

## AG Geology & Engineering, D.P.C.

445 Hamilton Ave, Suite 504  
White Plains, NY 10601 USA

October 3, 2023

Mr. Parag Amin, P.E.  
Division of Environmental Remediation  
Remedial Bureau C – Section B  
New York State Department of Environmental Conservation  
625 Broadway, 11<sup>th</sup> Floor  
Albany, New York 12233-7014

Subject: Spring 2023 Semi-Annual Groundwater Monitoring Report

Dyno Nobel Inc. – Port Ewen Facility  
161 Ulster Avenue  
Ulster Park, New York

Dear Mr. Amin:

AG Geology & Engineering, D.P.C. (AG Geology) has prepared this *Spring 2023 Semi-Annual Groundwater Monitoring Report* on behalf of Ashland Inc. (Ashland) detailing the semi-annual groundwater and surface water sampling conducted at the Dyno Nobel, Inc. Port Ewen facility on May 31, 2023, and June 1, 2023 (facility, **Figures 1 and 2**, referenced as the Spring 2023 sampling event herein). A groundwater sampling event was implemented in accordance with recommendations presented in the New York State Department of Environmental Conservation (NYSDEC) approved Resource Conservation and Recovery Act (RCRA) *Facility Investigation Report (RFI, 1999)*.

### PROPERTY USAGE

The facility is currently occupied by Dyno Nobel personnel who support administrative company operations. In addition to the Dyno Nobel personnel, a portion of the facility is leased to Maine Drilling and Blasting (MD&B), who provide blasting services for the construction and quarry markets. MD&B operations involve the blending of emulsions and ammonium nitrate, storage and distribution of packaged explosives and bulk blasting agents, and maintenance and repairs to company delivery vehicles. MD&B occupies/utilizes three buildings on-site for offices, operations (truck maintenance and blending operations), and storage.

Dyno Nobel intends for the future use of the facility to be industrial and has deed restricted the property accordingly. The historical Active Plant area is fenced, and solid waste management units (SWMUs) 1, 22, and 35, within the Wetlands Complex, are fenced as well. As such, public access to the facility is limited. Indoor air monitoring was completed annually at the Shell Plant building based on historically elevated concentrations of volatile organic compounds (VOCs) detected in sub-slab samples. Indoor air monitoring was suspended by NYSDEC in September 2015, since the building had not been occupied for over a year, and there are no current plans for the building to be utilized in the future.

### COMPLETED SCOPE OF WORK

Presented below are the results of the groundwater and surface water sampling scope of work and the laboratory analytical results from the Spring 2023 sampling event.

### SYNOPTIC GAUGING EVENT

Prior to groundwater sampling, a synoptic water level gauging event was conducted at the facility (**Figure 3**). **Table 1** presents depth to water measurements and calculated groundwater elevations. **Figures 4, 5, and 6** present the potentiometric surface contour maps for shallow overburden, deep overburden, and bedrock zones, respectively. Groundwater flow direction is inferred to be generally east in all three groundwater bearing zones.

## GROUNDWATER SAMPLING

Groundwater samples were collected from 14 monitoring wells (MW-2B, MW-3, MW-15D, MW-16S, MW-21D, MW-22D, MW-22R, MW-24S, MW-24D, MW-25S, MW-26S, MW-26D, MW-27R, and MW-28R) on May 31, 2023 and June 1, 2023, during the Spring 2023 sampling event (**Figure 3**), per the 1999 NYSDEC approved RCRA RFI. Field staff were unable to locate monitoring wells MW-4A and MW-4B due to flooding and vegetation, which posed a health and safety concern. Field Staff were also unable to access MW-15S as the key used to open the well broke in the lock. Therefore, these monitoring wells were not sampled during the Spring 2023 sampling event.

Groundwater samples were collected in accordance with the *Low-Flow Groundwater Sampling Procedures* guidance (United States Environmental Protection Agency [USEPA], April 1996) from each well. Field parameters were collected during the groundwater sampling event including pH, temperature, specific conductance, dissolved oxygen (DO), turbidity, and oxidation-reduction potential (ORP) per low-flow procedures.

Groundwater samples were then collected from each monitoring well after field parameters stabilized over three consecutive readings.

Groundwater samples were analyzed by Eurofins Environment Testing (Eurofins) located in Savannah, Georgia, consistent with previous sampling events. Eurofins in Savannah, Georgia is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified analytical laboratory.

Groundwater samples were analyzed using the following analytical methods:

Monitoring Well ID	Analysis
MW-3	
MW-21D	
MW-22D	
MW-22R	VOCs (USEPA Method 8260B)
MW-25S	
MW-27R	
MW-28R	
Monitoring Well ID	Analysis
MW-2B	
MW-15D	
MW-16S	Total and dissolved metals (USEPA Method 6010C) and mercury (USEPA Method 7470A)
MW-24S	
MW-24D	
MW-26S	
MW-26D	

Groundwater samples collected for total metals analysis were unfiltered. Those samples collected for dissolved metals analysis were field-filtered using disposable in-line 0.45-micron filters. Field filtering of the dissolved metals samples has been utilized during previous sampling events and is intended for comparing and contrasting between filtered and non-filtered analytical results to address any potential turbidity issues that are typically observed in groundwater samples.

## SURFACE WATER SAMPLING

One surface water sample (SW-1) was collected during the Spring 2023 sampling event on June 1, 2023 from a sampling point located downstream of the former shooting pond area (**Figure 3**). The sampling location was located near the northern property boundary and approximately 150 yards upstream from the April 2012

sampling location. The surface water sample was collected utilizing a disposable polyethylene bailer. Surface water sample SW-1 was analyzed for total and dissolved metals by USEPA Method 6010C and for mercury by USEPA Method 7470A.

The surface water sample collected for total metals analysis was unfiltered, and the sample collected for dissolved metals analysis was field-filtered using a disposable 0.45-micron filter. Field filtering of the dissolved metals sample was intended for comparing and contrasting between filtered and non-filtered analytical results to address any potential turbidity issues in the surface water sample.

## ANALYTICAL RESULTS

AG Geology compared the groundwater and surface water analytical data to the NYSDEC's *Division of Water, Technical and Operational Series (TOGS) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* (TOGS 1.1.1). The TOGS are derived from NYSDEC, Title 6 of the *New York Code, Rules, and Regulations (NYCRR) Part 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations*.

The laboratory analytical report is provided in **Appendix A**. **Tables 2, 3A, and 3B** present the analytes that have had detections or historic detections for VOCs and metals, respectively. A summary of these results is presented below.

### GROUNDWATER - VOLATILE ORGANIC COMPOUNDS

- VOCs were not detected at concentrations above NYSDEC Class GA groundwater quality standards in samples from monitoring wells MW-21D, MW-22D, MW-22R, MW-25S, MW-27R, and MW-28R.
- VOCs were detected above NYSDEC Class GA groundwater quality standards in the sample collected from monitoring well MW-3:
  - MW-3:
    - 1,1,1-trichloroethane (TCA)
    - 1,1-dichloroethene (DCE)
    - cis-1,2- DCE
    - trichloroethene (TCE)

VOC analytical results from the Spring 2023 sampling event are generally consistent with historic results. **Appendix B** presents groundwater VOC concentrations over time for monitoring wells MW-3, MW-4A, and MW-4B. Generally, VOC concentrations are shown to be decreasing in monitoring well MW-3. Note that monitoring wells MW-4A and 4B have not been sampled since June 2020 due to inaccessibility; therefore, those graphs do not represent any data since June 2020.

### GROUNDWATER - TOTAL AND DISSOLVED METALS

- Total metals were not detected at concentrations above NYSDEC Class GA groundwater quality standards in samples collected from monitoring wells MW-16S, MW-24S, MW-24D, and MW-26D.
- Total metals were detected at concentrations above NYSDEC Class GA groundwater quality standards in samples collected from monitoring wells MW-2B, MW-15D and MW-26S:
  - MW-2B – Selenium
  - MW-15D – Selenium
  - MW-26S – Sodium
- Dissolved metals were not detected at concentrations above NYSDEC Class GA groundwater quality standards in samples collected from monitoring wells MW-24S and MW-24D.
- Dissolved metals were detected at concentrations above NYSDEC Class GA groundwater quality standards in samples collected from wells MW-2B, MW-15D, MW- 16S, MW-26S and MW-26D:
  - MW-2B – Selenium

- MW-15D – Selenium
- MW-16S – Sodium
- MW-26S – Sodium
- MW-26D - Arsenic

### SURFACE WATER - TOTAL AND DISSOLVED METALS

- SW-1 – Total aluminum, cobalt, iron, and mercury exceeded the NYSDEC Class A(C) surface water quality standards.
- No dissolved metals were detected at concentrations above NYSDEC Class A(C) surface water quality standards.

### DATA QUALITY EVALUATION

The data were reviewed for completeness, accuracy, and representativeness. The quality assurance/quality control (QA/QC) program included field and laboratory samples consisting of two trip blanks, two equipment blanks, and two matrix spike/matrix spike duplicate (MS/MSD) samples, and method blanks.

The analytical results of the trip blank (VOCs) and both equipment blanks were reported as non-detect for all analytes. The method blank contained dissolved manganese above the reporting limit. There were no exceedances of the NYSDEC Class GA groundwater quality standards or the NYSDEC Class A(C) surface water quality standards during the Spring 2023 sampling event for dissolved manganese. Therefore, detections in the method blank were not considered to significantly influence the results of the Spring 2023 sampling event.

Field duplicate samples and MS/MSDs were collected and analyzed to evaluate sampling and analytical representativeness. Sample MET DUP\_20230531 was evaluated as a field duplicate of MW-15D for metal analyses, and VOC DUP\_20230601 was evaluated as a field duplicate of MW-22R for VOCs. MS/MSD samples were also collected from MW-15D for metals and MW-22R for VOCs.

Relative percent difference (RPD) data were calculated for analytes that were detected above the RL in both the environmental and field duplicate samples. Although there are no established QC limits for field duplicate RPD data, RPD values of 50% or less for aqueous samples are considered indicative of acceptable sampling and analytical precision as previously established for this facility (or if the difference between the sample and duplicate result is less than the Contract Required Quantification Limit [CRQL]; or if both results are less than five times the CRQL). RPD values for the VOC and metal field samples and their duplicates collected during the Spring 2023 sampling event ranged from 0 to 29% for analytes that were detected above the RL. Therefore, the field duplicate data reported are considered indicative of acceptable sampling and analytical precision.

The case narratives from the laboratory reports presented in **Appendix A** note the following regarding MS/MSD detections:

#### VOCs

- The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 480-672295 were outside control limits for one or more analytes (1,1,1-Trichloroethane, 1,1-Dichloroethene, Carbon tetrachloride, Tetrachloroethene, and trans-1,2-Dichloroethene). Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

### SUMMARY

Groundwater and surface water concentrations are generally stable across the facility. Analytical results from the Spring 2023 sampling event indicate that the selected remedy (monitored natural attenuation [MNA] with

Mr. Parag Amin  
New York State Department of Environmental Conservation  
October 3, 2023

long term groundwater monitoring) remains an effective remedial strategy as noted in the *Corrective Measures Study* (CMS, 2014).

## CLOSING

AG Geology appreciates the opportunity to present this semi-annual groundwater monitoring report. If you have any questions regarding this submittal, please feel free to contact us.

Sincerely,



Ezra Coyne  
Staff Professional  
+1 508 649 9891



Katharine Angel, PE  
Project Manager  
+1 518 859 4626

### Attachments:

#### Figures

- Figure 1 – Site Location Map
- Figure 2 – 2019 Aerial Map
- Figure 3 – Sample Location Map
- Figure 4 – Potentiometric Surface Contour Map – Shallow Overburden Wells, May 31, 2023
- Figure 5 – Potentiometric Surface Contour Map – Deep Overburden Wells, May 31, 2023
- Figure 6 – Potentiometric Surface Contour Map – Bedrock Wells, May 31, 2023

#### Tables

- Table 1 – Monitoring Well Construction and Groundwater Elevation, May 31, 2023
- Table 2 – Groundwater Analytical Results
- Table 3A – Groundwater and Surface Water Analytical Results
- Table 3B – Groundwater and Surface Water Analytical Results

#### Appendices

- Appendix A – Laboratory Analytical Report
- Appendix B – Time Versus Concentration Plots

cc: Ed Meeks – Ashland Inc.  
Fred Jardinico – Dyno Nobel, Inc.  
Kristin VanLandingham, P.E. – EHS Support Corporation

## **Figures**

Figure 1 – Site Location Map

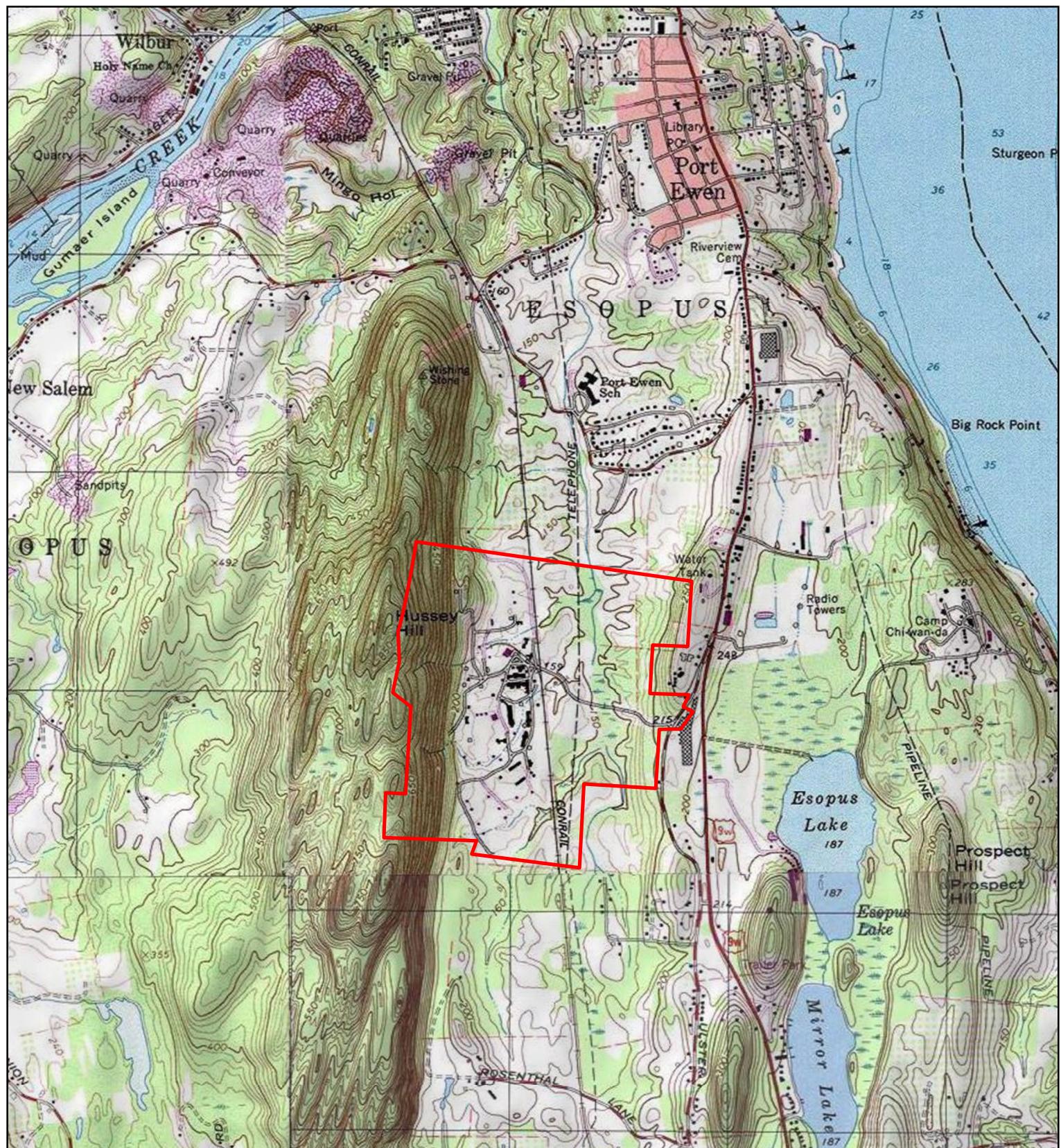
Figure 2 – 2019 Aerial Map

Figure 3 – Sample Location Map

Figure 4 – Potentiometric Surface Contour Map – Shallow Overburden Wells, May 31, 2023

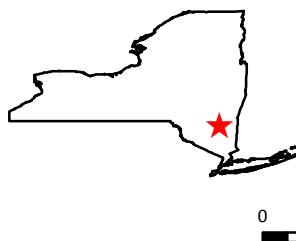
Figure 5 – Potentiometric Surface Contour Map – Deep Overburden Wells, May 31, 2023

Figure 6 – Potentiometric Surface Contour Map – Bedrock Wells, May 31, 2023



#### Legend

■ Subject Property Boundary



0 500 1,000 2,000 3,000 4,000 Feet

**FIGURE 1**

SITE LOCATION MAP  
DYNO-NOBEL, INC. - PORT EWEN FACILITY  
161 ULSTER AVENUE  
ULSTER PARK, NEW YORK

PROJECT NO. ASHWEN20	PREPARED BY MSS	REF SCALE 1:24,000
DATE 7/31/2020	REVIEWED BY HB	MAP SCALE 1 INCH = 2,000 FEET

**AG Geology, D.P.C.**



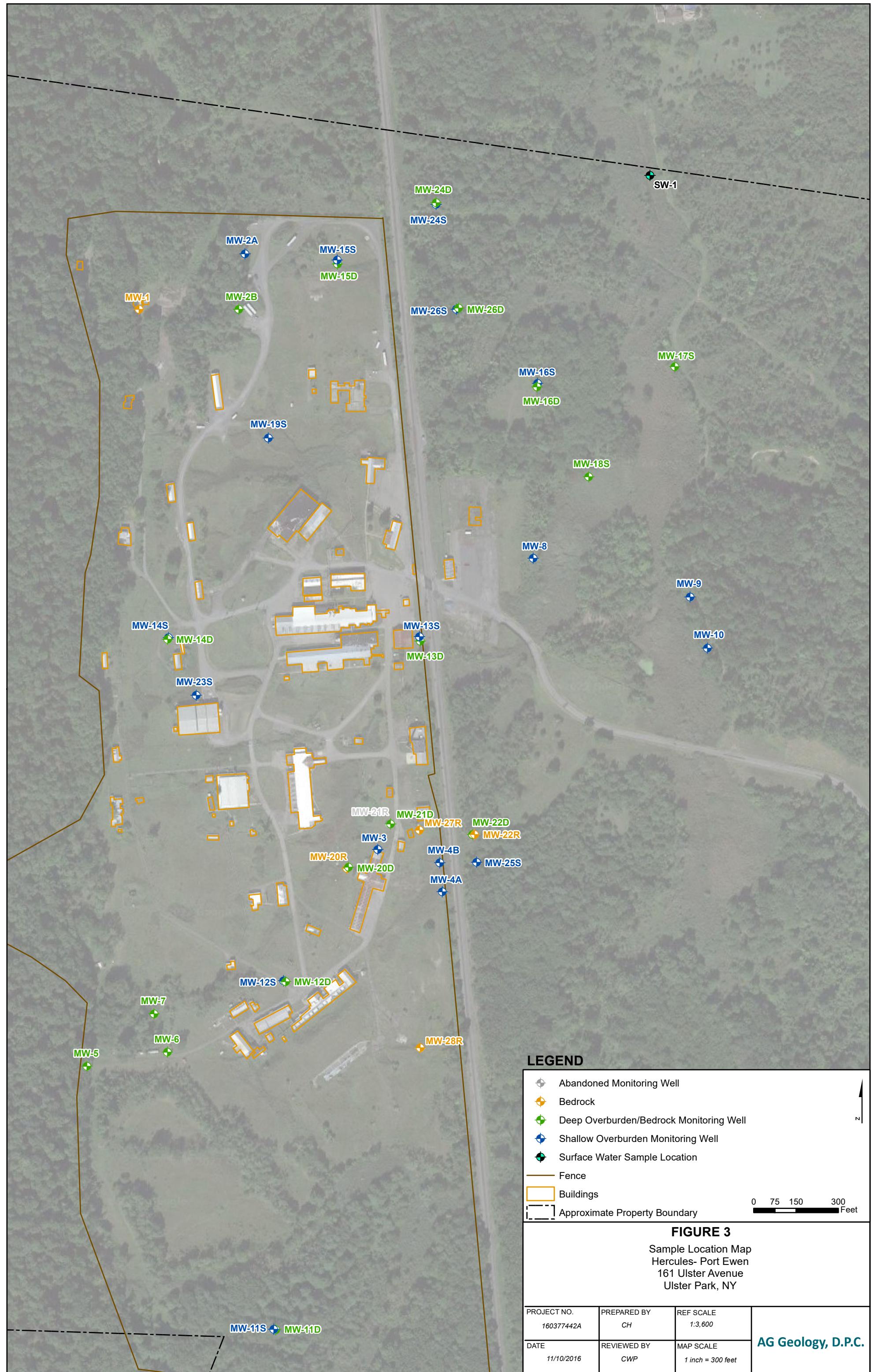
**FIGURE 2**

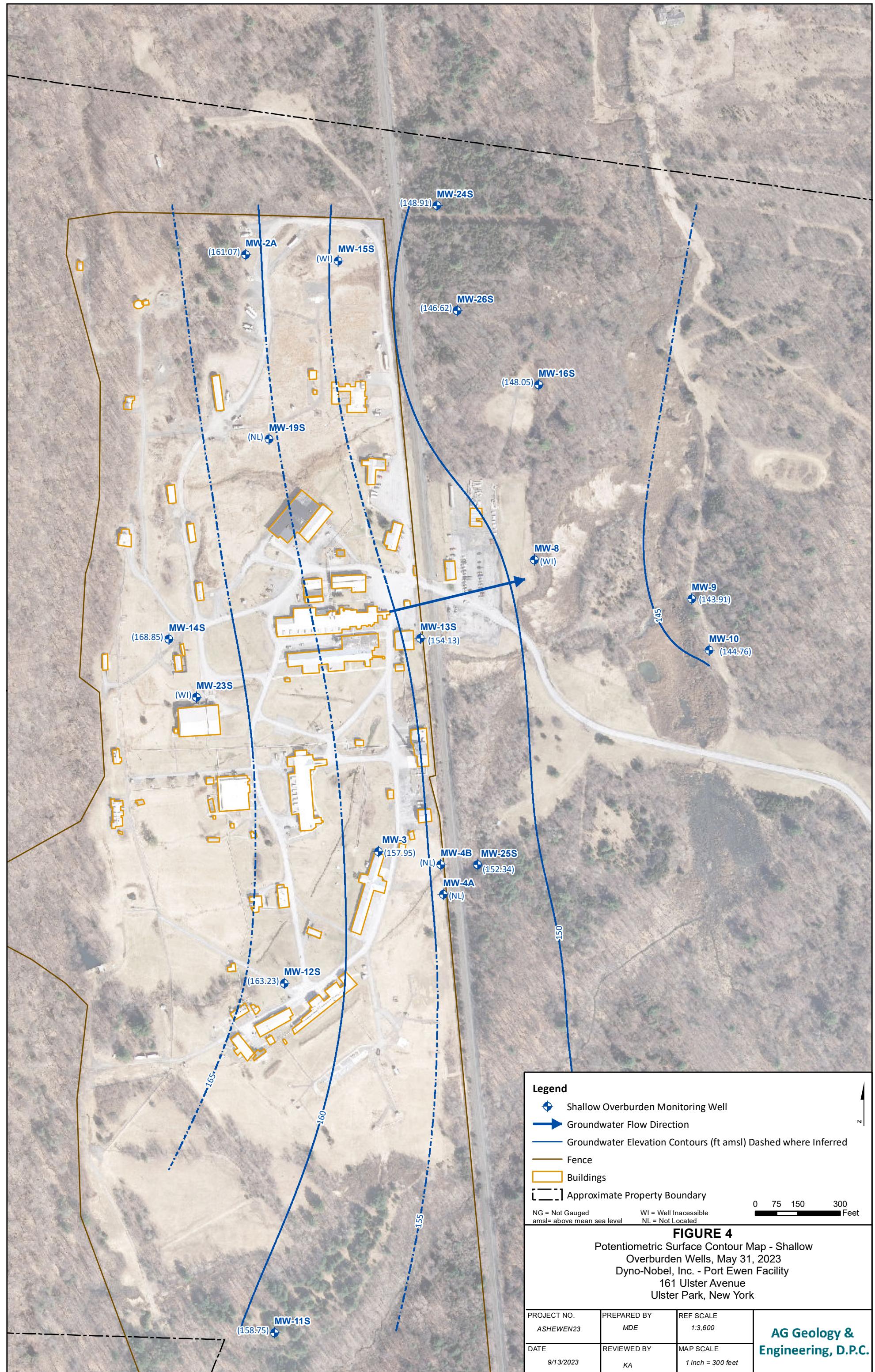
2019 Aerial Map  
Dyno-Nobel, Inc. - Port Ewen Facility  
161 Ulster Avenue  
Ulster Park, NY

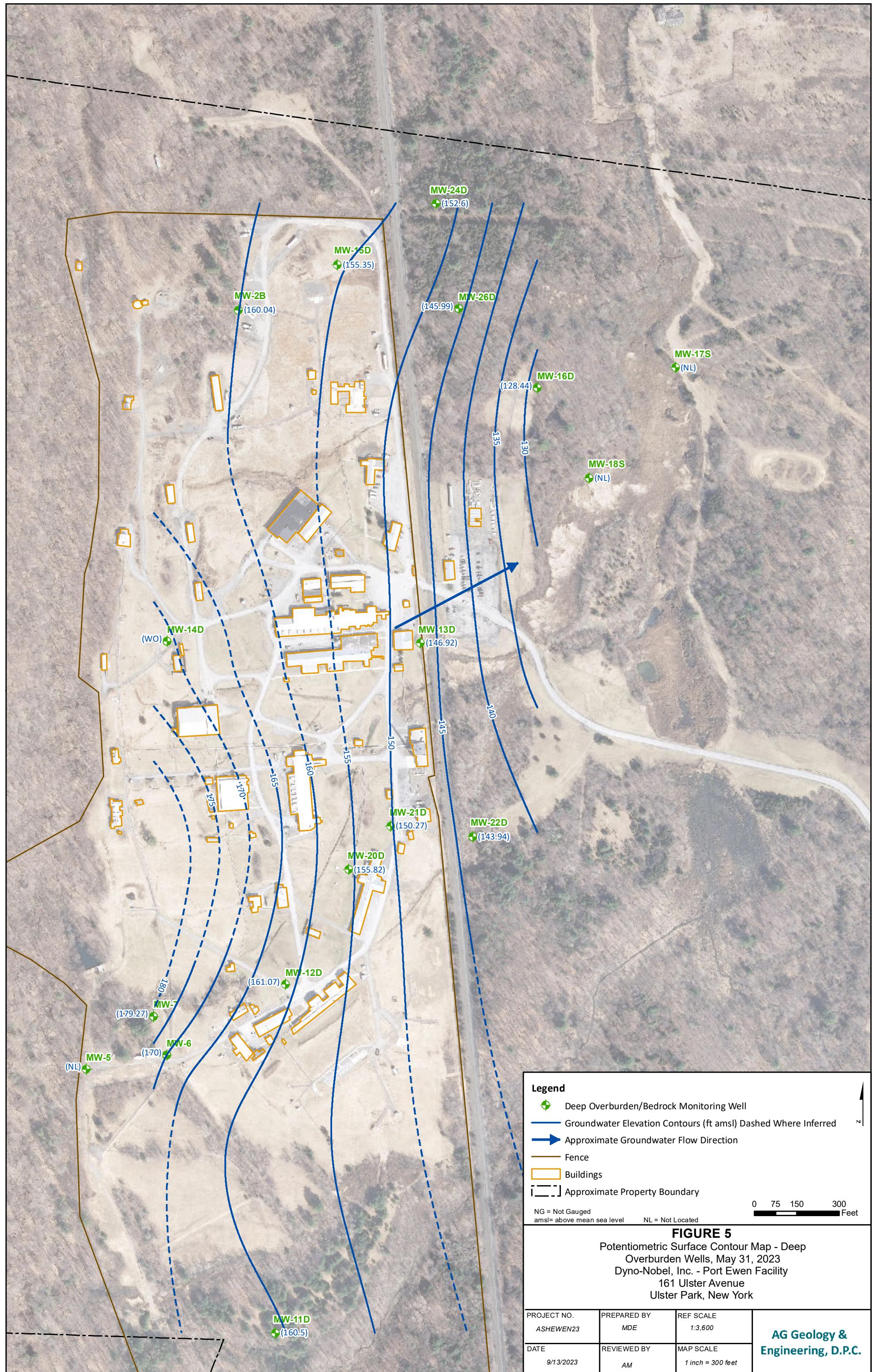
N  
↑

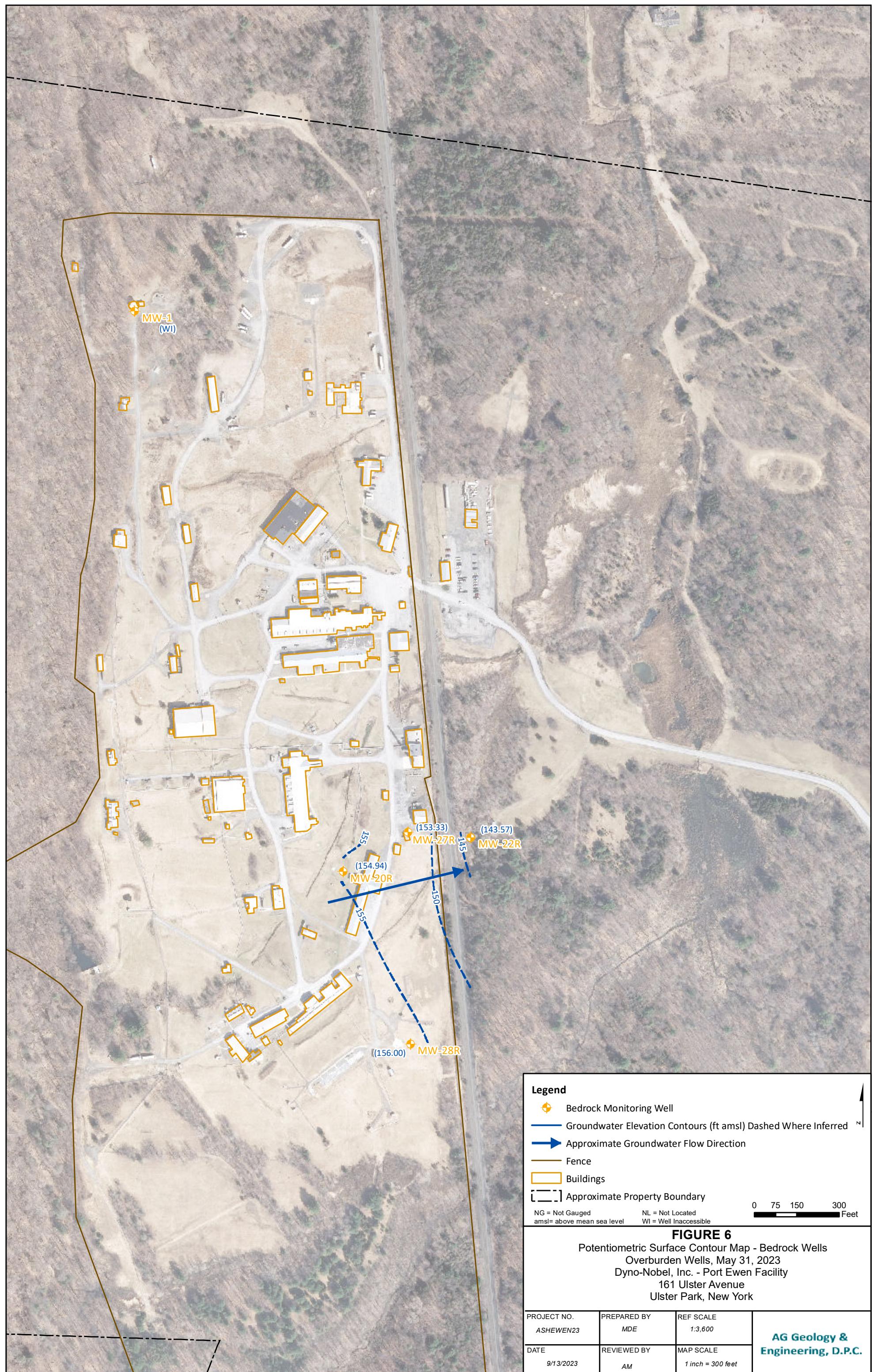
0 170 340 680 Feet

PROJECT NO. ASHWEN20	PREPARED BY MB	REF SCALE 1:4,800	AG Geology, D.P.C.
DATE 7/31/2020	REVIEWED BY AM	MAP SCALE 1 inch = 400 feet	









## Tables

Table 1 – Monitoring Well Construction and Groundwater Elevation, May 31, 2023

Table 2 – Groundwater Analytical Results

    Historic Detections of Volatile Organic Compounds - 2011 through 2023

Table 3A – Groundwater and Surface Water Analytical Results

    Historic Detections Dissolved Metals - 2011 through 2023

Table 4B – Groundwater and Surface Water Analytical Results

    Historic Detections Total Metals - 2011 through 2023

Table 3B – Groundwater and Surface Water Analytical Results

    Historic Detections Total Metals - 2011 through 2023

**TABLE 1**  
**Monitoring Well Construction and Groundwater Elevation**  
**May 31, 2023**

Well ID	Construction	Screened Unit/Horizon	Classification	Top of Well Casing Elevation* (feet above mean sea level)	Screen Interval (feet below ground surface)	Total Borehole Depth (feet below ground surface)	Gauging Depth to Water (feet below ground surface) June 1, 2023	Groundwater Elevation (feet above mean sea level)
MW-1	PVC	Bedrock	Bedrock	227.40	9.5 - 34 (open)	34.00	WI	NG
MW-2A	PVC	Overburden	Shallow Overburden	170.70	14 -24	25.00	9.63	161.07
MW-2B	PVC	Overburden	Deep Overburden	171.70	17-27	28.88	11.66	160.04
MW-3	PVC	Overburden	Shallow Overburden	167.20	16-26	29.43	9.25	157.95
MW-4A	PVC	Overburden	Shallow Overburden	158.90	13.5-23.5	26.18	NL	NG
MW-4B	PVC	Overburden	Shallow Overburden	158.30	17-27	28.00	NL	NG
MW-5	PVC	Overburden	Deep Overburden	193.10	24.5-34.5	35.00	NL	NG
MW-6	PVC	Overburden	Deep Overburden	180.90	57-67	67.67	10.9	170.00
MW-7	PVC	Overburden	Deep Overburden	182.80	33.5-43.5	44.00	3.53	179.27
MW-8	PVC	Overburden	Shallow Overburden	153.90	12-22	25.00	WI	NG
MW-9	PVC	Overburden	Shallow Overburden	148.00	9-19	20.00	4.09	143.91
MW-10	PVC	Overburden	Shallow Overburden	149.00	14-24	25.00	4.24	144.76
MW-11S	PVC	Overburden	Shallow Overburden	164.40	14-24	24.00	5.65	158.75
MW-11D	PVC	Overburden	Deep Overburden	163.90	54.5-64.5	67.00	3.4	160.50
MW-12S	PVC	Overburden	Shallow Overburden	168.90	15-25	25.50	5.67	163.23
MW-12D	PVC	Overburden	Deep Overburden	168.40	74-84	85.10	7.33	161.07
MW-13S	PVC	Overburden	Shallow Overburden	162.50	15-25	25.00	8.37	154.13
MW-13D	PVC	Overburden, Bedrock	Deep Overburden	162.40	35.5-45.5	46.00	15.48	146.92
MW-14S	PVC	Overburden	Shallow Overburden	175.60	15.5-25.5	26.50	6.75	168.85
MW-14D	PVC	Overburden	Deep Overburden	176.10	55-65	65.30	WO	NG
MW-15S	PVC	Overburden	Shallow Overburden	162.00	10.5-20.5	21.70	WI	NG
MW-15D	PVC	Overburden	Deep Overburden	162.00	24-29	31.07	6.65	155.35
MW-16S	PVC	Overburden	Shallow Overburden	159.30	15-25	26.76	11.25	148.05
MW-16D	PVC	Overburden	Deep Overburden	143.90	38.5-48.5	49.00	15.46	128.44
MW-17S	PVC	Overburden	Deep Overburden	146.80	4-9	11.00	NL	NG
MW-18S	PVC	Overburden	Deep Overburden	147.50	9-19	20.50	NL	NG
MW-19S	PVC	Overburden	Shallow Overburden	156.30	13.5-24	24.00	NL	NG
MW-20D	Stainless Steel	Overburden	Deep Overburden	161.40	44-54	55.00	5.58	155.82
MW-20R	Steel	Bedrock	Bedrock	161.00	59-77 (open)	77.00	6.06	154.94
MW-21R*	Steel	Overburden, Bedrock	Bedrock	163.80	66-86 (open)	89.06	Well Abandoned	
MW-21D	Stainless Steel	Overburden	Deep Overburden	164.10	49-59	60.99	13.83	150.27
MW-22R*	Steel	Overburden, Bedrock	Bedrock	151.60	35.5-54.5 (open)	57.90	8.03	143.57
MW-22D	Stainless Steel	Overburden	Deep Overburden	151.90	27-32	35.00	7.96	143.94
MW-23S	PVC	Overburden	Shallow Overburden	165.20	14-24	24.00	WI	NG
MW-24S	PVC	Overburden	Shallow Overburden	157.19	10-20	22.68	8.28	148.91
MW-24D	PVC	Overburden	Deep Overburden	157.21	30-40	42.55	4.61	152.60
MW-25S	PVC	Overburden	Shallow Overburden	159.71	10-30	31.58	7.37	152.34
MW-26S	PVC	Overburden	Shallow Overburden	154.49	10-20	22.55	7.87	146.62
MW-26D	PVC	Overburden	Deep Overburden	153.70	48-58	59.98	7.71	145.99
MW-27R	PVC	Bedrock	Bedrock	164.82	67.5-150	150.00	11.49	153.33
MW-28R	PVC	Bedrock	Bedrock	168.43	77.5-135	135.00	12.43	156.00

NA - Not available

NG - Not gauged

NL - Not located

WO - Well Obstructed

WI - Well Inaccessible

NS - Not Surveyed

\* - MW 21R and MW 22R Top of Casing Elevation from Top of Outer Casing (no inner well casing; open wells)

**TABLE 2**  
**Groundwater Analytical Results**  
**Historic Detections of Volatile Organic Compounds – 2011 through 2023**  
**Dyno-Nobel, Inc. - Port Ewen Facility**

Well ID	Date	GROUNDWATER ANALYTICAL DATA																				
		1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethylene (ug/L)	1,2,4-Trichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	2-Butanone (MEK) (ug/L)	Acetone (ug/L)	Benzene (ug/L)	Chloroform (ug/L)	Cis-1,2-Dichloroethene (ug/L)	Cyclohexane (ug/L)	Ethylbenzene (ug/L)	Methyl chloride (ug/L)	Methylene chloride (ug/L)	Methyl-tertiary-butyl ether (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	Trichloroethene (ug/L)	Vinyl chloride (ug/L)
NYSDEC CLASS GA GW STANDARD	5	NGV	5	5	NGV	0.6	50	50	1	7	5	NGV	NGV	NGV	NGV	NGV	5	NGV	5	5	2	NGV
4/14/2011	28,000	< 500	140 J	37,000	< 500	150 J	< 5,000	< 12,000	< 500	480 J	< 500	< 500*	< 2,500	< 5,000	< 500	< 500	< 500	< 500	41,000	< 500	< 1,000	
10/1/2011	19,000	< 250	130 J	22,000	< 250	94 J	< 2,500	< 6,300	< 250	340	< 250	< 250*	< 1,300	< 2,500	< 2,500	< 2,500	< 250	< 250	24,000	< 250	< 500	
4/3/2012	22,000	< 500	160 J	29,000	< 500	130 J	< 5,000	< 13,000	< 500	500	< 500	< 500*	< 2,500	< 5,000	< 500	< 500	< 500	< 500	37,000	< 500	< 1,000	
10/24/2012	15,000	< 500	< 500	23,000	< 500	< 500	< 5,000	< 13,000	< 500	400 J	< 500	< 500	< 2,500	< 5,000	< 500	< 500	< 500	< 500	23,000	< 500	< 1,000	
4/17/2013	18,000	< 500	17,000	< 17,000	< 500	110 J	< 5,000	< 13,000	< 500	420 J	< 500	< 500*	< 2,500	< 5,000	< 500	< 500	< 500	< 500	30,000	< 500	< 1,000	
10/24/2013	17,000	< 500	< 500	19,000	< 500	< 500	< 5,000	< 13,000	< 500	540	< 500	< 500	< 2,500	< 5,000	< 500	< 500	< 500	< 500	31,000	< 500	< 1,000	
4/30/2014	17,000	< 500	140 J	20,000	< 500	140 J	< 5,000	< 13,000	< 500	190 BJ	700	< 500	< 500*	< 2,500	< 5,000	< 500	< 500	< 500	< 500	36,000	< 500	< 1,000
10/23/2014	15,000	< 500	< 500	27,000	< 2,500	220 J	< 5,000	< 5,000	< 500	890	< 500	< 500	< 2,500	< 5,000	< 500	< 500	< 500	< 500	33,000	< 500	< 1,000	
4/15/2015	13,000	< 500	< 500	23,000	< 2,500	< 500	< 5,000	< 5,000	< 500	610	< 500	< 500*	< 2,500	< 5,000	< 500	< 500	< 500	< 500	30,000	< 500	< 500	
11/1/2015	11,000	< 500	< 500	23,000	< 2,500	< 500	< 5,000	< 5,000	< 500	660	< 500	< 500	< 2,500	< 5,000	< 500	< 500	< 500	< 500	28,000	< 500	< 500	
4/26/2016	12,000	< 250	< 250	28,000	< 1,300	< 250	< 2,500	< 250	< 250	750	< 250	< 250*	< 1,300	< 2,500	< 250	< 250	< 250	< 250	28,000	< 250	< 250	
10/19/2016	15,000	< 250	160 J	29,000	< 1,300	180 J	< 2,500	< 2,500	< 250	1,100	< 2,500	< 2,500*	< 1,300	< 2,500	< 2,500	< 2,500	< 250	< 250	42,000	< 250	< 250	
4/24/2017	9,800	< 250	< 250	23,000	< 1,300	< 250	< 2,500	< 2,500	< 250	670	< 250	< 250*	< 1,300	< 2,500	< 250	< 250	< 250	< 250	31,000	< 250	< 250	
11/7/2017	6,800	< 250	< 250	16,000	< 1,300	< 250	< 2,500	< 2,500	< 250	590	< 250	< 250*	< 1,300	< 2,500	< 250	< 250	< 250	< 250	17,000	< 250	< 250	
6/5/2018	12,000	< 250	< 250	150 J	31,000	< 1,300*	150 J	< 2,500*	< 2,500	1,100	< 250	< 250*	< 1,300	< 2,500	< 250	< 250	< 250	< 250	42,000	< 250	< 250	
12/1/2018	7,900	< 100	110	20,000	< 500	100	< 1,000	< 1,000	< 100	670	< 100	< 100*	< 500	< 1,000	< 100	< 100	< 100	< 100	25,000	< 100	< 100	
5/30/2019	8,900	< 250	130 J	25,000	< 1,300	< 250	< 2,500	< 2,500	< 250	770	< 250	< 250*	< 1,300	< 2,500	< 250	< 250	< 250	< 250	28,000	< 250	< 250	
10/17/2019	7,000	< 250	98 J	19,000	< 1,300	130 J	< 2,500	< 2,500	< 250	960	< 250	< 250*	< 1,300	< 2,500	< 250	< 250	< 250	< 250	27,000	< 250	< 250	
6/23/2020	7,300	< 250	100 J	21,000	< 1,300	< 250	< 2,500	< 2,500	< 250	860	< 250	< 250*	< 1,300	< 2,500	< 250	< 250	< 250	< 250	28,000	< 250	< 250	
11/5/2020	5,600	< 250	< 250	16,000*	< 1,300	< 250	< 2,500	< 2,500	< 250	580	< 250	< 250*	< 1,300	< 2,500	< 250	< 250	< 250	< 250	20,000	< 250	< 250	
6/29/2021	6,300	< 250	< 250	21,000	< 1,300	94 J	< 2,500	< 2,500	< 250	710	< 250	< 250*	< 1,300	< 2,500	< 250	< 250	< 250	< 250	29,000	< 250	< 250	
11/18/2021	4,300	< 250	< 250	15,000	< 1,300	< 250	< 2,500	< 2,500	< 250	420	< 250	< 250*	< 1,300	< 2,500	< 250	< 250	< 250	< 250	17,000	< 250	< 250	
6/7/2022	5,300	16	100	18,000	< 5	75	< 10	< 10	3.5	19	770	< 1	< 1	< 1	< 5	< 5	9.7	1.4	5.9	21,000	30	0.33
10/19/2022	5,800	< 200	< 200	24,000	< 1,000	73 J	< 2,000	< 2,000	< 200	740	< 200	51 J	< 1,000	< 1,000	< 100	< 100	< 200	< 200	22,000	< 200	< 200	
5/31/2023	7,700	< 1,000	< 1,000	31,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	1,300	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	33,000	< 1,000	< 2,000	
4/14/2011	< 5,000	< 5,000	< 5,000	< 5,000	< 5,000	< 5,000	< 5,000	< 5,000	< 5,000	5,000	< 5,000	< 5,000*	< 5,000	< 5,000	< 5,000	< 5,000	< 5,000	< 5,000	52,000	< 5,000	< 10,000	
10/1/2011	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500	160 J	< 500	< 500*	< 2,500	< 5,000	< 500	< 500	< 500	< 500	26,000	< 500	< 1,000	
4/3/2012	< 1,300	< 1,300	< 1,300*	< 1,300	< 1,300	< 1,300	< 1,300	< 1,300	< 1,300	1,300	< 1,300	< 1,300*	< 6,300	< 13,000	< 1,300	< 1,300	< 1,300	< 1,300	97,000	< 1,300	< 2,500	
10/24/2012	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	2,000	< 2,000	< 2,000*	< 10,000	< 20,000	< 2,000	< 2,000	< 2,000	< 2,000	250,000	< 2,000	< 4,000	
10/24/2013	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	2,000	< 2,000	< 2,000*	< 10,000	< 20,000	< 2,000	< 2,000	< 2,000	< 2,000	360,000	< 2,000	< 4,000	
10/23/2014	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	2,000	< 2,000	< 2,000*	< 10,000	< 20,000	< 2,000	< 2,000	< 2,000	< 2,000	440 J	< 2,000	< 4,000	
4/15/2015	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	1,000	< 1,000	< 1,000*	< 10,000	< 20,000	< 1,000	< 1,000	< 1,000	< 1,000	83,000	< 1,000	< 1,000	
11/1/2015	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	100 J	< 100	< 100*	< 10,000	< 20,000	< 100	< 100	< 100	< 100	800 J	< 100	< 1,000	
4/26/2016	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	110,000	< 1,000	< 1,000*	< 10,000	< 20,000	< 1,000	< 1,000	< 1,000	< 1,000	270,000	< 1,000	< 1,000	
10/19/2016	< 200	< 200	1,700 J	< 10,000	< 200	< 20,000	< 200	< 20,000	< 200	99,000	< 200	< 200*	< 10,000	< 20,000	< 200	< 200	< 200	< 200	1,500 J	< 10,000	< 2,000	
4/24/2017	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	68,000	< 2,000	< 2,000*	< 10,000	< 20,000	< 2,000	< 2,000	< 2,000	< 2,000	240,000	< 2,000	< 4,000	
11/7/2017	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	< 2,000	150,000	< 2,000	< 2,000*	< 10,000	< 20,000	< 2,000	< 2,000	< 2,000	< 2,000	1,600 J	< 10,000	< 2,000	
6/5/2018	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	72,000	< 1,000	< 1,000*	< 10,000	< 20,000	< 1,000	< 1,000	< 1,000	< 1,000	730 J	< 10,00		

**TABLE 2**  
**Groundwater Analytical Results**  
**Historic Detections of Volatile Organic Compounds – 2011 through 2023**  
**Dyno-Nobel, Inc. - Port Ewen Facility**

Well ID	Date	GROUNDWATER ANALYTICAL DATA																					
		1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethylene (ug/L)	1,2,4-Trichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	2-Butanone (MEK) (ug/L)	Acetone (ug/L)	Benzene (ug/L)	Chloroform (ug/L)	1,1,2-Dichloroethene (ug/L)	Cyclohexane (ug/L)	Ethylbenzene (ug/L)	Methyl acetate (ug/L)	Methylene chloride (ug/L)	Methyl-tertiary-butyl ether (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	Trichloroethene (ug/L)	Vinyl chloride (ug/L)	Xylene (Total) (ug/L)
NYSDEC CLASS GA GW STANDARD	5	NGV	5	5	NGV	0.6	50	50	1	7	5	NGV	NGV	NGV	NGV	NGV	5	NGV	5	5	2	NGV	
MW-21R	4/14/2011	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.63J	<1	<1	<1	<5	<10	<1	<1	<1	5	<1	<2	
	10/1/2011	<1	<1	<1	<1	<1	<10	<25	<1	<1	1.1	<1	<1	<1	<5	<10	<1	<1	0.23J	6.1	<1	<2	
	4/3/2012	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.59J	<1	<1	<1	<5	<10	<1	<1	<1	2.3	<1	<2	
	10/2/2012	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.48J	<1	<1	<1	<5	<10	<1	<1	<1	2.1	<1	<2	
	4/17/2013	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.21J	<1	<1	<1	<5	<10	<1	<1	<1	1.1	<1	<2	
	10/2/2013	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.61J	<1	<1	<1	<5	<10	<1	<1	<1	1.9	<1	<2	
	4/30/2014	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.41J	<1	<1	<1	<5	<10	<1	<1	<1	0.96J	<1	<2	
	10/2/2014	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.86J	<1	<1	<1	<5	<10	<1	<1	<1	1.1	<1	<2	
	4/15/2015	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	0.79J	<1	<1	
	11/1/2015	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	1.8	<1	<1	
	4/26/2016	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.5J	<1	<1	<1	<5	<10	<1	<1	<1	1.5	<1	<1	
	10/19/2016	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.61J	<1	<1	<1	<5	<10	<1	<1	<1	1.6	<1	<1	
	4/24/2017	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.75J	<1	<1	<1	<5	<10	<1	<1	<1	3.7	<1	<1	
	11/7/2017	<1	<1	<1	<1	<1	<10	<25	<1	<1	3.5	<1	<1	<1	<5*	<10	<1	<1	<1	3.7	<1	<1	
	6/5/2018	<1	<1	<1	<1	<1	<10*	<25	<1	<1	2	<1	<1	<1	<5	<10	<1	<1	<1	3.6	<1	<1	
	12/1/2018	<1	<1	<1	<1	<1	<10	<25	<1	<1	2.8	<1	<1	<1	<5	<10	<1	<1	<1	0.39J	4.8	<1	<1
	5/30/2019	<1	<1	<1	<1	<1	<10*	<25	<1	<1	1.8	<1	<1	<1	<5	<10	<1	<1	<1	3.4	<1	<1	
	10/17/2019	<1	<1	<1	<1	<1	<10	<25	<1	<1	2.2	<1	<1	<1	<5	<10	<1	<1	<1	2.9	<1	<1	
	6/23/2020	<1	<1	<1	<1	<1	<10	<25	<1	<1	6.5	<1	<1	<1	<5	<10	<1	<1	<1	0.82J	<1	<1	
	11/1/2020	<1	<1	<1	<1	<1	<10	<25	<1	<1	6.5	<1*	<1	<1	<5	<10	<1	<1	<1	0.91J	<1	<1	
	6/30/2021	<1	<1	<1	<1	<1	<10	<25	<1	<1	6.2	<1	<1	<1	<5	<10	<1	<1	<1	1.1	<1	<1	
	11/18/2021	<1	<1	<1	<1	<1	<10	<25	<1	<1	1.7	<1	<1	<1	<5	<10	<1	<1	<1	0.91J	<1	<1	
Well Abandoned																							
MW-22D	4/14/2011	<1	<1	<1	0.2J	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	1	<1	<2	
	10/1/2011	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
	4/4/2012	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
	10/2/2012	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	0.14J	<1	<1	
	10/23/2013	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.27 BJ	<1	<1	<1	<5	<10	<1	<1	<1	0.27J	<1	<1	
	4/30/2014	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.28J	<1	<1	<1	<5	<10	<1	<1	<1	0.27J	<1	<1	
	10/23/2014	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	0.27J	<1	<1	
	4/15/2015	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
	11/1/2015	6.6	<1	<1	18	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	45	<1	<1	
	4/26/2016	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
	10/19/2016	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	0.75J	<1	<1	
	4/24/2017	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
	11/7/2017	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5*	<10	<1	<1	<1	0.62J	<1	<1	
	6/5/2018	<1	<1	<1	<1	<1	<10*	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
	12/1/2018	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	1	<1	<1	
	5/30/2019	<1	<1	<1	<1	<1	<10*	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	0.5	<1	<1	
	11/18/2019	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	0.5	<1	<1	
	6/8/2020	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	0.5	<1	<1	
	10/19/2020	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	0.5	<1	<1	
	6/1/2021	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	0.5	<1	<1	
MW-22R	4/14/2011	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
	10/1/2011	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
	4/4/2012	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
	10/2/2012	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	1	<1	<2	
	10/23/2013	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	1	<1	<2	
	4/30/2014	<1	<1	<1	<1	<1	<10	<25	<1	<1	0.28J	<1	<1	<1	<5	<10	<1	<1	<1	1	<1	<2	
	10/23/2014	<1	<1	<1	<1	<1	<10	<25	<1	<1	1	<1	<1	<1	<5	<10	<1	<1	<1	1	<1	<2	
	4/15/2015	<1	<1	<1	<1	<1	<10	<25	<1</td														

**TABLE 2**  
**Groundwater Analytical Results**  
**Historic Detections of Volatile Organic Compounds – 2011 through 2023**  
**Dyno-Nobel, Inc. - Port Ewen Facility**

Well ID	Date	GROUNDWATER ANALYTICAL DATA																					
		1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	Dichloroethylene (ug/L)	1,2,4-Trichlorobenzene (ug/L)	Dichloroethane (ug/L)	2-Butanone (MEK) (ug/L)	Acetone (ug/L)	Benzene	Chloroform (ug/L)	1,1,2-Dichloroethene (ug/L)	Cyclohexane	Ethylbenzene	Methyl acetate	Methylene chloride (ug/L)	Methyl-tertiary-butyl ether (ug/L)	Tetrachloroethene	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	Trichloroethene (ug/L)	Vinyl chloride (ug/L)	Xylene (Total) (ug/L)
NYDEC CLASS GA GW STANDARD	5	NGV	5	5	NGV	0.6	50	50	1	7	5	NGV	NGV	NGV	NGV	NGV	NGV	5	NGV	5	5	2	NGV
4/14/2011	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
10/11/2011	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	0.67J	<1	
4/4/2012	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
10/24/2012	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
4/17/2013	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
10/23/2013	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
4/30/2014	<1	<1	<1	<1	<1	<1	<10	<25	<1	0.28BJ	<1	<1	<1	<1	<5	<10	<1	<1	<1	0.16J	<1	<2	
10/23/2014	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
4/15/2015	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
11/1/2015	3.7	<1	<1	9.7	<5	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	39	<1	<1	
4/26/2016	<1	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
10/19/2016	<1	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	0.75J	<1	<1	
4/24/2017	1.3	<1	<1	1.9	<5	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	5.9	<1	<1	
8/16/2017	<1	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
11/7/2017	<1	<1	<1	<1	<1	<1	<10*	<10	<1	0.89J	<1	<1	<1	<1	<5	<10	<1	<1	0.44J	<1	<1	<1	
6/5/2018	<1	<1	<1	<1	<1	<1	<10*	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	2.6	<1	<1	<1	
12/12/2018	<1	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1*	<1	<1	<1	<1	<1	
5/30/2019	<1	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
10/17/2019	<1	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
6/24/2020	<1	<1	<1*	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
11/5/2020	<1	<1	<1	<1	<1	<1	<10*	<10	<1	<1	<1	<1*	<1	<1	<5	<10	<1	<1	0.53JB	<1	<1	<1	
6/30/2021	<1	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
11/18/2021	<1	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
6/8/2022	<1	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
10/20/2022	<1	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<1	
6/1/2023	<1	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<10	<1	<1	<1	<1	<1	<2	
MW-27R	6/8/2022	<1	<1	<1	<1	<1	<10	<10	<1	11	<1	<1	<1	<1	<5	<5	<5	<0.5	0.89J	<1	<1	<1	
	10/19/2022	<1	<1	<1	<1	<1	1.9JB	<1	<10	<1	5.9	<1	<1	<1	<5	<5	<5	<0.5	0.66J	<1	<1	<1	
	6/1/2023	<1	<1	<1	<1	<1	<10	<10	<1	2.2	<1	<1	<1	<1	<5	<5	<5	<0.5	<1	<1	<1	<2	
	6/8/2022	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<1	<1	<1	<1	
MW-28R	10/20/2022	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<1	<1	<1	<1	
	6/1/2023	<1	<1	<1	<1	<1	<10	<10	<1	<1	<1	<1	<1	<1	<5	<2.5	<1	<1	<1	<1	<1	<2	

**Notes:**

ug/L = micrograms per liter

Result cells highlighted in grey and bolded exceed NYDEC Class GA Groundwater Standard.

Analytes not detected are not included on this table.

< - indicates the analyte was analyzed for but not detected at the noted reporting limit.

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

B - Compound was found in the blank sample.

\* - RPD of the LCS and LSD exceeds the control limits.

E - Result exceeded calibration range

H - Sample was prepped or analyzed beyond the specified holding time

F1 - MS and/or MSD Recovery is outside acceptable limits.

F2 - MS/MSD RPD exceeds control limits.

**TABLE 3A**  
**Groundwater and Surface Water Analytical Results**  
**Historic Detections of Dissolved Metals– 2011 through 2023**  
**Dyno-Nobel, Inc. - Port Ewen Facility**

Well ID	Date	GROUNDWATER ANALYTICAL DATA																																													
		Aluminum (ug/L)		Antimony (ug/L)		Arsenic (ug/L)		Barium (ug/L)		Beryllium (ug/L)		Cadmium (ug/L)		Calcium (ug/L)		Chromium (ug/L)		Cobalt (ug/L)		Copper (ug/L)		Iron (ug/L)		Lead (ug/L)		Magnesium (ug/L)		Manganese (ug/L)		Mercury (ug/L)		Nickel (ug/L)		Potassium (ug/L)		Selenium (ug/L)		Silver (ug/L)		Sodium (ug/L)		Thallium (ug/L)		Vanadium (ug/L)		Zinc (ug/L)	
		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved														
MW-2B	NYSDEC CLASS GA GW STANDARD	NGV	3	25	1,000	3	5	NGV	50	5	200	300	25	35,000	300	0.7	100	NGV	10	50	20,000	0.5	NGV	2,000																							
	4/14/2011	<200	<20	<20	47	<4	<5	75,000	<10	<10	<20	<50	<10	8,100	<10	<0.2	<40	940 J	42	<10	5,600	<25	<10	<20																							
	10/10/2011	<200	<20	<20	63	<4	<5	88,000	<10	<10	<20	<50	<10	8,900	24	<0.2	<40	1,600	320	<10	6,200	<25	<10	<20																							
	4/3/2012	<200	<20	<20	39	<4	<5	90,000	<10	<10	<20	<50	<10	24 J	<10	11,000	8.3 J	<0.2	<40	1,000	17 J	<10	6,300	<25	<10	<20																					
	10/24/2012	<200	<20	<20	84	<4	<5	55,000	<10	<10	<20	<50	<10	7,700	<10	<0.2	<40	2,000	290	<10	7,900	<25	<10	<20																							
	4/18/2013	<200	<20	<20	35	<4	<5	73,000	<10	<10	<20	<50	<10	7,900	<10	<0.2	<40	930 J	30	<10	5,400	<25	<10	<20																							
	11/8/2013	<200	<20	<20	42	<4	<5	59,000	<10	<10	<20	<50	<10	7,400	<10	<0.2	<40	1,400	780	<10	7,500	<25	<10	<20																							
	4/30/2014	<200	<20	<20	30	<4	<5	66,000	<10	<10	<20	<50	<10	6,500	<10	<0.2	<40	870 J	29	<10	4,700	<25	<10	<20																							
	10/23/2014	<200	<20	<20	61	<4	<5	60,000	<10	<10	<20	<50	<10	8,300	<10	<0.2	<40	2,000	670	<10	7,900	<25	<10	<20																							
	4/15/2015	<200	<20	<20	31	<4	<5	69,000	<10	<10	<20	<50	<10	8,400	<10	<0.2	<40	990 J	18 J	<10	5,000	<25	<10	<20																							
	11/11/2015	<200	<20	<20	66	<4	<5	55,000	<10	<10	<20	<50	<10	7,200	<10	<0.2	<40	1,800	1,000	<10	7,000	<25	<10	<20																							
	4/26/2016	<200	<20	<20	37	<4	<5	90,000	<10	<10	<20	<50	<10	11,000	<10	<0.2	<40	990 J	20	<10	6,500	<25	<10	<20																							
	10/19/2016	<200	<20	<20	77	<4	<5	72,000	<10	<10	<20	<50	<10	10,000	1.1 J	<0.2	<40	2,2 J	2,200	570	<10	8,000	<25	<10	7.9 J																						
	4/24/2017	<200	<20	<20	30	<4	<5	72,000	<10	<10	<20	<50	<10	7,300	<10	<0.2	<40	800 J	21	<10	5,000	<25	<10	<20																							
	11/7/2017	<200	<20	<20	83	<2	<2	65,000	<4	<4	<10	<50	<10	9,300	<3	<0.2	<40	1,900	650	<6	6,900	<20	<5	<10																							
	6/5/2018	<200	<20	<20	37	<4	<5	89,000	<10	<10	2 J	<50	<10	10,000	<10	<0.2	<40	4,2 J	970 J	28	<10	6,200	<25	<10	<20																						
	5/30/2019	24 JB	<20	<20	28	<4	<5	88,000	<10	<10	<20	<50	<10	8,900	1.1 J	<0.2	<40	830 J	<20	<10	6,000	<25	<10	71																							
	10/17/2019	<200	<20	<20	50	<4	<5	62,000	<10	<10	3.5 J	<50	<10	8,400	7.6 J	<0.2	<40	1,900	580	<10	5,900	<25	<10	<20																							
	6/23/2020	<200	<20	<20	21	<4	<5	76,000	<10	<10	<20	<50	<10	8,800	220	<0.2	<40	850 J	180	<10	5,600	<25	<10	1.7 J	<20																						
	11/4/2020	<200	5.7 JB	<20	48	<4	<5	65,000	<10	<10	2.9 J	<50	<10	9,300	<10	<0.2	<40	2,4 J	2,000	530	<10	6,300	<25	<10	<20																						
	6/30/2021	<200	<20	<20	66	<4	<5	75,000	<10	<10	<20	<50	<10	21,000	210	<0.2	<40	1,400	<20	<10	9,800	<25	<10	1.2 J	<20																						
	11/16/2021	68 J	<20	<20	32	<4	<5	90,000	<10	<10	1.3 JB	<20	70	<10	10,000	<10	<0.2	<40	1,000	31	<10	5,900	<25	<10	<20																						
	6/8/2022	<200	<20	<20	32	<4	<5	95,000	<10	<10	<20	<100	<10	12,000	<10	<0.2	<40	1,100 B	19 J	<10	6,300	<25	<10	<20																							
	10/20/2022	<200	<20	<20	33	<4	<5	59,000	<10	<10	<20	<100	<10	8,100	<10	<0.2	<40	1,500 B	590	<10	5,700	<25	<10	<20																							
	6/1/2023	<200	<20	<20	35	<2	<2	100,000	<4	<4	7.3 J	<50	<10	12,000	<3	<0.2	<40	960	19 J	<6	6,800	<20	<5	<10																							
MW-15D	4/13/2011	<200	<20	<20	120	<4	<5	63,000	2.5 J	<10	<20	<50	<10	320 J	<10	<0.2	<40	4,900	140	<10	12,000	<25	<10	<20																							
	10/10/2011	<200	<20	<20	100	<4	<5	34,000	<10	<10	<20	<50	<10	2,100	<10	<0.2	<40	5,100	260	<10	9,500	<25	<10	<20																							
	4/3/2012	<200	8 J	<20	99	<4	<5	51,000	<10	<10	<20	<50	<10	5,800	<10	<0.2	<40	4,800	370	<10	9,400	<25	<10	<20																							
	10/24/2012	<200	<20	<20	100	<4	<5	31,000	<10	<10	<20	<50	<10	4,700	<10	<0.2	<40	5,300	230	<10	7,700	<25	<10	<20																							
	4/18/2013	<200	<20	<20	100	<4	<5	43,000	2.2 J	<10	<20	<50	<10	2,100	<10	<0.2	<40	4,900	180	<10	9,700	<25	<10	<20																							
	4/30/2014	<200	<20	<20	140	<4	<5	54,000	<10	<10	<20	<50	<10	82	<10	<0.2	<40	9,000	16	<0.2	<40	4,600	370	<10	8,000	<25	<10	<20																			
	10/23/2014	<200	<20	<20	100	<4	<5	41,000	<10	<10	<20	<50	<10	8,000	5.4 J	<0.2	<40	4,600	350	<10	8,300	<25	<10	<20																							
	4/15/2015	<200	<20	<20	100	<4	<5	44,000	<10	<10	<20	<50	<10	32 J	<10	<0.2	<40	7,200	9 J	<0.2	<40	4,300	330	<10	8,100	<25	<10	<20																			
	11/11/2015	<200	&lt																																												

**TABLE 3A**  
**Groundwater and Surface Water Analytical Results**  
**Historic Detections of Dissolved Metals– 2011 through 2023**  
**Dyno-Nobel, Inc. - Port Ewen Facility**

Well ID	Date	GROUNDWATER ANALYTICAL DATA																																													
		Aluminum (ug/L)		Antimony (ug/L)		Arsenic (ug/L)		Barium (ug/L)		Beryllium (ug/L)		Cadmium (ug/L)		Calcium (ug/L)		Chromium (ug/L)		Cobalt (ug/L)		Copper (ug/L)		Iron (ug/L)		Lead (ug/L)		Magnesium (ug/L)		Manganese (ug/L)		Mercury (ug/L)		Nickel (ug/L)		Potassium (ug/L)		Selenium (ug/L)		Silver (ug/L)		Sodium (ug/L)		Thallium (ug/L)		Vanadium (ug/L)		Zinc (ug/L)	
		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved															
MW-16S	NYSDEC CLASS GA GW STANDARD	NGV	3	25	1,000	3	5	NGV	50	5	200	300	25	35,000	300	0.7	100	NGV	10	50	20,000	0.5	NGV	2,000																							
	4/13/2011	<200	<20	<20	110	<4	<5	80,000	<10	<10	<20	<50	<10	23,000	21	<0.2	<40	870 J	<20	<10	18,000	<25	<10	6.7 J																							
	10/10/2011	<200	<20	<20	110	<4	<5	92,000	<10	<10	<20	110	<10	24,000	180	<0.2	<40	1,000	<20	<10	19,000	<25	<10	7.8 J																							
	4/3/2012	<200	11 J	<20	110	<4	<5	77,000	<10	<10	<20	35 J	<10	23,000	32	<0.2	<40	900 J	<20	<10	18,000	11 J	<10	<20																							
	10/24/2012	<200	<20	80	<4	<5	76,000	<10	<10	<20	<50	<10	22,000	12	<0.2	<40	1,000	<20	<10	18,000	<25	<10	<20																								
	4/17/2013	<200	<20	<20	110	<4	<5	78,000	<10	<10	<20	370	<10	23,000	130	<0.2	<40	890 J	<20	<10	18,000	<25	<10	<20																							
	11/8/2013	<200	<20	<20	140	<4	<5	78,000	<10	<10	<20	1,600	<10	23,000	440	<0.2	<40	870 J	<20	<10	18,000	<25	<10	<20																							
	4/30/2014	<200	<20	<20	110	<4	<5	81,000	<10	<10	<20	24 J	<10	24,000	11	<0.2	<40	920 J	<20	<10	19,000	<25	<10	<20																							
	10/23/2014	<200	<20	<20	120	<4	<5	78,000	<10	1.2 J	<20	92	4 J	23,000	400	<0.2	<40	1,000	<20	<10	19,000	<25	<10	<20																							
	4/15/2015	<200	<20	<20	110	<4	<5	85,000	<10	<10	<20	58	<10	24,000	46	<0.2	<40	980 J	<20	<10	19,000	<25	<10	<20																							
	11/11/2015	<200	<20	<20	120	<4	<5	85,000	<10	<10	<20	1,000	<10	24,000	360	<0.2	<40	950 J	<20	<10	19,000	<25	<10	<20																							
	4/26/2016	<200	<20	<20	100	<4	<5	83,000	<10	<10	<20	35 J	<10	24,000	30	<0.2	<40	910 J	<20	<10	20,000	<25	<10	<20																							
	10/19/2016	<200	<20	92 J	120	<4	<5	79,000	<10	<10	<20	610	<10	23,000	440	<0.2	<40	980 J	<20	<10	18,000	<25	<10	<20																							
	4/24/2017	<200	<20	<20	100	<4	<5	81,000	<10	<10	<20	<50	<10	22,000	6.2 J	<0.2	<40	1,000	<20	<10	19,000	<25	<10	<20																							
	11/7/2017	<200	<20	<15	140	<2	0.54 J	84,000	<4	<4	<10	130	<10	25,000	160	<0.2	<40	1,000	<25	<6	19,000	<20	<5	1.5 J																							
	6/5/2018	<200	<20	<20	90	<4	<5	81,000	<10	<10	2.7 J	<50	<10	23,000	5.6 J	<0.2	4.3 J	880 J	<20	<10	18,000	<25	<10	<20																							
	12/11/2018	<200	<20	<20	95	<4	<5	82,000	<10	<10	<20	160	<10	24,000	88	<0.2	<40	920 J	<20	<10	18,000	<25	<10	<20																							
	5/30/2019	29 J	<20	<20	86	<4	<5	72,000	<10	<10	<20	47 J	<10	21,000	28	<0.2	<40	840 J	<20	<10	19,000	<25	<10	70																							
	10/17/2019	<200	<20	11 J	130	<4	<5	79,000	<10	<10	1.9 J	790	<10	23,000	340	<0.2	<40	880 J	<20	<10	16,000	<25	<10	1.1 J	<20																						
	6/2/2020	740	<20	8.4 J	140	<4	1.2 J	87,000	3.6 J	<10	5.6 J	1,500	8.8 J	25,000	280 B	<0.2	6.8 J	1,200	<20	<10	18,000	<25	<10	2.5 J	9.2 J																						
	11/5/2020	<200	7.6 J B	<20	120	<4	1.4 J	86,000	<10	<10	<20	760	<10	25,000	160	<0.2	2.1 J	930 J	<20	2 J	20,000	<25	<10	1.3 J																							
	6/30/2021	<200	<20	7 J	100	<4	<5	77,000	<10	<10	<20	35 J	<10	22,000	110	<0.2	<40	810 J	<20	<10	16,000	<25	<10	1.3 J	<20																						
	11/18/2021	39 J	<20	<20	110	<4	<5	84,000	<10	1.2 J B	1.8 J	140	<10	24,000	170	<0.2	<40	970 J	<20	<10	17,000	<25	<10	<20																							
	6/8/2022	<200	<20	<20	92	<4	<5	78,000	<10	<10	<20	<100	<10	22,000	4.3 J	<0.2	<40	830 J	<20	<10	17,000	<25	<10	<20																							
	10/20/2022	<200	<20	<20	100	<4	<5	76,000	<10	<10	<20	95 J	<10	22,000	230	<0.2	<40	1,100 B	<20	<10	17,000	<25	<10	<20																							
	6/1/2023	<200	<20	<15	120	<2	2	94,000	<4	2.1 J	65	<10	27,000	63	<0.2	<40	1,000	<25	<6	21,000	<20	<5	<10																								
MW-24D	4/13/2011	<200	<20	74	<4	<5	63,000	<10	<10	<20	<50	<10	12,000	5.5 J	<0.2	<40	1,600	<20	<10	6,500	<25	<10	<20																								
	10/11/2011	<200	<20	87	<4	<5	73,000	<10	<10	<20	220	<10	13,000	120	<0.2	<40	1,800	<20	<10	6,600	<25	<10	<20																								
	4/3/2012	<200	6 J	<20	85	<4	<5	70,000	<10	<10	<20	<50	<10	14,000	140	<0.2	<40	1,900	<20	<10	7,200	<25	<10	<20																							
	10/24/2012	<200	<20	81	<4	<5	68,000	<10	<10	<20	99	<10	14,000	120	<0.2	<40	1,900	<20	<10	6,600	<25	<10	<20																								
	4/17/2013	<200	<20	85	<4	<5	70,000	<10	<10	<20	<50	<10	14,000	38	<0.2	<40	1,900	<20	<10	7,300	<25	<10	<20																								
	11/8/2013	<200	<20	84	<4	<5	66,000	<10	<10	<20	93	<10	13,000	110	<0.2	5.2 J	1,700	<20	<10	7,200	<25	<10	<20																								
	4/30/2014	<200	<20	83	<4	<5	68,000	<10	<10	<20	<50	<10	14,000	88	<0.2	<40	1,900	<20	<10	7,200	<25	<10	<20																								
	10/23/2014	<200	<20	89	<4	<5	70,000	<10	<10	<20	130	<10	14,000	130	<0.2	<40	2,000	<20	<10	7,500	<25	<10	<20																								
	4/15/2015	<200	<20	81	<4	<5	70,000	<10	<10	<20	<50	<10	14,000	32	&																																

**TABLE 3A**  
**Groundwater and Surface Water Analytical Results**  
**Historic Detections of Dissolved Metals– 2011 through 2023**  
**Dyno-Nobel, Inc. - Port Ewen Facility**

Well ID	Date	GROUNDWATER ANALYTICAL DATA																																													
		Aluminum ( $\mu\text{g/L}$ )		Antimony ( $\mu\text{g/L}$ )		Arsenic ( $\mu\text{g/L}$ )		Barium ( $\mu\text{g/L}$ )		Beryllium ( $\mu\text{g/L}$ )		Cadmium ( $\mu\text{g/L}$ )		Calcium ( $\mu\text{g/L}$ )		Chromium ( $\mu\text{g/L}$ )		Cobalt ( $\mu\text{g/L}$ )		Copper ( $\mu\text{g/L}$ )		Iron ( $\mu\text{g/L}$ )		Lead ( $\mu\text{g/L}$ )		Magnesium ( $\mu\text{g/L}$ )		Manganese ( $\mu\text{g/L}$ )		Mercury ( $\mu\text{g/L}$ )		Nickel ( $\mu\text{g/L}$ )		Potassium ( $\mu\text{g/L}$ )		Selenium ( $\mu\text{g/L}$ )		Silver ( $\mu\text{g/L}$ )		Sodium ( $\mu\text{g/L}$ )		Thallium ( $\mu\text{g/L}$ )		Vanadium ( $\mu\text{g/L}$ )		Zinc ( $\mu\text{g/L}$ )	
		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved																
MW-26D	NYSDEC CLASS GA GW STANDARD	NGV	3	25	1,000	3	5	NGV	50	5	200	300	25	35,000	300	0.7	100	NGV	10	50	20,000	0.5	NGV	2,000																							
	4/13/2011	<200	<20	18J	51	<4	<5	37,000	<10	<10	<20	27J	<10	6,000	<10	<0.2	<40	700 J	<20	<10	17,000	<25	<10	7.3 J																							
	10/11/2011	<200	<20	20	48	<4	<5	40,000	<10	<10	<20	<50	<10	6,100	<10	<0.2	<40	720 J	<20	<10	17,000	<25	<10	6.8 J																							
	4/3/2012	<200	6.2 J	20	52	<4	<5	39,000	<10	<10	<20	<50	<10	6,500	<10	<0.2	<40	740 J	<20	<10	19,000	<25	<10	<20																							
	10/24/2012	<200	<20	20	43	<4	<5	36,000	<10	<10	<20	<50	<10	6,000	<10	<0.2	<40	730 J	<20	<10	17,000	<25	<10	<20																							
	4/17/2013	<200	<20	24	52	<4	<5	41,000	<10	<10	<20	<50	<10	6,800	120	<0.2	<40	710 J	<20	<10	16,000	<25	<10	<20																							
	11/8/2013	<200	<20	20	51	<4	<5	44,000	<10	<10	<20	<50	<10	7,400	160	<0.2	<40	700 J	<20	<10	11,000	<25	<10	<20																							
	4/30/2014	<200	<20	17 J	53	<4	<5	42,000	<10	<10	<20	27 J	<10	7,100	10	<0.2	<40	770 J	<20	<10	13,000	<25	<10	<20																							
	10/23/2014	<200	<20	18 J	51	<4	<5	42,000	<10	<10	<20	<50	<10	7,000	<10	<0.2	<40	730 J	<20	<10	13,000	<25	<10	<20																							
	4/15/2015	<200	<20	23	52	<4	<5	43,000	<10	<10	<20	<50	<10	6,900	<10	<0.2	<40	730 J	<20	<10	11,000	<25	<10	<20																							
	11/11/2015	<200	<20	18 J	51	<4	<5	44,000	<10	<10	<20	<50	<10	7,000	36	<0.2	<40	680 J	<20	<10	11,000	<25	<10	<20																							
	4/26/2016	<200	<20	24	52	<4	<5	45,000	<10	<10	<20	<50	<10	7,400	4.7 J	<0.2	<40	2.9 J	710 J	<20	<10	11,000	<25	<10	<20																						
	10/19/2016	<200	<20	27	49	<4	<5	44,000	<10	<10	<20	<50	<10	7,200	<10	<0.2	<40	760 J	<20	<10	12,000	<25	<10	<20																							
	4/24/2017	<200	<20	26	49	<4	<5	43,000	<10	<10	<20	<50	<10	7,300	<10	<0.2	<40	720 J	<20	<10	11,000	<25	<10	<20																							
	11/7/2017	<200	<20	21	52	<2	<5	43,000	<4	<10	<20	<50	<10	7,300	3	<0.2	<40	660 J	<25	<6	11,000	<20	<5	<10																							
	6/5/2018	<200	<20	28	49	<4	<5	45,000	<10	<10	<20	3.5 J	<50	<10	7,300	7.9 J	<0.2	4.6 J	720 J	<20	<10	11,000	<25	<10	<20																						
	12/12/2018	<200	<20	23	49	<4	<5	48,000	<10	<10	<20	18 J	<10	8,100	2.2 J	<0.2	<40	720 J	<20	<10	11,000	<25	<10	<20																							
	5/30/2019	<200	<20	13 J	47	<4	<5	42,000	<10	<10	<20	<50	<10	7,200	47	<0.2	<40	710 J	<20	<10	10,000	<25	<10	62																							
	10/17/2019	<200	<20	23	60	<4	<5	43,000	<10	<10	<20	3.4 J	<50	<10	6,900	120	<0.2	<40	640 J	<20	<10	8,300	<25	<10	<20																						
	6/23/2020	<200	<20	21	44	<4	<5	43,000	<10	<10	<20	<50	<10	7,100	4.7 J	<0.2	<40	670 J	<20	<10	8,600	<25	<10	11 J	<20																						
	11/5/2020	<200	<20	34	49	<4	<5	45,000	<10	<10	<20	360	<10	7,400	45	<0.2	<40	620 J	<20	<10	9,100	<25	<10	<20																							
	11/18/2021	<200	<20	11 J	52	<4	<5	52,000	<10	<10	<20	4.4 J	<20	9,200	100	<0.2	<40	1,000 J	<20	<10	7,400	<25	<10	<20																							
	6/8/2022	<200	<20	22	57	<4	<5	47,000	<10	<10	<20	<100	<10	7,600	<10	<0.2	<40	860 JB	<20	<10	8,700	<25	<10	<20																							
	10/20/2022	<200	<20	21	54	<4	<5	45,000	<10	<10	<20	14 J	<100	7,400	<10	<0.2	<40	830 JB	<20	<10	8,900	<25	<10	8.9 J																							
	6/1/2023	<200	<20	28	63	<2	<2	53,000	<4	<10	<20	<50	<10	8,400	0.99 J	<0.2	<40	820	<25	<6	10,000	<20	<5	<10																							
MW-26S	4/13/2011	<200	<20	50	<4	<5	70,000	<10	<10	<20	<50	<10	27,000	<10	<0.2	<40	660 J	<20	<10	29,000	<25	<10	<20																								
	10/11/2011	<200	<20	24	<4	<5	66,000	<10	<10	<20	<50	<10	23,000	5.6 J	<0.2	<40	560 J	<20	<10	27,000	<25	<10	<20																								
	4/3/2012	<200	<20	34	<4	<5	58,000	<10	<10	<20	30 J	<10	22,000	9.8 J	<0.2	<40	510 J	<20	<10	28,000	<25	<10	<20																								
	10/24/2012	<200	<20	24	<4	<5	62,000	<10	<10	<20	<50	<10	25,000	<10	<0.2	<40	650 J	<20	<10	25,000	<25	<10	<20																								
	4/17/2013	<200	<20	29	<4	<5	61,000	<10	<10	<20	<50	<10	14,000	24,000	<10	<0.2	<40	510 J	<20	<10	26,000	<25	<10	<20																							
	11/8/2013	<200	<20	33	<4	<5	63,000	<10	<10	<20	<50	<10	25,000	<10	<0.2	<40	4 J	<20	<10	29,000	<25	<10	<20																								
	4/30/2014	<200	<20	34	<4	<5	56,000	<10	<10	<20	<50	<10	22,000	<10	<0.2	<40	530 J	<20	<10	26,000	<25	<10	<20																								
	10/23/2014	<200	<20	20	56	<4	<5	58,000	<10	<10	<20	<50	<10	22,000	91																																

**TABLE 3B**  
**Groundwater and Surface Water Analytical Results Historic**  
**Detections of Total Metals– 2011 through 2023**  
**Dyno-Nobel, Inc. - Port Ewen Facility**

**TABLE 3B**  
**Groundwater and Surface Water Analytical Results**  
**Historic Detections of Total Metals– 2011 through 2023**  
**Dyno-Nobel, Inc. - Port Ewen Facility**

Well ID	Date	Aluminum		Antimony		Arsenic		Barium		Beryllium		Cadmium		Calcium		Chromium		Cobalt		Copper		Iron		Lead		Magnesium		Manganese		Mercury		Nickel		Potassium		Selenium		Silver		Sodium		Thallium		Vanadium		Zinc	
		Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total										
<b>FRACTION</b>		<b>NGV</b>	<b>3</b>	<b>25</b>	<b>1,000</b>	<b>3</b>	<b>5</b>	<b>NGV</b>	<b>50</b>	<b>5</b>	<b>200</b>	<b>300</b>	<b>25</b>	<b>35,000</b>	<b>300</b>	<b>0.7</b>	<b>100</b>	<b>NGV</b>	<b>10</b>	<b>50</b>	<b>20,000</b>	<b>0.5</b>	<b>NGV</b>	<b>2,000</b>																							
MW-165	4/13/2011	< 200	< 20	< 20	120	< 4	< 5	88,000	< 10	2.7 J	160	< 10	25,000	<b>420</b>	< 0.2	< 40	940 J	< 20	< 10	19,000	< 25	< 10	12 J																								
	10/10/2011	< 200	< 20	6.3 J	110	< 4	< 5	88,000	< 10	< 10	180	< 10	23,000	280	< 0.2	< 40	970 J	< 20	< 10	18,000	< 25	< 10	10 J																								
	4/3/2012	< 200	< 20	< 20	110	< 4	< 5	79,000	< 10	< 10	3.3 J	210	< 10	23,000	240	< 0.2	< 40	920 J	< 20	< 10	18,000	< 25	< 10	9.8 J																							
	10/24/2012	< 200	< 20	< 20	110	< 4	< 5	80,000	< 10	< 10	3.3 J	230	< 10	23,000	<b>940</b>	< 0.2	< 40	920 J	< 20	< 10	18,000	< 25	< 10	12 J																							
	4/17/2013	< 200	< 20	< 20	120	< 4	< 5	81,000	< 10	< 10	2.5 J	530	< 10	23,000	<b>320</b>	< 0.2	< 40	890 J	< 20	< 10	19,000	< 25	< 10	< 20																							
	11/8/2013	< 200	< 20	< 20	140	< 4	< 5	80,000	< 10	< 10	1,700	< 10	23,000	<b>500</b>	< 0.2	< 40	860 J	< 20	< 10	17,000	< 25	< 10	< 20																								
	4/30/2014	< 200	< 20	< 20	120	< 4	< 5	81,000	< 10	< 10	150	< 10	23,000	61	< 0.2	< 40	880 J	< 20	< 10	19,000	< 25	< 10	< 20																								
	10/23/2014	< 200	< 20	11 J	230	< 4	2.1 J	86,000	< 10	2 J	6.8 J	<b>3,100</b>	< 10	23,000	<b>1,400</b>	< 0.2	< 40	1,100	< 20	< 10	17,000	< 25	< 10	20																							
	4/15/2015	< 200	< 20	< 20	110	< 4	< 5	86,000	< 10	< 10	260	< 10	24,000	110	< 0.2	< 40	940 J	< 20	< 10	19,000	< 25	< 10	< 20																								
	11/11/2015	< 200	< 20	< 20	110	< 4	< 5	82,000	< 10	< 10	900	< 10	23,000	<b>420</b>	< 0.2	< 40	890 J	< 20	< 10	17,000	< 25	< 10	< 20																								
	4/26/2016	< 200	< 20	< 20	96	< 4	< 5	81,000	< 10	< 10	240	< 10	23,000	71	< 0.2	< 40	940 J	< 20	< 10	<b>20,000</b>	< 25	< 10	< 20																								
	10/19/2016	34 J	< 20	11 J	140	< 4	< 5	87,000	< 10	< 10	20	<b>820</b>	< 10	25,000	<b>630</b>	< 0.2	< 40	1,100	< 20	< 10	<b>20,000</b>	< 25	< 10	< 20																							
	4/24/2017	29 J	< 20	< 20	110	< 4	< 5	90,000	< 10	< 10	290	< 10	24,000	67	< 0.2	< 40	1,200	< 20	< 10	<b>21,000</b>	< 25	< 10	< 20																								
	11/7/2017	490	< 20	5.6 J	110	< 2	1.8 J	66,000	1.4 J	< 4	5.6 J	<b>1,900</b>	9.3 J	18,000	260	< 0.2	2.2 J	890	< 25	< 6	14,000	< 20	< 5	12																							
	6/5/2018	< 200	< 20	< 20	98	< 4	< 5	83,000	< 10	< 10	20	200	< 10	24,000	72	< 0.2	6.4 J	900 J	< 20	< 10	18,000	< 25	< 10	< 20																							
	12/11/2018	36 J	< 20	< 20	97	< 4	< 5	84,000	< 10	< 10	20	270	< 10	24,000	150	< 0.2	< 40	930 J	< 20	< 10	19,000	< 25	< 10	7.9 J																							
	5/30/2019	45 J	< 20	< 20	89	< 4	< 5	72,000	< 10	< 10	3.1 J	200	< 10	21,000	110	< 0.2	< 40	860 J	< 20	< 10	19,000	< 25	< 10	71																							
	10/17/2019	< 200	< 20	9.9 J	130	< 4	< 5	79,000	< 10	< 10	20	<b>880</b>	< 10	24,000	<b>390</b>	< 0.2	< 40	880 J	< 20	< 10	16,000	< 25	< 1.3 J	< 20																							
	6/24/2020	< 200	< 20	< 20	120	< 4	< 5	83,000 B	< 10	< 10	20	100	< 10	24,000	160	< 0.2	< 40	890 J	< 20	< 10	17,000	< 25	< 1.4 J	< 20																							
	11/5/2020	< 200	< 20	< 20	130	< 4	< 5	85,000	< 10	< 10	170 B	< 10	24,000	200	< 0.2	< 40	960 J	< 20	< 10	19,000	< 25	< 1.1 J	< 20																								
	6/30/2021	< 200	< 20	7.6 J	110	< 4	< 5	82,000	< 10	< 10	20	76	< 10	23,000	150	< 0.2	< 40	910 J	< 20	< 10	18,000	< 25	< 1 J	< 20																							
	11/18/2021	< 200	< 20	< 20	100	< 4	< 5	80,000	< 10	1.1 J	20	97	< 10	23,000	160	< 0.2	< 40	960 J	< 20	< 10	16,000	< 25	< 10	< 20																							
	6/8/2022	< 200	< 20	< 20	100	< 4	< 5	79,000	< 10	< 10	20	190	< 10	23,000	67	< 0.2	< 40	880 JB	< 20	< 10	18,000 B	< 25	< 10	< 20																							
	10/20/2022	< 200	< 20	< 20	110	< 4	0.62 J	75,000	< 10	< 10	20	300	< 10	22,000	<b>480</b>	< 0.2	< 40	910 J	< 20	< 10	17,000	< 25	< 10	< 20																							
	6/1/2023	< 200	< 20	< 15	110	< 2	< 4	82,000	< 4	< 4	< 10	200	< 10	24,000	200	< 0.2	< 40	870	< 25	< 6	18,000	< 20	< 5	2.2 J																							
MW-24D	4/13/2011	< 200	< 20	< 20	82	< 4	< 5	71,000	< 10	< 10	20	< 100	< 10	14,000	7.9 J	< 0.2	< 40	1,800	< 20	< 10	7,300	< 25	< 10	< 20																							
	10/11/2011	< 200	< 20	90	< 4	< 5	75,000	< 10	< 10	20	<b>980</b>	< 10	14,000	140	< 0.2	< 40	1,800	< 20	< 10	6,500	< 25	< 10	< 20																								
	4/3/2012	380	< 20	< 20	89	< 4	< 5	69,000	< 10	< 10	2.3 J	<b>1,100</b>	< 10	14,000	200	< 0.2	< 40	1,900	< 20	< 10	1 J	7,200	< 25	< 10	< 20																						
	10/4/2012	< 200	< 20	86	< 4	< 5	69,000	< 10	< 10	20	<b>590</b>	< 10	14,000	170	< 0.2	< 40	1,800	< 20	< 10	6,900	< 25	< 10	< 20																								
	4/17/2013	< 200	< 20	85	< 4	< 5	69,000	< 10	< 10	20	<b>440</b>	< 10	14,000	110	< 0.2	< 40	1,900	< 20	< 10	7,000	< 25	< 10	< 20																								
	11/8/2013	< 200	< 20	84	< 4	< 5	65,000	< 10	< 10	20	160	< 10	13,000	110	< 0.2	< 40	1,600	< 20	< 10	6,300	< 25	< 10	< 20																								
	4/30/2014	< 2																																													



## **Appendix A – Laboratory Analytical Report**

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ed Meeks  
Ashland LLC  
Ashland Hercules Research Center  
500 Hercules Rd Bldg 8145  
Wilmington, Delaware 19808

Generated 7/5/2023 11:23:12 AM

## JOB DESCRIPTION

Hercules Dyno - Port Ewen, NY (EHS)

## JOB NUMBER

480-209410-1

# Eurofins Buffalo

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

## Authorization



Generated  
7/5/2023 11:23:12 AM

Authorized for release by  
Wyatt Watson, Project Management Assistant I  
[Wyatt.Watson@et.eurofinsus.com](mailto:Wyatt.Watson@et.eurofinsus.com)  
Designee for  
John Beninati, Project Manager  
[John.Beninati@et.eurofinsus.com](mailto:John.Beninati@et.eurofinsus.com)  
(716)504-9874

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Client Sample Results . . . . .	11
Surrogate Summary . . . . .	34
QC Sample Results . . . . .	35
QC Association Summary . . . . .	46
Lab Chronicle . . . . .	50
Certification Summary . . . . .	55
Method Summary . . . . .	56
Sample Summary . . . . .	57
Chain of Custody . . . . .	58
Receipt Checklists . . . . .	61

# Definitions/Glossary

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

### 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.
B	Compound was found in the blank and sample.
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 Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

**Job ID: 480-209410-1**

**Laboratory: Eurofins Buffalo**

## Narrative

### Job Narrative 480-209410-1

## Comments

No additional comments.

## Receipt

The samples were received on 6/2/2023 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.7° C.

## GC/MS VOA

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-672295 recovered above the upper control limit for 1,1,1-Trichloroethane, Chlorodibromomethane, Carbon tetrachloride and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted:

MW-25S\_20230601 (480-209410-1), MW-22D\_20230601 (480-209410-2), MW-22R\_20230601 (480-209410-3), MW-21D\_20230601 (480-209410-4), MW-27R\_20230601 (480-209410-5), MW-28R\_20230601 (480-209410-6) and VOC DUP\_20230601 (480-209410-8).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-672295 recovered above the upper control limit for Carbon tetrachloride, Chlorodibromomethane and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: MW-3\_20230531 (480-209410-7).

Method 8260C: The continuing calibration verification (CCV) analyzed in 480-672295 was outside the method criteria for the following analyte: 1,1,1-Trichloroethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated. The associated sample is impacted: MW-3\_20230531 (480-209410-7).

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-3\_20230531 (480-209410-7). Elevated reporting limits (RLs) are provided.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 480-672295 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

## Metals

Method 6010C: The recovery of post spike, (480-209410-A-15-D PDS), associated with batch 480-672499, exhibited a result outside quality control limits for Total Calcium. However, the serial dilution (SD) of this sample was compliant, therefore no corrective action was necessary.

Method 6010C: The method blank for preparation batch 480-672083 and analytical batch 480-673463 contained Dissolved Manganese above the reporting limit (RL). Associated samples MW-16S\_20230601 (480-209410-9), MW-24D\_20230601 (480-209410-10) and SW-1\_20230601 (480-209410-19) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6010C: The method blank for preparation batch 480-672083 contained Dissolved Manganese above the reporting limit (RL). None of the samples MW-26S\_20230601 (480-209410-13), MW-2B\_20230601 (480-209410-14), EQUIPMENT BLANK\_20230531 (480-209410-17) and EQUIPMENT BLANK\_20230601 (480-209410-18) associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 6010C: The recovery of post spike, (480-209410-B-15-D PDS), associated with batch 480-673463, exhibited results outside quality control limits for Dissolved Beryllium, Calcium, and Potassium. However, the serial dilution (SD) of this sample was compliant, therefore no corrective action was necessary.

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

## Detection Summary

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-25S\_20230601**

**Lab Sample ID: 480-209410-1**

No Detections.

**Client Sample ID: MW-22D\_20230601**

**Lab Sample ID: 480-209410-2**

No Detections.

**Client Sample ID: MW-22R\_20230601**

**Lab Sample ID: 480-209410-3**

No Detections.

**Client Sample ID: MW-21D\_20230601**

**Lab Sample ID: 480-209410-4**

No Detections.

**Client Sample ID: MW-27R\_20230601**

**Lab Sample ID: 480-209410-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.2		1.0	0.34	ug/L	1		8260C	Total/NA

**Client Sample ID: MW-28R\_20230601**

**Lab Sample ID: 480-209410-6**

No Detections.

**Client Sample ID: MW-3\_20230531**

**Lab Sample ID: 480-209410-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	7700		1000	820	ug/L	1000		8260C	Total/NA
1,1-Dichloroethene	31000		1000	290	ug/L	1000		8260C	Total/NA
cis-1,2-Dichloroethene	1300		1000	810	ug/L	1000		8260C	Total/NA
Methylene Chloride	850	J	1000	440	ug/L	1000		8260C	Total/NA
Trichloroethene	33000		1000	460	ug/L	1000		8260C	Total/NA

**Client Sample ID: VOC DUP\_20230601**

**Lab Sample ID: 480-209410-8**

No Detections.

**Client Sample ID: MW-16S\_20230601**

**Lab Sample ID: 480-209410-9**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.11		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	82		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.20		0.050	0.019	mg/L	1		6010C	Total/NA
Potassium	0.87		0.50	0.10	mg/L	1		6010C	Total/NA
Magnesium	24		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.20		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	18		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.0022	J	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium	0.12		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium	94		0.50	0.10	mg/L	1		6010C	Dissolved
Copper	0.0021	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Iron	0.065		0.050	0.019	mg/L	1		6010C	Dissolved
Potassium	1.0		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium	27		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese	0.063	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Sodium	21		1.0	0.32	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

# Detection Summary

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

**Client Sample ID: MW-24D\_20230601**

**Lab Sample ID: 480-209410-10**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.097		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	68		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.15		0.050	0.019	mg/L	1		6010C	Total/NA
Potassium	1.8		0.50	0.10	mg/L	1		6010C	Total/NA
Magnesium	13		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.087		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	6.5		1.0	0.32	mg/L	1		6010C	Total/NA
Barium	0.10		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium	74		0.50	0.10	mg/L	1		6010C	Dissolved
Copper	0.0016	J		0.010	mg/L	1		6010C	Dissolved
Iron	0.050		0.050	0.019	mg/L	1		6010C	Dissolved
Potassium	2.1		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium	14		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese	0.091	B		0.0030	0.00040 mg/L	1		6010C	Dissolved
Sodium	7.3		1.0	0.32	mg/L	1		6010C	Dissolved

**Client Sample ID: MW-24S\_20230601**

**Lab Sample ID: 480-209410-11**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.044		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	86		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.16		0.050	0.019	mg/L	1		6010C	Total/NA
Potassium	0.51		0.50	0.10	mg/L	1		6010C	Total/NA
Magnesium	29		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.019		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	14		1.0	0.32	mg/L	1		6010C	Total/NA
Barium	0.045		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium	95		0.50	0.10	mg/L	1		6010C	Dissolved
Copper	0.0024	J		0.010	mg/L	1		6010C	Dissolved
Potassium	0.61		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium	31		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese	0.0033	B		0.0030	0.00040 mg/L	1		6010C	Dissolved
Sodium	16		1.0	0.32	mg/L	1		6010C	Dissolved

**Client Sample ID: MW-26D\_20230601**

**Lab Sample ID: 480-209410-12**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.023		0.015	0.0056	mg/L	1		6010C	Total/NA
Barium	0.059		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	48		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.031	J		0.050	0.019 mg/L	1		6010C	Total/NA
Potassium	0.69		0.50	0.10	mg/L	1		6010C	Total/NA
Magnesium	7.7		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.0087		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	9.0		1.0	0.32	mg/L	1		6010C	Total/NA
Arsenic	0.028		0.015	0.0056	mg/L	1		6010C	Dissolved
Barium	0.063		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium	53		0.50	0.10	mg/L	1		6010C	Dissolved
Potassium	0.82		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium	8.4		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese	0.00099	J B		0.0030	0.00040 mg/L	1		6010C	Dissolved
Sodium	10		1.0	0.32	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

# Detection Summary

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-26S\_20230601**

**Lab Sample ID: 480-209410-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.035		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	58		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.035	J	0.050	0.019	mg/L	1		6010C	Total/NA
Potassium	0.50		0.50	0.10	mg/L	1		6010C	Total/NA
Magnesium	22		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.019		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	22		1.0	0.32	mg/L	1		6010C	Total/NA
Barium	0.033		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium	63		0.50	0.10	mg/L	1		6010C	Dissolved
Potassium	0.56		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium	23		0.20	0.043	mg/L	1		6010C	Dissolved
Sodium	24		1.0	0.32	mg/L	1		6010C	Dissolved

**Client Sample ID: MW-2B\_20230601**

**Lab Sample ID: 480-209410-14**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.034		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	95		0.50	0.10	mg/L	1		6010C	Total/NA
Potassium	0.83		0.50	0.10	mg/L	1		6010C	Total/NA
Magnesium	11		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.0012	J	0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	6.2		1.0	0.32	mg/L	1		6010C	Total/NA
Selenium	0.021	J	0.025	0.0087	mg/L	1		6010C	Total/NA
Barium	0.035		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium	100		0.50	0.10	mg/L	1		6010C	Dissolved
Copper	0.0073	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Potassium	0.96		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium	12		0.20	0.043	mg/L	1		6010C	Dissolved
Sodium	6.8		1.0	0.32	mg/L	1		6010C	Dissolved
Selenium	0.019	J	0.025	0.0087	mg/L	1		6010C	Dissolved

**Client Sample ID: MW-15D\_20230531**

**Lab Sample ID: 480-209410-15**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.13	J	0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.094		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	60		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.25		0.050	0.019	mg/L	1		6010C	Total/NA
Potassium	2.9		0.50	0.10	mg/L	1		6010C	Total/NA
Magnesium	13		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.017		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	6.9		1.0	0.32	mg/L	1		6010C	Total/NA
Selenium	0.41		0.025	0.0087	mg/L	1		6010C	Total/NA
Zinc	0.0017	J	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium	0.086		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium	64		0.50	0.10	mg/L	1		6010C	Dissolved
Potassium	3.2		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium	14		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese	0.0022	J B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Sodium	7.5		1.0	0.32	mg/L	1		6010C	Dissolved
Selenium	0.45		0.025	0.0087	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

# Detection Summary

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MET DUP\_20230531**

**Lab Sample ID: 480-209410-16**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.17	J	0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.098		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	58		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.0018	J	0.0040	0.0010	mg/L	1		6010C	Total/NA
Iron	0.35		0.050	0.019	mg/L	1		6010C	Total/NA
Potassium	2.9		0.50	0.10	mg/L	1		6010C	Total/NA
Magnesium	13		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.020		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	6.9		1.0	0.32	mg/L	1		6010C	Total/NA
Selenium	0.41		0.025	0.0087	mg/L	1		6010C	Total/NA
Zinc	0.0022	J	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium	0.086		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium	64		0.50	0.10	mg/L	1		6010C	Dissolved
Chromium	0.0011	J	0.0040	0.0010	mg/L	1		6010C	Dissolved
Potassium	3.2		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium	13		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese	0.0021	J B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Sodium	7.5		1.0	0.32	mg/L	1		6010C	Dissolved
Selenium	0.43		0.025	0.0087	mg/L	1		6010C	Dissolved

**Client Sample ID: EQUIPMENT BLANK\_20230531**

**Lab Sample ID: 480-209410-17**

No Detections.

**Client Sample ID: EQUIPMENT BLANK \_20230601**

**Lab Sample ID: 480-209410-18**

No Detections.

**Client Sample ID: SW-1\_20230601**

**Lab Sample ID: 480-209410-19**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7.7		0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.21		0.0020	0.00070	mg/L	1		6010C	Total/NA
Beryllium	0.00052	J	0.0020	0.00030	mg/L	1		6010C	Total/NA
Calcium	50		0.50	0.10	mg/L	1		6010C	Total/NA
Cadmium	0.0016	J	0.0020	0.00050	mg/L	1		6010C	Total/NA
Cobalt	0.0075		0.0040	0.00063	mg/L	1		6010C	Total/NA
Chromium	0.0090		0.0040	0.0010	mg/L	1		6010C	Total/NA
Copper	0.93		0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	19		0.050	0.019	mg/L	1		6010C	Total/NA
Potassium	1.3		0.50	0.10	mg/L	1		6010C	Total/NA
Magnesium	6.9		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	3.5		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	12		1.0	0.32	mg/L	1		6010C	Total/NA
Nickel	0.012		0.010	0.0013	mg/L	1		6010C	Total/NA
Lead	0.036		0.010	0.0030	mg/L	1		6010C	Total/NA
Vanadium	0.014		0.0050	0.0015	mg/L	1		6010C	Total/NA
Zinc	0.15		0.010	0.0015	mg/L	1		6010C	Total/NA
Barium	0.063		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium	57		0.50	0.10	mg/L	1		6010C	Dissolved
Copper	0.0066	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Iron	0.042	J	0.050	0.019	mg/L	1		6010C	Dissolved
Potassium	0.57		0.50	0.10	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

## Detection Summary

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: SW-1\_20230601 (Continued)**

**Lab Sample ID: 480-209410-19**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	6.3		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese	0.45	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Sodium	14		1.0	0.32	mg/L	1		6010C	Dissolved
Mercury	0.0095		0.00020	0.000043	mg/L	1		7470A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

**Client Sample ID: MW-25S\_20230601**

**Lab Sample ID: 480-209410-1**

**Matrix: Water**

Date Collected: 06/01/23 16:02

Date Received: 06/02/23 10:00

**Method: SW846 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			06/08/23 15:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 15:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/08/23 15:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/08/23 15:59	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/08/23 15:59	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/08/23 15:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/08/23 15:59	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/08/23 15:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/08/23 15:59	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 15:59	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/08/23 15:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/08/23 15:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/08/23 15:59	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/08/23 15:59	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/08/23 15:59	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/08/23 15:59	1
Acetone	10	U	10	3.0	ug/L			06/08/23 15:59	1
Benzene	1.0	U	1.0	0.41	ug/L			06/08/23 15:59	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/08/23 15:59	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/08/23 15:59	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/08/23 15:59	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/08/23 15:59	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/08/23 15:59	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/08/23 15:59	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/08/23 15:59	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/08/23 15:59	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/08/23 15:59	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/08/23 15:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/08/23 15:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/08/23 15:59	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/08/23 15:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/08/23 15:59	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/08/23 15:59	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/08/23 15:59	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/08/23 15:59	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/08/23 15:59	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/08/23 15:59	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/08/23 15:59	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/08/23 15:59	1
Styrene	1.0	U	1.0	0.73	ug/L			06/08/23 15:59	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/08/23 15:59	1
Toluene	1.0	U	1.0	0.51	ug/L			06/08/23 15:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/08/23 15:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/08/23 15:59	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/08/23 15:59	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/08/23 15:59	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/08/23 15:59	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/08/23 15:59	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

**Client Sample ID: MW-25S\_20230601**

Date Collected: 06/01/23 16:02

Date Received: 06/02/23 10:00

**Lab Sample ID: 480-209410-1**

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		06/08/23 15:59	1
1,2-Dichloroethane-d4 (Surr)	109		77 - 120		06/08/23 15:59	1
4-Bromofluorobenzene (Surr)	109		73 - 120		06/08/23 15:59	1
Dibromofluoromethane (Surr)	112		75 - 123		06/08/23 15:59	1

**Client Sample ID: MW-22D\_20230601**

Date Collected: 06/01/23 14:50

Date Received: 06/02/23 10:00

**Lab Sample ID: 480-209410-2**

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			06/08/23 16:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 16:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/08/23 16:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/08/23 16:22	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/08/23 16:22	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/08/23 16:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/08/23 16:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/08/23 16:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/08/23 16:22	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 16:22	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/08/23 16:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/08/23 16:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/08/23 16:22	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/08/23 16:22	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/08/23 16:22	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/08/23 16:22	1
Acetone	10	U	10	3.0	ug/L			06/08/23 16:22	1
Benzene	1.0	U	1.0	0.41	ug/L			06/08/23 16:22	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/08/23 16:22	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/08/23 16:22	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/08/23 16:22	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/08/23 16:22	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/08/23 16:22	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/08/23 16:22	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/08/23 16:22	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/08/23 16:22	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/08/23 16:22	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/08/23 16:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/08/23 16:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/08/23 16:22	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/08/23 16:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/08/23 16:22	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/08/23 16:22	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/08/23 16:22	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/08/23 16:22	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/08/23 16:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/08/23 16:22	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/08/23 16:22	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/08/23 16:22	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

**Client Sample ID: MW-22D\_20230601**

**Lab Sample ID: 480-209410-2**

**Matrix: Water**

Date Collected: 06/01/23 14:50

Date Received: 06/02/23 10:00

## Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0	0.73	ug/L			06/08/23 16:22	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/08/23 16:22	1
Toluene	1.0	U	1.0	0.51	ug/L			06/08/23 16:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/08/23 16:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/08/23 16:22	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/08/23 16:22	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/08/23 16:22	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/08/23 16:22	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/08/23 16:22	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Toluene-d8 (Surr)		98		80 - 120				06/08/23 16:22	1
1,2-Dichloroethane-d4 (Surr)		105		77 - 120				06/08/23 16:22	1
4-Bromofluorobenzene (Surr)		106		73 - 120				06/08/23 16:22	1
Dibromofluoromethane (Surr)		119		75 - 123				06/08/23 16:22	1

**Client Sample ID: MW-22R\_20230601**

**Lab Sample ID: 480-209410-3**

**Matrix: Water**

Date Collected: 06/01/23 13:42

Date Received: 06/02/23 10:00

## Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U F1	1.0	0.82	ug/L			06/08/23 16:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 16:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/08/23 16:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/08/23 16:44	1
1,1-Dichloroethane	1.0	U F1	1.0	0.38	ug/L			06/08/23 16:44	1
1,1-Dichloroethene	1.0	U F1	1.0	0.29	ug/L			06/08/23 16:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/08/23 16:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/08/23 16:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/08/23 16:44	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 16:44	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/08/23 16:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/08/23 16:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/08/23 16:44	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/08/23 16:44	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/08/23 16:44	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/08/23 16:44	1
Acetone	10	U F1	10	3.0	ug/L			06/08/23 16:44	1
Benzene	1.0	U	1.0	0.41	ug/L			06/08/23 16:44	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/08/23 16:44	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/08/23 16:44	1
Bromomethane	1.0	U F1	1.0	0.69	ug/L			06/08/23 16:44	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/08/23 16:44	1
Carbon tetrachloride	1.0	U F1	1.0	0.27	ug/L			06/08/23 16:44	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/08/23 16:44	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/08/23 16:44	1
Chloroethane	1.0	U F1	1.0	0.32	ug/L			06/08/23 16:44	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/08/23 16:44	1
Chloromethane	1.0	U F1	1.0	0.35	ug/L			06/08/23 16:44	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-22R\_20230601****Lab Sample ID: 480-209410-3**

Matrix: Water

Date Collected: 06/01/23 13:42

Date Received: 06/02/23 10:00

**Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/08/23 16:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/08/23 16:44	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/08/23 16:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/08/23 16:44	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/08/23 16:44	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/08/23 16:44	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/08/23 16:44	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/08/23 16:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/08/23 16:44	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/08/23 16:44	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/08/23 16:44	1
Styrene	1.0	U	1.0	0.73	ug/L			06/08/23 16:44	1
Tetrachloroethene	1.0	U F1	1.0	0.36	ug/L			06/08/23 16:44	1
Toluene	1.0	U	1.0	0.51	ug/L			06/08/23 16:44	1
trans-1,2-Dichloroethene	1.0	U F1	1.0	0.90	ug/L			06/08/23 16:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/08/23 16:44	1
Trichloroethene	1.0	U F1	1.0	0.46	ug/L			06/08/23 16:44	1
Trichlorofluoromethane	1.0	U F1	1.0	0.88	ug/L			06/08/23 16:44	1
Vinyl chloride	1.0	U F1	1.0	0.90	ug/L			06/08/23 16:44	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/08/23 16:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
Toluene-d8 (Surr)	99		80 - 120				06/08/23 16:44	1	
1,2-Dichloroethane-d4 (Surr)	108		77 - 120				06/08/23 16:44	1	
4-Bromofluorobenzene (Surr)	110		73 - 120				06/08/23 16:44	1	
Dibromofluoromethane (Surr)	118		75 - 123				06/08/23 16:44	1	

**Client Sample ID: MW-21D\_20230601****Lab Sample ID: 480-209410-4**

Matrix: Water

Date Collected: 06/01/23 12:11

Date Received: 06/02/23 10:00

**Method: SW846 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			06/08/23 17:07	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 17:07	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/08/23 17:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/08/23 17:07	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/08/23 17:07	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/08/23 17:07	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/08/23 17:07	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/08/23 17:07	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/08/23 17:07	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 17:07	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/08/23 17:07	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/08/23 17:07	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/08/23 17:07	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/08/23 17:07	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/08/23 17:07	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/08/23 17:07	1
Acetone	10	U	10	3.0	ug/L			06/08/23 17:07	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-21D\_20230601**

**Lab Sample ID: 480-209410-4**

Matrix: Water

Date Collected: 06/01/23 12:11

Date Received: 06/02/23 10:00

**Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			06/08/23 17:07	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/08/23 17:07	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/08/23 17:07	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/08/23 17:07	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/08/23 17:07	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/08/23 17:07	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/08/23 17:07	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/08/23 17:07	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/08/23 17:07	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/08/23 17:07	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/08/23 17:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/08/23 17:07	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/08/23 17:07	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/08/23 17:07	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/08/23 17:07	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/08/23 17:07	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/08/23 17:07	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/08/23 17:07	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/08/23 17:07	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/08/23 17:07	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/08/23 17:07	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/08/23 17:07	1
Styrene	1.0	U	1.0	0.73	ug/L			06/08/23 17:07	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/08/23 17:07	1
Toluene	1.0	U	1.0	0.51	ug/L			06/08/23 17:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/08/23 17:07	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/08/23 17:07	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/08/23 17:07	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/08/23 17:07	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/08/23 17:07	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/08/23 17:07	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
Toluene-d8 (Surr)	100		80 - 120				06/08/23 17:07	1	
1,2-Dichloroethane-d4 (Surr)	108		77 - 120				06/08/23 17:07	1	
4-Bromofluorobenzene (Surr)	109		73 - 120				06/08/23 17:07	1	
Dibromofluoromethane (Surr)	109		75 - 123				06/08/23 17:07	1	

**Client Sample ID: MW-27R\_20230601**

**Lab Sample ID: 480-209410-5**

Matrix: Water

Date Collected: 06/01/23 10:55

Date Received: 06/02/23 10:00

**Method: SW846 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			06/08/23 17:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 17:29	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/08/23 17:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/08/23 17:29	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/08/23 17:29	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/08/23 17:29	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

**Client Sample ID: MW-27R\_20230601**

**Lab Sample ID: 480-209410-5**

**Matrix: Water**

Date Collected: 06/01/23 10:55

Date Received: 06/02/23 10:00

## Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/08/23 17:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/08/23 17:29	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/08/23 17:29	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 17:29	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/08/23 17:29	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/08/23 17:29	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/08/23 17:29	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/08/23 17:29	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/08/23 17:29	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/08/23 17:29	1
Acetone	10	U	10	3.0	ug/L			06/08/23 17:29	1
Benzene	1.0	U	1.0	0.41	ug/L			06/08/23 17:29	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/08/23 17:29	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/08/23 17:29	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/08/23 17:29	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/08/23 17:29	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/08/23 17:29	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/08/23 17:29	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/08/23 17:29	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/08/23 17:29	1
<b>Chloroform</b>	<b>2.2</b>		1.0	0.34	ug/L			06/08/23 17:29	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/08/23 17:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/08/23 17:29	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/08/23 17:29	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/08/23 17:29	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/08/23 17:29	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/08/23 17:29	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/08/23 17:29	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/08/23 17:29	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/08/23 17:29	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/08/23 17:29	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/08/23 17:29	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/08/23 17:29	1
Styrene	1.0	U	1.0	0.73	ug/L			06/08/23 17:29	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/08/23 17:29	1
Toluene	1.0	U	1.0	0.51	ug/L			06/08/23 17:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/08/23 17:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/08/23 17:29	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/08/23 17:29	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/08/23 17:29	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/08/23 17:29	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/08/23 17:29	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
Toluene-d8 (Surr)	101		80 - 120						
1,2-Dichloroethane-d4 (Surr)	110		77 - 120						
4-Bromofluorobenzene (Surr)	108		73 - 120						
Dibromofluoromethane (Surr)	112		75 - 123						

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

**Client Sample ID: MW-28R\_20230601**

**Lab Sample ID: 480-209410-6**

**Matrix: Water**

Date Collected: 06/01/23 10:01

Date Received: 06/02/23 10:00

## Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			06/08/23 17:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 17:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/08/23 17:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/08/23 17:52	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/08/23 17:52	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/08/23 17:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/08/23 17:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/08/23 17:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/08/23 17:52	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 17:52	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/08/23 17:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/08/23 17:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/08/23 17:52	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/08/23 17:52	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/08/23 17:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/08/23 17:52	1
Acetone	10	U	10	3.0	ug/L			06/08/23 17:52	1
Benzene	1.0	U	1.0	0.41	ug/L			06/08/23 17:52	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/08/23 17:52	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/08/23 17:52	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/08/23 17:52	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/08/23 17:52	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/08/23 17:52	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/08/23 17:52	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/08/23 17:52	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/08/23 17:52	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/08/23 17:52	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/08/23 17:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/08/23 17:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/08/23 17:52	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/08/23 17:52	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/08/23 17:52	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/08/23 17:52	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/08/23 17:52	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/08/23 17:52	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/08/23 17:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/08/23 17:52	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/08/23 17:52	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/08/23 17:52	1
Styrene	1.0	U	1.0	0.73	ug/L			06/08/23 17:52	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/08/23 17:52	1
Toluene	1.0	U	1.0	0.51	ug/L			06/08/23 17:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/08/23 17:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/08/23 17:52	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/08/23 17:52	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/08/23 17:52	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/08/23 17:52	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/08/23 17:52	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

**Client Sample ID: MW-28R\_20230601**

Date Collected: 06/01/23 10:01

Date Received: 06/02/23 10:00

**Lab Sample ID: 480-209410-6**

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	96		80 - 120
1,2-Dichloroethane-d4 (Surr)	109		77 - 120
4-Bromofluorobenzene (Surr)	107		73 - 120
Dibromofluoromethane (Surr)	115		75 - 123

**Prepared**

06/08/23 17:52

1

06/08/23 17:52

1

06/08/23 17:52

1

06/08/23 17:52

1

**Client Sample ID: MW-3\_20230531**

Date Collected: 05/31/23 16:27

Date Received: 06/02/23 10:00

**Lab Sample ID: 480-209410-7**

Matrix: Water

**Method: SW846 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,1,1-Trichloroethane</b>	<b>7700</b>		1000	820	ug/L			06/08/23 18:14	1000
1,1,2,2-Tetrachloroethane	1000	U	1000	210	ug/L			06/08/23 18:14	1000
1,1,2-Trichloroethane	1000	U	1000	230	ug/L			06/08/23 18:14	1000
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	U	1000	310	ug/L			06/08/23 18:14	1000
1,1-Dichloroethane	1000	U	1000	380	ug/L			06/08/23 18:14	1000
<b>1,1-Dichloroethene</b>	<b>31000</b>		1000	290	ug/L			06/08/23 18:14	1000
1,2,4-Trichlorobenzene	1000	U	1000	410	ug/L			06/08/23 18:14	1000
1,2-Dibromo-3-Chloropropane	1000	U	1000	390	ug/L			06/08/23 18:14	1000
1,2-Dichlorobenzene	1000	U	1000	790	ug/L			06/08/23 18:14	1000
1,2-Dichloroethane	1000	U	1000	210	ug/L			06/08/23 18:14	1000
1,2-Dichloropropane	1000	U	1000	720	ug/L			06/08/23 18:14	1000
1,3-Dichlorobenzene	1000	U	1000	780	ug/L			06/08/23 18:14	1000
1,4-Dichlorobenzene	1000	U	1000	840	ug/L			06/08/23 18:14	1000
2-Butanone (MEK)	10000	U	10000	1300	ug/L			06/08/23 18:14	1000
2-Hexanone	5000	U	5000	1200	ug/L			06/08/23 18:14	1000
4-Methyl-2-pentanone (MIBK)	5000	U	5000	2100	ug/L			06/08/23 18:14	1000
Acetone	10000	U	10000	3000	ug/L			06/08/23 18:14	1000
Benzene	1000	U	1000	410	ug/L			06/08/23 18:14	1000
Bromodichloromethane	1000	U	1000	390	ug/L			06/08/23 18:14	1000
Bromoform	1000	U	1000	260	ug/L			06/08/23 18:14	1000
Bromomethane	1000	U	1000	690	ug/L			06/08/23 18:14	1000
Carbon disulfide	1000	U	1000	190	ug/L			06/08/23 18:14	1000
Carbon tetrachloride	1000	U	1000	270	ug/L			06/08/23 18:14	1000
Chlorobenzene	1000	U	1000	750	ug/L			06/08/23 18:14	1000
Dibromochloromethane	1000	U	1000	320	ug/L			06/08/23 18:14	1000
Chloroethane	1000	U	1000	320	ug/L			06/08/23 18:14	1000
Chloroform	1000	U	1000	340	ug/L			06/08/23 18:14	1000
Chloromethane	1000	U	1000	350	ug/L			06/08/23 18:14	1000
<b>cis-1,2-Dichloroethene</b>	<b>1300</b>		1000	810	ug/L			06/08/23 18:14	1000
cis-1,3-Dichloropropene	1000	U	1000	360	ug/L			06/08/23 18:14	1000
Cyclohexane	1000	U	1000	180	ug/L			06/08/23 18:14	1000
Dichlorodifluoromethane	1000	U	1000	680	ug/L			06/08/23 18:14	1000
Ethylbenzene	1000	U	1000	740	ug/L			06/08/23 18:14	1000
1,2-Dibromoethane	1000	U	1000	730	ug/L			06/08/23 18:14	1000
Isopropylbenzene	1000	U	1000	790	ug/L			06/08/23 18:14	1000
Methyl acetate	2500	U	2500	1300	ug/L			06/08/23 18:14	1000
Methyl tert-butyl ether	1000	U	1000	160	ug/L			06/08/23 18:14	1000
Methylcyclohexane	1000	U	1000	160	ug/L			06/08/23 18:14	1000
<b>Methylene Chloride</b>	<b>850</b>	<b>J</b>	1000	440	ug/L			06/08/23 18:14	1000

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-3\_20230531**

**Lab Sample ID: 480-209410-7**

Matrix: Water

Date Collected: 05/31/23 16:27

Date Received: 06/02/23 10:00

## Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1000	U	1000	730	ug/L			06/08/23 18:14	1000
Tetrachloroethene	1000	U	1000	360	ug/L			06/08/23 18:14	1000
Toluene	1000	U	1000	510	ug/L			06/08/23 18:14	1000
trans-1,2-Dichloroethene	1000	U	1000	900	ug/L			06/08/23 18:14	1000
trans-1,3-Dichloropropene	1000	U	1000	370	ug/L			06/08/23 18:14	1000
<b>Trichloroethene</b>	<b>33000</b>		1000	460	ug/L			06/08/23 18:14	1000
Trichlorofluoromethane	1000	U	1000	880	ug/L			06/08/23 18:14	1000
Vinyl chloride	1000	U	1000	900	ug/L			06/08/23 18:14	1000
Xylenes, Total	2000	U	2000	660	ug/L			06/08/23 18:14	1000
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120					06/08/23 18:14	1000
1,2-Dichloroethane-d4 (Surr)	111		77 - 120					06/08/23 18:14	1000
4-Bromofluorobenzene (Surr)	108		73 - 120					06/08/23 18:14	1000
Dibromofluoromethane (Surr)	117		75 - 123					06/08/23 18:14	1000

**Client Sample ID: VOC DUP\_20230601**

**Lab Sample ID: 480-209410-8**

Matrix: Water

Date Collected: 06/01/23 00:00

Date Received: 06/02/23 10:00

## Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			06/08/23 18:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 18:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/08/23 18:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/08/23 18:36	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/08/23 18:36	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/08/23 18:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/08/23 18:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/08/23 18:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/08/23 18:36	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 18:36	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/08/23 18:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/08/23 18:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/08/23 18:36	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/08/23 18:36	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/08/23 18:36	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/08/23 18:36	1
Acetone	10	U	10	3.0	ug/L			06/08/23 18:36	1
Benzene	1.0	U	1.0	0.41	ug/L			06/08/23 18:36	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/08/23 18:36	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/08/23 18:36	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/08/23 18:36	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/08/23 18:36	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/08/23 18:36	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/08/23 18:36	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/08/23 18:36	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/08/23 18:36	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/08/23 18:36	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/08/23 18:36	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: VOC DUP\_20230601**

**Lab Sample ID: 480-209410-8**

**Matrix: Water**

Date Collected: 06/01/23 00:00

Date Received: 06/02/23 10:00

## Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/08/23 18:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/08/23 18:36	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/08/23 18:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/08/23 18:36	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/08/23 18:36	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/08/23 18:36	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/08/23 18:36	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/08/23 18:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/08/23 18:36	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/08/23 18:36	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/08/23 18:36	1
Styrene	1.0	U	1.0	0.73	ug/L			06/08/23 18:36	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/08/23 18:36	1
Toluene	1.0	U	1.0	0.51	ug/L			06/08/23 18:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/08/23 18:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/08/23 18:36	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/08/23 18:36	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/08/23 18:36	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/08/23 18:36	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/08/23 18:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Toluene-d8 (Surr)	99		80 - 120					06/08/23 18:36	1
1,2-Dichloroethane-d4 (Surr)	114		77 - 120					06/08/23 18:36	1
4-Bromofluorobenzene (Surr)	108		73 - 120					06/08/23 18:36	1
Dibromofluoromethane (Surr)	117		75 - 123					06/08/23 18:36	1

**Client Sample ID: MW-16S\_20230601**

**Lab Sample ID: 480-209410-9**

**Matrix: Water**

Date Collected: 06/01/23 16:19

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/06/23 08:14	06/09/23 04:58	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/06/23 08:14	06/09/23 04:58	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/06/23 08:14	06/09/23 04:58	1
<b>Barium</b>	<b>0.11</b>		0.0020	0.00070	mg/L		06/06/23 08:14	06/09/23 04:58	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/06/23 08:14	06/09/23 04:58	1
<b>Calcium</b>	<b>82</b>		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 04:58	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/06/23 08:14	06/09/23 04:58	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/06/23 08:14	06/09/23 04:58	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/06/23 08:14	06/09/23 04:58	1
Copper	0.010	U	0.010	0.0016	mg/L		06/06/23 08:14	06/09/23 04:58	1
<b>Iron</b>	<b>0.20</b>		0.050	0.019	mg/L		06/06/23 08:14	06/09/23 04:58	1
<b>Potassium</b>	<b>0.87</b>		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 04:58	1
<b>Magnesium</b>	<b>24</b>		0.20	0.043	mg/L		06/06/23 08:14	06/09/23 04:58	1
<b>Manganese</b>	<b>0.20</b>		0.0030	0.00040	mg/L		06/06/23 08:14	06/09/23 04:58	1
<b>Sodium</b>	<b>18</b>		1.0	0.32	mg/L		06/06/23 08:14	06/09/23 04:58	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/06/23 08:14	06/09/23 04:58	1
Lead	0.010	U	0.010	0.0030	mg/L		06/06/23 08:14	06/09/23 04:58	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-16S\_20230601**

**Lab Sample ID: 480-209410-9**

Matrix: Water

Date Collected: 06/01/23 16:19

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.020	U	0.020	0.0068	mg/L		06/06/23 08:14	06/09/23 04:58	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/06/23 08:14	06/09/23 04:58	1
Thallium	0.020	U	0.020	0.010	mg/L		06/06/23 08:14	06/09/23 04:58	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/06/23 08:14	06/09/23 04:58	1
<b>Zinc</b>	<b>0.0022</b>	<b>J</b>	0.010	0.0015	mg/L		06/06/23 08:14	06/09/23 04:58	1

## Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/07/23 08:18	06/16/23 20:54	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/07/23 08:18	06/16/23 20:54	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/07/23 08:18	06/16/23 20:54	1
<b>Barium</b>	<b>0.12</b>		0.0020	0.00070	mg/L		06/07/23 08:18	06/16/23 20:54	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/07/23 08:18	06/16/23 20:54	1
<b>Calcium</b>	<b>94</b>		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 20:54	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/07/23 08:18	06/16/23 20:54	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/07/23 08:18	06/16/23 20:54	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/07/23 08:18	06/16/23 20:54	1
<b>Copper</b>	<b>0.0021</b>	<b>J</b>	0.010	0.0016	mg/L		06/07/23 08:18	06/16/23 20:54	1
Iron	<b>0.065</b>		0.050	0.019	mg/L		06/07/23 08:18	06/16/23 20:54	1
<b>Potassium</b>	<b>1.0</b>		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 20:54	1
<b>Magnesium</b>	<b>27</b>		0.20	0.043	mg/L		06/07/23 08:18	06/16/23 20:54	1
<b>Manganese</b>	<b>0.063</b>	<b>B</b>	0.0030	0.00040	mg/L		06/07/23 08:18	06/16/23 20:54	1
<b>Sodium</b>	<b>21</b>		1.0	0.32	mg/L		06/07/23 08:18	06/16/23 20:54	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/07/23 08:18	06/16/23 20:54	1
Lead	0.010	U	0.010	0.0030	mg/L		06/07/23 08:18	06/16/23 20:54	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/07/23 08:18	06/16/23 20:54	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/07/23 08:18	06/16/23 20:54	1
Thallium	0.020	U	0.020	0.010	mg/L		06/07/23 08:18	06/16/23 20:54	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/07/23 08:18	06/16/23 20:54	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/07/23 08:18	06/16/23 20:54	1

## Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 15:42	1

## Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:06	1

**Client Sample ID: MW-24D\_20230601**

**Lab Sample ID: 480-209410-10**

Matrix: Water

Date Collected: 06/01/23 14:11

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/06/23 08:14	06/09/23 05:02	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/06/23 08:14	06/09/23 05:02	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/06/23 08:14	06/09/23 05:02	1
<b>Barium</b>	<b>0.097</b>		0.0020	0.00070	mg/L		06/06/23 08:14	06/09/23 05:02	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/06/23 08:14	06/09/23 05:02	1
<b>Calcium</b>	<b>68</b>		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:02	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-24D\_20230601**

**Lab Sample ID: 480-209410-10**

**Matrix: Water**

Date Collected: 06/01/23 14:11

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/06/23 08:14	06/09/23 05:02	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/06/23 08:14	06/09/23 05:02	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/06/23 08:14	06/09/23 05:02	1
Copper	0.010	U	0.010	0.0016	mg/L		06/06/23 08:14	06/09/23 05:02	1
Iron	0.15		0.050	0.019	mg/L		06/06/23 08:14	06/09/23 05:02	1
Potassium	1.8		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:02	1
Magnesium	13		0.20	0.043	mg/L		06/06/23 08:14	06/09/23 05:02	1
Manganese	0.087		0.0030	0.00040	mg/L		06/06/23 08:14	06/09/23 05:02	1
Sodium	6.5		1.0	0.32	mg/L		06/06/23 08:14	06/09/23 05:02	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/06/23 08:14	06/09/23 05:02	1
Lead	0.010	U	0.010	0.0030	mg/L		06/06/23 08:14	06/09/23 05:02	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/06/23 08:14	06/09/23 05:02	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/06/23 08:14	06/09/23 05:02	1
Thallium	0.020	U	0.020	0.010	mg/L		06/06/23 08:14	06/09/23 05:02	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/06/23 08:14	06/09/23 05:02	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/06/23 08:14	06/09/23 05:02	1

## Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/07/23 08:18	06/16/23 20:58	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/07/23 08:18	06/16/23 20:58	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/07/23 08:18	06/16/23 20:58	1
Barium	0.10		0.0020	0.00070	mg/L		06/07/23 08:18	06/16/23 20:58	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/07/23 08:18	06/16/23 20:58	1
Calcium	74		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 20:58	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/07/23 08:18	06/16/23 20:58	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/07/23 08:18	06/16/23 20:58	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/07/23 08:18	06/16/23 20:58	1
Copper	0.0016	J	0.010	0.0016	mg/L		06/07/23 08:18	06/16/23 20:58	1
Iron	0.050		0.050	0.019	mg/L		06/07/23 08:18	06/16/23 20:58	1
Potassium	2.1		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 20:58	1
Magnesium	14		0.20	0.043	mg/L		06/07/23 08:18	06/16/23 20:58	1
Manganese	0.091	B	0.0030	0.00040	mg/L		06/07/23 08:18	06/16/23 20:58	1
Sodium	7.3		1.0	0.32	mg/L		06/07/23 08:18	06/16/23 20:58	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/07/23 08:18	06/16/23 20:58	1
Lead	0.010	U	0.010	0.0030	mg/L		06/07/23 08:18	06/16/23 20:58	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/07/23 08:18	06/16/23 20:58	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/07/23 08:18	06/16/23 20:58	1
Thallium	0.020	U	0.020	0.010	mg/L		06/07/23 08:18	06/16/23 20:58	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/07/23 08:18	06/16/23 20:58	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/07/23 08:18	06/16/23 20:58	1

## Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 15:44	1

## Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:07	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

**Client Sample ID: MW-24S\_20230601**

**Lab Sample ID: 480-209410-11**

**Matrix: Water**

Date Collected: 06/01/23 13:19

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/06/23 08:14	06/09/23 05:06	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/06/23 08:14	06/09/23 05:06	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/06/23 08:14	06/09/23 05:06	1
<b>Barium</b>	<b>0.044</b>		0.0020	0.00070	mg/L		06/06/23 08:14	06/09/23 05:06	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/06/23 08:14	06/09/23 05:06	1
<b>Calcium</b>	<b>86</b>		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:06	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/06/23 08:14	06/09/23 05:06	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/06/23 08:14	06/09/23 05:06	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/06/23 08:14	06/09/23 05:06	1
Copper	0.010	U	0.010	0.0016	mg/L		06/06/23 08:14	06/09/23 05:06	1
<b>Iron</b>	<b>0.16</b>		0.050	0.019	mg/L		06/06/23 08:14	06/09/23 05:06	1
<b>Potassium</b>	<b>0.51</b>		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:06	1
<b>Magnesium</b>	<b>29</b>		0.20	0.043	mg/L		06/06/23 08:14	06/09/23 05:06	1
<b>Manganese</b>	<b>0.019</b>		0.0030	0.00040	mg/L		06/06/23 08:14	06/09/23 05:06	1
<b>Sodium</b>	<b>14</b>		1.0	0.32	mg/L		06/06/23 08:14	06/09/23 05:06	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/06/23 08:14	06/09/23 05:06	1
Lead	0.010	U	0.010	0.0030	mg/L		06/06/23 08:14	06/09/23 05:06	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/06/23 08:14	06/09/23 05:06	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/06/23 08:14	06/09/23 05:06	1
Thallium	0.020	U	0.020	0.010	mg/L		06/06/23 08:14	06/09/23 05:06	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/06/23 08:14	06/09/23 05:06	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/06/23 08:14	06/09/23 05:06	1

## Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/07/23 08:18	06/16/23 21:02	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/07/23 08:18	06/16/23 21:02	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/07/23 08:18	06/16/23 21:02	1
<b>Barium</b>	<b>0.045</b>		0.0020	0.00070	mg/L		06/07/23 08:18	06/16/23 21:02	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/07/23 08:18	06/16/23 21:02	1
<b>Calcium</b>	<b>95</b>		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:02	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/07/23 08:18	06/16/23 21:02	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/07/23 08:18	06/16/23 21:02	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/07/23 08:18	06/16/23 21:02	1
<b>Copper</b>	<b>0.0024 J</b>		0.010	0.0016	mg/L		06/07/23 08:18	06/16/23 21:02	1
Iron	0.050	U	0.050	0.019	mg/L		06/07/23 08:18	06/16/23 21:02	1
<b>Potassium</b>	<b>0.61</b>		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:02	1
<b>Magnesium</b>	<b>31</b>		0.20	0.043	mg/L		06/07/23 08:18	06/16/23 21:02	1
<b>Manganese</b>	<b>0.0033 B</b>		0.0030	0.00040	mg/L		06/22/23 12:07	06/23/23 19:39	1
<b>Sodium</b>	<b>16</b>		1.0	0.32	mg/L		06/07/23 08:18	06/16/23 21:02	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/07/23 08:18	06/16/23 21:02	1
Lead	0.010	U	0.010	0.0030	mg/L		06/07/23 08:18	06/16/23 21:02	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/07/23 08:18	06/16/23 21:02	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/07/23 08:18	06/16/23 21:02	1
Thallium	0.020	U	0.020	0.010	mg/L		06/07/23 08:18	06/16/23 21:02	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/07/23 08:18	06/16/23 21:02	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/07/23 08:18	06/16/23 21:02	1

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-24S\_20230601**

**Lab Sample ID: 480-209410-11**

Matrix: Water

Date Collected: 06/01/23 13:19

Date Received: 06/02/23 10:00

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L	D	06/05/23 11:04	06/05/23 15:45	1

**Method: SW846 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L	D	06/05/23 11:04	06/05/23 16:08	1

**Client Sample ID: MW-26D\_20230601**

**Lab Sample ID: 480-209410-12**

Matrix: Water

Date Collected: 06/01/23 12:05

Date Received: 06/02/23 10:00

**Method: SW846 6010C - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Aluminum	0.20	U	0.20	0.060	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
<b>Arsenic</b>	<b>0.023</b>		0.015	0.0056	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
<b>Barium</b>	<b>0.059</b>		0.0020	0.00070	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
<b>Calcium</b>	<b>48</b>		0.50	0.10	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Chromium	0.0040	U	0.0040	0.0010	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Copper	0.010	U	0.010	0.0016	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
<b>Iron</b>	<b>0.031 J</b>		0.050	0.019	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
<b>Potassium</b>	<b>0.69</b>		0.50	0.10	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
<b>Magnesium</b>	<b>7.7</b>		0.20	0.043	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
<b>Manganese</b>	<b>0.0087</b>		0.0030	0.00040	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
<b>Sodium</b>	<b>9.0</b>		1.0	0.32	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Nickel	0.010	U	0.010	0.0013	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Lead	0.010	U	0.010	0.0030	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Antimony	0.020	U	0.020	0.0068	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Selenium	0.025	U	0.025	0.0087	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Thallium	0.020	U	0.020	0.010	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L	D	06/06/23 08:14	06/09/23 05:10	1
Zinc	0.010	U	0.010	0.0015	mg/L	D	06/06/23 08:14	06/09/23 05:10	1

**Method: SW846 6010C - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
Aluminum	0.20	U	0.20	0.060	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
<b>Arsenic</b>	<b>0.028</b>		0.015	0.0056	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
<b>Barium</b>	<b>0.063</b>		0.0020	0.00070	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
<b>Calcium</b>	<b>53</b>		0.50	0.10	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
Chromium	0.0040	U	0.0040	0.0010	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
Copper	0.010	U	0.010	0.0016	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
Iron	0.050	U	0.050	0.019	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
<b>Potassium</b>	<b>0.82</b>		0.50	0.10	mg/L	D	06/07/23 08:18	06/16/23 21:06	1
<b>Magnesium</b>	<b>8.4</b>		0.20	0.043	mg/L	D	06/07/23 08:18	06/16/23 21:06	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-26D\_20230601**

**Lab Sample ID: 480-209410-12**

Matrix: Water

Date Collected: 06/01/23 12:05

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.00099	J B	0.0030	0.00040	mg/L		06/22/23 12:07	06/23/23 19:43	1
Sodium	10		1.0	0.32	mg/L		06/07/23 08:18	06/16/23 21:06	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/07/23 08:18	06/16/23 21:06	1
Lead	0.010	U	0.010	0.0030	mg/L		06/07/23 08:18	06/16/23 21:06	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/07/23 08:18	06/16/23 21:06	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/07/23 08:18	06/16/23 21:06	1
Thallium	0.020	U	0.020	0.010	mg/L		06/07/23 08:18	06/16/23 21:06	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/07/23 08:18	06/16/23 21:06	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/07/23 08:18	06/16/23 21:06	1

## Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 15:46	1

## Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:12	1

**Client Sample ID: MW-26S\_20230601**

**Lab Sample ID: 480-209410-13**

Matrix: Water

Date Collected: 06/01/23 11:15

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/06/23 08:14	06/09/23 05:25	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/06/23 08:14	06/09/23 05:25	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/06/23 08:14	06/09/23 05:25	1
<b>Barium</b>	<b>0.035</b>		0.0020	0.00070	mg/L		06/06/23 08:14	06/09/23 05:25	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/06/23 08:14	06/09/23 05:25	1
<b>Calcium</b>	<b>58</b>		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:25	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/06/23 08:14	06/09/23 05:25	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/06/23 08:14	06/09/23 05:25	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/06/23 08:14	06/09/23 05:25	1
Copper	0.010	U	0.010	0.0016	mg/L		06/06/23 08:14	06/09/23 05:25	1
<b>Iron</b>	<b>0.035</b>	<b>J</b>	0.050	0.019	mg/L		06/06/23 08:14	06/09/23 05:25	1
<b>Potassium</b>	<b>0.50</b>		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:25	1
<b>Magnesium</b>	<b>22</b>		0.20	0.043	mg/L		06/06/23 08:14	06/09/23 05:25	1
<b>Manganese</b>	<b>0.019</b>		0.0030	0.00040	mg/L		06/06/23 08:14	06/09/23 05:25	1
<b>Sodium</b>	<b>22</b>		1.0	0.32	mg/L		06/06/23 08:14	06/09/23 05:25	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/06/23 08:14	06/09/23 05:25	1
Lead	0.010	U	0.010	0.0030	mg/L		06/06/23 08:14	06/09/23 05:25	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/06/23 08:14	06/09/23 05:25	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/06/23 08:14	06/09/23 05:25	1
Thallium	0.020	U	0.020	0.010	mg/L		06/06/23 08:14	06/09/23 05:25	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/06/23 08:14	06/09/23 05:25	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/06/23 08:14	06/09/23 05:25	1

## Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/07/23 08:18	06/16/23 21:10	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/07/23 08:18	06/16/23 21:10	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-26S\_20230601**

**Lab Sample ID: 480-209410-13**

Matrix: Water

Date Collected: 06/01/23 11:15

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.015	U	0.015	0.0056	mg/L		06/07/23 08:18	06/16/23 21:10	1
<b>Barium</b>	<b>0.033</b>		0.0020	0.00070	mg/L		06/07/23 08:18	06/16/23 21:10	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/07/23 08:18	06/16/23 21:10	1
<b>Calcium</b>	<b>63</b>		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:10	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/07/23 08:18	06/16/23 21:10	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/07/23 08:18	06/16/23 21:10	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/07/23 08:18	06/16/23 21:10	1
Copper	0.010	U	0.010	0.0016	mg/L		06/07/23 08:18	06/16/23 21:10	1
Iron	0.050	U	0.050	0.019	mg/L		06/07/23 08:18	06/16/23 21:10	1
<b>Potassium</b>	<b>0.56</b>		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:10	1
<b>Magnesium</b>	<b>23</b>		0.20	0.043	mg/L		06/07/23 08:18	06/16/23 21:10	1
Manganese	0.0030	U	0.0030	0.00040	mg/L		06/07/23 08:18	06/16/23 21:10	1
<b>Sodium</b>	<b>24</b>		1.0	0.32	mg/L		06/07/23 08:18	06/16/23 21:10	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/07/23 08:18	06/16/23 21:10	1
Lead	0.010	U	0.010	0.0030	mg/L		06/07/23 08:18	06/16/23 21:10	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/07/23 08:18	06/16/23 21:10	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/07/23 08:18	06/16/23 21:10	1
Thallium	0.020	U	0.020	0.010	mg/L		06/07/23 08:18	06/16/23 21:10	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/07/23 08:18	06/16/23 21:10	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/07/23 08:18	06/16/23 21:10	1

## Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 15:47	1

## Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:14	1

**Client Sample ID: MW-2B\_20230601**

**Lab Sample ID: 480-209410-14**

Matrix: Water

Date Collected: 06/01/23 09:25

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/06/23 08:14	06/09/23 05:29	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/06/23 08:14	06/09/23 05:29	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/06/23 08:14	06/09/23 05:29	1
<b>Barium</b>	<b>0.034</b>		0.0020	0.00070	mg/L		06/06/23 08:14	06/09/23 05:29	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/06/23 08:14	06/09/23 05:29	1
<b>Calcium</b>	<b>95</b>		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:29	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/06/23 08:14	06/09/23 05:29	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/06/23 08:14	06/09/23 05:29	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/06/23 08:14	06/09/23 05:29	1
Copper	0.010	U	0.010	0.0016	mg/L		06/06/23 08:14	06/09/23 05:29	1
Iron	0.050	U	0.050	0.019	mg/L		06/06/23 08:14	06/09/23 05:29	1
<b>Potassium</b>	<b>0.83</b>		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:29	1
<b>Magnesium</b>	<b>11</b>		0.20	0.043	mg/L		06/06/23 08:14	06/09/23 05:29	1
Manganese	0.0012	J	0.0030	0.00040	mg/L		06/06/23 08:14	06/09/23 05:29	1
<b>Sodium</b>	<b>6.2</b>		1.0	0.32	mg/L		06/06/23 08:14	06/09/23 05:29	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-2B\_20230601**

**Lab Sample ID: 480-209410-14**

Matrix: Water

Date Collected: 06/01/23 09:25

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.010	U	0.010	0.0013	mg/L		06/06/23 08:14	06/09/23 05:29	1
Lead	0.010	U	0.010	0.0030	mg/L		06/06/23 08:14	06/09/23 05:29	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/06/23 08:14	06/09/23 05:29	1
<b>Selenium</b>	<b>0.021</b>	<b>J</b>	0.025	0.0087	mg/L		06/06/23 08:14	06/09/23 05:29	1
Thallium	0.020	U	0.020	0.010	mg/L		06/06/23 08:14	06/09/23 05:29	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/06/23 08:14	06/09/23 05:29	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/06/23 08:14	06/09/23 05:29	1

## Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/07/23 08:18	06/16/23 21:13	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/07/23 08:18	06/16/23 21:13	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/07/23 08:18	06/16/23 21:13	1
<b>Barium</b>	<b>0.035</b>		0.0020	0.00070	mg/L		06/07/23 08:18	06/16/23 21:13	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/07/23 08:18	06/16/23 21:13	1
<b>Calcium</b>	<b>100</b>		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:13	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/07/23 08:18	06/16/23 21:13	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/07/23 08:18	06/16/23 21:13	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/07/23 08:18	06/16/23 21:13	1
<b>Copper</b>	<b>0.0073</b>	<b>J</b>	0.010	0.0016	mg/L		06/07/23 08:18	06/16/23 21:13	1
Iron	0.050	U	0.050	0.019	mg/L		06/07/23 08:18	06/16/23 21:13	1
<b>Potassium</b>	<b>0.96</b>		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:13	1
<b>Magnesium</b>	<b>12</b>		0.20	0.043	mg/L		06/07/23 08:18	06/16/23 21:13	1
Manganese	0.0030	U	0.0030	0.00040	mg/L		06/07/23 08:18	06/16/23 21:13	1
<b>Sodium</b>	<b>6.8</b>		1.0	0.32	mg/L		06/07/23 08:18	06/16/23 21:13	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/07/23 08:18	06/16/23 21:13	1
Lead	0.010	U	0.010	0.0030	mg/L		06/07/23 08:18	06/16/23 21:13	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/07/23 08:18	06/16/23 21:13	1
<b>Selenium</b>	<b>0.019</b>	<b>J</b>	0.025	0.0087	mg/L		06/07/23 08:18	06/16/23 21:13	1
Thallium	0.020	U	0.020	0.010	mg/L		06/07/23 08:18	06/16/23 21:13	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/07/23 08:18	06/16/23 21:13	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/07/23 08:18	06/16/23 21:13	1

## Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 15:49	1

## Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:15	1

**Client Sample ID: MW-15D\_20230531**

**Lab Sample ID: 480-209410-15**

Matrix: Water

Date Collected: 05/31/23 16:35

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/06/23 08:14	06/09/23 05:33	1
<b>Aluminum</b>	<b>0.13</b>	<b>J</b>	0.20	0.060	mg/L		06/06/23 08:14	06/09/23 05:33	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/06/23 08:14	06/09/23 05:33	1
<b>Barium</b>	<b>0.094</b>		0.0020	0.00070	mg/L		06/06/23 08:14	06/09/23 05:33	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-15D\_20230531**

**Lab Sample ID: 480-209410-15**

**Matrix: Water**

Date Collected: 05/31/23 16:35

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.0020	U	0.0020	0.00030	mg/L	06/06/23 08:14	06/09/23 05:33		1
<b>Calcium</b>	<b>60</b>		0.50	0.10	mg/L	06/06/23 08:14	06/09/23 05:33		1
Cadmium	0.0020	U	0.0020	0.00050	mg/L	06/06/23 08:14	06/09/23 05:33		1
Cobalt	0.0040	U	0.0040	0.00063	mg/L	06/06/23 08:14	06/09/23 05:33		1
Chromium	0.0040	U	0.0040	0.0010	mg/L	06/06/23 08:14	06/09/23 05:33		1
Copper	0.010	U	0.010	0.0016	mg/L	06/06/23 08:14	06/09/23 05:33		1
Iron	<b>0.25</b>		0.050	0.019	mg/L	06/06/23 08:14	06/09/23 05:33		1
Potassium	<b>2.9</b>		0.50	0.10	mg/L	06/06/23 08:14	06/09/23 05:33		1
Magnesium	<b>13</b>		0.20	0.043	mg/L	06/06/23 08:14	06/09/23 05:33		1
Manganese	<b>0.017</b>		0.0030	0.00040	mg/L	06/06/23 08:14	06/09/23 05:33		1
Sodium	<b>6.9</b>		1.0	0.32	mg/L	06/06/23 08:14	06/09/23 05:33		1
Nickel	0.010	U	0.010	0.0013	mg/L	06/06/23 08:14	06/09/23 05:33		1
Lead	0.010	U	0.010	0.0030	mg/L	06/06/23 08:14	06/09/23 05:33		1
Antimony	0.020	U	0.020	0.0068	mg/L	06/06/23 08:14	06/09/23 05:33		1
<b>Selenium</b>	<b>0.41</b>		0.025	0.0087	mg/L	06/06/23 08:14	06/09/23 05:33		1
Thallium	0.020	U	0.020	0.010	mg/L	06/06/23 08:14	06/09/23 05:33		1
Vanadium	0.0050	U	0.0050	0.0015	mg/L	06/06/23 08:14	06/09/23 05:33		1
Zinc	<b>0.0017</b>	J	0.010	0.0015	mg/L	06/06/23 08:14	06/09/23 05:33		1

## Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L	06/07/23 08:18	06/16/23 21:29		1
Aluminum	0.20	U	0.20	0.060	mg/L	06/07/23 08:18	06/16/23 21:29		1
Arsenic	0.015	U	0.015	0.0056	mg/L	06/07/23 08:18	06/16/23 21:29		1
<b>Barium</b>	<b>0.086</b>		0.0020	0.00070	mg/L	06/07/23 08:18	06/16/23 21:29		1
Beryllium	0.0020	U	0.0020	0.00030	mg/L	06/07/23 08:18	06/16/23 21:29		1
<b>Calcium</b>	<b>64</b>		0.50	0.10	mg/L	06/07/23 08:18	06/16/23 21:29		1
Cadmium	0.0020	U	0.0020	0.00050	mg/L	06/07/23 08:18	06/16/23 21:29		1
Cobalt	0.0040	U	0.0040	0.00063	mg/L	06/07/23 08:18	06/16/23 21:29		1
Chromium	0.0040	U	0.0040	0.0010	mg/L	06/07/23 08:18	06/16/23 21:29		1
Copper	0.010	U	0.010	0.0016	mg/L	06/07/23 08:18	06/16/23 21:29		1
Iron	0.050	U	0.050	0.019	mg/L	06/07/23 08:18	06/16/23 21:29		1
<b>Potassium</b>	<b>3.2</b>		0.50	0.10	mg/L	06/07/23 08:18	06/16/23 21:29		1
<b>Magnesium</b>	<b>14</b>		0.20	0.043	mg/L	06/07/23 08:18	06/16/23 21:29		1
Manganese	<b>0.0022</b>	J B	0.0030	0.00040	mg/L	06/22/23 12:07	06/23/23 19:47		1
<b>Sodium</b>	<b>7.5</b>		1.0	0.32	mg/L	06/07/23 08:18	06/16/23 21:29		1
Nickel	0.010	U	0.010	0.0013	mg/L	06/07/23 08:18	06/16/23 21:29		1
Lead	0.010	U	0.010	0.0030	mg/L	06/07/23 08:18	06/16/23 21:29		1
Antimony	0.020	U	0.020	0.0068	mg/L	06/07/23 08:18	06/16/23 21:29		1
<b>Selenium</b>	<b>0.45</b>		0.025	0.0087	mg/L	06/07/23 08:18	06/16/23 21:29		1
Thallium	0.020	U	0.020	0.010	mg/L	06/07/23 08:18	06/16/23 21:29		1
Vanadium	0.0050	U	0.0050	0.0015	mg/L	06/07/23 08:18	06/16/23 21:29		1
Zinc	0.010	U	0.010	0.0015	mg/L	06/07/23 08:18	06/16/23 21:29		1

## Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U F1 F2	0.00020	0.000043	mg/L	06/05/23 11:04	06/05/23 15:50		1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-15D\_20230531**

**Lab Sample ID: 480-209410-15**

Matrix: Water

Date Collected: 05/31/23 16:35

Date Received: 06/02/23 10:00

**Method: SW846 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:16	1

**Client Sample ID: MET DUP\_20230531**

**Lab Sample ID: 480-209410-16**

Matrix: Water

Date Collected: 05/31/23 00:00

Date Received: 06/02/23 10:00

**Method: SW846 6010C - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/06/23 08:14	06/09/23 05:52	1
<b>Aluminum</b>	<b>0.17</b>	<b>J</b>	0.20	0.060	mg/L		06/06/23 08:14	06/09/23 05:52	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/06/23 08:14	06/09/23 05:52	1
<b>Barium</b>	<b>0.098</b>		0.0020	0.00070	mg/L		06/06/23 08:14	06/09/23 05:52	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/06/23 08:14	06/09/23 05:52	1
<b>Calcium</b>	<b>58</b>		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:52	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/06/23 08:14	06/09/23 05:52	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/06/23 08:14	06/09/23 05:52	1
<b>Chromium</b>	<b>0.0018</b>	<b>J</b>	0.0040	0.0010	mg/L		06/06/23 08:14	06/09/23 05:52	1
Copper	0.010	U	0.010	0.0016	mg/L		06/06/23 08:14	06/09/23 05:52	1
<b>Iron</b>	<b>0.35</b>		0.050	0.019	mg/L		06/06/23 08:14	06/09/23 05:52	1
<b>Potassium</b>	<b>2.9</b>		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:52	1
<b>Magnesium</b>	<b>13</b>		0.20	0.043	mg/L		06/06/23 08:14	06/09/23 05:52	1
<b>Manganese</b>	<b>0.020</b>		0.0030	0.00040	mg/L		06/06/23 08:14	06/09/23 05:52	1
<b>Sodium</b>	<b>6.9</b>		1.0	0.32	mg/L		06/06/23 08:14	06/09/23 05:52	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/06/23 08:14	06/09/23 05:52	1
Lead	0.010	U	0.010	0.0030	mg/L		06/06/23 08:14	06/09/23 05:52	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/06/23 08:14	06/09/23 05:52	1
<b>Selenium</b>	<b>0.41</b>		0.025	0.0087	mg/L		06/06/23 08:14	06/09/23 05:52	1
Thallium	0.020	U	0.020	0.010	mg/L		06/06/23 08:14	06/09/23 05:52	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/06/23 08:14	06/09/23 05:52	1
<b>Zinc</b>	<b>0.0022</b>	<b>J</b>	0.010	0.0015	mg/L		06/06/23 08:14	06/09/23 05:52	1

**Method: SW846 6010C - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/07/23 08:18	06/16/23 21:48	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/07/23 08:18	06/16/23 21:48	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/07/23 08:18	06/16/23 21:48	1
<b>Barium</b>	<b>0.086</b>		0.0020	0.00070	mg/L		06/07/23 08:18	06/16/23 21:48	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/07/23 08:18	06/16/23 21:48	1
<b>Calcium</b>	<b>64</b>		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:48	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/07/23 08:18	06/16/23 21:48	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/07/23 08:18	06/16/23 21:48	1
<b>Chromium</b>	<b>0.0011</b>	<b>J</b>	0.0040	0.0010	mg/L		06/07/23 08:18	06/16/23 21:48	1
Copper	0.010	U	0.010	0.0016	mg/L		06/07/23 08:18	06/16/23 21:48	1
Iron	0.050	U	0.050	0.019	mg/L		06/07/23 08:18	06/16/23 21:48	1
<b>Potassium</b>	<b>3.2</b>		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:48	1
<b>Magnesium</b>	<b>13</b>		0.20	0.043	mg/L		06/07/23 08:18	06/16/23 21:48	1
<b>Manganese</b>	<b>0.0021</b>	<b>J B</b>	0.0030	0.00040	mg/L		06/22/23 12:07	06/23/23 19:58	1
<b>Sodium</b>	<b>7.5</b>		1.0	0.32	mg/L		06/07/23 08:18	06/16/23 21:48	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/07/23 08:18	06/16/23 21:48	1
Lead	0.010	U	0.010	0.0030	mg/L		06/07/23 08:18	06/16/23 21:48	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MET DUP\_20230531**

**Lab Sample ID: 480-209410-16**

Matrix: Water

Date Collected: 05/31/23 00:00

Date Received: 06/02/23 10:00

**Method: SW846 6010C - Metals (ICP) - Dissolved (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.020	U	0.020	0.0068	mg/L		06/07/23 08:18	06/16/23 21:48	1
Selenium	0.43		0.025	0.0087	mg/L		06/07/23 08:18	06/16/23 21:48	1
Thallium	0.020	U	0.020	0.010	mg/L		06/07/23 08:18	06/16/23 21:48	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/07/23 08:18	06/16/23 21:48	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/07/23 08:18	06/16/23 21:48	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 15:58	1

**Method: SW846 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:22	1

**Client Sample ID: EQUIPMENT BLANK\_20230531**

**Lab Sample ID: 480-209410-17**

Matrix: Water

Date Collected: 05/31/23 17:25

Date Received: 06/02/23 10:00

**Method: SW846 6010C - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/06/23 08:14	06/09/23 05:56	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/06/23 08:14	06/09/23 05:56	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/06/23 08:14	06/09/23 05:56	1
Barium	0.0020	U	0.0020	0.00070	mg/L		06/06/23 08:14	06/09/23 05:56	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/06/23 08:14	06/09/23 05:56	1
Calcium	0.50	U	0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:56	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/06/23 08:14	06/09/23 05:56	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/06/23 08:14	06/09/23 05:56	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/06/23 08:14	06/09/23 05:56	1
Copper	0.010	U	0.010	0.0016	mg/L		06/06/23 08:14	06/09/23 05:56	1
Iron	0.050	U	0.050	0.019	mg/L		06/06/23 08:14	06/09/23 05:56	1
Potassium	0.50	U	0.50	0.10	mg/L		06/06/23 08:14	06/09/23 05:56	1
Magnesium	0.20	U	0.20	0.043	mg/L		06/06/23 08:14	06/09/23 05:56	1
Manganese	0.0030	U	0.0030	0.00040	mg/L		06/06/23 08:14	06/09/23 05:56	1
Sodium	1.0	U	1.0	0.32	mg/L		06/06/23 08:14	06/09/23 05:56	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/06/23 08:14	06/09/23 05:56	1
Lead	0.010	U	0.010	0.0030	mg/L		06/06/23 08:14	06/09/23 05:56	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/06/23 08:14	06/09/23 05:56	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/06/23 08:14	06/09/23 05:56	1
Thallium	0.020	U	0.020	0.010	mg/L		06/06/23 08:14	06/09/23 05:56	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/06/23 08:14	06/09/23 05:56	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/06/23 08:14	06/09/23 05:56	1

**Method: SW846 6010C - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/07/23 08:18	06/16/23 21:52	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/07/23 08:18	06/16/23 21:52	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/07/23 08:18	06/16/23 21:52	1
Barium	0.0020	U	0.0020	0.00070	mg/L		06/07/23 08:18	06/16/23 21:52	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/07/23 08:18	06/16/23 21:52	1
Calcium	0.50	U	0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:52	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: EQUIPMENT BLANK\_20230531**

**Lab Sample ID: 480-209410-17**

**Matrix: Water**

Date Collected: 05/31/23 17:25

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/07/23 08:18	06/16/23 21:52	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/07/23 08:18	06/16/23 21:52	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/07/23 08:18	06/16/23 21:52	1
Copper	0.010	U	0.010	0.0016	mg/L		06/07/23 08:18	06/16/23 21:52	1
Iron	0.050	U	0.050	0.019	mg/L		06/07/23 08:18	06/16/23 21:52	1
Potassium	0.50	U	0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:52	1
Magnesium	0.20	U	0.20	0.043	mg/L		06/07/23 08:18	06/16/23 21:52	1
Manganese	0.0030	U	0.0030	0.00040	mg/L		06/07/23 08:18	06/16/23 21:52	1
Sodium	1.0	U	1.0	0.32	mg/L		06/07/23 08:18	06/16/23 21:52	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/07/23 08:18	06/16/23 21:52	1
Lead	0.010	U	0.010	0.0030	mg/L		06/07/23 08:18	06/16/23 21:52	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/07/23 08:18	06/16/23 21:52	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/07/23 08:18	06/16/23 21:52	1
Thallium	0.020	U	0.020	0.010	mg/L		06/07/23 08:18	06/16/23 21:52	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/07/23 08:18	06/16/23 21:52	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/07/23 08:18	06/16/23 21:52	1

## Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 15:59	1

## Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:24	1

**Client Sample ID: EQUIPMENT BLANK\_20230601**

**Lab Sample ID: 480-209410-18**

**Matrix: Water**

Date Collected: 06/01/23 17:05

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/06/23 08:14	06/09/23 06:11	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/06/23 08:14	06/09/23 06:11	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/06/23 08:14	06/09/23 06:11	1
Barium	0.0020	U	0.0020	0.00070	mg/L		06/06/23 08:14	06/09/23 06:11	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/06/23 08:14	06/09/23 06:11	1
Calcium	0.50	U	0.50	0.10	mg/L		06/06/23 08:14	06/09/23 06:11	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/06/23 08:14	06/09/23 06:11	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/06/23 08:14	06/09/23 06:11	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/06/23 08:14	06/09/23 06:11	1
Copper	0.010	U	0.010	0.0016	mg/L		06/06/23 08:14	06/09/23 06:11	1
Iron	0.050	U	0.050	0.019	mg/L		06/06/23 08:14	06/09/23 06:11	1
Potassium	0.50	U	0.50	0.10	mg/L		06/06/23 08:14	06/09/23 06:11	1
Magnesium	0.20	U	0.20	0.043	mg/L		06/06/23 08:14	06/09/23 06:11	1
Manganese	0.0030	U	0.0030	0.00040	mg/L		06/06/23 08:14	06/09/23 06:11	1
Sodium	1.0	U	1.0	0.32	mg/L		06/06/23 08:14	06/09/23 06:11	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/06/23 08:14	06/09/23 06:11	1
Lead	0.010	U	0.010	0.0030	mg/L		06/06/23 08:14	06/09/23 06:11	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/06/23 08:14	06/09/23 06:11	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/06/23 08:14	06/09/23 06:11	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: EQUIPMENT BLANK \_20230601**

**Lab Sample ID: 480-209410-18**

Matrix: Water

Date Collected: 06/01/23 17:05

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.020	U	0.020	0.010	mg/L		06/06/23 08:14	06/09/23 06:11	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/06/23 08:14	06/09/23 06:11	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/06/23 08:14	06/09/23 06:11	1

## Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/07/23 08:18	06/16/23 21:56	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/07/23 08:18	06/16/23 21:56	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/07/23 08:18	06/16/23 21:56	1
Barium	0.0020	U	0.0020	0.00070	mg/L		06/07/23 08:18	06/16/23 21:56	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/07/23 08:18	06/16/23 21:56	1
Calcium	0.50	U	0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:56	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/07/23 08:18	06/16/23 21:56	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/07/23 08:18	06/16/23 21:56	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/07/23 08:18	06/16/23 21:56	1
Copper	0.010	U	0.010	0.0016	mg/L		06/07/23 08:18	06/16/23 21:56	1
Iron	0.050	U	0.050	0.019	mg/L		06/07/23 08:18	06/16/23 21:56	1
Potassium	0.50	U	0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:56	1
Magnesium	0.20	U	0.20	0.043	mg/L		06/07/23 08:18	06/16/23 21:56	1
Manganese	0.0030	U	0.0030	0.00040	mg/L		06/07/23 08:18	06/16/23 21:56	1
Sodium	1.0	U	1.0	0.32	mg/L		06/07/23 08:18	06/16/23 21:56	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/07/23 08:18	06/16/23 21:56	1
Lead	0.010	U	0.010	0.0030	mg/L		06/07/23 08:18	06/16/23 21:56	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/07/23 08:18	06/16/23 21:56	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/07/23 08:18	06/16/23 21:56	1
Thallium	0.020	U	0.020	0.010	mg/L		06/07/23 08:18	06/16/23 21:56	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/07/23 08:18	06/16/23 21:56	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/07/23 08:18	06/16/23 21:56	1

## Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:01	1

## Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:25	1

**Client Sample ID: SW-1\_20230601**

**Lab Sample ID: 480-209410-19**

Matrix: Water

Date Collected: 06/01/23 17:10

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/06/23 08:14	06/09/23 06:15	1
<b>Aluminum</b>	<b>7.7</b>		0.20	0.060	mg/L		06/06/23 08:14	06/09/23 06:15	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/06/23 08:14	06/09/23 06:15	1
Barium	0.21		0.0020	0.00070	mg/L		06/06/23 08:14	06/09/23 06:15	1
Beryllium	0.00052	J	0.0020	0.00030	mg/L		06/06/23 08:14	06/09/23 06:15	1
Calcium	50		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 06:15	1
Cadmium	0.0016	J	0.0020	0.00050	mg/L		06/06/23 08:14	06/09/23 06:15	1
Cobalt	0.0075		0.0040	0.00063	mg/L		06/06/23 08:14	06/09/23 06:15	1

Eurofins Buffalo

# Client Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: SW-1\_20230601**

**Lab Sample ID: 480-209410-19**

**Matrix: Water**

Date Collected: 06/01/23 17:10

Date Received: 06/02/23 10:00

## Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.0090		0.0040	0.0010	mg/L		06/06/23 08:14	06/09/23 06:15	1
Copper	0.93		0.010	0.0016	mg/L		06/06/23 08:14	06/09/23 06:15	1
Iron	19		0.050	0.019	mg/L		06/06/23 08:14	06/09/23 06:15	1
Potassium	1.3		0.50	0.10	mg/L		06/06/23 08:14	06/09/23 06:15	1
Magnesium	6.9		0.20	0.043	mg/L		06/06/23 08:14	06/09/23 06:15	1
Manganese	3.5		0.0030	0.00040	mg/L		06/06/23 08:14	06/09/23 06:15	1
Sodium	12		1.0	0.32	mg/L		06/06/23 08:14	06/09/23 06:15	1
Nickel	0.012		0.010	0.0013	mg/L		06/06/23 08:14	06/09/23 06:15	1
Lead	0.036		0.010	0.0030	mg/L		06/06/23 08:14	06/09/23 06:15	1
Antimony	0.020 U		0.020	0.0068	mg/L		06/06/23 08:14	06/09/23 06:15	1
Selenium	0.025 U		0.025	0.0087	mg/L		06/06/23 08:14	06/09/23 06:15	1
Thallium	0.020 U		0.020	0.010	mg/L		06/06/23 08:14	06/09/23 06:15	1
Vanadium	0.014		0.0050	0.0015	mg/L		06/06/23 08:14	06/09/23 06:15	1
Zinc	0.15		0.010	0.0015	mg/L		06/06/23 08:14	06/09/23 06:15	1

## Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060 U		0.0060	0.0017	mg/L		06/07/23 08:18	06/16/23 21:59	1
Aluminum	0.20 U		0.20	0.060	mg/L		06/07/23 08:18	06/16/23 21:59	1
Arsenic	0.015 U		0.015	0.0056	mg/L		06/07/23 08:18	06/16/23 21:59	1
Barium	0.063		0.0020	0.00070	mg/L		06/07/23 08:18	06/16/23 21:59	1
Beryllium	0.0020 U		0.0020	0.00030	mg/L		06/07/23 08:18	06/16/23 21:59	1
Calcium	57		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:59	1
Cadmium	0.0020 U		0.0020	0.00050	mg/L		06/07/23 08:18	06/16/23 21:59	1
Cobalt	0.0040 U		0.0040	0.00063	mg/L		06/07/23 08:18	06/16/23 21:59	1
Chromium	0.0040 U		0.0040	0.0010	mg/L		06/07/23 08:18	06/16/23 21:59	1
Copper	0.0066 J		0.010	0.0016	mg/L		06/07/23 08:18	06/16/23 21:59	1
Iron	0.042 J		0.050	0.019	mg/L		06/07/23 08:18	06/16/23 21:59	1
Potassium	0.57		0.50	0.10	mg/L		06/07/23 08:18	06/16/23 21:59	1
Magnesium	6.3		0.20	0.043	mg/L		06/07/23 08:18	06/16/23 21:59	1
Manganese	0.45 B		0.0030	0.00040	mg/L		06/07/23 08:18	06/16/23 21:59	1
Sodium	14		1.0	0.32	mg/L		06/07/23 08:18	06/16/23 21:59	1
Nickel	0.010 U		0.010	0.0013	mg/L		06/07/23 08:18	06/16/23 21:59	1
Lead	0.010 U		0.010	0.0030	mg/L		06/07/23 08:18	06/16/23 21:59	1
Antimony	0.020 U		0.020	0.0068	mg/L		06/07/23 08:18	06/16/23 21:59	1
Selenium	0.025 U		0.025	0.0087	mg/L		06/07/23 08:18	06/16/23 21:59	1
Thallium	0.020 U		0.020	0.010	mg/L		06/07/23 08:18	06/16/23 21:59	1
Vanadium	0.0050 U		0.0050	0.0015	mg/L		06/07/23 08:18	06/16/23 21:59	1
Zinc	0.010 U		0.010	0.0015	mg/L		06/07/23 08:18	06/16/23 21:59	1

## Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0095		0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:02	1

## Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020 U		0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:29	1

Eurofins Buffalo

# Surrogate Summary

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

## Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TOL (80-120)	DCA (77-120)	BFB (73-120)	DBFM (75-123)
480-209410-1	MW-25S_20230601	102	109	109	112
480-209410-2	MW-22D_20230601	98	105	106	119
480-209410-3	MW-22R_20230601	99	108	110	118
480-209410-3 MS	MW-22R_20230601	101	101	109	103
480-209410-3 MSD	MW-22R_20230601	104	103	113	109
480-209410-4	MW-21D_20230601	100	108	109	109
480-209410-5	MW-27R_20230601	101	110	108	112
480-209410-6	MW-28R_20230601	96	109	107	115
480-209410-7	MW-3_20230531	101	111	108	117
480-209410-8	VOC DUP_20230601	99	114	108	117
LCS 480-672295/6	Lab Control Sample	104	104	109	111
MB 480-672295/8	Method Blank	99	105	110	112

### Surrogate Legend

TOL = Toluene-d8 (Surr)

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

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

# QC Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-672295/8**

**Matrix: Water**

**Analysis Batch: 672295**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			06/08/23 10:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 10:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/08/23 10:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/08/23 10:59	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/08/23 10:59	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/08/23 10:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/08/23 10:59	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/08/23 10:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/08/23 10:59	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/08/23 10:59	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/08/23 10:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/08/23 10:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/08/23 10:59	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/08/23 10:59	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/08/23 10:59	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/08/23 10:59	1
Acetone	10	U	10	3.0	ug/L			06/08/23 10:59	1
Benzene	1.0	U	1.0	0.41	ug/L			06/08/23 10:59	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/08/23 10:59	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/08/23 10:59	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/08/23 10:59	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/08/23 10:59	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/08/23 10:59	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/08/23 10:59	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/08/23 10:59	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/08/23 10:59	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/08/23 10:59	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/08/23 10:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/08/23 10:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/08/23 10:59	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/08/23 10:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/08/23 10:59	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/08/23 10:59	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/08/23 10:59	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/08/23 10:59	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/08/23 10:59	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/08/23 10:59	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/08/23 10:59	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/08/23 10:59	1
Styrene	1.0	U	1.0	0.73	ug/L			06/08/23 10:59	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/08/23 10:59	1
Toluene	1.0	U	1.0	0.51	ug/L			06/08/23 10:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/08/23 10:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/08/23 10:59	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/08/23 10:59	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/08/23 10:59	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/08/23 10:59	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/08/23 10:59	1

Eurofins Buffalo

# QC Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-672295/8**

**Matrix: Water**

**Analysis Batch: 672295**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)		99			80 - 120		06/08/23 10:59	1
1,2-Dichloroethane-d4 (Surr)		105			77 - 120		06/08/23 10:59	1
4-Bromofluorobenzene (Surr)		110			73 - 120		06/08/23 10:59	1
Dibromofluoromethane (Surr)		112			75 - 123		06/08/23 10:59	1

**Lab Sample ID: LCS 480-672295/6**

**Matrix: Water**

**Analysis Batch: 672295**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LC S	LC S	Unit	D	%Rec	%Rec	Limits
		Result	Qualifier					
1,1,1-Trichloroethane	25.0	30.0		ug/L	120	73 - 126		
1,1,2,2-Tetrachloroethane	25.0	23.5		ug/L	94	76 - 120		
1,1,2-Trichloroethane	25.0	23.8		ug/L	95	76 - 122		
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.0		ug/L	120	61 - 148		
1,1-Dichloroethane	25.0	26.7		ug/L	107	77 - 120		
1,1-Dichloroethene	25.0	29.7		ug/L	119	66 - 127		
1,2,4-Trichlorobenzene	25.0	20.5		ug/L	82	79 - 122		
1,2-Dibromo-3-Chloropropane	25.0	26.6		ug/L	106	56 - 134		
1,2-Dichlorobenzene	25.0	22.9		ug/L	92	80 - 124		
1,2-Dichloroethane	25.0	25.6		ug/L	102	75 - 120		
1,2-Dichloropropane	25.0	24.7		ug/L	99	76 - 120		
1,3-Dichlorobenzene	25.0	23.6		ug/L	94	77 - 120		
1,4-Dichlorobenzene	25.0	22.2		ug/L	89	80 - 120		
2-Butanone (MEK)	125	114		ug/L	91	57 - 140		
2-Hexanone	125	115		ug/L	92	65 - 127		
4-Methyl-2-pentanone (MIBK)	125	120		ug/L	96	71 - 125		
Acetone	125	160		ug/L	128	56 - 142		
Benzene	25.0	24.5		ug/L	98	71 - 124		
Bromodichloromethane	25.0	28.4		ug/L	113	80 - 122		
Bromoform	25.0	30.7		ug/L	123	61 - 132		
Bromomethane	25.0	30.1		ug/L	120	55 - 144		
Carbon disulfide	25.0	28.7		ug/L	115	59 - 134		
Carbon tetrachloride	25.0	31.8		ug/L	127	72 - 134		
Chlorobenzene	25.0	24.8		ug/L	99	80 - 120		
Dibromochloromethane	25.0	29.9		ug/L	119	75 - 125		
Chloroethane	25.0	27.6		ug/L	111	69 - 136		
Chloroform	25.0	26.6		ug/L	106	73 - 127		
Chloromethane	25.0	26.1		ug/L	105	68 - 124		
cis-1,2-Dichloroethene	25.0	26.5		ug/L	106	74 - 124		
cis-1,3-Dichloropropene	25.0	24.7		ug/L	99	74 - 124		
Cyclohexane	25.0	28.6		ug/L	114	59 - 135		
Dichlorodifluoromethane	25.0	25.0		ug/L	100	59 - 135		
Ethylbenzene	25.0	24.7		ug/L	99	77 - 123		
1,2-Dibromoethane	25.0	26.3		ug/L	105	77 - 120		
Isopropylbenzene	25.0	23.9		ug/L	95	77 - 122		
Methyl acetate	50.0	43.9		ug/L	88	74 - 133		
Methyl tert-butyl ether	25.0	22.5		ug/L	90	77 - 120		
Methylcyclohexane	25.0	27.8		ug/L	111	68 - 134		

Eurofins Buffalo

# QC Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 480-672295/6**

**Matrix: Water**

**Analysis Batch: 672295**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Methylene Chloride	25.0	26.3		ug/L		105	75 - 124
Styrene	25.0	23.8		ug/L		95	80 - 120
Tetrachloroethene	25.0	27.0		ug/L		108	74 - 122
Toluene	25.0	24.3		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	28.8		ug/L		115	73 - 127
trans-1,3-Dichloropropene	25.0	23.7		ug/L		95	80 - 120
Trichloroethene	25.0	29.0		ug/L		116	74 - 123
Trichlorofluoromethane	25.0	31.4		ug/L		126	62 - 150
Vinyl chloride	25.0	28.7		ug/L		115	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	104		80 - 120
1,2-Dichloroethane-d4 (Surr)	104		77 - 120
4-Bromofluorobenzene (Surr)	109		73 - 120
Dibromofluoromethane (Surr)	111		75 - 123

**Lab Sample ID: 480-209410-3 MS**

**Matrix: Water**

**Analysis Batch: 672295**

**Client Sample ID: MW-22R\_20230601**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	1.0	U F1	25.0	34.7	F1	ug/L		139	73 - 126
1,1,2,2-Tetrachloroethane	1.0	U	25.0	25.4		ug/L		101	76 - 120
1,1,2-Trichloroethane	1.0	U	25.0	25.6		ug/L		103	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	25.0	33.5		ug/L		134	61 - 148
1,1-Dichloroethane	1.0	U F1	25.0	29.3		ug/L		117	77 - 120
1,1-Dichloroethene	1.0	U F1	25.0	34.5	F1	ug/L		138	66 - 127
1,2,4-Trichlorobenzene	1.0	U	25.0	22.2		ug/L		89	79 - 122
1,2-Dibromo-3-Chloropropane	1.0	U	25.0	27.7		ug/L		111	56 - 134
1,2-Dichlorobenzene	1.0	U	25.0	25.4		ug/L		102	80 - 124
1,2-Dichloroethane	1.0	U	25.0	27.3		ug/L		109	75 - 120
1,2-Dichloropropane	1.0	U	25.0	26.5		ug/L		106	76 - 120
1,3-Dichlorobenzene	1.0	U	25.0	25.1		ug/L		100	77 - 120
1,4-Dichlorobenzene	1.0	U	25.0	24.8		ug/L		99	78 - 124
2-Butanone (MEK)	10	U	125	125		ug/L		100	57 - 140
2-Hexanone	5.0	U	125	124		ug/L		99	65 - 127
4-Methyl-2-pentanone (MIBK)	5.0	U	125	128		ug/L		103	71 - 125
Acetone	10	U F1	125	168		ug/L		135	56 - 142
Benzene	1.0	U	25.0	27.2		ug/L		109	71 - 124
Bromodichloromethane	1.0	U	25.0	29.8		ug/L		119	80 - 122
Bromoform	1.0	U	25.0	28.2		ug/L		113	61 - 132
Bromomethane	1.0	U F1	25.0	35.5		ug/L		142	55 - 144
Carbon disulfide	1.0	U	25.0	30.2		ug/L		121	59 - 134
Carbon tetrachloride	1.0	U F1	25.0	35.2	F1	ug/L		141	72 - 134
Chlorobenzene	1.0	U	25.0	27.7		ug/L		111	80 - 120
Dibromochloromethane	1.0	U	25.0	29.3		ug/L		117	75 - 125
Chloroethane	1.0	U F1	25.0	32.2		ug/L		129	69 - 136
Chloroform	1.0	U	25.0	29.5		ug/L		118	73 - 127

Eurofins Buffalo

# QC Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 480-209410-3 MS**

**Client Sample ID: MW-22R\_20230601**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 672295**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chloromethane	1.0	U F1	25.0	29.0		ug/L	116	68 - 124	
cis-1,2-Dichloroethene	1.0	U	25.0	29.6		ug/L	119	74 - 124	
cis-1,3-Dichloropropene	1.0	U	25.0	25.1		ug/L	100	74 - 124	
Cyclohexane	1.0	U	25.0	32.2		ug/L	129	59 - 135	
Dichlorodifluoromethane	1.0	U	25.0	25.3		ug/L	101	59 - 135	
Ethylbenzene	1.0	U	25.0	28.6		ug/L	114	77 - 123	
1,2-Dibromoethane	1.0	U	25.0	27.8		ug/L	111	77 - 120	
Isopropylbenzene	1.0	U	25.0	27.2		ug/L	109	77 - 122	
Methyl acetate	2.5	U	50.0	48.7		ug/L	97	74 - 133	
Methyl tert-butyl ether	1.0	U	25.0	24.3		ug/L	97	77 - 120	
Methylcyclohexane	1.0	U	25.0	29.9		ug/L	120	68 - 134	
Methylene Chloride	1.0	U	25.0	27.8		ug/L	111	75 - 124	
Styrene	1.0	U	25.0	26.4		ug/L	106	80 - 120	
Tetrachloroethene	1.0	U F1	25.0	32.2	F1	ug/L	129	74 - 122	
Toluene	1.0	U	25.0	27.2		ug/L	109	80 - 122	
trans-1,2-Dichloroethene	1.0	U F1	25.0	33.5	F1	ug/L	134	73 - 127	
trans-1,3-Dichloropropene	1.0	U	25.0	24.5		ug/L	98	80 - 120	
Trichloroethene	1.0	U F1	25.0	30.3		ug/L	121	74 - 123	
Trichlorofluoromethane	1.0	U F1	25.0	35.2		ug/L	141	62 - 150	
Vinyl chloride	1.0	U F1	25.0	33.3		ug/L	133	65 - 133	
<hr/>									
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
Toluene-d8 (Surr)	101		80 - 120						
1,2-Dichloroethane-d4 (Surr)	101		77 - 120						
4-Bromofluorobenzene (Surr)	109		73 - 120						
Dibromofluoromethane (Surr)	103		75 - 123						

**Lab Sample ID: 480-209410-3 MSD**

**Client Sample ID: MW-22R\_20230601**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 672295**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	1.0	U F1	25.0	34.2	F1	ug/L	137	73 - 126		1	15
1,1,2,2-Tetrachloroethane	1.0	U	25.0	25.4		ug/L	102	76 - 120		0	15
1,1,2-Trichloroethane	1.0	U	25.0	25.3		ug/L	101	76 - 122		1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	25.0	33.2		ug/L	133	61 - 148		1	20
1,1-Dichloroethane	1.0	U F1	25.0	30.8	F1	ug/L	123	77 - 120		5	20
1,1-Dichloroethene	1.0	U F1	25.0	35.0	F1	ug/L	140	66 - 127		1	16
1,2,4-Trichlorobenzene	1.0	U	25.0	25.2		ug/L	101	79 - 122		12	20
1,2-Dibromo-3-Chloropropane	1.0	U	25.0	29.7		ug/L	119	56 - 134		7	15
1,2-Dichlorobenzene	1.0	U	25.0	26.8		ug/L	107	80 - 124		5	20
1,2-Dichloroethane	1.0	U	25.0	29.0		ug/L	116	75 - 120		6	20
1,2-Dichloropropane	1.0	U	25.0	27.8		ug/L	111	76 - 120		5	20
1,3-Dichlorobenzene	1.0	U	25.0	25.9		ug/L	104	77 - 120		3	20
1,4-Dichlorobenzene	1.0	U	25.0	25.4		ug/L	102	78 - 124		3	20
2-Butanone (MEK)	10	U	125	125		ug/L	100	57 - 140		1	20
2-Hexanone	5.0	U	125	123		ug/L	98	65 - 127		1	15
4-Methyl-2-pentanone (MIBK)	5.0	U	125	127		ug/L	102	71 - 125		1	35

Eurofins Buffalo

# QC Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 480-209410-3 MSD**

**Matrix: Water**

**Analysis Batch: 672295**

**Client Sample ID: MW-22R\_20230601**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec %Rec	Limits	RPD RPD	Limit Limit
Acetone	10	U F1	125	182	F1	ug/L	146	56 - 142	8	15	
Benzene	1.0	U	25.0	28.1		ug/L	113	71 - 124	3	13	
Bromodichloromethane	1.0	U	25.0	30.5		ug/L	122	80 - 122	2	15	
Bromoform	1.0	U	25.0	27.1		ug/L	109	61 - 132	4	15	
Bromomethane	1.0	U F1	25.0	37.2	F1	ug/L	149	55 - 144	5	15	
Carbon disulfide	1.0	U	25.0	30.9		ug/L	124	59 - 134	2	15	
Carbon tetrachloride	1.0	U F1	25.0	37.5	F1	ug/L	150	72 - 134	6	15	
Chlorobenzene	1.0	U	25.0	27.5		ug/L	110	80 - 120	1	25	
Dibromochloromethane	1.0	U	25.0	28.4		ug/L	114	75 - 125	3	15	
Chloroethane	1.0	U F1	25.0	35.6	F1	ug/L	142	69 - 136	10	15	
Chloroform	1.0	U	25.0	30.8		ug/L	123	73 - 127	4	20	
Chloromethane	1.0	U F1	25.0	31.6	F1	ug/L	126	68 - 124	8	15	
cis-1,2-Dichloroethene	1.0	U	25.0	30.8		ug/L	123	74 - 124	4	15	
cis-1,3-Dichloropropene	1.0	U	25.0	26.3		ug/L	105	74 - 124	5	15	
Cyclohexane	1.0	U	25.0	33.4		ug/L	133	59 - 135	3	20	
Dichlorodifluoromethane	1.0	U	25.0	27.5		ug/L	110	59 - 135	9	20	
Ethylbenzene	1.0	U	25.0	28.1		ug/L	112	77 - 123	2	15	
1,2-Dibromoethane	1.0	U	25.0	28.1		ug/L	112	77 - 120	1	15	
Isopropylbenzene	1.0	U	25.0	28.3		ug/L	113	77 - 122	4	20	
Methyl acetate	2.5	U	50.0	48.0		ug/L	96	74 - 133	1	20	
Methyl tert-butyl ether	1.0	U	25.0	26.2		ug/L	105	77 - 120	7	37	
Methylcyclohexane	1.0	U	25.0	31.5		ug/L	126	68 - 134	5	20	
Methylene Chloride	1.0	U	25.0	29.6		ug/L	118	75 - 124	6	15	
Styrene	1.0	U	25.0	26.6		ug/L	106	80 - 120	1	20	
Tetrachloroethene	1.0	U F1	25.0	30.8	F1	ug/L	123	74 - 122	5	20	
Toluene	1.0	U	25.0	27.6		ug/L	111	80 - 122	2	15	
trans-1,2-Dichloroethene	1.0	U F1	25.0	33.6	F1	ug/L	134	73 - 127	0	20	
trans-1,3-Dichloropropene	1.0	U	25.0	25.3		ug/L	101	80 - 120	3	15	
Trichloroethene	1.0	U F1	25.0	31.5	F1	ug/L	126	74 - 123	4	16	
Trichlorofluoromethane	1.0	U F1	25.0	37.7	F1	ug/L	151	62 - 150	7	20	
Vinyl chloride	1.0	U F1	25.0	35.4	F1	ug/L	142	65 - 133	6	15	

**MSD MSD**

Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	104		80 - 120
1,2-Dichloroethane-d4 (Surr)	103		77 - 120
4-Bromofluorobenzene (Surr)	113		73 - 120
Dibromofluoromethane (Surr)	109		75 - 123

## Method: 6010C - Metals (ICP)

**Lab Sample ID: MB 480-671891/1-A**

**Matrix: Water**

**Analysis Batch: 672499**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 671891**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L	06/06/23 08:14	06/09/23 04:51		1
Aluminum	0.20	U	0.20	0.060	mg/L	06/06/23 08:14	06/09/23 04:51		1
Arsenic	0.015	U	0.015	0.0056	mg/L	06/06/23 08:14	06/09/23 04:51		1
Barium	0.0020	U	0.0020	0.00070	mg/L	06/06/23 08:14	06/09/23 04:51		1

Eurofins Buffalo

# QC Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

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

**Lab Sample ID: MB 480-671891/1-A**

**Matrix: Water**

**Analysis Batch: 672499**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 671891**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Beryllium	0.0020	U	0.0020	0.00030	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Calcium	0.50	U	0.50	0.10	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Chromium	0.0040	U	0.0040	0.0010	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Copper	0.010	U	0.010	0.0016	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Iron	0.050	U	0.050	0.019	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Potassium	0.50	U	0.50	0.10	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Magnesium	0.20	U	0.20	0.043	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Manganese	0.0030	U	0.0030	0.00040	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Sodium	1.0	U	1.0	0.32	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Nickel	0.010	U	0.010	0.0013	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Lead	0.010	U	0.010	0.0030	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Antimony	0.020	U	0.020	0.0068	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Selenium	0.025	U	0.025	0.0087	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Thallium	0.020	U	0.020	0.010	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L	06/06/23 08:14	06/09/23 04:51	1	1
Zinc	0.010	U	0.010	0.0015	mg/L	06/06/23 08:14	06/09/23 04:51	1	1

**Lab Sample ID: LCS 480-671891/2-A**

**Matrix: Water**

**Analysis Batch: 672499**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 671891**

Analyte	Spike	LCS	LCS	%Rec		
	Added	Result	Qualifier	Unit	D	%Rec
Silver	0.0500	0.0489		mg/L	98	80 - 120
Aluminum	10.0	10.6		mg/L	106	80 - 120
Arsenic	0.200	0.204		mg/L	102	80 - 120
Barium	0.200	0.218		mg/L	109	80 - 120
Beryllium	0.200	0.220		mg/L	110	80 - 120
Calcium	10.0	10.6		mg/L	106	80 - 120
Cadmium	0.200	0.211		mg/L	105	80 - 120
Cobalt	0.200	0.201		mg/L	100	80 - 120
Chromium	0.201	0.209		mg/L	104	80 - 120
Copper	0.200	0.204		mg/L	102	80 - 120
Iron	10.0	10.4		mg/L	104	80 - 120
Potassium	10.0	10.7		mg/L	107	80 - 120
Magnesium	10.0	10.3		mg/L	102	80 - 120
Manganese	0.200	0.218		mg/L	109	80 - 120
Sodium	10.0	10.5		mg/L	105	80 - 120
Nickel	0.200	0.200		mg/L	100	80 - 120
Lead	0.200	0.203		mg/L	102	80 - 120
Antimony	0.200	0.225		mg/L	112	80 - 120
Selenium	0.200	0.197		mg/L	98	80 - 120
Thallium	0.200	0.211		mg/L	105	80 - 120
Vanadium	0.200	0.212		mg/L	106	80 - 120
Zinc	0.200	0.200		mg/L	100	80 - 120

Eurofins Buffalo

# QC Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

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

**Lab Sample ID: 480-209410-15 MS**

**Matrix: Water**

**Analysis Batch: 672499**

**Client Sample ID: MW-15D\_20230531**

**Prep Type: Total/NA**

**Prep Batch: 671891**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits	
	Result	Qualifier	Added	Result	Qualifier						
Silver	0.0060	U	0.0500	0.0490		mg/L		98		75 - 125	
Aluminum	0.13	J	10.0	10.5		mg/L		103		75 - 125	
Arsenic	0.015	U	0.200	0.208		mg/L		104		75 - 125	
Barium	0.094		0.200	0.309		mg/L		108		75 - 125	
Beryllium	0.0020	U	0.200	0.216		mg/L		108		75 - 125	
Calcium	60		10.0	67.3	4	mg/L		75		75 - 125	
Cadmium	0.0020	U	0.200	0.211		mg/L		106		75 - 125	
Cobalt	0.0040	U	0.200	0.201		mg/L		100		75 - 125	
Chromium	0.0040	U	0.201	0.208		mg/L		104		75 - 125	
Copper	0.010	U	0.200	0.206		mg/L		103		75 - 125	
Iron	0.25		10.0	10.3		mg/L		100		75 - 125	
Potassium	2.9		10.0	13.4		mg/L		105		75 - 125	
Magnesium	13		10.0	23.1		mg/L		100		75 - 125	
Manganese	0.017		0.200	0.229		mg/L		106		75 - 125	
Sodium	6.9		10.0	17.2		mg/L		103		75 - 125	
Nickel	0.010	U	0.200	0.202		mg/L		101		75 - 125	
Lead	0.010	U	0.200	0.205		mg/L		102		75 - 125	
Antimony	0.020	U	0.200	0.224		mg/L		112		75 - 125	
Selenium	0.41		0.200	0.627		mg/L		108		75 - 125	
Thallium	0.020	U	0.200	0.211		mg/L		106		75 - 125	
Vanadium	0.0050	U	0.200	0.213		mg/L		107		75 - 125	
Zinc	0.0017	J	0.200	0.198		mg/L		98		75 - 125	

**Lab Sample ID: 480-209410-15 MSD**

**Matrix: Water**

**Analysis Batch: 672499**

**Client Sample ID: MW-15D\_20230531**

**Prep Type: Total/NA**

**Prep Batch: 671891**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Silver	0.0060	U	0.0500	0.0480		mg/L		96		75 - 125	2 20
Aluminum	0.13	J	10.0	10.5		mg/L		104		75 - 125	0 20
Arsenic	0.015	U	0.200	0.208		mg/L		104		75 - 125	0 20
Barium	0.094		0.200	0.309		mg/L		108		75 - 125	0 20
Beryllium	0.0020	U	0.200	0.219		mg/L		109		75 - 125	1 20
Calcium	60		10.0	66.9	4	mg/L		72		75 - 125	1 20
Cadmium	0.0020	U	0.200	0.210		mg/L		105		75 - 125	0 20
Cobalt	0.0040	U	0.200	0.201		mg/L		100		75 - 125	0 20
Chromium	0.0040	U	0.201	0.210		mg/L		105		75 - 125	1 20
Copper	0.010	U	0.200	0.205		mg/L		102		75 - 125	1 20
Iron	0.25		10.0	10.4		mg/L		101		75 - 125	1 20
Potassium	2.9		10.0	13.5		mg/L		106		75 - 125	1 20
Magnesium	13		10.0	23.0		mg/L		99		75 - 125	0 20
Manganese	0.017		0.200	0.229		mg/L		106		75 - 125	0 20
Sodium	6.9		10.0	17.2		mg/L		103		75 - 125	0 20
Nickel	0.010	U	0.200	0.201		mg/L		101		75 - 125	0 20
Lead	0.010	U	0.200	0.205		mg/L		103		75 - 125	0 20
Antimony	0.020	U	0.200	0.222		mg/L		111		75 - 125	1 20
Selenium	0.41		0.200	0.614		mg/L		101		75 - 125	2 20
Thallium	0.020	U	0.200	0.210		mg/L		105		75 - 125	0 20
Vanadium	0.0050	U	0.200	0.212		mg/L		106		75 - 125	1 20

Eurofins Buffalo

# QC Sample Results

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

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

**Lab Sample ID: 480-209410-15 MSD**

**Matrix: Water**

**Analysis Batch: 672499**

**Client Sample ID: MW-15D\_20230531**

**Prep Type: Total/NA**

**Prep Batch: 671891**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
	0.0017	J	0.200	0.199		mg/L	98	Limits	Limit
Zinc								75 - 125	0 - 20

**Lab Sample ID: MB 480-672083/1-A**

**Matrix: Water**

**Analysis Batch: 673463**

**Client Sample ID: Method Blank**

**Prep Type: Total Recoverable**

**Prep Batch: 672083**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0060	U	0.0060	0.0017	mg/L		06/07/23 08:18	06/16/23 20:43	1
Aluminum	0.20	U	0.20	0.060	mg/L		06/07/23 08:18	06/16/23 20:43	1
Arsenic	0.015	U	0.015	0.0056	mg/L		06/07/23 08:18	06/16/23 20:43	1
Barium	0.0020	U	0.0020	0.00070	mg/L		06/07/23 08:18	06/16/23 20:43	1
Beryllium	0.0020	U	0.0020	0.00030	mg/L		06/07/23 08:18	06/16/23 20:43	1
Calcium	0.50	U	0.50	0.10	mg/L		06/07/23 08:18	06/16/23 20:43	1
Cadmium	0.0020	U	0.0020	0.00050	mg/L		06/07/23 08:18	06/16/23 20:43	1
Cobalt	0.0040	U	0.0040	0.00063	mg/L		06/07/23 08:18	06/16/23 20:43	1
Chromium	0.0040	U	0.0040	0.0010	mg/L		06/07/23 08:18	06/16/23 20:43	1
Copper	0.010	U	0.010	0.0016	mg/L		06/07/23 08:18	06/16/23 20:43	1
Iron	0.050	U	0.050	0.019	mg/L		06/07/23 08:18	06/16/23 20:43	1
Potassium	0.50	U	0.50	0.10	mg/L		06/07/23 08:18	06/16/23 20:43	1
Magnesium	0.20	U	0.20	0.043	mg/L		06/07/23 08:18	06/16/23 20:43	1
Manganese	0.00347		0.0030	0.00040	mg/L		06/07/23 08:18	06/16/23 20:43	1
Sodium	1.0	U	1.0	0.32	mg/L		06/07/23 08:18	06/16/23 20:43	1
Nickel	0.010	U	0.010	0.0013	mg/L		06/07/23 08:18	06/16/23 20:43	1
Lead	0.010	U	0.010	0.0030	mg/L		06/07/23 08:18	06/16/23 20:43	1
Antimony	0.020	U	0.020	0.0068	mg/L		06/07/23 08:18	06/16/23 20:43	1
Selenium	0.025	U	0.025	0.0087	mg/L		06/07/23 08:18	06/16/23 20:43	1
Thallium	0.020	U	0.020	0.010	mg/L		06/07/23 08:18	06/16/23 20:43	1
Vanadium	0.0050	U	0.0050	0.0015	mg/L		06/07/23 08:18	06/16/23 20:43	1
Zinc	0.010	U	0.010	0.0015	mg/L		06/07/23 08:18	06/16/23 20:43	1

**Lab Sample ID: LCS 480-672083/2-A**

**Matrix: Water**

**Analysis Batch: 673463**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 672083**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	Prepared	Analyzed	Dil Fac	
Silver	0.0500	0.0548		mg/L		110	80 - 120		
Aluminum	10.0	11.9		mg/L		119	80 - 120		
Arsenic	0.200	0.227		mg/L		113	80 - 120		
Barium	0.200	0.241		mg/L		120	80 - 120		
Calcium	10.0	11.9		mg/L		119	80 - 120		
Cadmium	0.200	0.235		mg/L		117	80 - 120		
Cobalt	0.200	0.229		mg/L		114	80 - 120		
Chromium	0.201	0.235		mg/L		117	80 - 120		
Copper	0.200	0.231		mg/L		116	80 - 120		
Iron	10.0	11.9		mg/L		119	80 - 120		
Magnesium	10.0	11.6		mg/L		116	80 - 120		
Sodium	10.0	12.0		mg/L		120	80 - 120		
Nickel	0.200	0.230		mg/L		115	80 - 120		
Lead	0.200	0.231		mg/L		116	80 - 120		

Eurofins Buffalo

# QC Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

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

**Lab Sample ID: LCS 480-672083/2-A**

**Matrix: Water**

**Analysis Batch: 673463**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 672083**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Selenium	0.200	0.220		mg/L	110	80 - 120	
Thallium	0.200	0.239		mg/L	120	80 - 120	
Zinc	0.200	0.226		mg/L	113	80 - 120	

**Lab Sample ID: LCS 480-672083/2-A**

**Matrix: Water**

**Analysis Batch: 674030**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 672083**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Beryllium	0.200	0.214		mg/L	107	80 - 120	
Potassium	10.0	10.2		mg/L	101	80 - 120	
Manganese	0.200	0.209		mg/L	105	80 - 120	
Antimony	0.200	0.220		mg/L	110	80 - 120	
Vanadium	0.200	0.205		mg/L	102	80 - 120	

**Lab Sample ID: MB 480-674051/1-A**

**Matrix: Water**

**Analysis Batch: 674356**

**Client Sample ID: Method Blank**

**Prep Type: Total Recoverable**

**Prep Batch: 674051**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.000520	J	0.0030	0.00040	mg/L	06/22/23 12:07	06/23/23 18:27		1

**Lab Sample ID: LCS 480-674051/2-A**

**Matrix: Water**

**Analysis Batch: 674356**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 674051**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	0.200	0.210		mg/L	105	80 - 120	

**Lab Sample ID: 480-209410-15 MS**

**Matrix: Water**

**Analysis Batch: 673463**

**Client Sample ID: MW-15D\_20230531**

**Prep Type: Dissolved**

**Prep Batch: 672083**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Silver	0.0060	U	0.0500	0.0561		mg/L	112	75 - 125	
Aluminum	0.20	U	10.0	12.1		mg/L	121	75 - 125	
Arsenic	0.015	U	0.200	0.239		mg/L	120	75 - 125	
Barium	0.086		0.200	0.332		mg/L	123	75 - 125	
Beryllium	0.0020	U	0.200	0.255	F1	mg/L	128	75 - 125	
Calcium	64		10.0	81.1	4	mg/L	166	75 - 125	
Cadmium	0.0020	U	0.200	0.242		mg/L	121	75 - 125	
Cobalt	0.0040	U	0.200	0.233		mg/L	117	75 - 125	
Chromium	0.0040	U	0.201	0.242		mg/L	121	75 - 125	
Copper	0.010	U	0.200	0.237		mg/L	118	75 - 125	
Iron	0.050	U	10.0	12.0		mg/L	120	75 - 125	
Potassium	3.2		10.0	16.2	F1	mg/L	130	75 - 125	
Magnesium	14		10.0	25.9		mg/L	123	75 - 125	
Sodium	7.5		10.0	20.3	F1	mg/L	127	75 - 125	
Nickel	0.010	U	0.200	0.234		mg/L	117	75 - 125	
Lead	0.010	U	0.200	0.238		mg/L	119	75 - 125	

Eurofins Buffalo

# QC Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

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

**Lab Sample ID: 480-209410-15 MS**

**Matrix: Water**

**Analysis Batch: 673463**

**Client Sample ID: MW-15D\_20230531**

**Prep Type: Dissolved**

**Prep Batch: 672083**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits		
Antimony	0.020	U	0.200	0.255	F1	mg/L	127	75 - 125			
Selenium	0.45		0.200	0.684		mg/L	117	75 - 125			
Thallium	0.020	U	0.200	0.244		mg/L	122	75 - 125			
Vanadium	0.0050	U	0.200	0.249		mg/L	124	75 - 125			
Zinc	0.010	U	0.200	0.229		mg/L	115	75 - 125			

**Lab Sample ID: 480-209410-15 MSD**

**Matrix: Water**

**Analysis Batch: 673463**

**Client Sample ID: MW-15D\_20230531**

**Prep Type: Dissolved**

**Prep Batch: 672083**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Silver	0.0060	U	0.0500	0.0553		mg/L	111	75 - 125		1	20
Aluminum	0.20	U	10.0	11.8		mg/L	118	75 - 125		3	20
Arsenic	0.015	U	0.200	0.231		mg/L	115	75 - 125		4	20
Barium	0.086		0.200	0.324		mg/L	119	75 - 125		2	20
Beryllium	0.0020	U	0.200	0.248		mg/L	124	75 - 125		3	20
Calcium	64		10.0	77.5	4	mg/L	130	75 - 125		5	20
Cadmium	0.0020	U	0.200	0.236		mg/L	118	75 - 125		2	20
Cobalt	0.0040	U	0.200	0.227		mg/L	114	75 - 125		2	20
Chromium	0.0040	U	0.201	0.236		mg/L	118	75 - 125		3	20
Copper	0.010	U	0.200	0.232		mg/L	116	75 - 125		2	20
Iron	0.050	U	10.0	11.6		mg/L	116	75 - 125		3	20
Potassium	3.2		10.0	15.8	F1	mg/L	126	75 - 125		3	20
Magnesium	14		10.0	25.4		mg/L	119	75 - 125		2	20
Sodium	7.5		10.0	19.8		mg/L	122	75 - 125		2	20
Nickel	0.010	U	0.200	0.229		mg/L	115	75 - 125		2	20
Lead	0.010	U	0.200	0.233		mg/L	116	75 - 125		2	20
Antimony	0.020	U	0.200	0.247		mg/L	124	75 - 125		3	20
Selenium	0.45		0.200	0.678		mg/L	114	75 - 125		1	20
Thallium	0.020	U	0.200	0.238		mg/L	119	75 - 125		3	20
Vanadium	0.0050	U	0.200	0.244		mg/L	122	75 - 125		2	20
Zinc	0.010	U	0.200	0.223		mg/L	112	75 - 125		3	20

**Lab Sample ID: 480-209410-15 MS**

**Matrix: Water**

**Analysis Batch: 674356**

**Client Sample ID: MW-15D\_20230531**

**Prep Type: Dissolved**

**Prep Batch: 674051**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits		
Manganese	0.0022	J B	0.200	0.206		mg/L	102	75 - 125			

**Lab Sample ID: 480-209410-15 MSD**

**Matrix: Water**

**Analysis Batch: 674356**

**Client Sample ID: MW-15D\_20230531**

**Prep Type: Dissolved**

**Prep Batch: 674051**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Manganese	0.0022	J B	0.200	0.206		mg/L	102	75 - 125		0	20

# QC Sample Results

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID:** MB 480-671859/1-A

**Matrix:** Water

**Analysis Batch:** 671941

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 671859

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 15:25	1

**Lab Sample ID:** LCS 480-671859/2-A

**Matrix:** Water

**Analysis Batch:** 671941

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 671859

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00669	0.00656		mg/L		98	80 - 120

**Lab Sample ID:** 480-209410-15 MS

**Matrix:** Water

**Analysis Batch:** 671941

**Client Sample ID:** MW-15D\_20230531

**Prep Type:** Total/NA

**Prep Batch:** 671859

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00020	U F1 F2	0.00669	0.00408	F1	mg/L		61	80 - 120

**Lab Sample ID:** 480-209410-15 MSD

**Matrix:** Water

**Analysis Batch:** 671941

**Client Sample ID:** MW-15D\_20230531

**Prep Type:** Total/NA

**Prep Batch:** 671859

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	Limit
Mercury	0.00020	U F1 F2	0.00669	0.00627	F2	mg/L		94	80 - 120	42

**Lab Sample ID:** MB 480-671860/1-A

**Matrix:** Water

**Analysis Batch:** 671941

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 671860

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000043	mg/L		06/05/23 11:04	06/05/23 16:03	1

**Lab Sample ID:** LCS 480-671860/2-A

**Matrix:** Water

**Analysis Batch:** 671941

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 671860

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00669	0.00644		mg/L		96	80 - 120

**Lab Sample ID:** 480-209410-15 MS

**Matrix:** Water

**Analysis Batch:** 671941

**Client Sample ID:** MW-15D\_20230531

**Prep Type:** Dissolved

**Prep Batch:** 671860

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00020	U	0.00669	0.00656		mg/L		98	80 - 120

**Lab Sample ID:** 480-209410-15 MSD

**Matrix:** Water

**Analysis Batch:** 671941

**Client Sample ID:** MW-15D\_20230531

**Prep Type:** Dissolved

**Prep Batch:** 671860

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	Limit
Mercury	0.00020	U	0.00669	0.00621		mg/L		93	80 - 120	5

Eurofins Buffalo

# QC Association Summary

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

## GC/MS VOA

### Analysis Batch: 672295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209410-1	MW-25S_20230601	Total/NA	Water	8260C	
480-209410-2	MW-22D_20230601	Total/NA	Water	8260C	
480-209410-3	MW-22R_20230601	Total/NA	Water	8260C	
480-209410-4	MW-21D_20230601	Total/NA	Water	8260C	
480-209410-5	MW-27R_20230601	Total/NA	Water	8260C	
480-209410-6	MW-28R_20230601	Total/NA	Water	8260C	
480-209410-7	MW-3_20230531	Total/NA	Water	8260C	
480-209410-8	VOC DUP_20230601	Total/NA	Water	8260C	
MB 480-672295/8	Method Blank	Total/NA	Water	8260C	
LCS 480-672295/6	Lab Control Sample	Total/NA	Water	8260C	
480-209410-3 MS	MW-22R_20230601	Total/NA	Water	8260C	
480-209410-3 MSD	MW-22R_20230601	Total/NA	Water	8260C	

## Metals

### Prep Batch: 671859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209410-9	MW-16S_20230601	Total/NA	Water	7470A	
480-209410-10	MW-24D_20230601	Total/NA	Water	7470A	
480-209410-11	MW-24S_20230601	Total/NA	Water	7470A	
480-209410-12	MW-26D_20230601	Total/NA	Water	7470A	
480-209410-13	MW-26S_20230601	Total/NA	Water	7470A	
480-209410-14	MW-2B_20230601	Total/NA	Water	7470A	
480-209410-15	MW-15D_20230531	Total/NA	Water	7470A	
480-209410-16	MET DUP_20230531	Total/NA	Water	7470A	
480-209410-17	EQUIPMENT BLANK_20230531	Total/NA	Water	7470A	
480-209410-18	EQUIPMENT BLANK_20230601	Total/NA	Water	7470A	
480-209410-19	SW-1_20230601	Total/NA	Water	7470A	
MB 480-671859/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-671859/2-A	Lab Control Sample	Total/NA	Water	7470A	
480-209410-15 MS	MW-15D_20230531	Total/NA	Water	7470A	
480-209410-15 MSD	MW-15D_20230531	Total/NA	Water	7470A	

### Prep Batch: 671860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209410-9	MW-16S_20230601	Dissolved	Water	7470A	
480-209410-10	MW-24D_20230601	Dissolved	Water	7470A	
480-209410-11	MW-24S_20230601	Dissolved	Water	7470A	
480-209410-12	MW-26D_20230601	Dissolved	Water	7470A	
480-209410-13	MW-26S_20230601	Dissolved	Water	7470A	
480-209410-14	MW-2B_20230601	Dissolved	Water	7470A	
480-209410-15	MW-15D_20230531	Dissolved	Water	7470A	
480-209410-16	MET DUP_20230531	Dissolved	Water	7470A	
480-209410-17	EQUIPMENT BLANK_20230531	Dissolved	Water	7470A	
480-209410-18	EQUIPMENT BLANK_20230601	Dissolved	Water	7470A	
480-209410-19	SW-1_20230601	Dissolved	Water	7470A	
MB 480-671860/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-671860/2-A	Lab Control Sample	Total/NA	Water	7470A	
480-209410-15 MS	MW-15D_20230531	Dissolved	Water	7470A	
480-209410-15 MSD	MW-15D_20230531	Dissolved	Water	7470A	

# QC Association Summary

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

## Metals

### Prep Batch: 671891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209410-9	MW-16S_20230601	Total/NA	Water	3010A	
480-209410-10	MW-24D_20230601	Total/NA	Water	3010A	
480-209410-11	MW-24S_20230601	Total/NA	Water	3010A	
480-209410-12	MW-26D_20230601	Total/NA	Water	3010A	
480-209410-13	MW-26S_20230601	Total/NA	Water	3010A	
480-209410-14	MW-2B_20230601	Total/NA	Water	3010A	
480-209410-15	MW-15D_20230531	Total/NA	Water	3010A	
480-209410-16	MET DUP_20230531	Total/NA	Water	3010A	
480-209410-17	EQUIPMENT BLANK_20230531	Total/NA	Water	3010A	
480-209410-18	EQUIPMENT BLANK_20230601	Total/NA	Water	3010A	
480-209410-19	SW-1_20230601	Total/NA	Water	3010A	
MB 480-671891/1-A	Method Blank	Total/NA	Water	3010A	
LCS 480-671891/2-A	Lab Control Sample	Total/NA	Water	3010A	
480-209410-15 MS	MW-15D_20230531	Total/NA	Water	3010A	
480-209410-15 MSD	MW-15D_20230531	Total/NA	Water	3010A	

### Analysis Batch: 671941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209410-9	MW-16S_20230601	Dissolved	Water	7470A	671860
480-209410-9	MW-16S_20230601	Total/NA	Water	7470A	671859
480-209410-10	MW-24D_20230601	Dissolved	Water	7470A	671860
480-209410-10	MW-24D_20230601	Total/NA	Water	7470A	671859
480-209410-11	MW-24S_20230601	Dissolved	Water	7470A	671860
480-209410-11	MW-24S_20230601	Total/NA	Water	7470A	671859
480-209410-12	MW-26D_20230601	Dissolved	Water	7470A	671860
480-209410-12	MW-26D_20230601	Total/NA	Water	7470A	671859
480-209410-13	MW-26S_20230601	Dissolved	Water	7470A	671860
480-209410-13	MW-26S_20230601	Total/NA	Water	7470A	671859
480-209410-14	MW-2B_20230601	Dissolved	Water	7470A	671860
480-209410-14	MW-2B_20230601	Total/NA	Water	7470A	671859
480-209410-15	MW-15D_20230531	Dissolved	Water	7470A	671860
480-209410-15	MW-15D_20230531	Total/NA	Water	7470A	671859
480-209410-16	MET DUP_20230531	Dissolved	Water	7470A	671860
480-209410-16	MET DUP_20230531	Total/NA	Water	7470A	671859
480-209410-17	EQUIPMENT BLANK_20230531	Dissolved	Water	7470A	671860
480-209410-17	EQUIPMENT BLANK_20230531	Total/NA	Water	7470A	671859
480-209410-18	EQUIPMENT BLANK_20230601	Dissolved	Water	7470A	671860
480-209410-18	EQUIPMENT BLANK_20230601	Total/NA	Water	7470A	671859
480-209410-19	SW-1_20230601	Dissolved	Water	7470A	671860
480-209410-19	SW-1_20230601	Total/NA	Water	7470A	671859
MB 480-671859/1-A	Method Blank	Total/NA	Water	7470A	671859
MB 480-671860/1-A	Method Blank	Total/NA	Water	7470A	671860
LCS 480-671859/2-A	Lab Control Sample	Total/NA	Water	7470A	671859
LCS 480-671860/2-A	Lab Control Sample	Total/NA	Water	7470A	671860
480-209410-15 MS	MW-15D_20230531	Dissolved	Water	7470A	671860
480-209410-15 MS	MW-15D_20230531	Total/NA	Water	7470A	671859
480-209410-15 MSD	MW-15D_20230531	Dissolved	Water	7470A	671860
480-209410-15 MSD	MW-15D_20230531	Total/NA	Water	7470A	671859

Eurofins Buffalo

# QC Association Summary

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

## Metals

### Prep Batch: 672083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209410-9	MW-16S_20230601	Dissolved	Water	3005A	
480-209410-10	MW-24D_20230601	Dissolved	Water	3005A	
480-209410-11	MW-24S_20230601	Dissolved	Water	3005A	
480-209410-12	MW-26D_20230601	Dissolved	Water	3005A	
480-209410-13	MW-26S_20230601	Dissolved	Water	3005A	
480-209410-14	MW-2B_20230601	Dissolved	Water	3005A	
480-209410-15	MW-15D_20230531	Dissolved	Water	3005A	
480-209410-16	MET DUP_20230531	Dissolved	Water	3005A	
480-209410-17	EQUIPMENT BLANK_20230531	Dissolved	Water	3005A	
480-209410-18	EQUIPMENT BLANK_20230601	Dissolved	Water	3005A	
480-209410-19	SW-1_20230601	Dissolved	Water	3005A	
MB 480-672083/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 480-672083/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
480-209410-15 MS	MW-15D_20230531	Dissolved	Water	3005A	
480-209410-15 MSD	MW-15D_20230531	Dissolved	Water	3005A	

### Analysis Batch: 672499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209410-9	MW-16S_20230601	Total/NA	Water	6010C	671891
480-209410-10	MW-24D_20230601	Total/NA	Water	6010C	671891
480-209410-11	MW-24S_20230601	Total/NA	Water	6010C	671891
480-209410-12	MW-26D_20230601	Total/NA	Water	6010C	671891
480-209410-13	MW-26S_20230601	Total/NA	Water	6010C	671891
480-209410-14	MW-2B_20230601	Total/NA	Water	6010C	671891
480-209410-15	MW-15D_20230531	Total/NA	Water	6010C	671891
480-209410-16	MET DUP_20230531	Total/NA	Water	6010C	671891
480-209410-17	EQUIPMENT BLANK_20230531	Total/NA	Water	6010C	671891
480-209410-18	EQUIPMENT BLANK_20230601	Total/NA	Water	6010C	671891
480-209410-19	SW-1_20230601	Total/NA	Water	6010C	671891
MB 480-671891/1-A	Method Blank	Total/NA	Water	6010C	671891
LCS 480-671891/2-A	Lab Control Sample	Total/NA	Water	6010C	671891
480-209410-15 MS	MW-15D_20230531	Total/NA	Water	6010C	671891
480-209410-15 MSD	MW-15D_20230531	Total/NA	Water	6010C	671891

### Analysis Batch: 673463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209410-9	MW-16S_20230601	Dissolved	Water	6010C	672083
480-209410-10	MW-24D_20230601	Dissolved	Water	6010C	672083
480-209410-11	MW-24S_20230601	Dissolved	Water	6010C	672083
480-209410-12	MW-26D_20230601	Dissolved	Water	6010C	672083
480-209410-13	MW-26S_20230601	Dissolved	Water	6010C	672083
480-209410-14	MW-2B_20230601	Dissolved	Water	6010C	672083
480-209410-15	MW-15D_20230531	Dissolved	Water	6010C	672083
480-209410-16	MET DUP_20230531	Dissolved	Water	6010C	672083
480-209410-17	EQUIPMENT BLANK_20230531	Dissolved	Water	6010C	672083
480-209410-18	EQUIPMENT BLANK_20230601	Dissolved	Water	6010C	672083
480-209410-19	SW-1_20230601	Dissolved	Water	6010C	672083
MB 480-672083/1-A	Method Blank	Total Recoverable	Water	6010C	672083
LCS 480-672083/2-A	Lab Control Sample	Total Recoverable	Water	6010C	672083
480-209410-15 MS	MW-15D_20230531	Dissolved	Water	6010C	672083
480-209410-15 MSD	MW-15D_20230531	Dissolved	Water	6010C	672083

Eurofins Buffalo

# QC Association Summary

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

## Metals

### Analysis Batch: 674030

Lab Sample ID LCS 480-672083/2-A	Client Sample ID Lab Control Sample	Prep Type Total Recoverable	Matrix Water	Method 6010C	Prep Batch 672083
-------------------------------------	--	--------------------------------	-----------------	-----------------	----------------------

### Prep Batch: 674051

Lab Sample ID 480-209410-11	Client Sample ID MW-24S_20230601	Prep Type Dissolved	Matrix Water	Method 3005A	Prep Batch 674051
480-209410-12	MW-26D_20230601	Dissolved	Water	3005A	674051
480-209410-15	MW-15D_20230531	Dissolved	Water	3005A	674051
480-209410-16	MET DUP_20230531	Dissolved	Water	3005A	674051
MB 480-674051/1-A	Method Blank	Total Recoverable	Water	3005A	674051
LCS 480-674051/2-A	Lab Control Sample	Total Recoverable	Water	3005A	674051
480-209410-15 MS	MW-15D_20230531	Dissolved	Water	3005A	674051
480-209410-15 MSD	MW-15D_20230531	Dissolved	Water	3005A	674051

### Analysis Batch: 674356

Lab Sample ID 480-209410-11	Client Sample ID MW-24S_20230601	Prep Type Dissolved	Matrix Water	Method 6010C	Prep Batch 674051
480-209410-12	MW-26D_20230601	Dissolved	Water	6010C	674051
480-209410-15	MW-15D_20230531	Dissolved	Water	6010C	674051
480-209410-16	MET DUP_20230531	Dissolved	Water	6010C	674051
MB 480-674051/1-A	Method Blank	Total Recoverable	Water	6010C	674051
LCS 480-674051/2-A	Lab Control Sample	Total Recoverable	Water	6010C	674051
480-209410-15 MS	MW-15D_20230531	Dissolved	Water	6010C	674051
480-209410-15 MSD	MW-15D_20230531	Dissolved	Water	6010C	674051

# Lab Chronicle

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-25S\_20230601**

**Lab Sample ID: 480-209410-1**

Matrix: Water

Date Collected: 06/01/23 16:02

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	672295	CR	EET BUF	06/08/23 15:59

**Client Sample ID: MW-22D\_20230601**

**Lab Sample ID: 480-209410-2**

Matrix: Water

Date Collected: 06/01/23 14:50

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	672295	CR	EET BUF	06/08/23 16:22

**Client Sample ID: MW-22R\_20230601**

**Lab Sample ID: 480-209410-3**

Matrix: Water

Date Collected: 06/01/23 13:42

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	672295	CR	EET BUF	06/08/23 16:44

**Client Sample ID: MW-21D\_20230601**

**Lab Sample ID: 480-209410-4**

Matrix: Water

Date Collected: 06/01/23 12:11

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	672295	CR	EET BUF	06/08/23 17:07

**Client Sample ID: MW-27R\_20230601**

**Lab Sample ID: 480-209410-5**

Matrix: Water

Date Collected: 06/01/23 10:55

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	672295	CR	EET BUF	06/08/23 17:29

**Client Sample ID: MW-28R\_20230601**

**Lab Sample ID: 480-209410-6**

Matrix: Water

Date Collected: 06/01/23 10:01

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	672295	CR	EET BUF	06/08/23 17:52

**Client Sample ID: MW-3\_20230531**

**Lab Sample ID: 480-209410-7**

Matrix: Water

Date Collected: 05/31/23 16:27

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1000	672295	CR	EET BUF	06/08/23 18:14

Eurofins Buffalo

# Lab Chronicle

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: VOC DUP\_20230601**

**Lab Sample ID: 480-209410-8**

Matrix: Water

Date Collected: 06/01/23 00:00

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	672295	CR	EET BUF	06/08/23 18:36

**Client Sample ID: MW-16S\_20230601**

**Lab Sample ID: 480-209410-9**

Matrix: Water

Date Collected: 06/01/23 16:19

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			672083	MP	EET BUF	06/07/23 08:18
Dissolved	Analysis	6010C		1	673463	LMH	EET BUF	06/16/23 20:54
Total/NA	Prep	3010A			671891	VAK	EET BUF	06/06/23 08:14
Total/NA	Analysis	6010C		1	672499	LMH	EET BUF	06/09/23 04:58
Dissolved	Prep	7470A			671860	NVK	EET BUF	06/05/23 11:04
Dissolved	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 16:06
Total/NA	Prep	7470A			671859	NVK	EET BUF	06/05/23 11:04
Total/NA	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 15:42

**Client Sample ID: MW-24D\_20230601**

**Lab Sample ID: 480-209410-10**

Matrix: Water

Date Collected: 06/01/23 14:11

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			672083	MP	EET BUF	06/07/23 08:18
Dissolved	Analysis	6010C		1	673463	LMH	EET BUF	06/16/23 20:58
Total/NA	Prep	3010A			671891	VAK	EET BUF	06/06/23 08:14
Total/NA	Analysis	6010C		1	672499	LMH	EET BUF	06/09/23 05:02
Dissolved	Prep	7470A			671860	NVK	EET BUF	06/05/23 11:04
Dissolved	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 16:07
Total/NA	Prep	7470A			671859	NVK	EET BUF	06/05/23 11:04
Total/NA	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 15:44

**Client Sample ID: MW-24S\_20230601**

**Lab Sample ID: 480-209410-11**

Matrix: Water

Date Collected: 06/01/23 13:19

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			672083	MP	EET BUF	06/07/23 08:18
Dissolved	Analysis	6010C		1	673463	LMH	EET BUF	06/16/23 21:02
Dissolved	Prep	3005A			674051	VAK	EET BUF	06/22/23 12:07
Dissolved	Analysis	6010C		1	674356	LMH	EET BUF	06/23/23 19:39
Total/NA	Prep	3010A			671891	VAK	EET BUF	06/06/23 08:14
Total/NA	Analysis	6010C		1	672499	LMH	EET BUF	06/09/23 05:06
Dissolved	Prep	7470A			671860	NVK	EET BUF	06/05/23 11:04
Dissolved	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 16:08
Total/NA	Prep	7470A			671859	NVK	EET BUF	06/05/23 11:04
Total/NA	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 15:45

Eurofins Buffalo

# Lab Chronicle

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-26D\_20230601**

**Lab Sample ID: 480-209410-12**

**Matrix: Water**

Date Collected: 06/01/23 12:05

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			672083	MP	EET BUF	06/07/23 08:18
Dissolved	Analysis	6010C		1	673463	LMH	EET BUF	06/16/23 21:06
Dissolved	Prep	3005A			674051	VAK	EET BUF	06/22/23 12:07
Dissolved	Analysis	6010C		1	674356	LMH	EET BUF	06/23/23 19:43
Total/NA	Prep	3010A			671891	VAK	EET BUF	06/06/23 08:14
Total/NA	Analysis	6010C		1	672499	LMH	EET BUF	06/09/23 05:10
Dissolved	Prep	7470A			671860	NVK	EET BUF	06/05/23 11:04
Dissolved	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 16:12
Total/NA	Prep	7470A			671859	NVK	EET BUF	06/05/23 11:04
Total/NA	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 15:46

**Client Sample ID: MW-26S\_20230601**

**Lab Sample ID: 480-209410-13**

**Matrix: Water**

Date Collected: 06/01/23 11:15

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			672083	MP	EET BUF	06/07/23 08:18
Dissolved	Analysis	6010C		1	673463	LMH	EET BUF	06/16/23 21:10
Total/NA	Prep	3010A			671891	VAK	EET BUF	06/06/23 08:14
Total/NA	Analysis	6010C		1	672499	LMH	EET BUF	06/09/23 05:25
Dissolved	Prep	7470A			671860	NVK	EET BUF	06/05/23 11:04
Dissolved	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 16:14
Total/NA	Prep	7470A			671859	NVK	EET BUF	06/05/23 11:04
Total/NA	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 15:47

**Client Sample ID: MW-2B\_20230601**

**Lab Sample ID: 480-209410-14**

**Matrix: Water**

Date Collected: 06/01/23 09:25

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			672083	MP	EET BUF	06/07/23 08:18
Dissolved	Analysis	6010C		1	673463	LMH	EET BUF	06/16/23 21:13
Total/NA	Prep	3010A			671891	VAK	EET BUF	06/06/23 08:14
Total/NA	Analysis	6010C		1	672499	LMH	EET BUF	06/09/23 05:29
Dissolved	Prep	7470A			671860	NVK	EET BUF	06/05/23 11:04
Dissolved	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 16:15
Total/NA	Prep	7470A			671859	NVK	EET BUF	06/05/23 11:04
Total/NA	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 15:49

Eurofins Buffalo

# Lab Chronicle

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: MW-15D\_20230531**

**Lab Sample ID: 480-209410-15**

**Matrix: Water**

Date Collected: 05/31/23 16:35

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			672083	MP	EET BUF	06/07/23 08:18
Dissolved	Analysis	6010C		1	673463	LMH	EET BUF	06/16/23 21:29
Dissolved	Prep	3005A			674051	VAK	EET BUF	06/22/23 12:07
Dissolved	Analysis	6010C		1	674356	LMH	EET BUF	06/23/23 19:47
Total/NA	Prep	3010A			671891	VAK	EET BUF	06/06/23 08:14
Total/NA	Analysis	6010C		1	672499	LMH	EET BUF	06/09/23 05:33
Dissolved	Prep	7470A			671860	NVK	EET BUF	06/05/23 11:04
Dissolved	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 16:16
Total/NA	Prep	7470A			671859	NVK	EET BUF	06/05/23 11:04
Total/NA	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 15:50

**Client Sample ID: MET DUP\_20230531**

**Lab Sample ID: 480-209410-16**

**Matrix: Water**

Date Collected: 05/31/23 00:00

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			672083	MP	EET BUF	06/07/23 08:18
Dissolved	Analysis	6010C		1	673463	LMH	EET BUF	06/16/23 21:48
Dissolved	Prep	3005A			674051	VAK	EET BUF	06/22/23 12:07
Dissolved	Analysis	6010C		1	674356	LMH	EET BUF	06/23/23 19:58
Total/NA	Prep	3010A			671891	VAK	EET BUF	06/06/23 08:14
Total/NA	Analysis	6010C		1	672499	LMH	EET BUF	06/09/23 05:52
Dissolved	Prep	7470A			671860	NVK	EET BUF	06/05/23 11:04
Dissolved	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 16:22
Total/NA	Prep	7470A			671859	NVK	EET BUF	06/05/23 11:04
Total/NA	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 15:58

**Client Sample ID: EQUIPMENT BLANK\_20230531**

**Lab Sample ID: 480-209410-17**

**Matrix: Water**

Date Collected: 05/31/23 17:25

Date Received: 06/02/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			672083	MP	EET BUF	06/07/23 08:18
Dissolved	Analysis	6010C		1	673463	LMH	EET BUF	06/16/23 21:52
Total/NA	Prep	3010A			671891	VAK	EET BUF	06/06/23 08:14
Total/NA	Analysis	6010C		1	672499	LMH	EET BUF	06/09/23 05:56
Dissolved	Prep	7470A			671860	NVK	EET BUF	06/05/23 11:04
Dissolved	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 16:24
Total/NA	Prep	7470A			671859	NVK	EET BUF	06/05/23 11:04
Total/NA	Analysis	7470A		1	671941	NVK	EET BUF	06/05/23 15:59

Eurofins Buffalo

# Lab Chronicle

Client: Ashland LLC

Job ID: 480-209410-1

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

**Client Sample ID: EQUIPMENT BLANK \_20230601**

**Lab Sample ID: 480-209410-18**

**Matrix: Water**

**Date Collected: 06/01/23 17:05**

**Date Received: 06/02/23 10:00**

Prep Type	Batch	Batch	Run	Dilution	Batch		Prepared or Analyzed
	Type	Method		Factor	Number	Analyst	
Dissolved	Prep	3005A			672083	MP	EET BUF 06/07/23 08:18
Dissolved	Analysis	6010C		1	673463	LMH	EET BUF 06/16/23 21:56
Total/NA	Prep	3010A			671891	VAK	EET BUF 06/06/23 08:14
Total/NA	Analysis	6010C		1	672499	LMH	EET BUF 06/09/23 06:11
Dissolved	Prep	7470A			671860	NVK	EET BUF 06/05/23 11:04
Dissolved	Analysis	7470A		1	671941	NVK	EET BUF 06/05/23 16:25
Total/NA	Prep	7470A			671859	NVK	EET BUF 06/05/23 11:04
Total/NA	Analysis	7470A		1	671941	NVK	EET BUF 06/05/23 16:01

**Client Sample ID: SW-1\_20230601**

**Lab Sample ID: 480-209410-19**

**Matrix: Water**

**Date Collected: 06/01/23 17:10**

**Date Received: 06/02/23 10:00**

Prep Type	Batch	Batch	Run	Dilution	Batch		Prepared or Analyzed
	Type	Method		Factor	Number	Analyst	
Dissolved	Prep	3005A			672083	MP	EET BUF 06/07/23 08:18
Dissolved	Analysis	6010C		1	673463	LMH	EET BUF 06/16/23 21:59
Total/NA	Prep	3010A			671891	VAK	EET BUF 06/06/23 08:14
Total/NA	Analysis	6010C		1	672499	LMH	EET BUF 06/09/23 06:15
Dissolved	Prep	7470A			671860	NVK	EET BUF 06/05/23 11:04
Dissolved	Analysis	7470A		1	671941	NVK	EET BUF 06/05/23 16:29
Total/NA	Prep	7470A			671859	NVK	EET BUF 06/05/23 11:04
Total/NA	Analysis	7470A		1	671941	NVK	EET BUF 06/05/23 16:02

**Laboratory References:**

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

Eurofins Buffalo

# Accreditation/Certification Summary

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

## Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23
Iowa	State	374	03-01-23 *
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	30	04-01-23 *
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23
Louisiana (All)	NELAP	02031	06-30-23
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	06-30-23
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-23
New Jersey	NELAP	NY455	06-30-23
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	07-31-23
Rhode Island	State	LAO00328	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23
Washington	State	C784	02-10-23 *
Wisconsin	State	998310390	08-31-23

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Buffalo

## Method Summary

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
6010C	Metals (ICP)	SW846	EET BUF
7470A	Mercury (CVAA)	SW846	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET BUF
3010A	Preparation, Total Metals	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF

**Protocol References:**

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

**Laboratory References:**

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

# Sample Summary

Client: Ashland LLC

Project/Site: Hercules Dyno - Port Ewen, NY (EHS)

Job ID: 480-209410-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
480-209410-1	MW-25S_20230601	Water	06/01/23 16:02	06/02/23 10:00	1
480-209410-2	MW-22D_20230601	Water	06/01/23 14:50	06/02/23 10:00	2
480-209410-3	MW-22R_20230601	Water	06/01/23 13:42	06/02/23 10:00	3
480-209410-4	MW-21D_20230601	Water	06/01/23 12:11	06/02/23 10:00	4
480-209410-5	MW-27R_20230601	Water	06/01/23 10:55	06/02/23 10:00	5
480-209410-6	MW-28R_20230601	Water	06/01/23 10:01	06/02/23 10:00	6
480-209410-7	MW-3_20230531	Water	05/31/23 16:27	06/02/23 10:00	7
480-209410-8	VOC DUP_20230601	Water	06/01/23 00:00	06/02/23 10:00	8
480-209410-9	MW-16S_20230601	Water	06/01/23 16:19	06/02/23 10:00	9
480-209410-10	MW-24D_20230601	Water	06/01/23 14:11	06/02/23 10:00	10
480-209410-11	MW-24S_20230601	Water	06/01/23 13:19	06/02/23 10:00	11
480-209410-12	MW-26D_20230601	Water	06/01/23 12:05	06/02/23 10:00	12
480-209410-13	MW-26S_20230601	Water	06/01/23 11:15	06/02/23 10:00	13
480-209410-14	MW-2B_20230601	Water	06/01/23 09:25	06/02/23 10:00	14
480-209410-15	MW-15D_20230531	Water	05/31/23 16:35	06/02/23 10:00	15
480-209410-16	MET DUP_20230531	Water	05/31/23 00:00	06/02/23 10:00	
480-209410-17	EQUIPMENT BLANK_20230531	Water	05/31/23 17:25	06/02/23 10:00	
480-209410-18	EQUIPMENT BLANK _20230601	Water	06/01/23 17:05	06/02/23 10:00	
480-209410-19	SW-1_20230601	Water	06/01/23 17:10	06/02/23 10:00	



## Chain of Custody Record

Client Information		Sampler: <u>John Stangel</u>	Lab P.M.: <u>Benigno; John Fuller, David</u>	Carrier Tracking No(s):	COC No: 680-136352-49761.1		
Client Contact:	Phone: <u>612-772-1142</u>	E-Mail: <u>John.Benigno@er.eurofins.us</u>	<u>David.Fuller@er.eurofins.us</u>	State of Origin: NY	Page: <u>Page 2 of 3</u>		
Company:	PWSID:	Job #:					
Ashland LLC							
Address:	Ashland Hercules Research Center 500 Hercules Rd Bldg 8145	Due Date Requested:		Analysis Requested			
City:	Wilmington	TAT Requested (business days): <u>10 Day TAT</u>					
State, Zip:	DE, 19808	Compliance Project: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
Phone:		Lab PO #: PO / Task 400					
Email:	edmeeks@ashland.com	Lab Project #: <u>68001427</u>					
Project Name:	Hercules Dyno - Port Ewen NY	Project #: <u></u>					
Site:	WC#:						
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (water, semi-solid, tissue, A/Au)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)
<u>20230531-20230601</u>		<u>6/4/23</u>	<u>13:49</u>	<u>G</u>	<u>Water</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>MW-24S-20230601</u>		<u>6/1/23</u>	<u>13:49</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>/</u>
<u>MW-26D-20230601</u>		<u>6/1/23</u>	<u>12:05</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>/</u>
<u>MW-26 S - 20230601</u>		<u>6/1/23</u>	<u>11:55</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>/</u>
<u>MW-2B - 20230601</u>		<u>6/1/23</u>	<u>09:25</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>/</u>
<u>MW-15D - 20230531</u>		<u>5/31/23</u>	<u>16:35</u>	<u>G</u>	<u>Water</u>	<u>W</u>	<u>W</u>
<u>met Disp - 20230531</u>		<u>5/31/23</u>	<u>-</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>/</u>
<u>Equip Blank - 20230531</u>		<u>5/31/23</u>	<u>17:25</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>/</u>
<u>Equip Blank - 20230601</u>		<u>6/1/23</u>	<u>17:05</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>/</u>
<u>MW-15D - 20230531</u>		<u>5/31/23</u>	<u>16:35</u>	<u>G</u>	<u>Water</u>	<u>R</u>	<u>/</u>
<u>MW-15D MSD - 20230531</u>		<u>5/31/23</u>	<u>16:35</u>	<u>G</u>	<u>Water</u>	<u>R</u>	<u>/</u>
<u>MW-15D MSD - 20230531</u>		<u>5/31/23</u>	<u>16:35</u>	<u>G</u>	<u>Water</u>	<u>R</u>	<u>/</u>
<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological							
Deliverable Requested: I, II, III, IV, Other (specify)							
Empty Kit Relinquished by: Relinquished by: <u>John Stangel</u> Date/Time: <u>6/1/23 / 10:30</u> Company <u>AMR Group</u> Received by: <u>Calumaca</u> Method of Shipment: <u>Delivery</u> Relinquished by: <u></u> Date/Time: <u></u> Company <u></u> Received by: <u></u> Date/Time: <u></u> Company							
Custody Seal Intact: <input checked="" type="checkbox"/> Custody Seal No: <u></u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Special Instructions/QC Requirements:							
Cooler Temperature(s), °C and Other Remarks:							

**Client Information**

Savannah, GA 31404  
Phone (912) 354-7858 Phone (912) 352-0165

Client Information									
Client Contact: Ed Meeks Company: Ashland LLC Address:		Sampler: John Stinszel Phone: 612-772-1142 PWID:		Lab P.M.: Beninati, John Fuller, David E-Mail: John.Beninati@er.euromitrus.com, David.Fuller@er.euromitrus.com		Carrier Tracking No(s): 680-136352-49761.1		COC No: Page: 3 of 3	
<b>Analysis Requested</b>									
<p><b>Total Number of containers:</b> <input checked="" type="checkbox"/> 5</p> <p><b>Preservation Codes:</b></p> <p>M - Hexane N - None A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Z - other (specify):</p> <p><b>Special Instructions/Note:</b></p> <p>6010C, 7470A - TAL Metals w/ Mercury 6010D - TCL VOCs OLM04.2 Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/></p>									
Due Date Requested:		TAT Requested (business days): <b>10 Day TAT</b>		Compliance Project: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Lab PO #: PO / Task 400		Project #: <b>68001427</b>	
City: Wilmington State, Zip: DE, 19808 Phone: Email: edmeeks@ashland.com Project Name: Hercules Dyno - Port Ewen NY Site:		W/C#:		Sample Date: <b>6/1/23</b>		Sample Time: <b>13</b>		Sample Type (C=Comp, G=grab): <b>Water</b>	
Ashland Hercules Research Center 500 Hercules Rd Bldg 8145		TAT Requested (business days): <b>10 Day TAT</b>		Preservation Code: <input checked="" type="checkbox"/> D <input type="checkbox"/> A		Matrix (W=water, S=solid, C=coastal, G=tissue, A=aq): <b>Water</b>		Sample Type (C=Comp, G=grab): <b>Water</b>	
Sample Identification <del>HW-22R M.S. - 20230601</del>		Sample Identification <del>HW-22R M.S. - 20230601</del>		Sample Identification <del>HW-1 - 20230601</del>		Sample Identification <del>HW-1 - 20230601</del>		Sample Identification <del>HW-1 - 20230601</del>	
Empty Kit Relinquished by: Relinquished by: <b>John Stinszel</b>		Possible Hazard Identification <input type="checkbox"/> Non-hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date: <b>6/1/23 / 1930</b>		Time: <b>12:00 PM</b>		Method of Shipment: Date/Time: <b>6/2/23 / 000</b> Company: <b>JAS</b>	
Deliverable Requested: I, II, III, IV, Other (specify)		Relinquished by: Relinquished by: Relinquished by:		Date/Time: <b>6/1/23 / 1930</b>		Date/Time: <b>6/2/23 / 000</b>		Archive For Months:	
Custody Seals intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Date/Time: <b>6/1/23 / 1930</b>		Date/Time: <b>6/2/23 / 000</b>		Company: <b>JAS</b>	
Cooler Temperature(s) °C and Other Remarks:									

## Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 480-209410-1

**Login Number: 209410**

**List Source: Eurofins Buffalo**

**List Number: 1**

**Creator: Stopa, Erik S**

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

## Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 480-209410-1

**Login Number:** 209410

**List Source:** Eurofins Buffalo

**List Number:** 2

**Creator:** Stopa, Erik S

### Question

### Answer

### Comment

Radioactivity wasn't checked or is </= background as measured by a survey meter.

The cooler's custody seal, if present, is intact.

Sample custody seals, if present, are intact.

The cooler or samples do not appear to have been compromised or tampered with.

Samples were received on ice.

Cooler Temperature is acceptable.

Cooler Temperature is recorded.

COC is present.

COC is filled out in ink and legible.

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

There are no discrepancies between the containers received and the COC.

Samples are received within Holding Time (excluding tests with immediate HTs)

Sample containers have legible labels.

Containers are not broken or leaking.

Sample collection date/times are provided.

Appropriate sample containers are used.

Sample bottles are completely filled.

Sample Preservation Verified.

There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Multiphasic samples are not present.

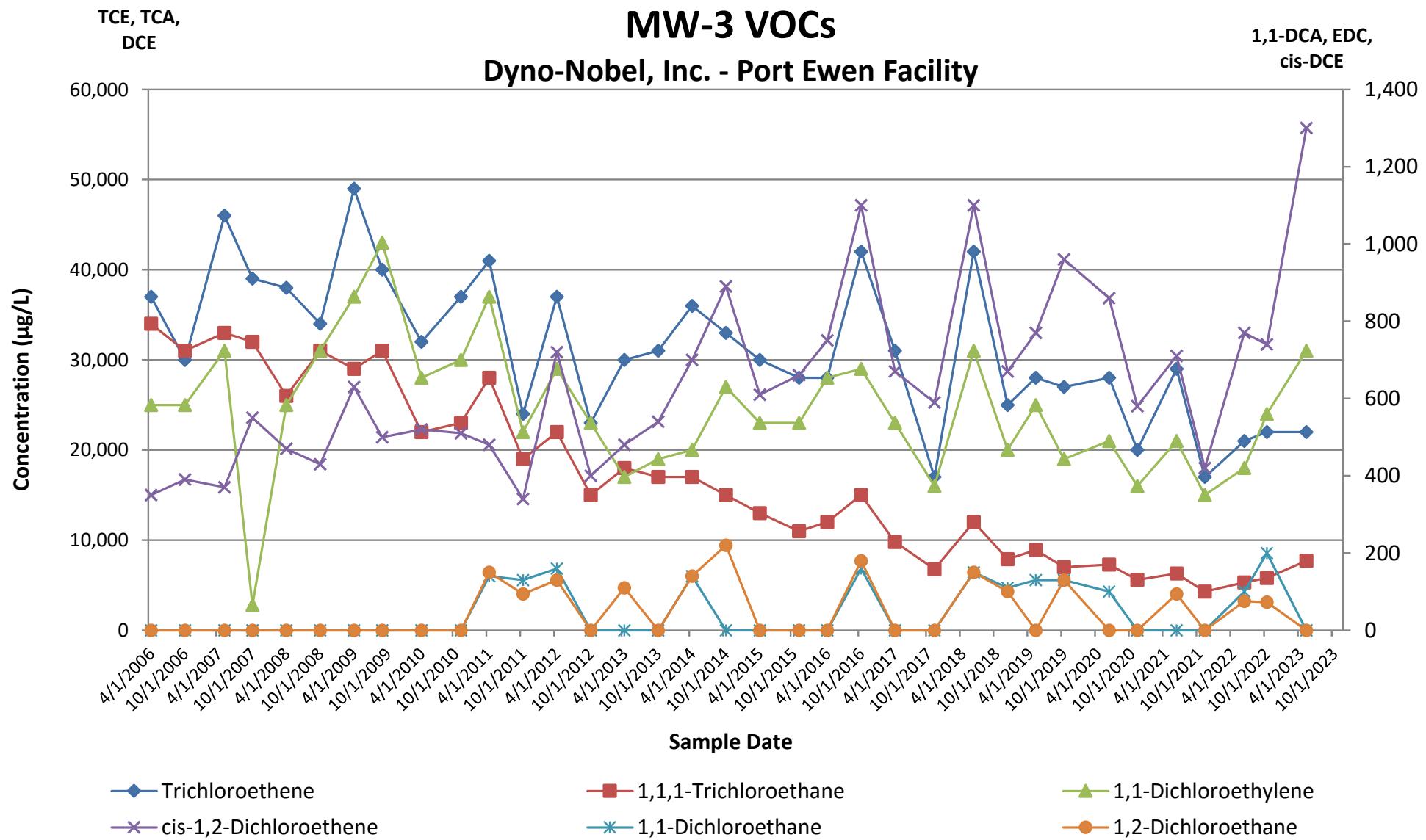
Samples do not require splitting or compositing.

Residual Chlorine Checked.

## **Appendix B – Time Versus Concentration Plots**

# MW-3 VOCs

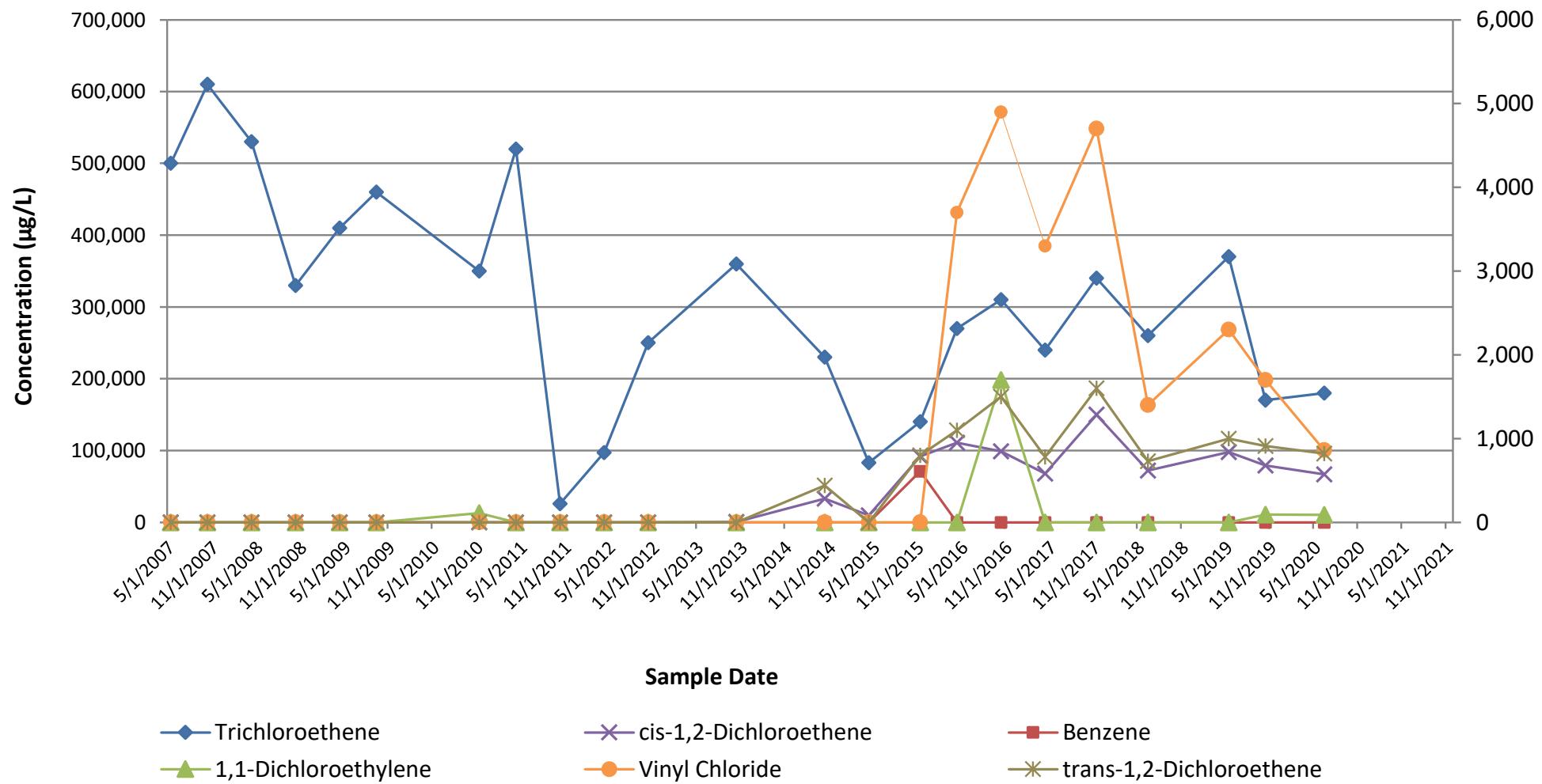
## Dyno-Nobel, Inc. - Port Ewen Facility



TCE, cis-DCE,  
Benzene

## MW-4A VOCs Dyno-Noble, Inc. - Port Ewen Facility

DCE, VC, trans-  
DCE,



DCE, MEK, cis-DCE

# MW-4B VOCs

TCE

Dyno-Noble, Inc. - Port Ewen Facility

