

August 26, 2021

Brian Jankauskas, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation (DER), Remedial Bureau A
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**Subject: Soil Sampling Report for the Sliver Quarry Area
 Former Ciba-Geigy/Hercules Site, Glens Falls, New York
 EPA ID NYD002069748 / NYSDEC Site No.: 557011**

Dear Mr. Jankauskas:

This *Soil Sampling Report for the Sliver Quarry Area* ("report") summarizes the results of the soil samples collected at the Sliver Quarry Area, which is located north of the former Ciba-Geigy Corporation ("CIBA") pigments manufacturing facility Main Plant Site (MPS), located at 89 Lower Warren Street in Queensbury, New York, just east of the City of Glens Falls) currently owned by BASF Corporation ("BASF") (the Site; **Figure 1**). EHS Support LLC ("EHS Support") is submitting this report to the New York State Department of Environmental Conservation (NYSDEC) on behalf of Hercules Incorporated (previously acquired by Ashland LLC) and CIBA (previously acquired by BASF). The Site is now in post-closure management under a NYSDEC Hazardous Waste Management (HWM) Post Closure Permit ("HWM Permit") (NYSDEC Site No. 557011). A renewal of the Part 373 HWM Permit #5-5234-00008/00096 was issued by NYSDEC on March 5, 2015. Hercules and CIBA ("the Parties") are the permittees and share responsibility for ongoing environmental activities at the Site.

On behalf of the Parties, EHS Support submitted a *Soil Sampling Work Plan for the Sliver Quarry Area* to NYSDEC on July 14, 2020. On September 30, 2020, NYSDEC sent a comment letter on the Work Plan to the Parties, and EHS Support provided a comment response letter to NYSDEC on October 15, 2020. On October 22, 2020, NYSDEC provided an email indicating that the Parties' responses were appropriate and requesting a Revised Work Plan. On November 9, 2020, the Parties submitted a *Revised Soil Sampling Work Plan for the Sliver Quarry Area* ("Work Plan") to NYSDEC. NYSDEC approved the Work Plan in a letter dated November 9, 2020.

Background and Previous Investigation Activities

There was no documented industrial activity in the Sliver Quarry Area; therefore, no constituents of concern (COCs) have been identified based on historical land use. Select metals have been identified as COCs at the MPS, other owned parcels, and off-site parcels. During the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), the transport of certain metals to surface soil via air deposition from historic plant operations was identified on certain off-site parcels located further to the north than the Sliver Quarry Area (i.e., north of Lower Warren Street), and remediation was performed on these parcels to address metals deposited by this transport pathway. However, no completed migration pathway to the Sliver Quarry Area was identified during the RFI for the on-site or off-site parcels.



In 2013, soil samples were collected from a depth of 18 to 24 inches below ground surface (bgs) at six locations in the eastern portion of the Sliver Quarry Area and the adjacent property to the east that is owned by the New York State Canal Corporation (“Canal Corporation”), to support an assessment by BASF regarding potential property redeployment alternatives (AMO Environmental Decisions, 2014).¹ At that time, the eastern boundary of BASF’s property was thought to extend approximately 200 feet further to the east than the actual property boundary onto property owned by Canal Corporation. At four of the six locations, mercury and/or cadmium concentrations in the soil samples exceeded the 6 New York Codes, Rules, and Regulations Part 375 Soil Cleanup Objectives (SCOs) for the protection of public health at industrial properties (locations S005, S006, S008, and S010 on **Figure 2**).

In 2018, the Parties installed two borings and collected soil samples in the western portion of the Sliver Quarry Area in support of a proposed New York State Department of Transportation culvert replacement project. As detailed in the *Soil Sampling Data Report to Support DOT Culvert Installation*,² cyanide and metals concentrations (including mercury and cadmium concentrations) were less than the corresponding NYSDEC Commercial SCOs for all constituents analyzed. The locations of the two borings installed by the Parties in 2018 (SQ-001 and SQ-002) are illustrated on **Figure 2**. During the NYSDEC review process for work supporting the culvert replacement, NYSDEC requested that the Parties collect additional samples at other locations in the Sliver Quarry Area, and NYSDEC conducted a related Site walk in the Sliver Quarry Area with representatives from Hercules and BASF in May 2019.

There is a groundwater monitoring well cluster located in the Sliver Quarry Area that was installed in 1987 as part of the *Preliminary Site Assessment*.³ The well cluster is comprised of overburden well MW-24, shallow bedrock well MW-23S, and intermediate bedrock well MW-23D. Each of these wells was sampled in the 1990s and again in 2013, and none of the sample results exceeded the applicable NYSDEC GA standards for Site-related metals, demonstrating that metals present in soil in the Sliver Quarry Area do not pose a risk to potential receptors via groundwater.

It is noted that the Sliver Quarry Area receives stormwater from multiple off-site parcels located north of Lower Warren Street via culverts that extend beneath the road and discharge to the Canal Corporation-owned property located east of the Sliver Quarry Area. The stormwater then flows west via overland flow within ditches (see **Figures 2 and 3**) toward the ponded water on the Sliver Quarry Area property.

It is also noted that only a portion of the Sliver Quarry Area was deemed accessible for sampling (see **Figure 2**). A large portion of the Sliver Quarry is inundated with water, and the portion of the Sliver Quarry Area that is located between the water and the road to the north has a steep, in some locations, nearly vertical grade (see 2-foot topography contours illustrated in **Figure 3**).

¹ AMO Environmental Decisions. 2014. *Addendum A to Work Plan for Target Removal Tasks at North Lot and Pre-Treatment Plant Parcels of BASF Corporation’s Glens Falls, New York Property*. Prepared by AMO Environmental Decisions on behalf of BASF and submitted to the NYSDEC on May 20, 2014.

² EHS Support. 2018. *Soil Sampling Data Report to Support DOT Culvert Installation*. February 14.

³ Malcolm Pirnie. 1987. *Preliminary Site Assessment*.



Soil Sampling Objectives

The objectives of soil sampling activities were to:

- Determine the concentrations of metals in shallow soil (within the top 12 inches), in the accessible portion of the Sliver Quarry Area to determine if the existing soil functions as a cover over the metals concentrations previously identified at 18 to 24 inches bgs.
- At locations not sampled previously, collect soil samples at 18 to 24 inches bgs to provide additional delineation of the horizontal extent of metals impacts identified at this depth during the 2013 sampling event.
- Compare the soil sampling results to the applicable Part 375 SCOs.

Sampling Activities

On June 15 and June 16, 2021, Antea® Group of Valhalla, New York collected soil samples at the Sliver Quarry Area pursuant to the NYSDEC-approved Work Plan. Prior to field mobilization, Antea Group completed a private utility markout and a utility clearance survey, via the New York Public Service Commission dig safely notification line, and vegetation clearance activities. Brian Jankauskas of NYSDEC was on-site during the sampling activities conducted on June 15, 2021.

Health and Safety

Field activities were conducted in accordance with a Site-specific Health and Safety Plan (HASP) developed as a separate document. Field personnel were required to implement the procedures presented in the HASP while conducting fieldwork, including the use of clean gloves during the collection of samples and any other personal protective equipment deemed necessary.

Sampling Locations and Depths

Soil samples were collected from the planned boring locations and depths summarized in **Table 1**. The locations of the borings were field-located using Global Positioning System coordinates (**Table 2**).

Two locations were moved slightly due to obstructions at depth. The modifications to the proposed locations and the actual boring coordinates are documented in the field notes. The sample locations shown in **Figure 2** reflect those changes. There were no other modifications to the locations or sample intervals included in the NYSDEC-approved Work Plan. At one boring location (S011), a gray material was encountered at a depth of 12 inches bgs. Otherwise, the soil encountered at all locations was dark to medium brown soil with various proportions of sand and silt, often mixed with organic material including roots, and without any visual evidence of anthropogenic components or soil staining.

Boring and Sampling Methodology

A stainless-steel hand auger was used to collect soil samples at all locations. Once the desired depth was achieved, soil from the sample interval was collected and visually inspected for physical characteristics (i.e., soil type, relative moisture content, consistency, odor, color), and the field observations were



recorded in a field logbook. Soil boring logs are provided in **Attachment A**. Soil boreholes were abandoned following soil sampling by placing the remaining soil back into the borehole.

For each interval, a sample was collected by placing the soil in a clean container (zip lock bag) and mixing the soil to homogenize the sample. The sample was then transferred to a clean sample container provided by the laboratory. For each sample, the required sample volume was collected from a contiguous interval of the boring, and the sampled interval and ID were recorded on the sample log.

Upon collection (i.e., filling of sample container for laboratory analysis), the container was sealed (lid closed); labeled with the sample ID, and the date and time of collection; and placed in a cooler with ice for transport to the Eurofins TestAmerica Buffalo laboratory ("Eurofins") in Amherst, New York under chain-of-custody documentation.

Eurofins performed the laboratory analyses summarized in **Table 3**. Eurofins is certified under the New York State Environmental Laboratory Accreditation Program for the test methods used.

Equipment Decontamination

Soil sampling equipment was decontaminated after use in each borehole. Cleaning/decontamination was comprised of a pre-rinse in potable water, followed by washing in non-phosphate detergent solution (e.g., Alconox wash), rinsing in clean (potable or laboratory-grade) water, and air drying (or wiped dry using clean paper towels).

Investigation-Derived Waste

The excess soil not used for laboratory analysis was placed back into the hole created during the boring process. Excess cutting volumes were minimal. Solid waste (packaging material, spent gloves) was disposed of as municipal waste. Decontamination water was containerized and discharged to the Glens Falls publicly owned treatment works (POTW) via the effluent pumping station at the MPS.

Quality Assurance/Quality Control Program

The Level II analytical data report is provided in **Attachment B**. Category B data deliverables were also provided by the laboratory, and full data validation was performed. The Data Usability Summary Report (DUSR) is provided as **Attachment C**, and electronic data deliverables will be supplied to NYSDEC.

Two blind duplicate soil samples and two matrix spike/matrix spike duplicate (MS/MSD) samples were collected and handled using the same methodology employed for the original samples and analyzed for the same suite of analytes as the original samples.

To supplement the data validation process, the laboratory analyzed one additional MS/MSD sample pair and performed eight additional MS analyses for cyanide. Due to apparent matrix effects and as a result



of the data validation process, several non-detect cyanide results for soil samples were rejected (i.e., those without a corresponding MS sample with recovery of at least 30 percent).⁴

Despite the cyanide data rejected through the validation process, sufficient usable data is available that demonstrates cyanide is not a COC for the Sliver Quarry Area. The cyanide results for samples collected in June 2021 were deemed usable at five sample locations, with concentrations far below the applicable Part 375 SCOs (i.e., results ranging from non-detect to an estimated concentration of 1.7 mg/kg):

- S004 – 0-2 inches
- S008 – 6-12 inches
- S011 – 0-2 inches
- S013 – 6-12 inches
- S014 – 0-2 inches

All other results in the data set were determined to be usable. There were instances where qualifications were appended to the analytical results, but these qualifications did not affect data usability. Specific details are provided in the DUSR included in **Attachment C**.

Sampling Results

The sample results are summarized in **Table 4**. Along with the soil sample results, **Table 4** provides the applicable Part 375 SCOs for the protection of public health at industrial properties. While not applicable to the Sliver Quarry property (which is zoned and deed-restricted for industrial land use), **Table 4** also provides the Part 375 SCOs for commercial properties, for reference. The Canal Corporation-owned property, located directly east of the BASF-owned property, is also zoned industrial; however, the deed notice only applies to the BASF-owned portion of the Sliver Quarry Area.

The soil sample data show that mercury and/or cadmium concentrations exceed the industrial SCOs at certain locations (see **Figure 4** and **Figure 5**). At the 0 to 2-inch bgs interval, mercury and/or cadmium exceeded the industrial SCOs at 11 of the 12 sampling locations. At some of these locations, mercury and/or cadmium concentrations also exceeded industrial SCOs at deeper interval(s) (6 to 12 inches bgs and/or 18 to 24 inches bgs).

The highest concentrations of cadmium and mercury were detected in the central portion of the sampling area (S005, S006, S008, S010, S012, and S013), with both the magnitude and frequency of industrial SCO exceedances decreasing as sampling extended to the east and west. At sample locations to the east (S014) and west (S011 and S016), industrial SCO exceedances were present for mercury at the 0 to 2-inch bgs sample interval but not at the deeper sample intervals, and there were no industrial SCO exceedances for cadmium.

⁴ Matrix recovery for one of the MS/MSD pairs (sample S012 (6-12) with laboratory sample ID 480-186219-17) was less than 30 percent, which would lead to qualification of all non-detect cyanide results collected during this event as rejected except the results for samples that demonstrated MS recoveries of at least 30 percent. To establish whether the matrix effects indicated by the recovery of 480-186219-17 MS were representative of other samples in the data set, additional MS analyses were performed in July 2021 for the following samples: S006(0-2), S011(0-2), S012(6-12), S013(6-12), S014(0-2), S015(0-2), S015(18-24), and S016(0-2).



Recommendations

The soil samples collected at the Sliver Quarry Area in June 2021 showed exceedances of the Part 375 SCOs for mercury and cadmium, based on the protection of public health at industrial sites. The data show that the soil overlying the 18 to 24-inch bgs interval sampled in 2013 contains exceedances of the industrial SCOs for mercury and/or cadmium; therefore, the existing soil does not provide a cover that precludes direct contact.

Through the extensive RFI, Corrective Measures Study (CMS), and Corrective Measures Implementation (CMI) steps followed for the MPS, placement of a clean cover over metals-impacted soil was deemed to be the most appropriate remedy to inhibit direct contact. Following this precedent, the Parties recommend proceeding with steps to support a cover design for the metals-impacted soil that has been identified in the Sliver Quarry Area.

The Parties recommend the following next steps:

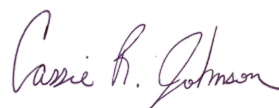
- Fall 2021 – Perform a topographic survey to refine the precision of the available topography, in support of a cover design.
- Fall 2021 – Resample the groundwater well cluster in the Sliver Quarry Area (MW-24, MW-23S, and MW-23D) for mercury and cadmium, as well as the COCs in groundwater at the MPS (chromium, hexavalent chromium, and cyanide). While several previous groundwater monitoring rounds have demonstrated that there are no Site-related metals impacts in groundwater at the Sliver Quarry Area, to provide more current data, the Parties propose to collect another round of groundwater samples from these wells concurrent with the annual groundwater sampling event at the MPS that is scheduled for October 2021.
- Winter 2021 – Develop a CMI Work Plan proposing a cover design and the application of institutional controls on the portion owned by the Canal Corporation⁵ as the Final Remedy for the Sliver Quarry Area.
- Winter 2021 – Incorporate the CMI Work Plan for the Sliver Quarry Area into the HWM Permit Modification process that has already been recommended by NYSDEC for components of the *Site Management Plan*.

The Parties further recommend scheduling a conference call in late September 2021 to discuss these next steps, after the NYSDEC has had an opportunity to review this report. In early September the Parties will circulate a proposed agenda and proposed dates for this conference call.

We appreciate your time in review of this report. Please contact Cassie Johnson at (608) 558-6795 regarding any questions.

Sincerely,


Elena Dadukova
Project Engineer


Cassie Johnson
Project Manager

⁵ A deed notice is already in place for the portion of the Sliver Quarry Area that is owned by BASF, which limits the property to industrial use and prohibits the use of groundwater.



cc: Eamonn O'Neill, New York State Department of Health
James Vondracek, Ashland LLC
Stephen Havlik, BASF
Laura McMahon, BASF
Cody Hume, Antea Group
Bob O'Neill, Brown and Caldwell
Jeff Caputi, Brown and Caldwell
Kristin VanLandingham, PE, EHS Support LLC

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Tables

Table 1
Soil Sampling Program
Soil Sampling Report for the Sliver Quarry Area
Sliver Quarry Area, near Former Ciba-Geigy/Hercules Facility
Glens Falls, NY

Sample Location	Depth Interval	Analysis
S004	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
S005	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
S006	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
S007	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
S008	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
S010	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
S011	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
	1.5 - 2 ft. bgs	
S012	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
	1.5 - 2 ft. bgs	
S013	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
	1.5 - 2 ft. bgs	
S014	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
	1.5 - 2 ft. bgs	
S015	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
	1.5 - 2 ft. bgs	
S016	0 - 2 in. bgs	Chromium, cadmium, lead, mercury, and cyanide
	6 - 12 in. bgs	
	1.5 - 2 ft. bgs	

Notes:

ft. bgs = feet below ground surface

in. bgs = inches below ground surface

1) Two duplicate samples and two matrix spike/matrix spike duplicate pair samples were also collected for quality control/quality assurance.

Table 2
Sample Locations
Soil Sampling Report for the Sliver Quarry Area
Sliver Quarry Area, near Former Ciba-Geigy/Hercules Facility
Glens Falls, NY

Boring Name	Northing	Easting
S004	1632271.1	728154.79
S005	1632286.9	728253.91
S006	1632284.87	728354.60
S007	1632318.3	728453.73
S008	1632171	728173.43
S010	1632187.7	728271.22
S011	1632222.4	728124.89
S012	1632220.5	728205.19
S013	1632237.2	728303.35
S014	1632266.1	728415.63
S015	1632263.4	728051.85
S016	1632152.8	728113.11

Note:

Coordinates recorded using hand-held GPS and provided in NAD 1983
State Plane New York East (US feet) datum.

GPS = global positioning system

NAD = North American Datum

Table 3
Laboratory Analytical Method Summary
Soil Sampling Report for the Sliver Quarry Area
Sliver Quarry Area, near Former Ciba-Geigy/Hercules Facility
Glens Falls, NY

Analyte	Method Number	Anticipated Reporting Limit		Sample Container Type	Minimum Sample Volume	Preservation	Holding Time
Chromium	SW846 6010C/6020A	1.0	mg/kg	4 oz glass	20 g	Cool, < 6 °C.	180 days
Cadmium		0.5	mg/kg				
Lead		2.0	mg/kg				
Mercury	SW846 7174B	0.033	mg/kg	4 oz glass	20 g	Cool, < 6 °C.	28 Days
Total Cyanide	SW846 9012B	0.1	mg/kg	4 oz glass	20 g	Cool, < 6 °C.	14 Days

Notes:

°C = degrees Celsius

g = grams

mg/kg = milligrams per kilogram

oz = ounces

Table 4
Soil Sample Results for Certain Metals and Cyanide
Soil Sampling Report for the Sliver Quarry Area
Sliver Quarry Area, near Former Ciba-Geigy/Hercules Facility
Glens Falls, NY

Sample Location	Date	Depth Range (inches bgs)		Constituent	Result (mg/kg) ¹	NYSDEC SCOs - Protection of Public Health - Industrial (mg/kg) ²	NYSDEC SCOs - Protection of Public Health - Commercial (mg/kg) ²
S004	06/15/2021	0	2	Cadmium	72 J	60	9.3
S004	06/15/2021	0	2	Chromium, total	200 J	800	400
S004	06/15/2021	0	2	Cyanide	1.7 J	10000	27
S004	06/15/2021	0	2	Lead	300 J	3900	1000
S004	06/15/2021	0	2	Mercury	25 J	5.7	2.8
S004	06/15/2021	6	12	Cadmium	6 J	60	9.3
S004	06/15/2021	6	12	Chromium, total	53 J	800	400
S004	06/15/2021	6	12	Cyanide	1 R	10000	27
S004	06/15/2021	6	12	Lead	610 J	3900	1000
S004	06/15/2021	6	12	Mercury	2.8 J	5.7	2.8
S004	04/04/2013	18	24	Cadmium	10	60	9.3
S004	04/04/2013	18	24	Chromium, total	35	800	400
S004	04/04/2013	18	24	Cyanide	0.28 U	10000	27
S004	04/04/2013	18	24	Lead	140	3900	1000
S004	04/04/2013	18	24	Mercury	4.6	5.7	2.8
S005	06/16/2021	0	2	Cadmium	34 J	60	9.3
S005	06/16/2021	0	2	Chromium, total	82 J	800	400
S005	06/16/2021	0	2	Cyanide	1.2 R	10000	27
S005	06/16/2021	0	2	Lead	230 J	3900	1000
S005	06/16/2021	0	2	Mercury	10 J	5.7	2.8
S005	06/16/2021	6	12	Cadmium	20 J	60	9.3
S005	06/16/2021	6	12	Chromium, total	220 J	800	400
S005	06/16/2021	6	12	Cyanide	1.3 R	10000	27
S005	06/16/2021	6	12	Lead	240 J	3900	1000
S005	06/16/2021	6	12	Mercury	7.6 J	5.7	2.8
S005 (DUP-1)	06/16/2021	6	12	Cadmium	23 J	60	9.3
S005 (DUP-1)	06/16/2021	6	12	Chromium, total	240 J	800	400
S005 (DUP-1)	06/16/2021	6	12	Cyanide	1.4 R	10000	27
S005 (DUP-1)	06/16/2021	6	12	Lead	230 J	3900	1000
S005 (DUP-1)	06/16/2021	6	12	Mercury	5.4 J	5.7	2.8
S005	04/04/2013	18	24	Cadmium	68	60	9.3
S005	04/04/2013	18	24	Chromium, total	120	800	400
S005	04/04/2013	18	24	Chromium, hexavalent	0.24 U	800	400
S005	04/04/2013	18	24	Cyanide	1.3	10000	27
S005	04/04/2013	18	24	Lead	540	3900	1000
S005	04/04/2013	18	24	Mercury	15	5.7	2.8
S006	06/16/2021	0	2	Cadmium	89 J	60	9.3
S006	06/16/2021	0	2	Chromium, total	83 J	800	400
S006	06/16/2021	0	2	Cyanide	1.1 R	10000	27
S006	06/16/2021	0	2	Lead	250 J	3900	1000
S006	06/16/2021	0	2	Mercury	37 J	5.7	2.8
S006	06/16/2021	6	12	Cadmium	28 J	60	9.3
S006	06/16/2021	6	12	Chromium, total	40 J	800	400
S006	06/16/2021	6	12	Cyanide	1.1 R	10000	27
S006	06/16/2021	6	12	Lead	98 J	3900	1000
S006	06/16/2021	6	12	Mercury	7.7 J	5.7	2.8
S006 (DUP-2)	06/16/2021	6	12	Cadmium	21 J	60	9.3
S006 (DUP-2)	06/16/2021	6	12	Chromium, total	41 J	800	400
S006 (DUP-2)	06/16/2021	6	12	Cyanide	1.1 R	10000	27
S006 (DUP-2)	06/16/2021	6	12	Lead	84 J	3900	1000
S006 (DUP-2)	06/16/2021	6	12	Mercury	5.8 J	5.7	2.8
S006	04/04/2013	18	24	Cadmium	210	60	9.3
S006	04/04/2013	18	24	Chromium, total	180	800	400
S006	04/04/2013	18	24	Chromium, hexavalent	0.22 U	800	400
S006	04/04/2013	18	24	Cyanide	0.25 U	10000	27
S006	04/04/2013	18	24	Lead	540	3900	1000
S006	04/04/2013	18	24	Mercury	18	5.7	2.8
S007	06/16/2021	0	2	Cadmium	13 J	60	9.3
S007	06/16/2021	0	2	Chromium, total	48 J	800	400
S007	06/16/2021	0	2	Cyanide	1.1 R	10000	27
S007	06/16/2021	0	2	Lead	230 J	3900	1000

Table 4
Soil Sample Results for Certain Metals and Cyanide
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Sample Location	Date	Depth Range (inches bgs)		Constituent	Result (mg/kg) ¹	NYSDEC SCOs - Protection of Public Health - Industrial (mg/kg) ²	NYSDEC SCOs - Protection of Public Health - Commercial (mg/kg) ²
S007	06/16/2021	0	2	Mercury	4.7 J	5.7	2.8
S007	06/16/2021	6	12	Cadmium	56 J	60	9.3
S007	06/16/2021	6	12	Chromium, total	52 J	800	400
S007	06/16/2021	6	12	Cyanide	1 R	10000	27
S007	06/16/2021	6	12	Lead	190 J	3900	1000
S007	06/16/2021	6	12	Mercury	2 J	5.7	2.8
S007	04/04/2013	18	24	Cadmium	2.4	60	9.3
S007	04/04/2013	18	24	Chromium, total	24	800	400
S007	04/04/2013	18	24	Cyanide	0.25 U	10000	27
S007	04/04/2013	18	24	Lead	23	3900	1000
S007	04/04/2013	18	24	Mercury	1.3	5.7	2.8
S008	06/15/2021	0	2	Cadmium	85 J	60	9.3
S008	06/15/2021	0	2	Chromium, total	170 J	800	400
S008	06/15/2021	0	2	Cyanide	1.4 R	10000	27
S008	06/15/2021	0	2	Lead	120 J	3900	1000
S008	06/15/2021	0	2	Mercury	32 J	5.7	2.8
S008	06/15/2021	6	12	Cadmium	15 J	60	9.3
S008	06/15/2021	6	12	Chromium, total	42 J	800	400
S008	06/15/2021	6	12	Cyanide	1.1 UJ	10000	27
S008	06/15/2021	6	12	Lead	45 J	3900	1000
S008	06/15/2021	6	12	Mercury	5.6 J	5.7	2.8
S008	04/04/2013	18	24	Cadmium	23	60	9.3
S008	04/04/2013	18	24	Chromium, total	36	800	400
S008	04/04/2013	18	24	Cyanide	0.28 U	10000	27
S008	04/04/2013	18	24	Lead	36	3900	1000
S008	04/04/2013	18	24	Mercury	10	5.7	2.8
S010	06/16/2021	0	2	Cadmium	92 J	60	9.3
S010	06/16/2021	0	2	Chromium, total	170 J	800	400
S010	06/16/2021	0	2	Cyanide	1.2 R	10000	27
S010	06/16/2021	0	2	Lead	120 J	3900	1000
S010	06/16/2021	0	2	Mercury	45 J	5.7	2.8
S010	06/16/2021	6	12	Cadmium	7.9 J	60	9.3
S010	06/16/2021	6	12	Chromium, total	21 J	800	400
S010	06/16/2021	6	12	Cyanide	1.1 R	10000	27
S010	06/16/2021	6	12	Lead	19 J	3900	1000
S010	06/16/2021	6	12	Mercury	2.8 J	5.7	2.8
S010	04/04/2013	18	24	Cadmium	43	60	9.3
S010	04/04/2013	18	24	Chromium, total	67	800	400
S010	04/04/2013	18	24	Cyanide	1.3	10000	27
S010	04/04/2013	18	24	Lead	79	3900	1000
S010	04/04/2013	18	24	Mercury	12	5.7	2.8
S011	06/15/2021	0	2	Cadmium	20 J	60	9.3
S011	06/15/2021	0	2	Chromium, total	99 J	800	400
S011	06/15/2021	0	2	Cyanide	1.4 UJ	10000	27
S011	06/15/2021	0	2	Lead	200 J	3900	1000
S011	06/15/2021	0	2	Mercury	10 J	5.7	2.8
S011	06/15/2021	6	12	Cadmium	12 J	60	9.3
S011	06/15/2021	6	12	Chromium, total	57 J	800	400
S011	06/15/2021	6	12	Cyanide	1.3 R	10000	27
S011	06/15/2021	6	12	Lead	190 J	3900	1000
S011	06/15/2021	6	12	Mercury	5.3 J	5.7	2.8
S011	06/15/2021	18	24	Cadmium	9.4 J	60	9.3
S011	06/15/2021	18	24	Chromium, total	63 J	800	400
S011	06/15/2021	18	24	Cyanide	1.2 R	10000	27
S011	06/15/2021	18	24	Lead	450 J	3900	1000
S011	06/15/2021	18	24	Mercury	3.5 J	5.7	2.8
S012	06/15/2021	0	2	Cadmium	98 J	60	9.3
S012	06/15/2021	0	2	Chromium, total	250 J	800	400
S012	06/15/2021	0	2	Cyanide	1.3 R	10000	27
S012	06/15/2021	0	2	Lead	390 J	3900	1000
S012	06/15/2021	0	2	Mercury	33 J	5.7	2.8

Table 4
Soil Sample Results for Certain Metals and Cyanide
Soil Sampling Report for the Sliver Quarry Area
Sliver Quarry Area, near Former Ciba-Geigy/Hercules Facility
Glens Falls, NY

Sample Location	Date	Depth Range (inches bgs)		Constituent	Result (mg/kg) ¹	NYSDEC SCOs - Protection of Public Health - Industrial (mg/kg) ²	NYSDEC SCOs - Protection of Public Health - Commercial (mg/kg) ²
S012	06/15/2021	6	12	Cadmium	21 J	60	9.3
S012	06/15/2021	6	12	Chromium, total	72 J	800	400
S012	06/15/2021	6	12	Cyanide	1.2 R	10000	27
S012	06/15/2021	6	12	Lead	240 J	3900	1000
S012	06/15/2021	6	12	Mercury	9.9 J	5.7	2.8
S012	06/15/2021	18	24	Cadmium	3 J	60	9.3
S012	06/15/2021	18	24	Chromium, total	26 J	800	400
S012	06/15/2021	18	24	Cyanide	1.3 R	10000	27
S012	06/15/2021	18	24	Lead	28 J	3900	1000
S012	06/15/2021	18	24	Mercury	0.96 J	5.7	2.8
S013	06/16/2021	0	2	Cadmium	150 J	60	9.3
S013	06/16/2021	0	2	Chromium, total	210 J	800	400
S013	06/16/2021	0	2	Cyanide	1.3 R	10000	27
S013	06/16/2021	0	2	Lead	650 J	3900	1000
S013	06/16/2021	0	2	Mercury	56 J	5.7	2.8
S013	06/16/2021	6	12	Cadmium	130 J	60	9.3
S013	06/16/2021	6	12	Chromium, total	170 J	800	400
S013	06/16/2021	6	12	Cyanide	1.2 UJ	10000	27
S013	06/16/2021	6	12	Lead	410 J	3900	1000
S013	06/16/2021	6	12	Mercury	35 J	5.7	2.8
S013	06/16/2021	18	24	Cadmium	110 J	60	9.3
S013	06/16/2021	18	24	Chromium, total	160 J	800	400
S013	06/16/2021	18	24	Cyanide	1.1 R	10000	27
S013	06/16/2021	18	24	Lead	350 J	3900	1000
S013	06/16/2021	18	24	Mercury	42 J	5.7	2.8
S014	06/16/2021	0	2	Cadmium	52 J	60	9.3
S014	06/16/2021	0	2	Chromium, total	76 J	800	400
S014	06/16/2021	0	2	Cyanide	1.1 UJ	10000	27
S014	06/16/2021	0	2	Lead	87 J	3900	1000
S014	06/16/2021	0	2	Mercury	16 J	5.7	2.8
S014	06/16/2021	6	12	Cadmium	1.5 J	60	9.3
S014	06/16/2021	6	12	Chromium, total	9.2 J	800	400
S014	06/16/2021	6	12	Cyanide	0.96 R	10000	27
S014	06/16/2021	6	12	Lead	7.7 J	3900	1000
S014	06/16/2021	6	12	Mercury	0.21 J	5.7	2.8
S014	06/16/2021	18	24	Cadmium	1.8	60	9.3
S014	06/16/2021	18	24	Chromium, total	8.6 J	800	400
S014	06/16/2021	18	24	Cyanide	1 R	10000	27
S014	06/16/2021	18	24	Lead	7.3 J	3900	1000
S014	06/16/2021	18	24	Mercury	0.48 J	5.7	2.8
S015	06/15/2021	0	2	Cadmium	55 J	60	9.3
S015	06/15/2021	0	2	Chromium, total	180 J	800	400
S015	06/15/2021	0	2	Cyanide	1.4 R	10000	27
S015	06/15/2021	0	2	Lead	250 J	3900	1000
S015	06/15/2021	0	2	Mercury	15 J	5.7	2.8
S015	06/15/2021	6	12	Cadmium	14 J	60	9.3
S015	06/15/2021	6	12	Chromium, total	87 J	800	400
S015	06/15/2021	6	12	Cyanide	1.3 R	10000	27
S015	06/15/2021	6	12	Lead	140 J	3900	1000
S015	06/15/2021	6	12	Mercury	3.3 J	5.7	2.8
S015	06/15/2021	18	24	Cadmium	22 J	60	9.3
S015	06/15/2021	18	24	Chromium, total	120 J	800	400
S015	06/15/2021	18	24	Cyanide	1.2 R	10000	27
S015	06/15/2021	18	24	Lead	190 J	3900	1000
S015	06/15/2021	18	24	Mercury	6.2 J	5.7	2.8
S016	06/15/2021	0	2	Cadmium	40 J	60	9.3
S016	06/15/2021	0	2	Chromium, total	170 J	800	400
S016	06/15/2021	0	2	Cyanide	1.2 R	10000	27
S016	06/15/2021	0	2	Lead	180 J	3900	1000
S016	06/15/2021	0	2	Mercury	14 J	5.7	2.8
S016	06/15/2021	6	12	Cadmium	11 J	60	9.3

Table 4
Soil Sample Results for Certain Metals and Cyanide
Soil Sampling Report for the Sliver Quarry Area
Sliver Quarry Area, near Former Ciba-Geigy/Hercules Facility
Glens Falls, NY

Sample Location	Date	Depth Range (inches bgs)		Constituent	Result (mg/kg) ¹	NYSDEC SCOs - Protection of Public Health - Industrial (mg/kg) ²	NYSDEC SCOs - Protection of Public Health - Commercial (mg/kg) ²
S016	06/15/2021	6	12	Chromium, total	43 J	800	400
S016	06/15/2021	6	12	Cyanide	1.2 R	10000	27
S016	06/15/2021	6	12	Lead	66 J	3900	1000
S016	06/15/2021	6	12	Mercury	4.4 J	5.7	2.8
S016	06/15/2021	18	24	Cadmium	2.3 J	60	9.3
S016	06/15/2021	18	24	Chromium, total	14 J	800	400
S016	06/15/2021	18	24	Cyanide	1.1 R	10000	27
S016	06/15/2021	18	24	Lead	15 J	3900	1000
S016	06/15/2021	18	24	Mercury	1.1 J	5.7	2.8

Notes:

Yellow highlighted text = Result exceeded the corresponding NYSDEC 6NYCRR Part 375 SCO for industrial land use.

bgs = below ground surface

DUP = duplicate

J = Result is less than the reporting limit (RL) but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value.

mg/kg = milligrams per kilogram

NYCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

R = Indicates the result was rejected

SCO = Soil Cleanup Objective

U - indicates analyte was not detected above reporting limit shown

¹ The data tables by AMO, 2014 (Tables 2/3 Expanded) presented two metals values for each analyte for each location. Values summarized here are for the discrete samples collected at each location. The other values presented in the *Work Plan for Target Removal Tasks at North Lot and Pre-Treatment Plant Parcels of BASF Corporation's Glens Falls, New York Property* (AMO, 2014, Tables 2/3 Expanded) were the results of samples that were composited from multiple boring locations (i.e., S004 and S008; S005 and S010; and S006 and S007).

² NYSDEC 6 NYCRR PART 375, Table 375-6.8(b): Restricted Use Soil Cleanup Objectives, Effective December 14, 2006. Chromium standards as indicated are for hexavalent chromium. All total chromium sample results are below SCOs for trivalent chromium (1,500 mg/kg and 6,800 mg/kg for commercial and industrial land use, respectively).

References:

AMO Environmental Decisions, 2014. *Work Plan for Target Removal Tasks at North Lot and Pre-Treatment Plant Parcels of BASF Corporation's Glens Falls, New York Property*. May 20, 2014.



Figures



- Legend**
- Surveyed Property Line
 - Corrective Action Management Unit (CAMU)
 - Railroad

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



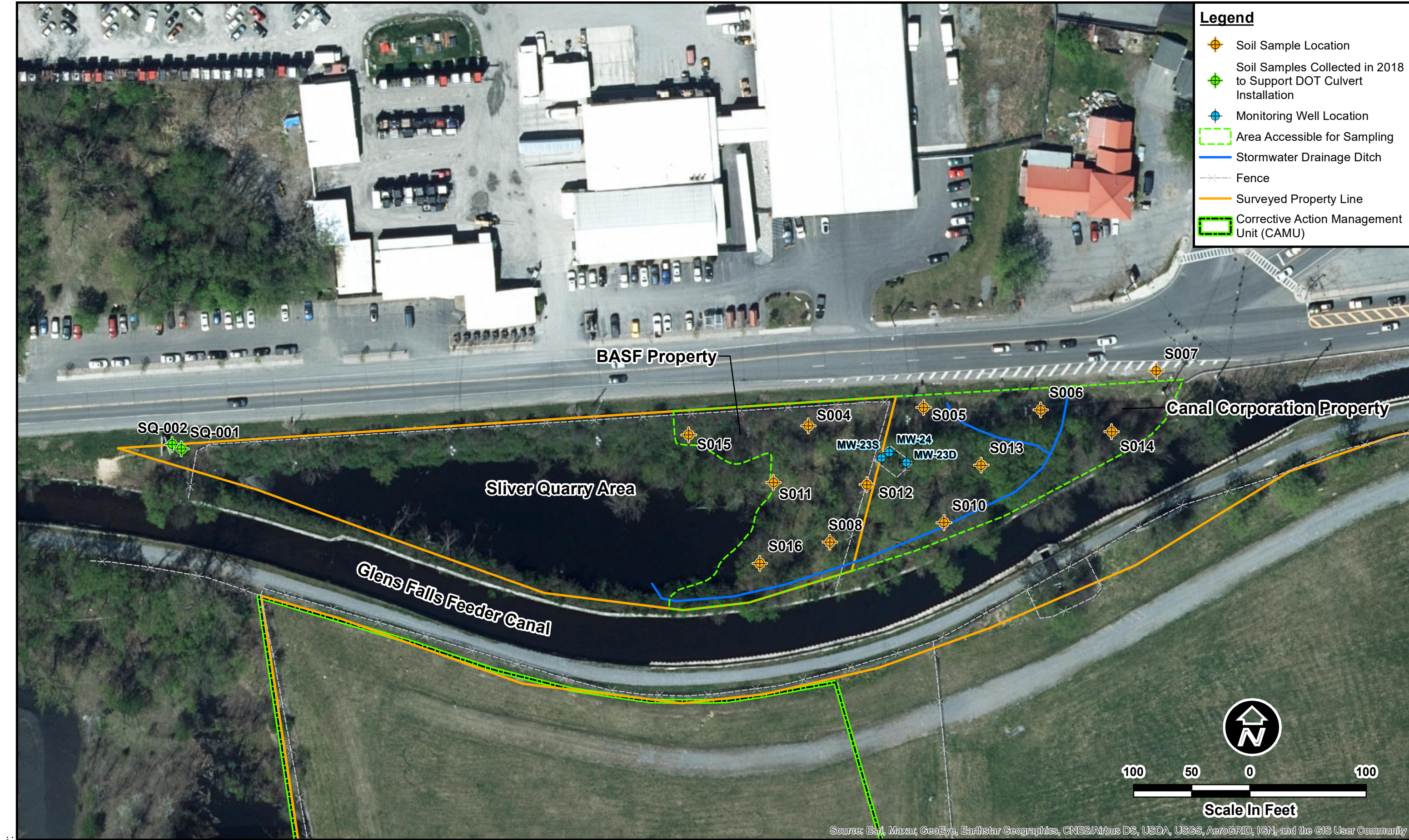
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Scale In Feet

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Reviewed By: C. Reuter

J:\EHSS_GIS\GIS262_Glenfalls-HudsonRiver\01_ANALYSIS\20210809_SO_SilverQuarry_Rpt\Figure 1 SiteMap.mxd
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Reviewed By:



FORMER CIBA-GEIGY / HERCULES SITE
GLENS FALLS, NY

**SAMPLE LOCATIONS AND DESIGNATION OF AREA ACCESSIBLE FOR SAMPLING
SOIL SAMPLING REPORT FOR THE SLIVER QUARRY AREA**

FIGURE 2

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Reviewed By:

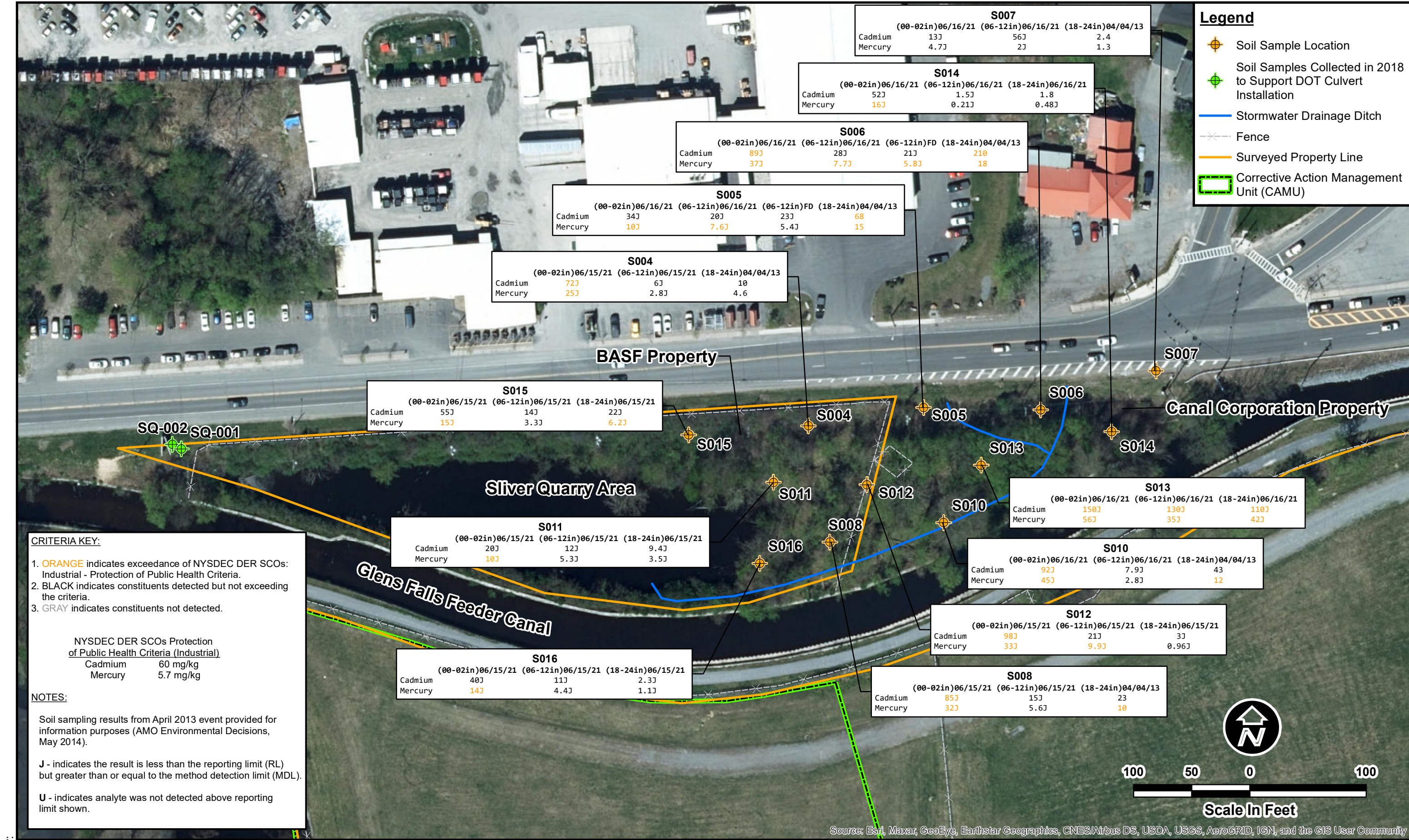


FORMER CIBA-GEIGY / HERCULES SITE
GLENS FALLS, NY

**TOPOGRAPHIC SURVEY MAP
SOIL SAMPLING REPORT FOR THE SLIVER QUARRY AREA**

FIGURE 3

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CRITERIA KEY:

- 1. **ORANGE** indicates exceedance of NYSDEC DER SCOs: Industrial - Protection of Public Health Criteria.
- 2. **BLACK** indicates constituents detected but not exceeding the criteria.
- 3. **GRAY** indicates constituents not detected.

NYSDEC DER SCOs Protection of Public Health Criteria (Industrial)	
Cadmium	60 mg/kg
Mercury	5.7 mg/kg

NOTES:

Soil sampling results from April 2013 event provided for information purposes (AMO Environmental Decisions, May 2014).

J - indicates the result is less than the reporting limit (RL) but greater than or equal to the method detection limit (MDL).

U - indicates analyte was not detected above reporting limit shown.

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Reviewed By:



FORMER CIBA-GEIGY / HERCULES SITE
GLENS FALLS, NY

CONSTITUENT CONCENTRATIONS COMPARED TO INDUSTRIAL SCOS SOIL SAMPLING REPORT FOR THE SLIVER QUARRY AREA

FIGURE 4

J:\EHS\GIS\16262_GlensFallsHudsonRiver\01_ANALYSIS\20210809_SO_SilverQuarry_RptSilverQuarry_SOPpt_Figures.mxd
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FORMER CIBA-GEIGY / HERCULES SITE
GLENS FALLS, NY

GRAPHICAL DEPICTION OF INDUSTRIAL SCOS EXCEEDANCE DEPTHS
SOIL SAMPLING REPORT FOR THE SLIVER QUARRY AREA

FIGURE 5

J:\EHS\GIS\16262_GlensFallsHudsonRiver\01_ANALYSIS\20210809_SO_SilverQuarry_Rpt\SilverQuarry_SOPpt_Figures.mxd
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Attachment A Boring Logs

**Antea® Group**

BORING NUMBER:

5084

1. CLIENT NAME:

Ashland

2. DRILLING SUBCONTRACTOR:

SHEET

SHEETS

3. PROJECT:

1 OF 1

Glens Falls

4. LOCATION:

Silver Quarry

5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER:

6. MANUFACTURER DESIGNATION OF DRILL:

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:

Hand Auger, 4oz glass bottles

8. BORING LOGGED BY:

JS

9. SURFACE ELEVATION:

295.70'

10. TOP OF CASING ELEVATION:

NA

11. BORING TOTAL DEPTH:

12"

12. WELL TOTAL DEPTH:

13. DATE/TIME STARTED:

1045 / 6/15/21

14. DATE/TIME COMPLETED:

6/15/21 / 1102

DEPTH (ft.)

DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria

PID

SAMPLE INTERVAL

LAB SAMPLE

REMARKS

1

sandy-silt, dark brown, some roots, trace gravel

-

0-2"

5004

6/15/21 10:50

2

sandy-silt, dark brown, some roots, some gravel

-

6-12"

5004

Description is for 6-12"
ignore depth ticks on left

6/15/21 10:50

3

4

5

6

7

8

9

10

11

12

13

14



Antea® Group

BORING NUMBER:

5005

1. CLIENT NAME:

Ashland

2. DRILLING SUBCONTRACTOR:

SHEET

SHEETS

1 OF 1

3. PROJECT:

Silver Quarry

4. LOCATION:

Glens Falls

5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER:

6. MANUFACTURER DESIGNATION OF DRILL:

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:

8. BORING LOGGED BY:

JS

9. SURFACE ELEVATION:

10. TOP OF CASING ELEVATION:

11. BORING TOTAL DEPTH:

12'

12. WELL TOTAL DEPTH:

—

13. DATE/TIME STARTED:

6/16/21 / 1000

14. DATE/TIME COMPLETED:

6/16/21 / 1046

DEPTH (ft.)	DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria	PID	SAMPLE INTERVAL	LAB SAMPLE	REMARKS
1	Dark brown, silty sand, roots	—	0-2"		6/16/21 1015
2	Dark brown, med sand, some roots,	—	6-12"		6/16/21 1022 ADUP 001 1041
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

**Antea® Group**

BORING NUMBER:

5006

1. CLIENT NAME:

Ashland

2. DRILLING SUBCONTRACTOR:

SHEET

SHEETS

1 OF 1

3. PROJECT:

Glens Falls

4. LOCATION:

Silver Quarry

5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER:

6. MANUFACTURER DESIGNATION OF DRILL:

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:

8. BORING LOGGED BY:

JS

9. SURFACE ELEVATION:

292.03

10. TOP OF CASING ELEVATION:

11. BORING TOTAL DEPTH:

12"

12. WELL TOTAL DEPTH:

-

13. DATE/TIME STARTED:

6/16/21 1330

14. DATE/TIME COMPLETED:

6/16/21

DEPTH (ft.)	DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria	PID	SAMPLE INTERVAL	LAB SAMPLE	REMARKS
1	Dark brown, silty sand, some roots, pebbles	-	0-2"		6/16/21 1335
2	Dark brown, fine sand, trace roots, pebbles	-	6-12"		6/16/21 1340 RUP 2
3					Return for new GPS coordinates
4					New coordinates 43.310276 N
5					73.612407 W
6					
7					
8					
9					
10					
11					
12					
13					
14					

**Antea[®] Group**

BORING NUMBER:

3007

1. CLIENT NAME:

Ashland

2. DRILLING SUBCONTRACTOR:

SHEET

SHEETS

1 OF 1

3. PROJECT:

Glens Falls

4. LOCATION:

Silver Quarry

5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER:

6. MANUFACTURER DESIGNATION OF DRILL:

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:

Ann Arbor 4oz glass bottles

8. BORING LOGGED BY:

RT

9. SURFACE ELEVATION:

296.80

10. TOP OF CASING ELEVATION:

—

11. BORING TOTAL DEPTH:

12'

12. WELL TOTAL DEPTH:

—

13. DATE/TIME STARTED:

1420 6/16/21

14. DATE/TIME COMPLETED:

6/16/21 1430

DEPTH (ft.)	DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria	PID	SAMPLE INTERVAL	LAB SAMPLE	REMARKS
1	Dark brown, silty loam, lots of small roots, loose	—	0-2"		6/16/21 1425
2	Dark brown, silt-sand, dense, coarse particles, lots of pebbles	—	6-12"		6/16/21 1428
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					



Antea[®] Group

BORING NUMBER:

5008

1. CLIENT NAME:

Ashland

2. DRILLING SUBCONTRACTOR:

-

SHEET

SHEETS

1 OF 1

3. PROJECT:

Glens Falls

4. LOCATION:

Silver Quarry

5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER:

-

6. MANUFACTURER DESIGNATION OF DRILL:

-

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:

1 1/2" Auger, 4oz glass bottles

8. BORING LOGGED BY:

JS

9. SURFACE ELEVATION:

285.70'

10. TOP OF CASING ELEVATION:

-

11. BORING TOTAL DEPTH:

12"

12. WELL TOTAL DEPTH:

-

13. DATE/TIME STARTED:

6/15/21 / 1320

14. DATE/TIME COMPLETED:

1300 6/15/21 / 1500

DEPTH (ft.)	DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria	PID	SAMPLE INTERVAL	LAB SAMPLE	REMARKS
1	silty-sand, dark brown, roots	-	0-2"		6/15/21 1325
2	fine-sand, dark brown, some roots	-	6-12"		6/15/21 1405 ms/msd 1420 / 1440
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

1. CLIENT NAME:

Ashland

2. DRILLING SUBCONTRACTOR:

—

SHEET

SHEETS

1 OF 1

3. PROJECT:

Sliver Quarry

4. LOCATION:

Glens Falls

5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER:

—

6. MANUFACTURER DESIGNATION OF DRILL:

—

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:

Hand Auger, 4oz glass bottles

8. BORING LOGGED BY:

JJ

9. SURFACE ELEVATION:

296.64'

10. TOP OF CASING ELEVATION:

N/A

11. BORING TOTAL DEPTH:

12"

12. WELL TOTAL DEPTH:

—

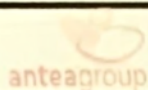
13. DATE/TIME STARTED:

6/16/21/1240

14. DATE/TIME COMPLETED:

6/16/21/1330

DEPTH (ft.)	DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria	PID	SAMPLE INTERVAL	LAB SAMPLE	REMARKS
1	Dark brown, silty sand, roots	—	0-2"		6/16/21 1243
2	Reddish-light brown, some pebbles, silty sand	—	6-12"		6/16/21 1305
3	Reddish-light brown, pebbles, silty sand	—	10-12"		6/16/21 1320 MS/MSD 1325
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

**Antea[®] Group**

BORING NUMBER:

5011

1. CLIENT NAME:

Ashland

2. DRILLING SUBCONTRACTOR:

—

SHEET

SHEETS

1 OF 1

3. PROJECT:

Clens Falls

4. LOCATION:

Silver Quarry

5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER:

6. MANUFACTURER DESIGNATION OF DRILL:

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:

Hand Auger, 4oz glass bottles

8. BORING LOGGED BY:

JS

9. SURFACE ELEVATION:

284.44'

10. TOP OF CASING ELEVATION:

—

11. BORING TOTAL DEPTH:

2'

12. WELL TOTAL DEPTH:

—

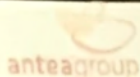
13. DATE/TIME STARTED:

6/15/21 / 1108

14. DATE/TIME COMPLETED:

6/15/21 / 1158

DEPTH (ft.)	DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria	PID	SAMPLE INTERVAL	LAB SAMPLE	REMARKS
1	Dark Brown, med sandy silt, some roots	—	0-2"	Soil	6/15/21 11:13
2	medium sand, dark brown, pebbles	—	0-12"	Soil	6/15/21 11:20
3	same as above	—	1.5-2'	Soil	1.5-2' location moved slightly set new gps coord. 6/15/21 11:52
4					new coordinates 43.810120 N 73.613274 W
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

**Antea[®] Group**

BORING NUMBER:

5012

1. CLIENT NAME:

Ashland

2. DRILLING SUBCONTRACTOR:

-

SHEET

SHEETS

1 OF 1

3. PROJECT:

Glens Falls

4. LOCATION:

Silver Quarry

5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER:

6. MANUFACTURER DESIGNATION OF DRILL:

-

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:

Ann Arbor, 4 oz glass bottles

8. BORING LOGGED BY:

CH

9. SURFACE ELEVATION:

289.50'

10. TOP OF CASING ELEVATION:

-

11. BORING TOTAL DEPTH:

2

12. WELL TOTAL DEPTH:

-

13. DATE/TIME STARTED:

6/15/21 / 1205

14. DATE/TIME COMPLETED:

6/15/21 / 1248

DEPTH (ft.)

DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria

PID

SAMPLE INTERVAL

LAB SAMPLE

REMARKS

1

dark brown, silty sand, roots

-

0-2"

6/15/21 12:10

2

light brown, fine grained sand, trace roots

-

6-12"

6/15/21 12:20

2

light brown, fine grained sand

-

1.5-2'

6/15/21 12:42

3

4

5

6

7

8

9

10

11

12

13

14

5013

1. CLIENT NAME:

Ashland

2. DRILLING SUBCONTRACTOR:

—

SHEET

SHEETS

1 OF 1

3. PROJECT:

Clens Falls

4. LOCATION:

Silver Quarry

5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER:

—

6. MANUFACTURER DESIGNATION OF DRILL:

—

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:

And Auger, 4oz glass bottles

8. BORING LOGGED BY:

JS

9. SURFACE ELEVATION:

287.06

10. TOP OF CASING ELEVATION:

—

11. BORING TOTAL DEPTH:

2'

12. WELL TOTAL DEPTH:

—

13. DATE/TIME STARTED:

6/16/21 / 1145

14. DATE/TIME COMPLETED:

6/16/21 / 1230

DEPTH (ft.)	DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria	PID	SAMPLE INTERVAL	LAB SAMPLE	REMARKS
1	Dark Brown, Silty sand, roots	—	0-2"	—	6/16/21 1150
2	Dark brown, fine sand, some roots	—	6-12"	—	6/16/21 1200
3	Dark brown fine sand, pebbles, some roots	—	1.5-2'	—	6/16/21 1222
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					



Antea® Group

BORING NUMBER:

5014

1. CLIENT NAME: Ashland		2. DRILLING SUBCONTRACTOR: —		SHEET 1 OF 1
3. PROJECT: Glens Falls		4. LOCATION: Silver Quarry		
5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER: —		6. MANUFACTURER DESIGNATION OF DRILL: —		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: And Auger, 4oz glass bottles		8. BORING LOGGED BY: JS		
		9. SURFACE ELEVATION: 301.87'		10. TOP OF CASING ELEVATION:
11. BORING TOTAL DEPTH: 2'		12. WELL TOTAL DEPTH: —		13. DATE/TIME STARTED: 6/16/21 / 1355
				14. DATE/TIME COMPLETED: 6/16/21 / 1415

DEPTH (ft.)	DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria	PID	SAMPLE INTERVAL	LAB SAMPLE	REMARKS
1	Gravel, fine sand, trace roots	—	0-2"		6/16/21 1400
2	same as above	—	6-12"		6/16/21 1405
3	medium sand, light-brown	—	1.5-2'		6/16/21 1410
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

1. CLIENT NAME:

Ashland

2. DRILLING SUBCONTRACTOR:

3. PROJECT:

Glens Falls

4. LOCATION:

Sliver Quarry

5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER:

6. MANUFACTURER DESIGNATION OF DRILL:

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:

Hand Auger 4/2 Glass bottles

8. BORING LOGGED BY:

JS

9. SURFACE ELEVATION:

291.43'

10. TOP OF CASING ELEVATION:

11. BORING TOTAL DEPTH:

2'

12. WELL TOTAL DEPTH:

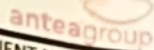
13. DATE/TIME STARTED:

6/15/21 / 17.45

14. DATE/TIME COMPLETED:

6/15/21 / 1850

DEPTH (ft.)	DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria	PID	SAMPLE INTERVAL	LAB SAMPLE	REMARKS
1	Dark brown, fine-sand, roots	-	0-2"		6/15/21 1800
2	Same as above	-	6-12"		6/15/21 1820
3	Dark brown, medium sand, some roots, pebbles	-	1.5-2'		6/15/21 1845
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

**Antea® Group**

BORING NUMBER:

S016

SHEETS

1. CLIENT NAME:

Ashland

2. DRILLING SUBCONTRACTOR:

SHEET

1 OF 1

3. PROJECT:

Clons Falls

4. LOCATION:

Silver Quarry

5. DRILLING SUBCONTRACTOR/NAME OF DRILLER/REGISTRATION NUMBER:

6. MANUFACTURER DESIGNATION OF DRILL:

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT:

Ant Auger 402 glass bottles

8. BORING LOGGED BY:

JS

9. SURFACE ELEVATION:

283.71'

10. TOP OF CASING ELEVATION:

11. BORING TOTAL DEPTH:

2'

12. WELL TOTAL DEPTH:

13. DATE/TIME STARTED:

6/15/21 / 1615

14. DATE/TIME COMPLETED:

6/15/21 / 1715

DEPTH (ft.)	DESCRIPTION OF MATERIALS: PRIMARY, secondary, color, density, plasticity, moisture, odor/other notable criteria	PID	SAMPLE INTERVAL	LAB SAMPLE	REMARKS
1	Dark brown silty-sand, roots	-	0-2"		6/15/21 1622
2	Dark brown silt, some roots	-	6-12"		6/15/21 1645
3	Light brown, muddy-silt, moist	-	1.5-2'		6/15/21 1710
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Sample Team Members: JS, CL, RT

QA/QC Tracking Sheet

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



Attachment B Laboratory Analytical Report

ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-186219-1

Client Project/Site: Hercules Glens Falls - Quarry
Revision: 1

For:

Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek



Authorized for release by:
6/29/2021 9:14:39 AM

Eddie Barnett, Project Manager I
(912)250-0280
Eddie.Barnett@Eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



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.

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Definitions/Glossary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Qualifiers

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.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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

Case Narrative

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Job ID: 480-186219-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

CASE NARRATIVE **Client: Ashland LLC** **Project: Hercules Glens Falls - Quarry**

Report Number: 480-186219-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report has been revised on 06/29/21 per client request to update the sample ID formatting.

RECEIPT

The samples were received on 06/18/2021; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.5° C, 2.6° C, 2.8° C and 3.1° C.

METALS (ICP)

Samples S004(0-2) (480-186219-1), S004(6-12) (480-186219-2), S005(0-2) (480-186219-3), S005(6-12) (480-186219-4), S006(0-2) (480-186219-5), S006(6-12) (480-186219-6), S007(0-2) (480-186219-7), S007(6-12) (480-186219-8), S008(0-2) (480-186219-9), S008(6-12) (480-186219-10), S010(0-2) (480-186219-11), S010(6-12) (480-186219-12), S011(0-2) (480-186219-13), S011(6-12) (480-186219-14), S011(18-24) (480-186219-15), S012(0-2) (480-186219-16), S012(6-12) (480-186219-17), S012(18-24) (480-186219-18), S014(0-2) (480-186219-19), S014(6-12) (480-186219-20), S014(18-24) (480-186219-21), S013(0-2) (480-186219-22), S013(6-12) (480-186219-23), S013(18-24) (480-186219-24), S015(0-2) (480-186219-25), S015(6-12) (480-186219-26), S015(18-24) (480-186219-27), S016(0-2) (480-186219-28), S016(6-12) (480-186219-29), S016(18-24) (480-186219-30), DUP-1 (480-186219-31) and DUP-2 (480-186219-32) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 06/18/2021 and analyzed on 06/22/2021.

Chromium and Lead recovered low for the MS of sample S008(6-12)MS (480-186219-10) in batch 480-586400. Cadmium, Chromium and Lead recovered low for the MSD of sample S008(6-12)MSD (480-186219-10) in batch 480-586400. Refer to the QC report for details.

Chromium and Lead recovered high for the MS of sample S010(6-12)MS (480-186219-12) and MSD of sample S010(6-12)MSD (480-186219-12) in batch 480-586400. Chromium exceeded the RPD limit. Refer to the QC report for details.

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

TOTAL MERCURY

Samples S004(0-2) (480-186219-1), S004(6-12) (480-186219-2), S005(0-2) (480-186219-3), S005(6-12) (480-186219-4), S006(0-2) (480-186219-5), S006(6-12) (480-186219-6), S007(0-2) (480-186219-7), S007(6-12) (480-186219-8), S008(0-2) (480-186219-9), S008(6-12) (480-186219-10), S010(0-2) (480-186219-11), S010(6-12) (480-186219-12), S011(0-2) (480-186219-13), S011(6-12) (480-186219-14), S011(18-24) (480-186219-15), S012(0-2) (480-186219-16), S012(6-12) (480-186219-17), S012(18-24) (480-186219-18), S014(0-2) (480-186219-19), S014(6-12) (480-186219-20), S014(18-24) (480-186219-21), S013(0-2) (480-186219-22), S013(6-12) (480-186219-23), S013(18-24) (480-186219-24), S015(0-2) (480-186219-25), S015(6-12) (480-186219-26), S015(18-24) (480-186219-27), S016(0-2) (480-186219-28), S016(6-12) (480-186219-29), S016(18-24) (480-186219-30), DUP-1 (480-186219-31) and DUP-2 (480-186219-32) were analyzed for total mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared and analyzed on 06/22/2021 and 06/23/2021.

Mercury recovered high for the MS of sample S008(6-12)MS (480-186219-10) and MSD of sample S008(6-12)MSD (480-186219-10) in batch 480-586476. Refer to the QC report for details.

Mercury recovered high for the MS of sample S010(6-12)MS (480-186219-12) and MSD of sample S010(6-12)MSD (480-186219-12) in batch 480-586476. Mercury exceeded the RPD limit. Refer to the QC report for details.

Case Narrative

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Job ID: 480-186219-1 (Continued)

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

Samples S004(0-2) (480-186219-1)[5X], S004(6-12) (480-186219-2)[5X], S005(0-2) (480-186219-3)[5X], S005(6-12) (480-186219-4)[5X], S006(0-2) (480-186219-5)[25X], S006(6-12) (480-186219-6)[5X], S007(0-2) (480-186219-7)[5X], S007(6-12) (480-186219-8)[5X], S008(0-2) (480-186219-9)[5X], S008(6-12) (480-186219-10)[10X], S010(0-2) (480-186219-11)[25X], S010(6-12) (480-186219-12)[10X], S011(0-2) (480-186219-13)[5X], S011(6-12) (480-186219-14)[5X], S011(18-24) (480-186219-15)[5X], S012(0-2) (480-186219-16)[5X], S012(6-12) (480-186219-17)[5X], S014(0-2) (480-186219-19)[5X], S013(0-2) (480-186219-22)[25X], S013(6-12) (480-186219-23)[5X], S013(18-24) (480-186219-24)[25X], S015(0-2) (480-186219-25)[5X], S015(6-12) (480-186219-26)[5X], S015(18-24) (480-186219-27)[5X], S016(0-2) (480-186219-28)[5X], S016(6-12) (480-186219-29)[5X], DUP-1 (480-186219-31)[5X] and DUP-2 (480-186219-32)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL CYANIDE

Samples S004(0-2) (480-186219-1), S004(6-12) (480-186219-2), S005(0-2) (480-186219-3), S005(6-12) (480-186219-4), S006(0-2) (480-186219-5), S006(6-12) (480-186219-6), S007(0-2) (480-186219-7), S007(6-12) (480-186219-8), S008(0-2) (480-186219-9), S008(6-12) (480-186219-10), S010(0-2) (480-186219-11), S010(6-12) (480-186219-12), S011(0-2) (480-186219-13), S011(6-12) (480-186219-14), S011(18-24) (480-186219-15), S012(0-2) (480-186219-16), S012(6-12) (480-186219-17), S012(18-24) (480-186219-18), S014(0-2) (480-186219-19), S014(6-12) (480-186219-20), S014(18-24) (480-186219-21), S013(0-2) (480-186219-22), S013(6-12) (480-186219-23), S013(18-24) (480-186219-24), S015(0-2) (480-186219-25), S015(6-12) (480-186219-26), S015(18-24) (480-186219-27), S016(0-2) (480-186219-28), S016(6-12) (480-186219-29), S016(18-24) (480-186219-30), DUP-1 (480-186219-31) and DUP-2 (480-186219-32) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 06/21/2021 and 06/22/2021 and analyzed on 06/21/2021 and 06/23/2021.

Cyanide, Total recovered low for the MS of sample S008(6-12)MS (480-186219-10) and MSD of sample S008(6-12)MSD (480-186219-10) in batch 480-586333. Cyanide, Total exceeded the RPD limit. Refer to the QC report for details.

Cyanide, Total recovered low for the MS of sample S012(6-12)MS (480-186219-17) in batch 480-586687. Refer to the QC report for details.

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

PERCENT SOLIDS/MOISTURE

Samples S004(0-2) (480-186219-1), S004(6-12) (480-186219-2), S005(0-2) (480-186219-3), S005(6-12) (480-186219-4), S006(0-2) (480-186219-5), S006(6-12) (480-186219-6), S007(0-2) (480-186219-7), S007(6-12) (480-186219-8), S008(0-2) (480-186219-9), S008(6-12) (480-186219-10), S010(0-2) (480-186219-11), S010(6-12) (480-186219-12), S011(0-2) (480-186219-13), S011(6-12) (480-186219-14), S011(18-24) (480-186219-15), S012(0-2) (480-186219-16), S012(6-12) (480-186219-17), S012(18-24) (480-186219-18), S014(0-2) (480-186219-19), S014(6-12) (480-186219-20), S014(18-24) (480-186219-21), S013(0-2) (480-186219-22), S013(6-12) (480-186219-23), S013(18-24) (480-186219-24), S015(0-2) (480-186219-25), S015(6-12) (480-186219-26), S015(18-24) (480-186219-27), S016(0-2) (480-186219-28), S016(6-12) (480-186219-29), S016(18-24) (480-186219-30), DUP-1 (480-186219-31) and DUP-2 (480-186219-32) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP. The samples were analyzed on 06/18/2021.

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

Detection Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S004(0-2)

Lab Sample ID: 480-186219-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	72		0.30	0.044	mg/Kg	1	✱	6010C	Total/NA
Chromium	200		0.74	0.30	mg/Kg	1	✱	6010C	Total/NA
Lead	300		1.5	0.35	mg/Kg	1	✱	6010C	Total/NA
Mercury	25		0.30	0.12	mg/Kg	5	✱	7471B	Total/NA
Cyanide, Total	1.7		1.3	0.64	mg/Kg	1	✱	9012B	Total/NA

Client Sample ID: S004(6-12)

Lab Sample ID: 480-186219-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	6.0		0.23	0.034	mg/Kg	1	✱	6010C	Total/NA
Chromium	53		0.57	0.23	mg/Kg	1	✱	6010C	Total/NA
Lead	610		1.1	0.27	mg/Kg	1	✱	6010C	Total/NA
Mercury	2.8		0.38	0.15	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S005(0-2)

Lab Sample ID: 480-186219-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	34		0.28	0.042	mg/Kg	1	✱	6010C	Total/NA
Chromium	82		0.71	0.28	mg/Kg	1	✱	6010C	Total/NA
Lead	230		1.4	0.34	mg/Kg	1	✱	6010C	Total/NA
Mercury	10		0.30	0.12	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S005(6-12)

Lab Sample ID: 480-186219-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	20		0.27	0.040	mg/Kg	1	✱	6010C	Total/NA
Chromium	220		0.67	0.27	mg/Kg	1	✱	6010C	Total/NA
Lead	240		1.3	0.32	mg/Kg	1	✱	6010C	Total/NA
Mercury	7.6		0.30	0.12	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S006(0-2)

Lab Sample ID: 480-186219-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	89		0.26	0.040	mg/Kg	1	✱	6010C	Total/NA
Chromium	83		0.66	0.26	mg/Kg	1	✱	6010C	Total/NA
Lead	250		1.3	0.32	mg/Kg	1	✱	6010C	Total/NA
Mercury	37		1.5	0.62	mg/Kg	25	✱	7471B	Total/NA

Client Sample ID: S006(6-12)

Lab Sample ID: 480-186219-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	28		0.25	0.038	mg/Kg	1	✱	6010C	Total/NA
Chromium	40		0.63	0.25	mg/Kg	1	✱	6010C	Total/NA
Lead	98		1.3	0.30	mg/Kg	1	✱	6010C	Total/NA
Mercury	7.7		0.41	0.17	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S007(0-2)

Lab Sample ID: 480-186219-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	13		0.24	0.036	mg/Kg	1	✱	6010C	Total/NA
Chromium	48		0.60	0.24	mg/Kg	1	✱	6010C	Total/NA
Lead	230		1.2	0.29	mg/Kg	1	✱	6010C	Total/NA
Mercury	4.7		0.39	0.16	mg/Kg	5	✱	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Detection Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S007(6-12)

Lab Sample ID: 480-186219-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	56		0.23	0.034	mg/Kg	1	✱	6010C	Total/NA
Chromium	52		0.57	0.23	mg/Kg	1	✱	6010C	Total/NA
Lead	190		1.1	0.28	mg/Kg	1	✱	6010C	Total/NA
Mercury	2.0		0.33	0.13	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S008(0-2)

Lab Sample ID: 480-186219-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	85		0.29	0.043	mg/Kg	1	✱	6010C	Total/NA
Chromium	170		0.72	0.29	mg/Kg	1	✱	6010C	Total/NA
Lead	120		1.4	0.35	mg/Kg	1	✱	6010C	Total/NA
Mercury	32		0.47	0.19	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S008(6-12)

Lab Sample ID: 480-186219-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	15	F1	0.24	0.036	mg/Kg	1	✱	6010C	Total/NA
Chromium	42	F1	0.59	0.24	mg/Kg	1	✱	6010C	Total/NA
Lead	45	F1	1.2	0.29	mg/Kg	1	✱	6010C	Total/NA
Mercury	5.6		0.22	0.088	mg/Kg	10	✱	7471B	Total/NA

Client Sample ID: S010(0-2)

Lab Sample ID: 480-186219-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	92		0.27	0.040	mg/Kg	1	✱	6010C	Total/NA
Chromium	170		0.66	0.27	mg/Kg	1	✱	6010C	Total/NA
Lead	120		1.3	0.32	mg/Kg	1	✱	6010C	Total/NA
Mercury	45		1.7	0.68	mg/Kg	25	✱	7471B	Total/NA

Client Sample ID: S010(6-12)

Lab Sample ID: 480-186219-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	7.9		0.25	0.038	mg/Kg	1	✱	6010C	Total/NA
Chromium	21	F1 F2	0.63	0.25	mg/Kg	1	✱	6010C	Total/NA
Lead	19	F1	1.3	0.30	mg/Kg	1	✱	6010C	Total/NA
Mercury	2.8	F2	0.24	0.096	mg/Kg	10	✱	7471B	Total/NA

Client Sample ID: S011(0-2)

Lab Sample ID: 480-186219-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	20		0.30	0.045	mg/Kg	1	✱	6010C	Total/NA
Chromium	99		0.74	0.30	mg/Kg	1	✱	6010C	Total/NA
Lead	200		1.5	0.36	mg/Kg	1	✱	6010C	Total/NA
Mercury	10		0.52	0.21	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S011(6-12)

Lab Sample ID: 480-186219-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	12		0.26	0.040	mg/Kg	1	✱	6010C	Total/NA
Chromium	57		0.66	0.26	mg/Kg	1	✱	6010C	Total/NA
Lead	190		1.3	0.32	mg/Kg	1	✱	6010C	Total/NA
Mercury	5.3		0.38	0.15	mg/Kg	5	✱	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Detection Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S011(18-24)

Lab Sample ID: 480-186219-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	9.4		0.28	0.042	mg/Kg	1	✱	6010C	Total/NA
Chromium	63		0.71	0.28	mg/Kg	1	✱	6010C	Total/NA
Lead	450		1.4	0.34	mg/Kg	1	✱	6010C	Total/NA
Mercury	3.5		0.36	0.15	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S012(0-2)

Lab Sample ID: 480-186219-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	98		0.29	0.044	mg/Kg	1	✱	6010C	Total/NA
Chromium	250		0.73	0.29	mg/Kg	1	✱	6010C	Total/NA
Lead	390		1.5	0.35	mg/Kg	1	✱	6010C	Total/NA
Mercury	33		0.45	0.18	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S012(6-12)

Lab Sample ID: 480-186219-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	21		0.24	0.036	mg/Kg	1	✱	6010C	Total/NA
Chromium	72		0.60	0.24	mg/Kg	1	✱	6010C	Total/NA
Lead	240		1.2	0.29	mg/Kg	1	✱	6010C	Total/NA
Mercury	9.9		0.39	0.16	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S012(18-24)

Lab Sample ID: 480-186219-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	3.0		0.28	0.042	mg/Kg	1	✱	6010C	Total/NA
Chromium	26		0.70	0.28	mg/Kg	1	✱	6010C	Total/NA
Lead	28		1.4	0.34	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.96		0.067	0.027	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: S014(0-2)

Lab Sample ID: 480-186219-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	52		0.24	0.036	mg/Kg	1	✱	6010C	Total/NA
Chromium	76		0.61	0.24	mg/Kg	1	✱	6010C	Total/NA
Lead	87		1.2	0.29	mg/Kg	1	✱	6010C	Total/NA
Mercury	16		0.39	0.16	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S014(6-12)

Lab Sample ID: 480-186219-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	1.5		0.21	0.032	mg/Kg	1	✱	6010C	Total/NA
Chromium	9.2		0.53	0.21	mg/Kg	1	✱	6010C	Total/NA
Lead	7.7		1.1	0.25	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.21		0.046	0.019	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: S014(18-24)

Lab Sample ID: 480-186219-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	1.8		0.23	0.034	mg/Kg	1	✱	6010C	Total/NA
Chromium	8.6		0.57	0.23	mg/Kg	1	✱	6010C	Total/NA
Lead	7.3		1.1	0.28	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.48		0.047	0.019	mg/Kg	1	✱	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Detection Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S013(0-2)

Lab Sample ID: 480-186219-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	150		0.29	0.043	mg/Kg	1	✱	6010C	Total/NA
Chromium	210		0.72	0.29	mg/Kg	1	✱	6010C	Total/NA
Lead	650		1.4	0.35	mg/Kg	1	✱	6010C	Total/NA
Mercury	56		1.6	0.66	mg/Kg	25	✱	7471B	Total/NA

Client Sample ID: S013(6-12)

Lab Sample ID: 480-186219-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	130		0.27	0.041	mg/Kg	1	✱	6010C	Total/NA
Chromium	170		0.68	0.27	mg/Kg	1	✱	6010C	Total/NA
Lead	410		1.4	0.33	mg/Kg	1	✱	6010C	Total/NA
Mercury	35		0.42	0.17	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S013(18-24)

Lab Sample ID: 480-186219-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	110		0.28	0.042	mg/Kg	1	✱	6010C	Total/NA
Chromium	160		0.69	0.28	mg/Kg	1	✱	6010C	Total/NA
Lead	350		1.4	0.33	mg/Kg	1	✱	6010C	Total/NA
Mercury	42		2.0	0.82	mg/Kg	25	✱	7471B	Total/NA

Client Sample ID: S015(0-2)

Lab Sample ID: 480-186219-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	55		0.32	0.048	mg/Kg	1	✱	6010C	Total/NA
Chromium	180		0.80	0.32	mg/Kg	1	✱	6010C	Total/NA
Lead	250		1.6	0.39	mg/Kg	1	✱	6010C	Total/NA
Mercury	15		0.52	0.21	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S015(6-12)

Lab Sample ID: 480-186219-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	14		0.26	0.039	mg/Kg	1	✱	6010C	Total/NA
Chromium	87		0.65	0.26	mg/Kg	1	✱	6010C	Total/NA
Lead	140		1.3	0.31	mg/Kg	1	✱	6010C	Total/NA
Mercury	3.3		0.35	0.14	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S015(18-24)

Lab Sample ID: 480-186219-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	22		0.27	0.041	mg/Kg	1	✱	6010C	Total/NA
Chromium	120		0.68	0.27	mg/Kg	1	✱	6010C	Total/NA
Lead	190		1.4	0.33	mg/Kg	1	✱	6010C	Total/NA
Mercury	6.2		0.32	0.13	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S016(0-2)

Lab Sample ID: 480-186219-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	40		0.25	0.038	mg/Kg	1	✱	6010C	Total/NA
Chromium	170		0.63	0.25	mg/Kg	1	✱	6010C	Total/NA
Lead	180		1.3	0.30	mg/Kg	1	✱	6010C	Total/NA
Mercury	14		0.40	0.16	mg/Kg	5	✱	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Detection Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S016(6-12)

Lab Sample ID: 480-186219-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	11		0.26	0.039	mg/Kg	1	✱	6010C	Total/NA
Chromium	43		0.65	0.26	mg/Kg	1	✱	6010C	Total/NA
Lead	66		1.3	0.31	mg/Kg	1	✱	6010C	Total/NA
Mercury	4.4		0.27	0.11	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: S016(18-24)

Lab Sample ID: 480-186219-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	2.3		0.25	0.037	mg/Kg	1	✱	6010C	Total/NA
Chromium	14		0.62	0.25	mg/Kg	1	✱	6010C	Total/NA
Lead	15		1.2	0.30	mg/Kg	1	✱	6010C	Total/NA
Mercury	1.1		0.080	0.032	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: DUP-1

Lab Sample ID: 480-186219-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	23		0.30	0.045	mg/Kg	1	✱	6010C	Total/NA
Chromium	240		0.75	0.30	mg/Kg	1	✱	6010C	Total/NA
Lead	230		1.5	0.36	mg/Kg	1	✱	6010C	Total/NA
Mercury	5.4		0.39	0.16	mg/Kg	5	✱	7471B	Total/NA

Client Sample ID: DUP-2

Lab Sample ID: 480-186219-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	21		0.25	0.038	mg/Kg	1	✱	6010C	Total/NA
Chromium	41		0.63	0.25	mg/Kg	1	✱	6010C	Total/NA
Lead	84		1.3	0.30	mg/Kg	1	✱	6010C	Total/NA
Mercury	5.8		0.29	0.12	mg/Kg	5	✱	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S004(0-2)

Date Collected: 06/15/21 10:50

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-1

Matrix: Solid

Percent Solids: 71.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	72		0.30	0.044	mg/Kg	☆	06/18/21 16:43	06/22/21 01:06	1
Chromium	200		0.74	0.30	mg/Kg	☆	06/18/21 16:43	06/22/21 01:06	1
Lead	300		1.5	0.35	mg/Kg	☆	06/18/21 16:43	06/22/21 01:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	25		0.30	0.12	mg/Kg	☆	06/23/21 12:55	06/23/21 14:35	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.7		1.3	0.64	mg/Kg	☆	06/21/21 13:03	06/21/21 16:59	1

Client Sample ID: S004(6-12)

Date Collected: 06/15/21 10:58

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-2

Matrix: Solid

Percent Solids: 85.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	6.0		0.23	0.034	mg/Kg	☆	06/18/21 16:43	06/22/21 01:10	1
Chromium	53		0.57	0.23	mg/Kg	☆	06/18/21 16:43	06/22/21 01:10	1
Lead	610		1.1	0.27	mg/Kg	☆	06/18/21 16:43	06/22/21 01:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.8		0.38	0.15	mg/Kg	☆	06/23/21 12:55	06/23/21 14:37	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.0	U	1.0	0.50	mg/Kg	☆	06/21/21 13:03	06/21/21 16:57	1

Client Sample ID: S005(0-2)

Date Collected: 06/16/21 10:15

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-3

Matrix: Solid

Percent Solids: 74.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	34		0.28	0.042	mg/Kg	☆	06/18/21 16:43	06/22/21 01:14	1
Chromium	82		0.71	0.28	mg/Kg	☆	06/18/21 16:43	06/22/21 01:14	1
Lead	230		1.4	0.34	mg/Kg	☆	06/18/21 16:43	06/22/21 01:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	10		0.30	0.12	mg/Kg	☆	06/23/21 12:55	06/23/21 14:38	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.2	U	1.2	0.57	mg/Kg	☆	06/21/21 13:03	06/21/21 16:56	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S005(6-12)

Date Collected: 06/16/21 10:22

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-4

Matrix: Solid

Percent Solids: 72.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	20		0.27	0.040	mg/Kg	☆	06/18/21 16:43	06/22/21 01:17	1
Chromium	220		0.67	0.27	mg/Kg	☆	06/18/21 16:43	06/22/21 01:17	1
Lead	240		1.3	0.32	mg/Kg	☆	06/18/21 16:43	06/22/21 01:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	7.6		0.30	0.12	mg/Kg	☆	06/23/21 12:55	06/23/21 14:39	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.3	U	1.3	0.61	mg/Kg	☆	06/21/21 13:03	06/21/21 16:55	1

Client Sample ID: S006(0-2)

Date Collected: 06/16/21 13:35

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-5

Matrix: Solid

Percent Solids: 79.1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	89		0.26	0.040	mg/Kg	☆	06/18/21 16:43	06/22/21 01:21	1
Chromium	83		0.66	0.26	mg/Kg	☆	06/18/21 16:43	06/22/21 01:21	1
Lead	250		1.3	0.32	mg/Kg	☆	06/18/21 16:43	06/22/21 01:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	37		1.5	0.62	mg/Kg	☆	06/23/21 12:55	06/23/21 16:15	25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.1	U	1.1	0.53	mg/Kg	☆	06/21/21 13:03	06/21/21 16:53	1

Client Sample ID: S006(6-12)

Date Collected: 06/16/21 13:40

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-6

Matrix: Solid

Percent Solids: 82.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	28		0.25	0.038	mg/Kg	☆	06/18/21 16:43	06/22/21 01:25	1
Chromium	40		0.63	0.25	mg/Kg	☆	06/18/21 16:43	06/22/21 01:25	1
Lead	98		1.3	0.30	mg/Kg	☆	06/18/21 16:43	06/22/21 01:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	7.7		0.41	0.17	mg/Kg	☆	06/23/21 12:55	06/23/21 14:44	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.1	U	1.1	0.54	mg/Kg	☆	06/21/21 13:03	06/21/21 16:52	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S007(0-2)

Date Collected: 06/16/21 14:25

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-7

Matrix: Solid

Percent Solids: 85.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	13		0.24	0.036	mg/Kg	☆	06/18/21 16:43	06/22/21 01:40	1
Chromium	48		0.60	0.24	mg/Kg	☆	06/18/21 16:43	06/22/21 01:40	1
Lead	230		1.2	0.29	mg/Kg	☆	06/18/21 16:43	06/22/21 01:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.7		0.39	0.16	mg/Kg	☆	06/23/21 12:55	06/23/21 14:45	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.1	U	1.1	0.52	mg/Kg	☆	06/21/21 13:03	06/21/21 16:50	1

Client Sample ID: S007(6-12)

Date Collected: 06/16/21 14:28

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-8

Matrix: Solid

Percent Solids: 89.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	56		0.23	0.034	mg/Kg	☆	06/18/21 16:43	06/22/21 01:44	1
Chromium	52		0.57	0.23	mg/Kg	☆	06/18/21 16:43	06/22/21 01:44	1
Lead	190		1.1	0.28	mg/Kg	☆	06/18/21 16:43	06/22/21 01:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.0		0.33	0.13	mg/Kg	☆	06/23/21 12:55	06/23/21 14:46	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.0	U	1.0	0.50	mg/Kg	☆	06/21/21 13:03	06/21/21 16:49	1

Client Sample ID: S008(0-2)

Date Collected: 06/15/21 13:35

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-9

Matrix: Solid

Percent Solids: 69.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	85		0.29	0.043	mg/Kg	☆	06/18/21 16:43	06/22/21 01:48	1
Chromium	170		0.72	0.29	mg/Kg	☆	06/18/21 16:43	06/22/21 01:48	1
Lead	120		1.4	0.35	mg/Kg	☆	06/18/21 16:43	06/22/21 01:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	32		0.47	0.19	mg/Kg	☆	06/23/21 12:55	06/23/21 14:50	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.4	U	1.4	0.68	mg/Kg	☆	06/21/21 13:03	06/21/21 16:47	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S008(6-12)

Lab Sample ID: 480-186219-10

Date Collected: 06/15/21 14:05

Matrix: Solid

Date Received: 06/18/21 08:00

Percent Solids: 83.4

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	15	F1	0.24	0.036	mg/Kg	☆	06/18/21 16:43	06/22/21 01:52	1
Chromium	42	F1	0.59	0.24	mg/Kg	☆	06/18/21 16:43	06/22/21 01:52	1
Lead	45	F1	1.2	0.29	mg/Kg	☆	06/18/21 16:43	06/22/21 01:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	5.6		0.22	0.088	mg/Kg	☆	06/22/21 14:00	06/22/21 15:55	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.1	U F1 F2	1.1	0.52	mg/Kg	☆	06/21/21 13:03	06/21/21 16:33	1

Client Sample ID: S010(0-2)

Lab Sample ID: 480-186219-11

Date Collected: 06/16/21 12:43

Matrix: Solid

Date Received: 06/18/21 08:00

Percent Solids: 78.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	92		0.27	0.040	mg/Kg	☆	06/18/21 16:43	06/22/21 02:11	1
Chromium	170		0.66	0.27	mg/Kg	☆	06/18/21 16:43	06/22/21 02:11	1
Lead	120		1.3	0.32	mg/Kg	☆	06/18/21 16:43	06/22/21 02:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	45		1.7	0.68	mg/Kg	☆	06/23/21 12:55	06/23/21 16:16	25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.2	U	1.2	0.57	mg/Kg	☆	06/21/21 13:03	06/21/21 17:08	1

Client Sample ID: S010(6-12)

Lab Sample ID: 480-186219-12

Date Collected: 06/16/21 13:05

Matrix: Solid

Date Received: 06/18/21 08:00

Percent Solids: 82.1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	7.9		0.25	0.038	mg/Kg	☆	06/18/21 16:43	06/22/21 02:26	1
Chromium	21	F1 F2	0.63	0.25	mg/Kg	☆	06/18/21 16:43	06/22/21 02:26	1
Lead	19	F1	1.3	0.30	mg/Kg	☆	06/18/21 16:43	06/22/21 02:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.8	F2	0.24	0.096	mg/Kg	☆	06/22/21 14:00	06/22/21 16:07	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.1	U F1 F2	1.1	0.52	mg/Kg	☆	06/21/21 12:53	06/21/21 18:01	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S011(0-2)

Date Collected: 06/15/21 11:13

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-13

Matrix: Solid

Percent Solids: 67.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	20		0.30	0.045	mg/Kg	☆	06/18/21 16:43	06/22/21 02:38	1
Chromium	99		0.74	0.30	mg/Kg	☆	06/18/21 16:43	06/22/21 02:38	1
Lead	200		1.5	0.36	mg/Kg	☆	06/18/21 16:43	06/22/21 02:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	10		0.52	0.21	mg/Kg	☆	06/23/21 12:55	06/23/21 14:55	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.4	U	1.4	0.67	mg/Kg	☆	06/21/21 13:03	06/21/21 16:42	1

Client Sample ID: S011(6-12)

Date Collected: 06/15/21 11:20

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-14

Matrix: Solid

Percent Solids: 77.6

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	12		0.26	0.040	mg/Kg	☆	06/18/21 16:43	06/22/21 02:41	1
Chromium	57		0.66	0.26	mg/Kg	☆	06/18/21 16:43	06/22/21 02:41	1
Lead	190		1.3	0.32	mg/Kg	☆	06/18/21 16:43	06/22/21 02:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	5.3		0.38	0.15	mg/Kg	☆	06/23/21 12:55	06/23/21 14:56	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.3	U	1.3	0.61	mg/Kg	☆	06/21/21 13:03	06/21/21 16:40	1

Client Sample ID: S011(18-24)

Date Collected: 06/15/21 11:52

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-15

Matrix: Solid

Percent Solids: 74.5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	9.4		0.28	0.042	mg/Kg	☆	06/18/21 16:43	06/22/21 02:45	1
Chromium	63		0.71	0.28	mg/Kg	☆	06/18/21 16:43	06/22/21 02:45	1
Lead	450		1.4	0.34	mg/Kg	☆	06/18/21 16:43	06/22/21 02:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.5		0.36	0.15	mg/Kg	☆	06/23/21 12:55	06/23/21 14:58	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.2	U	1.2	0.57	mg/Kg	☆	06/21/21 13:03	06/21/21 16:39	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S012(0-2)

Date Collected: 06/15/21 12:10

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-16

Matrix: Solid

Percent Solids: 68.5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	98		0.29	0.044	mg/Kg	☆	06/18/21 16:43	06/22/21 02:49	1
Chromium	250		0.73	0.29	mg/Kg	☆	06/18/21 16:43	06/22/21 02:49	1
Lead	390		1.5	0.35	mg/Kg	☆	06/18/21 16:43	06/22/21 02:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	33		0.45	0.18	mg/Kg	☆	06/23/21 12:55	06/23/21 14:59	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.3	U	1.3	0.65	mg/Kg	☆	06/21/21 13:03	06/21/21 16:37	1

Client Sample ID: S012(6-12)

Date Collected: 06/15/21 12:20

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-17

Matrix: Solid

Percent Solids: 79.7

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	21		0.24	0.036	mg/Kg	☆	06/18/21 16:43	06/22/21 02:53	1
Chromium	72		0.60	0.24	mg/Kg	☆	06/18/21 16:43	06/22/21 02:53	1
Lead	240		1.2	0.29	mg/Kg	☆	06/18/21 16:43	06/22/21 02:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	9.9		0.39	0.16	mg/Kg	☆	06/23/21 12:55	06/23/21 15:00	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.2	U F1	1.2	0.58	mg/Kg	☆	06/22/21 12:24	06/23/21 15:19	1

Client Sample ID: S012(18-24)

Date Collected: 06/15/21 12:42

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-18

Matrix: Solid

Percent Solids: 74.6

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	3.0		0.28	0.042	mg/Kg	☆	06/18/21 16:43	06/22/21 02:57	1
Chromium	26		0.70	0.28	mg/Kg	☆	06/18/21 16:43	06/22/21 02:57	1
Lead	28		1.4	0.34	mg/Kg	☆	06/18/21 16:43	06/22/21 02:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.96		0.067	0.027	mg/Kg	☆	06/23/21 12:55	06/23/21 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.3	U	1.3	0.61	mg/Kg	☆	06/22/21 12:24	06/23/21 15:24	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S014(0-2)

Lab Sample ID: 480-186219-19

Date Collected: 06/16/21 14:00

Matrix: Solid

Date Received: 06/18/21 08:00

Percent Solids: 87.7

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	52		0.24	0.036	mg/Kg	☆	06/18/21 16:43	06/22/21 03:12	1
Chromium	76		0.61	0.24	mg/Kg	☆	06/18/21 16:43	06/22/21 03:12	1
Lead	87		1.2	0.29	mg/Kg	☆	06/18/21 16:43	06/22/21 03:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	16		0.39	0.16	mg/Kg	☆	06/23/21 12:55	06/23/21 15:03	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.1	U	1.1	0.52	mg/Kg	☆	06/22/21 12:24	06/23/21 15:25	1

Client Sample ID: S014(6-12)

Lab Sample ID: 480-186219-20

Date Collected: 06/16/21 14:05

Matrix: Solid

Date Received: 06/18/21 08:00

Percent Solids: 91.0

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.5		0.21	0.032	mg/Kg	☆	06/18/21 16:43	06/22/21 03:16	1
Chromium	9.2		0.53	0.21	mg/Kg	☆	06/18/21 16:43	06/22/21 03:16	1
Lead	7.7		1.1	0.25	mg/Kg	☆	06/18/21 16:43	06/22/21 03:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.046	0.019	mg/Kg	☆	06/23/21 12:55	06/23/21 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.96	U	0.96	0.46	mg/Kg	☆	06/22/21 12:24	06/23/21 15:27	1

Client Sample ID: S014(18-24)

Lab Sample ID: 480-186219-21

Date Collected: 06/16/21 14:10

Matrix: Solid

Date Received: 06/18/21 08:00

Percent Solids: 91.1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.8		0.23	0.034	mg/Kg	☆	06/18/21 16:43	06/22/21 00:00	1
Chromium	8.6		0.57	0.23	mg/Kg	☆	06/18/21 16:43	06/22/21 00:00	1
Lead	7.3		1.1	0.28	mg/Kg	☆	06/18/21 16:43	06/22/21 00:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.48		0.047	0.019	mg/Kg	☆	06/23/21 12:55	06/23/21 16:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.0	U	1.0	0.48	mg/Kg	☆	06/22/21 12:24	06/23/21 15:28	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S013(0-2)

Date Collected: 06/16/21 11:50

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-22

Matrix: Solid

Percent Solids: 72.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	150		0.29	0.043	mg/Kg	☆	06/18/21 16:43	06/22/21 00:29	1
Chromium	210		0.72	0.29	mg/Kg	☆	06/18/21 16:43	06/22/21 00:29	1
Lead	650		1.4	0.35	mg/Kg	☆	06/18/21 16:43	06/22/21 00:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	56		1.6	0.66	mg/Kg	☆	06/23/21 12:55	06/23/21 16:21	25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.3	U	1.3	0.61	mg/Kg	☆	06/22/21 12:24	06/23/21 15:30	1

Client Sample ID: S013(6-12)

Date Collected: 06/16/21 12:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-23

Matrix: Solid

Percent Solids: 76.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	130		0.27	0.041	mg/Kg	☆	06/18/21 16:43	06/22/21 00:33	1
Chromium	170		0.68	0.27	mg/Kg	☆	06/18/21 16:43	06/22/21 00:33	1
Lead	410		1.4	0.33	mg/Kg	☆	06/18/21 16:43	06/22/21 00:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	35		0.42	0.17	mg/Kg	☆	06/23/21 12:55	06/23/21 15:20	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.2	U	1.2	0.57	mg/Kg	☆	06/22/21 12:24	06/23/21 15:34	1

Client Sample ID: S013(18-24)

Date Collected: 06/16/21 12:22

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-24

Matrix: Solid

Percent Solids: 75.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	110		0.28	0.042	mg/Kg	☆	06/18/21 16:43	06/22/21 00:36	1
Chromium	160		0.69	0.28	mg/Kg	☆	06/18/21 16:43	06/22/21 00:36	1
Lead	350		1.4	0.33	mg/Kg	☆	06/18/21 16:43	06/22/21 00:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	42		2.0	0.82	mg/Kg	☆	06/23/21 12:55	06/23/21 16:22	25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.1	U	1.1	0.55	mg/Kg	☆	06/22/21 12:24	06/23/21 15:35	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S015(0-2)

Date Collected: 06/15/21 18:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-25

Matrix: Solid

Percent Solids: 66.1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	55		0.32	0.048	mg/Kg	☆	06/18/21 16:43	06/22/21 00:40	1
Chromium	180		0.80	0.32	mg/Kg	☆	06/18/21 16:43	06/22/21 00:40	1
Lead	250		1.6	0.39	mg/Kg	☆	06/18/21 16:43	06/22/21 00:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	15		0.52	0.21	mg/Kg	☆	06/23/21 12:55	06/23/21 15:26	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.4	U	1.4	0.66	mg/Kg	☆	06/22/21 12:24	06/23/21 15:37	1

Client Sample ID: S015(6-12)

Date Collected: 06/15/21 18:20

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-26

Matrix: Solid

Percent Solids: 75.9

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	14		0.26	0.039	mg/Kg	☆	06/18/21 16:43	06/22/21 00:44	1
Chromium	87		0.65	0.26	mg/Kg	☆	06/18/21 16:43	06/22/21 00:44	1
Lead	140		1.3	0.31	mg/Kg	☆	06/18/21 16:43	06/22/21 00:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.3		0.35	0.14	mg/Kg	☆	06/23/21 12:55	06/23/21 15:27	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.3	U	1.3	0.61	mg/Kg	☆	06/22/21 12:24	06/23/21 15:38	1

Client Sample ID: S015(18-24)

Date Collected: 06/15/21 18:45

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-27

Matrix: Solid

Percent Solids: 73.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	22		0.27	0.041	mg/Kg	☆	06/18/21 16:43	06/22/21 00:59	1
Chromium	120		0.68	0.27	mg/Kg	☆	06/18/21 16:43	06/22/21 00:59	1
Lead	190		1.4	0.33	mg/Kg	☆	06/18/21 16:43	06/22/21 00:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	6.2		0.32	0.13	mg/Kg	☆	06/23/21 12:55	06/23/21 15:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.2	U	1.2	0.60	mg/Kg	☆	06/22/21 12:24	06/23/21 15:40	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S016(0-2)

Date Collected: 06/15/21 16:22

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-28

Matrix: Solid

Percent Solids: 77.4

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	40		0.25	0.038	mg/Kg	☆	06/18/21 16:43	06/22/21 01:03	1
Chromium	170		0.63	0.25	mg/Kg	☆	06/18/21 16:43	06/22/21 01:03	1
Lead	180		1.3	0.30	mg/Kg	☆	06/18/21 16:43	06/22/21 01:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	14		0.40	0.16	mg/Kg	☆	06/23/21 12:55	06/23/21 15:30	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.2	U	1.2	0.56	mg/Kg	☆	06/22/21 12:24	06/23/21 15:41	1

Client Sample ID: S016(6-12)

Date Collected: 06/15/21 16:45

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-29

Matrix: Solid

Percent Solids: 79.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	11		0.26	0.039	mg/Kg	☆	06/18/21 16:43	06/22/21 01:06	1
Chromium	43		0.65	0.26	mg/Kg	☆	06/18/21 16:43	06/22/21 01:06	1
Lead	66		1.3	0.31	mg/Kg	☆	06/18/21 16:43	06/22/21 01:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.4		0.27	0.11	mg/Kg	☆	06/23/21 12:55	06/23/21 15:31	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.2	U	1.2	0.56	mg/Kg	☆	06/22/21 12:24	06/23/21 15:43	1

Client Sample ID: S016(18-24)

Date Collected: 06/15/21 17:10

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-30

Matrix: Solid

Percent Solids: 80.1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.3		0.25	0.037	mg/Kg	☆	06/18/21 16:43	06/22/21 01:10	1
Chromium	14		0.62	0.25	mg/Kg	☆	06/18/21 16:43	06/22/21 01:10	1
Lead	15		1.2	0.30	mg/Kg	☆	06/18/21 16:43	06/22/21 01:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.1		0.080	0.032	mg/Kg	☆	06/23/21 12:55	06/23/21 16:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.1	U	1.1	0.55	mg/Kg	☆	06/22/21 12:24	06/23/21 15:44	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: DUP-1

Date Collected: 06/16/21 00:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-31

Matrix: Solid

Percent Solids: 62.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	23		0.30	0.045	mg/Kg	☆	06/18/21 16:43	06/22/21 01:14	1
Chromium	240		0.75	0.30	mg/Kg	☆	06/18/21 16:43	06/22/21 01:14	1
Lead	230		1.5	0.36	mg/Kg	☆	06/18/21 16:43	06/22/21 01:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	5.4		0.39	0.16	mg/Kg	☆	06/23/21 12:55	06/23/21 15:34	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.4	U	1.4	0.69	mg/Kg	☆	06/22/21 12:24	06/23/21 15:45	1

Client Sample ID: DUP-2

Date Collected: 06/16/21 00:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-32

Matrix: Solid

Percent Solids: 82.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	21		0.25	0.038	mg/Kg	☆	06/18/21 16:43	06/22/21 01:17	1
Chromium	41		0.63	0.25	mg/Kg	☆	06/18/21 16:43	06/22/21 01:17	1
Lead	84		1.3	0.30	mg/Kg	☆	06/18/21 16:43	06/22/21 01:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	5.8		0.29	0.12	mg/Kg	☆	06/23/21 12:55	06/23/21 15:35	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.1	U	1.1	0.53	mg/Kg	☆	06/22/21 12:24	06/23/21 15:47	1

QC Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-586083/1-A

Matrix: Solid

Analysis Batch: 586400

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 586083

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.19	U	0.19	0.028	mg/Kg		06/18/21 16:43	06/22/21 00:59	1
Chromium	0.47	U	0.47	0.19	mg/Kg		06/18/21 16:43	06/22/21 00:59	1
Lead	0.95	U	0.95	0.23	mg/Kg		06/18/21 16:43	06/22/21 00:59	1

Lab Sample ID: LCSSRM 480-586083/2-A

Matrix: Solid

Analysis Batch: 586400

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 586083

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	135	153		mg/Kg		113.2	74.8 - 124.4
Chromium	117	126		mg/Kg		108.1	70.1 - 129.9
Lead	77.6	75.9		mg/Kg		97.8	68.8 - 131.4

Lab Sample ID: 480-186219-10 MS

Matrix: Solid

Analysis Batch: 586400

Client Sample ID: S008(6-12)

Prep Type: Total/NA

Prep Batch: 586083

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	15	F1	47.8	52.5		mg/Kg	☼	79	75 - 125
Chromium	42	F1	47.8	76.4	F1	mg/Kg	☼	72	75 - 125
Lead	45	F1	47.8	80.0	F1	mg/Kg	☼	74	75 - 125

Lab Sample ID: 480-186219-10 MSD

Matrix: Solid

Analysis Batch: 586400

Client Sample ID: S008(6-12)

Prep Type: Total/NA

Prep Batch: 586083

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	15	F1	49.6	51.4	F1	mg/Kg	☼	74	75 - 125	2	20
Chromium	42	F1	49.6	69.2	F1	mg/Kg	☼	55	75 - 125	10	20
Lead	45	F1	49.6	73.4	F1	mg/Kg	☼	58	75 - 125	9	20

Lab Sample ID: 480-186219-12 MS

Matrix: Solid

Analysis Batch: 586400

Client Sample ID: S010(6-12)

Prep Type: Total/NA

Prep Batch: 586083

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	7.9		51.3	53.6		mg/Kg	☼	89	75 - 125
Chromium	21	F1 F2	51.3	101	F1	mg/Kg	☼	155	75 - 125
Lead	19	F1	51.3	95.1	F1	mg/Kg	☼	148	75 - 125

Lab Sample ID: 480-186219-12 MSD

Matrix: Solid

Analysis Batch: 586400

Client Sample ID: S010(6-12)

Prep Type: Total/NA

Prep Batch: 586083

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	7.9		46.9	52.4		mg/Kg	☼	95	75 - 125	2	20
Chromium	21	F1 F2	46.9	140	F1 F2	mg/Kg	☼	253	75 - 125	33	20

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-186219-12 MSD

Matrix: Solid

Analysis Batch: 586400

Client Sample ID: S010(6-12)

Prep Type: Total/NA

Prep Batch: 586083

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	19	F1	46.9	106	F1	mg/Kg	✱	186	75 - 125	11	20

Lab Sample ID: MB 480-586085/1-A

Matrix: Solid

Analysis Batch: 586408

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 586085

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.20	U	0.20	0.029	mg/Kg		06/18/21 16:43	06/21/21 23:52	1
Chromium	0.49	U	0.49	0.20	mg/Kg		06/18/21 16:43	06/21/21 23:52	1
Lead	0.98	U	0.98	0.24	mg/Kg		06/18/21 16:43	06/21/21 23:52	1

Lab Sample ID: LCSSRM 480-586085/2-A

Matrix: Solid

Analysis Batch: 586408

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 586085

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	135	148		mg/Kg		109.6	74.8 - 124.4
Chromium	117	117		mg/Kg		99.8	70.1 - 129.9
Lead	77.6	69.5		mg/Kg		89.6	68.8 - 131.4

Lab Sample ID: 480-186219-21 MS

Matrix: Solid

Analysis Batch: 586408

Client Sample ID: S014(18-24)

Prep Type: Total/NA

Prep Batch: 586085

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	1.8		46.4	42.9		mg/Kg	✱	89	75 - 125
Chromium	8.6		46.4	53.3		mg/Kg	✱	96	75 - 125
Lead	7.3		46.4	56.9		mg/Kg	✱	107	75 - 125

Lab Sample ID: 480-186219-21 MSD

Matrix: Solid

Analysis Batch: 586408

Client Sample ID: S014(18-24)

Prep Type: Total/NA

Prep Batch: 586085

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	1.8		43.8	41.4		mg/Kg	✱	90	75 - 125	4	20
Chromium	8.6		43.8	51.4		mg/Kg	✱	98	75 - 125	4	20
Lead	7.3		43.8	54.3		mg/Kg	✱	107	75 - 125	5	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-586291/1-A

Matrix: Solid

Analysis Batch: 586476

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 586291

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	U	0.020	0.0080	mg/Kg		06/22/21 14:00	06/22/21 15:13	1

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-586291/2-A ^10
Matrix: Solid
Analysis Batch: 586476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 586291

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	27.2	24.8		mg/Kg		91.3	59.9 - 140.1

Lab Sample ID: 480-186219-10 MS
Matrix: Solid
Analysis Batch: 586476

Client Sample ID: S008(6-12)
Prep Type: Total/NA
Prep Batch: 586291

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.6		0.395	8.06	4	mg/Kg	✱	620	80 - 120

Lab Sample ID: 480-186219-10 MSD
Matrix: Solid
Analysis Batch: 586476

Client Sample ID: S008(6-12)
Prep Type: Total/NA
Prep Batch: 586291

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	5.6		0.336	7.79	4	mg/Kg	✱	647	80 - 120	3	20

Lab Sample ID: MB 480-586293/1-A
Matrix: Solid
Analysis Batch: 586476

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 586293

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	U	0.019	0.0077	mg/Kg		06/22/21 14:00	06/22/21 16:04	1

Lab Sample ID: LCSSRM 480-586293/2-A ^10
Matrix: Solid
Analysis Batch: 586476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 586293

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	27.2	28.0		mg/Kg		102.8	59.9 - 140.1

Lab Sample ID: 480-186219-12 MS
Matrix: Solid
Analysis Batch: 586476

Client Sample ID: S010(6-12)
Prep Type: Total/NA
Prep Batch: 586293

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.8	F2	0.362	7.84	4	mg/Kg	✱	1401	80 - 120

Lab Sample ID: 480-186219-12 MSD
Matrix: Solid
Analysis Batch: 586476

Client Sample ID: S010(6-12)
Prep Type: Total/NA
Prep Batch: 586293

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	2.8	F2	0.407	13.1	4 F2	mg/Kg	✱	2531	80 - 120	50	20

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: MB 480-586490/1-A
Matrix: Solid
Analysis Batch: 586692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 586490

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	U	0.019	0.0078	mg/Kg		06/23/21 12:55	06/23/21 14:33	1

Lab Sample ID: LCSSRM 480-586490/2-A ^10
Matrix: Solid
Analysis Batch: 586692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 586490

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	27.2	25.9		mg/Kg		95.4	59.9 - 140.1

Lab Sample ID: MB 480-586491/1-A
Matrix: Solid
Analysis Batch: 586692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 586491

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	U	0.020	0.0081	mg/Kg		06/23/21 12:55	06/23/21 15:15	1

Lab Sample ID: LCSSRM 480-586491/2-A ^10
Matrix: Solid
Analysis Batch: 586692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 586491

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	27.2	24.8		mg/Kg		91.0	59.9 - 140.1

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-586261/1-A
Matrix: Solid
Analysis Batch: 586331

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 586261

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.91	U	0.91	0.44	mg/Kg		06/21/21 12:53	06/21/21 17:20	1

Lab Sample ID: LCSSRM 480-586261/2-A ^5
Matrix: Solid
Analysis Batch: 586331

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 586261

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	23.1	15.9		mg/Kg		69.0	17.0 - 162.8

Lab Sample ID: 480-186219-12 MS
Matrix: Solid
Analysis Batch: 586331

Client Sample ID: S010(6-12)
Prep Type: Total/NA
Prep Batch: 586261

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	1.1	U F1 F2	1.31	1.41		mg/Kg	✱	108	85 - 115

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Method: 9012B - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: 480-186219-12 MSD

Matrix: Solid

Analysis Batch: 586331

Client Sample ID: S010(6-12)

Prep Type: Total/NA

Prep Batch: 586261

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	1.1	U F1 F2	1.31	1.43		mg/Kg	✱	109	85 - 115	1	15

Lab Sample ID: MB 480-586265/1-A

Matrix: Solid

Analysis Batch: 586333

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 586265

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.91	U	0.91	0.44	mg/Kg		06/21/21 13:03	06/21/21 16:30	1

Lab Sample ID: LCSSRM 480-586265/2-A ^5

Matrix: Solid

Analysis Batch: 586333

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 586265

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	23.1	15.2		mg/Kg		65.8	17.0 - 162.8

Lab Sample ID: 480-186219-10 MS

Matrix: Solid

Analysis Batch: 586333

Client Sample ID: S008(6-12)

Prep Type: Total/NA

Prep Batch: 586265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	1.1	U F1 F2	1.37	0.677	J F1	mg/Kg	✱	49	85 - 115

Lab Sample ID: 480-186219-10 MSD

Matrix: Solid

Analysis Batch: 586333

Client Sample ID: S008(6-12)

Prep Type: Total/NA

Prep Batch: 586265

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	1.1	U F1 F2	1.35	0.860	J F1 F2	mg/Kg	✱	64	85 - 115	24	15

Lab Sample ID: MB 480-586429/1-A

Matrix: Solid

Analysis Batch: 586687

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 586429

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.95	U	0.95	0.46	mg/Kg		06/22/21 12:24	06/23/21 15:17	1

Lab Sample ID: LCSSRM 480-586429/2-A ^5

Matrix: Solid

Analysis Batch: 586687

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 586429

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	23.1	20.0		mg/Kg		86.5	17.0 - 162.8

QC Sample Results

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Method: 9012B - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: 480-186219-17 MS

Matrix: Solid

Analysis Batch: 586687

Client Sample ID: S012(6-12)

Prep Type: Total/NA

Prep Batch: 586429

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	1.2	U F1	1.41	1.2	U F1	mg/Kg	✱	0	85 - 115

Lab Sample ID: 480-186219-17 DU

Matrix: Solid

Analysis Batch: 586687

Client Sample ID: S012(6-12)

Prep Type: Total/NA

Prep Batch: 586429

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	1.2	U F1	1.2	U	mg/Kg	✱	NC	15

QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Metals

Prep Batch: 586083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-1	S004(0-2)	Total/NA	Solid	3050B	
480-186219-2	S004(6-12)	Total/NA	Solid	3050B	
480-186219-3	S005(0-2)	Total/NA	Solid	3050B	
480-186219-4	S005(6-12)	Total/NA	Solid	3050B	
480-186219-5	S006(0-2)	Total/NA	Solid	3050B	
480-186219-6	S006(6-12)	Total/NA	Solid	3050B	
480-186219-7	S007(0-2)	Total/NA	Solid	3050B	
480-186219-8	S007(6-12)	Total/NA	Solid	3050B	
480-186219-9	S008(0-2)	Total/NA	Solid	3050B	
480-186219-10	S008(6-12)	Total/NA	Solid	3050B	
480-186219-11	S010(0-2)	Total/NA	Solid	3050B	
480-186219-12	S010(6-12)	Total/NA	Solid	3050B	
480-186219-13	S011(0-2)	Total/NA	Solid	3050B	
480-186219-14	S011(6-12)	Total/NA	Solid	3050B	
480-186219-15	S011(18-24)	Total/NA	Solid	3050B	
480-186219-16	S012(0-2)	Total/NA	Solid	3050B	
480-186219-17	S012(6-12)	Total/NA	Solid	3050B	
480-186219-18	S012(18-24)	Total/NA	Solid	3050B	
480-186219-19	S014(0-2)	Total/NA	Solid	3050B	
480-186219-20	S014(6-12)	Total/NA	Solid	3050B	
MB 480-586083/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-586083/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-186219-10 MS	S008(6-12)	Total/NA	Solid	3050B	
480-186219-10 MSD	S008(6-12)	Total/NA	Solid	3050B	
480-186219-12 MS	S010(6-12)	Total/NA	Solid	3050B	
480-186219-12 MSD	S010(6-12)	Total/NA	Solid	3050B	

Prep Batch: 586085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-21	S014(18-24)	Total/NA	Solid	3050B	
480-186219-22	S013(0-2)	Total/NA	Solid	3050B	
480-186219-23	S013(6-12)	Total/NA	Solid	3050B	
480-186219-24	S013(18-24)	Total/NA	Solid	3050B	
480-186219-25	S015(0-2)	Total/NA	Solid	3050B	
480-186219-26	S015(6-12)	Total/NA	Solid	3050B	
480-186219-27	S015(18-24)	Total/NA	Solid	3050B	
480-186219-28	S016(0-2)	Total/NA	Solid	3050B	
480-186219-29	S016(6-12)	Total/NA	Solid	3050B	
480-186219-30	S016(18-24)	Total/NA	Solid	3050B	
480-186219-31	DUP-1	Total/NA	Solid	3050B	
480-186219-32	DUP-2	Total/NA	Solid	3050B	
MB 480-586085/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-586085/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-186219-21 MS	S014(18-24)	Total/NA	Solid	3050B	
480-186219-21 MSD	S014(18-24)	Total/NA	Solid	3050B	

Prep Batch: 586291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-10	S008(6-12)	Total/NA	Solid	7471B	
MB 480-586291/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-586291/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	

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QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Metals (Continued)

Prep Batch: 586291 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-10 MS	S008(6-12)	Total/NA	Solid	7471B	
480-186219-10 MSD	S008(6-12)	Total/NA	Solid	7471B	

Prep Batch: 586293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-12	S010(6-12)	Total/NA	Solid	7471B	
MB 480-586293/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-586293/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-186219-12 MS	S010(6-12)	Total/NA	Solid	7471B	
480-186219-12 MSD	S010(6-12)	Total/NA	Solid	7471B	

Analysis Batch: 586400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-1	S004(0-2)	Total/NA	Solid	6010C	586083
480-186219-2	S004(6-12)	Total/NA	Solid	6010C	586083
480-186219-3	S005(0-2)	Total/NA	Solid	6010C	586083
480-186219-4	S005(6-12)	Total/NA	Solid	6010C	586083
480-186219-5	S006(0-2)	Total/NA	Solid	6010C	586083
480-186219-6	S006(6-12)	Total/NA	Solid	6010C	586083
480-186219-7	S007(0-2)	Total/NA	Solid	6010C	586083
480-186219-8	S007(6-12)	Total/NA	Solid	6010C	586083
480-186219-9	S008(0-2)	Total/NA	Solid	6010C	586083
480-186219-10	S008(6-12)	Total/NA	Solid	6010C	586083
480-186219-11	S010(0-2)	Total/NA	Solid	6010C	586083
480-186219-12	S010(6-12)	Total/NA	Solid	6010C	586083
480-186219-13	S011(0-2)	Total/NA	Solid	6010C	586083
480-186219-14	S011(6-12)	Total/NA	Solid	6010C	586083
480-186219-15	S011(18-24)	Total/NA	Solid	6010C	586083
480-186219-16	S012(0-2)	Total/NA	Solid	6010C	586083
480-186219-17	S012(6-12)	Total/NA	Solid	6010C	586083
480-186219-18	S012(18-24)	Total/NA	Solid	6010C	586083
480-186219-19	S014(0-2)	Total/NA	Solid	6010C	586083
480-186219-20	S014(6-12)	Total/NA	Solid	6010C	586083
MB 480-586083/1-A	Method Blank	Total/NA	Solid	6010C	586083
LCSSRM 480-586083/2-A	Lab Control Sample	Total/NA	Solid	6010C	586083
480-186219-10 MS	S008(6-12)	Total/NA	Solid	6010C	586083
480-186219-10 MSD	S008(6-12)	Total/NA	Solid	6010C	586083
480-186219-12 MS	S010(6-12)	Total/NA	Solid	6010C	586083
480-186219-12 MSD	S010(6-12)	Total/NA	Solid	6010C	586083

Analysis Batch: 586408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-21	S014(18-24)	Total/NA	Solid	6010C	586085
480-186219-22	S013(0-2)	Total/NA	Solid	6010C	586085
480-186219-23	S013(6-12)	Total/NA	Solid	6010C	586085
480-186219-24	S013(18-24)	Total/NA	Solid	6010C	586085
480-186219-25	S015(0-2)	Total/NA	Solid	6010C	586085
480-186219-26	S015(6-12)	Total/NA	Solid	6010C	586085
480-186219-27	S015(18-24)	Total/NA	Solid	6010C	586085
480-186219-28	S016(0-2)	Total/NA	Solid	6010C	586085
480-186219-29	S016(6-12)	Total/NA	Solid	6010C	586085

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QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Metals (Continued)

Analysis Batch: 586408 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-30	S016(18-24)	Total/NA	Solid	6010C	586085
480-186219-31	DUP-1	Total/NA	Solid	6010C	586085
480-186219-32	DUP-2	Total/NA	Solid	6010C	586085
MB 480-586085/1-A	Method Blank	Total/NA	Solid	6010C	586085
LCSSRM 480-586085/2-A	Lab Control Sample	Total/NA	Solid	6010C	586085
480-186219-21 MS	S014(18-24)	Total/NA	Solid	6010C	586085
480-186219-21 MSD	S014(18-24)	Total/NA	Solid	6010C	586085

Analysis Batch: 586476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-10	S008(6-12)	Total/NA	Solid	7471B	586291
480-186219-12	S010(6-12)	Total/NA	Solid	7471B	586293
MB 480-586291/1-A	Method Blank	Total/NA	Solid	7471B	586291
MB 480-586293/1-A	Method Blank	Total/NA	Solid	7471B	586293
LCSSRM 480-586291/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	586291
LCSSRM 480-586293/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	586293
480-186219-10 MS	S008(6-12)	Total/NA	Solid	7471B	586291
480-186219-10 MSD	S008(6-12)	Total/NA	Solid	7471B	586291
480-186219-12 MS	S010(6-12)	Total/NA	Solid	7471B	586293
480-186219-12 MSD	S010(6-12)	Total/NA	Solid	7471B	586293

Prep Batch: 586490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-1	S004(0-2)	Total/NA	Solid	7471B	
480-186219-2	S004(6-12)	Total/NA	Solid	7471B	
480-186219-3	S005(0-2)	Total/NA	Solid	7471B	
480-186219-4	S005(6-12)	Total/NA	Solid	7471B	
480-186219-5	S006(0-2)	Total/NA	Solid	7471B	
480-186219-6	S006(6-12)	Total/NA	Solid	7471B	
480-186219-7	S007(0-2)	Total/NA	Solid	7471B	
480-186219-8	S007(6-12)	Total/NA	Solid	7471B	
480-186219-9	S008(0-2)	Total/NA	Solid	7471B	
480-186219-11	S010(0-2)	Total/NA	Solid	7471B	
480-186219-13	S011(0-2)	Total/NA	Solid	7471B	
480-186219-14	S011(6-12)	Total/NA	Solid	7471B	
480-186219-15	S011(18-24)	Total/NA	Solid	7471B	
480-186219-16	S012(0-2)	Total/NA	Solid	7471B	
480-186219-17	S012(6-12)	Total/NA	Solid	7471B	
480-186219-18	S012(18-24)	Total/NA	Solid	7471B	
480-186219-19	S014(0-2)	Total/NA	Solid	7471B	
480-186219-20	S014(6-12)	Total/NA	Solid	7471B	
480-186219-21	S014(18-24)	Total/NA	Solid	7471B	
MB 480-586490/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-586490/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 586491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-22	S013(0-2)	Total/NA	Solid	7471B	
480-186219-23	S013(6-12)	Total/NA	Solid	7471B	
480-186219-24	S013(18-24)	Total/NA	Solid	7471B	
480-186219-25	S015(0-2)	Total/NA	Solid	7471B	

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QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Metals (Continued)

Prep Batch: 586491 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-26	S015(6-12)	Total/NA	Solid	7471B	
480-186219-27	S015(18-24)	Total/NA	Solid	7471B	
480-186219-28	S016(0-2)	Total/NA	Solid	7471B	
480-186219-29	S016(6-12)	Total/NA	Solid	7471B	
480-186219-30	S016(18-24)	Total/NA	Solid	7471B	
480-186219-31	DUP-1	Total/NA	Solid	7471B	
480-186219-32	DUP-2	Total/NA	Solid	7471B	
MB 480-586491/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-586491/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 586692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-1	S004(0-2)	Total/NA	Solid	7471B	586490
480-186219-2	S004(6-12)	Total/NA	Solid	7471B	586490
480-186219-3	S005(0-2)	Total/NA	Solid	7471B	586490
480-186219-4	S005(6-12)	Total/NA	Solid	7471B	586490
480-186219-5	S006(0-2)	Total/NA	Solid	7471B	586490
480-186219-6	S006(6-12)	Total/NA	Solid	7471B	586490
480-186219-7	S007(0-2)	Total/NA	Solid	7471B	586490
480-186219-8	S007(6-12)	Total/NA	Solid	7471B	586490
480-186219-9	S008(0-2)	Total/NA	Solid	7471B	586490
480-186219-11	S010(0-2)	Total/NA	Solid	7471B	586490
480-186219-13	S011(0-2)	Total/NA	Solid	7471B	586490
480-186219-14	S011(6-12)	Total/NA	Solid	7471B	586490
480-186219-15	S011(18-24)	Total/NA	Solid	7471B	586490
480-186219-16	S012(0-2)	Total/NA	Solid	7471B	586490
480-186219-17	S012(6-12)	Total/NA	Solid	7471B	586490
480-186219-18	S012(18-24)	Total/NA	Solid	7471B	586490
480-186219-19	S014(0-2)	Total/NA	Solid	7471B	586490
480-186219-20	S014(6-12)	Total/NA	Solid	7471B	586490
480-186219-21	S014(18-24)	Total/NA	Solid	7471B	586490
480-186219-22	S013(0-2)	Total/NA	Solid	7471B	586491
480-186219-23	S013(6-12)	Total/NA	Solid	7471B	586491
480-186219-24	S013(18-24)	Total/NA	Solid	7471B	586491
480-186219-25	S015(0-2)	Total/NA	Solid	7471B	586491
480-186219-26	S015(6-12)	Total/NA	Solid	7471B	586491
480-186219-27	S015(18-24)	Total/NA	Solid	7471B	586491
480-186219-28	S016(0-2)	Total/NA	Solid	7471B	586491
480-186219-29	S016(6-12)	Total/NA	Solid	7471B	586491
480-186219-30	S016(18-24)	Total/NA	Solid	7471B	586491
480-186219-31	DUP-1	Total/NA	Solid	7471B	586491
480-186219-32	DUP-2	Total/NA	Solid	7471B	586491
MB 480-586490/1-A	Method Blank	Total/NA	Solid	7471B	586490
MB 480-586491/1-A	Method Blank	Total/NA	Solid	7471B	586491
LCSSRM 480-586490/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	586490
LCSSRM 480-586491/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	586491

QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

General Chemistry

Analysis Batch: 586121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-1	S004(0-2)	Total/NA	Solid	Moisture	
480-186219-2	S004(6-12)	Total/NA	Solid	Moisture	
480-186219-3	S005(0-2)	Total/NA	Solid	Moisture	
480-186219-4	S005(6-12)	Total/NA	Solid	Moisture	
480-186219-5	S006(0-2)	Total/NA	Solid	Moisture	
480-186219-6	S006(6-12)	Total/NA	Solid	Moisture	
480-186219-7	S007(0-2)	Total/NA	Solid	Moisture	
480-186219-8	S007(6-12)	Total/NA	Solid	Moisture	
480-186219-9	S008(0-2)	Total/NA	Solid	Moisture	
480-186219-10	S008(6-12)	Total/NA	Solid	Moisture	
480-186219-11	S010(0-2)	Total/NA	Solid	Moisture	
480-186219-12	S010(6-12)	Total/NA	Solid	Moisture	
480-186219-13	S011(0-2)	Total/NA	Solid	Moisture	
480-186219-14	S011(6-12)	Total/NA	Solid	Moisture	
480-186219-15	S011(18-24)	Total/NA	Solid	Moisture	
480-186219-16	S012(0-2)	Total/NA	Solid	Moisture	
480-186219-17	S012(6-12)	Total/NA	Solid	Moisture	
480-186219-18	S012(18-24)	Total/NA	Solid	Moisture	
480-186219-19	S014(0-2)	Total/NA	Solid	Moisture	
480-186219-20	S014(6-12)	Total/NA	Solid	Moisture	
480-186219-21	S014(18-24)	Total/NA	Solid	Moisture	
480-186219-22	S013(0-2)	Total/NA	Solid	Moisture	
480-186219-23	S013(6-12)	Total/NA	Solid	Moisture	
480-186219-24	S013(18-24)	Total/NA	Solid	Moisture	
480-186219-25	S015(0-2)	Total/NA	Solid	Moisture	
480-186219-26	S015(6-12)	Total/NA	Solid	Moisture	
480-186219-27	S015(18-24)	Total/NA	Solid	Moisture	
480-186219-28	S016(0-2)	Total/NA	Solid	Moisture	
480-186219-29	S016(6-12)	Total/NA	Solid	Moisture	
480-186219-30	S016(18-24)	Total/NA	Solid	Moisture	
480-186219-31	DUP-1	Total/NA	Solid	Moisture	
480-186219-32	DUP-2	Total/NA	Solid	Moisture	
480-186219-10 MS	S008(6-12)	Total/NA	Solid	Moisture	
480-186219-10 MSD	S008(6-12)	Total/NA	Solid	Moisture	
480-186219-12 MS	S010(6-12)	Total/NA	Solid	Moisture	
480-186219-12 MSD	S010(6-12)	Total/NA	Solid	Moisture	

Prep Batch: 586261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-12	S010(6-12)	Total/NA	Solid	9012B	
MB 480-586261/1-A	Method Blank	Total/NA	Solid	9012B	
LCSSRM 480-586261/2-A ^5	Lab Control Sample	Total/NA	Solid	9012B	
480-186219-12 MS	S010(6-12)	Total/NA	Solid	9012B	
480-186219-12 MSD	S010(6-12)	Total/NA	Solid	9012B	

Prep Batch: 586265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-1	S004(0-2)	Total/NA	Solid	9012B	
480-186219-2	S004(6-12)	Total/NA	Solid	9012B	
480-186219-3	S005(0-2)	Total/NA	Solid	9012B	
480-186219-4	S005(6-12)	Total/NA	Solid	9012B	

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QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

General Chemistry (Continued)

Prep Batch: 586265 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-5	S006(0-2)	Total/NA	Solid	9012B	
480-186219-6	S006(6-12)	Total/NA	Solid	9012B	
480-186219-7	S007(0-2)	Total/NA	Solid	9012B	
480-186219-8	S007(6-12)	Total/NA	Solid	9012B	
480-186219-9	S008(0-2)	Total/NA	Solid	9012B	
480-186219-10	S008(6-12)	Total/NA	Solid	9012B	
480-186219-11	S010(0-2)	Total/NA	Solid	9012B	
480-186219-13	S011(0-2)	Total/NA	Solid	9012B	
480-186219-14	S011(6-12)	Total/NA	Solid	9012B	
480-186219-15	S011(18-24)	Total/NA	Solid	9012B	
480-186219-16	S012(0-2)	Total/NA	Solid	9012B	
MB 480-586265/1-A	Method Blank	Total/NA	Solid	9012B	
LCSSRM 480-586265/2-A ^5	Lab Control Sample	Total/NA	Solid	9012B	
480-186219-10 MS	S008(6-12)	Total/NA	Solid	9012B	
480-186219-10 MSD	S008(6-12)	Total/NA	Solid	9012B	

Analysis Batch: 586331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-12	S010(6-12)	Total/NA	Solid	9012B	586261
MB 480-586261/1-A	Method Blank	Total/NA	Solid	9012B	586261
LCSSRM 480-586261/2-A ^5	Lab Control Sample	Total/NA	Solid	9012B	586261
480-186219-12 MS	S010(6-12)	Total/NA	Solid	9012B	586261
480-186219-12 MSD	S010(6-12)	Total/NA	Solid	9012B	586261

Analysis Batch: 586333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-1	S004(0-2)	Total/NA	Solid	9012B	586265
480-186219-2	S004(6-12)	Total/NA	Solid	9012B	586265
480-186219-3	S005(0-2)	Total/NA	Solid	9012B	586265
480-186219-4	S005(6-12)	Total/NA	Solid	9012B	586265
480-186219-5	S006(0-2)	Total/NA	Solid	9012B	586265
480-186219-6	S006(6-12)	Total/NA	Solid	9012B	586265
480-186219-7	S007(0-2)	Total/NA	Solid	9012B	586265
480-186219-8	S007(6-12)	Total/NA	Solid	9012B	586265
480-186219-9	S008(0-2)	Total/NA	Solid	9012B	586265
480-186219-10	S008(6-12)	Total/NA	Solid	9012B	586265
480-186219-11	S010(0-2)	Total/NA	Solid	9012B	586265
480-186219-13	S011(0-2)	Total/NA	Solid	9012B	586265
480-186219-14	S011(6-12)	Total/NA	Solid	9012B	586265
480-186219-15	S011(18-24)	Total/NA	Solid	9012B	586265
480-186219-16	S012(0-2)	Total/NA	Solid	9012B	586265
MB 480-586265/1-A	Method Blank	Total/NA	Solid	9012B	586265
LCSSRM 480-586265/2-A ^5	Lab Control Sample	Total/NA	Solid	9012B	586265
480-186219-10 MS	S008(6-12)	Total/NA	Solid	9012B	586265
480-186219-10 MSD	S008(6-12)	Total/NA	Solid	9012B	586265

Prep Batch: 586429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-17	S012(6-12)	Total/NA	Solid	9012B	
480-186219-18	S012(18-24)	Total/NA	Solid	9012B	
480-186219-19	S014(0-2)	Total/NA	Solid	9012B	

Eurofins TestAmerica, Buffalo

QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

General Chemistry (Continued)

Prep Batch: 586429 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-20	S014(6-12)	Total/NA	Solid	9012B	
480-186219-21	S014(18-24)	Total/NA	Solid	9012B	
480-186219-22	S013(0-2)	Total/NA	Solid	9012B	
480-186219-23	S013(6-12)	Total/NA	Solid	9012B	
480-186219-24	S013(18-24)	Total/NA	Solid	9012B	
480-186219-25	S015(0-2)	Total/NA	Solid	9012B	
480-186219-26	S015(6-12)	Total/NA	Solid	9012B	
480-186219-27	S015(18-24)	Total/NA	Solid	9012B	
480-186219-28	S016(0-2)	Total/NA	Solid	9012B	
480-186219-29	S016(6-12)	Total/NA	Solid	9012B	
480-186219-30	S016(18-24)	Total/NA	Solid	9012B	
480-186219-31	DUP-1	Total/NA	Solid	9012B	
480-186219-32	DUP-2	Total/NA	Solid	9012B	
MB 480-586429/1-A	Method Blank	Total/NA	Solid	9012B	
LCSSRM 480-586429/2-A ^5	Lab Control Sample	Total/NA	Solid	9012B	
480-186219-17 MS	S012(6-12)	Total/NA	Solid	9012B	
480-186219-17 DU	S012(6-12)	Total/NA	Solid	9012B	

Analysis Batch: 586687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186219-17	S012(6-12)	Total/NA	Solid	9012B	586429
480-186219-18	S012(18-24)	Total/NA	Solid	9012B	586429
480-186219-19	S014(0-2)	Total/NA	Solid	9012B	586429
480-186219-20	S014(6-12)	Total/NA	Solid	9012B	586429
480-186219-21	S014(18-24)	Total/NA	Solid	9012B	586429
480-186219-22	S013(0-2)	Total/NA	Solid	9012B	586429
480-186219-23	S013(6-12)	Total/NA	Solid	9012B	586429
480-186219-24	S013(18-24)	Total/NA	Solid	9012B	586429
480-186219-25	S015(0-2)	Total/NA	Solid	9012B	586429
480-186219-26	S015(6-12)	Total/NA	Solid	9012B	586429
480-186219-27	S015(18-24)	Total/NA	Solid	9012B	586429
480-186219-28	S016(0-2)	Total/NA	Solid	9012B	586429
480-186219-29	S016(6-12)	Total/NA	Solid	9012B	586429
480-186219-30	S016(18-24)	Total/NA	Solid	9012B	586429
480-186219-31	DUP-1	Total/NA	Solid	9012B	586429
480-186219-32	DUP-2	Total/NA	Solid	9012B	586429
MB 480-586429/1-A	Method Blank	Total/NA	Solid	9012B	586429
LCSSRM 480-586429/2-A ^5	Lab Control Sample	Total/NA	Solid	9012B	586429
480-186219-17 MS	S012(6-12)	Total/NA	Solid	9012B	586429
480-186219-17 DU	S012(6-12)	Total/NA	Solid	9012B	586429

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S004(0-2)

Date Collected: 06/15/21 10:50

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S004(0-2)

Date Collected: 06/15/21 10:50

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-1

Matrix: Solid

Percent Solids: 71.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 01:06	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:35	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:59	ALT	TAL BUF

Client Sample ID: S004(6-12)

Date Collected: 06/15/21 10:58

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S004(6-12)

Date Collected: 06/15/21 10:58

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-2

Matrix: Solid

Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 01:10	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:37	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:57	ALT	TAL BUF

Client Sample ID: S005(0-2)

Date Collected: 06/16/21 10:15

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S005(0-2)

Date Collected: 06/16/21 10:15

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-3

Matrix: Solid

Percent Solids: 74.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 01:14	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:38	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:56	ALT	TAL BUF

Client Sample ID: S005(6-12)

Date Collected: 06/16/21 10:22

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S005(6-12)

Date Collected: 06/16/21 10:22

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-4

Matrix: Solid

Percent Solids: 72.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 01:17	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:39	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:55	ALT	TAL BUF

Client Sample ID: S006(0-2)

Date Collected: 06/16/21 13:35

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S006(0-2)

Date Collected: 06/16/21 13:35

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-5

Matrix: Solid

Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 01:21	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		25	586692	06/23/21 16:15	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:53	ALT	TAL BUF

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Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S006(6-12)

Date Collected: 06/16/21 13:40

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S006(6-12)

Date Collected: 06/16/21 13:40

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-6

Matrix: Solid

Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 01:25	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:44	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:52	ALT	TAL BUF

Client Sample ID: S007(0-2)

Date Collected: 06/16/21 14:25

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S007(0-2)

Date Collected: 06/16/21 14:25

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-7

Matrix: Solid

Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 01:40	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:45	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:50	ALT	TAL BUF

Client Sample ID: S007(6-12)

Date Collected: 06/16/21 14:28

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S007(6-12)

Date Collected: 06/16/21 14:28

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-8

Matrix: Solid

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 01:44	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:46	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:49	ALT	TAL BUF

Client Sample ID: S008(0-2)

Date Collected: 06/15/21 13:35

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S008(0-2)

Date Collected: 06/15/21 13:35

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-9

Matrix: Solid

Percent Solids: 69.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 01:48	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:50	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:47	ALT	TAL BUF

Client Sample ID: S008(6-12)

Date Collected: 06/15/21 14:05

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S008(6-12)

Date Collected: 06/15/21 14:05

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-10

Matrix: Solid

Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 01:52	AMH	TAL BUF
Total/NA	Prep	7471B			586291	06/22/21 14:00	BMB	TAL BUF
Total/NA	Analysis	7471B		10	586476	06/22/21 15:55	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:33	ALT	TAL BUF

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Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S010(0-2)

Date Collected: 06/16/21 12:43

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S010(0-2)

Date Collected: 06/16/21 12:43

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-11

Matrix: Solid

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 02:11	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		25	586692	06/23/21 16:16	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 17:08	ALT	TAL BUF

Client Sample ID: S010(6-12)

Date Collected: 06/16/21 13:05

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S010(6-12)

Date Collected: 06/16/21 13:05

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-12

Matrix: Solid

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 02:26	AMH	TAL BUF
Total/NA	Prep	7471B			586293	06/22/21 14:00	BMB	TAL BUF
Total/NA	Analysis	7471B		10	586476	06/22/21 16:07	BMB	TAL BUF
Total/NA	Prep	9012B			586261	06/21/21 12:53	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586331	06/21/21 18:01	ALT	TAL BUF

Client Sample ID: S011(0-2)

Date Collected: 06/15/21 11:13

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Eurofins TestAmerica, Buffalo

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S011(0-2)

Date Collected: 06/15/21 11:13

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-13

Matrix: Solid

Percent Solids: 67.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 02:38	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:55	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:42	ALT	TAL BUF

Client Sample ID: S011(6-12)

Date Collected: 06/15/21 11:20

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S011(6-12)

Date Collected: 06/15/21 11:20

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-14

Matrix: Solid

Percent Solids: 77.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 02:41	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:56	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:40	ALT	TAL BUF

Client Sample ID: S011(18-24)

Date Collected: 06/15/21 11:52

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S011(18-24)

Date Collected: 06/15/21 11:52

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-15

Matrix: Solid

Percent Solids: 74.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 02:45	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:58	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:39	ALT	TAL BUF

Eurofins TestAmerica, Buffalo

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S012(0-2)

Date Collected: 06/15/21 12:10

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S012(0-2)

Date Collected: 06/15/21 12:10

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-16

Matrix: Solid

Percent Solids: 68.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 02:49	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 14:59	BMB	TAL BUF
Total/NA	Prep	9012B			586265	06/21/21 13:03	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586333	06/21/21 16:37	ALT	TAL BUF

Client Sample ID: S012(6-12)

Date Collected: 06/15/21 12:20

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S012(6-12)

Date Collected: 06/15/21 12:20

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-17

Matrix: Solid

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 02:53	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 15:00	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:19	ALT	TAL BUF

Client Sample ID: S012(18-24)

Date Collected: 06/15/21 12:42

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S012(18-24)

Lab Sample ID: 480-186219-18

Date Collected: 06/15/21 12:42

Matrix: Solid

Date Received: 06/18/21 08:00

Percent Solids: 74.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 02:57	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		1	586692	06/23/21 16:17	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:24	ALT	TAL BUF

Client Sample ID: S014(0-2)

Lab Sample ID: 480-186219-19

Date Collected: 06/16/21 14:00

Matrix: Solid

Date Received: 06/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S014(0-2)

Lab Sample ID: 480-186219-19

Date Collected: 06/16/21 14:00

Matrix: Solid

Date Received: 06/18/21 08:00

Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 03:12	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 15:03	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:25	ALT	TAL BUF

Client Sample ID: S014(6-12)

Lab Sample ID: 480-186219-20

Date Collected: 06/16/21 14:05

Matrix: Solid

Date Received: 06/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S014(6-12)

Lab Sample ID: 480-186219-20

Date Collected: 06/16/21 14:05

Matrix: Solid

Date Received: 06/18/21 08:00

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586083	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586400	06/22/21 03:16	AMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		1	586692	06/23/21 16:19	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:27	ALT	TAL BUF

Eurofins TestAmerica, Buffalo

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S014(18-24)

Date Collected: 06/16/21 14:10

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S014(18-24)

Date Collected: 06/16/21 14:10

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-21

Matrix: Solid

Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 00:00	LMH	TAL BUF
Total/NA	Prep	7471B			586490	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		1	586692	06/23/21 16:20	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:28	ALT	TAL BUF

Client Sample ID: S013(0-2)

Date Collected: 06/16/21 11:50

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S013(0-2)

Date Collected: 06/16/21 11:50

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-22

Matrix: Solid

Percent Solids: 72.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 00:29	LMH	TAL BUF
Total/NA	Prep	7471B			586491	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		25	586692	06/23/21 16:21	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:30	ALT	TAL BUF

Client Sample ID: S013(6-12)

Date Collected: 06/16/21 12:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-23

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S013(6-12)

Date Collected: 06/16/21 12:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-23

Matrix: Solid

Percent Solids: 76.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 00:33	LMH	TAL BUF
Total/NA	Prep	7471B			586491	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 15:20	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:34	ALT	TAL BUF

Client Sample ID: S013(18-24)

Date Collected: 06/16/21 12:22

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S013(18-24)

Date Collected: 06/16/21 12:22

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-24

Matrix: Solid

Percent Solids: 75.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 00:36	LMH	TAL BUF
Total/NA	Prep	7471B			586491	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		25	586692	06/23/21 16:22	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:35	ALT	TAL BUF

Client Sample ID: S015(0-2)

Date Collected: 06/15/21 18:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S015(0-2)

Date Collected: 06/15/21 18:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-25

Matrix: Solid

Percent Solids: 66.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 00:40	LMH	TAL BUF
Total/NA	Prep	7471B			586491	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 15:26	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:37	ALT	TAL BUF

Eurofins TestAmerica, Buffalo

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S015(6-12)

Date Collected: 06/15/21 18:20

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-26

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S015(6-12)

Date Collected: 06/15/21 18:20

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-26

Matrix: Solid

Percent Solids: 75.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 00:44	LMH	TAL BUF
Total/NA	Prep	7471B			586491	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 15:27	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:38	ALT	TAL BUF

Client Sample ID: S015(18-24)

Date Collected: 06/15/21 18:45

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-27

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S015(18-24)

Date Collected: 06/15/21 18:45

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-27

Matrix: Solid

Percent Solids: 73.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 00:59	LMH	TAL BUF
Total/NA	Prep	7471B			586491	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 15:28	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:40	ALT	TAL BUF

Client Sample ID: S016(0-2)

Date Collected: 06/15/21 16:22

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-28

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: S016(0-2)

Date Collected: 06/15/21 16:22

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-28

Matrix: Solid

Percent Solids: 77.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 01:03	LMH	TAL BUF
Total/NA	Prep	7471B			586491	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 15:30	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:41	ALT	TAL BUF

Client Sample ID: S016(6-12)

Date Collected: 06/15/21 16:45

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-29

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S016(6-12)

Date Collected: 06/15/21 16:45

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-29

Matrix: Solid

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 01:06	LMH	TAL BUF
Total/NA	Prep	7471B			586491	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 15:31	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:43	ALT	TAL BUF

Client Sample ID: S016(18-24)

Date Collected: 06/15/21 17:10

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-30

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: S016(18-24)

Date Collected: 06/15/21 17:10

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-30

Matrix: Solid

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 01:10	LMH	TAL BUF
Total/NA	Prep	7471B			586491	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		1	586692	06/23/21 16:24	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:44	ALT	TAL BUF

Eurofins TestAmerica, Buffalo

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Client Sample ID: DUP-1

Date Collected: 06/16/21 00:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-31

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: DUP-1

Date Collected: 06/16/21 00:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-31

Matrix: Solid

Percent Solids: 62.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 01:14	LMH	TAL BUF
Total/NA	Prep	7471B			586491	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 15:34	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:45	ALT	TAL BUF

Client Sample ID: DUP-2

Date Collected: 06/16/21 00:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-32

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	586121	06/18/21 20:17	CLA	TAL BUF

Client Sample ID: DUP-2

Date Collected: 06/16/21 00:00

Date Received: 06/18/21 08:00

Lab Sample ID: 480-186219-32

Matrix: Solid

Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			586085	06/18/21 16:43	ADM	TAL BUF
Total/NA	Analysis	6010C		1	586408	06/22/21 01:17	LMH	TAL BUF
Total/NA	Prep	7471B			586491	06/23/21 12:55	BMB	TAL BUF
Total/NA	Analysis	7471B		5	586692	06/23/21 15:35	BMB	TAL BUF
Total/NA	Prep	9012B			586429	06/22/21 12:24	JPS	TAL BUF
Total/NA	Analysis	9012B		1	586687	06/23/21 15:47	ALT	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Laboratory: Eurofins TestAmerica, 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	04-01-22

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
9012B	Cyanide, Total and/or Amenable	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

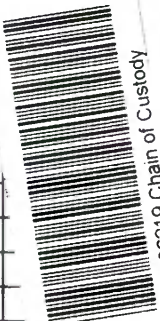
Client: Ashland LLC
Project/Site: Hercules Glens Falls - Quarry

Job ID: 480-186219-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-186219-1	S004(0-2)	Solid	06/15/21 10:50	06/18/21 08:00	
480-186219-2	S004(6-12)	Solid	06/15/21 10:58	06/18/21 08:00	
480-186219-3	S005(0-2)	Solid	06/16/21 10:15	06/18/21 08:00	
480-186219-4	S005(6-12)	Solid	06/16/21 10:22	06/18/21 08:00	
480-186219-5	S006(0-2)	Solid	06/16/21 13:35	06/18/21 08:00	
480-186219-6	S006(6-12)	Solid	06/16/21 13:40	06/18/21 08:00	
480-186219-7	S007(0-2)	Solid	06/16/21 14:25	06/18/21 08:00	
480-186219-8	S007(6-12)	Solid	06/16/21 14:28	06/18/21 08:00	
480-186219-9	S008(0-2)	Solid	06/15/21 13:35	06/18/21 08:00	
480-186219-10	S008(6-12)	Solid	06/15/21 14:05	06/18/21 08:00	
480-186219-11	S010(0-2)	Solid	06/16/21 12:43	06/18/21 08:00	
480-186219-12	S010(6-12)	Solid	06/16/21 13:05	06/18/21 08:00	
480-186219-13	S011(0-2)	Solid	06/15/21 11:13	06/18/21 08:00	
480-186219-14	S011(6-12)	Solid	06/15/21 11:20	06/18/21 08:00	
480-186219-15	S011(18-24)	Solid	06/15/21 11:52	06/18/21 08:00	
480-186219-16	S012(0-2)	Solid	06/15/21 12:10	06/18/21 08:00	
480-186219-17	S012(6-12)	Solid	06/15/21 12:20	06/18/21 08:00	
480-186219-18	S012(18-24)	Solid	06/15/21 12:42	06/18/21 08:00	
480-186219-19	S014(0-2)	Solid	06/16/21 14:00	06/18/21 08:00	
480-186219-20	S014(6-12)	Solid	06/16/21 14:05	06/18/21 08:00	
480-186219-21	S014(18-24)	Solid	06/16/21 14:10	06/18/21 08:00	
480-186219-22	S013(0-2)	Solid	06/16/21 11:50	06/18/21 08:00	
480-186219-23	S013(6-12)	Solid	06/16/21 12:00	06/18/21 08:00	
480-186219-24	S013(18-24)	Solid	06/16/21 12:22	06/18/21 08:00	
480-186219-25	S015(0-2)	Solid	06/15/21 18:00	06/18/21 08:00	
480-186219-26	S015(6-12)	Solid	06/15/21 18:20	06/18/21 08:00	
480-186219-27	S015(18-24)	Solid	06/15/21 18:45	06/18/21 08:00	
480-186219-28	S016(0-2)	Solid	06/15/21 16:22	06/18/21 08:00	
480-186219-29	S016(6-12)	Solid	06/15/21 16:45	06/18/21 08:00	
480-186219-30	S016(18-24)	Solid	06/15/21 17:10	06/18/21 08:00	
480-186219-31	DUP-1	Solid	06/16/21 00:00	06/18/21 08:00	
480-186219-32	DUP-2	Solid	06/16/21 00:00	06/18/21 08:00	

#224

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Company Name: Antea Group Address: 445 Hamilton Ave City/State/Zip: White Plains NY 10601 Phone: 914-495-9933 Fax: Project Name: Ashland Glen Falls Silver Quarry Site: Glen Falls PO#		Client Contact Project Manager: Cody Hure Tel/Email: cody.hure@antegroup.us Analysis Turnaround Time ☐ CALENDAR DAYS ☐ WORKING DAYS TAT if different from Below _____ ☒ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Project Manager: Cody Hure Tel/Email: cody.hure@antegroup.us Analysis Turnaround Time ☐ CALENDAR DAYS ☐ WORKING DAYS TAT if different from Below _____ ☒ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Site Contact: Lab Contact:		Date: Carrier:		COC No: 1 of 3 COCs Sampler: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.: 68000956 Sample Specific Notes:	
 480-186219 Chain of Custody											
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix		# of Cont.	
S004 (0-2")		6/15/21		1050		G		S		3	
S004 (6-12")		6/15/21		1058		G		S		3	
S005 (0-2")		6/16/21		1015		G		S		3	
S005 (6-12")		6/16/21		1022		G		S		3	
S006 (0-2")		6/16/21		1335		G		S		3	
S006 (6-12")		6/16/21		1340		G		S		3	
S007 (0-2")		6/16/21		1425		G		S		3	
S007 (6-12")		6/16/21		1428		G		S		3	
S008 (0-2")		6/15/21		1335		G		S		3	
S008 (6-12")		6/15/21		1405		G		S		3	
S009 (6-12") MS		6/15/21		1420		G		S		3	
S009 (6-12") MSD		6/15/21		1440		G		S		3	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other _____											
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.											
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown											
Special Instructions/QC Requirements & Comments:											
Custody Seals Intact: ☐ Yes ☐ No				Custody Seal No.:				Relinquished by:			
Relinquished by: Bob Donelli				Company: Antea Group				Date/Time: 6/16/21			
Relinquished by: Mark Joehn				Company: Culpin				Date/Time: 6/17/21 0800			
Relinquished by:				Company: TIA				Date/Time: 6/18/21 0800			

Albany
#224

Chain of Custody Record

529312



Environment Testing
TestAmerica

Address:

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact		Project Manager: Carly Hume		Site Contact:		Date:		COC No:	
Company Name: Antea Group		Tel/Email: Carly.Hume@antegroup.us		Lab Contact:		Carrier:		2 of 3 COCs	
Address: 445 Hamillon Ave		Analysis Turnaround Time		Perform MS/MSD (Y/N)				Sampler:	
City/State/Zip: White Plains NY 10601		☐ CALENDAR DAYS ☐ WORKING DAYS		Filtered Sample (Y/N)				For Lab Use Only:	
Phone: 914-495-9939		TAT if different from Below		Sample Type (C=Comp, G=Grab)				Walk-in Client:	
Fax:		☒ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Sample Date		Sample Time		Lab Sampling:	
Project Name: Ashland Glens Falls Silver Quarry				Sample Date		Sample Time		Job / SDG No:	
Site: Glens Falls				Sample Date		Sample Time		Job / SDG No: 48000956	
PO #				Sample Date		Sample Time		Sample Specific Notes:	
S010 (0-2")		G		G		G		SMH 6/10/2010 9:48 AM	
S010 (6-12")		G		G		G		SMH 6/10/2010 9:48 AM	
S010 MS (6-12")		G		G		G		SMH 6/10/2010 9:48 AM	
S010 MSD (6-12")		G		G		G		SMH 6/10/2010 9:48 AM	
S011 (0-2")		G		G		G		SMH 6/10/2010 9:48 AM	
S011 (6-12")		G		G		G		SMH 6/10/2010 9:48 AM	
S011 (1.5-2')		G		G		G		SMH 6/10/2010 9:48 AM	
S012 (0-2")		G		G		G		SMH 6/10/2010 9:48 AM	
S012 (6-12")		G		G		G		SMH 6/10/2010 9:48 AM	
S012 (1.5-2')		G		G		G		SMH 6/10/2010 9:48 AM	
S014 (0-2")		G		G		G		SMH 6/10/2010 9:48 AM	
S014 (6-12")		G		G		G		SMH 6/10/2010 9:48 AM	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Special Instructions/QC Requirements & Comments:

Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corrd:		Therm ID No.:	
Relinquished by: Ben Travellin	Company: Antea Group	Date/Time: 6/16/21	Received by: Karl Yahn	Company: Eurofins	Date/Time: 6/17/21 0800		
Relinquished by: Karl Yahn	Company: Eurofins	Date/Time: 6/17/21 1700	Received by: Karl Yahn	Company: Eurofins	Date/Time: 6/18/21 0800		
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TBA	Date/Time: 6/18/21 0800		

Albany

#224

Address:

Chain of Custody Record

529313

Environment Testing
TestAmerica

Regulatory Program:

☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-9210

Client Contact		Project Manager: <u>Cody Hurne</u>		Site Contact:		Date:		COC No:	
Company Name: <u>Antea Group</u>		Tel/Email: <u>Cody.Hurne@antengroup.us</u>		Lab Contact:		Carrier:		3 of 3 COCs	
Address: <u>445 Hamilton Ave</u>		City/State/Zip: <u>White Plains NY</u>		Analysis Turnaround Time		Sampler:		For Lab Use Only:	
Phone: <u>914-495-9939</u>		Fax:		☐ CALENDAR DAYS ☐ WORKING DAYS TAT if different from Below ☒ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in Client:		Lab Sampling:	
Project Name: <u>Ashland Glens Falls Silver Quarry</u>		Site: <u>Glens Falls</u>		P O #		Job / SDG No: <u>48000956</u>			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes:
S014 (1.5'-2')		6/16/21	1410	G	S	3	N	N	
S013 (0-2')		6/16/21	1150	G	S	3	N	N	
S013 (6-12')		6/16/21	1200	G	S	3	N	N	
S013 (1.5'-2')		6/16/21	1222	G	S	3	N	N	
S015 (0-2')		6/15/21	1800	G	S	3	N	N	
S015 (6-12')		6/15/21	1820	G	S	3	N	N	
S015 (1.5'-2')		6/15/21	1845	G	S	3	N	N	
S016 (0-2')		6/15/21	1622	G	S	3	N	N	
S016 (6-12')		6/15/21	1645	G	S	3	N	N	
S016 (1.5'-2')		6/15/21	1710	G	S	3	N	N	
DUP-1		6/16/21	—	G	S	3	N	N	
DUP-2		6/16/21	—	G	S	3	N	N	
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other									
Possible Hazard Identification: Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.									
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown									
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temp. (°C):		Obs'd:		Corr'd:	
Relinquished by: <u>Rory Savorelli</u>		Company: <u>Antea Group</u>		Date/Time: <u>6/16/21</u>		Received by: <u>Karl Zedler</u>		Company: <u>Eurofins</u>	
Relinquished by: <u>Karl Zedler</u>		Company: <u>Eurofins</u>		Date/Time: <u>4/17/21</u>		Received by: <u>Antea Group</u>		Company: <u>Eurofins</u>	
Relinquished by:		Company:		Date/Time:		Received in Laboratory:		Company: <u>Antea Group</u>	

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 480-186219-1

Login Number: 186219

List Source: Eurofins TestAmerica, Buffalo

List Number: 1

Creator: Sabuda, Brendan D

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	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	2.8 3.1 2.5 2.6 #1 ICE
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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Attachment C DUSR

EHS Validation Report

Number: 375

Former Ciba Geigy
Facility

Queensbury, New York

Analyses performed

by: Eurofins

TestAmerica, Buffalo,
New York

Sample Delivery Group
(SDG): 480-186219

Analyses: Metals,
General Chemistry

Review Level: DUSR



Report Date:

July 27, 2021



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Sample and Analytical Protocol Summary

Soil samples were collected at the Former Ciba Geigy Facility in Queensbury, New York and were analyzed by Environmental Protection Agency (EPA) SW-846 Methods 6010C for metals, 7471B for mercury, and 9012B for cyanide. Samples included in this sample delivery group (SDG), and in this data validation report, are listed in the table below.

Lab Sample ID	Field Sample ID	Sample Matrix	Sample Collection Date	Analysis	
				Gen Chem	Metals
480-186219-1	S004(0-2)	Soil	6/15/2021	X	X
480-186219-2	S004(6-12)	Soil	6/15/2021	X	X
480-186219-3	S005(0-2)	Soil	6/16/2021	X	X
480-186219-4	S005(6-12)	Soil	6/16/2021	X	X
480-186219-5	S006(0-2)	Soil	6/16/2021	X	X
480-186219-6	S006(6-12)	Soil	6/16/2021	X	X
480-186219-7	S007(0-2)	Soil	6/16/2021	X	X
480-186219-8	S007(6-12)	Soil	6/16/2021	X	X
480-186219-9	S008(0-2)	Soil	6/15/2021	X	X
480-186219-10	S008(6-12)	Soil	6/15/2021	X	X
480-186219-11	S010(0-2)	Soil	6/16/2021	X	X
480-186219-12	S010(6-12)	Soil	6/16/2021	X	X
480-186219-13	S011(0-2)	Soil	6/15/2021	X	X
480-186219-14	S011(6-12)	Soil	6/15/2021	X	X
480-186219-15	S011(18-24)	Soil	6/15/2021	X	X
480-186219-16	S012(0-2)	Soil	6/15/2021	X	X
480-186219-17	S012(6-12)	Soil	6/15/2021	X	X
480-186219-18	S012(18-24)	Soil	6/15/2021	X	X
480-186219-19	S014(0-2)	Soil	6/16/2021	X	X
480-186219-20	S014(6-12)	Soil	6/16/2021	X	X
480-186219-21	S014(18-24)	Soil	6/16/2021	X	X
480-186219-22	S013(0-2)	Soil	6/16/2021	X	X
480-186219-23	S013(6-12)	Soil	6/16/2021	X	X
480-186219-24	S013(18-24)	Soil	6/16/2021	X	X
480-186219-25	S015(0-2)	Soil	6/15/2021	X	X
480-186219-26	S015(6-12)	Soil	6/15/2021	X	X



Lab Sample ID	Field Sample ID	Sample Matrix	Sample Collection Date	Analysis	
				Gen Chem	Metals
480-186219-27	S015(18-24)	Soil	6/15/2021	X	X
480-186219-28	S016(0-2)	Soil	6/15/2021	X	X
480-186219-29	S016(6-12)	Soil	6/15/2021	X	X
480-186219-30	S016(18-24)	Soil	6/15/2021	X	X
480-186219-31	DUP-1	Soil	6/16/2021	X	X
480-186219-32	DUP-2	Soil	6/16/2021	X	X



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, January 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 sufficient quality review of the data prior to 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:

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 properly preserved. The chain of custody was properly completed, except that there are gaps between relinquishing and receiving information in the custody transfer section; it is assumed that custody was maintained.

1.3 Assessment Summary and Data Usability

In this SDG, significantly low matrix spike recoveries led to rejection of several cyanide results. Remaining data are considered usable. Refer to the following sections for specific QC variances and data qualification.



2 Metals Analysis

2.1 Preservation and Holding Times

Acceptance criteria were met. Relevant preservation and holding time requirements are presented in the following table.

Method	Matrix	Preservation	Holding Time
Metals (except Hg and Cr6+) by 6010 / 6020	Water	HNO ₃ to pH <2	180 days
	Soil	None	180 days

2.2 Calibration

Acceptance criteria were met. The initial calibration verification (ICV) and continuing calibration verification (CCV) results were within limits for all reported metals. Low-level standards were analyzed and exhibited acceptable recoveries. Correlation coefficients for all reported metals were acceptable.

2.3 Blanks

Acceptance criteria were met. No detections were reported in the method blanks nor the calibration blanks associated with this data.

2.4 ICP Interference Check Sample (ICS)

Acceptance criteria were met.

2.5 Laboratory Control Sample (LCS)

Acceptance criteria were met.

2.6 Laboratory Duplicate Analysis

Not applicable; no laboratory duplicate analysis performed on a sample in this data set was reported.

2.7 Matrix Spike/ Matrix Spike Duplicate (MS/MSD) Analysis

Matrix spike recoveries and/or RPD values outside acceptance limits are presented in the following table. Please note that matrix spike analyses cannot be evaluated if the unspiked sample concentration of the relevant analyte is $\geq 4x$ the spike amount.



Sample ID	Analyte	Recovery		MS/MSD RPD
		MS	MSD	
480-186219-10	Cadmium	Acceptable	74%	Acceptable
	Chromium	72%	55%	Acceptable
	Lead	74%	58%	Acceptable
480-186219-12	Chromium	155%	253%	33%
	Lead	148%	186%	Acceptable

MS Matrix Spike
MSD Matrix spike duplicate
RPD Relative percent difference

For inorganic analyses in which samples undergo batch digestion or batch distillation, batch qualifications are applied. As a consequence of the matrix spike QC variances, qualifiers were applied to results for the listed metals in all field samples in this SDG, except for any sample whose MS/MSD results were acceptable. In this data set, sample 480-186219 -21 exhibited acceptable results for all three metals and sample 480-186219-12 exhibited acceptable results for cadmium.

Spike Recovery	Sample Result	Qualification ^(Note 1)
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery <30%	Non-detect	R
	Detect	J
MS/MSD percent recovery >125%	Non-detect	No Action
	Detect	J
MS/MSD RPD > Upper acceptance limit	Non-detect	UJ
	Detect	J

Note 1 See Section 1 for qualifier definitions.
MS Matrix Spike
MSD Matrix spike duplicate
RPD Relative percent difference

2.8 Serial Dilution

Serial dilution analysis results that were outside control limits are shown in the following table.

Sample	Analyte	% Difference
480-186219-10	Cadmium	16%
	Chromium	20%
	Mercury	15%



As a consequence of these excursions, qualifiers were applied to results for the listed metals in all soil samples in this SDG – except for any that exhibited acceptable serial dilution results.

Serial Dilution % Difference	Sample Result	Qualification ^(Note 1)
> Upper limit	Non-detect	UJ
	Detect	J

Note 1 See Section 1 for qualifier definitions.

2.9 Internal Standards

Acceptance criteria were met. Internal standards are part of 6010 analysis at TestAmerica Buffalo. Recoveries were within acceptance limits.

2.10 Field Duplicates

Acceptance criteria, shown in the table below, were met. Two field duplicate- parent sample pairs were included in this sample delivery group.

Parent sample – field duplicate sample acceptable relationships
Sample and its field duplicate $\geq 5x$ the RL and - o RPD $\leq 30\%$ (aqueous) - or - - o RPD $\leq 50\%$ (soil/ sediment)
Sample and/or its field duplicate $< 5x$ the RL and - o absolute difference $\leq 2x$ the RL (aqueous) - or- - o absolute difference $\leq 3x$ the RL (soil/ sediment)

2.11 Additional Notes

Not applicable; no additional notes to report.



3 General Chemistry Analysis

3.1 Preservation and Holding Times

Acceptance criteria were met. Relevant preservation and holding time requirements are presented in the following table.

Method	Matrix	Preservation	Holding time
Total cyanide by 9012B	Water	4°C ± 2°C, NaOH to pH > 12	14 days

3.2 Calibration

Acceptance criteria were met. The correlation coefficients and the continuing calibration verification (CCV) results were within limits.

3.3 Blanks

Acceptance criteria were met. No detections were reported in the method blanks nor the calibration blanks associated with this data.

3.4 Laboratory Control Sample/ Laboratory Control Sample Duplicate (LCS/LCSD)

Acceptance criteria were met.

3.5 Laboratory Duplicate Analysis

Acceptance criteria were met. Laboratory duplicate analysis was performed on sample 480-186219-17. Parent and replicate results were non-detect.

3.6 Matrix Spike/ Matrix Spike Duplicate (MS/MSD) Analysis

Matrix spike analyses associated with recoveries outside control limits are listed in the following table.

Sample ID	Analyte	Recovery		MS/MSD RPD
		MS	MSD	
480-186219-10	Cyanide	49%	64%	24%
480-186219-17	Cyanide	<30%	NA (MS only)	NA

NA Not applicable

MS Matrix Spike

MSD Matrix spike duplicate

For inorganic analyses in which samples undergo batch digestion or batch distillation, batch qualifications are applied. The significantly low recovery of the matrix spike in sample 480-186219-17



would lead to qualification of all cyanide results in this SDG - except those for samples that demonstrated matrix spike recoveries $\geq 30\%$.

In order to establish whether the matrix effects indicated by the recovery of 480-186219-17MS are representative of other samples in this data set, additional matrix spike analyses were requested in July. Results of these analyses are reported by the laboratory in 480-186219-2 and summarized in the following table.

Matrix Spike Results in 480-186219-2					
Sample ID	Analyte	Recovery		MS/MSD RPD	Qualification of Non-detect Results
		MS	MSD		
480-186219-13	Cyanide	70%	48%	32%	UJ
480-186219-19	Cyanide	65%	68%	Acceptable	UJ
480-186219-5	Cyanide	<30%	<30%	Not calculated	R
480-186219-17	Cyanide	<30%	NA (MS only)	NA	R
480-186219-23	Cyanide	64%	NA (MS only)	NA	UJ
480-186219-25	Cyanide	<30%	<30%	Not calculated	R
480-186219-27	Cyanide	<30%	NA (MS only)	NA	R
480-186219-28	Cyanide	<30%	NA (MS only)	NA	R

MS Matrix Spike

MSD Matrix spike duplicate

NA Not applicable

RPD Relative percent difference

Not Calculated - In some instances, the RPD cannot be calculated because of the recovery values. In these cases, the RPD is of no consequence because the qualification is determined by the recoveries.

Cyanide results have been qualified per the following table. Samples whose matrix spike recoveries were greater than 30% were not rejected.

Spike Recovery	Sample Result	Qualification ^(Note 1)
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery <30%	Non-detect	R
	Detect	J
MS/MSD percent recovery >125%	Non-detect	No Action
	Detect	J
MS/MSD RPD > Upper acceptance limit	Non-detect	UJ
	Detect	J

Note 1 See Section 1 for qualifier definitions.

MS Matrix Spike

MSD Matrix spike duplicate

RPD Relative percent difference



3.7 Field Duplicates

Acceptance criteria, shown in the table below, were met. Two field duplicate- parent sample pairs were included in this sample delivery group.

Parent sample – field duplicate sample acceptable relationships
Sample and its field duplicate $\geq 5x$ the RL and - o $RPD \leq 30\%$ (aqueous) - or - - o $RPD \leq 50\%$ (soil/ sediment)
Sample and/or its field duplicate $< 5x$ the RL and - o absolute difference $\leq 2x$ the RL (aqueous) - or - - o absolute difference $\leq 3x$ the RL (soil/ sediment)

3.8 Additional Notes

Laboratory report 480-186219-1 is the initial laboratory report for this data set and it includes all reportable field sample results. Laboratory report 480-186219-2 includes results of matrix spike analyses that were requested upon review of the initial laboratory report. Laboratory report 480-186219-2 was used only for supplemental QC.

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