - New York		Job #: 680-216226-1
Address: 2417 Bond Street,	Due Date Requested: 6/9/2022			
City: University Park	TAT Requested (days):			
State, Zip: IL, 60484	PO #:			
Phone: 708-534-5200(Tel) 708-534-5211(Fax)	WO #:			
Email:				
Project Name: Hercules Glens Falls Quarterly Event	Project #: 68000956			
Site:	SSOW#:			

680-216226 COC

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastes/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	218.6/FIELD_FLTRD Chromium, Hexavalent (Ion Chromatography)	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X		X	
EB-20220524 (680-216226-1)	5/24/22	17:15 Eastern		Water			X	1	
EB-20220525 (680-216226-2)	5/25/22	18.00 Eastern		Water			X	1	
MW-OB14-20220524 (680-216226-3)	5/24/22	16:20 Eastern		Water			X	1	
MW-OB32-20220524 (680-216226-4)	5/24/22	13 02 Eastern		Water			X	1	
EW-B5-20220525 (680-216226-5)	5/25/22	09:45 Eastern		Water			X	1	
MW-OB30-20220525 (680-216226-6)	5/25/22	10:45 Eastern		Water			X	1	
DUP-20220525 (680-216226-7)	5/25/22	Eastern		Water			X	1	
AW-C11-20220526 (680-216226-8)	5/26/22	11:36 Eastern		Water			X	1	
AW-C11-20220526 (680-216226-8MS)	5/26/22	11.36 Eastern	MS	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/31 1400		Paula Buckley	6/1/22 1025	EEtA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 2.8 +1.4

Ver 06/08/2021

Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone: 912-354-7858 Fax: 912-352-0165

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Fuller, David	Carrier Tracking No(s):	COC No: 680-696367.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: David.Fuller@et.eurofinsus.com	State of Origin: New York	Page: Page 2 of 2
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP - New York		Job #: 680-216226-1
Address: 2417 Bond Street,	Due Date Requested: 6/9/2022			
City: University Park	TAT Requested (days):			
State, Zip: IL, 60484				
Phone: 708-534-5200(Tel) 708-534-5211(Fax)	PO #:			
Email:	WO #:			
Project Name: Hercules Glens Falls Quarterly Event	Project #: 68000956			
Site:	SSOW#:			

Preservation Codes.

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	218.6/FIELD_FLTRD Chromium, Hexavalent (Ion Chromatography)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
AW-C11-20220526 (680-216226-8MSD)	5/26/22	11:36 Eastern	MSD	Water			X	1	
EB-20220526 (680-216226-9)	5/26/22	13:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	5/31 1400		Paula Buckley	6/1/22 1625	EEA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 2.8 → 1.4

Ver 06/08/2021

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 680-216226-1

Login Number: 216226

List Source: Eurofins Savannah

List Number: 1

Creator: Hartley, Tyler

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

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 680-216226-1

Login Number: 216226
List Number: 2
Creator: Buckley, Paula M

List Source: Eurofins Chicago
List Creation: 06/01/22 10:49 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4
COC is present.	False	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Angel
Antea USA Inc.
5788 Wide Water Parkway
2nd Floor - ANTEA
Syracuse New York 13214

Generated 11/21/2022 12:17:19 PM

JOB DESCRIPTION

Hercules Glens Falls Annuial Event

JOB NUMBER

680-224211-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

myEOL

Definitions/Glossary

Client: Antea USA Inc. Job ID: 680-224211-1
Project/Site: Hercules Glens Falls Annuial Event

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Sample Summary

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls Annuial Event

Job ID: 680-224211-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-224211-1	SW_01_20221025	Water	10/25/22 10:13	10/27/22 12:37
680-224211-2	SW_02_20221025	Water	10/25/22 12:13	10/27/22 12:37
680-224211-3	SW_03_20221025	Water	10/25/22 14:18	10/27/22 12:37
680-224211-4	DUP_20221025	Water	10/25/22 00:00	10/27/22 12:37
680-224211-5	SW_04_20221025	Water	10/25/22 16:02	10/27/22 12:37
680-224211-6	EB_20221025	Water	10/25/22 17:00	10/27/22 12:37
680-224211-7	EB_20221024	Water	10/24/22 18:05	10/27/22 12:37
680-224211-8	SG_11_20221024	Water	10/24/22 15:55	10/27/22 12:37

Case Narrative

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls Annuial Event

Job ID: 680-224211-1

Job ID: 680-224211-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-224211-1

Receipt
The samples were received on 10/27/2022 12:37 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Comments
Due to an error by the lab PM on the Bottle Order, frosted plastic bottles were ordered for the Free Cyanide test instead of amber plastic bottles.

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

Client Sample Results

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls Annuial Event

Job ID: 680-224211-1

Client Sample ID: SW_01_20221025
Date Collected: 10/25/22 10:13
Date Received: 10/27/22 12:37

Lab Sample ID: 680-224211-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free (OI CORP OIA-1677)	0.0012	J	0.0020	0.00079	mg/L			11/05/22 14:29	1

Client Sample Results

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls Annuial Event

Job ID: 680-224211-1

Client Sample ID: SW_02_20221025
Date Collected: 10/25/22 12:13
Date Received: 10/27/22 12:37

Lab Sample ID: 680-224211-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free (OI CORP OIA-1677)	0.00098	J	0.0020	0.00079	mg/L			11/05/22 14:30	1

Client Sample Results

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls Annuial Event

Job ID: 680-224211-1

Client Sample ID: SW_03_20221025
Date Collected: 10/25/22 14:18
Date Received: 10/27/22 12:37

Lab Sample ID: 680-224211-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free (OI CORP OIA-1677)	0.0011	J	0.0020	0.00079	mg/L			11/05/22 14:24	1

Client Sample Results

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls Annuial Event

Job ID: 680-224211-1

Client Sample ID: DUP_20221025
Date Collected: 10/25/22 00:00
Date Received: 10/27/22 12:37

Lab Sample ID: 680-224211-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free (OI CORP OIA-1677)	0.0020	U	0.0020	0.00079	mg/L			11/05/22 14:32	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224211-1
Project/Site: Hercules Glens Falls Annuial Event

Client Sample ID: SW_04_20221025
Lab Sample ID: 680-224211-5
Date Collected: 10/25/22 16:02
Matrix: Water
Date Received: 10/27/22 12:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free (OI CORP OIA-1677)	0.0020	U	0.0020	0.00079	mg/L			11/05/22 14:33	1

Client Sample Results

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls Annuial Event

Job ID: 680-224211-1

Client Sample ID: EB_20221025
Date Collected: 10/25/22 17:00
Date Received: 10/27/22 12:37

Lab Sample ID: 680-224211-6
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free (OI CORP OIA-1677)	0.0020	U	0.0020	0.00079	mg/L			11/05/22 14:35	1

Client Sample Results

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls Annuial Event

Job ID: 680-224211-1

Client Sample ID: EB_20221024
Date Collected: 10/24/22 18:05
Date Received: 10/27/22 12:37

Lab Sample ID: 680-224211-7
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free (OI CORP OIA-1677)	0.0020	U	0.0020	0.00079	mg/L			11/05/22 14:42	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224211-1
Project/Site: Hercules Glens Falls Annuial Event

Client Sample ID: SG_11_20221024
Lab Sample ID: 680-224211-8
Date Collected: 10/24/22 15:55
Matrix: Water
Date Received: 10/27/22 12:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free (OI CORP OIA-1677)	0.00081	J	0.0020	0.00079	mg/L			11/05/22 14:44	1

Method: OIA-1677 - Cyanide, Free (Flow Injection)

Lab Sample ID: MB 180-417391/24
Matrix: Water
Analysis Batch: 417391

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	0.0020	U	0.0020	0.00079	mg/L			11/05/22 14:21	1

Lab Sample ID: LCS 180-417391/25
Matrix: Water
Analysis Batch: 417391

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Free			0.0500	0.0499		mg/L		100	82 - 132		

Lab Sample ID: 680-224211-3 MS
Matrix: Water
Analysis Batch: 417391

Client Sample ID: SW_03_20221025
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Free	0.0011	J	0.0500	0.0498		mg/L		98	82 - 130		

Lab Sample ID: 680-224211-3 MSD
Matrix: Water
Analysis Batch: 417391

Client Sample ID: SW_03_20221025
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Free	0.0011	J	0.0500	0.0503		mg/L		98	82 - 130	1	11

QC Association Summary

Client: Antea USA Inc.
Job ID: 680-224211-1
Project/Site: Hercules Glens Falls Annuial Event

General Chemistry

Analysis Batch: 417391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224211-1	SW_01_20221025	Total/NA	Water	OIA-1677	
680-224211-2	SW_02_20221025	Total/NA	Water	OIA-1677	
680-224211-3	SW_03_20221025	Total/NA	Water	OIA-1677	
680-224211-4	DUP_20221025	Total/NA	Water	OIA-1677	
680-224211-5	SW_04_20221025	Total/NA	Water	OIA-1677	
680-224211-6	EB_20221025	Total/NA	Water	OIA-1677	
680-224211-7	EB_20221024	Total/NA	Water	OIA-1677	
680-224211-8	SG_11_20221024	Total/NA	Water	OIA-1677	
MB 180-417391/24	Method Blank	Total/NA	Water	OIA-1677	
LCS 180-417391/25	Lab Control Sample	Total/NA	Water	OIA-1677	
680-224211-3 MS	SW_03_20221025	Total/NA	Water	OIA-1677	
680-224211-3 MSD	SW_03_20221025	Total/NA	Water	OIA-1677	

Lab Chronicle

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls Annuial Event

Job ID: 680-224211-1

Client Sample ID: SW_01_20221025
Lab Sample ID: 680-224211-1
Date Collected: 10/25/22 10:13
Matrix: Water
Date Received: 10/27/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	OIA-1677		1	417391	SNR	EET PIT	11/05/22 14:29

Client Sample ID: SW_02_20221025
Lab Sample ID: 680-224211-2
Date Collected: 10/25/22 12:13
Matrix: Water
Date Received: 10/27/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	OIA-1677		1	417391	SNR	EET PIT	11/05/22 14:30

Client Sample ID: SW_03_20221025
Lab Sample ID: 680-224211-3
Date Collected: 10/25/22 14:18
Matrix: Water
Date Received: 10/27/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	OIA-1677		1	417391	SNR	EET PIT	11/05/22 14:24

Client Sample ID: DUP_20221025
Lab Sample ID: 680-224211-4
Date Collected: 10/25/22 00:00
Matrix: Water
Date Received: 10/27/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	OIA-1677		1	417391	SNR	EET PIT	11/05/22 14:32

Client Sample ID: SW_04_20221025
Lab Sample ID: 680-224211-5
Date Collected: 10/25/22 16:02
Matrix: Water
Date Received: 10/27/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	OIA-1677		1	417391	SNR	EET PIT	11/05/22 14:33

Client Sample ID: EB_20221025
Lab Sample ID: 680-224211-6
Date Collected: 10/25/22 17:00
Matrix: Water
Date Received: 10/27/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	OIA-1677		1	417391	SNR	EET PIT	11/05/22 14:35

Client Sample ID: EB_20221024
Lab Sample ID: 680-224211-7
Date Collected: 10/24/22 18:05
Matrix: Water
Date Received: 10/27/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	OIA-1677		1	417391	SNR	EET PIT	11/05/22 14:42

Lab Chronicle

Client: Antea USA Inc.
Job ID: 680-224211-1
Project/Site: Hercules Glens Falls Annuial Event

Client Sample ID: SG_11_20221024
Lab Sample ID: 680-224211-8
Date Collected: 10/24/22 15:55
Matrix: Water
Date Received: 10/27/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	OIA-1677		1	417391	SNR	EET PIT	11/05/22 14:44

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Accreditation/Certification Summary

Client: Antea USA Inc.
Job ID: 680-224211-1
Project/Site: Hercules Glens Falls Annuial Event

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22 *
California	State	2891	04-30-23
Connecticut	State	PH-0688	09-30-22 *
Florida	NELAP	E871008	11-15-22
Georgia	State	PA 02-00416	11-15-22
Illinois	NELAP	004375	11-15-22
Kansas	NELAP	E-10350	11-15-22
Kentucky (UST)	State	162013	04-30-23
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	11-15-22
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	11-15-22
New Hampshire	NELAP	2030	11-15-22
New Jersey	NELAP	PA005	11-15-22
New York	NELAP	11182	11-15-22
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	11-15-22
Oregon	NELAP	PA-2151	11-15-22
Pennsylvania	NELAP	02-00416	11-15-22
Rhode Island	State	LAO00362	12-31-22
South Carolina	State	89014	04-20-23
Texas	NELAP	T104704528	11-15-22
USDA	US Federal Programs	P330-16-00211	06-21-24
Utah	NELAP	PA001462019-8	11-15-22
Virginia	NELAP	10043	11-15-22
West Virginia DEP	State	142	11-15-22
Wisconsin	State	998027800	08-31-23

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

Method Summary

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls Annuial Event

Job ID: 680-224211-1

Method	Method Description	Protocol	Laboratory
OIA-1677	Cyanide, Free (Flow Injection)	OI CORP	EET PIT

Protocol References:

OI CORP = OI Corporation Instrument Manual.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

01677 Lower Reporting Limits

Chain of Custody Record

60 to Pittsburgh

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Barrett Crowe	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-76228-31646 1
Client Contact: Mr. Jim Vondracek	Phone: 860 992 2636	E-Mail: eddie.barnett@testamericainc.com		Page: Page 1 of
Company: Ashland Inc				Job #:
Address: 5200 Blazer Parkway DS-4	Due Date Requested: STD	Analysis Requested		
City: Dublin	TAT Requested (days): Standard			
State, Zip: OH, 43017				
Phone: 614-790-6146	PO #: 4502471936			
Email: jevondracek@ashland com, cassie johnson@ehs support.com	WO #:			
Project Name: Hercules Glens Falls Annual Event	Project #: 68000956			
Site: Ashland Glens Falls	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA

680-224211 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B - Cyanide, Total	7196A - Chromium, hexavalent (field filtered)	6020A - Dissolved Total Chromium and Vanadium (field filtered)	2540C_Calcd - Total Dissolved Solids (field filtered)	2340C - Hardness as calcium carbonate	8260C - (MOD) TCL list OLM04.2 (Dichlorobenzenes [1,2-, 1,3-, 1,4-])	Free Cyanide OIA-1677	Tot	Special Instructions/Note:
			Preservation Code:				B	N	D	N	D	A			
SW-01_20221025	10/25/22	1013	6	Water	N	N							X	1	
SW-02_20221025	10/25/22	1213	6	Water	N	N							X	1	
SW-03_20221025	10/25/22	1418	6	Water	N	Y							X	2	MS/MSD
DUP_20221025	10/25/22	—	6	Water	N	N							X	1	
SW-04_20221025	10/25/22	1602	6	Water	N	N							X	1	
EB_20221025	10/25/22	1700	6	Water	N	N							X	1	
EB_20221024	10/24/22	1805	6	Water	N	N							X	1	
SG-11_20221024	10/24/22	1555	6	Water	N	N							X	1	
				Water											
				Water											
				Water											

10-27-22

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
1		10/27/22 1757	Antea		10-27-22 1237	KETN
2		10-27-22 1700	KETN		10/28/22 1000	TVA
3		Date/Time.	Company	Received by:	Date/Time	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No

Cooler Temperature(s) °C and Other Remarks: 2.9 3.3 3.4 1.6 # 1 ICE

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 680-224211-1

Login Number: 224211
List Number: 2
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh
List Creation: 11/03/22 06:19 PM

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

Eurofins Savannah

Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



Generated
11/21/2022 12:17:19 PM

Authorized for release by
David Fuller, Project Manager
David.Fuller@et.eurofinsus.com
(770)344-8986

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Angel
Antea USA Inc.
5788 Wide Water Parkway
2nd Floor - ANTEA
Syracuse, New York 13214

Generated 12/4/2022 9:19:12 PM Revision 1

JOB DESCRIPTION

Hercules Glens Falls O&M Quarterly

JOB NUMBER

680-224213-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

See page two for job notes and contact information.

my EOL

Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



Generated
12/4/2022 9:19:12 PM
Revision 1

Authorized for release by
David Fuller, Project Manager
David.Fuller@et.eurofinsus.com
(770)344-8986

Definitions/Glossary

Client: Antea USA Inc. Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Sample Summary

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-224213-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-224213-1	SW_01_20221025	Water	10/25/22 10:13	10/28/22 05:19
680-224213-2	SW_02_20221025	Water	10/25/22 12:13	10/28/22 05:19
680-224213-3	SW_03_20221025	Water	10/25/22 14:18	10/28/22 05:19
680-224213-4	SW_04_20221025	Water	10/25/22 16:02	10/28/22 05:19
680-224213-5	DUP_20221025	Water	10/25/22 00:00	10/28/22 05:19
680-224213-6	EB_20221025	Water	10/25/22 17:00	10/28/22 05:19
680-224213-7	EB_20221024	Water	10/24/22 18:05	10/28/22 05:19
680-224213-8	AW_B18_20221024	Water	10/24/22 17:02	10/28/22 05:19
680-224213-9	DUP_20221024	Water	10/24/22 00:00	10/28/22 05:19
680-224213-10	MW_OB14_20221024	Water	10/24/22 16:38	10/28/22 05:19
680-224213-11	IP_4_20221024	Water	10/24/22 16:40	10/28/22 05:19
680-224213-12	MW_28_20221025	Water	10/25/22 12:30	10/28/22 05:19
680-224213-13	MW_OB26_20221027	Water	10/27/22 10:00	10/28/22 05:19
680-224213-14	AW_C11_20221025	Water	10/25/22 12:30	10/28/22 05:19
680-224213-15	AW_C2_20221025	Water	10/26/22 16:27	10/28/22 05:19
680-224213-16	AW_B4_20221025	Water	10/25/22 16:00	10/28/22 05:19
680-224213-17	SUMP_B_20221026	Water	10/26/22 15:15	10/28/22 05:19
680-224213-18	SUMP_A_20221026	Water	10/26/22 14:32	10/28/22 05:19
680-224213-19	EW_B5_20221026	Water	10/26/22 13:29	10/28/22 05:19
680-224213-20	DUP_20221026	Water	10/26/22 00:00	10/28/22 05:19
680-224213-21	EB_20221026	Water	10/26/22 15:00	10/28/22 05:19
680-224213-22	MW_25S_20221026	Water	10/26/22 12:28	10/28/22 05:19
680-224213-23	MW_OB33_20221026	Water	10/26/22 13:12	10/28/22 05:19
680-224213-24	MW_OB34_20221026	Water	10/26/22 13:26	10/28/22 05:19
680-224213-25	MW_OB32_20221026	Water	10/26/22 11:50	10/28/22 05:19
680-224213-26	MW_OB31_20221026	Water	10/26/22 09:50	10/28/22 05:19
680-224213-27	MW_OB30_20221027	Water	10/27/22 10:03	10/28/22 05:19
680-224213-28	AW_A11_20221026	Water	10/26/22 09:58	10/28/22 05:19
680-224213-29	MW_31_20221026	Water	10/26/22 12:14	10/28/22 05:19
680-224213-30	AW_A14_20221026	Water	10/26/22 10:06	10/28/22 05:19
680-224213-31	MW_OB25_20221026	Water	10/26/22 15:02	10/28/22 05:19
680-224213-32	EB_20221027	Water	10/27/22 11:00	10/28/22 05:19

Job ID: 680-224213-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-224213-1

Revision 1
The report being provided is a revision of the original report sent on 11/21/2022. The report (revision 1) is being revised in order to correct the Client Sample ID for the 30th sample to AW_A14_20221026 as listed on the Chain of Custody.

Receipt
The samples were received on 10/28/2022 5:19 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

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

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SW_01_20221025
Lab Sample ID: 680-224213-1
Date Collected: 10/25/22 10:13
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 19:49	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SW_02_20221025
Lab Sample ID: 680-224213-2
Date Collected: 10/25/22 12:13
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 17:22	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SW_03_20221025
Lab Sample ID: 680-224213-3
Date Collected: 10/25/22 14:18
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 15:07	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SW_04_20221025
Lab Sample ID: 680-224213-4
Date Collected: 10/25/22 16:02
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 17:09	1

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: DUP_20221025
Lab Sample ID: 680-224213-5
Date Collected: 10/25/22 00:00
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 17:02	1

Client Sample Results

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-224213-1

Client Sample ID: EB_20221025
Date Collected: 10/25/22 17:00
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-6
Matrix: Water

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 17:15	1

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: EB_20221024
Lab Sample ID: 680-224213-7
Date Collected: 10/24/22 18:05
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 16:43	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_B18_20221024
Lab Sample ID: 680-224213-8
Date Collected: 10/24/22 17:02
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 19:56	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: DUP_20221024
Lab Sample ID: 680-224213-9
Date Collected: 10/24/22 00:00
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 16:05	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB14_20221024
Lab Sample ID: 680-224213-10
Date Collected: 10/24/22 16:38
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 18:39	1

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: IP_4_20221024
Lab Sample ID: 680-224213-11
Date Collected: 10/24/22 16:40
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 16:30	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_28_20221025
Lab Sample ID: 680-224213-12
Date Collected: 10/25/22 12:30
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 16:24	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB26_20221027
Lab Sample ID: 680-224213-13
Date Collected: 10/27/22 10:00
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	5.4	J	10	5.0	ug/L			11/04/22 17:34	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_C11_20221025
Lab Sample ID: 680-224213-14
Date Collected: 10/25/22 12:30
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	380	F1	50	25	ug/L			11/10/22 01:55	5

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_C2_20221025
Lab Sample ID: 680-224213-15
Date Collected: 10/26/22 16:27
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 19:04	1

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_B4_20221025
Lab Sample ID: 680-224213-16
Date Collected: 10/25/22 16:00
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 20:02	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SUMP_B_20221026
Lab Sample ID: 680-224213-17

Date Collected: 10/26/22 15:15
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	150		10	5.0	ug/L			11/04/22 17:47	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SUMP_A_20221026
Lab Sample ID: 680-224213-18

Date Collected: 10/26/22 14:32
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	130		10	5.0	ug/L			11/04/22 17:28	1

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: EW_B5_20221026
Lab Sample ID: 680-224213-19
Date Collected: 10/26/22 13:29
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	26000		5000	2500	ug/L			11/07/22 14:18	500

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: DUP_20221026
Lab Sample ID: 680-224213-20
Date Collected: 10/26/22 00:00
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	34000		5000	2500	ug/L			11/07/22 14:12	500

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: EB_20221026
Lab Sample ID: 680-224213-21
Date Collected: 10/26/22 15:00
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 16:17	1

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_25S_20221026
Lab Sample ID: 680-224213-22
Date Collected: 10/26/22 12:28
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 18:51	1

Client Sample Results

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-224213-1

Client Sample ID: MW_OB33_20221026
Date Collected: 10/26/22 13:12
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-23
Matrix: Water

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	2900		100	50	ug/L			11/10/22 02:21	10

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB34_20221026
Lab Sample ID: 680-224213-24
Date Collected: 10/26/22 13:26
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 15:58	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB32_20221026
Lab Sample ID: 680-224213-25
Date Collected: 10/26/22 11:50
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 15:52	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB31_20221026
Lab Sample ID: 680-224213-26
Date Collected: 10/26/22 09:50
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 17:41	1

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB30_20221027
Lab Sample ID: 680-224213-27
Date Collected: 10/27/22 10:03
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	5500		500	250	ug/L			11/04/22 20:08	50

Client Sample Results

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-224213-1

Client Sample ID: AW_A11_20221026
Date Collected: 10/26/22 09:58
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-28
Matrix: Water

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	65		10	5.0	ug/L			11/04/22 19:36	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_31_20221026
Lab Sample ID: 680-224213-29
Date Collected: 10/26/22 12:14
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 19:17	1

Client Sample Results

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_A14_20221026
Lab Sample ID: 680-224213-30
Date Collected: 10/26/22 10:06
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 18:58	1

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB25_20221026
Lab Sample ID: 680-224213-31
Date Collected: 10/26/22 15:02
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	710		50	25	ug/L			11/10/22 02:14	5

Client: Antea USA Inc.
Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: EB_20221027
Lab Sample ID: 680-224213-32
Date Collected: 10/27/22 11:00
Matrix: Water
Date Received: 10/28/22 05:19

Method: EPA 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 16:11	1

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Lab Sample ID: MB 410-315749/10
Matrix: Water
Analysis Batch: 315749

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/07/22 13:25	1

Lab Sample ID: LCS 410-315749/9
Matrix: Water
Analysis Batch: 315749

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent Chromium (CrVI)	100	98.6		ug/L		99	90 - 110

Lab Sample ID: MB 410-315769/12
Matrix: Water
Analysis Batch: 315769

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 09:20	1

Lab Sample ID: MB 410-315769/22
Matrix: Water
Analysis Batch: 315769

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 12:01	1

Lab Sample ID: MB 410-315769/50
Matrix: Water
Analysis Batch: 315769

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 15:00	1

Lab Sample ID: MB 410-315769/78
Matrix: Water
Analysis Batch: 315769

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium (CrVI)	10	U	10	5.0	ug/L			11/04/22 18:00	1

Lab Sample ID: LCS 410-315769/21
Matrix: Water
Analysis Batch: 315769

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent Chromium (CrVI)	100	98.3		ug/L		98	90 - 110

Lab Sample ID: LCS 410-315769/49
Matrix: Water
Analysis Batch: 315769

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent Chromium (CrVI)	100	94.3		ug/L		94	90 - 110

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Lab Sample ID: LCS 410-315769/77
Matrix: Water
Analysis Batch: 315769

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexavalent Chromium (CrVI)			100	97.8		ug/L		98	90 - 110		

Lab Sample ID: 680-224213-3 MS
Matrix: Water
Analysis Batch: 315769

Client Sample ID: SW_03_20221025
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexavalent Chromium (CrVI)	10	U	100	102		ug/L		102	75 - 125		

Lab Sample ID: 680-224213-3 MSD
Matrix: Water
Analysis Batch: 315769

Client Sample ID: SW_03_20221025
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexavalent Chromium (CrVI)	10	U	100	115		ug/L		115	75 - 125	13	20

Lab Sample ID: 680-224213-14 MS
Matrix: Water
Analysis Batch: 316340

Client Sample ID: AW_C11_20221025
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexavalent Chromium (CrVI)	380	F1	500	1040	F1	ug/L		131	75 - 125		

Lab Sample ID: 680-224213-14 MSD
Matrix: Water
Analysis Batch: 316340

Client Sample ID: AW_C11_20221025
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexavalent Chromium (CrVI)	380	F1	500	1100	F1	ug/L		143	75 - 125	5	20

HPLC/IC

Analysis Batch: 315749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224213-19	EW_B5_20221026	Dissolved	Water	218.6	
680-224213-20	DUP_20221026	Dissolved	Water	218.6	
MB 410-315749/10	Method Blank	Total/NA	Water	218.6	
LCS 410-315749/9	Lab Control Sample	Total/NA	Water	218.6	

Analysis Batch: 315769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224213-1	SW_01_20221025	Dissolved	Water	218.6	
680-224213-2	SW_02_20221025	Dissolved	Water	218.6	
680-224213-3	SW_03_20221025	Dissolved	Water	218.6	
680-224213-4	SW_04_20221025	Dissolved	Water	218.6	
680-224213-5	DUP_20221025	Dissolved	Water	218.6	
680-224213-6	EB_20221025	Dissolved	Water	218.6	
680-224213-7	EB_20221024	Dissolved	Water	218.6	
680-224213-8	AW_B18_20221024	Dissolved	Water	218.6	
680-224213-9	DUP_20221024	Dissolved	Water	218.6	
680-224213-10	MW_OB14_20221024	Dissolved	Water	218.6	
680-224213-11	IP_4_20221024	Dissolved	Water	218.6	
680-224213-12	MW_28_20221025	Dissolved	Water	218.6	
680-224213-13	MW_OB26_20221027	Dissolved	Water	218.6	
680-224213-15	AW_C2_20221025	Dissolved	Water	218.6	
680-224213-16	AW_B4_20221025	Dissolved	Water	218.6	
680-224213-17	SUMP_B_20221026	Dissolved	Water	218.6	
680-224213-18	SUMP_A_20221026	Dissolved	Water	218.6	
680-224213-21	EB_20221026	Dissolved	Water	218.6	
680-224213-22	MW_25S_20221026	Dissolved	Water	218.6	
680-224213-24	MW_OB34_20221026	Dissolved	Water	218.6	
680-224213-25	MW_OB32_20221026	Dissolved	Water	218.6	
680-224213-26	MW_OB31_20221026	Dissolved	Water	218.6	
680-224213-27	MW_OB30_20221027	Dissolved	Water	218.6	
680-224213-28	AW_A11_20221026	Dissolved	Water	218.6	
680-224213-29	MW_31_20221026	Dissolved	Water	218.6	
680-224213-30	AW_A14_20221026	Dissolved	Water	218.6	
680-224213-32	EB_20221027	Dissolved	Water	218.6	
MB 410-315769/12	Method Blank	Total/NA	Water	218.6	
MB 410-315769/22	Method Blank	Total/NA	Water	218.6	
MB 410-315769/50	Method Blank	Total/NA	Water	218.6	
MB 410-315769/78	Method Blank	Total/NA	Water	218.6	
LCS 410-315769/21	Lab Control Sample	Total/NA	Water	218.6	
LCS 410-315769/49	Lab Control Sample	Total/NA	Water	218.6	
LCS 410-315769/77	Lab Control Sample	Total/NA	Water	218.6	
680-224213-3 MS	SW_03_20221025	Dissolved	Water	218.6	
680-224213-3 MSD	SW_03_20221025	Dissolved	Water	218.6	

Analysis Batch: 316340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224213-14	AW_C11_20221025	Dissolved	Water	218.6	
680-224213-23	MW_OB33_20221026	Dissolved	Water	218.6	
680-224213-31	MW_OB25_20221026	Dissolved	Water	218.6	
680-224213-14 MS	AW_C11_20221025	Dissolved	Water	218.6	
680-224213-14 MSD	AW_C11_20221025	Dissolved	Water	218.6	

Lab Chronicle

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-224213-1

Client Sample ID: SW_01_20221025
Date Collected: 10/25/22 10:13
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 19:49

Client Sample ID: SW_02_20221025
Date Collected: 10/25/22 12:13
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 17:22

Client Sample ID: SW_03_20221025
Date Collected: 10/25/22 14:18
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 15:07

Client Sample ID: SW_04_20221025
Date Collected: 10/25/22 16:02
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 17:09

Client Sample ID: DUP_20221025
Date Collected: 10/25/22 00:00
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 17:02

Client Sample ID: EB_20221025
Date Collected: 10/25/22 17:00
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 17:15

Client Sample ID: EB_20221024
Date Collected: 10/24/22 18:05
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 16:43

Lab Chronicle

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-224213-1

Client Sample ID: AW_B18_20221024
Date Collected: 10/24/22 17:02
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 19:56

Client Sample ID: DUP_20221024
Date Collected: 10/24/22 00:00
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 16:05

Client Sample ID: MW_OB14_20221024
Date Collected: 10/24/22 16:38
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 18:39

Client Sample ID: IP_4_20221024
Date Collected: 10/24/22 16:40
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 16:30

Client Sample ID: MW_28_20221025
Date Collected: 10/25/22 12:30
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 16:24

Client Sample ID: MW_OB26_20221027
Date Collected: 10/27/22 10:00
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 17:34

Client Sample ID: AW_C11_20221025
Date Collected: 10/25/22 12:30
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		5	316340	L4QM	ELLE	11/10/22 01:55

Lab Chronicle

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-224213-1

Client Sample ID: AW_C2_20221025
Date Collected: 10/26/22 16:27
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 19:04

Client Sample ID: AW_B4_20221025
Date Collected: 10/25/22 16:00
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 20:02

Client Sample ID: SUMP_B_20221026
Date Collected: 10/26/22 15:15
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 17:47

Client Sample ID: SUMP_A_20221026
Date Collected: 10/26/22 14:32
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 17:28

Client Sample ID: EW_B5_20221026
Date Collected: 10/26/22 13:29
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		500	315749	L4QM	ELLE	11/07/22 14:18

Client Sample ID: DUP_20221026
Date Collected: 10/26/22 00:00
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		500	315749	L4QM	ELLE	11/07/22 14:12

Client Sample ID: EB_20221026
Date Collected: 10/26/22 15:00
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 16:17

Lab Chronicle

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-224213-1

Client Sample ID: MW_25S_20221026
Date Collected: 10/26/22 12:28
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 18:51

Client Sample ID: MW_OB33_20221026
Date Collected: 10/26/22 13:12
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		10	316340	L4QM	ELLE	11/10/22 02:21

Client Sample ID: MW_OB34_20221026
Date Collected: 10/26/22 13:26
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 15:58

Client Sample ID: MW_OB32_20221026
Date Collected: 10/26/22 11:50
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 15:52

Client Sample ID: MW_OB31_20221026
Date Collected: 10/26/22 09:50
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-26
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 17:41

Client Sample ID: MW_OB30_20221027
Date Collected: 10/27/22 10:03
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-27
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		50	315769	L4QM	ELLE	11/04/22 20:08

Client Sample ID: AW_A11_20221026
Date Collected: 10/26/22 09:58
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-28
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 19:36

Lab Chronicle

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-224213-1

Client Sample ID: MW_31_20221026
Date Collected: 10/26/22 12:14
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-29
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 19:17

Client Sample ID: AW_A14_20221026
Date Collected: 10/26/22 10:06
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-30
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 18:58

Client Sample ID: MW_OB25_20221026
Date Collected: 10/26/22 15:02
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-31
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		5	316340	L4QM	ELLE	11/10/22 02:14

Client Sample ID: EB_20221027
Date Collected: 10/27/22 11:00
Date Received: 10/28/22 05:19

Lab Sample ID: 680-224213-32
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Analysis	218.6		1	315769	L4QM	ELLE	11/04/22 16:11

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Antea USA Inc. Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-20-22
A2LA	ISO/IEC 17025	0001.01	11-30-22
Alaska	State	PA00009	07-01-23
Alaska (UST)	State	17-027	02-28-23
Arizona	State	AZ0780	03-12-23
Arkansas DEQ	State	88-00660	08-09-23
California	State	2792	11-30-22
Colorado	State	PA00009	06-30-23
Connecticut	State	PH-0746	06-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-23
Delaware (DW)	State	N/A	01-31-23
Florida	NELAP	E87997	06-30-23
Georgia (DW)	State	C048	01-31-23
Hawaii	State	N/A	11-27-22
Illinois	NELAP	200027	01-31-23
Iowa	State	361	11-21-22
Kansas	NELAP	E-10151	10-31-22 *
Kentucky (DW)	State	KY90088	12-31-22
Kentucky (UST)	State	0001.01	11-20-22
Kentucky (WW)	State	KY90088	01-01-23
Louisiana (All)	NELAP	02055	06-30-23
Maine	State	2019012	03-12-23
Maryland	State	100	06-30-23
Massachusetts	State	M-PA009	11-10-22
Michigan	State	9930	01-31-23
Minnesota	NELAP	042-999-487	12-31-22
Mississippi	State	022	01-31-23
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-23
Montana (UST)	State	<cert No.>	02-01-23
Nebraska	State	NE-OS-32-17	01-31-23
New Hampshire	NELAP	2730	01-10-23
New Jersey	NELAP	PA011	11-14-22
New York	NELAP	10670	04-01-23
North Carolina (DW)	State	42705	07-31-23
North Carolina (WW/SW)	State	521	12-31-22
North Dakota	State	R-205	01-31-23
Oklahoma	NELAP	R-205	11-22-22
Oregon	NELAP	PA200001	09-11-23
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-23
Rhode Island	State	LAO00338	12-30-22
South Carolina	State	89002	01-31-23
Tennessee	State	02838	01-31-23
Texas	NELAP	T104704194-22-43	08-31-23
USDA	US Federal Programs	P330-19-00197	08-09-23
Vermont	State	VT - 36037	11-16-22
Virginia	NELAP	460182	06-14-23
Washington	State	C457	04-11-23
West Virginia (DW)	State	9906 C	12-31-22

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

Accreditation/Certification Summary

Client: Antea USA Inc. Job ID: 680-224213-1
Project/Site: Hercules Glens Falls O&M Quarterly

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
West Virginia DEP	State	055	07-31-23
Wyoming	State	8TMS-L	01-31-23
Wyoming (UST)	A2LA	0001.01	11-20-22

Method Summary

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-224213-1

Method	Method Description	Protocol	Laboratory
218.6	Chromium, Hexavalent (Ion Chromatography)	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Barrett Crowe	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-76228-31646.1
Client Contact: Mr. Jim Vondracek	Phone: 860-992-2636	E-Mail: eddie.barnett@testamericainc.com		Page: Page 1 of 4
Company: Ashland Inc		Analysis Requested		Job #:
Address: 5200 Blazer Parkway DS-4	Due Date Requested: STD			Preservation Codes:
City: Dublin	TAT Requested (days): Standard			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4
State, Zip: OH, 43017				
Phone: 614-790-6146	PO #: 4502471936			
Email: jevondracek@ashland.com, cassie.johnson@ehs support.com	WO #:			
Project Name: Hercules Glens Falls Annual Event	Project #: 68000956			
Site: Ashland Glens Falls	SSOW#:			

680-224213 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B - Cyanide, Total	7196A - Chromium, hexavalent (field filtered)	6020A - Dissolved Total Chromium and Vanadium (field filtered)	2540C_Calcd - Total Dissolved Solids (field filtered)	2340C - Hardness as calcium carbonate	8260C - (MOD) TCL list OLM04.2 (Dichlorobenzenes (1,2-, 1,3-, 1,4-))	Total Num	Special Instructions/Note:
			Preservation Code:				B	N	D	N	D	A		
SW-01_20221025	10/25/22	1013	G	Water	Y	N		X					1	
SW-02_20221025	10/25/22	1213		Water	Y	N		X					1	
SW-03_20221025	10/25/22	1418		Water	Y	Y		X					2	MS/MSD
SW-04_20221025	10/25/22	1602		Water	Y	N		X					1	
DUP_20221025	10/25/22	~~1700~~		Water	Y	N		X					1	
EB_20221025	10/25/22	~~1700~~ 1700		Water	Y	N		X					1	
EB_20221024	10/24/22	~~1805~~ 1805		Water	Y	N		X					1	
AW-DBS_20221024	10/24/22	1707		Water	Y	Y		X					2	MS/MSD
~~MW-DB23_20221024~~				Water	Y			X					1	
~~MW-DB19_2019~~				Water	Y			X					1	
DUP_20221024	10/24/22	—	G	Water	Y	N		X					1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Egan Green	10/27/22 1237	Antea	[illegible]	10-27-22 1237	EETW
2	[illegible]	10-27-22 1700	EETW	[illegible]	10/28/22 1000	TA
3				[illegible]	11/3/22 10:15	ELET

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.4 3.3 3.4 1.6 # 1±C5 0.6°C

JM

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Garrett Crowe	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-76228-31646.1
Client Contact: Mr. Jim Vondracek	Phone: 860-992-7636	E-Mail: eddie.barnett@testamericainc.com		Page: Page 2 of 4
Company: Ashland Inc				Job #:
Address: 5200 Blazer Parkway DS-4	Due Date Requested: STD			
City: Dublin	TAT Requested (days): Standard			
State, Zip: OH, 43017				
Phone: 614-790-6146	PO #: 4502471936			
Email: jevondracek@ashland.com, cassie.johnson@ehs support.com	WO #:			
Project Name: Hercules Glens Falls Annual Event	Project #: 68000956			
Site: Ashland Glens Falls	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B - Cyanide, Total	7196A - Chromium, hexavalent (field filtered)	6020A - Dissolved Total Chromium and Vanadium (field filtered)	2540C_Calcd - Total Dissolved Solids (field filtered)	2340C - Hardness as calcium carbonate	8260C - (MOD) TCL list OLM04.2 (Dichlorobenzenes [1,2-, 1,3-, 1,4-])	Total Number of containers	Special Instructions/Note:
			Preservation Code:				B	N	D	N	D	A		
MW-OB14_20221024	10/24/22	1638	G	Water	Y	N		X					1	
IP-4_20221024	10/24/22	1640		Water				X						
MW-28_20221025	10/25/22	1230		Water				X						
MW-OB26_20221027	10/27/22	1000		Water		N		X						
~~AW-C11~~ AW-C1_20221025	10/25/22	1230		Water		Y		X					2	MS/MSD
~~SUMP-B_2022~~ AW-C2_20221025	10/25/22	1627		Water		N		X					1	
AW-B4_20221025	10/25/22	1600		Water				X						
SUMP-B_20221026	10/26/22	1515		Water				X						
SUMP-A_20221026		1432		Water				X						
EW-B5_20221026		1329		Water				X						
DUP_20221026	10/26/22	—	G	Water	Y	N		X					1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Egan Gray	10/27/22 1237	Antea	[signature]	10-27-22 1237	EETW
2	[signature]	10-27-22 1700	EETW	See pg1		
3				[signature]	11/3/22 10:15	EETW

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.6

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Garrett Crowe	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-76228-31646.1
Client Contact: Mr. Jim Vondracek	Phone: 860-992-2636	E-Mail: eddie.barnett@testamericainc.com		Page: Page 3 of 4
Company: Ashland Inc				Job #:

Address: 5200 Blazer Parkway DS-4	Due Date Requested: STD
City: Dublin	TAT Requested (days): Standard
State, Zip: OH, 43017	
Phone: 614-790-6146	PO #: 4502471936
Email: jevondracek@ashland.com, cassie.johnson@ehs support.com	WO #:
Project Name: Hercules Glens Falls Annual Event	Project #: 68000956
Site: Ashland Glens Falls	SSOW#:

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B - Cyanide, Total	7196A - Chromium, hexavalent (field filtered)	6020A - Dissolved Total Chromium and Vanadium (field filtered)	2540C_Calcd - Total Dissolved Solids (field filtered)	2340C - Hardness as calcium carbonate	8260C - (MOD) TCL list OLM04.2 (Dichlorobenzenes [1,2-, 1,3-, 1,4-])	Total Number of containers	Special Instructions/Note:
			Preservation Code:				B	N	D	N	D	A		
EB_20221026	10/26/22	1500	G	Water	Y	N							1	
MW-25S_20221026		1228		Water										
MW-0B33_20221026		1315		Water										
MW-0B34_20221026		1326		Water										
MW-0B32_20221026		1150		Water										
MW-0B31_20221026	10/26/22	0950		Water										
MW-0B30_20221027	10/27/22	1003		Water										
AW-A11_20221026	10/26/22	0958		Water										
MW-31_20221026		1214		Water										
AW-A14_20221026		1006		Water										
MW-0B25_20221026	10/26/22	1502	G	Water	Y	N							1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Eva Gru	10/27/22 1237	Antea	Tim Franklin	10-27-22 1237	FETN
Tim Franklin	10-27-22 1700	FETN	see esl		
				11/3/22 10:15	FETN

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.6

IM

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Garrett Crowe	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-76228-31646.1
Client Contact: Mr. Jim Vondracek	Phone: 860-997-2636	E-Mail: eddie.barnett@testamericainc.com		Page: Page 4 of 4
Company: Ashland Inc				Job #:
Address: 5200 Blazer Parkway DS-4	Due Date Requested: STD	Analysis Requested		Preservation Codes:
City: Dublin	TAT Requested (days): Standard			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: OH, 43017				
Phone: 614-790-6146	PO #: 4502471936			Other:
Email: jevondracek@ashland.com, cassie.johnson@ehs support.com	WO #:			
Project Name: Hercules Glens Falls Annual Event	Project #: 68000956			
Site: Ashland Glens Falls	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B - Cyanide, Total	7196A - Chromium, hexavalent (field filtered)	6020A - Dissolved Total Chromium and Vanadium (field filtered)	2540C_Calcd - Total Dissolved Solids (field filtered)	2340C - Hardness as calcium carbonate	8260C - (MOD) TCL list OLM04.2 (Dichlorobenzenes [1,2-, 1,3-, 1,4-])	Total Number of containers	Special Instructions/Note:
			Preservation Code:				B	N	D	N	D	A		
EB_20221027	10/27/22	1100	G	Water	Y	N		X					1	
				Water										
				Water										
				Water										
				Water				TDL						
				Water										
				Water										
				Water				10-27-22						
				Water										
				Water										
				Water										
				Water										

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Eric Sines	10/27/22 1237	Antea	[signature]	10-27-22 1737	EETW
2	[signature]	10-27-22 1700	EETW	see psl		
3				[signature]	11/3/22 1015	EETW

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.6

JM

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 680-224213-1

Login Number: 224213
List Number: 2
Creator: McCaskey, Jonathan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 11/03/22 11:51 AM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Angel
Antea USA Inc.
5788 Wide Water Parkway
2nd Floor - ANTEA
Syracuse New York 13214

Generated 11/21/2022 9:14:08 PM

JOB DESCRIPTION

Hercules Glens Falls O&M Quarterly

JOB NUMBER

680-224230-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

my EOL

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Sample Summary

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-224230-1	SW_01_20221025	Water	10/25/22 10:13	10/28/22 09:58
680-224230-2	SW_02_20221025	Water	10/25/22 12:13	10/28/22 09:58
680-224230-3	SW_03_20221025	Water	10/25/22 14:18	10/28/22 09:58
680-224230-4	SW_04_20221025	Water	10/25/22 16:02	10/28/22 09:58
680-224230-5	DUP_20221025	Water	10/25/22 00:00	10/28/22 09:58
680-224230-6	EB_20221025	Water	10/25/22 17:00	10/28/22 09:58
680-224230-7	EB_20221024	Water	10/24/22 18:05	10/28/22 09:58
680-224230-8	AW_B18_20221024	Water	10/24/22 17:02	10/28/22 09:58
680-224230-9	MW_OB23_20221024	Water	10/24/22 14:26	10/28/22 09:58
680-224230-10	MW_OB19_20221024	Water	10/24/22 15:15	10/28/22 09:58
680-224230-11	DUP_20221024	Water	10/24/22 00:00	10/28/22 09:58
680-224230-12	MW_OB14_20221024	Water	10/24/22 16:38	10/28/22 09:58
680-224230-13	IP_4_20221024	Water	10/24/22 16:40	10/28/22 09:58
680-224230-14	MW_28_20221025	Water	10/25/22 12:30	10/28/22 09:58
680-224230-15	MW_OB26_20221027	Water	10/27/22 10:00	10/28/22 09:58
680-224230-16	AW_C11_20221025	Water	10/25/22 12:30	10/28/22 09:58
680-224230-17	AW_C2_20221025	Water	10/25/22 16:27	10/28/22 09:58
680-224230-18	AW_B4_20221025	Water	10/25/22 16:00	10/28/22 09:58
680-224230-19	SUMP_B_20221026	Water	10/26/22 15:15	10/28/22 09:58
680-224230-20	SUMP_A_20221026	Water	10/26/22 14:32	10/28/22 09:58
680-224230-21	EW_B5_20221026	Water	10/26/22 13:29	10/28/22 09:58
680-224230-22	DUP_20221026	Water	10/26/22 00:00	10/28/22 09:58
680-224230-23	EB_20221026	Water	10/26/22 15:00	10/28/22 09:58
680-224230-24	MW_25S_20221026	Water	10/26/22 12:28	10/28/22 09:58
680-224230-25	MW_OB33_20221026	Water	10/26/22 13:12	10/28/22 09:58
680-224230-26	MW_OB34_20221026	Water	10/26/22 13:25	10/28/22 09:58
680-224230-27	MW_OB32_20221026	Water	10/26/22 11:50	10/28/22 09:58
680-224230-28	MW_OB31_20221026	Water	10/26/22 09:50	10/28/22 09:58
680-224230-29	MW_OB30_20221026	Water	10/26/22 10:03	10/28/22 09:58
680-224230-30	AW_A11_20221026	Water	10/26/22 09:58	10/28/22 09:58
680-224230-31	MW_31_20221026	Water	10/26/22 12:14	10/28/22 09:58
680-224230-32	AW_A14_20221026	Water	10/26/22 10:06	10/28/22 09:58
680-224230-33	MW_OB25_20221026	Water	10/26/22 15:02	10/28/22 09:58
680-224230-34	EB_20221027	Water	10/27/22 11:00	10/28/22 09:58

Job ID: 680-224230-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-224230-1

Receipt
The samples were received on 10/28/2022 9:58 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice

Receipt Exceptions
Method 9012B: The following sample could not be located for cyanide analysis in Buffalo: MW_OB14_20221024 (680-224230-12).

GC/MS VOA
Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: AW_B18_20221024 (680-224230-8) and DUP_20221024 (680-224230-11). Elevated reporting limits (RLs) are provided.

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

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

General Chemistry
Method SM 2540C: The following samples were analyzed outside of analytical holding time due to miscommunication in the lab: SW_01_20221025 (680-224230-1), SW_02_20221025 (680-224230-2), SW_03_20221025 (680-224230-3), SW_03_20221025 (680-224230-3[MS]), SW_03_20221025 (680-224230-3[MSD]), SW_04_20221025 (680-224230-4), DUP_20221025 (680-224230-5) and EB_20221025 (680-224230-6).

Methods 9012B: The method blank for preparation batch 649064 contained Cyanide, Total above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of sample was not performed.EB_20221027 (680-224230-34)

Method 9012B: The method blank for analytical batch 480-649064 contained Cyanide, Total above the reporting limit (RL). Associated samples were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.MW_25S_20221026 (680-224230-24), MW_OB33_20221026 (680-224230-25), MW_31_20221026 (680-224230-31) and MW_OB25_20221026 (680-224230-33)

Method 9012B: Reanalysis of the following samples were performed outside of the analytical holding time due to failing QC in original batch : AW_B18_20221024 (680-224230-8), MW_OB19_20221024 (680-224230-10) and DUP_20221024 (680-224230-11). Both sets of data have been reported.

Method 9012B: The method blank for analytical batch 480-649256 contained Cyanide, Total above the reporting limit (RL). Associated samples were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.MW_OB23_20221024 (680-224230-9), IP_4_20221024 (680-224230-13), SUMP_B_20221026 (680-224230-19), MW_OB34_20221026 (680-224230-26) and MW_OB32_20221026 (680-224230-27)

Method 9012B: Reanalysis of the following samples were performed outside of the analytical holding time due to samples needing dilutions to bring results within calibration range : MW_OB23_20221024 (680-224230-9), IP_4_20221024 (680-224230-13), SUMP_B_20221026 (680-224230-19), MW_OB34_20221026 (680-224230-26) and MW_OB32_20221026 (680-224230-27).

Method 9012B: The method blank associated with analytical batch 480-648875 contained Cyanide, Total greater than one-half the reporting limit (RL). The samples were re-analyzed outside of analytical hold; both sets of data have been reported.

Method 9012B: The following sample was analyzed outside of analytical holding time due to matrix spike duplicate being missed on initial analysis: AW_C11_20221025 (680-224230-16[MSD]).

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

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SW_01_20221025
Lab Sample ID: 680-224230-1
Date Collected: 10/25/22 10:13
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	**0.69**	**J**	1.5	0.36	ug/L		11/04/22 09:31	11/04/22 16:27	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		11/04/22 09:31	11/04/22 16:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate (SM 2340C)	**36000**		4000	1100	ug/L			11/13/22 10:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**800**	**H**	10	4.0	mg/L			11/02/22 09:44	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SW_02_20221025
Lab Sample ID: 680-224230-2
Date Collected: 10/25/22 12:13
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	0.68	J	1.5	0.36	ug/L		11/04/22 09:31	11/04/22 16:29	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		11/04/22 09:31	11/04/22 16:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate (SM 2340C)	44000		4000	1100	ug/L			11/13/22 10:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	280	H	10	4.0	mg/L			11/02/22 09:44	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SW_03_20221025
Lab Sample ID: 680-224230-3
Date Collected: 10/25/22 14:18
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	**0.37**	**J**	1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:17	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		11/03/22 09:31	11/03/22 21:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate (SM 2340C)	**48000**		4000	1100	ug/L			11/13/22 10:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**540**	**H**	10	4.0	mg/L			11/02/22 09:44	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SW_04_20221025
Lab Sample ID: 680-224230-4
Date Collected: 10/25/22 16:02
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.5	U	1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:29	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		11/03/22 09:31	11/03/22 21:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate (SM 2340C)	56000		4000	1100	ug/L			11/13/22 10:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	530	H	10	4.0	mg/L			11/02/22 09:44	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: DUP_20221025
Lab Sample ID: 680-224230-5
Date Collected: 10/25/22 00:00
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.5	U	1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:31	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		11/03/22 09:31	11/03/22 21:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate (SM 2340C)	32000		4000	1100	ug/L			11/13/22 10:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	600	H	10	4.0	mg/L			11/02/22 09:44	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: EB_20221025
Lab Sample ID: 680-224230-6
Date Collected: 10/25/22 17:00
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	**0.51**	**J**	1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:33	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		11/03/22 09:31	11/03/22 21:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate (SM 2340C)	4000	U	4000	1100	ug/L			11/13/22 10:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**940**	**H**	10	4.0	mg/L			11/02/22 09:44	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: EB_20221024
Lab Sample ID: 680-224230-7

Date Collected: 10/24/22 18:05
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			11/02/22 18:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			11/02/22 18:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			11/02/22 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/02/22 18:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*11/02/22 18:00*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*11/02/22 18:00*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*11/02/22 18:00*	*1*

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.5	U	1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.010	U	0.010	0.0041	mg/L			11/07/22 20:16	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_B18_20221024
Lab Sample ID: 680-224230-8
Date Collected: 10/24/22 17:02
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	130	E	1.0	0.79	ug/L			11/02/22 18:22	1
1,3-Dichlorobenzene	2.5		1.0	0.78	ug/L			11/02/22 18:22	1
1,4-Dichlorobenzene	17		1.0	0.84	ug/L			11/02/22 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*108*		*80 - 120*		*11/02/22 18:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*11/02/22 18:22*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*11/02/22 18:22*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*11/02/22 18:22*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	130		2.0	1.6	ug/L			11/03/22 18:21	2
1,3-Dichlorobenzene	2.6		2.0	1.6	ug/L			11/03/22 18:21	2
1,4-Dichlorobenzene	17		2.0	1.7	ug/L			11/03/22 18:21	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/03/22 18:21*	*2*
1,2-Dichloroethane-d4 (Surr)	*112*		*77 - 120*		*11/03/22 18:21*	*2*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*11/03/22 18:21*	*2*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*11/03/22 18:21*	*2*

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.3	J	1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.10	B ^2	0.010	0.0041	mg/L			11/07/22 20:19	1
Cyanide, Total (SW846 9012B)	0.10	H B	0.010	0.0041	mg/L			11/08/22 18:10	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB23_20221024
Lab Sample ID: 680-224230-9
Date Collected: 10/24/22 14:26
Matrix: Water
Date Received: 10/28/22 09:58

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	1.8	B ^2	0.010	0.0041	mg/L			11/07/22 20:21	1
Cyanide, Total (SW846 9012B)	3.0	H B ^2	0.10	0.041	mg/L			11/09/22 19:24	10

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB19_20221024
Lab Sample ID: 680-224230-10
Date Collected: 10/24/22 15:15
Matrix: Water
Date Received: 10/28/22 09:58

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.11	B ^2	0.010	0.0041	mg/L			11/07/22 20:40	1
Cyanide, Total (SW846 9012B)	0.27	H B	0.10	0.041	mg/L			11/08/22 18:18	10

Client: Antea USA Inc.
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-224230-1

Client Sample ID: DUP_20221024

Date Collected: 10/24/22 00:00
Date Received: 10/28/22 09:58

Lab Sample ID: 680-224230-11

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	120	E	1.0	0.79	ug/L			11/02/22 18:44	1
1,3-Dichlorobenzene	2.4		1.0	0.78	ug/L			11/02/22 18:44	1
1,4-Dichlorobenzene	17		1.0	0.84	ug/L			11/02/22 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*80 - 120*		*11/02/22 18:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*11/02/22 18:44*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*11/02/22 18:44*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*11/02/22 18:44*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	120		2.0	1.6	ug/L			11/03/22 18:44	2
1,3-Dichlorobenzene	2.5		2.0	1.6	ug/L			11/03/22 18:44	2
1,4-Dichlorobenzene	17		2.0	1.7	ug/L			11/03/22 18:44	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/03/22 18:44*	*2*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*11/03/22 18:44*	*2*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*11/03/22 18:44*	*2*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*11/03/22 18:44*	*2*

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.2	J	1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.11	B ^2	0.010	0.0041	mg/L			11/07/22 20:45	1
Cyanide, Total (SW846 9012B)	0.11	H B	0.010	0.0041	mg/L			11/08/22 18:21	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB14_20221024
Lab Sample ID: 680-224230-12
Date Collected: 10/24/22 16:38
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	7.3		1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:50	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: IP_4_20221024
Lab Sample ID: 680-224230-13
Date Collected: 10/24/22 16:40
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	4.8		1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	1.4	B ^2	0.010	0.0041	mg/L			11/07/22 20:48	1
Cyanide, Total (SW846 9012B)	1.1	H B ^2	0.050	0.021	mg/L			11/09/22 19:27	5

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_28_20221025
Lab Sample ID: 680-224230-14
Date Collected: 10/25/22 12:30
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	9.9		1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.014	B	0.010	0.0041	mg/L			11/08/22 18:26	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB26_20221027
Lab Sample ID: 680-224230-15
Date Collected: 10/27/22 10:00
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	13		1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.15	B	0.010	0.0041	mg/L			11/08/22 18:28	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_C11_20221025
Lab Sample ID: 680-224230-16
Date Collected: 10/25/22 12:30
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	470		1.5	0.36	ug/L		11/03/22 09:31	11/03/22 21:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.021	B F1	0.010	0.0041	mg/L			11/08/22 18:45	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_C2_20221025
Lab Sample ID: 680-224230-17
Date Collected: 10/25/22 16:27
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	16		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.026	B	0.010	0.0041	mg/L			11/08/22 18:52	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_B4_20221025
Lab Sample ID: 680-224230-18
Date Collected: 10/25/22 16:00
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	6.0		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 15:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.080	B	0.010	0.0041	mg/L			11/08/22 18:55	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SUMP_B_20221026
Lab Sample ID: 680-224230-19
Date Collected: 10/26/22 15:15
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	150		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 15:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.66	B ^2	0.020	0.0082	mg/L			11/09/22 19:29	2

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SUMP_A_20221026
Lab Sample ID: 680-224230-20
Date Collected: 10/26/22 14:32
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	130		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 15:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.33	B	0.010	0.0041	mg/L			11/08/22 19:00	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: EW_B5_20221026
Lab Sample ID: 680-224230-21
Date Collected: 10/26/22 13:29
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	36000		75	18	ug/L		11/04/22 09:31	11/07/22 15:09	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.18	B	0.010	0.0041	mg/L			11/08/22 19:03	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: DUP_20221026
Lab Sample ID: 680-224230-22
Date Collected: 10/26/22 00:00
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	34000		75	18	ug/L		11/04/22 09:31	11/07/22 15:11	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.18	B	0.010	0.0041	mg/L			11/08/22 19:05	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: EB_20221026
Lab Sample ID: 680-224230-23
Date Collected: 10/26/22 15:00
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	**2.6**		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 15:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.010	U	0.010	0.0041	mg/L			11/08/22 19:08	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_25S_20221026
Lab Sample ID: 680-224230-24
Date Collected: 10/26/22 12:28
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	11		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 15:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.14	B	0.010	0.0041	mg/L			11/08/22 19:29	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB33_20221026
Lab Sample ID: 680-224230-25
Date Collected: 10/26/22 13:12
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	2200		15	3.6	ug/L		11/04/22 09:31	11/07/22 15:14	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.25	B	0.010	0.0041	mg/L			11/08/22 19:35	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB34_20221026
Lab Sample ID: 680-224230-26
Date Collected: 10/26/22 13:25
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	91		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 15:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.57	B ^2	0.020	0.0082	mg/L			11/09/22 19:32	2

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB32_20221026
Lab Sample ID: 680-224230-27
Date Collected: 10/26/22 11:50
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	75		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 16:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	3.4	B ^2	0.10	0.041	mg/L			11/09/22 19:35	10

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB31_20221026
Lab Sample ID: 680-224230-28
Date Collected: 10/26/22 09:50
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	100		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 16:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.067	B ^2	0.010	0.0041	mg/L			11/09/22 20:01	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB30_20221026
Lab Sample ID: 680-224230-29
Date Collected: 10/26/22 10:03
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	5300		30	7.2	ug/L		11/04/22 09:31	11/07/22 15:16	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.081	B ^2	0.010	0.0041	mg/L			11/09/22 20:04	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_A11_20221026
Lab Sample ID: 680-224230-30
Date Collected: 10/26/22 09:58
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	70		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 16:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.037	B ^2	0.010	0.0041	mg/L			11/09/22 20:07	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_31_20221026
Lab Sample ID: 680-224230-31
Date Collected: 10/26/22 12:14
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	9.5		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 16:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.22	B	0.010	0.0041	mg/L			11/08/22 20:05	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_A14_20221026
Lab Sample ID: 680-224230-32
Date Collected: 10/26/22 10:06
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	3.0		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 16:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.034	B ^2	0.010	0.0041	mg/L			11/09/22 20:10	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB25_20221026
Lab Sample ID: 680-224230-33
Date Collected: 10/26/22 15:02
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	520		1.5	0.36	ug/L		11/04/22 09:31	11/04/22 16:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.16	B	0.010	0.0041	mg/L			11/08/22 20:15	1

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: EB_20221027
Lab Sample ID: 680-224230-34
Date Collected: 10/27/22 11:00
Matrix: Water
Date Received: 10/28/22 09:58

Method: SW846 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.5	U	1.5	0.36	ug/L		11/04/22 09:31	11/04/22 16:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.010	U	0.010	0.0041	mg/L			11/08/22 20:17	1

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

Lab Sample ID: MB 480-648143/7
Matrix: Water
Analysis Batch: 648143

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			11/02/22 12:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			11/02/22 12:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			11/02/22 12:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*11/02/22 12:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*11/02/22 12:22*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*11/02/22 12:22*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*11/02/22 12:22*	*1*

Lab Sample ID: LCS 480-648143/5
Matrix: Water
Analysis Batch: 648143

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	25.0	24.4		ug/L		98	80 - 124
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	80 - 120

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

Lab Sample ID: MB 480-648267/7
Matrix: Water
Analysis Batch: 648267

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			11/03/22 12:29	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			11/03/22 12:29	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			11/03/22 12:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*11/03/22 12:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*11/03/22 12:29*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*11/03/22 12:29*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*11/03/22 12:29*	*1*

Lab Sample ID: LCS 480-648267/5
Matrix: Water
Analysis Batch: 648267

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	25.0	23.5		ug/L		94	80 - 124
1,3-Dichlorobenzene	25.0	24.4		ug/L		98	77 - 120
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	80 - 120

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	109		77 - 120
4-Bromofluorobenzene (Surr)	98		73 - 120
Dibromofluoromethane (Surr)	104		75 - 123

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 480-648212/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 648605 — **Prep Batch: 648212**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.5	U	1.5	0.36	ug/L		11/04/22 09:31	11/04/22 15:10	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		11/04/22 09:31	11/04/22 15:10	1

Lab Sample ID: LCS 480-648212/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 648605 — **Prep Batch: 648212**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Chromium	20.0	21.7		ug/L		108	80 - 120
Dissolved Vanadium	20.0	21.3		ug/L		107	80 - 120

Lab Sample ID: MB 480-648221/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 648513 — **Prep Batch: 648221**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Chromium	1.5	U	1.5	0.36	ug/L		11/03/22 09:31	11/03/22 20:46	1
Dissolved Vanadium	4.0	U	4.0	1.2	ug/L		11/03/22 09:31	11/03/22 20:46	1

Lab Sample ID: LCS 480-648221/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 648513 — **Prep Batch: 648221**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Chromium	20.0	21.1		ug/L		105	80 - 120
Dissolved Vanadium	20.0	21.1		ug/L		105	80 - 120

Lab Sample ID: 680-224230-19 MS — **Client Sample ID: SUMP_B_20221026**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 648605 — **Prep Batch: 648212**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Chromium	150		20.0	174	4	ug/L		120	75 - 125
Dissolved Vanadium	33		20.0	54.1		ug/L		107	75 - 125

Lab Sample ID: 680-224230-19 MSD — **Client Sample ID: SUMP_B_20221026**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 648605 — **Prep Batch: 648212**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dissolved Chromium	150		20.0	170	4	ug/L		95	75 - 125	3	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-224230-19 MSD
Matrix: Water
Analysis Batch: 648605

Client Sample ID: SUMP_B_20221026
Prep Type: Dissolved
Prep Batch: 648212

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dissolved Vanadium	33		20.0	52.7		ug/L		101	75 - 125	3	20

Lab Sample ID: 680-224230-3 MS
Matrix: Water
Analysis Batch: 648513

Client Sample ID: SW_03_20221025
Prep Type: Dissolved
Prep Batch: 648221

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Chromium	0.37	J	20.0	23.1		ug/L		114	75 - 125
Dissolved Vanadium	4.0	U	20.0	23.0		ug/L		115	75 - 125

Lab Sample ID: 680-224230-3 MSD
Matrix: Water
Analysis Batch: 648513

Client Sample ID: SW_03_20221025
Prep Type: Dissolved
Prep Batch: 648221

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dissolved Chromium	0.37	J	20.0	23.4		ug/L		115	75 - 125	1	20
Dissolved Vanadium	4.0	U	20.0	23.5		ug/L		117	75 - 125	2	20

Lab Sample ID: 680-224230-16 MS
Matrix: Water
Analysis Batch: 648513

Client Sample ID: AW_C11_20221025
Prep Type: Dissolved
Prep Batch: 648221

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Chromium	470		20.0	487	4	ug/L		101	75 - 125
Dissolved Vanadium	63		20.0	86.1		ug/L		113	75 - 125

Lab Sample ID: 680-224230-16 MSD
Matrix: Water
Analysis Batch: 648513

Client Sample ID: AW_C11_20221025
Prep Type: Dissolved
Prep Batch: 648221

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dissolved Chromium	470		20.0	499	4	ug/L		156	75 - 125	2	20
Dissolved Vanadium	63		20.0	86.9		ug/L		117	75 - 125	1	20

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-648875/160
Matrix: Water
Analysis Batch: 648875

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00840	J	0.010	0.0041	mg/L			11/07/22 19:18	1

Lab Sample ID: MB 480-648875/189
Matrix: Water
Analysis Batch: 648875

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00920	J	0.010	0.0041	mg/L			11/07/22 20:36	1

Method: 9012B - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: HLCS 480-648875/22
Matrix: Water
Analysis Batch: 648875

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

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.370		mg/L		92	90 - 110

Lab Sample ID: LCS 480-648875/161
Matrix: Water
Analysis Batch: 648875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.230		mg/L		92	90 - 110

Lab Sample ID: LCS 480-648875/190
Matrix: Water
Analysis Batch: 648875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.233		mg/L		93	90 - 110

Lab Sample ID: LCSD 480-648875/162
Matrix: Water
Analysis Batch: 648875

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	0.250	0.238		mg/L		95	90 - 110	1	15

Lab Sample ID: 680-224230-10 MS
Matrix: Water
Analysis Batch: 648875

Client Sample ID: MW_OB19_20221024
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.11	B ^2	0.100	0.198		mg/L		92	90 - 110

Lab Sample ID: MB 480-649064/133
Matrix: Water
Analysis Batch: 649064

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00860	J	0.010	0.0041	mg/L			11/08/22 18:05	1

Lab Sample ID: MB 480-649064/163
Matrix: Water
Analysis Batch: 649064

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0109		0.010	0.0041	mg/L			11/08/22 19:25	1

Lab Sample ID: MB 480-649064/193
Matrix: Water
Analysis Batch: 649064

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00740	J	0.010	0.0041	mg/L			11/08/22 20:45	1

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: HLCS 480-649064/22
Matrix: Water
Analysis Batch: 649064

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

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.406		mg/L		102	90 - 110

Lab Sample ID: LCS 480-649064/134
Matrix: Water
Analysis Batch: 649064

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.242		mg/L		97	90 - 110

Lab Sample ID: LCS 480-649064/164
Matrix: Water
Analysis Batch: 649064

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.242		mg/L		97	90 - 110

Lab Sample ID: LCS 480-649064/194
Matrix: Water
Analysis Batch: 649064

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.243		mg/L		97	90 - 110

Lab Sample ID: 680-224230-8 MS
Matrix: Water
Analysis Batch: 649064

Client Sample ID: AW_B18_20221024
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.10	H B	0.100	0.201		mg/L		97	90 - 110

Lab Sample ID: 680-224230-16 MS
Matrix: Water
Analysis Batch: 649064

Client Sample ID: AW_C11_20221025
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.021	B F1	0.100	0.105	F1	mg/L		84	90 - 110

Lab Sample ID: 680-224230-24 MS
Matrix: Water
Analysis Batch: 649064

Client Sample ID: MW_25S_20221026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.14	B	0.100	0.229		mg/L		93	90 - 110

Lab Sample ID: 680-224230-31 MS
Matrix: Water
Analysis Batch: 649064

Client Sample ID: MW_31_20221026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.22	B	0.100	0.322		mg/L		105	90 - 110

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: 680-224230-16 DU
Client Sample ID: AW_C11_20221025
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 649064

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.021	B F1	0.0195		mg/L		9	15

Lab Sample ID: 680-224230-31 DU
Client Sample ID: MW_31_20221026
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 649064

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.22	B	0.218		mg/L		0.1	15

Lab Sample ID: MB 480-649256/133
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 649256

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0121		0.010	0.0041	mg/L			11/09/22 18:32	1

Lab Sample ID: MB 480-649256/162
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 649256

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0104		0.010	0.0041	mg/L			11/09/22 19:49	1

Lab Sample ID: HLCS 480-649256/22
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 649256

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.390		mg/L		97	90 - 110

Lab Sample ID: LCS 480-649256/134
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 649256

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.241		mg/L		96	90 - 110

Lab Sample ID: LCS 480-649256/163
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 649256

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.236		mg/L		95	90 - 110

Lab Sample ID: 680-224230-16 MSD
Client Sample ID: AW_C11_20221025
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 649256

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	0.021	B F1	0.100	0.106	H F1	mg/L		85	90 - 110	1	15

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 480-649748/27
Matrix: Water
Analysis Batch: 649748

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	2000	U	2000	530	ug/L			11/13/22 10:45	1

Lab Sample ID: MB 480-649748/3
Matrix: Water
Analysis Batch: 649748

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	2000	U	2000	530	ug/L			11/13/22 10:45	1

Lab Sample ID: LCS 480-649748/28
Matrix: Water
Analysis Batch: 649748

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hardness as calcium carbonate			277000	272000		ug/L		98	90 - 110		

Lab Sample ID: LCS 480-649748/4
Matrix: Water
Analysis Batch: 649748

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hardness as calcium carbonate			277000	284000		ug/L		103	90 - 110		

Lab Sample ID: 680-224230-3 MS
Matrix: Water
Analysis Batch: 649748

Client Sample ID: SW_03_20221025
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Hardness as calcium carbonate	48000		200000	252000		ug/L		102	74 - 130		

Lab Sample ID: 680-224230-3 MSD
Matrix: Water
Analysis Batch: 649748

Client Sample ID: SW_03_20221025
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hardness as calcium carbonate	48000		200000	256000		ug/L		104	74 - 130	2	15

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 480-648107/1
Matrix: Water
Analysis Batch: 648107

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	U	10	4.0	mg/L			11/02/22 09:44	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 480-648107/2
Matrix: Water
Analysis Batch: 648107

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	589	586		mg/L		99	85 - 115

QC Association Summary

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

GC/MS VOA

Analysis Batch: 648143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-7	EB_20221024	Total/NA	Water	8260C	
680-224230-8	AW_B18_20221024	Total/NA	Water	8260C	
680-224230-11	DUP_20221024	Total/NA	Water	8260C	
MB 480-648143/7	Method Blank	Total/NA	Water	8260C	
LCS 480-648143/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 648267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-8 - DL	AW_B18_20221024	Total/NA	Water	8260C	
680-224230-11 - DL	DUP_20221024	Total/NA	Water	8260C	
MB 480-648267/7	Method Blank	Total/NA	Water	8260C	
LCS 480-648267/5	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 648212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-1	SW_01_20221025	Dissolved	Water	3020A	
680-224230-2	SW_02_20221025	Dissolved	Water	3020A	
680-224230-17	AW_C2_20221025	Dissolved	Water	3020A	
680-224230-18	AW_B4_20221025	Dissolved	Water	3020A	
680-224230-19	SUMP_B_20221026	Dissolved	Water	3020A	
680-224230-20	SUMP_A_20221026	Dissolved	Water	3020A	
680-224230-21	EW_B5_20221026	Dissolved	Water	3020A	
680-224230-22	DUP_20221026	Dissolved	Water	3020A	
680-224230-23	EB_20221026	Dissolved	Water	3020A	
680-224230-24	MW_25S_20221026	Dissolved	Water	3020A	
680-224230-25	MW_OB33_20221026	Dissolved	Water	3020A	
680-224230-26	MW_OB34_20221026	Dissolved	Water	3020A	
680-224230-27	MW_OB32_20221026	Dissolved	Water	3020A	
680-224230-28	MW_OB31_20221026	Dissolved	Water	3020A	
680-224230-29	MW_OB30_20221026	Dissolved	Water	3020A	
680-224230-30	AW_A11_20221026	Dissolved	Water	3020A	
680-224230-31	MW_31_20221026	Dissolved	Water	3020A	
680-224230-32	AW_A14_20221026	Dissolved	Water	3020A	
680-224230-33	MW_OB25_20221026	Dissolved	Water	3020A	
680-224230-34	EB_20221027	Dissolved	Water	3020A	
MB 480-648212/1-A	Method Blank	Total/NA	Water	3020A	
LCS 480-648212/2-A	Lab Control Sample	Total/NA	Water	3020A	
680-224230-19 MS	SUMP_B_20221026	Dissolved	Water	3020A	
680-224230-19 MSD	SUMP_B_20221026	Dissolved	Water	3020A	

Prep Batch: 648221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-3	SW_03_20221025	Dissolved	Water	3020A	
680-224230-4	SW_04_20221025	Dissolved	Water	3020A	
680-224230-5	DUP_20221025	Dissolved	Water	3020A	
680-224230-6	EB_20221025	Dissolved	Water	3020A	
680-224230-7	EB_20221024	Dissolved	Water	3020A	
680-224230-8	AW_B18_20221024	Dissolved	Water	3020A	
680-224230-11	DUP_20221024	Dissolved	Water	3020A	

Metals (Continued)

Prep Batch: 648221 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-12	MW_OB14_20221024	Dissolved	Water	3020A	
680-224230-13	IP_4_20221024	Dissolved	Water	3020A	
680-224230-14	MW_28_20221025	Dissolved	Water	3020A	
680-224230-15	MW_OB26_20221027	Dissolved	Water	3020A	
680-224230-16	AW_C11_20221025	Dissolved	Water	3020A	
MB 480-648221/1-A	Method Blank	Total/NA	Water	3020A	
LCS 480-648221/2-A	Lab Control Sample	Total/NA	Water	3020A	
680-224230-3 MS	SW_03_20221025	Dissolved	Water	3020A	
680-224230-3 MSD	SW_03_20221025	Dissolved	Water	3020A	
680-224230-16 MS	AW_C11_20221025	Dissolved	Water	3020A	
680-224230-16 MSD	AW_C11_20221025	Dissolved	Water	3020A	

Analysis Batch: 648513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-3	SW_03_20221025	Dissolved	Water	6020A	648221
680-224230-4	SW_04_20221025	Dissolved	Water	6020A	648221
680-224230-5	DUP_20221025	Dissolved	Water	6020A	648221
680-224230-6	EB_20221025	Dissolved	Water	6020A	648221
680-224230-7	EB_20221024	Dissolved	Water	6020A	648221
680-224230-8	AW_B18_20221024	Dissolved	Water	6020A	648221
680-224230-11	DUP_20221024	Dissolved	Water	6020A	648221
680-224230-12	MW_OB14_20221024	Dissolved	Water	6020A	648221
680-224230-13	IP_4_20221024	Dissolved	Water	6020A	648221
680-224230-14	MW_28_20221025	Dissolved	Water	6020A	648221
680-224230-15	MW_OB26_20221027	Dissolved	Water	6020A	648221
680-224230-16	AW_C11_20221025	Dissolved	Water	6020A	648221
MB 480-648221/1-A	Method Blank	Total/NA	Water	6020A	648221
LCS 480-648221/2-A	Lab Control Sample	Total/NA	Water	6020A	648221
680-224230-3 MS	SW_03_20221025	Dissolved	Water	6020A	648221
680-224230-3 MSD	SW_03_20221025	Dissolved	Water	6020A	648221
680-224230-16 MS	AW_C11_20221025	Dissolved	Water	6020A	648221
680-224230-16 MSD	AW_C11_20221025	Dissolved	Water	6020A	648221

Analysis Batch: 648605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-1	SW_01_20221025	Dissolved	Water	6020A	648212
680-224230-2	SW_02_20221025	Dissolved	Water	6020A	648212
680-224230-17	AW_C2_20221025	Dissolved	Water	6020A	648212
680-224230-18	AW_B4_20221025	Dissolved	Water	6020A	648212
680-224230-19	SUMP_B_20221026	Dissolved	Water	6020A	648212
680-224230-20	SUMP_A_20221026	Dissolved	Water	6020A	648212
680-224230-23	EB_20221026	Dissolved	Water	6020A	648212
680-224230-24	MW_25S_20221026	Dissolved	Water	6020A	648212
680-224230-26	MW_OB34_20221026	Dissolved	Water	6020A	648212
680-224230-27	MW_OB32_20221026	Dissolved	Water	6020A	648212
680-224230-28	MW_OB31_20221026	Dissolved	Water	6020A	648212
680-224230-30	AW_A11_20221026	Dissolved	Water	6020A	648212
680-224230-31	MW_31_20221026	Dissolved	Water	6020A	648212
680-224230-32	AW_A14_20221026	Dissolved	Water	6020A	648212
680-224230-33	MW_OB25_20221026	Dissolved	Water	6020A	648212
680-224230-34	EB_20221027	Dissolved	Water	6020A	648212

Metals (Continued)

Analysis Batch: 648605 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-648212/1-A	Method Blank	Total/NA	Water	6020A	648212
LCS 480-648212/2-A	Lab Control Sample	Total/NA	Water	6020A	648212
680-224230-19 MS	SUMP_B_20221026	Dissolved	Water	6020A	648212
680-224230-19 MSD	SUMP_B_20221026	Dissolved	Water	6020A	648212

Analysis Batch: 648950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-21	EW_B5_20221026	Dissolved	Water	6020A	648212
680-224230-22	DUP_20221026	Dissolved	Water	6020A	648212
680-224230-25	MW_OB33_20221026	Dissolved	Water	6020A	648212
680-224230-29	MW_OB30_20221026	Dissolved	Water	6020A	648212

General Chemistry

Analysis Batch: 648107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-1	SW_01_20221025	Dissolved	Water	SM 2540C	
680-224230-2	SW_02_20221025	Dissolved	Water	SM 2540C	
680-224230-3	SW_03_20221025	Dissolved	Water	SM 2540C	
680-224230-4	SW_04_20221025	Dissolved	Water	SM 2540C	
680-224230-5	DUP_20221025	Dissolved	Water	SM 2540C	
680-224230-6	EB_20221025	Dissolved	Water	SM 2540C	
MB 480-648107/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 480-648107/2	Lab Control Sample	Total/NA	Water	SM 2540C	
680-224230-3 MS	SW_03_20221025	Dissolved	Water	SM 2540C	
680-224230-3 MSD	SW_03_20221025	Dissolved	Water	SM 2540C	

Analysis Batch: 648875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-7	EB_20221024	Total/NA	Water	9012B	
680-224230-8	AW_B18_20221024	Total/NA	Water	9012B	
680-224230-9	MW_OB23_20221024	Total/NA	Water	9012B	
680-224230-10	MW_OB19_20221024	Total/NA	Water	9012B	
680-224230-11	DUP_20221024	Total/NA	Water	9012B	
680-224230-13	IP_4_20221024	Total/NA	Water	9012B	
MB 480-648875/160	Method Blank	Total/NA	Water	9012B	
MB 480-648875/189	Method Blank	Total/NA	Water	9012B	
HLCS 480-648875/22	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-648875/161	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-648875/190	Lab Control Sample	Total/NA	Water	9012B	
LCSD 480-648875/162	Lab Control Sample Dup	Total/NA	Water	9012B	
680-224230-10 MS	MW_OB19_20221024	Total/NA	Water	9012B	

Analysis Batch: 649064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-8	AW_B18_20221024	Total/NA	Water	9012B	
680-224230-10	MW_OB19_20221024	Total/NA	Water	9012B	
680-224230-11	DUP_20221024	Total/NA	Water	9012B	
680-224230-14	MW_28_20221025	Total/NA	Water	9012B	
680-224230-15	MW_OB26_20221027	Total/NA	Water	9012B	
680-224230-16	AW_C11_20221025	Total/NA	Water	9012B	

General Chemistry (Continued)

Analysis Batch: 649064 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-17	AW_C2_20221025	Total/NA	Water	9012B	
680-224230-18	AW_B4_20221025	Total/NA	Water	9012B	
680-224230-20	SUMP_A_20221026	Total/NA	Water	9012B	
680-224230-21	EW_B5_20221026	Total/NA	Water	9012B	
680-224230-22	DUP_20221026	Total/NA	Water	9012B	
680-224230-23	EB_20221026	Total/NA	Water	9012B	
680-224230-24	MW_25S_20221026	Total/NA	Water	9012B	
680-224230-25	MW_OB33_20221026	Total/NA	Water	9012B	
680-224230-31	MW_31_20221026	Total/NA	Water	9012B	
680-224230-33	MW_OB25_20221026	Total/NA	Water	9012B	
680-224230-34	EB_20221027	Total/NA	Water	9012B	
MB 480-649064/133	Method Blank	Total/NA	Water	9012B	
MB 480-649064/163	Method Blank	Total/NA	Water	9012B	
MB 480-649064/193	Method Blank	Total/NA	Water	9012B	
HLCS 480-649064/22	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-649064/134	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-649064/164	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-649064/194	Lab Control Sample	Total/NA	Water	9012B	
680-224230-8 MS	AW_B18_20221024	Total/NA	Water	9012B	
680-224230-16 MS	AW_C11_20221025	Total/NA	Water	9012B	
680-224230-24 MS	MW_25S_20221026	Total/NA	Water	9012B	
680-224230-31 MS	MW_31_20221026	Total/NA	Water	9012B	
680-224230-16 DU	AW_C11_20221025	Total/NA	Water	9012B	
680-224230-31 DU	MW_31_20221026	Total/NA	Water	9012B	

Analysis Batch: 649256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-9	MW_OB23_20221024	Total/NA	Water	9012B	
680-224230-13	IP_4_20221024	Total/NA	Water	9012B	
680-224230-19	SUMP_B_20221026	Total/NA	Water	9012B	
680-224230-26	MW_OB34_20221026	Total/NA	Water	9012B	
680-224230-27	MW_OB32_20221026	Total/NA	Water	9012B	
680-224230-28	MW_OB31_20221026	Total/NA	Water	9012B	
680-224230-29	MW_OB30_20221026	Total/NA	Water	9012B	
680-224230-30	AW_A11_20221026	Total/NA	Water	9012B	
680-224230-32	AW_A14_20221026	Total/NA	Water	9012B	
MB 480-649256/133	Method Blank	Total/NA	Water	9012B	
MB 480-649256/162	Method Blank	Total/NA	Water	9012B	
HLCS 480-649256/22	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-649256/134	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-649256/163	Lab Control Sample	Total/NA	Water	9012B	
680-224230-16 MSD	AW_C11_20221025	Total/NA	Water	9012B	

Analysis Batch: 649748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-224230-1	SW_01_20221025	Total/NA	Water	SM 2340C	
680-224230-2	SW_02_20221025	Total/NA	Water	SM 2340C	
680-224230-3	SW_03_20221025	Total/NA	Water	SM 2340C	
680-224230-4	SW_04_20221025	Total/NA	Water	SM 2340C	
680-224230-5	DUP_20221025	Total/NA	Water	SM 2340C	
680-224230-6	EB_20221025	Total/NA	Water	SM 2340C	

General Chemistry (Continued)

Analysis Batch: 649748 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-649748/27	Method Blank	Total/NA	Water	SM 2340C	
MB 480-649748/3	Method Blank	Total/NA	Water	SM 2340C	
LCS 480-649748/28	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-649748/4	Lab Control Sample	Total/NA	Water	SM 2340C	
680-224230-3 MS	SW_03_20221025	Total/NA	Water	SM 2340C	
680-224230-3 MSD	SW_03_20221025	Total/NA	Water	SM 2340C	

Lab Chronicle

Client: Antea USA Inc. Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: SW_01_20221025 — Lab Sample ID: 680-224230-1

Date Collected: 10/25/22 10:13 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 16:27
Total/NA	Analysis	SM 2340C		1	649748	DLG	EET BUF	11/13/22 10:45
Dissolved	Analysis	SM 2540C		1	648107	SAK	EET BUF	11/02/22 09:44

Client Sample ID: SW_02_20221025 — Lab Sample ID: 680-224230-2

Date Collected: 10/25/22 12:13 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 16:29
Total/NA	Analysis	SM 2340C		1	649748	DLG	EET BUF	11/13/22 10:45
Dissolved	Analysis	SM 2540C		1	648107	SAK	EET BUF	11/02/22 09:44

Client Sample ID: SW_03_20221025 — Lab Sample ID: 680-224230-3

Date Collected: 10/25/22 14:18 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:17
Total/NA	Analysis	SM 2340C		1	649748	DLG	EET BUF	11/13/22 10:45
Dissolved	Analysis	SM 2540C		1	648107	SAK	EET BUF	11/02/22 09:44

Client Sample ID: SW_04_20221025 — Lab Sample ID: 680-224230-4

Date Collected: 10/25/22 16:02 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:29
Total/NA	Analysis	SM 2340C		1	649748	DLG	EET BUF	11/13/22 10:45
Dissolved	Analysis	SM 2540C		1	648107	SAK	EET BUF	11/02/22 09:44

Client Sample ID: DUP_20221025 — Lab Sample ID: 680-224230-5

Date Collected: 10/25/22 00:00 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:31
Total/NA	Analysis	SM 2340C		1	649748	DLG	EET BUF	11/13/22 10:45
Dissolved	Analysis	SM 2540C		1	648107	SAK	EET BUF	11/02/22 09:44

Lab Chronicle

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: EB_20221025
Lab Sample ID: 680-224230-6
Date Collected: 10/25/22 17:00
Matrix: Water
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:33
Total/NA	Analysis	SM 2340C		1	649748	DLG	EET BUF	11/13/22 10:45
Dissolved	Analysis	SM 2540C		1	648107	SAK	EET BUF	11/02/22 09:44

Client Sample ID: EB_20221024
Lab Sample ID: 680-224230-7
Date Collected: 10/24/22 18:05
Matrix: Water
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	648143	CB	EET BUF	11/02/22 18:00
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:43
Total/NA	Analysis	9012B		1	648875	CLT	EET BUF	11/07/22 20:16

Client Sample ID: AW_B18_20221024
Lab Sample ID: 680-224230-8
Date Collected: 10/24/22 17:02
Matrix: Water
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C	DL	2	648267	CR	EET BUF	11/03/22 18:21
Total/NA	Analysis	8260C		1	648143	CB	EET BUF	11/02/22 18:22
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:45
Total/NA	Analysis	9012B		1	648875	CLT	EET BUF	11/07/22 20:19
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 18:10

Client Sample ID: MW_OB23_20221024
Lab Sample ID: 680-224230-9
Date Collected: 10/24/22 14:26
Matrix: Water
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9012B		1	648875	CLT	EET BUF	11/07/22 20:21
Total/NA	Analysis	9012B		10	649256	CLT	EET BUF	11/09/22 19:24

Client Sample ID: MW_OB19_20221024
Lab Sample ID: 680-224230-10
Date Collected: 10/24/22 15:15
Matrix: Water
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9012B		1	648875	CLT	EET BUF	11/07/22 20:40
Total/NA	Analysis	9012B		10	649064	CLT	EET BUF	11/08/22 18:18

Lab Chronicle

Client: Antea USA Inc. Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: DUP_20221024 — Lab Sample ID: 680-224230-11

Date Collected: 10/24/22 00:00 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C	DL	2	648267	CR	EET BUF	11/03/22 18:44
Total/NA	Analysis	8260C		1	648143	CB	EET BUF	11/02/22 18:44
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:48
Total/NA	Analysis	9012B		1	648875	CLT	EET BUF	11/07/22 20:45
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 18:21

Client Sample ID: MW_OB14_20221024 — Lab Sample ID: 680-224230-12

Date Collected: 10/24/22 16:38 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:50

Client Sample ID: IP_4_20221024 — Lab Sample ID: 680-224230-13

Date Collected: 10/24/22 16:40 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:52
Total/NA	Analysis	9012B		1	648875	CLT	EET BUF	11/07/22 20:48
Total/NA	Analysis	9012B		5	649256	CLT	EET BUF	11/09/22 19:27

Client Sample ID: MW_28_20221025 — Lab Sample ID: 680-224230-14

Date Collected: 10/25/22 12:30 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:55
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 18:26

Client Sample ID: MW_OB26_20221027 — Lab Sample ID: 680-224230-15

Date Collected: 10/27/22 10:00 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:57
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 18:28

Lab Chronicle

Client: Antea USA Inc. Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: AW_C11_20221025 — Lab Sample ID: 680-224230-16

Date Collected: 10/25/22 12:30 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648221	VAK	EET BUF	11/03/22 09:31
Dissolved	Analysis	6020A		1	648513	BMB	EET BUF	11/03/22 21:59
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 18:45

Client Sample ID: AW_C2_20221025 — Lab Sample ID: 680-224230-17

Date Collected: 10/25/22 16:27 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 15:14
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 18:52

Client Sample ID: AW_B4_20221025 — Lab Sample ID: 680-224230-18

Date Collected: 10/25/22 16:00 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 15:24
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 18:55

Client Sample ID: SUMP_B_20221026 — Lab Sample ID: 680-224230-19

Date Collected: 10/26/22 15:15 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 15:26
Total/NA	Analysis	9012B		2	649256	CLT	EET BUF	11/09/22 19:29

Client Sample ID: SUMP_A_20221026 — Lab Sample ID: 680-224230-20

Date Collected: 10/26/22 14:32 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 15:38
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 19:00

Lab Chronicle

Client: Antea USA Inc. Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: EW_B5_20221026 — Lab Sample ID: 680-224230-21

Date Collected: 10/26/22 13:29 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		50	648950	BMB	EET BUF	11/07/22 15:09
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 19:03

Client Sample ID: DUP_20221026 — Lab Sample ID: 680-224230-22

Date Collected: 10/26/22 00:00 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		50	648950	BMB	EET BUF	11/07/22 15:11
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 19:05

Client Sample ID: EB_20221026 — Lab Sample ID: 680-224230-23

Date Collected: 10/26/22 15:00 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 15:44
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 19:08

Client Sample ID: MW_25S_20221026 — Lab Sample ID: 680-224230-24

Date Collected: 10/26/22 12:28 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 15:54
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 19:29

Client Sample ID: MW_OB33_20221026 — Lab Sample ID: 680-224230-25

Date Collected: 10/26/22 13:12 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		10	648950	BMB	EET BUF	11/07/22 15:14
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 19:35

Lab Chronicle

Client: Antea USA Inc. Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_OB34_20221026 — Lab Sample ID: 680-224230-26

Date Collected: 10/26/22 13:25 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 15:59
Total/NA	Analysis	9012B		2	649256	CLT	EET BUF	11/09/22 19:32

Client Sample ID: MW_OB32_20221026 — Lab Sample ID: 680-224230-27

Date Collected: 10/26/22 11:50 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 16:01
Total/NA	Analysis	9012B		10	649256	CLT	EET BUF	11/09/22 19:35

Client Sample ID: MW_OB31_20221026 — Lab Sample ID: 680-224230-28

Date Collected: 10/26/22 09:50 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 16:03
Total/NA	Analysis	9012B		1	649256	CLT	EET BUF	11/09/22 20:01

Client Sample ID: MW_OB30_20221026 — Lab Sample ID: 680-224230-29

Date Collected: 10/26/22 10:03 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		20	648950	BMB	EET BUF	11/07/22 15:16
Total/NA	Analysis	9012B		1	649256	CLT	EET BUF	11/09/22 20:04

Client Sample ID: AW_A11_20221026 — Lab Sample ID: 680-224230-30

Date Collected: 10/26/22 09:58 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 16:08
Total/NA	Analysis	9012B		1	649256	CLT	EET BUF	11/09/22 20:07

Lab Chronicle

Client: Antea USA Inc. Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: MW_31_20221026 — Lab Sample ID: 680-224230-31

Date Collected: 10/26/22 12:14 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 16:10
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 20:05

Client Sample ID: AW_A14_20221026 — Lab Sample ID: 680-224230-32

Date Collected: 10/26/22 10:06 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 16:13
Total/NA	Analysis	9012B		1	649256	CLT	EET BUF	11/09/22 20:10

Client Sample ID: MW_OB25_20221026 — Lab Sample ID: 680-224230-33

Date Collected: 10/26/22 15:02 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 16:15
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 20:15

Client Sample ID: EB_20221027 — Lab Sample ID: 680-224230-34

Date Collected: 10/27/22 11:00 — **Matrix: Water**
Date Received: 10/28/22 09:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3020A			648212	VAK	EET BUF	11/04/22 09:31
Dissolved	Analysis	6020A		1	648605	BMB	EET BUF	11/04/22 16:24
Total/NA	Analysis	9012B		1	649064	CLT	EET BUF	11/08/22 20:17

Laboratory References:

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

Accreditation/Certification Summary

Client: Antea USA Inc. Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

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

Analysis Method	Prep Method	Matrix	Analyte
SM 2340C		Water	Hardness as calcium carbonate

Method Summary

Client: Antea USA Inc.
Job ID: 680-224230-1
Project/Site: Hercules Glens Falls O&M Quarterly

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
6020A	Metals (ICP/MS)	SW846	EET BUF
9012B	Cyanide, Total and/or Amenable	SW846	EET BUF
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	EET BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET BUF
3020A	Preparation, Total Metals	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

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

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Garrett Crowe	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-76228-31646.1
Client Contact: Mr. Jim Vondracek	Phone: 8609922636	E-Mail: eddie.barnett@testamericainc.com		Page: Page 1 of 4
Company: Ashland Inc				Job #:
Address: 5200 Blazer Parkway DS-4	Due Date Requested: STD			
City: Dublin	TAT Requested (days): Standard			
State, Zip: OH, 43017				
Phone: 614-790-6146	PO #: 4502471936			
Email: jevondracek@ashland.com, cassie.johnson@ehs support.com	WO #:			
Project Name: Hercules Glens Falls Annual Event	Project #: 68000956			
Site: Ashland Glens Falls	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate

680-224230 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B - Cyanide, Total	7196A - Chromium, hexavalent (field filtered)	6020A - Dissolved Total Chromium and Vanadium (field filtered)	2540C_Calcd - Total Dissolved Solids (field filtered)	2340C - Hardness as calcium carbonate	8260C - (MOD) TCL list OLM04.2 (Dichlorobenzenes [1,2-, 1,3-, 1,4-])	Total N	Special Instructions/Note:
			Preservation Code:				B	N	D	N	D	A		
SW-01_20221025	10/25/22	1013	G	Water	Y	N			X	X	X		3	
SW-02_20221025		1213		Water	Y	N			X	X	X		3	
SW-03_20221025		1418		Water	Y	Y			X	X	X		6	MS/MSD
SW-04_20221025		1602		Water	Y	N			X	X	X		3	
DUP_20221025		—		Water	Y	N			X	X	X		3	
EB_20221025	10/25/22	1700		Water	Y	N	X		X	X	X		4	[redacted]
EB_20221024	10/24/22	1805		Water	Y	N	X		X			X	5	no vanadium
AW-B18_20221024	10/24/22	1702		Water	Y	Y	X		X			X	6	no vanadium
MW-0B23_20221024	10/24/22	1426		Water	N	N	X						1	
MW-0B19_20221019	10/24/22	1515		Water	N	N	X						1	
DUP_20221024	10/24/22	—	G	Water	Y	N	X		X			X	5	no vanadium

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	10/27/22 1237	Antea	[signature]	10-27-22 1237	EETN
2	[signature]	10-27-22 1700	EETN	[signature] 10.0 lb	10/28/22 900	TA
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Garrett Crowe	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-76228-31646.1
Client Contact: Mr. Jim Vondracek	Phone: 860-997-7636	E-Mail: eddie.barnett@testamericainc.com		Page: Page 2 of 4
Company: Ashland Inc				Job #:
Address: 5200 Blazer Parkway DS-4	Due Date Requested: STD			
City: Dublin	TAT Requested (days): Standard			
State, Zip: OH, 43017				
Phone: 614-790-6146	PO #: 4502471936			
Email: jevondracek@ashland.com, cassie.johnson@ehs support.com	WO #:			
Project Name: Hercules Glens Falls Annual Event	Project #: 68000956			
Site: Ashland Glens Falls	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B - Cyanide, Total	7196A - Chromium, hexavalent (field filtered)	6020A - Dissolved Total Chromium and [redacted] (field filtered)	2540C_Calcd - Total Dissolved Solids (field filtered)	2340C - Hardness as calcium carbonate	8260C - (MOD) TCL list OLM04.2 (Dichlorobenzenes [1,2-, 1,3-, 1,4-])	Total Number of containers	Special Instructions/Note:
			Preservation Code:				B	N	D	N	D	A		
MW-0B14_20221024	10/24/22	1638	G	Water	Y	N	X		X				2	
IP-4_20221024	10/24/22	1640	G	Water	Y	N	X		X				2	
MW-28_20221025	10/25/22	1230	G	Water	Y	N	X		X				2	
MW-0B26_20221027	10/27/22	1000	G	Water	Y	N	X		X				2	
AW-C11_20221025	10/25/22	1230	G	Water	Y	Y	X		X				4	MS/MSD
AW-C2_20221025	10/25/22	1627	G	Water	Y	N	X		X				2	
AW-B4_20221025	10/25/22	1600	G	Water	Y	N	X		X				2	
SUMP-B_20221026	10/26/22	1515	G	Water	Y	N	X		X				2	
SUMP-A_20221026	10/26/22	1432	G	Water	Y	N	X		X				2	
EW-B5_20221026	10/26/22	1329	G	Water	Y	N	X		X				2	
DUP_20221026	10/26/22	—	G	Water	Y	N	X		X				2	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 10/27/22 1237	Company ADEA	Received by: [signature]	Date/Time: 10-27-22 1237	Company EETN
Relinquished by: [signature]	Date/Time: 10-27-22 1700	Company EETN	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

11/21/2022

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Garrett Crowe	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-76228-31646.1
Client Contact: Mr. Jim Vondracek	Phone: 860-992-2656	E-Mail: eddie.barnett@testamericainc.com		Page: Page 3 of 4
Company: Ashland Inc				Job #:
Address: 5200 Blazer Parkway DS-4	Due Date Requested: ~~ST~~STD			
City: Dublin	TAT Requested (days): Standard			
State, Zip: OH, 43017				
Phone: 614-790-6146	PO #: 4502471936			
Email: jevondracek@ashland.com, cassie.johnson@ehs support.com	WO #:			
Project Name: Hercules Glens Falls Annual Event	Project #: 68000956			
Site: Ashland Glens Falls	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B - Cyanide, Total	7196A - Chromium, hexavalent (field filtered)	6020A - Dissolved Total Chromium and ~~Vanadium~~ (field filtered)	2540C_Calcd - Total Dissolved Solids (field filtered)	2340C - Hardness as calcium carbonate	8260C - (MOD) TCL list OLM04.2 (Dichlorobenzenes [1,2-, 1,3-, 1,4-])	Total Number of containers	Special Instructions/Note:
			Preservation Code:				B	N	D	N	D	A		
EB_20221026	10/26/22	1500	G	Water	Y	N	X		X				2	
MW-25S_20221026	10/26/22	1228	G	Water	Y	N	X		X				2	
MW-0B33_20221026	10/26/22	1312	G	Water	Y	N	X		X				2	
MW-0B34_20221026	10/26/22	1325	G	Water	Y	N	X		X				2	
MW-0B22_20221026	10/26/22	1150	G	Water	Y	N	X		X				2	
MW-0B31_20221026	10/26/22	0950	G	Water	Y	N	X		X				2	
MW-0B30_20221027	10/27/22	1003	G	Water	Y	N	X		X				2	
AW-A11_20221026	10/26/22	0958	G	Water	Y	N	X		X				2	
MW-31_20221026	10/26/22	1214	G	Water	Y	N	X		X				2	
AW-A14_20221026	10/26/22	1006	G	Water	Y	N	X		X				2	
MW-0B25_20221026	10/26/22	1502	G	Water	Y	N	X		X				2	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Garrett Crowe	10/27/22 1237	Antea	[signature]	10-27-22 1237	EETN
2	[signature]	10-27-22 1700	EETN	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

11/21/2022

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Garrett Crowe	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-76228-31646.1
Client Contact: Mr. Jim Vondracek	Phone: 860-992-7636	E-Mail: eddie.barnett@testamericainc.com		Page: Page 1 of 1
Company: Ashland Inc				Job #:
Address: 5200 Blazer Parkway DS-4	Due Date Requested: STD			
City: Dublin	TAT Requested (days): Standard			
State, Zip: OH, 43017				
Phone: 614-790-6146	PO #: 4502471936			
Email: jevondracek@ashland.com, cassie.johnson@ehs support.com	WO #:			
Project Name: Hercules Glens Falls Annual Event	Project #: 68000956			
Site: Ashland Glens Falls	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B - Cyanide, Total	7196A - Chromium, hexavalent (field filtered)	6020A - Dissolved Total Chromium and Vanadium (field filtered)	2540C_Calcd - Total Dissolved Solids (field filtered)	2340C - Hardness as calcium carbonate	8260C - (MOD) TCL list OLM04.2 (Dichlorobenzenes [1,2-, 1,3-, 1,4-])	Total Number of containers	Special Instructions/Note:
			Preservation Code:				B	N	D	N	D	A		
EB_20221027	10/27/22	1100	G	Water	Y	N	X		X				2	
				Water										
				Water										
				Water										
				Water										
				Water										
				Water										
				Water										
				Water										
				Water										
				Water										
				Water										

10-27-22

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/27/22 1237	Antea		10-27-22 1237	EETN
2		10-27-22 1700	EETN			
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

11/21/2022

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 680-224230-1

Login Number: 224230

List Number: 1

Creator: Fuller, David

List Source: Eurofins Savannah

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

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 680-224230-1

Login Number: 224230
List Number: 2
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 11/01/22 02:56 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3 ice
COC is present.	False	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Eurofins Savannah

Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



Generated
11/21/2022 9:14:08 PM

Authorized for release by
David Fuller, Project Manager
David.Fuller@et.eurofinsus.com
(770)344-8986

Appendix C Tier II Validation Reports

EHS Support Validation Report Number: 485

Former Ciba Geigy Facility
Queensbury, New York

Sample Delivery Group (SDG): 680-216145-1

Analyses: Metals, General Chemistry

Review Level: Tier II

Analyses performed by:
Eurofins
Buffalo, New York

Report Date: January 16, 2023

Table of Contents

1 Data Review Summary 1

1.1 Guidelines and Qualifiers 1
1.2 Sample Custody and Receipt 1
1.3 Assessment Summary and Data Usability 1

2 Metals Analysis 2

2.1 Preservation and Holding Times 2
2.2 Blanks 2
2.3 Laboratory Control Sample Analysis 2
2.4 Matrix Spike/Matrix Spike Duplicate Analysis 2
2.5 Laboratory Duplicate Analysis 3
2.6 Serial Dilution 3
2.7 Field Duplicates 3
2.8 Additional Notes 4

3 General Chemistry Analysis 5

3.1 Preservation and Holding Times 5
3.2 Blanks 5
3.3 Laboratory Control Sample Analysis 5
3.4 Matrix Spike/Matrix Spike Duplicate Analysis 5
3.5 Laboratory Duplicate Analysis 6
3.6 Field Duplicates 7
3.7 Additional Notes 7

4 Reference 8

List of Appendices

Appendix A Records with Updated Qualifiers

Sample and Analytical Protocol Summary

Water samples were collected at the Former Ciba Geigy Facility in Queensbury, New York and were analyzed by United States Environmental Protection Agency (USEPA) SW-846 Methods 6020A for metals and 9012B for cyanide. Samples included in this sample delivery group (SDG), and in this data validation report, are listed in **Table 1**.

Table 1 Sample and Analytical Protocol Summary

SDG	Lab Sample ID	Field Sample ID	Sample Matrix	Sample Collection Date	Analysis	
					Cyanide	Metals
680-216145-1	680-216145-1	EB-20220524	Water	5/24/2022	X	X
680-216145-1	680-216145-2	EB-20220525	Water	5/25/2022	X	X
680-216145-1	680-216145-3	MW-OB14-20220524	Water	5/24/2022	X	X
680-216145-1	680-216145-4	MW-OB32-20220524	Water	5/24/2022	X	X
680-216145-1	680-216145-5	EW-B5-20220525	Water	5/25/2022	X	X
680-216145-1	680-216145-6	MW-OB30-20220525	Water	5/25/2022	X	X
680-216145-1	680-216145-7	DUP-20220525	Water	5/25/2022	X	X
680-216145-1	680-216145-8	AW-C11-20220526	Water	5/26/2022	X	X
680-216145-1	680-216145-9	EB-20220526	Water	5/26/2022	X	X

SDG = Sample delivery group

1 Data Review Summary

1.1 Guidelines and Qualifiers

Data were reviewed in accordance with the United States Environmental Protection Agency (USEPA) Contract Laboratory Program National Functional Guidelines (USEPA, 2017), laboratory analytical methods, and professional judgment. Relevant USEPA Region 2 Data Validation Standard Operating Procedures (SOPs) were referenced as needed. It is expected that the laboratory conducted a sufficient quality review of the data before reporting. While quality control (QC) is meant to increase confidence in analytical data, it is important to note that no compound concentration is guaranteed to be accurate, even if all QC criteria are met.

Data validation includes a review of reported results and supporting documentation in the laboratory report. Based on this evaluation, qualifiers may be added, deleted, or modified. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines (**Table 2**):

Table 2 Qualifier Codes and Definitions

Qualifier Code	Definition
U	The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.
UJ	The analyte was included in the analysis but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

QC = Quality control

1.2 Sample Custody and Receipt

All samples were received in good condition and appropriately preserved. The chain of custody was properly completed except that there is a gap between the relinquishing and the receiving date/time information associated with the second custody transfer. This is likely due to time in the custody of a shipper. It is assumed that custody was maintained.

1.3 Assessment Summary and Data Usability

In this SDG, no QC excursions encountered led to the rejection of data. Results reported in this SDG are considered usable. The specific QC variances and data qualification are outlined in this report. Records that have updated qualifiers are presented in **Appendix A.**

2 Metals Analysis

2.1 Preservation and Holding Times

Acceptance criteria were met. Relevant preservation and holding time requirements for metals are presented in **Table 3**:

Table 3 Preservation and Holding Time Requirements - Metals

Method	Matrix	Preservation	Holding Time
Metals (except mercury and hexavalent chromium) by 6010/6020	Water	Nitric acid, pH less than 2	180 days
	Soil	None	180 days

2.2 Blanks

Blanks are analyzed to identify contamination that may have been introduced into samples. There are several types of blanks that undergo different portions of the process undergone by field samples. In short, blanks are containers of analyte-free water (and in some cases, analyte-free or 'clean' sand when associated samples are solids). The following are common types of blanks:

- Laboratory method blanks indicate contamination introduced during sample preparation and/or analysis from sources such as reagents, glassware, equipment, sample handling, and ambient laboratory conditions.
- Equipment blanks indicate the effectiveness of the field decontamination procedures as well as contamination from new sampling equipment. They also identify contamination introduced from bottleware and ambient conditions.

Acceptance criteria were met. Results for the laboratory method blank and for the equipment blanks were non-detect.

2.3 Laboratory Control Sample Analysis

A laboratory control sample is prepared when known concentrations of target analytes are spiked into an aliquot of analyte-free material (deionized water or 'clean' sand). The laboratory control sample undergoes the same preparation and analytical procedure as field samples. The laboratory control sample is analyzed to determine, without sample matrix, whether the overall procedure is working within control limits. The recoveries of the spiked analytes are evaluated to determine accuracy.

Acceptance criteria were met. Laboratory control recoveries were within control limits.

2.4 Matrix Spike/Matrix Spike Duplicate Analysis

A matrix spike is prepared when known concentrations of target analytes are spiked into an aliquot of field sample. The matrix spike undergoes the same preparation and analytical procedure as normal

(unspiked) field samples. It is analyzed to evaluate the effects of interferences caused by the sample matrix. Poor spike recoveries could indicate matrix interference issues.

A matrix spike duplicate is an additional replicate of the matrix spike, i.e., a separate aliquot of sample into which the same concentrations of analytes are spiked. The matrix spike and matrix spike duplicate undergo the same preparation and analytical testing as the original sample. Recoveries of analytes from matrix spiked samples and from matrix spiked duplicates are evaluated to assess accuracy and bias. The relative percent difference between the matrix spike result and the matrix spike duplicate result is evaluated to assess precision.

Acceptance criteria were met. Matrix spike/matrix spike duplicate analysis was performed on sample 680-216145-8. Note that matrix spike analyses cannot be evaluated if the unspiked sample concentration of the relevant analyte is greater than or equal to 4x the spike amount.

2.5 Laboratory Duplicate Analysis

When a field sample is split into two sub-samples, these sub-samples are called laboratory duplicates or laboratory replicates. Each undergoes the same preparation and analysis that normal field samples do. The analytical results of the two laboratory duplicates are compared to assess precision.

Not applicable. No laboratory duplicate analysis performed on a sample in this data set was reported.

2.6 Serial Dilution

Serial dilution is used to determine whether significant physical or chemical interferences exist due to the sample matrix. A sample is analyzed undiluted and at a 5-fold dilution, then the calculated results are compared. Serial dilution analysis is evaluated for analytes that were detected in the original sample at concentrations at least 50x the instrument detection limit; the concentration in the undiluted sample must be greater than or equal to 50x the instrument detection limit to obtain a meaningful comparison. The results of the inductively coupled plasma serial dilution are deemed acceptable when the percent difference between the original analysis and the diluted analysis is less than or equal to 10 percent.

Not applicable: No serial dilution analysis performed on a sample in this data set was reported.

2.7 Field Duplicates

Acceptance criteria (**Table 4**) were met. One parent sample – field duplicate sample pair was included in this SDG.

Table 4 Acceptable Parent Sample – Field Duplicate Relationships – Metals

Parent Sample – Field Duplicate Sample Acceptable Relationships	Difference
Sample and its field duplicate are greater than or equal to 5x the reporting limit	o Relative percent difference is less than or equal to 30% (aqueous) **or** o Relative percent difference is less than or equal to 50% (soil/ sediment)

Parent Sample – Field Duplicate Sample Acceptable Relationships	Difference
Sample and/or its field duplicate is less than 5x the reporting limit	o Absolute difference is less than or equal to 2x the reporting limit (aqueous) **or** o Absolute difference is less than or equal to 3x the reporting limit (soil/ sediment)

2.8 Additional Notes

Notes in the laboratory report narrative state that two results reported in this data set were associated with a noncompliant low-level continuing calibration verification recovery. The notes also state that:

- The recovery was high; it was greater than the upper acceptance limit.
- Two associated results were non-detect.
- One associated result was a concentration greater than 10x the concentration of the low-level continuing calibration verification (CCV).

Therefore, no qualification was needed.

3 General Chemistry Analysis

3.1 Preservation and Holding Times

Acceptance criteria were met. Relevant preservation and holding time requirements are presented in **Table 5:**

Table 5 Preservation and Holding Time Requirements – General Chemistry

Method	Matrix	Preservation	Holding Time
Total cyanide by 9012B	Water	Less than or equal to 6 °C, NaOH to pH greater than 12	14 days

°C = Degrees Celsius
NaOH = Sodium hydroxide

3.2 Blanks

Blanks are analyzed to identify contamination that may have been introduced into samples. There are several types of blanks that undergo different portions of the process undergone by field samples. Blanks are containers of analyte-free water (and in some cases, analyte-free or 'clean' sand when associated samples are solids). Some common types of blanks follow:

- Laboratory method blanks indicate contamination introduced during sample preparation and/or analysis from sources such as reagents, glassware, equipment, sample handling, and ambient laboratory conditions.
- Equipment blanks indicate the effectiveness of the field decontamination procedures as well as contamination from new sampling equipment. They also identify contamination introduced from bottleware and ambient conditions.

No results were qualified due to contamination observed in associated blanks. Field sample results were all at least 5x the concentrations seen in associated blanks. Therefore, no qualification was needed. "B" flags applied by the laboratory have been removed. Please note that blank samples are not qualified due to contamination seen in other blanks. For example, equipment blanks are not qualified based on method blank results.

3.3 Laboratory Control Sample Analysis

A laboratory control sample is prepared when known concentrations of target analytes are spiked into an aliquot of analyte-free material (deionized water or 'clean' sand). The laboratory control sample undergoes the same preparation and analytical procedure as field samples. The laboratory control sample is analyzed to determine, without sample matrix, whether the overall procedure is working within control limits. The recoveries of the spiked analytes are evaluated to determine accuracy.

Acceptance criteria were met. Recoveries were within control limits.

3.4 Matrix Spike/Matrix Spike Duplicate Analysis

A matrix spike is prepared when known concentrations of target analytes are spiked into an aliquot of field sample. The matrix spike undergoes the same preparation and analytical procedure as normal

(unspiked) field samples. It is analyzed to evaluate the effects of interferences caused by the sample matrix. Poor spike recoveries could indicate matrix interference issues.

A matrix spike duplicate is an additional replicate of the matrix spike, i.e., a separate aliquot of sample into which the same concentrations of analytes are spiked. The matrix spike and matrix spike duplicate undergo the same preparation and analytical testing as the original sample. Recoveries of analytes from matrix spiked samples and from matrix spiked duplicates are evaluated to assess accuracy and bias. The relative percent difference between the matrix spike result and the matrix spike duplicate result is evaluated to assess precision.

Matrix spike/matrix spike duplicate analysis was performed on sample 680-216145-8. However, results of that analysis could not be evaluated because the concentration in the unspiked sample was greater than or equal to 4x the spike amount.

Matrix spike recoveries outside control limits are presented in **Table 6**.

Table 6 Observed matrix spike Nonconformances – General Chemistry

Sample ID	Analyte	Recovery
680-216145-1	Total cyanide	193%
680-216145-2	Total cyanide	130%

For inorganic analyses in which samples undergo batch digestion or batch distillation, batch qualifications are applied (**Table 7**). Because of the noncompliant matrix spike results, qualifiers were applied to cyanide results in all field samples in this SDG.

Table 7 Matrix Spike/Matrix Spike Duplicate Nonconformance Actions – General Chemistry

Recovery	Sample Result	Qualification [a]
Matrix spike percent recovery is less than 75% but greater than or equal to 30%.	Non-detect	UJ
	Detect	J
Matrix spike percent recovery is less than 30%.	Non-detect	R
	Detect	J
Matrix spike percent recovery is greater than 125%.	Non-detect	No Action
	Detect	J

[a] See **Section 1** for qualifier definitions.

3.5 Laboratory Duplicate Analysis

When a field sample is split into two sub-samples, these sub-samples are called laboratory duplicates or laboratory replicates. Each undergoes the same preparation and analysis as a normal field sample. The analytical results of the two laboratory duplicates are compared to assess precision.

Acceptance criteria (**Table 8**) were met. Laboratory duplicate analysis was performed on sample 680-216145-5.

Table 8 Acceptable Parent Sample - Laboratory Duplicate Relationships – General Chemistry

Parent Sample and Laboratory Duplicate Sample Concentrations	Difference
Sample and field duplicate concentrations are greater than or equal to 5x the reporting limit.	o Relative percent difference is less than or equal to 20% (aqueous) **or** o Relative percent difference is less than or equal to 35% (soil/sediment)
Sample and/or field duplicate concentration(s) is/are less than 5x the reporting limit.	o Absolute difference is less than or equal to 1x the reporting limit (aqueous) **or** o Absolute difference is less than or equal to 2x the reporting limit (soil/sediment)

3.6 Field Duplicates

Acceptance criteria (**Table 9**) were met. One parent sample – field duplicate sample pair was included in this SDG.

Table 9 Acceptable Parent Sample – Field Duplicate Relationships – General Chemistry

Parent Sample – Field Duplicate Sample Acceptable Relationships	Difference
Sample and its field duplicate is greater than or equal to 5x the reporting limit.	o Relative percent difference is less than or equal to 30% (aqueous) **or** o Relative percent difference is less than or equal to 50% (soil/ sediment)
Sample and/or its field duplicate is less than 5x the reporting limit.	o Absolute difference is less than or equal to 2x the reporting limit (aqueous) **or** o Absolute difference is less than or equal to 3x the reporting limit (soil/ sediment)

3.7 Additional Notes

Not applicable; no additional notes to report.

Validation performed by: Amy Coats
EHS Support LLC

4 Reference

USEPA. 2017. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-540-R-2017-001. January.

Appendix A Records with Updated Qualifiers

Table A-1 Records with Updated Qualifiers

Sample Name	Sample Date	Matrix	Fraction	Analytical Method	Analyte	Unit	Result Value	Interpreted Qualifier	Quantitation Limit Value	Lab Qualifier	Lab Sample ID	SDG
DUP-20220525	5/25/2022	Water	T	9012B	Cyanide	mg/L	0.24		0.010	B	680-216145-7	680-216145-1
EB-20220524	5/24/2022	Water	D	6020A	Chromium, total	µg/L	1.5	U	1.5	U^+	680-216145-1	680-216145-1
EB-20220524	5/24/2022	Water	T	9012B	Cyanide	mg/L	0.01	U	0.010	UF1	680-216145-1	680-216145-1
EB-20220525	5/25/2022	Water	D	6020A	Chromium, total	µg/L	1.5	U	1.5	U^+	680-216145-2	680-216145-1
EB-20220525	5/25/2022	Water	T	9012B	Cyanide	mg/L	0.0056	JB	0.010	JBF1	680-216145-2	680-216145-1
EW-B5-20220525	5/25/2022	Water	T	9012B	Cyanide	mg/L	0.23		0.010	B	680-216145-5	680-216145-1
MW-OB30-20220525	5/25/2022	Water	T	9012B	Cyanide	mg/L	0.13		0.010	B	680-216145-6	680-216145-1
MW-OB32-20220524	5/24/2022	Water	D	6020A	Chromium, total	µg/L	95		1.5	^+	680-216145-4	680-216145-1

Notes:
^+ = Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
µg/L = micrograms per liter
B = Compound was found in the blank and sample.
D = dissolved
F1 = MS and/or MSD recovery exceeds control limits.
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L = milligrams per liter
SDG = sample delivery group
T = total
U = The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.

EHS Support Validation Report Number: 486

Former Ciba Geigy Facility
Queensbury, New York

Sample Delivery Group (SDG): 680-216226-1

Analyses: General Chemistry

Review Level: Tier II

Analyses performed by:
Eurofins
Chicago, Illinois

EHS Support℠

Report Date: January 17, 2023

Table of Contents

1 Data Review Summary 1

1.1 Guidelines and Qualifiers 1
1.2 Sample Custody and Receipt 1
1.3 Assessment Summary and Data Usability 1

2 General Chemistry Analysis 2

2.1 Preservation and Holding Times 2
2.2 Blanks 2
2.3 Laboratory Control Sample Analysis 3
2.4 Matrix Spike/Matrix Spike Duplicate Analysis 3
2.5 Laboratory Duplicate Analysis 3
2.6 Field Duplicates 3
2.7 Additional Notes 4

3 Reference 5

List of Appendices

Appendix A Records with Updated Qualifiers

Sample and Analytical Protocol Summary

Water samples were collected at the Former Ciba Geigy Facility in Queensbury, New York and were analyzed by United States Environmental Protection Agency (USEPA) Method 218.6 for hexavalent chromium. Samples included in this sample delivery group (SDG), and in this data validation report, are listed in **Table 1**.

Table 1 Sample and Analytical Protocol Summary

SDG	Lab Sample ID	Field Sample ID	Sample Matrix	Sample Collection Date	Hexavalent Chromium Analysis
680-216226-1	680-216226-1	EB-20220524	Water	5/24/2022	X
680-216226-1	680-216226-2	EB-20220525	Water	5/25/2022	X
680-216226-1	680-216226-3	MW-OB14-20220524	Water	5/24/2022	X
680-216226-1	680-216226-4	MW-OB32-20220524	Water	5/24/2022	X
680-216226-1	680-216226-5	EW-B5-20220525	Water	5/25/2022	X
680-216226-1	680-216226-6	MW-OB30-20220525	Water	5/25/2022	X
680-216226-1	680-216226-7	DUP-20220525	Water	5/25/2022	X
680-216226-1	680-216226-8	AW-C11-20220526	Water	5/26/2022	X
680-216226-1	680-216226-9	EB-20220526	Water	5/26/2022	X

SDG = Sample delivery group

1 Data Review Summary

1.1 Guidelines and Qualifiers

Data were reviewed in accordance with the United States Environmental Protection Agency (USEPA) Contract Laboratory Program National Functional Guidelines (USEPA, 2017), laboratory analytical methods, and professional judgment. Relevant USEPA Region 2 Data Validation Standard Operating Procedures (SOPs) were referenced as needed. It is expected that the laboratory conducted a sufficient quality review of the data before reporting. While quality control (QC) is meant to increase confidence in analytical data, it is important to note that no compound concentration is guaranteed to be accurate, even if all QC criteria are met.

Data validation includes a review of reported results and supporting documentation in the laboratory report. Based on this evaluation, qualifiers may be added, deleted, or modified. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines (**Table 2**):

Table 2 Qualifier Codes and Definitions

Qualifier Code	Definition
U	The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.
UJ	The analyte was included in the analysis but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

QC = Quality control

1.2 Sample Custody and Receipt

Notes in the laboratory report narrative state that four samples this SDG were received with insufficient preservation and were preserved in the laboratory. Additional information is provided in **Section 2.1**. With that exception, samples were received in good condition and appropriately preserved.

The chain of custody was properly completed except there are gaps between the relinquishing and the receiving date/time information associated with the second and subsequent custody transfers. This is likely due to time in the custody of a shipper. It is assumed that custody was maintained.

1.3 Assessment Summary and Data Usability

In this SDG, no QC excursions encountered led to the rejection of data. Results reported in this SDG are considered usable. The specific QC variances and data qualification are outlined in this report. Records that have updated qualifiers are presented in **Appendix A.**

2 General Chemistry Analysis

2.1 Preservation and Holding Times

Relevant preservation and holding time requirements are presented in **Table 3**:

Table 3 Preservation and Holding Time Requirements – General Chemistry

Method	Matrix	Preservation	Holding time
Hexavalent chromium by 218.6	Water	Field filtration, ammonium sulfate buffer, 4°C ± 2°C	28 days*

*Footnote 20 from Code of Federal Regulations Title 40 Part 136, Subchapter D, Table II: "To achieve the 28-day holding time, use the ammonium sulfate buffer solution specified in EPA Method 218.6. The allowance in this footnote supersedes preservation and holding time requirements in the approved hexavalent chromium methods, unless this supersession would compromise the measurement, in which case requirements in the method must be followed."
°C = Degrees Celsius

Notes in the laboratory report narrative state: "The reference method requires samples to be preserved to a pH of 9.3-9.7. The following samples were received with insufficient preservation: EW-B5-20220525 (680-216226-5), MW-OB30-20220525 (680-216226-6), DUP-20220525 (680-216226-7) and EB-20220526 (680-216226-9). The sample(s) were preserved to the appropriate pH in the laboratory. As a result the samples are flagged as being run outside of the holding time." All other holding time criteria were met. Preservation variances, as well as the consequent qualification, are listed in **Table** 4.

Table 4 Observed Preservation and/or Holding Time Nonconformances – General Chemistry

Samples	Analysis	Preservation Variance	Qualification [a]
680-216226-5 680-216226-6 680-216226-7 680-216226-9	Hexavalent chromium by 218.6	pH criterion not met	J/UJ

[a] See **Section 1** for qualifier definitions.

2.2 Blanks

Blanks are analyzed to identify contamination that may have been introduced into samples. There are several types of blanks that undergo different portions of the process undergone by field samples. Blanks are containers of analyte-free water (and in some cases, analyte-free or 'clean' sand when associated samples are solids). Some common types of blanks follow:

- Laboratory method blanks indicate contamination introduced during sample preparation and/or analysis from sources such as reagents, glassware, equipment, sample handling, and ambient laboratory conditions.
- Equipment blanks indicate the effectiveness of the field decontamination procedures as well as contamination from new sampling equipment. They also identify contamination introduced from bottleware and ambient conditions.

Acceptance criteria were met. Laboratory method blank and equipment blank results were non-detect.

2.3 Laboratory Control Sample Analysis

A laboratory control sample is prepared when known concentrations of target analytes are spiked into an aliquot of analyte-free material (deionized water or 'clean' sand). The laboratory control sample undergoes the same preparation and analytical procedure as field samples. The laboratory control sample is analyzed to determine, without sample matrix, whether the overall procedure is working within control limits. The recoveries of the spiked analytes are evaluated to determine accuracy.

Acceptance criteria were met. Recoveries were within control limits.

2.4 Matrix Spike/Matrix Spike Duplicate Analysis

A matrix spike is prepared when known concentrations of target analytes are spiked into an aliquot of field sample. The matrix spike undergoes the same preparation and analytical procedure as normal (unspiked) field samples. It is analyzed to evaluate the effects of interferences caused by the sample matrix. Poor spike recoveries could indicate matrix interference issues.

A matrix spike duplicate is an additional replicate of the matrix spike, i.e., a separate aliquot of sample into which the same concentrations of analytes are spiked. The matrix spike and matrix spike duplicate undergo the same preparation and analytical testing as the original sample. Recoveries of analytes from matrix spiked samples and from matrix spiked duplicates are evaluated to assess accuracy and bias. The relative percent difference between the matrix spike result and the matrix spike duplicate result is evaluated to assess precision.

Acceptance criteria were met. Matrix spike/matrix spike duplicate analysis was performed on sample 680-216226-8. Recoveries, as well as the relative percent difference between the matrix spike and the matrix spike duplicate results, were within control limits.

2.5 Laboratory Duplicate Analysis

When a field sample is split into two sub-samples, these sub-samples are called laboratory duplicates or laboratory replicates. Each undergoes the same preparation and analysis as a normal field sample. The analytical results of the two laboratory duplicates are compared to assess precision.

Not applicable. No laboratory duplicate analysis performed on a sample in this data set was reported.

2.6 Field Duplicates

Acceptance criteria (**Table** 5) were met. One parent sample – field duplicate sample pair was included in this SDG.

Table 5 Acceptable Parent Sample – Field Duplicate Relationships – General Chemistry

Parent Sample – Field Duplicate Sample Acceptable Relationships	Difference
Sample and its field duplicate are greater than or equal to 5x the reporting limit.	o Relative percent difference is less than or equal to 30% (aqueous) **or** o Relative percent difference is less than or equal to 50% (soil/ sediment)
Sample and/or its field duplicate is less than 5x the reporting limit.	o Absolute difference is less than or equal to 2x the reporting limit (aqueous) **or** o Absolute difference is less than or equal to 3x the reporting limit (soil/ sediment)

2.7 Additional Notes

Not applicable; no additional notes to report.

Validation performed by: Amy Coats
EHS Support LLC

3 Reference

USEPA. 2017. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-540-R-2017-001. January.

Appendix A Records with Updated Qualifiers

Table A-1 Records with Updated Qualifiers

Sample Name	Sample Date	Matrix	Fraction	Analytical Method	Analyte	Unit	Result Value	Interpreted Qualifier	Quantitation Limit Value	Lab Qualifier	Lab Sample ID	SDG
EW-B5-20220525	5/25/2022	Water	D	218.6	Chromium, hexavalent	mg/L	38	J	0.30	H3	680-216226-5	680-216226-1
MW-OB30-20220525	5/25/2022	Water	D	218.6	Chromium, hexavalent	mg/L	1.3	J	0.015	H3	680-216226-6	680-216226-1
DUP-20220525	5/25/2022	Water	D	218.6	Chromium, hexavalent	mg/L	35	J	0.30	H3	680-216226-7	680-216226-1
EB-20220526	5/26/2022	Water	D	218.6	Chromium, hexavalent	mg/L	0.0003	UJ	0.00030	UH3	680-216226-9	680-216226-1

Notes:
D = Dissolved
H3 = Sample was received and analyzed past holding time.
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L = milligrams per liter
SDG = sample delivery group
U = The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.
UJ = The analyte was included in the analysis but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

EHS Support Validation Report Number: 487

Former Ciba Geigy Facility
Queensbury, New York

Sample Delivery Group (SDG): 680-224211-1

Analyses: General Chemistry

Review Level: Tier II

Analyses performed by:
Eurofins
Pittsburgh,
Pennsylvania

Report Date: January 30, 2023

Table of Contents

1 Data Review Summary 1

1.1 Guidelines and Qualifiers 1
1.2 Sample Custody and Receipt 1
1.3 Assessment Summary and Data Usability 1

2 General Chemistry Analysis 3

2.1 Preservation and Holding Times 3
2.2 Blanks 3
2.3 Laboratory Control Sample Analysis 4
2.4 Matrix Spike/Matrix Spike Duplicate Analysis 4
2.5 Laboratory Duplicate Analysis 4
2.6 Field Duplicates 4
2.7 Additional Notes 5

3 Reference 6

Sample and Analytical Protocol Summary

Water samples were collected at the Former Ciba Geigy Facility in Queensbury, New York and were analyzed by OI Analytical Method OIA 1677 for free cyanide. Samples included in this sample delivery group (SDG), and in this data validation report, are listed in **Table 1**.

Table 1 Sample and Analytical Protocol Summary

SDG	Lab Sample ID	Field Sample ID	Sample Matrix	Sample Collection Date	Free Cyanide Analysis
680-224211-1	680-224211-1	SW_01_20221025	Water	10/25/2022	X
680-224211-1	680-224211-2	SW_02_20221025	Water	10/25/2022	X
680-224211-1	680-224211-3	SW_03_20221025	Water	10/25/2022	X
680-224211-1	680-224211-4	DUP_20221025	Water	10/25/2022	X
680-224211-1	680-224211-5	SW_04_20221025	Water	10/25/2022	X
680-224211-1	680-224211-6	EB_20221025	Water	10/25/2022	X
680-224211-1	680-224211-7	EB_20221024	Water	10/24/2022	X
680-224211-1	680-224211-8	SG_11_20221024	Water	10/24/2022	X

SDG = Sample delivery group

1 Data Review Summary

1.1 Guidelines and Qualifiers

Data were reviewed in accordance with the United States Environmental Protection Agency (USEPA) Contract Laboratory Program National Functional Guidelines (USEPA, 2017), laboratory analytical methods, and professional judgment. Relevant USEPA Region 2 Data Validation Standard Operating Procedures (SOPs) were referenced as needed. It is expected that the laboratory conducted a sufficient quality review of the data before reporting. While quality control (QC) is meant to increase confidence in analytical data, it is important to note that no compound concentration is guaranteed to be accurate, even if all QC criteria are met.

Data validation includes a review of reported results and supporting documentation in the laboratory report. Based on this evaluation, qualifiers may be added, deleted, or modified. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines (**Table 2**):

Table 2 Qualifier Codes and Definitions

Qualifier Code	Definition
U	The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.
UJ	The analyte was included in the analysis but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

QC = Quality control

1.2 Sample Custody and Receipt

A note in the laboratory report narrative states: “Due to an error by the lab PM on the Bottle Order, frosted plastic bottles were ordered for the Free Cyanide test instead of amber plastic bottles.” Additional information is provided in **Section 2.1**. With that exception, samples were received in good condition and appropriately preserved.

The chain of custody was properly completed except that there is a gap between the relinquishing and the receiving date/time information associated with the second custody transfer. This is likely due to time in the custody of a shipper. It is assumed that custody was maintained.

1.3 Assessment Summary and Data Usability

In this SDG, no QC excursions encountered led to the rejection of data. Results reported in this SDG are considered usable. Specific QC information is provided in this report. Positive results for free cyanide are considered estimated due to improper preservation; impacted results already bore “J” flags from the

laboratory because they are less than the associated reporting limits. Therefore, no results in this data set have updated qualifiers.

2 General Chemistry Analysis

2.1 Preservation and Holding Times

Relevant preservation and holding time requirements are presented in **Table 3**:

Table 3 Preservation and Holding Time Requirements – General Chemistry

Method	Matrix	Preservation	Holding time
Free cyanide by OIA 1677	Water	4 °C ± 2 °C, NaOH to pH > 12	14 days

°C = Degrees Celsius
NaOH = Sodium hydroxide

Analyses were performed within the technical holding time. Notes in the laboratory report narrative state: "Due to an error by the lab PM on the Bottle Order, frosted plastic bottles were ordered for the Free Cyanide test instead of amber plastic bottles."

Samples for free cyanide analysis are to be collected in containers that are amber or are covered with aluminum foil to prevent photodecomposition of metal-cyanide complexes. If sample aliquots are exposed to sunlight, metal-cyanide complexes could be dissociated. This dissociation can cause an increase in the concentration of free cyanide in the sample. Therefore, positive (detected) concentrations of free cyanide in impacted samples have been qualified as estimated (J). Samples associated with preservation variances are listed in **Table 4**.

Table 4 Observed Preservation and/or Holding Time Nonconformances – General Chemistry

Samples	Analysis	Preservation Variance	Sample Result	Sample Result Qualification[a]
All samples in this SDG	Free cyanide	Sample containers allow sample exposure to light.	Non-detect	No Action
			Detect	J

[a] See **Section 1** for qualifier definitions.
SDG = Sample delivery group

2.2 Blanks

Blanks are analyzed to identify contamination that may have been introduced into samples. There are several types of blanks that undergo different portions of the process undergone by field samples. Blanks are containers of analyte-free water (and in some cases, analyte-free or 'clean' sand when associated samples are solids). Some common types of blanks follow:

- Laboratory method blanks indicate contamination introduced during sample preparation and/or analysis from sources such as reagents, glassware, equipment, sample handling, and ambient laboratory conditions.
- Equipment blanks indicate the effectiveness of the field decontamination procedures as well as contamination from new sampling equipment. They also identify contamination introduced from bottleware and ambient conditions.

Acceptance criteria were met. Laboratory method blank and equipment blank results were non-detect.

2.3 Laboratory Control Sample Analysis

A laboratory control sample is prepared when known concentrations of target analytes are spiked into an aliquot of analyte-free material (deionized water or 'clean' sand). The laboratory control sample undergoes the same preparation and analytical procedure as field samples. The laboratory control sample is analyzed to determine, without sample matrix, whether the overall procedure is working within control limits. The recoveries of the spiked analytes are evaluated to determine accuracy.

Acceptance criteria were met. Recoveries were within control limits.

2.4 Matrix Spike/Matrix Spike Duplicate Analysis

A matrix spike is prepared when known concentrations of target analytes are spiked into an aliquot of field sample. The matrix spike undergoes the same preparation and analytical procedure as normal (unspiked) field samples. It is analyzed to evaluate the effects of interferences caused by the sample matrix. Poor spike recoveries could indicate matrix interference issues.

A matrix spike duplicate is an additional replicate of the matrix spike, i.e., a separate aliquot of sample into which the same concentrations of analytes are spiked. The matrix spike and matrix spike duplicate undergo the same preparation and analytical testing as the original sample. Recoveries of analytes from matrix spiked samples and from matrix spiked duplicates are evaluated to assess accuracy and bias. The relative percent difference between the matrix spike result and the matrix spike duplicate result is evaluated to assess precision.

Acceptance criteria were met. Matrix spike/matrix spike duplicate analysis was performed on sample 680-224211-3. Recoveries, as well as the relative percent difference between the matrix spike and the matrix spike duplicate results, were within control limits.

2.5 Laboratory Duplicate Analysis

When a field sample is split into two sub-samples, these sub-samples are called laboratory duplicates or laboratory replicates. Each undergoes the same preparation and analysis as a normal field sample. The analytical results of the two laboratory duplicates are compared to assess precision.

Not applicable. No laboratory duplicate analysis performed on a sample in this data set was reported

2.6 Field Duplicates

Acceptance criteria (**Table 5**) were met. One parent sample – field duplicate sample pair was included in this SDG.

Table 5 Acceptable Parent Sample – Field Duplicate Relationships – General Chemistry

Parent Sample – Field Duplicate Sample Acceptable Relationships	Difference
Sample and its field duplicate are greater than or equal to 5x the reporting limit.	o Relative percent difference is less than or equal to 30% (aqueous) **or** o Relative percent difference is less than or equal to 50% (soil/ sediment)
Sample and/or its field duplicate is less than 5x the reporting limit.	o Absolute difference is less than or equal to 2x the reporting limit (aqueous) **or** o Absolute difference is less than or equal to 3x the reporting limit (soil/ sediment)

2.7 Additional Notes

Not applicable; no additional notes to report.

Validation performed by: Amy Coats
EHS Support LLC

3 Reference

USEPA. 2017. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-540-R-2017-001. January

EHS Support Validation Report Number: 488

Former Ciba Geigy Facility
Queensbury, New York

Sample Delivery Group (SDG): 680-224213-1

Analyses: General Chemistry

Review Level: Tier II

Analyses performed by:
Eurofins
Lancaster, Pennsylvania

EHS Support℠

Report Date: January 17, 2023

Table of Contents

1 Data Review Summary 1

1.1 Guidelines and Qualifiers 1
1.2 Sample Custody and Receipt 1
1.3 Assessment Summary and Data Usability 1

2 General Chemistry Analysis 2

2.1 Preservation and Holding Times 2
2.2 Blanks 2
2.3 Laboratory Control Sample Analysis 2
2.4 Matrix Spike/Matrix Spike Duplicate Analysis 2
2.5 Laboratory Duplicate Analysis 3
2.6 Field Duplicates 4
2.7 Additional Notes 4

3 Reference 5

List of Appendices

Appendix A Records with Updated Qualifiers

Sample and Analytical Protocol Summary

Water samples were collected at the Former Ciba Geigy Facility in Queensbury, New York and were analyzed by United States Environmental Protection Agency (USEPA) Method 218.6 for hexavalent chromium. Samples included in this sample delivery group (SDG), and in this data validation report, are listed in **Table 1**.

Table 1 Sample and Analytical Protocol Summary

SDG	Lab Sample ID	Field Sample ID	Sample Matrix	Sample Collection Date	Hexavalent Chromium Analysis
680-224213-1	680-224213-1	SW_01_20221025	Water	10/25/2022	X
680-224213-1	680-224213-2	SW_02_20221025	Water	10/25/2022	X
680-224213-1	680-224213-3	SW_03_20221025	Water	10/25/2022	X
680-224213-1	680-224213-4	SW_04_20221025	Water	10/25/2022	X
680-224213-1	680-224213-5	DUP_20221025	Water	10/25/2022	X
680-224213-1	680-224213-6	EB_20221025	Water	10/25/2022	X
680-224213-1	680-224213-7	EB_20221024	Water	10/24/2022	X
680-224213-1	680-224213-8	AW_B18_20221024	Water	10/24/2022	X
680-224213-1	680-224213-9	DUP_20221024	Water	10/24/2022	X
680-224213-1	680-224213-10	MW_OB14_20221024	Water	10/24/2022	X
680-224213-1	680-224213-11	IP_4_20221024	Water	10/24/2022	X
680-224213-1	680-224213-12	MW_28_20221025	Water	10/25/2022	X
680-224213-1	680-224213-13	MW_OB26_20221027	Water	10/27/2022	X
680-224213-1	680-224213-14	AW_C11_20221025	Water	10/25/2022	X
680-224213-1	680-224213-15	AW_C2_20221025	Water	10/26/2022	X
680-224213-1	680-224213-16	AW_B4_20221025	Water	10/25/2022	X
680-224213-1	680-224213-17	SUMP_B_20221026	Water	10/26/2022	X
680-224213-1	680-224213-18	SUMP_A_20221026	Water	10/26/2022	X
680-224213-1	680-224213-19	EW_B5_20221026	Water	10/26/2022	X
680-224213-1	680-224213-20	DUP_20221026	Water	10/26/2022	X
680-224213-1	680-224213-21	EB_20221026	Water	10/26/2022	X
680-224213-1	680-224213-22	MW_25S_20221026	Water	10/26/2022	X
680-224213-1	680-224213-23	MW_OB33_20221026	Water	10/26/2022	X
680-224213-1	680-224213-24	MW_OB34_20221026	Water	10/26/2022	X
680-224213-1	680-224213-25	MW_OB32_20221026	Water	10/26/2022	X
680-224213-1	680-224213-26	MW_OB31_20221026	Water	10/26/2022	X

SDG	Lab Sample ID	Field Sample ID	Sample Matrix	Sample Collection Date	Hexavalent Chromium Analysis
680-224213-1	680-224213-27	MW_OB30_20221027	Water	10/27/2022	X
680-224213-1	680-224213-28	AW_A11_20221026	Water	10/26/2022	X
680-224213-1	680-224213-29	MW_31_20221026	Water	10/26/2022	X
680-224213-1	680-224213-30	AW_A14_20221026	Water	10/26/2022	X
680-224213-1	680-224213-31	MW_OB25_20221026	Water	10/26/2022	X
680-224213-1	680-224213-32	EB_20221027	Water	10/27/2022	X

SDG = Sample delivery group

1 Data Review Summary

1.1 Guidelines and Qualifiers

Data were reviewed in accordance with the United States Environmental Protection Agency (USEPA) Contract Laboratory Program National Functional Guidelines (USEPA, 2017), laboratory analytical methods, and professional judgment. Relevant USEPA Region 2 Data Validation Standard Operating Procedures (SOPs) were referenced as needed. It is expected that the laboratory conducted a sufficient quality review of the data before reporting. While quality control (QC) is meant to increase confidence in analytical data, it is important to note that no compound concentration is guaranteed to be accurate, even if all QC criteria are met.

Data validation includes a review of reported results and supporting documentation in the laboratory report. Based on this evaluation, qualifiers may be added, deleted, or modified. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines (**Table 2**):

Table 2 Qualifier Codes and Definitions

Qualifier Code	Definition
U	The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.
UJ	The analyte was included in the analysis but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

QC = Quality control

1.2 Sample Custody and Receipt

Samples were received in good condition and appropriately preserved.

The chain of custody was properly completed except that, for the second and third custody transfers, receiving and relinquishing information is either incomplete or fails to exhibit perfect parity. This is likely due to time in the custody of a shipper. It is assumed that custody was maintained.

1.3 Assessment Summary and Data Usability

In this SDG, no QC excursions encountered led to the rejection of data. Results reported in this SDG are considered usable. The specific QC variances and data qualification are outlined in this report. Records that have updated qualifiers are presented in **Appendix A.**

2 General Chemistry Analysis

2.1 Preservation and Holding Times

Acceptance criteria were met. Relevant preservation and holding time requirements are presented in **Table 3**:

Table 3 Preservation and Holding Time Requirements – General Chemistry

Method	Matrix	Preservation	Holding time
Hexavalent chromium by 218.6	Water	Field filtration, ammonium sulfate buffer, 4 °C ± 2 °C	28 days*

*Footnote 20 from Code of Federal Regulations Title 40 Part 136, Subchapter D, Table II: "To achieve the 28-day holding time, use the ammonium sulfate buffer solution specified in EPA Method 218.6. The allowance in this footnote supersedes preservation and holding time requirements in the approved hexavalent chromium methods, unless this supersession would compromise the measurement, in which case requirements in the method must be followed."
°C = Degrees Celsius

2.2 Blanks

Blanks are analyzed to identify contamination that may have been introduced into samples. There are several types of blanks that undergo different portions of the process undergone by field samples. Blanks are containers of analyte-free water (and in some cases, analyte-free or 'clean' sand when associated samples are solids). Some common types of blanks follow:

- Laboratory method blanks indicate contamination introduced during sample preparation and/or analysis from sources such as reagents, glassware, equipment, sample handling, and ambient laboratory conditions.
- Equipment blanks indicate the effectiveness of the field decontamination procedures as well as contamination from new sampling equipment. They also identify contamination introduced from bottleware and ambient conditions.

Acceptance criteria were met. Laboratory method blank and equipment blank results were non-detect.

2.3 Laboratory Control Sample Analysis

A laboratory control sample is prepared when known concentrations of target analytes are spiked into an aliquot of analyte-free material (deionized water or 'clean' sand). The laboratory control sample undergoes the same preparation and analytical procedure as field samples. The laboratory control sample is analyzed to determine, without sample matrix, whether the overall procedure is working within control limits. The recoveries of the spiked analytes are evaluated to determine accuracy.

Acceptance criteria were met. Recoveries were within control limits.

2.4 Matrix Spike/Matrix Spike Duplicate Analysis

A matrix spike is prepared when known concentrations of target analytes are spiked into an aliquot of field sample. The matrix spike undergoes the same preparation and analytical procedure as normal

(unspiked) field samples. It is analyzed to evaluate the effects of interferences caused by the sample matrix. Poor spike recoveries could indicate matrix interference issues.

A matrix spike duplicate is an additional replicate of the matrix spike, i.e., a separate aliquot of sample into which the same concentrations of analytes are spiked. The matrix spike and matrix spike duplicate undergo the same preparation and analytical testing as the original sample. Recoveries of analytes from matrix spiked samples and from matrix spiked duplicates are evaluated to assess accuracy and bias. The relative percent difference between the matrix spike result and the matrix spike duplicate result is evaluated to assess precision.

Matrix spike recoveries and/or relative percent difference values outside control limits are presented in **Table 4.** Note that matrix spike analyses cannot be evaluated if the unspiked sample concentration of the relevant analyte is greater than or equal to 4x the spike amount.

Table 4 Observed Matrix Spike/Matrix Spike Duplicate Nonconformances – General Chemistry

Sample ID	Analyte	Recoveries		Matrix Spike/Matrix Spike Duplicate Relative Percent Difference
		Matrix Spike	Matrix Spike Duplicate	
680-224213-14	Hexavalent Chromium	131%	143%	Acceptable

Because of these excursions, the impacted result has been qualified per **Table 5**.

Table 5 Matrix Spike/Matrix Spike Duplicate Nonconformance Actions – General Chemistry

Recovery	Sample Result	Qualification [a]
Matrix spike percent recovery is less than 75% but greater than or equal to 30%.	Non-detect	UJ
	Detect	J
Matrix spike percent recovery is less than 30%.	Non-detect	R
	Detect	J
Matrix spike percent recovery is greater than 125%.	Non-detect	No Action
	Detect	J

[a] See **Section 1** for qualifier definitions.

2.5 Laboratory Duplicate Analysis

When a field sample is split into two sub-samples, these sub-samples are called laboratory duplicates or laboratory replicates. Each undergoes the same preparation and analysis as a normal field sample. The analytical results of the two laboratory duplicates are compared to assess precision.

Not applicable. No laboratory duplicate analysis performed on a sample in this data set was reported.

2.6 Field Duplicates

Acceptance criteria (**Table 6**) were met. Three parent sample – field duplicate sample pairs were included in this SDG.

Table 6 Acceptable Parent Sample – Field Duplicate Relationships – General Chemistry

Parent Sample – Field Duplicate Sample Acceptable Relationships	Difference
Sample and its field duplicate are greater than or equal to 5x the reporting limit.	o Relative percent difference is less than or equal to 30% (aqueous) **or** o Relative percent difference is less than or equal to 50% (soil/ sediment)
Sample and/or its field duplicate is less than 5x the reporting limit.	o Absolute difference is less than or equal to 2x the reporting limit (aqueous) **or** o Absolute difference is less than or equal to 3x the reporting limit (soil/ sediment)

2.7 Additional Notes

Not applicable; no additional notes to report.

Validation performed by: Amy Coats
EHS Support LLC

3 Reference

USEPA. 2017. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-540-R-2017-001. January.

Appendix A Records with Updated Qualifiers

Table A-1 Record with Updated Qualifiers

Sample Name	Sample Date	Matrix	Fraction	Analytical Method	Analyte	Unit	Result Value	Interpreted Qualifier	Quantitation Limit Value	Lab Qualifier	Lab Sample ID	SDG
AW_C11_20221025	10/25/2022	Water	N	218.6	Chromium, hexavalent	µg/L	380	J	50	F1	680-224213-14	680-224213-1

Notes:
µg/L = micrograms per liter
F1 = MS and/or MSD recovery exceeds control limits.
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
MS/MSD = matrix spike/matrix spike duplicate
N = Not applicable
SDG = sample delivery group

EHS Support Validation Report Number: 489

Former Ciba Geigy Facility
Queensbury, New York

Sample Delivery Group (SDG): 680-224230-1

Analyses: VOC, Metals, General Chemistry

Review Level: Tier II

Analyses performed by:
Eurofins
Buffalo, New York

EHS Support℠

Report Date: January 30, 2023

Table of Contents

1 Data Review Summary 1

1.1 Guidelines and Qualifiers 1
1.2 Sample Custody and Receipt 1
1.3 Assessment Summary and Data Usability 2

2 Volatile Organic Compound Analysis 3

2.1 Preservation and Holding Times 3
2.2 Blanks 3
2.3 Surrogates 3
2.4 Laboratory Control Sample Analysis 4
2.5 Matrix Spike/Matrix Spike Duplicate Analysis 4
2.6 Target Compound Identification 4
2.7 Field Duplicates 4
2.8 Additional Notes 5

3 Metals Analysis 6

3.1 Preservation and Holding Times 6
3.2 Blanks 6
3.3 Laboratory Control Sample Analysis 7
3.4 Matrix Spike/Matrix Spike Duplicate Analysis 7
3.5 Laboratory Duplicate Analysis 8
3.6 Serial Dilution 8
3.7 Field Duplicates 8
3.8 Additional Notes 9

4 General Chemistry Analysis 10

4.1 Preservation and Holding Times 10
4.2 Blanks 11
4.3 Laboratory Control Sample/Laboratory Control Sample Duplicate Analysis 12
4.4 Matrix Spike/Matrix Spike Duplicate Analysis 13
4.5 Laboratory Duplicate Analysis 13
4.6 Field Duplicates 14
4.7 Additional Notes 15

5 References 16

List of Appendices

Appendix A Records with Updated Qualifiers

Sample and Analytical Protocol Summary

Water samples were collected at the Former Ciba Geigy Facility in Queensbury, New York and were analyzed by United States Environmental Protection Agency (USEPA) SW-846 Methods 8260C for volatile organic compounds (VOC), 6020A for metals, and 9012B for cyanide, and by Standard Methods SM2340C for hardness and SM2540C for total dissolved solids. Samples included in this sample delivery group (SDG), and in this data validation report, are listed in **Table** 1.

Table 1 Sample and Analytical Protocol Summary

SDG	Lab Sample ID	Field Sample ID	Sample Matrix	Sample Collection Date	Analysis		
					Gen Chem	Metals	VOC
680-224230-1	680-224230-1	SW_01_20221025	Water	10/25/2022	X	X	
680-224230-1	680-224230-2	SW_02_20221025	Water	10/25/2022	X	X	
680-224230-1	680-224230-3	SW_03_20221025	Water	10/25/2022	X	X	
680-224230-1	680-224230-4	SW_04_20221025	Water	10/25/2022	X	X	
680-224230-1	680-224230-5	DUP_20221025	Water	10/25/2022	X	X	
680-224230-1	680-224230-6	EB_20221025	Water	10/25/2022	X	X	
680-224230-1	680-224230-7	EB_20221024	Water	10/24/2022	X	X	X
680-224230-1	680-224230-8	AW_B18_20221024	Water	10/24/2022	X	X	X
680-224230-1	680-224230-9	MW_OB23_20221024	Water	10/24/2022	X		
680-224230-1	680-224230-10	MW_OB19_20221024	Water	10/24/2022	X		
680-224230-1	680-224230-11	DUP_20221024	Water	10/24/2022	X	X	X
680-224230-1	680-224230-12	MW_OB14_20221024	Water	10/24/2022		X	
680-224230-1	680-224230-13	IP_4_20221024	Water	10/24/2022	X	X	
680-224230-1	680-224230-14	MW_28_20221025	Water	10/25/2022	X	X	
680-224230-1	680-224230-15	MW_OB26_20221027	Water	10/27/2022	X	X	
680-224230-1	680-224230-16	AW_C11_20221025	Water	10/25/2022	X	X	
680-224230-1	680-224230-17	AW_C2_20221025	Water	10/25/2022	X	X	
680-224230-1	680-224230-18	AW_B4_20221025	Water	10/25/2022	X	X	
680-224230-1	680-224230-19	SUMP_B_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-20	SUMP_A_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-21	EW_B5_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-22	DUP_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-23	EB_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-24	MW_25S_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-25	MW_OB33_20221026	Water	10/26/2022	X	X	

SDG	Lab Sample ID	Field Sample ID	Sample Matrix	Sample Collection Date	Analysis		
					Gen Chem	Metals	VOC
680-224230-1	680-224230-26	MW_OB34_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-27	MW_OB32_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-28	MW_OB31_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-29	MW_OB30_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-30	AW_A11_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-31	MW_31_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-32	AW_A14_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-33	MW_OB25_20221026	Water	10/26/2022	X	X	
680-224230-1	680-224230-34	EB_20221027	Water	10/27/2022	X	X	

Gen Chem = General Chemistry
SDG = Sample delivery group
VOC = Volatile organic compound

1 Data Review Summary

1.1 Guidelines and Qualifiers

Data were reviewed in accordance with the United States Environmental Protection Agency (USEPA) Contract Laboratory Program National Functional Guidelines (Inorganic [USEPA, 2017a] and Organic [USEPA, 2017b]), laboratory analytical methods, and professional judgment. Relevant USEPA Region 2 Data Validation Standard Operating Procedures (SOPs) were referenced as needed. It is expected that the laboratory conducted a sufficient quality review of the data before reporting. While quality control (QC) is meant to increase confidence in analytical data, it is important to note that no compound concentration is guaranteed to be accurate, even if all QC criteria are met.

Data validation includes a review of reported results and supporting documentation in the laboratory report. Based on this evaluation, qualifiers may be added, deleted, or modified. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines (**Table 2**):

Table 2 Qualifier Codes and Definitions

Qualifier Code	Definition
U	The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.
UJ	The analyte was included in the analysis but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

QC = Quality control

1.2 Sample Custody and Receipt

Samples were received in good condition and appropriately preserved. The chain of custody was properly completed except for the following issues:

- A note in the laboratory report narrative states that sample MW_OB14_20221024 (680-224230-12) “could not be located for cyanide analysis in Buffalo.”
- There is a gap between the relinquishing and the receiving date/time associated with the second custody transfer. This is likely due to time in custody of a shipper. It is assumed that custody was maintained.

No issues expected to impact data quality were encountered.

1.3 Assessment Summary and Data Usability

In this SDG, no QC excursions encountered led to the rejection of data. Results reported in this SDG are considered usable. The specific QC variances and data qualification are outlined in this report. Records that have updated qualifiers are presented in **Appendix A.**

2 Volatile Organic Compound Analysis

2.1 Preservation and Holding Times

Acceptance criteria were met. Relevant preservation and holding time requirements for VOCs are presented in **Table 3**.

Table 3 Preservation and Holding Time Requirements – Volatile Organic Compounds

Method	Matrix	Preservation	Holding Time
Method 8260	Soil	Frozen, or cooled to less than or equal to 6 °C and preserved with $NaHSO_4$ or MeOH.	14 days
	Water	Less than or equal to 6 °C; HCl to pH less than 2.	14 days
		Less than or equal to 6 °C.	7 days

°C = Degrees Celsius
HCl = Hydrochloric acid
MeOH = Methanol
$NaHSO_4$ = Sodium bisulfate

2.2 Blanks

Blanks are analyzed to identify contamination that may have been introduced into samples. There are several types of blanks that undergo different portions of the process undergone by field samples. Blanks are containers of analyte-free water (and in some cases, analyte-free or 'clean' sand when associated samples are solids) that are preserved and analyzed the same as field samples. The following are some common types of blanks:

- Laboratory method blanks indicate contamination introduced during sample preparation and/or analysis from sources such as reagents, glassware, equipment, sample handling, and ambient laboratory conditions.
- Trip blanks identify contamination introduced at any point during the "trip," which begins with the empty containers and their transportation to the site and includes field activity, shipment to the laboratory, and analysis.
- Field blanks identify contamination introduced from bottleware and ambient conditions.
- Equipment blanks indicate the effectiveness of the field decontamination procedures as well as contamination from new sampling equipment. They also identify contamination introduced from bottleware and ambient conditions.

Acceptance criteria were met; no detections were reported from the laboratory method blanks or equipment blank submitted in this SDG.

2.3 Surrogates

Surrogates are chemicals that are similar to target compounds in chemical composition and chromatography but are not expected to be present in samples. Each field sample and QC sample is spiked with a known concentration of the appropriate surrogate compound(s) before sample preparation and analysis. Surrogates are incorporated into samples, and their recoveries are shown to

predict experimental recoveries of target analytes. Surrogates are used to monitor performance of the preparation and analysis process, particularly purging efficiency and possible matrix interference, on a sample-specific basis.

Acceptance criteria were met. The relationship between the amount of surrogate added and the amount of surrogate reported for each sample was within acceptance limits.

2.4 Laboratory Control Sample Analysis

A laboratory control sample is prepared when known concentrations of target analytes are spiked into an aliquot of analyte-free material (deionized water or 'clean' sand). The laboratory control sample undergoes the same preparation and analytical procedure as the field samples. It is analyzed to determine, without sample matrix, whether the overall procedure is working within control limits. The recoveries of the spiked analytes are evaluated to determine accuracy.

Acceptance criteria were met. Recoveries were within control limits.

2.5 Matrix Spike/Matrix Spike Duplicate Analysis

A matrix spike is prepared when known concentrations of target analytes are spiked into an aliquot of a field sample, thus it is a spiked sample. The matrix spike undergoes the same preparation and analytical procedure as normal (unspiked) field samples. It is analyzed to evaluate the effects of interferences caused by the sample matrix. Poor spike recoveries could indicate matrix interference issues.

A matrix spike duplicate is a replicate of the matrix spike. It is a separate aliquot of sample into which the same concentrations of analytes are spiked; this second spiked sample is intended to be identical to the matrix spike. The matrix spike and matrix spike duplicate undergo the same preparation and analytical process as the original sample. Recoveries of analytes from the matrix spike and matrix spike duplicate are evaluated to assess accuracy and bias. The relative percent difference between the matrix spike result and the matrix spike duplicate result is evaluated to assess precision.

Not applicable. No matrix spike analysis performed on a sample in this data set was reported.

2.6 Target Compound Identification

Acceptable; no issues to report. In the initial analysis, results for 1,2-dichlorobenzene from two samples were greater than the calibrated range of the instrument. Results for that compound from those samples were reported from subsequent dilutions.

2.7 Field Duplicates

Acceptance criteria, shown in **Table 4**, were met. One parent sample – field duplicate sample pair was included in this SDG and designated for VOC analysis.

Table 4 Acceptable Parent Sample – Field Duplicate Relationships – Volatile Organic Compounds

Parent Sample and Field Duplicate Sample Concentrations	Difference
Sample and field duplicate concentrations are greater than or equal to 5x the reporting limit.	o Relative percent difference is less than or equal to 30% (aqueous) **or** o Relative percent difference is less than or equal to 50% (soil/sediment)
Sample and/or field duplicate concentration(s) is/are less than 5x the reporting limit.	o Absolute difference is less than or equal to 2x the reporting limit (aqueous) **or** o Absolute difference is less than or equal to 3x the reporting limit (soil/sediment)

2.8 Additional Notes

Samples 680-224230-8 and 680-224230-11 were analyzed at dilutions.

3 Metals Analysis

3.1 Preservation and Holding Times

Acceptance criteria were met. Relevant preservation and holding time requirements for metals are presented in **Table 5**:

Table 5 Preservation and Holding Time Requirements - Metals

Method	Matrix	Preservation	Holding Time
Metals (except mercury and hexavalent chromium) by 6010/6020	Water	HNO_3 to pH less than 2	180 days
	Soil	None	180 days
Mercury by 7470A	Water	HNO_3 to pH less than 2	28 days
Mercury by 7471B	Soil	Less than or equal to 6 °C	28 days

°C = Degrees Celsius
HNO_3 = Nitric acid

3.2 Blanks

Blanks are analyzed to identify contamination that may have been introduced into samples. There are several types of blanks that undergo different portions of the process undergone by field samples. In short, blanks are containers of analyte-free water (and in some cases, analyte-free or 'clean' sand when associated samples are solids). The following are common types of blanks:

- Laboratory method blanks indicate contamination introduced during sample preparation and/or analysis from sources such as reagents, glassware, equipment, sample handling, and ambient laboratory conditions.
- Equipment blanks indicate the effectiveness of the field decontamination procedures as well as contamination from new sampling equipment. They also identify contamination introduced from bottleware and ambient conditions.

Positive (detected) sample results associated with blank contamination are presented in **Table 6**. When analyte detections are reported in blanks, but associated results are non-detect, no qualification is necessary; such cases are not shown.

Table 6 Observed Blank Contamination and Associated Actions – Metals

Analyte	Blank Detection [a]	Blank Result (Category)	Associated Samples	Sample Result	Qualification [a]
Dissolved chromium	0.51 J µg/L (EB_20221025)	Greater than or equal to the method detection limit but less than or equal to reporting limit.	680-224230-1 680-224230-2 680-224230-3	Less than the reporting limit	Report U at the reporting limit
			680-224230-14 680-224230-16 680-224230-17 680-224230-18	Greater than reporting limit and greater than 5x the blank result	No qualification needed

Analyte	Blank Detection [a]	Blank Result (Category)	Associated Samples	Sample Result	Qualification [a]
Dissolved chromium	2.6 µg/L (EB_20221026)	Greater than the reporting limit	680-224230-24 680-224230-31 680-224230-32	Greater than the reporting limit and greater than the blank concentration but less than 5x the blank concentration.	Report U at the reported concentration
			680-224230-19 680-224230-20 680-224230-21 680-224230-22 680-224230-25 680-224230-26 680-224230-27 680-224230-28 680-224230-29 680-224230-30 680-224230-33	Greater than reporting limit and greater than 5x the blank result	No qualification needed

[a] See **Section 1** for qualifier definitions.
µg/L = Micrograms per liter
EB = Equipment blank

3.3 Laboratory Control Sample Analysis

A laboratory control sample is prepared when known concentrations of target analytes are spiked into an aliquot of analyte-free material (deionized water or 'clean' sand). The laboratory control sample undergoes the same preparation and analytical procedure as field samples. The laboratory control sample is analyzed to determine, without sample matrix, whether the overall procedure is working within control limits. The recoveries of the spiked analytes are evaluated to determine accuracy.

Acceptance criteria were met. Laboratory control sample recoveries were within control limits.

3.4 Matrix Spike/Matrix Spike Duplicate Analysis

A matrix spike is prepared when known concentrations of target analytes are spiked into an aliquot of field sample. The matrix spike undergoes the same preparation and analytical procedure as normal (unspiked) field samples. It is analyzed to evaluate the effects of interferences caused by the sample matrix. Poor spike recoveries could indicate matrix interference issues.

A matrix spike duplicate is an additional replicate of the matrix spike, i.e., a separate aliquot of sample into which the same concentrations of analytes are spiked. The matrix spike and matrix spike duplicate undergo the same preparation and analytical testing as the original sample. Recoveries of analytes from

matrix spiked samples and from matrix spiked duplicates are evaluated to assess accuracy and bias. The relative percent difference between the matrix spike result and the matrix spike duplicate result is evaluated to assess precision.

Acceptance criteria were met. Matrix spike/matrix spike duplicate analysis was performed on samples 680-224230-19, 680-224230-3, and 680-224230-16. Note that matrix spike analyses cannot be evaluated if the unspiked sample concentration of the relevant analyte is greater than or equal to 4x the spike amount.

3.5 Laboratory Duplicate Analysis

When a field sample is split into two sub-samples, these sub-samples are called laboratory duplicates or laboratory replicates. Each undergoes the same preparation and analysis that normal field samples do. The analytical results of the two laboratory duplicates are compared to assess precision.

Not applicable. No laboratory duplicate analysis performed on a sample in this data set was reported.

3.6 Serial Dilution

Serial dilution is used to determine whether significant physical or chemical interferences exist due to the sample matrix. A sample is analyzed undiluted and at a 5-fold dilution, then the calculated results are compared. Serial dilution analysis is evaluated for analytes that were detected in the original sample at concentrations at least 50x the instrument detection limit; the concentration in the undiluted sample must be greater than or equal to 50x the instrument detection limit to obtain a meaningful comparison. The results of the inductively coupled plasma serial dilution are deemed acceptable when the percent difference between the original analysis and the diluted analysis is less than or equal to 10 percent.

Not applicable: No serial dilution analysis performed on a sample in this data set was reported.

3.7 Field Duplicates

Acceptance criteria (**Table 7**) were met. Three parent sample – field duplicate sample pairs were included in this SDG.

Table 7 Acceptable Parent Sample – Field Duplicate Relationships – Metals

Parent Sample – Field Duplicate Sample Acceptable Relationships	Difference
Sample and its field duplicate are greater than or equal to 5x the reporting limit.	o Relative percent difference is less than or equal to 30% (aqueous) **or** o Relative percent difference is less than or equal to 50% (soil/ sediment)
Sample and/or its field duplicate is less than 5x the reporting limit.	o Absolute difference is less than or equal to 2x the reporting limit (aqueous) **or** o Absolute difference is less than or equal to 3x the reporting limit (soil/ sediment)

3.8 Additional Notes

Not applicable; no additional notes to report.

4 General Chemistry Analysis

4.1 Preservation and Holding Times

Relevant preservation and holding time requirements are presented in **Table 8**:

Table 8 Preservation and Holding Time Requirements – General Chemistry

Method	Matrix	Preservation	Holding Time
Total cyanide by 9012B	Water	Less than or equal to 6 °C, NaOH to pH greater than 12	14 days
Hardness by SM2340C	Water	HNO_3 to pH less than 2	180 days
Total dissolved solids by SM2540	Water	Less than or equal to 6 °C	7 days

°C = Degrees Celsius
HNO_3 = Nitric acid
NaOH = Sodium hydroxide

Analyses performed outside of the specified holding times are listed in **Table 9**. All other holding time criteria were met.

Table 9 Observed Preservation and/or Holding Time Nonconformances – General Chemistry

Samples	Analysis	Holding Time	Observed Holding Time
680-224230-1 680-224230-2 680-224230-3 680-224230-4 680-224230-5 680-224230-6	Total dissolved solids by SM2540	7 days	7.7 – 8.4 days
680-224230-8 680-224230-9 680-224230-10 680-224230-11 680-224230-13	Total cyanide by 9012B	14 days	15 days – 16.2 days

The samples listed in **Table 9** have been qualified as shown in **Table 10**:

Table 10 Preservation and Holding Time Nonconformance Actions – General Chemistry

Quality Control Excursion	Qualification [a]	
	Detected Analytes	Non-Detect Analytes
Technical holding time exceeded; analysis performed in less than 2x holding time.	J	UJ

Quality Control Excursion	Qualification [a]	
	Detected Analytes	Non-Detect Analytes
Technical holding time exceeded; analysis performed in more than 2x holding time.	J	R

[a] See **Section 1** for qualifier definitions.

4.2 Blanks

Blanks are analyzed to identify contamination that may have been introduced into samples. There are several types of blanks that undergo different portions of the process undergone by field samples. Blanks are containers of analyte-free water (and in some cases, analyte-free or 'clean' sand when associated samples are solids). Some common types of blanks follow:

- Laboratory method blanks indicate contamination introduced during sample preparation and/or analysis from sources such as reagents, glassware, equipment, sample handling, and ambient laboratory conditions.
- Equipment blanks indicate the effectiveness of the field decontamination procedures as well as contamination from new sampling equipment. They also identify contamination introduced from bottleware and ambient conditions.

Positive (detected) sample results associated with blank contamination are presented in **Table 11.** When analyte detections are reported in blanks, but associated results are non-detect, no qualification is necessary; such cases are not shown.

Several cyanide results bear ^2 qualifiers from the laboratory. The ^2 flag is defined as "Calibration Blank (ICB and/or CCB) is outside acceptance limits." The laboratory report did not include details. Correspondence with laboratory staff yielded the following information: *"Batch 480-648875 from 11/7 had an elevated CCB/186 (at 0.011 mg/L). Batch 480-649256 from 11/9 had elevated ICB (at 0.011) and CCBs (at between 0.011 and 0.013)"*. Field sample results that are associated with calibration blank contamination were evaluated. Any results that would be qualified due to the detection in the calibration blank have already been qualified due to the method blank contamination. The detections reported in the calibration blanks do not necessitate any qualification beyond what was done based on method blank results. The information about detections in the calibration blanks is not shown in **Table 11**.

Table 11 Observed Blank Contamination and Associated Actions – General Chemistry

Analyte	Blank Detection [a]	Blank Result (Category)	Associated Samples	Sample Result	Qualification [a]
Cyanide	0.0086 J mg/L (MB 480-649064/133) 0.0109 mg/L MB 480-649064/163 0.0074 J mg/L (MB 480-649064/193)	One blank concentration is greater than the reporting limit	680-224230-14 680-224230-16 680-224230-17	Greater than reporting limit, greater than the blank concentration but less than 5x the blank result	Report U at the detected concentration
			680-224230-8 680-224230-10 680-224230-11 680-224230-15 680-224230-18 680-224230-20 680-224230-21 680-224230-22 680-224230-24 680-224230-25 680-224230-31 680-224230-33	Greater than reporting limit and greater than 5x the blank result	No qualification needed
Cyanide	0.0121 mg/L (MB 480-649256/133) 0.0104 mg/L (MB 480-649256/162)	Greater than the reporting limit	680-224230-30 680-224230-32	Greater than reporting limit, greater than the blank concentration but less than 5x the blank result	Report U at the detected concentration
			680-224230-9 680-224230-13 680-224230-19 680-224230-26 680-224230-27 680-224230-28 680-224230-29	Greater than reporting limit and greater than 5x the blank result	No qualification needed

[a] See **Section 1** for qualifier definitions.
MB = Method blank
mg/L = Milligrams per liter

4.3 Laboratory Control Sample/Laboratory Control Sample Duplicate Analysis

A laboratory control sample is prepared when known concentrations of target analytes are spiked into an aliquot of analyte-free material (deionized water or 'clean' sand). The laboratory control sample undergoes the same preparation and analytical procedure as field samples. The laboratory control sample is analyzed to determine, without sample matrix, whether the overall procedure is working within control limits. The recoveries of the spiked analytes are evaluated to determine accuracy.

A laboratory control sample duplicate is, as the name implies, a separate QC sample that is created just as the laboratory control sample is created. It undergoes the same preparation and analytical procedure. Recoveries of analytes from the laboratory control sample and from the laboratory control sample duplicate are evaluated to access accuracy and bias. The relative percent difference between laboratory control sample and laboratory control sample duplicate results is evaluated to assess precision.

Acceptance criteria were met. Recoveries, as well as the relative percent difference between the laboratory control sample and laboratory control sample duplicate results, were within acceptable limits. The laboratory control sample/laboratory control sample duplicate pair was analyzed for cyanide. Laboratory control samples were analyzed in all other cases.

4.4 Matrix Spike/Matrix Spike Duplicate Analysis

A matrix spike is prepared when known concentrations of target analytes are spiked into an aliquot of field sample. The matrix spike undergoes the same preparation and analytical procedure as normal (unspiked) field samples. It is analyzed to evaluate the effects of interferences caused by the sample matrix. Poor spike recoveries could indicate matrix interference issues.

A matrix spike duplicate is an additional replicate of the matrix spike, i.e., a separate aliquot of sample into which the same concentrations of analytes are spiked. The matrix spike and matrix spike duplicate undergo the same preparation and analytical testing as the original sample. Recoveries of analytes from matrix spiked samples and from matrix spiked duplicates are evaluated to assess accuracy and bias. The relative percent difference between the matrix spike result and the matrix spike duplicate result is evaluated to assess precision.

Acceptance criteria were met. Matrix spike/matrix spike duplicate analysis was performed on sample 680-224230-3 for hardness. Matrix spike/matrix spike duplicate analysis was performed on sample 680-224230-16 for cyanide. Matrix spike analyses were performed on several samples for cyanide. The recoveries and the relative percent difference between the matrix spike and matrix spike duplicate were acceptable. The matrix spike and matrix spike duplicate recoveries in the cyanide analysis of sample 680-224230-16 were 84 percent and 85 percent, which are outside the laboratory's acceptance limits, but within the 75 to 125 percent acceptance limits applied for this validation. Therefore, the lab flag applied to the cyanide result for sample 680-224230-16 has been removed.

4.5 Laboratory Duplicate Analysis

When a field sample is split into two sub-samples, these sub-samples are called laboratory duplicates or laboratory replicates. Each undergoes the same preparation and analysis as a normal field sample. The analytical results of the two laboratory duplicates are compared to assess precision.

Acceptance criteria (**Table 12**) were met. Laboratory duplicate analyses for cyanide were performed on samples 680-224230-16 and 680-224230-31.

Table 12 Acceptable Parent Sample - Laboratory Duplicate Relationships – General Chemistry

Parent Sample and Laboratory Duplicate Sample Concentrations	Difference
Sample and field duplicate concentrations are greater than or equal to 5x the reporting limit.	o Relative percent difference is less than or equal to 20% (aqueous) **or** o Relative percent difference is less than or equal to 35% (soil/sediment)
Sample and/or field duplicate concentration(s) is/are less than 5x the reporting limit.	o Absolute difference is less than or equal to 1x the reporting limit (aqueous) **or** o Absolute difference is less than or equal to 2x the reporting limit (soil/sediment)

4.6 Field Duplicates

Three field duplicates were submitted in this SDG. Parent result – field duplicate result relationships that are outside acceptance limits are shown in **Table 13**. When the parent and field duplicate results are both significantly greater than the associated reporting limit, the relationship between the two results is expressed numerically as the relative percent difference.

Table 13 Observed Field Duplicate Nonconformances – General Chemistry

Samples	Analyte	Parent Sample Result (µg/L)	Duplicate Sample Result (µg/L)	Relationship
SW_03_20221025/ DUP_20221025	Hardness	48000	32000	40.0%

µg/L = Micrograms per liter

For inorganic analyses in which samples undergo batch digestion or batch distillation, batch qualifications are applied (**Table 14**). Because of the noncompliant parent sample – field duplicate relationship, qualifiers were applied to hardness results in all field samples in this SDG.

Table 14 Field Duplicate Nonconformance Actions – General Chemistry

Quality Control Nonconformance	Sample Result	Sample Result Qualification [a]
Sample and its field duplicate are greater than or equal to 5x the reporting limit and - Relative percent difference is greater than 30% (aqueous) **or** - Relative percent difference is greater than 50% (soil/ sediment)	Detect	J
Sample and/or its field duplicate is less than 5x the reporting limit and -Absolute difference is greater than 2x the reporting limit (aqueous) **or** -Absolute difference is greater than 3x the reporting limit (soil/sediment)	Non-detect	UJ
	Detect	J

[a] See **Section 1** for qualifier definitions.

4.7 Additional Notes

Not applicable; no additional notes to report.

Validation performed by: Amy Coats
EHS Support LLC

5 References

USEPA. 2017a. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-540-R-2017-001. January.

USEPA. 2017b. National Functional Guidelines for Organic Superfund Methods Data Review. EPA-540-R-2017-002. January.

Appendix A Records with Updated Qualifiers

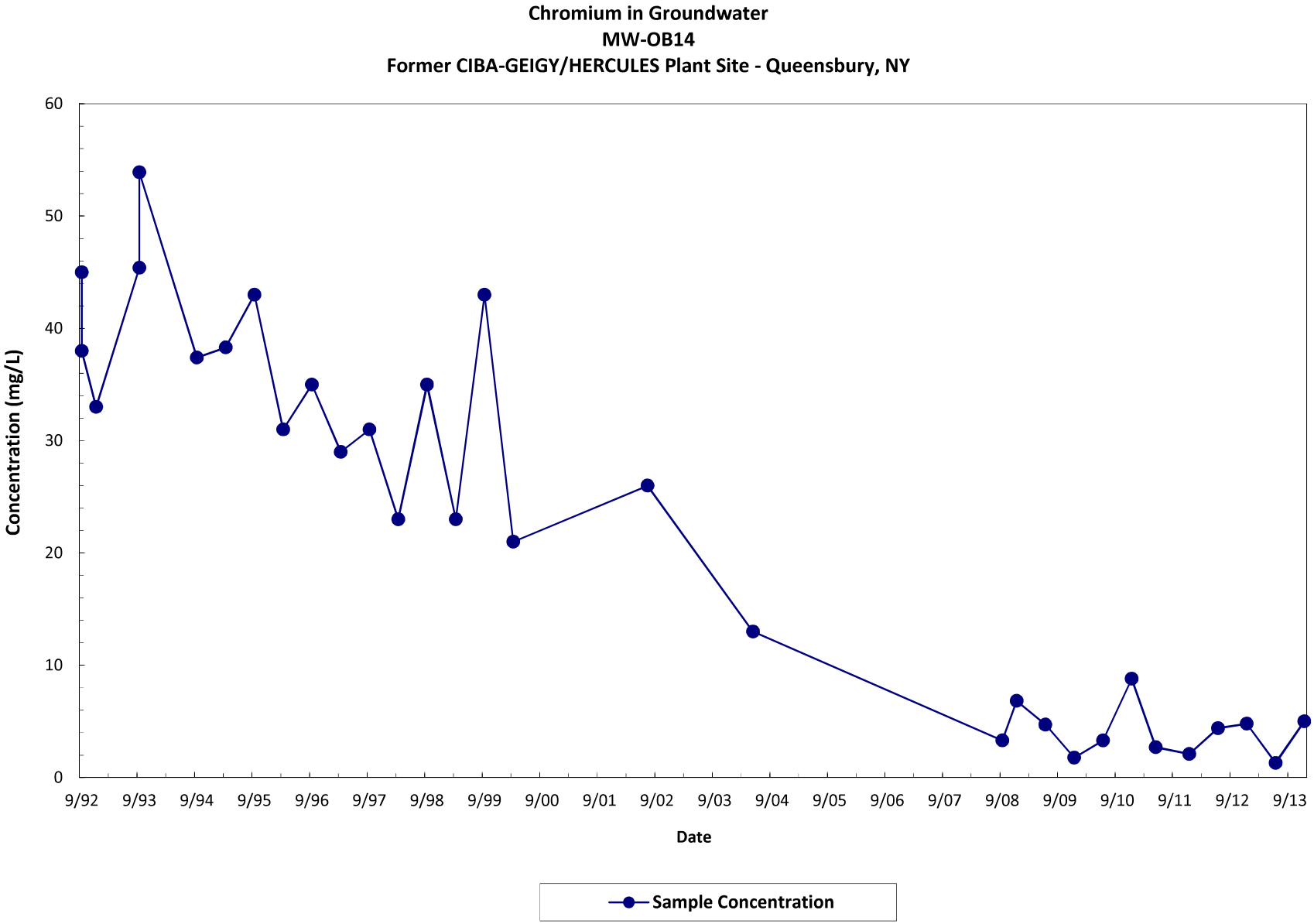
Table A-1 Records with Updated Qualifiers

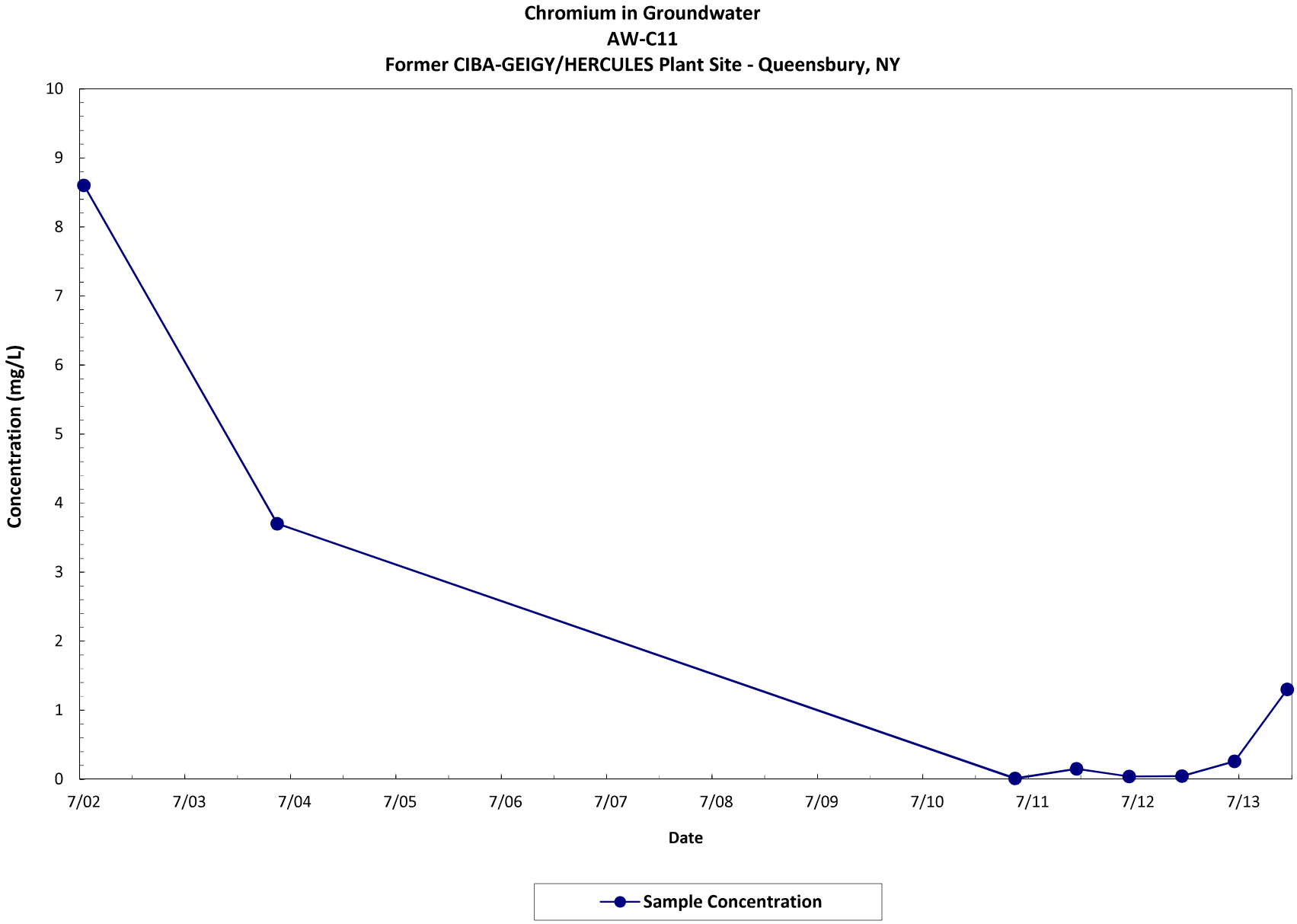
Sample Name	Sample Date	Matrix	Fraction	Analytical Method	Analyte	Units	Result Value	Interpreted Qualifier	Quantitation Limit Value	Lab Qualifier	Lab Sample ID	SDG
SW_01_20221025	10/25/2022	Water	T	2340C	Hardness (As CaCO3)	µg/L	36000	J	4000		680-224230-1	680-224230-1
SW_01_20221025	10/25/2022	Water	D	2540C	Total Dissolved Solids (Residue, Filterable)	mg/L	800	J	10	H	680-224230-1	680-224230-1
SW_01_20221025	10/25/2022	Water	D	6020A	Chromium, total	µg/L	0.69	U	1.5	J	680-224230-1	680-224230-1
MW_OB19_20221024	10/24/2022	Water	T	9012B	Cyanide	mg/L	0.27	J	0.10	HB	680-224230-10	680-224230-1
DUP_20221024	10/24/2022	Water	T	9012B	Cyanide	mg/L	0.11	J	0.010	HB	680-224230-11	680-224230-1
IP_4_20221024	10/24/2022	Water	T	9012B	Cyanide	mg/L	1.1	J	0.050	HB^2	680-224230-13	680-224230-1
MW_28_20221025	10/25/2022	Water	T	9012B	Cyanide	mg/L	0.014	U	0.014	B	680-224230-14	680-224230-1
MW_OB26_20221027	10/27/2022	Water	T	9012B	Cyanide	mg/L	0.15		0.010	B	680-224230-15	680-224230-1
AW_C11_20221025	10/25/2022	Water	T	9012B	Cyanide	mg/L	0.021	U	0.021	BF1	680-224230-16	680-224230-1
AW_C2_20221025	10/25/2022	Water	T	9012B	Cyanide	mg/L	0.026	U	0.026	B	680-224230-17	680-224230-1
AW_B4_20221025	10/25/2022	Water	T	9012B	Cyanide	mg/L	0.08		0.010	B	680-224230-18	680-224230-1
SUMP_B_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.66		0.020	B^2	680-224230-19	680-224230-1
SW_02_20221025	10/25/2022	Water	T	2340C	Hardness (As CaCO3)	µg/L	44000	J	4000		680-224230-2	680-224230-1
SW_02_20221025	10/25/2022	Water	D	2540C	Total Dissolved Solids (Residue, Filterable)	mg/L	280	J	10	H	680-224230-2	680-224230-1
SW_02_20221025	10/25/2022	Water	D	6020A	Chromium, total	µg/L	0.68	U	1.5	J	680-224230-2	680-224230-1
SUMP_A_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.33		0.010	B	680-224230-20	680-224230-1
EW_B5_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.18		0.010	B	680-224230-21	680-224230-1
DUP_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.18		0.010	B	680-224230-22	680-224230-1
MW_25S_20221026	10/26/2022	Water	D	6020A	Chromium, total	µg/L	11	U	11		680-224230-24	680-224230-1
MW_25S_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.14		0.010	B	680-224230-24	680-224230-1
MW_OB33_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.25		0.010	B	680-224230-25	680-224230-1
MW_OB34_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.57		0.020	B^2	680-224230-26	680-224230-1
MW_OB32_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	3.4		0.10	B^2	680-224230-27	680-224230-1
MW_OB31_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.067		0.010	B^2	680-224230-28	680-224230-1
MW_OB30_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.081		0.010	B^2	680-224230-29	680-224230-1
SW_03_20221025	10/25/2022	Water	T	2340C	Hardness (As CaCO3)	µg/L	48000	J	4000		680-224230-3	680-224230-1
SW_03_20221025	10/25/2022	Water	D	2540C	Total Dissolved Solids (Residue, Filterable)	mg/L	540	J	10	H	680-224230-3	680-224230-1
SW_03_20221025	10/25/2022	Water	D	6020A	Chromium, total	µg/L	0.37	U	1.5	J	680-224230-3	680-224230-1
AW_A11_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.037	U	0.037	B^2	680-224230-30	680-224230-1
MW_31_20221026	10/26/2022	Water	D	6020A	Chromium, total	µg/L	9.5	U	9.5		680-224230-31	680-224230-1
MW_31_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.22		0.010	B	680-224230-31	680-224230-1
AW_A14_20221026	10/26/2022	Water	D	6020A	Chromium, total	µg/L	3	U	3		680-224230-32	680-224230-1
AW_A14_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.034	U	0.034	B^2	680-224230-32	680-224230-1
MW_OB25_20221026	10/26/2022	Water	T	9012B	Cyanide	mg/L	0.16		0.010	B	680-224230-33	680-224230-1
SW_04_20221025	10/25/2022	Water	T	2340C	Hardness (As CaCO3)	µg/L	56000	J	4000		680-224230-4	680-224230-1
SW_04_20221025	10/25/2022	Water	D	2540C	Total Dissolved Solids (Residue, Filterable)	mg/L	530	J	10	H	680-224230-4	680-224230-1
DUP_20221025	10/25/2022	Water	T	2340C	Hardness (As CaCO3)	µg/L	32000	J	4000		680-224230-5	680-224230-1
DUP_20221025	10/25/2022	Water	D	2540C	Total Dissolved Solids (Residue, Filterable)	mg/L	600	J	10	H	680-224230-5	680-224230-1
EB_20221025	10/25/2022	Water	D	2540C	Total Dissolved Solids (Residue, Filterable)	mg/L	940	J	10	H	680-224230-6	680-224230-1
AW_B18_20221024	10/24/2022	Water	T	9012B	Cyanide	mg/L	0.1	J	0.010	HB	680-224230-8	680-224230-1
MW_OB23_20221024	10/24/2022	Water	T	9012B	Cyanide	mg/L	3	J	0.10	HB^2	680-224230-9	680-224230-1

Notes:
µg/L = micrograms per liter
^2 = Calibration Blank (ICB and/or CCB) is outside acceptance limits.

B = Compound was found in the blank and sample.
CaCO3 = Calcium carbonate
CCB = Continuing calibration blank
D = Dissolved
F1 = MS and/or MSD recovery exceeds control limits.
H = Sample was prepped or analyzed beyond the specified holding time
ICB = Initial calibration blank
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L = milligrams per liter
MS/MSD = matrix spike/matrix spike duplicate
SDG = sample delivery group
T = Total
U = The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.

Appendix D Historical Trends – MW-OB14 and AW-C11 (Antea, 2014)


Chromium in Groundwater
MW-OB14
Former CIBA-GEIGY/HERCULES Plant Site - Queensbury, NY
Concentration (mg/L)
60
50
40
30
20
10
0
9/92
9/93
9/94
9/95
9/96
9/97
9/98
9/99
9/00
9/01
9/02
9/03
9/04
9/05
9/06
9/07
9/08
9/09
9/10
9/11
9/12
9/13
Date
Sample Concentration


Chromium in Groundwater
AW-C11
Former CIBA-GEIGY/HERCULES Plant Site - Queensbury, NY
Concentration (mg/L)
10
9
8
7
6
5
4
3
2
1
0
7/02
7/03
7/04
7/05
7/06
7/07
7/08
7/09
7/10
7/11
7/12
7/13
Date
Sample Concentration