

New York State Office of People with Developmental Disabilities –
Gowanda Site – VCA Site No. V-00463-9

4 Industrial Place, Gowanda, NY

GROUNDWATER CHARACTERIZATION REPORT - MARCH 2024 (Q1 2024)



Colliers Engineering & Design

Office:

280 East Broad Street, Suite 200
Rochester, NY 14604

Phone: 585.232.5135

www.colliersengineering.com

Issued: June 5, 2024

DASNY Project No.: 3136109999

TABLE OF CONTENTS

1.0	INTRODUCTION	4
1.1	Scope of Work	4
1.2	Site Background.....	4
2.0	GROUNDWATER SAMPLING OVERVIEW AND METHODS	6
2.1	Well Maintenance Activities	6
2.2	Groundwater Field Monitoring and Sampling Activities.....	6
3.0	LOCAL GROUNDWATER FLOW CHARACTERIZATION	7
4.0	LABORATORY ANALYSIS	8
4.1	Laboratory Analysis on Groundwater Samples	8
4.2	Monitoring Well Groundwater Analysis Summary	8
4.3	Sentry Well Groundwater Analysis Summary	9
4.4	Recovery Well Groundwater Analysis Summary	9
4.5	Quality Assurance and Quality Control Samples.....	10
5.0	FUTURE GROUNDWATER MONITORING AND ANALYSIS ACTIVITIES.....	11

Tables

- Table 1: Groundwater Elevations and Field Measurements – March 21 and 22, 2024
- Table 2: March 2024 Analytical Results Summary
- Table 3: Historic Groundwater Analytical Results Summary
- Table 4: Percent Reduction in Total Groundwater VOCs
- Table 5: Full Analytical Results Summary Table

Figures

- Figure 1: March 2024 Groundwater Contour Map
- Figure 2: March 2024 Distribution of Groundwater Analytical Results: Monitoring Wells
- Figure 3: March 2024 Distribution of Groundwater Analytical Results: Recovery Wells

Charts

- Chart 1: Site-Wide Percent Reduction of VOC Concentrations
- Chart 2: Recovery Well Percent Reduction of VOC Concentrations

Appendices

- Appendix A: Laboratory Analytical Results Report - March 2024 Sampling Event
- Appendix B: Field Forms

1.0 INTRODUCTION

Colliers Engineering & Design (formerly Bergmann) is submitting this groundwater characterization report for the first quarter 2024 sampling event, conducted on March 21 and 22, 2024, on behalf of the Dormitory Authority of the State of New York (DASNY) and the New York State Office of People with Developmental Disabilities (OPWDD) for activities conducted at the former Gowanda Day Habilitation Center facility at 4 Industrial Place, Gowanda, NY. The OPWDD, as the volunteer, entered into a Voluntary Cleanup Agreement (VCA) with the New York State Department of Environmental Conservation (NYSDEC) to conduct investigations and implement remedial measures in accordance with VCA Site No. V-00463-9, effective August 16, 2001.

1.1 SCOPE OF WORK

This report documents the site-wide groundwater monitoring and laboratory analytical sampling event conducted on March 21 and 22, 2024. Field measurements, sampling procedures and laboratory analysis were conducted in accordance with the October 2006 Operations, Monitoring and Maintenance (OM&M) Manual and as modified with NYSDEC approval. During this sampling event, groundwater from twenty-one (21) of twenty-one (21) site-related groundwater monitoring wells and all seven (7) groundwater recovery wells were sampled for laboratory analysis. The previous groundwater sampling event was conducted in December 2023.

1.2 SITE BACKGROUND

The Gowanda Day Habilitation site consists of a 5.94-acre parcel located at 4 Industrial Place, Gowanda, New York. The building, previously used by several manufacturing operations, was built in stages between circa 1948 and 1987 and was renovated in 1987-1988. Manufacturing operations occurred at the site between 1956 and 1987. New York State agencies occupied the building since 1982. New York State acquired the parcel in 1989. The building was most recently operated by the OPWDD, which at that time was known as the Western New York Developmental Disabilities Services Office, as a Day Habilitation Center for mental care clients. In April 2001, on-site operations ceased. The nature and extent of contamination at the Gowanda Day Habilitation Center was detailed as part of the 2003 Site Investigation and 2004 Supplemental Site Investigation Reports. Trichloroethene (TCE) was the most commonly detected compound. TCE degradation products cis-1,2, Dichloroethene (Cis-1,2-DCE), trans-1,2-Dichloroethene (Trans-1,2-DCE) and Vinyl Chloride (VC) were also detected. The source of these CVOCs were releases that occurred during the manufacturing operations that occurred at the facility.

Following Interim Remedial Measure (IRM) system installation, the Groundwater Treatment System (GTS) and the Soil Vapor Extraction System (SVES) were operated from 2005 to 2015 recovered 2-5 gallons per minute (gpm) of groundwater. The GTS portion consisted of seven (7) groundwater recovery wells (four dual phase recovery wells and three groundwater-only recovery wells), an air compressor, a network of controller-less pneumatic pumps and an air stripper treatment system to process recovered groundwater. Recovered groundwater was pumped to the equalization tank for settling of the sediment and transferred to the air stripper using a consistent flow rate. Air discharge from the air stripper was routed to the SVE for treatment prior to discharge. Groundwater was discharged to the village of Gowanda Sewage Treatment Plant (STP). Quarterly groundwater sampling with Operation and Maintenance of the remediation system has been ongoing since 2002.

In January 2014, the condition of the SVE and GTS was discussed with the NYSDEC representative, and it was agreed that these systems would be deactivated to allow for groundwater level recovery during the preparation of an In-Situ Chemical Oxidation (ISCO) Remedial Action Plan (RAP) for the implementation of an ISCO treatment. Colliers Engineering & Design submitted an ISCO RAP for groundwater treatment to the NYSDEC to

address the remaining contamination at the Site in lieu of costly repair of the SVE and GTS. The SVE and GTS equipment will remain on-site in the event that re-activation is required in the future. The SVES system was deactivated in November 2013, and an ISCO treatment was implemented in September 2015 and a second ISCO treatment in September 2015. An ISCO Report was prepared and submitted under a separate cover.

2.0 GROUNDWATER SAMPLING OVERVIEW AND METHODS

2.1 WELL MAINTENANCE ACTIVITIES

During the March 2024 site visit, all monitoring wells were accessible, and the integrity of the wells was not compromised. Repairs or maintenance to the network of groundwater monitoring wells or recovery wells were not required. All protective casings and flush-mount curb boxes were found to be intact and secure. Exterior monitoring wells are secured with locking stick-up protective casings. The monitoring wells within the building are secured with flush-mount roadway covers. Well maintenance was not performed during the March 2024 sampling event.

2.2 GROUNDWATER FIELD MONITORING AND SAMPLING ACTIVITIES

Groundwater measurements and sampling activities were conducted in accordance with the October 2006 OM&M Manual. The depths to groundwater in groundwater monitoring wells are measured quarterly to monitor site-wide changes in the water table elevation and to allow for adjustment at recovery wells. Past operation of the recovery wells was intended to establish hydraulic containment of the impacted groundwater plume beneath the former Day Habilitation building and improve recovery and treatment of impacted groundwater. Groundwater samples were collected from the twenty-one (21) site-related groundwater monitoring wells for laboratory analysis on March 21 and March 22, 2024. Depth to groundwater measurements were obtained from twenty-eight (28) wells (including former recovery wells).

Groundwater samples were collected from monitoring wells after each well was gauged. Sample parameters including turbidity, temperature, pH, oxygen, and conductivity were determined by analyzing a quantity of groundwater in a cup using a YSI Quatro prior to sampling. Groundwater samples were collected from recovery wells using dedicated bailers. Sampling was performed based on discussion and direction from a telephone conversation with David Szymanski (NYSDEC project manager at the time) in January 2018 in which no noticeable changes in test results were noticed comparing bailing and slow purge methods. This was first noted in Q3 2018 and is also noted in the approved Periodic Review Report dated 2019. A single duplicate sample and a equipment blank sample were collected and submitted for laboratory analysis.

The samples were transported from the project site via a chain-of-custody protocol to ALS Environmental, a NYSELAP certified laboratory located in Rochester, New York. The samples were then tested for Volatile Organic Compounds (VOCs), using EPA Method 8260. Analytical results for each individual monitoring well have been posted in Table 3 for comparative purposes from sampling events completed 2012 – 2024.

3.0 LOCAL GROUNDWATER FLOW CHARACTERIZATION

The Site potentiometric surface pattern and groundwater flow direction was determined for March 2024 using water table elevations measured at each well. Groundwater elevations and well reference elevations were calculated using depth to water values obtained on March 21 and March 22, 2024. The well gauging values and groundwater elevations are provided in Table 1 – Groundwater Elevations and Field Measurements – March 2024.

The March 2024 potentiometric surface map shows a flow pattern similar to groundwater flow pattern observed historically since 2002. Groundwater at the Site is flowing generally in a northerly direction. Torrance Place is hydraulically down-gradient from the Day Habilitation Center building. It is noted that the residential properties along Torrance Place utilize municipal/public water. The March 2024 water table elevations range from 765.08 feet (ft) above mean sea level (AMSL) at MW-21, to 774.13 ft. AMSL at MW-9. The average table water elevation was 769.73 ft AMSL, which is a decrease from the average groundwater elevation of the previous sampling event in December of 2023 (770.17 ft AMSL).

The site-wide average groundwater elevation decreased by approximately 0.44 ft when compared to the previous sampling event from December 2023. This decrease in the elevation of groundwater appears to be seasonal.

Measured depth to water at all gauged monitoring and recovery wells is presented in Table 1 and March 2024 Groundwater Elevation Contours are presented on Figure 1 – March 2024 Groundwater Elevation Contour Map.

4.0 LABORATORY ANALYSIS

4.1 LABORATORY ANALYSIS ON GROUNDWATER SAMPLES

Laboratory analysis was completed on the groundwater samples from twenty-one (21) monitoring wells and seven (7) recovery wells collected March 21 and March 22, 2024. Samples were analyzed for VOCs via EPA Method 8260. Analysis was performed in accordance with the October 2006 OM&M Manual. The following chlorinated VOCs (CVOCS) were analyzed for:

- TCE
- TCA
- Cis-DCE
- Trans-1,2-DCE
- VC

CVOCS values, as present throughout this report, in the text, charts, and Tables 2, 3, and 4, are the of the sum of detected concentration of TCE, Cis-DCE, TRANS-1,2-DCE, VC, and TCA. Sample results for monitoring well MW-11, recovery well DR-1, and MW-X initially were detected above laboratory instrument range, resulting in estimated values. Secondary analysis was then performed on dilutions of these samples for more accurate results. The resulting values from this secondary analysis were used in the narrative of this report.

4.2 MONITORING WELL GROUNDWATER ANALYSIS SUMMARY

The March 2024 analytical results indicate detection of three (3) CVOCS in monitoring well samples: TCE, Cis-DCE, and VC. CVOCS were detected in groundwater samples from nine (9) of the twenty-one (21) monitoring wells sampled. Analytical results are summarized in Table 2 – March 2024 Analytical Results Summary, which compares detected VOCs and applicable NYSDEC Class GA Standards for each analyte. The complete laboratory analytical report is provided in Appendix A – Laboratory Analytical Results Report March 2024 Sampling Event. Table 3 – Historic Groundwater Analysis Results Summary includes the historical CVOCS concentrations at each well since the groundwater monitoring of the wells began in 2002.

Groundwater samples from nine (9) monitoring wells had detectable CVOCS at concentrations above applicable Class GA Standards. The monitoring well with the highest CVOCS were detected at monitoring wells MW-11 (309 parts per billion (ppb)), which is in the area of historically greatest impacted groundwater. VOCs were not detected in groundwater from twelve (12) of the sampled monitoring wells.

Concentrations in six (6) of the twenty-one (21) monitoring well groundwater samples increased when compared to the December 2023 sampling event while concentrations in four (4) of the twenty-one (21) monitoring well groundwater samples decreased. The concentrations of CVOCS in eleven (11) monitoring wells remain unchanged. The current sampling analytical results indicate an average site-wide decrease in CVOCS of approximately 93.55% since the activation of the GTS in September 2005.

The area of highest concentration of CVOCS groundwater is in the area centered between monitoring wells MW-1 and MW-11, which has historically concentrations of CVOCS have been detected and is inferred as the source area of impacted groundwater.

In the source area of the plume (MW-1, MW-6, MW-7, MW-11, MW-12, MW-14, MW-15, and MW-17) the analytical results show a contaminant reduction in CVOCS concentrations by an average of approximately 88.74% since monitoring of these wells began in 2002.

- The total CVOCS concentration at monitoring well MW-1 for the March 2024 sampling event was 248 ppb, a decrease from the December 2023 value of 679 ppb.

- The total CVOC concentration at MW-11 for the March 2024 sampling event is 309 ppb, a decrease from the December 2023 value of 565 ppb.
- The total CVOC concentration at MW-12 for the March 2024 sampling event is 101 ppb, an increase from the December 2023 value of 58 ppb. MW-12 is in close proximity to the center of the building.
- The CVOC were not detected at MW-13 for the March 2024 sampling event nor in the December 2023 sampling event.
- The total CVOC concentration at MW-14 for the March 2024 sampling event is 57.4 ppb, an increase from the December 2023 value of 25.4 ppb.
- The CVOC were not detected at MW-2, MW-3, MW-4, MW-5, MW-8, MW-9, MW-10, MW-13, MW-15, MW-19R, and MW-20 in the March 2024 sampling or in the December 2023 sampling event.

Six (6) groundwater monitoring wells are located along the subject property's north perimeter, down-gradient from the area of impacted groundwater (MW-5, MW-6, MW-7, MW-16, MW-17, and MW-21). The current analytical data exhibits an overall decrease in targeted CVOCs at the sampled monitoring wells along the north perimeter, compared to the December 2023 sampling event.

Laboratory analytical reports are included in Appendix A. Monitoring well locations and distribution of analytical results are shown on Figure 2 – March 2024 Distribution of Groundwater Analytical Results: Monitoring Wells.

4.3 SENTRY WELL GROUNDWATER ANALYSIS SUMMARY

Sentry groundwater monitoring wells monitor a separate occurrence of contaminated groundwater at the Gowanda Electronics Site (NYSDEC Site 905025), immediately east of Industrial Place and east of the Day Habilitation Center property. The eastern sentry wells sampled for this event were MW-19R and MW-4. The current results indicate non-detection for MW-19R and non-detection for MW-4. Results for MW-20, a well situated on the eastern side of the site north of MW-4 and south of MW-19R, were also non-detect.

The Gowanda Electronics impacted groundwater plume may be migrating to an area near Industrial Place and has intermittently impacted MW-19R. The Gowanda Electronics impacted groundwater plume does not appear to extend to the Day Habilitation Center property, based on consistent non-detect values at the eastern sentry wells. Conversely, impacted groundwater from the Day Habilitation Center does not appear to extend off-site to the east toward Industrial Place.

Laboratory analytical results are included in Appendix A. Sentry well locations and analytical results are shown on Figure 2.

4.4 RECOVERY WELL GROUNDWATER ANALYSIS SUMMARY

During the March 2024 sampling event, all of the seven (7) recovery wells were sampled. The recovery wells were active during GTS system operation from 2005 to 2013. The recovery wells have not been active since 2015.

The March 2024 analytical results indicate detection of chlorinated VOCs in all seven (7) recovery well samples that include: TCE, and Cis-DCE. Relative percent decrease in CVOCs for all monitoring wells and recovery wells are shown on Table 4 – Percent Reductions in Total Groundwater CVOCs.

- The total CVOC concentration at DR-1 for the March 2024 sampling event is 440 ppb, a decrease from the December 2023 value of 786 ppb.
- The total CVOC concentration at DR-2 for the March 2024 sampling event is 172 ppb, an increase from the December 2023 value of 121 ppb.
- The total CVOC concentration at DR-3 for the March 2024 sampling event is 32 ppb, a decrease from the December 2023 value of 40 ppb.

- The total CVOC concentration at DR-4 for the March 2024 sampling event is 16 ppb, a decrease from the December 2023 value of 25.5 ppb.
- The total CVOC concentration at G-1 for the March 2024 sampling event is 9.8 ppb, a decrease from the December 2023 value of 48 ppb.
- The total CVOC concentration at G-2 for the March 2024 sampling event is 46 ppb, an increase from the December 2023 value of 33 ppb.
- The total CVOC concentration at G-3 for the March 2024 sampling event is 105 ppb, an increase from the December 2023 value of 6.90 ppb.

Laboratory analytical results are included in Appendix A. Recovery well locations and analytical results are shown on Figure 3 – March 2024 Distribution of Groundwater Analytical Results: Recovery Wells.

4.5 QUALITY ASSURANCE AND QUALITY CONTROL SAMPLES

The analytical results for the equipment blank was non-detect. A field duplicate (labeled as MW-X) was taken from DR-1. The results of this field duplicate were generally consistent with the results of the sample labeled DR-1 as shown in Tables 2 and 3.

Laboratory analytical results are included in Appendix A.

5.0 FUTURE GROUNDWATER MONITORING AND ANALYSIS ACTIVITIES

The next site-wide groundwater sampling and laboratory analysis event is scheduled for Q2 2024. Future groundwater sampling events will be conducted to monitor groundwater conditions to evaluate seasonal changes in water table elevations.

TABLES

Table 1 Groundwater Elevations and Field Measurements March 2024

Gowanda Day Habilitation Center
 4 Industrial Place, Gowanda, New York
 VCA # V-00463-9

	Monitoring Wells									
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
Casing Elevation*	778.23	778.08	778.38	778.43	778.61	781.10	780.94	781.33	782.61	780.02
Depth to Groundwater (btoc)	5.90	5.40	6.10	7.05	10.82	13.24	13.24	9.21	8.48	6.35
Groundwater Elevation	772.33	772.68	772.28	771.38	767.79	767.86	767.70	772.12	774.13	773.67
Well Diameter	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"
Product Thickness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Well Depth (btoc)	16.02	17.15	16.30	15.78	13.95	22.88	21.80	17.65	20.96	19.44
Bottom of Well Elevation	762.21	760.93	762.08	762.65	764.66	758.22	759.14	763.68	761.65	760.58
Thickness of Water Column	10.12	11.75	10.20	8.73	3.13	9.64	8.56	8.44	12.48	13.09
Minimum Purge Volume (gal)	1.65	1.92	1.66	1.42	0.51	1.57	1.4	1.38	2.03	2.1
3 Volumes	4.95	5.75	4.99	4.27	1.53	4.71	4.19	4.13	6.10	6.40
Actual volume purged	5.00	6.00	5.00	4.50	1.75	4.75	4.25	4.25	6.25	6.50
Comments	Flush = -0.29'	Flush = -0.30'	Flush = -0.23'	Flush = -0.34'	Flush = -0.24'	Stickup=2.17'	Stickup=2.17'	Stickup=2.84'	Stickup=2.05'	Stickup=2.56'

	Monitoring Wells										
	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19R	MW-20	MW-21
Casing Elevation	778.58	778.50	778.39	778.43	778.38	780.43	779.85	776.39	774.2	778.04	774.76
Depth to Groundwater (btoc)	5.80	6.61	6.94	10.60	10.51	12.90	13.09	9.20	7.72	9.65	9.68
Groundwater Elevation	772.78	771.89	771.45	767.83	767.87	767.53	766.76	767.19	766.5	768.39	765.08
Well Diameter	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"
Product Thickness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Well Depth (btoc)	15.48	17.38	17.40	18.15	19.80	23.26	25.18	25.0	17.67	14.75	15.82
Bottom of Well Elevation	763.10	761.12	760.99	760.28	758.58	757.17	754.67	751.39	756.53	763.29	758.94
Thickness of Water Column	9.68	10.77	10.46	7.55	9.29	10.36	12.09	15.80	9.95	5.10	6.14
Minimum Purge Volume (gal)	1.58	1.76	1.70	1.23	1.51	1.69	1.97	2.58	1.6	0.8	1.0
3 Volumes	4.73	5.27	5.11	3.69	4.54	5.07	5.91	7.73	4.87	2.49	3.00
Actual volume purged	4.75	5.33	5.25	3.75	4.75	5.25	6.00	7.75	5.00	2.75	3.00
Comments	Flush = -0.23'	Flush = -0.35'	Flush = -0.48'	Flush = -0.39'	Flush = -0.38	Stickup=2.26'	Stickup=1.18'	Flush =-0.26'	Flush =0.36'	Flush=-0.43'	Flush =-.71'

	Recovery Wells						
	DR-1	DR-2	DR-3	DR-4	G-1	G-2	G-3
Casing Elevation	779.66	779.93	779.78	779.64	779.83	779.72	779.42
Depth to Groundwater (btoc)	7.09	6.90	11.58	11.60	11.75	11.70	10.04
Groundwater Elevation	772.57	773.03	768.20	768.04	768.08	768.02	769.38
Well Diameter	4"	4"	4"	4"	4"	4"	4"
Product Thickness	ND	ND	ND	ND	ND	ND	ND
Well Depth (btoc)	18.06	18.06	20.45	19.69	22.98	20.72	18.15
Bottom of Well Elevation	761.6	761.87	759.33	759.95	756.85	759	761.27
Thickness of Water Column	10.97	11.16	8.87	8.09	11.23	9.02	8.11
Minimum Purge Volume (gal)	7.16	7.29	5.8	5.28	7.33	5.89	5.30
3 Volumes	21.490	21.86	17.38	15.85	22.00	17.670	15.89
Actual volume purged	21.50	22.00	17.5	16.00	22.00	17.75	16.00
Comments	Stickup=0.85'	Stickup=1.06'	Stickup=0.95'	Stickup=0.84'	Stickup=1.03'	Stickup=0.86'	Vaulted well

NOTES

btoc = Below top of casing (inner riser)

All measurements are in feet, referenced to Mean Sea Level

NS = Not Sampled

ND = No floating product encountered

Minimum purge volume = 3 X well volume, 0.163 gallon per foot in a 2" diameter well. 0.653 gallon per foot in a 4" diameter well.

Monitoring well MW-19 was removed and the area restored on July 23, 2003 immediately after the well was developed, purged of 3 volumes and sampled.

The borehole for MW-19 was backfilled with a cement-bentonite grout after the PVC screening and casing was successfully removed.

Wells MW-19R, MW-20 and MW-21 were installed in October 2004.

Table 2 March 2024 Analytical Results Summary

Gowanda Day Habilitation Center

4 Industrial Place, Gowanda, New York

VCA # V-00463-9

Monitoring Well MW-1

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		580.00	200.00	5.0
CIS		99.00	48.00	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		679.00	248.00	

Sample Date: 03/22/2024

Monitoring Well MW-2

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS		ND	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		ND	ND	

Sample Date: 03/22/2024

Monitoring Well MW-3

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS		ND	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		ND	ND	

Sample Date: 03/22/2024

ND = Non-detect

Total VOCs values are not the total VOCs detected, but the sum of TCE, CIS, TRANS, VC, and TCA detected.

NS = Not Sampled. No analysis performed during this sampling event.

Results expressed as parts per billion (ppb).

Bold results exceed NYSDEC TOGS 1.1.1 Class GA, June 1998 re-issue (MTBE = April 2000 Addendum Guidance Value)

Monitoring Well MW-4

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS		ND	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		ND	ND	

Sample Date: 03/22/2024

Monitoring Well MW-5

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS		ND	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		ND	ND	

Sample Date: 03/22/2024

Monitoring Well MW-6

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS		35.00	30.00	5.0
TRANS		ND	ND	5.0
VC		52.00	32.00	2.0
TCA		ND	ND	5.0
Total VOCs		87.00	62.00	

Sample Date: 03/22/2024

Table 2 March 2024 Analytical Results Summary

Gowanda Day Habilitation Center

4 Industrial Place, Gowanda, New York

VCA # V-00463-9

Monitoring Well MW-7

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS		6.10	40.00	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		6.10	40.00	

Sample Date: 03/21/2024

Monitoring Well MW-8

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS		ND	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		ND	ND	

Sample Date: 03/22/2024

Monitoring Well MW-9

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS		ND	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		ND	ND	

Sample Date: 03/21/2024

ND = Non-detect

Total VOCs values are not the total VOCs detected, but the sum of TCE, CIS, TRANS, VC, and TCA detected.

NS = Not Sampled. No analysis performed during this sampling event.

Results expressed as parts per billion (ppb).

Bold results exceed NYSDEC TOGS 1.1.1 Class GA, June 1998 re-issue (MTBE = April 2000 Addendum Guidance Value)

Monitoring Well MW-10

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS		ND	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		ND	ND	

Sample Date: 03/22/2024

Monitoring Well MW-11

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		350.00	210.00	5.0
CIS		200.00	99.00	5.0
TRANS		15	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		565.00	309.00	

Sample Date: 03/21/2024

Monitoring Well MW-12

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		22.00	18.00	5.0
CIS		36.00	83.00	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		58.00	101.00	

Sample Date: 03/22/2024

Table 2 March 2024 Analytical Results Summary

Gowanda Day Habilitation Center

4 Industrial Place, Gowanda, New York

VCA # V-00463-9

Monitoring Well MW-13

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	ND	ND	5.0	
CIS	ND	ND	5.0	
TRANS	ND	ND	5.0	
VC	ND	ND	2.0	
TCA	ND	ND	5.0	
Total VOCs	ND	ND		

Sample Date: 03/21/2024

Monitoring Well MW-14

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	18.00	5.40	5.0	
CIS	7.40	52.00	5.0	
TRANS	ND	ND	5.0	
VC	ND	ND	2.0	
TCA	ND	ND	5.0	
Total VOCs	25.40	57.40		

Sample Date: 03/21/2024

Monitoring Well MW-15

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	ND	ND	5.0	
CIS	ND	ND	5.0	
TRANS	ND	ND	5.0	
VC	ND	ND	2.0	
TCA	ND	ND	5.0	
Total VOCs	ND	ND		

Sample Date: 03/21/2024

ND = Non-detect

Total VOCs values are not the total VOCs detected, but the sum of TCE, CIS, TRANS, VC, and TCA detected.

NS = Not Sampled. No analysis performed during this sampling event.

Results expressed as parts per billion (ppb).

Bold results exceed NYSDEC TOGS 1.1.1 Class GA, June 1998 re-issue (MTBE = April 2000 Addendum Guidance Value)

Monitoring Well MW-16

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	ND	ND	5.0	
CIS	11.00	16.00	5.0	
TRANS	ND	ND	5.0	
VC	ND	ND	2.0	
TCA	ND	ND	5.0	
Total VOCs	11.00	16.00		

Sample Date: 03/21/2024

Monitoring Well MW-17

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	6.20	6.50	5.0	
CIS	54.00	58.00	5.0	
TRANS	ND	ND	5.0	
VC	ND	ND	2.0	
TCA	ND	ND	5.0	
Total VOCs	60.20	64.50		

Sample Date: 03/22/2024

Monitoring Well MW-18

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	ND	ND	5.0	
CIS	ND	5.3	5.0	
TRANS	ND	ND	5.0	
VC	ND	ND	2.0	
TCA	ND	ND	5.0	
Total VOCs	ND	5.3		

Sample Date: 03/21/2024

Table 2 March 2024 Analytical Results Summary

Gowanda Day Habilitation Center

4 Industrial Place, Gowanda, New York

VCA # V-00463-9

Monitoring Well MW-19R

Sample Date: 03/22/2024

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS		ND	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		ND	ND	

Monitoring Well MW-20

Sample Date: 03/22/2024

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS		ND	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		ND	ND	

Monitoring Well MW-21

Sample Date: 03/22/2024

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE		ND	ND	5.0
CIS	16.00		ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs	16.00		ND	

ND = Non-detect

Total VOCs values are not the total VOCs detected, but the sum of TCE, CIS, TRANS, VC, and TCA detected.

NS = Not Sampled. No analysis performed during this sampling event.

Results expressed as parts per billion (ppb).

Bold results exceed NYSDEC TOGS 1.1.1 Class GA, June 1998 re-issue (MTBE = April 2000 Addendum Guidance Value)

Table 2 March 2024 Analytical Results Summary

Gowanda Day Habilitation Center

4 Industrial Place, Gowanda, New York

VCA # V-00463-9

Recovery Well DR-1

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	730.00	330.00		5.0
CIS	56.00	110.00		5.0
TRANS	ND	ND		5.0
VC	ND	ND		2.0
TCA	ND	ND		5.0
Total VOCs	786.00	440.00		

Sample Date: 03/21/2024

Recovery Well DR-2

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	22.00	22.00		5.0
CIS	99.00	150.00		5.0
TRANS	ND	ND		5.0
VC	ND	ND		2.0
TCA	ND	ND		5.0
Total VOCs	121.00	172.00		

Sample Date: 03/21/2024

Recovery Well DR-3

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	28.00	21.00		5.0
CIS	12.00	11.00		5.0
TRANS	ND	ND		5.0
VC	ND	ND		2.0
TCA	ND	ND		5.0
Total VOCs	40.00	32.00		

Sample Date: 03/21/2024

Recovery Well DR-4

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	18.00	16.00		5.0
CIS	7.50	ND		5.0
TRANS	ND	ND		5.0
VC	ND	ND		2.0
TCA	ND	ND		5.0
Total VOCs	25.50	16.00		

Sample Date: 03/21/2024

Recovery Well G-1

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	ND	ND		5.0
CIS	48.00	9.80		5.0
TRANS	ND	ND		5.0
VC	ND	ND		2.0
TCA	ND	ND		5.0
Total VOCs	48.00	9.80		

Sample Date: 03/21/2024

Recovery Well G-2

Sampling Events

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	ND	ND		5.0
CIS	33.00	46.00		5.0
TRANS	ND	ND		5.0
VC	ND	ND		2.0
TCA	ND	ND		5.0
Total VOCs	33.00	46.00		

Sample Date: 03/21/2024

ND = Non-detect

Total VOCs values are not the total VOCs detected, but the sum of TCE, CIS, TRANS, VC, and TCA detected.

NS = Not Sampled. No analysis performed during this sampling event.

Results expressed as parts per billion (ppb).

Bold results exceed NYSDEC TOGS 1.1.1 Class GA, June 1998 re-issue (MTBE = April 2000 Addendum Guidance Value)

Table 2 March 2024 Analytical Results Summary

Gowanda Day Habilitation Center

4 Industrial Place, Gowanda, New York

VCA # V-00463-9

Recovery Well G-3

Sampling Events

Sample Date: 03/22/2024

Analyte	in ppb	Dec 2023	Mar 2024	NYS Guidance Value
TCE	6.90	13.00		5.0
CIS	ND	92.00		5.0
TRANS	ND	ND		5.0
VC	ND	ND		2.0
TCA	ND	ND		5.0
Total VOCs	6.90	105.00		

Duplicate Blank (DR-1)

Sampling Events

Sample Date: 03/22/2024

Analyte	in ppb	Mar 2024	NYS Guidance Value
TCE	300.00	5.0	
CIS	110.00	5.0	
TRANS	ND	5.0	
VC	ND	2.0	
TCA	ND	5.0	
Total VOCs	410.00		

Equipment Blank

Sampling Events

Sample Date: 12/08/2024

Analyte	in ppb	Sep 2023	Dec 2023	NYS Guidance Value
TCE	ND	ND		5.0
CIS	ND	ND		5.0
TRANS	ND	ND		5.0
VC	ND	ND		2.0
TCA	ND	ND		5.0
Total VOCs	ND	ND		

ND = Non-detect

Total VOCs values are not the total VOCs detected, but the sum of TCE, CIS, TRANS, VC, and TCA detected.

NS = Not Sampled. No analysis performed during this sampling event.

Results expressed as parts per billion (ppb).

Bold results exceed NYSDEC TOGS 1.1.1 Class GA, June 1998 re-issue (MTBE = April 2000 Addendum Guidance Value)

Table 4 Percent Reductions in Total Groundwater VOCs
Gowanda Day Habilitation Center
4 Industrial Place, Gowanda, New York
VCA # V-00463-9

Gowanda City Board of Education
4 Industrial Place, Gowanda, New York
VCA # V-000603-9

The Groundwater Treatment System was activated in May 2006.

The Groundwater Treatment System was activated in May 2005.

Plume Area = MW-1, MW-11, MW-12, MW-14, MW-18, MW-7, MW-17

% reduction = percent reduction in total Volatile Organic Compounds (VOCs)

*Sampling of recovery wells initiated in 2005.

TABLE 5

FIGURES

DASNY
Gowanda Day
Habilitation Center

4 Industrial Place
Gowanda, New York



Bergmann Associates, Architects, Engineers,
Landscape Architects & Surveyors, D.P.C.

280 East Broad Street
Suite 200
Rochester, NY 14604

office: 585.232.5135
fax: 585.232.4652

www.bergmannpc.com

REVISIONS			
NO.	DATE	DESCRIPTION	REV. CKD

Copyright © Bergmann Associates,
Architects, Engineers, Landscape
Architects & Surveyors, D.P.C.

Note:
Unauthorized alteration or addition to this
drawing is a violation of the New York State
Education Law Article 145, Section 7209.

Project Manager:	Checked By:
J. O'BRIEN	J. O'BRIEN
Designed By:	Drawn By:
	C. WOOD
Date Issued:	Scale:
04/08/2024	1" = 60'
Project Number:	
23006923A	

MARCH 2024
WATER LEVEL
CONTOUR MAP

Drawing Number:

FIGURE 1

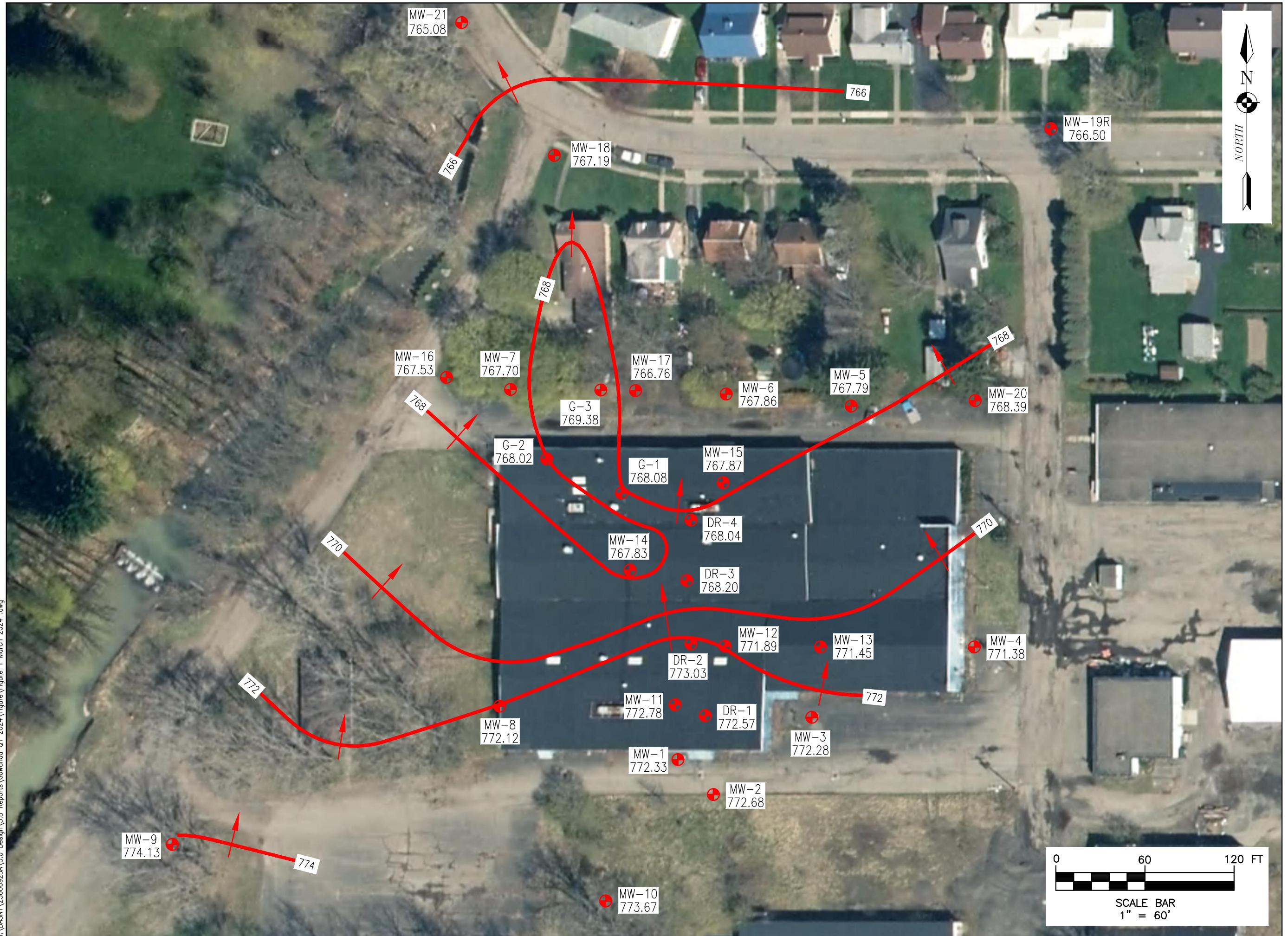




Figure 2

March
2024
Distribution of
Groundwater
Analytical Results:
Monitoring Wells



0 30 60 90 120

Feet



DASNY

Gowanda Day
Habilitation Center

4 Industrial Place
Gowanda, NY



BERGMANN
ARCHITECTS ENGINEERS PLANNERS

Figure 3

March
2024

**Distribution of
Groundwater
Analytical Results:
Recovery Wells**

0 25 50 75 100
Feet





Engineering
& Design

CHARTS

Chart 1
Gowanda Site V00463

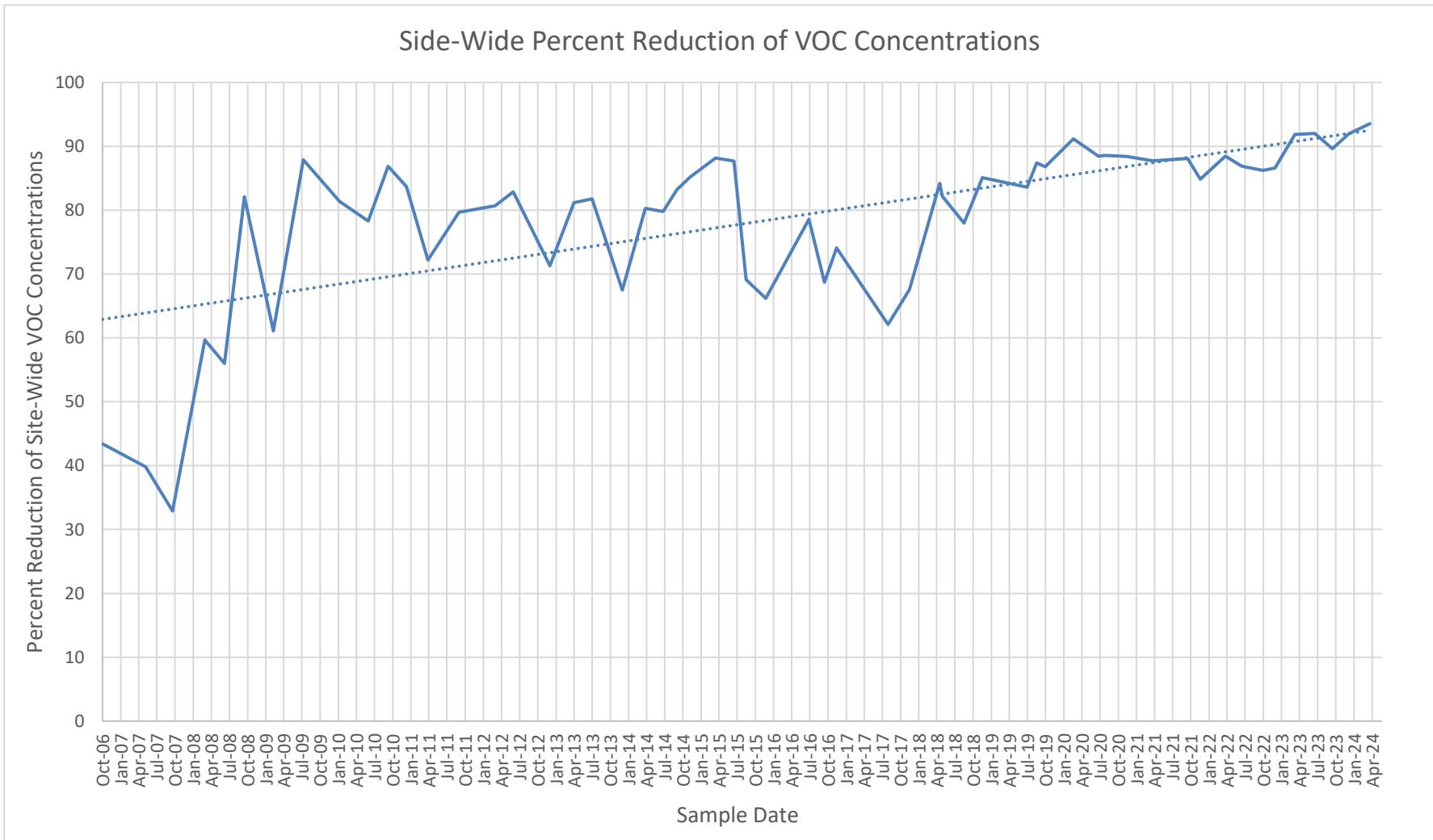
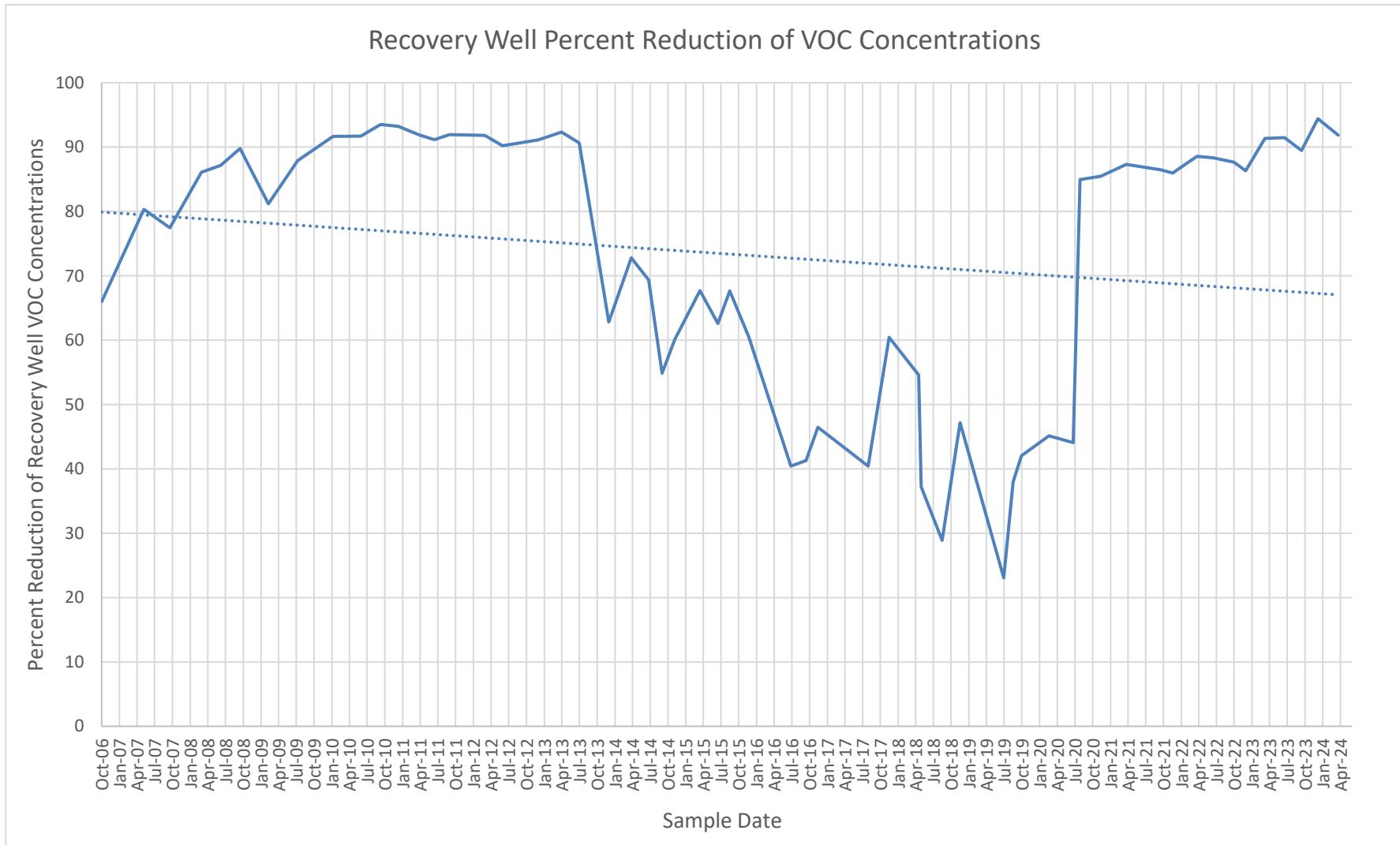


Chart 2
Gowanda Site V00463



APPENDICES

APPENDIX A:
LABORATORY
ANALYTICAL RESULTS



April 02, 2024

Service Request No:R2402345

Justin O'Brien
Colliers Engineering & Design
71 State St Suite 104
Binghamton, NY 13901

Laboratory Results for: Gowanda

Dear Justin,

Enclosed are the results of the sample(s) submitted to our laboratory March 22, 2024
For your reference, these analyses have been assigned our service request number **R2402345**.

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7476. You may also contact me via email at Chris.Leavy@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

A handwritten signature in black ink, appearing to read "C. Leavy".

Christopher Leavy
Project Manager



Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda
Sample Matrix: Water

Service Request: R2402345

Date Received: 03/22/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Thirty water samples were received for analysis at ALS Environmental on 03/22/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Volatiles by GC/MS:

Method 8260C, : The lower control limit for the spike recovery of the Laboratory Control Sample (LCS) was exceeded for one or more analyte. There were no detections of the analyte(s) in the associated field samples. The discrepancy associated with reduced recovery equates to a potential low bias. The analytes affected are flagged in the LCS Summary.

Method 8260C, 04/02/2024: The lower control limit for the spike recovery of the Laboratory Control Sample (LCS) was exceeded for one or more analyte. There were no detections of the analyte(s) in the associated field samples. The discrepancy associated with reduced recovery equates to a potential low bias. The analytes affected are flagged in the LCS Summary.

Method 8260C, 03/27/2024: The lower control limit for the spike recovery of the Laboratory Control Sample (LCS) was exceeded for one or more analyte. There were no detections of the analyte(s) in the associated field samples. The discrepancy associated with reduced recovery equates to a potential low bias. The analytes affected are flagged in the LCS Summary.

Method 8260C, 03/27/2024: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

A handwritten signature consisting of a stylized 'WZ' followed by a slanted line.

Approved by _____

Date 04/02/2024



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-1							Lab ID: R2402345-001						
Analyte	Results	Flag	MDL	MRL	Units	Method							
cis-1,2-Dichloroethene	48			5.0	ug/L	8260C							
Trichloroethene (TCE)	200			5.0	ug/L	8260C							
CLIENT ID: MW-6							Lab ID: R2402345-006						
Analyte	Results	Flag	MDL	MRL	Units	Method							
cis-1,2-Dichloroethene	30			5.0	ug/L	8260C							
Vinyl Chloride	32			5.0	ug/L	8260C							
CLIENT ID: MW-7							Lab ID: R2402345-007						
Analyte	Results	Flag	MDL	MRL	Units	Method							
cis-1,2-Dichloroethene	40			5.0	ug/L	8260C							
CLIENT ID: MW-11							Lab ID: R2402345-011						
Analyte	Results	Flag	MDL	MRL	Units	Method							
cis-1,2-Dichloroethene	99			13	ug/L	8260C							
Trichloroethene (TCE)	210			13	ug/L	8260C							
CLIENT ID: MW-12							Lab ID: R2402345-012						
Analyte	Results	Flag	MDL	MRL	Units	Method							
cis-1,2-Dichloroethene	83			5.0	ug/L	8260C							
Trichloroethene (TCE)	18			5.0	ug/L	8260C							
CLIENT ID: MW-14							Lab ID: R2402345-014						
Analyte	Results	Flag	MDL	MRL	Units	Method							
cis-1,2-Dichloroethene	52			5.0	ug/L	8260C							
Trichloroethene (TCE)	5.4			5.0	ug/L	8260C							
CLIENT ID: MW-16							Lab ID: R2402345-016						
Analyte	Results	Flag	MDL	MRL	Units	Method							
cis-1,2-Dichloroethene	16			5.0	ug/L	8260C							
CLIENT ID: MW-17							Lab ID: R2402345-017						
Analyte	Results	Flag	MDL	MRL	Units	Method							
cis-1,2-Dichloroethene	58			5.0	ug/L	8260C							
Trichloroethene (TCE)	6.5			5.0	ug/L	8260C							
CLIENT ID: MW-18							Lab ID: R2402345-018						
Analyte	Results	Flag	MDL	MRL	Units	Method							
cis-1,2-Dichloroethene	5.3			5.0	ug/L	8260C							
CLIENT ID: DR-1							Lab ID: R2402345-022						
Analyte	Results	Flag	MDL	MRL	Units	Method							
cis-1,2-Dichloroethene	110			13	ug/L	8260C							
Trichloroethene (TCE)	330			13	ug/L	8260C							



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: DR-2		Lab ID: R2402345-023				
Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	150			5.0	ug/L	8260C
Trichloroethene (TCE)	22			5.0	ug/L	8260C
CLIENT ID: DR-3		Lab ID: R2402345-024				
Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	11			5.0	ug/L	8260C
Trichloroethene (TCE)	21			5.0	ug/L	8260C
CLIENT ID: G-1		Lab ID: R2402345-026				
Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	9.8			5.0	ug/L	8260C
CLIENT ID: G-2		Lab ID: R2402345-027				
Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	46			5.0	ug/L	8260C
CLIENT ID: G-3		Lab ID: R2402345-028				
Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	92			5.0	ug/L	8260C
Trichloroethene (TCE)	13			5.0	ug/L	8260C
CLIENT ID: MW-X		Lab ID: R2402345-029				
Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	110			13	ug/L	8260C
Trichloroethene (TCE)	300			13	ug/L	8260C
CLIENT ID: DR-4		Lab ID: R2402345-025				
Analyte	Results	Flag	MDL	MRL	Units	Method
Trichloroethene (TCE)	16			5.0	ug/L	8260C



Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96

Service Request: R2402345

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2402345-001	MW-1	3/22/2024	0849
R2402345-002	MW-2	3/22/2024	0908
R2402345-003	MW-3	3/22/2024	0932
R2402345-004	MW-4	3/22/2024	0956
R2402345-005	MW-5	3/22/2024	1033
R2402345-006	MW-6	3/22/2024	1055
R2402345-007	MW-7	3/21/2024	1626
R2402345-008	MW-8	3/22/2024	0750
R2402345-009	MW-9	3/21/2024	1745
R2402345-010	MW-10	3/22/2024	0720
R2402345-011	MW-11	3/21/2024	1215
R2402345-012	MW-12	3/21/2024	1330
R2402345-013	MW-13	3/21/2024	1308
R2402345-014	MW-14	3/21/2024	1418
R2402345-015	MW-15	3/21/2024	1432
R2402345-016	MW-16	3/21/2024	1643
R2402345-017	MW-17	3/22/2024	1130
R2402345-018	MW-18	3/21/2024	1710
R2402345-019	MW-19	3/22/2024	1225
R2402345-020	MW-20	3/22/2024	1021
R2402345-021	MW-21	3/22/2024	1254
R2402345-022	DR-1	3/21/2024	1240
R2402345-023	DR-2	3/21/2024	1347
R2402345-024	DR-3	3/21/2024	1410
R2402345-025	DR-4	3/21/2024	1500
R2402345-026	G-1	3/21/2024	1530
R2402345-027	G-2	3/21/2024	1600
R2402345-028	G-3	3/22/2024	1210
R2402345-029	MW-X	3/22/2024	
R2402345-030	Field Blank	3/22/2024	1305



1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 • +1 585 288 5380 • alsglobal.com

Chain of Custody / Analytical Request Form

69039

SR#:

Page 1 of 3

Report To:		ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER			Preservative											
Company:	Colliers Engineering + Design			Project Name:	Q1 2014 Gowanda			GW								0. None
Contact:	Justin L. O'Brien			Project Number:				WW								1. HCl
Email:	Justin.O'Brien@collierspg.com			ALS Quote #:	R-00066GL-24			SW								2. HNO3
Phone:	601-333-3124			Sampler's Signature:	<i>JL</i>			DW								3. H2SO4
Address:	71 State Street, 1st Floor Suite 104 Binghamton, NY 13901			Email CC:				S								4. NAOH
Lab ID				State Samples Collected (Circle or Write):	NY MA, PA, CT, Other:			L								5. Zn Acet.
(ALS)				Sample Collection Information:			NA									6. MeOH
	Sample ID:		Date	Time	Matrix	Number of Containers	MS/MSD?	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter	Notes:	
	MW-1		3/21/14	0849	GW	3	X									
	MW-2		3/21/14	0908	GW	3	X									
	MW-3		3/21/14	0932	GW	3	X									
	MW-4		3/21/14	0956	GW	3	X									
	MW-5		3/21/14	1033	GW	3	X									
	MW-6		3/21/14	1055	GW	3	X									
	MW-7		3/21/14	1026	GW	3	X									
	MW-8		3/21/14	0750	GW	3	X									
	MW-9		3/21/14	1745	GW	3	X									
	MW-10		3/21/14	0820	GW	3	X									
Special Instructions / Comments:					Turnaround Requirements			Report Requirements			Metals: RCRA 8•PP 13•TAL 23•TCLP•Other (List)					
					Rush (Surcharges Apply) *Subject to Availability* *Please Check with your PM*			Tier II/Cat A -Results/QC			VOA/SVOA Report List: TCL • BTEX • TCLP • CP-51/Stars • THM • Other:					
					<input checked="" type="checkbox"/> Standard (10 Business Days)			Tier IV/Cat B - Data Validation Report w/. Data			Invoice To: <input checked="" type="checkbox"/> Same as Report To					
					Date Required:			EDD: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			PO #:					
								EDD Type:			Company:					
	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:	Contact:	
Signature	<i>John</i>															
Printed Name	Justin L. O'Brien															
Company	Colliers Eng. + Des.															
Date/Time	3/21/14 1500															
R2402345 5																
Colliers Engineering & Design Gowanda																



Chain of Custody / Analytical Request Form

69036

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 • +1 585 288 5380 • alsglobal.com

SR#:

Page 7

of 3

Report To:		ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER			Preservative																			
Company: <i>Colleens Eng. & Design</i>	Contact: <i>Justin L. O'Brien</i>	Project Name: <i>Q1 2014 General/NA</i>	Project Number: <i>R-0006-6L-24</i>	ALS Quote #: <i>R-0006-6L-24</i>	Sampler's Signature: <i>JL</i>	GW	Number of Containers	MS/MSD?	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter	Notes:								
Email: <i>Justin.O'Brien@colleenseg.com</i>	Phone: <i>607-333-3124</i>	Address: <i>71 State Street, 1st Floor Suite 104 Binghamton, NY 13901</i>	Email CC: <i></i>	Email CC: <i></i>		WW										0. None								
						SW										1. HCl								
						DW										2. HNO3								
						S										3. H2SO4								
						L										4. NAOH								
						NA										5. Zn Acet.								
																6. MeOH								
																7. NaHSO4								
																8. Other								
																Notes:								
Sample Collection Information:						Matrix																		
Lab ID (ALS)	Sample ID:	Date	Time	GW	3	X																		
	MW-11	3/21/14	1215	GW	3	X																		
	MW-12	3/21/14	1330	GW	3	X																		
	MW-13	3/21/14	1308	GW	3	X																		
	MW-14	3/21/14	1418	GW	3	X																		
	MW-15	3/21/14	1432	GW	3	X																		
	MW-16	3/21/14	1643	GW	3	X																		
	MW-17	3/21/14	1130	GW	3	X																		
	MW-18	3/21/14	1710	GW	3	X																		
	MW-19R	3/21/14	1275	GW	3	X																		
	MW-20	3/21/14	1021	GW	3	X																		
Special Instructions / Comments:						Turnaround Requirements			Report Requirements			Metals: RCRA 8•PP 13•TAL 23•TCLP•Other (List)												
						Rush (Surcharges Apply) *Subject to Availability* *Please Check with your PM*			Tier II/Cat A -Results/QC			VOA/SVOA Report List: TCL • BTEX • TCLP • CP-51/Stars • THM • Other:												
						X Standard (10 Business Days)			Tier IV/Cat B - Data Validation Report w/. Data			Invoice To: (X Same as Report To)												
						Date Required:			EDD: X Yes No			PO #:												
									EDD Type:			Company:												
	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:	Received By:	Received By:	Received By:	Received By:	Received By:	Received By:	Received By:	Received By:	Received By:	Contact:								
Signature <i>He-</i>																Email:								
Printed Name <i>Justin L. O'Brien</i>																Phone:								
Company <i>Colleens Eng. Design</i>																Address:								
Date/Time <i>3/21/14 1600</i>																								



Chain of Custody / Analytical Request Form

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 • +1 585 288 5380 • alsglobal.com

69037

SR#:

Page 3 of 3

Report To:		ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER			Preservative											
Company: <i>Collaborate Enviro + Design</i>	Contact: <i>Justin O'Brien</i>	Project Name: <i>Q1 2024 (garage)</i>	Project Number: <i></i>	ALS Quoted: <i>R-0006-GL-24</i>	Sampler's Signature: <i>[Signature]</i>	GW	Number of Containers	MS/MSD?	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter	0. None
Phone: <i>607-333-3124</i>	Email: <i>Justin.O'Brien@collaborateenviro.com</i>	Address: <i>71 State Street, 1st Floor Suite 104 Binghamton, NY 13901</i>	Email CC: <i></i>	Email CC: <i></i>	Matrix S L NA										1. HCl	
Lab ID (ALS)	Sample Collection Information:					MS/MSD?	Number of Containers	GW	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter	2. HNO3
	Sample ID:	Date	Time	MS/MSD?	Number of Containers	GW	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter	3. H2SO4		
	MW-1	3/21/24	1254	X	3	GW	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter	4. NAOH		
	DR-1	3/21/24	1240	X	3	GW	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter	5. Zn Acet.		
	DR-2	3/21/24	1347	X	3	GW	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter	6. MeOH		
	DR-3	3/21/24	1410	X	3	GW	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter	7. NaHSO4		
	DR-4	3/21/24	1500	X	3	GW	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter	8. Other		
	G-1	3/21/24	1530	X	3	GW	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter	Notes:		
	G-2	3/21/24	1600	X	3	GW	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter			
	G-3	3/21/24	1210	X	3	GW	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter			
	MW-X			X	3	GW	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter			
	Field Blank	3/22/24	1305	X	3	DN	GC/MS VOA - 8260 • 624 • 524 • TCLP	GC/MS SVOA - 8270 • 625 • TCLP	Pesticides - 8081 • 608 • TCLP	PCBs - 8082 • 608	Herbicides - 8151 • TCLP	Metals, Total - Select Below	Metals, Dissolved - Field / In-Lab Filter			
Special Instructions / Comments:					Turnaround Requirements			Report Requirements			Metals: RCRA 8•PP 13•TAL 23•TCLP•Other (List)					
					Rush (Surcharges Apply) *Subject to Availability* *Please Check with your PM*			Tier II/Cat A -Results/QC			VOA/SVOA Report List: TCL • BTEX • TCLP • CP-51/Stars • THM • Other:					
					Standard (10 Business Days)			Tier IV/Cat B - Data Validation Report w/. Data			Invoice To: (Same as Report To)					
					Date Required:			EDD: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			PO #:					
								EDD Type:			Company:					
	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:	Contact:							
Signature	<i>[Signature]</i>								Email:							
Printed Name	<i>Justin O'Brien</i>								Phone:							
Company	<i>Collaborate Enviro + Design</i>								Address:							
Date/Time	<i>3/22/24 1600</i>															



Cooler Receipt and Preservation Check Form

R2402345
Collars Engineering & Design
Gowanda

5

Project/Client Collars Engineering Folder Number _____

Cooler received on 3/22/24 by RDA

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
2	Custody papers properly completed (ink, signed)?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
3	Did all bottles arrive in good condition (unbroken)?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
4	Circle: Wet Ice Dry Ice Gel packs present?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

Sa	Perchlorate samples have required headspace?	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
Sb	Did VOA vials, Alk, or Sulfide have sig* bubbles?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
6	Where did the bottles originate?	<u>ALS/ROC</u> <u>CLIENT</u>
7	Soil VOA received as:	Bulk Encore 5035set <input type="checkbox"/> NA

8. Temperature Readings Date: 3/22/24 Time: 1616

ID: IR#12 RDA

From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>3.3</u>						
Within 0-6°C?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N					
If <0°C, were samples frozen?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N						

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

& Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SM6 by RDA on 3/22/24 at 1610

5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 3/22/24 Time: 1625 by: RDA

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO RDA
13. Were dissolved metals filtered in the field? YES NO NA
14. Air Samples: Cassettes / Tubes Intact Y/N with MS Y/N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
<2		HNO ₃								
<2		H ₂ SO ₄								
<4		NaHSO ₄								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis.
Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 112723-3A11

Explain all Discrepancies/ Other Comments:

*MW-9 one vial has a bubble
MW-12 one vial has a bubble
*VQA [HCl] chemical lot 24U01661 Exp 4/26

Labels secondary reviewed by: RDA
PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541



Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclo).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations¹



NE LAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to <https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx>.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental
Analyst Summary report

Client: Colliers Engineering & Design (Formerly Bergmann Associates) **Service Request:** R2402345
Project: Gowanda/6974.96

Sample Name: MW-1 **Date Collected:** 03/22/24
Lab Code: R2402345-001 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: MW-2 **Date Collected:** 03/22/24
Lab Code: R2402345-002 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: MW-3 **Date Collected:** 03/22/24
Lab Code: R2402345-003 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: MW-4 **Date Collected:** 03/22/24
Lab Code: R2402345-004 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: MW-5 **Date Collected:** 03/22/24
Lab Code: R2402345-005 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Colliers Engineering & Design (Formerly Bergmann Associates) **Service Request:** R2402345
Project: Gowanda/6974.96

Sample Name: MW-6 **Date Collected:** 03/22/24
Lab Code: R2402345-006 **Date Received:** 03/22/24
Sample Matrix: Water

Sample Name: MW-7 **Date Collected:** 03/21/24
Lab Code: R2402345-007 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
8260C KRUEST

Sample Name: MW-8 **Date Collected:** 03/22/24
Lab Code: R2402345-008 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
8260C KRUEST

Sample Name: MW-9 **Date Collected:** 03/21/24
Lab Code: R2402345-009 **Date Received:** 03/22/24
Sample Matrix: Water

Sample Name: MW-10 **Date Collected:** 03/22/24
Lab Code: R2402345-010 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
8260C KRUEST

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Colliers Engineering & Design (Formerly Bergmann Associates) **Service Request:** R2402345
Project: Gowanda/6974.96

Sample Name: MW-11 **Date Collected:** 03/21/24
Lab Code: R2402345-011 **Date Received:** 03/22/24
Sample Matrix: Water

Sample Name: MW-12 **Date Collected:** 03/21/24
Lab Code: R2402345-012 **Date Received:** 03/22/24
Sample Matrix: Water

Sample Name: MW-13 **Date Collected:** 03/21/24
Lab Code: R2402345-013 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
8260C KRUEST

Sample Name: MW-14 **Date Collected:** 03/21/24
Lab Code: R2402345-014 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
8260C KRUEST

Sample Name: MW-15 **Date Collected:** 03/21/24
Lab Code: R2402345-015 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
8260C KRUEST

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Colliers Engineering & Design (Formerly Bergmann Associates) **Service Request:** R2402345
Project: Gowanda/6974.96

Sample Name: MW-16 **Date Collected:** 03/21/24
Lab Code: R2402345-016 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-17 **Date Collected:** 03/22/24
Lab Code: R2402345-017 **Date Received:** 03/22/24
Sample Matrix: Water

Sample Name: MW-18 **Date Collected:** 03/21/24
Lab Code: R2402345-018 **Date Received:** 03/22/24
Sample Matrix: Water

Sample Name: MW-19 **Date Collected:** 03/22/24
Lab Code: R2402345-019 **Date Received:** 03/22/24
Sample Matrix: Water

Sample Name: MW-20 **Date Collected:** 03/22/24
Lab Code: R2402345-020 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
8260C KRUEST

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Colliers Engineering & Design (Formerly Bergmann Associates) **Service Request:** R2402345
Project: Gowanda/6974.96

Sample Name: MW-21 **Date Collected:** 03/22/24
Lab Code: R2402345-021 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: DR-1 **Date Collected:** 03/21/24
Lab Code: R2402345-022 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: DR-2 **Date Collected:** 03/21/24
Lab Code: R2402345-023 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: DR-3 **Date Collected:** 03/21/24
Lab Code: R2402345-024 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: DR-4 **Date Collected:** 03/21/24
Lab Code: R2402345-025 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Colliers Engineering & Design (Formerly Bergmann Associates) **Service Request:** R2402345
Project: Gowanda/6974.96

Sample Name: G-1 **Date Collected:** 03/21/24
Lab Code: R2402345-026 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: G-2 **Date Collected:** 03/21/24
Lab Code: R2402345-027 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: G-3 **Date Collected:** 03/22/24
Lab Code: R2402345-028 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: MW-X **Date Collected:** 03/22/24
Lab Code: R2402345-029 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST

Sample Name: Field Blank **Date Collected:** 03/22/24
Lab Code: R2402345-030 **Date Received:** 03/22/24
Sample Matrix: Water

Analysis Method **Extracted/Digested By** **Analyzed By**
8260C KRUEST



INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

RIGHT SOLUTIONS | RIGHT PARTNER



Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-1
Lab Code: R2402345-001

Service Request: R2402345
Date Collected: 03/22/24 08:49
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/28/24 21:01	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/28/24 21:01	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/28/24 21:01	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/28/24 21:01	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/28/24 21:01	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/28/24 21:01	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/28/24 21:01	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/28/24 21:01	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/28/24 21:01	
1,2-Dibromoethane	5.0 U	5.0	1	03/28/24 21:01	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/28/24 21:01	
1,2-Dichloroethane	5.0 U	5.0	1	03/28/24 21:01	
1,2-Dichloropropane	5.0 U	5.0	1	03/28/24 21:01	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/28/24 21:01	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/28/24 21:01	
1,4-Dioxane	100 U	100	1	03/28/24 21:01	
2-Butanone (MEK)	10 U	10	1	03/28/24 21:01	
2-Hexanone	10 U	10	1	03/28/24 21:01	
4-Methyl-2-pentanone	10 U	10	1	03/28/24 21:01	
Acetone	10 U	10	1	03/28/24 21:01	
Benzene	5.0 U	5.0	1	03/28/24 21:01	
Bromochloromethane	5.0 U	5.0	1	03/28/24 21:01	
Bromodichloromethane	5.0 U	5.0	1	03/28/24 21:01	
Bromoform	5.0 U	5.0	1	03/28/24 21:01	
Bromomethane	5.0 U	5.0	1	03/28/24 21:01	
Carbon Disulfide	10 U	10	1	03/28/24 21:01	
Carbon Tetrachloride	5.0 U	5.0	1	03/28/24 21:01	
Chlorobenzene	5.0 U	5.0	1	03/28/24 21:01	
Chloroethane	5.0 U	5.0	1	03/28/24 21:01	
Chloroform	5.0 U	5.0	1	03/28/24 21:01	
Chloromethane	5.0 U	5.0	1	03/28/24 21:01	
Cyclohexane	10 U	10	1	03/28/24 21:01	
Dibromochloromethane	5.0 U	5.0	1	03/28/24 21:01	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/28/24 21:01	
Dichloromethane	5.0 U	5.0	1	03/28/24 21:01	
Ethylbenzene	5.0 U	5.0	1	03/28/24 21:01	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/28/24 21:01	
Methyl Acetate	10 U	10	1	03/28/24 21:01	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/28/24 21:01	
Methylcyclohexane	10 U	10	1	03/28/24 21:01	
Styrene	5.0 U	5.0	1	03/28/24 21:01	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/28/24 21:01	
Toluene	5.0 U	5.0	1	03/28/24 21:01	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/22/24 08:49
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	MW-1	Units:	ug/L
Lab Code:	R2402345-001	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	200	5.0	1	03/28/24 21:01	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/28/24 21:01	
Vinyl Chloride	5.0 U	5.0	1	03/28/24 21:01	
cis-1,2-Dichloroethene	48	5.0	1	03/28/24 21:01	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 21:01	
m,p-Xylenes	5.0 U	5.0	1	03/28/24 21:01	
o-Xylene	5.0 U	5.0	1	03/28/24 21:01	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/28/24 21:01	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 21:01	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	03/28/24 21:01	
Dibromofluoromethane	99	80 - 116	03/28/24 21:01	
Toluene-d8	101	87 - 121	03/28/24 21:01	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-2
Lab Code: R2402345-002

Service Request: R2402345
Date Collected: 03/22/24 09:08
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/27/24 16:41	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/27/24 16:41	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/27/24 16:41	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/27/24 16:41	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/27/24 16:41	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/27/24 16:41	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/27/24 16:41	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/27/24 16:41	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/27/24 16:41	
1,2-Dibromoethane	5.0 U	5.0	1	03/27/24 16:41	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/27/24 16:41	
1,2-Dichloroethane	5.0 U	5.0	1	03/27/24 16:41	
1,2-Dichloropropane	5.0 U	5.0	1	03/27/24 16:41	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/27/24 16:41	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/27/24 16:41	
1,4-Dioxane	100 U	100	1	03/27/24 16:41	
2-Butanone (MEK)	10 U	10	1	03/27/24 16:41	
2-Hexanone	10 U	10	1	03/27/24 16:41	
4-Methyl-2-pentanone	10 U	10	1	03/27/24 16:41	
Acetone	10 U	10	1	03/27/24 16:41	
Benzene	5.0 U	5.0	1	03/27/24 16:41	
Bromochloromethane	5.0 U	5.0	1	03/27/24 16:41	
Bromodichloromethane	5.0 U	5.0	1	03/27/24 16:41	
Bromoform	5.0 U	5.0	1	03/27/24 16:41	
Bromomethane	5.0 U	5.0	1	03/27/24 16:41	
Carbon Disulfide	10 U	10	1	03/27/24 16:41	
Carbon Tetrachloride	5.0 U	5.0	1	03/27/24 16:41	
Chlorobenzene	5.0 U	5.0	1	03/27/24 16:41	
Chloroethane	5.0 U	5.0	1	03/27/24 16:41	
Chloroform	5.0 U	5.0	1	03/27/24 16:41	
Chloromethane	5.0 U	5.0	1	03/27/24 16:41	
Cyclohexane	10 U	10	1	03/27/24 16:41	
Dibromochloromethane	5.0 U	5.0	1	03/27/24 16:41	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/27/24 16:41	
Dichloromethane	5.0 U	5.0	1	03/27/24 16:41	
Ethylbenzene	5.0 U	5.0	1	03/27/24 16:41	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/27/24 16:41	
Methyl Acetate	10 U	10	1	03/27/24 16:41	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/27/24 16:41	
Methylcyclohexane	10 U	10	1	03/27/24 16:41	
Styrene	5.0 U	5.0	1	03/27/24 16:41	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/27/24 16:41	
Toluene	5.0 U	5.0	1	03/27/24 16:41	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/22/24 09:08
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	MW-2	Units:	ug/L
Lab Code:	R2402345-002	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/27/24 16:41	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/27/24 16:41	
Vinyl Chloride	5.0 U	5.0	1	03/27/24 16:41	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 16:41	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 16:41	
m,p-Xylenes	5.0 U	5.0	1	03/27/24 16:41	
o-Xylene	5.0 U	5.0	1	03/27/24 16:41	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 16:41	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 16:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	03/27/24 16:41	
Dibromofluoromethane	104	80 - 116	03/27/24 16:41	
Toluene-d8	97	87 - 121	03/27/24 16:41	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-3
Lab Code: R2402345-003

Service Request: R2402345
Date Collected: 03/22/24 09:32
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/27/24 17:50	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/27/24 17:50	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/27/24 17:50	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/27/24 17:50	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/27/24 17:50	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/27/24 17:50	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/27/24 17:50	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/27/24 17:50	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/27/24 17:50	
1,2-Dibromoethane	5.0 U	5.0	1	03/27/24 17:50	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/27/24 17:50	
1,2-Dichloroethane	5.0 U	5.0	1	03/27/24 17:50	
1,2-Dichloropropane	5.0 U	5.0	1	03/27/24 17:50	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/27/24 17:50	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/27/24 17:50	
1,4-Dioxane	100 U	100	1	03/27/24 17:50	
2-Butanone (MEK)	10 U	10	1	03/27/24 17:50	
2-Hexanone	10 U	10	1	03/27/24 17:50	
4-Methyl-2-pentanone	10 U	10	1	03/27/24 17:50	
Acetone	10 U	10	1	03/27/24 17:50	
Benzene	5.0 U	5.0	1	03/27/24 17:50	
Bromochloromethane	5.0 U	5.0	1	03/27/24 17:50	
Bromodichloromethane	5.0 U	5.0	1	03/27/24 17:50	
Bromoform	5.0 U	5.0	1	03/27/24 17:50	
Bromomethane	5.0 U	5.0	1	03/27/24 17:50	
Carbon Disulfide	10 U	10	1	03/27/24 17:50	
Carbon Tetrachloride	5.0 U	5.0	1	03/27/24 17:50	
Chlorobenzene	5.0 U	5.0	1	03/27/24 17:50	
Chloroethane	5.0 U	5.0	1	03/27/24 17:50	
Chloroform	5.0 U	5.0	1	03/27/24 17:50	
Chloromethane	5.0 U	5.0	1	03/27/24 17:50	
Cyclohexane	10 U	10	1	03/27/24 17:50	
Dibromochloromethane	5.0 U	5.0	1	03/27/24 17:50	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/27/24 17:50	
Dichloromethane	5.0 U	5.0	1	03/27/24 17:50	
Ethylbenzene	5.0 U	5.0	1	03/27/24 17:50	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/27/24 17:50	
Methyl Acetate	10 U	10	1	03/27/24 17:50	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/27/24 17:50	
Methylcyclohexane	10 U	10	1	03/27/24 17:50	
Styrene	5.0 U	5.0	1	03/27/24 17:50	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/27/24 17:50	
Toluene	5.0 U	5.0	1	03/27/24 17:50	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/22/24 09:32
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	MW-3	Units:	ug/L
Lab Code:	R2402345-003	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/27/24 17:50	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/27/24 17:50	
Vinyl Chloride	5.0 U	5.0	1	03/27/24 17:50	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 17:50	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 17:50	
m,p-Xylenes	5.0 U	5.0	1	03/27/24 17:50	
o-Xylene	5.0 U	5.0	1	03/27/24 17:50	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 17:50	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 17:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	03/27/24 17:50	
Dibromofluoromethane	100	80 - 116	03/27/24 17:50	
Toluene-d8	93	87 - 121	03/27/24 17:50	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-4
Lab Code: R2402345-004

Service Request: R2402345
Date Collected: 03/22/24 09:56
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/27/24 18:13	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/27/24 18:13	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/27/24 18:13	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/27/24 18:13	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/27/24 18:13	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/27/24 18:13	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/27/24 18:13	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/27/24 18:13	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/27/24 18:13	
1,2-Dibromoethane	5.0 U	5.0	1	03/27/24 18:13	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/27/24 18:13	
1,2-Dichloroethane	5.0 U	5.0	1	03/27/24 18:13	
1,2-Dichloropropane	5.0 U	5.0	1	03/27/24 18:13	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/27/24 18:13	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/27/24 18:13	
1,4-Dioxane	100 U	100	1	03/27/24 18:13	
2-Butanone (MEK)	10 U	10	1	03/27/24 18:13	
2-Hexanone	10 U	10	1	03/27/24 18:13	
4-Methyl-2-pentanone	10 U	10	1	03/27/24 18:13	
Acetone	10 U	10	1	03/27/24 18:13	
Benzene	5.0 U	5.0	1	03/27/24 18:13	
Bromochloromethane	5.0 U	5.0	1	03/27/24 18:13	
Bromodichloromethane	5.0 U	5.0	1	03/27/24 18:13	
Bromoform	5.0 U	5.0	1	03/27/24 18:13	
Bromomethane	5.0 U	5.0	1	03/27/24 18:13	
Carbon Disulfide	10 U	10	1	03/27/24 18:13	
Carbon Tetrachloride	5.0 U	5.0	1	03/27/24 18:13	
Chlorobenzene	5.0 U	5.0	1	03/27/24 18:13	
Chloroethane	5.0 U	5.0	1	03/27/24 18:13	
Chloroform	5.0 U	5.0	1	03/27/24 18:13	
Chloromethane	5.0 U	5.0	1	03/27/24 18:13	
Cyclohexane	10 U	10	1	03/27/24 18:13	
Dibromochloromethane	5.0 U	5.0	1	03/27/24 18:13	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/27/24 18:13	
Dichloromethane	5.0 U	5.0	1	03/27/24 18:13	
Ethylbenzene	5.0 U	5.0	1	03/27/24 18:13	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/27/24 18:13	
Methyl Acetate	10 U	10	1	03/27/24 18:13	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/27/24 18:13	
Methylcyclohexane	10 U	10	1	03/27/24 18:13	
Styrene	5.0 U	5.0	1	03/27/24 18:13	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/27/24 18:13	
Toluene	5.0 U	5.0	1	03/27/24 18:13	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: MW-4
Lab Code: R2402345-004

Service Request: R2402345
Date Collected: 03/22/24 09:56
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/27/24 18:13	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/27/24 18:13	
Vinyl Chloride	5.0 U	5.0	1	03/27/24 18:13	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 18:13	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 18:13	
m,p-Xylenes	5.0 U	5.0	1	03/27/24 18:13	
o-Xylene	5.0 U	5.0	1	03/27/24 18:13	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 18:13	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 18:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	03/27/24 18:13	
Dibromofluoromethane	104	80 - 116	03/27/24 18:13	
Toluene-d8	102	87 - 121	03/27/24 18:13	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-5
Lab Code: R2402345-005

Service Request: R2402345
Date Collected: 03/22/24 10:33
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/27/24 19:22	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/27/24 19:22	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/27/24 19:22	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/27/24 19:22	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/27/24 19:22	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/27/24 19:22	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/27/24 19:22	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/27/24 19:22	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/27/24 19:22	
1,2-Dibromoethane	5.0 U	5.0	1	03/27/24 19:22	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/27/24 19:22	
1,2-Dichloroethane	5.0 U	5.0	1	03/27/24 19:22	
1,2-Dichloropropane	5.0 U	5.0	1	03/27/24 19:22	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/27/24 19:22	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/27/24 19:22	
1,4-Dioxane	100 U	100	1	03/27/24 19:22	
2-Butanone (MEK)	10 U	10	1	03/27/24 19:22	
2-Hexanone	10 U	10	1	03/27/24 19:22	
4-Methyl-2-pentanone	10 U	10	1	03/27/24 19:22	
Acetone	10 U	10	1	03/27/24 19:22	
Benzene	5.0 U	5.0	1	03/27/24 19:22	
Bromochloromethane	5.0 U	5.0	1	03/27/24 19:22	
Bromodichloromethane	5.0 U	5.0	1	03/27/24 19:22	
Bromoform	5.0 U	5.0	1	03/27/24 19:22	
Bromomethane	5.0 U	5.0	1	03/27/24 19:22	
Carbon Disulfide	10 U	10	1	03/27/24 19:22	
Carbon Tetrachloride	5.0 U	5.0	1	03/27/24 19:22	
Chlorobenzene	5.0 U	5.0	1	03/27/24 19:22	
Chloroethane	5.0 U	5.0	1	03/27/24 19:22	
Chloroform	5.0 U	5.0	1	03/27/24 19:22	
Chloromethane	5.0 U	5.0	1	03/27/24 19:22	
Cyclohexane	10 U	10	1	03/27/24 19:22	
Dibromochloromethane	5.0 U	5.0	1	03/27/24 19:22	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/27/24 19:22	
Dichloromethane	5.0 U	5.0	1	03/27/24 19:22	
Ethylbenzene	5.0 U	5.0	1	03/27/24 19:22	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/27/24 19:22	
Methyl Acetate	10 U	10	1	03/27/24 19:22	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/27/24 19:22	
Methylcyclohexane	10 U	10	1	03/27/24 19:22	
Styrene	5.0 U	5.0	1	03/27/24 19:22	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/27/24 19:22	
Toluene	5.0 U	5.0	1	03/27/24 19:22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: MW-5
Lab Code: R2402345-005

Service Request: R2402345
Date Collected: 03/22/24 10:33
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/27/24 19:22	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/27/24 19:22	
Vinyl Chloride	5.0 U	5.0	1	03/27/24 19:22	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 19:22	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 19:22	
m,p-Xylenes	5.0 U	5.0	1	03/27/24 19:22	
o-Xylene	5.0 U	5.0	1	03/27/24 19:22	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 19:22	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 19:22	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	03/27/24 19:22	
Dibromofluoromethane	103	80 - 116	03/27/24 19:22	
Toluene-d8	103	87 - 121	03/27/24 19:22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-6
Lab Code: R2402345-006

Service Request: R2402345
Date Collected: 03/22/24 10:55
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/27/24 19:45	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/27/24 19:45	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/27/24 19:45	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/27/24 19:45	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/27/24 19:45	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/27/24 19:45	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/27/24 19:45	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/27/24 19:45	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/27/24 19:45	
1,2-Dibromoethane	5.0 U	5.0	1	03/27/24 19:45	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/27/24 19:45	
1,2-Dichloroethane	5.0 U	5.0	1	03/27/24 19:45	
1,2-Dichloropropane	5.0 U	5.0	1	03/27/24 19:45	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/27/24 19:45	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/27/24 19:45	
1,4-Dioxane	100 U	100	1	03/27/24 19:45	
2-Butanone (MEK)	10 U	10	1	03/27/24 19:45	
2-Hexanone	10 U	10	1	03/27/24 19:45	
4-Methyl-2-pentanone	10 U	10	1	03/27/24 19:45	
Acetone	10 U	10	1	03/27/24 19:45	
Benzene	5.0 U	5.0	1	03/27/24 19:45	
Bromochloromethane	5.0 U	5.0	1	03/27/24 19:45	
Bromodichloromethane	5.0 U	5.0	1	03/27/24 19:45	
Bromoform	5.0 U	5.0	1	03/27/24 19:45	
Bromomethane	5.0 U	5.0	1	03/27/24 19:45	
Carbon Disulfide	10 U	10	1	03/27/24 19:45	
Carbon Tetrachloride	5.0 U	5.0	1	03/27/24 19:45	
Chlorobenzene	5.0 U	5.0	1	03/27/24 19:45	
Chloroethane	5.0 U	5.0	1	03/27/24 19:45	
Chloroform	5.0 U	5.0	1	03/27/24 19:45	
Chloromethane	5.0 U	5.0	1	03/27/24 19:45	
Cyclohexane	10 U	10	1	03/27/24 19:45	
Dibromochloromethane	5.0 U	5.0	1	03/27/24 19:45	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/27/24 19:45	
Dichloromethane	5.0 U	5.0	1	03/27/24 19:45	
Ethylbenzene	5.0 U	5.0	1	03/27/24 19:45	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/27/24 19:45	
Methyl Acetate	10 U	10	1	03/27/24 19:45	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/27/24 19:45	
Methylcyclohexane	10 U	10	1	03/27/24 19:45	
Styrene	5.0 U	5.0	1	03/27/24 19:45	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/27/24 19:45	
Toluene	5.0 U	5.0	1	03/27/24 19:45	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/22/24 10:55
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	MW-6	Units:	ug/L
Lab Code:	R2402345-006	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/27/24 19:45	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/27/24 19:45	
Vinyl Chloride	32	5.0	1	03/27/24 19:45	
cis-1,2-Dichloroethene	30	5.0	1	03/27/24 19:45	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 19:45	
m,p-Xylenes	5.0 U	5.0	1	03/27/24 19:45	
o-Xylene	5.0 U	5.0	1	03/27/24 19:45	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 19:45	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 19:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85 - 122	03/27/24 19:45	
Dibromofluoromethane	104	80 - 116	03/27/24 19:45	
Toluene-d8	106	87 - 121	03/27/24 19:45	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-7
Lab Code: R2402345-007

Service Request: R2402345
Date Collected: 03/21/24 16:26
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/27/24 21:17	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/27/24 21:17	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/27/24 21:17	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/27/24 21:17	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/27/24 21:17	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/27/24 21:17	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/27/24 21:17	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/27/24 21:17	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/27/24 21:17	
1,2-Dibromoethane	5.0 U	5.0	1	03/27/24 21:17	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/27/24 21:17	
1,2-Dichloroethane	5.0 U	5.0	1	03/27/24 21:17	
1,2-Dichloropropane	5.0 U	5.0	1	03/27/24 21:17	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/27/24 21:17	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/27/24 21:17	
1,4-Dioxane	100 U	100	1	03/27/24 21:17	
2-Butanone (MEK)	10 U	10	1	03/27/24 21:17	
2-Hexanone	10 U	10	1	03/27/24 21:17	
4-Methyl-2-pentanone	10 U	10	1	03/27/24 21:17	
Acetone	10 U	10	1	03/27/24 21:17	
Benzene	5.0 U	5.0	1	03/27/24 21:17	
Bromochloromethane	5.0 U	5.0	1	03/27/24 21:17	
Bromodichloromethane	5.0 U	5.0	1	03/27/24 21:17	
Bromoform	5.0 U	5.0	1	03/27/24 21:17	
Bromomethane	5.0 U	5.0	1	03/27/24 21:17	
Carbon Disulfide	10 U	10	1	03/27/24 21:17	
Carbon Tetrachloride	5.0 U	5.0	1	03/27/24 21:17	
Chlorobenzene	5.0 U	5.0	1	03/27/24 21:17	
Chloroethane	5.0 U	5.0	1	03/27/24 21:17	
Chloroform	5.0 U	5.0	1	03/27/24 21:17	
Chloromethane	5.0 U	5.0	1	03/27/24 21:17	
Cyclohexane	10 U	10	1	03/27/24 21:17	
Dibromochloromethane	5.0 U	5.0	1	03/27/24 21:17	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/27/24 21:17	
Dichloromethane	5.0 U	5.0	1	03/27/24 21:17	
Ethylbenzene	5.0 U	5.0	1	03/27/24 21:17	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/27/24 21:17	
Methyl Acetate	10 U	10	1	03/27/24 21:17	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/27/24 21:17	
Methylcyclohexane	10 U	10	1	03/27/24 21:17	
Styrene	5.0 U	5.0	1	03/27/24 21:17	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/27/24 21:17	
Toluene	5.0 U	5.0	1	03/27/24 21:17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: MW-7
Lab Code: R2402345-007

Service Request: R2402345
Date Collected: 03/21/24 16:26
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/27/24 21:17	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/27/24 21:17	
Vinyl Chloride	5.0 U	5.0	1	03/27/24 21:17	
cis-1,2-Dichloroethene	40	5.0	1	03/27/24 21:17	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 21:17	
m,p-Xylenes	5.0 U	5.0	1	03/27/24 21:17	
o-Xylene	5.0 U	5.0	1	03/27/24 21:17	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 21:17	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 21:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	03/27/24 21:17	
Dibromofluoromethane	99	80 - 116	03/27/24 21:17	
Toluene-d8	100	87 - 121	03/27/24 21:17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-8
Lab Code: R2402345-008

Service Request: R2402345
Date Collected: 03/22/24 07:50
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/27/24 21:40	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/27/24 21:40	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/27/24 21:40	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/27/24 21:40	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/27/24 21:40	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/27/24 21:40	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/27/24 21:40	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/27/24 21:40	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/27/24 21:40	
1,2-Dibromoethane	5.0 U	5.0	1	03/27/24 21:40	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/27/24 21:40	
1,2-Dichloroethane	5.0 U	5.0	1	03/27/24 21:40	
1,2-Dichloropropane	5.0 U	5.0	1	03/27/24 21:40	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/27/24 21:40	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/27/24 21:40	
1,4-Dioxane	100 U	100	1	03/27/24 21:40	
2-Butanone (MEK)	10 U	10	1	03/27/24 21:40	
2-Hexanone	10 U	10	1	03/27/24 21:40	
4-Methyl-2-pentanone	10 U	10	1	03/27/24 21:40	
Acetone	10 U	10	1	03/27/24 21:40	
Benzene	5.0 U	5.0	1	03/27/24 21:40	
Bromochloromethane	5.0 U	5.0	1	03/27/24 21:40	
Bromodichloromethane	5.0 U	5.0	1	03/27/24 21:40	
Bromoform	5.0 U	5.0	1	03/27/24 21:40	
Bromomethane	5.0 U	5.0	1	03/27/24 21:40	
Carbon Disulfide	10 U	10	1	03/27/24 21:40	
Carbon Tetrachloride	5.0 U	5.0	1	03/27/24 21:40	
Chlorobenzene	5.0 U	5.0	1	03/27/24 21:40	
Chloroethane	5.0 U	5.0	1	03/27/24 21:40	
Chloroform	5.0 U	5.0	1	03/27/24 21:40	
Chloromethane	5.0 U	5.0	1	03/27/24 21:40	
Cyclohexane	10 U	10	1	03/27/24 21:40	
Dibromochloromethane	5.0 U	5.0	1	03/27/24 21:40	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/27/24 21:40	
Dichloromethane	5.0 U	5.0	1	03/27/24 21:40	
Ethylbenzene	5.0 U	5.0	1	03/27/24 21:40	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/27/24 21:40	
Methyl Acetate	10 U	10	1	03/27/24 21:40	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/27/24 21:40	
Methylcyclohexane	10 U	10	1	03/27/24 21:40	
Styrene	5.0 U	5.0	1	03/27/24 21:40	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/27/24 21:40	
Toluene	5.0 U	5.0	1	03/27/24 21:40	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-8
Lab Code: R2402345-008

Service Request: R2402345
Date Collected: 03/22/24 07:50
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/27/24 21:40	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/27/24 21:40	
Vinyl Chloride	5.0 U	5.0	1	03/27/24 21:40	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 21:40	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 21:40	
m,p-Xylenes	5.0 U	5.0	1	03/27/24 21:40	
o-Xylene	5.0 U	5.0	1	03/27/24 21:40	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 21:40	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 21:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/27/24 21:40	
Dibromofluoromethane	100	80 - 116	03/27/24 21:40	
Toluene-d8	101	87 - 121	03/27/24 21:40	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-9
Lab Code: R2402345-009

Service Request: R2402345
Date Collected: 03/21/24 17:45
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/27/24 22:03	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/27/24 22:03	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/27/24 22:03	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/27/24 22:03	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/27/24 22:03	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/27/24 22:03	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/27/24 22:03	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/27/24 22:03	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/27/24 22:03	
1,2-Dibromoethane	5.0 U	5.0	1	03/27/24 22:03	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/27/24 22:03	
1,2-Dichloroethane	5.0 U	5.0	1	03/27/24 22:03	
1,2-Dichloropropane	5.0 U	5.0	1	03/27/24 22:03	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/27/24 22:03	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/27/24 22:03	
1,4-Dioxane	100 U	100	1	03/27/24 22:03	
2-Butanone (MEK)	10 U	10	1	03/27/24 22:03	
2-Hexanone	10 U	10	1	03/27/24 22:03	
4-Methyl-2-pentanone	10 U	10	1	03/27/24 22:03	
Acetone	10 U	10	1	03/27/24 22:03	
Benzene	5.0 U	5.0	1	03/27/24 22:03	
Bromochloromethane	5.0 U	5.0	1	03/27/24 22:03	
Bromodichloromethane	5.0 U	5.0	1	03/27/24 22:03	
Bromoform	5.0 U	5.0	1	03/27/24 22:03	
Bromomethane	5.0 U	5.0	1	03/27/24 22:03	
Carbon Disulfide	10 U	10	1	03/27/24 22:03	
Carbon Tetrachloride	5.0 U	5.0	1	03/27/24 22:03	
Chlorobenzene	5.0 U	5.0	1	03/27/24 22:03	
Chloroethane	5.0 U	5.0	1	03/27/24 22:03	
Chloroform	5.0 U	5.0	1	03/27/24 22:03	
Chloromethane	5.0 U	5.0	1	03/27/24 22:03	
Cyclohexane	10 U	10	1	03/27/24 22:03	
Dibromochloromethane	5.0 U	5.0	1	03/27/24 22:03	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/27/24 22:03	
Dichloromethane	5.0 U	5.0	1	03/27/24 22:03	
Ethylbenzene	5.0 U	5.0	1	03/27/24 22:03	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/27/24 22:03	
Methyl Acetate	10 U	10	1	03/27/24 22:03	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/27/24 22:03	
Methylcyclohexane	10 U	10	1	03/27/24 22:03	
Styrene	5.0 U	5.0	1	03/27/24 22:03	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/27/24 22:03	
Toluene	5.0 U	5.0	1	03/27/24 22:03	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/21/24 17:45
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	MW-9	Units:	ug/L
Lab Code:	R2402345-009	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/27/24 22:03	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/27/24 22:03	
Vinyl Chloride	5.0 U	5.0	1	03/27/24 22:03	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 22:03	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 22:03	
m,p-Xylenes	5.0 U	5.0	1	03/27/24 22:03	
o-Xylene	5.0 U	5.0	1	03/27/24 22:03	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 22:03	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 22:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	03/27/24 22:03	
Dibromofluoromethane	100	80 - 116	03/27/24 22:03	
Toluene-d8	101	87 - 121	03/27/24 22:03	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-10
Lab Code: R2402345-010

Service Request: R2402345
Date Collected: 03/22/24 07:20
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/27/24 22:26	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/27/24 22:26	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/27/24 22:26	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/27/24 22:26	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/27/24 22:26	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/27/24 22:26	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/27/24 22:26	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/27/24 22:26	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/27/24 22:26	
1,2-Dibromoethane	5.0 U	5.0	1	03/27/24 22:26	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/27/24 22:26	
1,2-Dichloroethane	5.0 U	5.0	1	03/27/24 22:26	
1,2-Dichloropropane	5.0 U	5.0	1	03/27/24 22:26	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/27/24 22:26	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/27/24 22:26	
1,4-Dioxane	100 U	100	1	03/27/24 22:26	
2-Butanone (MEK)	10 U	10	1	03/27/24 22:26	
2-Hexanone	10 U	10	1	03/27/24 22:26	
4-Methyl-2-pentanone	10 U	10	1	03/27/24 22:26	
Acetone	10 U	10	1	03/27/24 22:26	
Benzene	5.0 U	5.0	1	03/27/24 22:26	
Bromochloromethane	5.0 U	5.0	1	03/27/24 22:26	
Bromodichloromethane	5.0 U	5.0	1	03/27/24 22:26	
Bromoform	5.0 U	5.0	1	03/27/24 22:26	
Bromomethane	5.0 U	5.0	1	03/27/24 22:26	
Carbon Disulfide	10 U	10	1	03/27/24 22:26	
Carbon Tetrachloride	5.0 U	5.0	1	03/27/24 22:26	
Chlorobenzene	5.0 U	5.0	1	03/27/24 22:26	
Chloroethane	5.0 U	5.0	1	03/27/24 22:26	
Chloroform	5.0 U	5.0	1	03/27/24 22:26	
Chloromethane	5.0 U	5.0	1	03/27/24 22:26	
Cyclohexane	10 U	10	1	03/27/24 22:26	
Dibromochloromethane	5.0 U	5.0	1	03/27/24 22:26	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/27/24 22:26	
Dichloromethane	5.0 U	5.0	1	03/27/24 22:26	
Ethylbenzene	5.0 U	5.0	1	03/27/24 22:26	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/27/24 22:26	
Methyl Acetate	10 U	10	1	03/27/24 22:26	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/27/24 22:26	
Methylcyclohexane	10 U	10	1	03/27/24 22:26	
Styrene	5.0 U	5.0	1	03/27/24 22:26	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/27/24 22:26	
Toluene	5.0 U	5.0	1	03/27/24 22:26	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/22/24 07:20
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	MW-10	Units:	ug/L
Lab Code:	R2402345-010	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/27/24 22:26	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/27/24 22:26	
Vinyl Chloride	5.0 U	5.0	1	03/27/24 22:26	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 22:26	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 22:26	
m,p-Xylenes	5.0 U	5.0	1	03/27/24 22:26	
o-Xylene	5.0 U	5.0	1	03/27/24 22:26	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 22:26	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 22:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	03/27/24 22:26	
Dibromofluoromethane	100	80 - 116	03/27/24 22:26	
Toluene-d8	96	87 - 121	03/27/24 22:26	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-11
Lab Code: R2402345-011

Service Request: R2402345
Date Collected: 03/21/24 12:15
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	13 U	13	2.5	03/27/24 23:12	
1,1,2,2-Tetrachloroethane	13 U	13	2.5	03/27/24 23:12	
1,1,2-Trichloroethane	13 U	13	2.5	03/27/24 23:12	
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	13	2.5	03/27/24 23:12	
1,1-Dichloroethane (1,1-DCA)	13 U	13	2.5	03/27/24 23:12	
1,1-Dichloroethylene (1,1-DCE)	13 U	13	2.5	03/27/24 23:12	
1,2,3-Trichlorobenzene	13 U	13	2.5	03/27/24 23:12	
1,2,4-Trichlorobenzene	13 U	13	2.5	03/27/24 23:12	
1,2-Dibromo-3-chloropropane (DBCP)	13 U	13	2.5	03/27/24 23:12	
1,2-Dibromoethane	13 U	13	2.5	03/27/24 23:12	
1,2-Dichlorobenzene	13 U	13	2.5	03/27/24 23:12	
1,2-Dichloroethane	13 U	13	2.5	03/27/24 23:12	
1,2-Dichloropropane	13 U	13	2.5	03/27/24 23:12	
1,3-Dichlorobenzene	13 U	13	2.5	03/27/24 23:12	
1,4-Dichlorobenzene	13 U	13	2.5	03/27/24 23:12	
1,4-Dioxane	250 U	250	2.5	03/27/24 23:12	
2-Butanone (MEK)	25 U	25	2.5	03/27/24 23:12	
2-Hexanone	25 U	25	2.5	03/27/24 23:12	
4-Methyl-2-pentanone	25 U	25	2.5	03/27/24 23:12	
Acetone	25 U	25	2.5	03/27/24 23:12	
Benzene	13 U	13	2.5	03/27/24 23:12	
Bromochloromethane	13 U	13	2.5	03/27/24 23:12	
Bromodichloromethane	13 U	13	2.5	03/27/24 23:12	
Bromoform	13 U	13	2.5	03/27/24 23:12	
Bromomethane	13 U	13	2.5	03/27/24 23:12	
Carbon Disulfide	25 U	25	2.5	03/27/24 23:12	
Carbon Tetrachloride	13 U	13	2.5	03/27/24 23:12	
Chlorobenzene	13 U	13	2.5	03/27/24 23:12	
Chloroethane	13 U	13	2.5	03/27/24 23:12	
Chloroform	13 U	13	2.5	03/27/24 23:12	
Chloromethane	13 U	13	2.5	03/27/24 23:12	
Cyclohexane	25 U	25	2.5	03/27/24 23:12	
Dibromochloromethane	13 U	13	2.5	03/27/24 23:12	
Dichlorodifluoromethane (CFC 12)	13 U	13	2.5	03/27/24 23:12	
Dichloromethane	13 U	13	2.5	03/27/24 23:12	
Ethylbenzene	13 U	13	2.5	03/27/24 23:12	
Isopropylbenzene (Cumene)	13 U	13	2.5	03/27/24 23:12	
Methyl Acetate	25 U	25	2.5	03/27/24 23:12	
Methyl tert-Butyl Ether	13 U	13	2.5	03/27/24 23:12	
Methylcyclohexane	25 U	25	2.5	03/27/24 23:12	
Styrene	13 U	13	2.5	03/27/24 23:12	
Tetrachloroethene (PCE)	13 U	13	2.5	03/27/24 23:12	
Toluene	13 U	13	2.5	03/27/24 23:12	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/21/24 12:15
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	MW-11	Units:	ug/L
Lab Code:	R2402345-011	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	210	13	2.5	03/27/24 23:12	
Trichlorofluoromethane (CFC 11)	13 U	13	2.5	03/27/24 23:12	
Vinyl Chloride	13 U	13	2.5	03/27/24 23:12	
cis-1,2-Dichloroethene	99	13	2.5	03/27/24 23:12	
cis-1,3-Dichloropropene	13 U	13	2.5	03/27/24 23:12	
m,p-Xylenes	13 U	13	2.5	03/27/24 23:12	
o-Xylene	13 U	13	2.5	03/27/24 23:12	
trans-1,2-Dichloroethene	13 U	13	2.5	03/27/24 23:12	
trans-1,3-Dichloropropene	13 U	13	2.5	03/27/24 23:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	03/27/24 23:12	
Dibromofluoromethane	102	80 - 116	03/27/24 23:12	
Toluene-d8	102	87 - 121	03/27/24 23:12	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-12
Lab Code: R2402345-012

Service Request: R2402345
Date Collected: 03/21/24 13:30
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/27/24 22:49	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/27/24 22:49	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/27/24 22:49	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/27/24 22:49	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/27/24 22:49	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/27/24 22:49	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/27/24 22:49	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/27/24 22:49	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/27/24 22:49	
1,2-Dibromoethane	5.0 U	5.0	1	03/27/24 22:49	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/27/24 22:49	
1,2-Dichloroethane	5.0 U	5.0	1	03/27/24 22:49	
1,2-Dichloropropane	5.0 U	5.0	1	03/27/24 22:49	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/27/24 22:49	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/27/24 22:49	
1,4-Dioxane	100 U	100	1	03/27/24 22:49	
2-Butanone (MEK)	10 U	10	1	03/27/24 22:49	
2-Hexanone	10 U	10	1	03/27/24 22:49	
4-Methyl-2-pentanone	10 U	10	1	03/27/24 22:49	
Acetone	10 U	10	1	03/27/24 22:49	
Benzene	5.0 U	5.0	1	03/27/24 22:49	
Bromochloromethane	5.0 U	5.0	1	03/27/24 22:49	
Bromodichloromethane	5.0 U	5.0	1	03/27/24 22:49	
Bromoform	5.0 U	5.0	1	03/27/24 22:49	
Bromomethane	5.0 U	5.0	1	03/27/24 22:49	
Carbon Disulfide	10 U	10	1	03/27/24 22:49	
Carbon Tetrachloride	5.0 U	5.0	1	03/27/24 22:49	
Chlorobenzene	5.0 U	5.0	1	03/27/24 22:49	
Chloroethane	5.0 U	5.0	1	03/27/24 22:49	
Chloroform	5.0 U	5.0	1	03/27/24 22:49	
Chloromethane	5.0 U	5.0	1	03/27/24 22:49	
Cyclohexane	10 U	10	1	03/27/24 22:49	
Dibromochloromethane	5.0 U	5.0	1	03/27/24 22:49	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/27/24 22:49	
Dichloromethane	5.0 U	5.0	1	03/27/24 22:49	
Ethylbenzene	5.0 U	5.0	1	03/27/24 22:49	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/27/24 22:49	
Methyl Acetate	10 U	10	1	03/27/24 22:49	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/27/24 22:49	
Methylcyclohexane	10 U	10	1	03/27/24 22:49	
Styrene	5.0 U	5.0	1	03/27/24 22:49	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/27/24 22:49	
Toluene	5.0 U	5.0	1	03/27/24 22:49	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-12
Lab Code: R2402345-012

Service Request: R2402345
Date Collected: 03/21/24 13:30
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	18	5.0	1	03/27/24 22:49	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/27/24 22:49	
Vinyl Chloride	5.0 U	5.0	1	03/27/24 22:49	
cis-1,2-Dichloroethene	83	5.0	1	03/27/24 22:49	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 22:49	
m,p-Xylenes	5.0 U	5.0	1	03/27/24 22:49	
o-Xylene	5.0 U	5.0	1	03/27/24 22:49	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 22:49	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 22:49	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	03/27/24 22:49	
Dibromofluoromethane	100	80 - 116	03/27/24 22:49	
Toluene-d8	93	87 - 121	03/27/24 22:49	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-13
Lab Code: R2402345-013

Service Request: R2402345
Date Collected: 03/21/24 13:08
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/28/24 18:43	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/28/24 18:43	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/28/24 18:43	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/28/24 18:43	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/28/24 18:43	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/28/24 18:43	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/28/24 18:43	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/28/24 18:43	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/28/24 18:43	
1,2-Dibromoethane	5.0 U	5.0	1	03/28/24 18:43	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/28/24 18:43	
1,2-Dichloroethane	5.0 U	5.0	1	03/28/24 18:43	
1,2-Dichloropropane	5.0 U	5.0	1	03/28/24 18:43	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/28/24 18:43	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/28/24 18:43	
1,4-Dioxane	100 U	100	1	03/28/24 18:43	
2-Butanone (MEK)	10 U	10	1	03/28/24 18:43	
2-Hexanone	10 U	10	1	03/28/24 18:43	
4-Methyl-2-pentanone	10 U	10	1	03/28/24 18:43	
Acetone	10 U	10	1	03/28/24 18:43	
Benzene	5.0 U	5.0	1	03/28/24 18:43	
Bromochloromethane	5.0 U	5.0	1	03/28/24 18:43	
Bromodichloromethane	5.0 U	5.0	1	03/28/24 18:43	
Bromoform	5.0 U	5.0	1	03/28/24 18:43	
Bromomethane	5.0 U	5.0	1	03/28/24 18:43	
Carbon Disulfide	10 U	10	1	03/28/24 18:43	
Carbon Tetrachloride	5.0 U	5.0	1	03/28/24 18:43	
Chlorobenzene	5.0 U	5.0	1	03/28/24 18:43	
Chloroethane	5.0 U	5.0	1	03/28/24 18:43	
Chloroform	5.0 U	5.0	1	03/28/24 18:43	
Chloromethane	5.0 U	5.0	1	03/28/24 18:43	
Cyclohexane	10 U	10	1	03/28/24 18:43	
Dibromochloromethane	5.0 U	5.0	1	03/28/24 18:43	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/28/24 18:43	
Dichloromethane	5.0 U	5.0	1	03/28/24 18:43	
Ethylbenzene	5.0 U	5.0	1	03/28/24 18:43	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/28/24 18:43	
Methyl Acetate	10 U	10	1	03/28/24 18:43	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/28/24 18:43	
Methylcyclohexane	10 U	10	1	03/28/24 18:43	
Styrene	5.0 U	5.0	1	03/28/24 18:43	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/28/24 18:43	
Toluene	5.0 U	5.0	1	03/28/24 18:43	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-13
Lab Code: R2402345-013

Service Request: R2402345
Date Collected: 03/21/24 13:08
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/28/24 18:43	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/28/24 18:43	
Vinyl Chloride	5.0 U	5.0	1	03/28/24 18:43	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/28/24 18:43	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 18:43	
m,p-Xylenes	5.0 U	5.0	1	03/28/24 18:43	
o-Xylene	5.0 U	5.0	1	03/28/24 18:43	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/28/24 18:43	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 18:43	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	03/28/24 18:43	
Dibromofluoromethane	100	80 - 116	03/28/24 18:43	
Toluene-d8	98	87 - 121	03/28/24 18:43	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-14
Lab Code: R2402345-014

Service Request: R2402345
Date Collected: 03/21/24 14:18
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/28/24 19:06	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/28/24 19:06	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/28/24 19:06	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/28/24 19:06	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/28/24 19:06	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/28/24 19:06	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/28/24 19:06	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/28/24 19:06	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/28/24 19:06	
1,2-Dibromoethane	5.0 U	5.0	1	03/28/24 19:06	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/28/24 19:06	
1,2-Dichloroethane	5.0 U	5.0	1	03/28/24 19:06	
1,2-Dichloropropane	5.0 U	5.0	1	03/28/24 19:06	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/28/24 19:06	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/28/24 19:06	
1,4-Dioxane	100 U	100	1	03/28/24 19:06	
2-Butanone (MEK)	10 U	10	1	03/28/24 19:06	
2-Hexanone	10 U	10	1	03/28/24 19:06	
4-Methyl-2-pentanone	10 U	10	1	03/28/24 19:06	
Acetone	10 U	10	1	03/28/24 19:06	
Benzene	5.0 U	5.0	1	03/28/24 19:06	
Bromochloromethane	5.0 U	5.0	1	03/28/24 19:06	
Bromodichloromethane	5.0 U	5.0	1	03/28/24 19:06	
Bromoform	5.0 U	5.0	1	03/28/24 19:06	
Bromomethane	5.0 U	5.0	1	03/28/24 19:06	
Carbon Disulfide	10 U	10	1	03/28/24 19:06	
Carbon Tetrachloride	5.0 U	5.0	1	03/28/24 19:06	
Chlorobenzene	5.0 U	5.0	1	03/28/24 19:06	
Chloroethane	5.0 U	5.0	1	03/28/24 19:06	
Chloroform	5.0 U	5.0	1	03/28/24 19:06	
Chloromethane	5.0 U	5.0	1	03/28/24 19:06	
Cyclohexane	10 U	10	1	03/28/24 19:06	
Dibromochloromethane	5.0 U	5.0	1	03/28/24 19:06	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/28/24 19:06	
Dichloromethane	5.0 U	5.0	1	03/28/24 19:06	
Ethylbenzene	5.0 U	5.0	1	03/28/24 19:06	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/28/24 19:06	
Methyl Acetate	10 U	10	1	03/28/24 19:06	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/28/24 19:06	
Methylcyclohexane	10 U	10	1	03/28/24 19:06	
Styrene	5.0 U	5.0	1	03/28/24 19:06	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/28/24 19:06	
Toluene	5.0 U	5.0	1	03/28/24 19:06	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-14
Lab Code: R2402345-014

Service Request: R2402345
Date Collected: 03/21/24 14:18
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.4	5.0	1	03/28/24 19:06	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/28/24 19:06	
Vinyl Chloride	5.0 U	5.0	1	03/28/24 19:06	
cis-1,2-Dichloroethene	52	5.0	1	03/28/24 19:06	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 19:06	
m,p-Xylenes	5.0 U	5.0	1	03/28/24 19:06	
o-Xylene	5.0 U	5.0	1	03/28/24 19:06	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/28/24 19:06	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 19:06	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	03/28/24 19:06	
Dibromofluoromethane	100	80 - 116	03/28/24 19:06	
Toluene-d8	96	87 - 121	03/28/24 19:06	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-15
Lab Code: R2402345-015

Service Request: R2402345
Date Collected: 03/21/24 14:32
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/28/24 19:29	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/28/24 19:29	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/28/24 19:29	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/28/24 19:29	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/28/24 19:29	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/28/24 19:29	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/28/24 19:29	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/28/24 19:29	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/28/24 19:29	
1,2-Dibromoethane	5.0 U	5.0	1	03/28/24 19:29	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/28/24 19:29	
1,2-Dichloroethane	5.0 U	5.0	1	03/28/24 19:29	
1,2-Dichloropropane	5.0 U	5.0	1	03/28/24 19:29	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/28/24 19:29	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/28/24 19:29	
1,4-Dioxane	100 U	100	1	03/28/24 19:29	
2-Butanone (MEK)	10 U	10	1	03/28/24 19:29	
2-Hexanone	10 U	10	1	03/28/24 19:29	
4-Methyl-2-pentanone	10 U	10	1	03/28/24 19:29	
Acetone	10 U	10	1	03/28/24 19:29	
Benzene	5.0 U	5.0	1	03/28/24 19:29	
Bromochloromethane	5.0 U	5.0	1	03/28/24 19:29	
Bromodichloromethane	5.0 U	5.0	1	03/28/24 19:29	
Bromoform	5.0 U	5.0	1	03/28/24 19:29	
Bromomethane	5.0 U	5.0	1	03/28/24 19:29	
Carbon Disulfide	10 U	10	1	03/28/24 19:29	
Carbon Tetrachloride	5.0 U	5.0	1	03/28/24 19:29	
Chlorobenzene	5.0 U	5.0	1	03/28/24 19:29	
Chloroethane	5.0 U	5.0	1	03/28/24 19:29	
Chloroform	5.0 U	5.0	1	03/28/24 19:29	
Chloromethane	5.0 U	5.0	1	03/28/24 19:29	
Cyclohexane	10 U	10	1	03/28/24 19:29	
Dibromochloromethane	5.0 U	5.0	1	03/28/24 19:29	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/28/24 19:29	
Dichloromethane	5.0 U	5.0	1	03/28/24 19:29	
Ethylbenzene	5.0 U	5.0	1	03/28/24 19:29	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/28/24 19:29	
Methyl Acetate	10 U	10	1	03/28/24 19:29	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/28/24 19:29	
Methylcyclohexane	10 U	10	1	03/28/24 19:29	
Styrene	5.0 U	5.0	1	03/28/24 19:29	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/28/24 19:29	
Toluene	5.0 U	5.0	1	03/28/24 19:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/21/24 14:32
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	MW-15	Units:	ug/L
Lab Code:	R2402345-015	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/28/24 19:29	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/28/24 19:29	
Vinyl Chloride	5.0 U	5.0	1	03/28/24 19:29	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/28/24 19:29	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 19:29	
m,p-Xylenes	5.0 U	5.0	1	03/28/24 19:29	
o-Xylene	5.0 U	5.0	1	03/28/24 19:29	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/28/24 19:29	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 19:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	03/28/24 19:29	
Dibromofluoromethane	102	80 - 116	03/28/24 19:29	
Toluene-d8	103	87 - 121	03/28/24 19:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-16
Lab Code: R2402345-016

Service Request: R2402345
Date Collected: 03/21/24 16:43
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/28/24 19:52	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/28/24 19:52	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/28/24 19:52	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/28/24 19:52	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/28/24 19:52	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/28/24 19:52	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/28/24 19:52	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/28/24 19:52	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/28/24 19:52	
1,2-Dibromoethane	5.0 U	5.0	1	03/28/24 19:52	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/28/24 19:52	
1,2-Dichloroethane	5.0 U	5.0	1	03/28/24 19:52	
1,2-Dichloropropane	5.0 U	5.0	1	03/28/24 19:52	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/28/24 19:52	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/28/24 19:52	
1,4-Dioxane	100 U	100	1	03/28/24 19:52	
2-Butanone (MEK)	10 U	10	1	03/28/24 19:52	
2-Hexanone	10 U	10	1	03/28/24 19:52	
4-Methyl-2-pentanone	10 U	10	1	03/28/24 19:52	
Acetone	10 U	10	1	03/28/24 19:52	
Benzene	5.0 U	5.0	1	03/28/24 19:52	
Bromochloromethane	5.0 U	5.0	1	03/28/24 19:52	
Bromodichloromethane	5.0 U	5.0	1	03/28/24 19:52	
Bromoform	5.0 U	5.0	1	03/28/24 19:52	
Bromomethane	5.0 U	5.0	1	03/28/24 19:52	
Carbon Disulfide	10 U	10	1	03/28/24 19:52	
Carbon Tetrachloride	5.0 U	5.0	1	03/28/24 19:52	
Chlorobenzene	5.0 U	5.0	1	03/28/24 19:52	
Chloroethane	5.0 U	5.0	1	03/28/24 19:52	
Chloroform	5.0 U	5.0	1	03/28/24 19:52	
Chloromethane	5.0 U	5.0	1	03/28/24 19:52	
Cyclohexane	10 U	10	1	03/28/24 19:52	
Dibromochloromethane	5.0 U	5.0	1	03/28/24 19:52	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/28/24 19:52	
Dichloromethane	5.0 U	5.0	1	03/28/24 19:52	
Ethylbenzene	5.0 U	5.0	1	03/28/24 19:52	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/28/24 19:52	
Methyl Acetate	10 U	10	1	03/28/24 19:52	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/28/24 19:52	
Methylcyclohexane	10 U	10	1	03/28/24 19:52	
Styrene	5.0 U	5.0	1	03/28/24 19:52	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/28/24 19:52	
Toluene	5.0 U	5.0	1	03/28/24 19:52	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: MW-16
Lab Code: R2402345-016

Service Request: R2402345
Date Collected: 03/21/24 16:43
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/28/24 19:52	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/28/24 19:52	
Vinyl Chloride	5.0 U	5.0	1	03/28/24 19:52	
cis-1,2-Dichloroethene	16	5.0	1	03/28/24 19:52	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 19:52	
m,p-Xylenes	5.0 U	5.0	1	03/28/24 19:52	
o-Xylene	5.0 U	5.0	1	03/28/24 19:52	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/28/24 19:52	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 19:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85 - 122	03/28/24 19:52	
Dibromofluoromethane	101	80 - 116	03/28/24 19:52	
Toluene-d8	95	87 - 121	03/28/24 19:52	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-17
Lab Code: R2402345-017

Service Request: R2402345
Date Collected: 03/22/24 11:30
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/28/24 20:15	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/28/24 20:15	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/28/24 20:15	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/28/24 20:15	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/28/24 20:15	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/28/24 20:15	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/28/24 20:15	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/28/24 20:15	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/28/24 20:15	
1,2-Dibromoethane	5.0 U	5.0	1	03/28/24 20:15	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/28/24 20:15	
1,2-Dichloroethane	5.0 U	5.0	1	03/28/24 20:15	
1,2-Dichloropropane	5.0 U	5.0	1	03/28/24 20:15	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/28/24 20:15	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/28/24 20:15	
1,4-Dioxane	100 U	100	1	03/28/24 20:15	
2-Butanone (MEK)	10 U	10	1	03/28/24 20:15	
2-Hexanone	10 U	10	1	03/28/24 20:15	
4-Methyl-2-pentanone	10 U	10	1	03/28/24 20:15	
Acetone	10 U	10	1	03/28/24 20:15	
Benzene	5.0 U	5.0	1	03/28/24 20:15	
Bromochloromethane	5.0 U	5.0	1	03/28/24 20:15	
Bromodichloromethane	5.0 U	5.0	1	03/28/24 20:15	
Bromoform	5.0 U	5.0	1	03/28/24 20:15	
Bromomethane	5.0 U	5.0	1	03/28/24 20:15	
Carbon Disulfide	10 U	10	1	03/28/24 20:15	
Carbon Tetrachloride	5.0 U	5.0	1	03/28/24 20:15	
Chlorobenzene	5.0 U	5.0	1	03/28/24 20:15	
Chloroethane	5.0 U	5.0	1	03/28/24 20:15	
Chloroform	5.0 U	5.0	1	03/28/24 20:15	
Chloromethane	5.0 U	5.0	1	03/28/24 20:15	
Cyclohexane	10 U	10	1	03/28/24 20:15	
Dibromochloromethane	5.0 U	5.0	1	03/28/24 20:15	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/28/24 20:15	
Dichloromethane	5.0 U	5.0	1	03/28/24 20:15	
Ethylbenzene	5.0 U	5.0	1	03/28/24 20:15	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/28/24 20:15	
Methyl Acetate	10 U	10	1	03/28/24 20:15	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/28/24 20:15	
Methylcyclohexane	10 U	10	1	03/28/24 20:15	
Styrene	5.0 U	5.0	1	03/28/24 20:15	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/28/24 20:15	
Toluene	5.0 U	5.0	1	03/28/24 20:15	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/22/24 11:30
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	MW-17	Units:	ug/L
Lab Code:	R2402345-017	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	6.5	5.0	1	03/28/24 20:15	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/28/24 20:15	
Vinyl Chloride	5.0 U	5.0	1	03/28/24 20:15	
cis-1,2-Dichloroethene	58	5.0	1	03/28/24 20:15	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 20:15	
m,p-Xylenes	5.0 U	5.0	1	03/28/24 20:15	
o-Xylene	5.0 U	5.0	1	03/28/24 20:15	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/28/24 20:15	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 20:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/28/24 20:15	
Dibromofluoromethane	102	80 - 116	03/28/24 20:15	
Toluene-d8	93	87 - 121	03/28/24 20:15	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-18
Lab Code: R2402345-018

Service Request: R2402345
Date Collected: 03/21/24 17:10
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/28/24 20:38	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/28/24 20:38	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/28/24 20:38	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/28/24 20:38	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/28/24 20:38	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/28/24 20:38	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/28/24 20:38	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/28/24 20:38	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/28/24 20:38	
1,2-Dibromoethane	5.0 U	5.0	1	03/28/24 20:38	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/28/24 20:38	
1,2-Dichloroethane	5.0 U	5.0	1	03/28/24 20:38	
1,2-Dichloropropane	5.0 U	5.0	1	03/28/24 20:38	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/28/24 20:38	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/28/24 20:38	
1,4-Dioxane	100 U	100	1	03/28/24 20:38	
2-Butanone (MEK)	10 U	10	1	03/28/24 20:38	
2-Hexanone	10 U	10	1	03/28/24 20:38	
4-Methyl-2-pentanone	10 U	10	1	03/28/24 20:38	
Acetone	10 U	10	1	03/28/24 20:38	
Benzene	5.0 U	5.0	1	03/28/24 20:38	
Bromochloromethane	5.0 U	5.0	1	03/28/24 20:38	
Bromodichloromethane	5.0 U	5.0	1	03/28/24 20:38	
Bromoform	5.0 U	5.0	1	03/28/24 20:38	
Bromomethane	5.0 U	5.0	1	03/28/24 20:38	
Carbon Disulfide	10 U	10	1	03/28/24 20:38	
Carbon Tetrachloride	5.0 U	5.0	1	03/28/24 20:38	
Chlorobenzene	5.0 U	5.0	1	03/28/24 20:38	
Chloroethane	5.0 U	5.0	1	03/28/24 20:38	
Chloroform	5.0 U	5.0	1	03/28/24 20:38	
Chloromethane	5.0 U	5.0	1	03/28/24 20:38	
Cyclohexane	10 U	10	1	03/28/24 20:38	
Dibromochloromethane	5.0 U	5.0	1	03/28/24 20:38	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/28/24 20:38	
Dichloromethane	5.0 U	5.0	1	03/28/24 20:38	
Ethylbenzene	5.0 U	5.0	1	03/28/24 20:38	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/28/24 20:38	
Methyl Acetate	10 U	10	1	03/28/24 20:38	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/28/24 20:38	
Methylcyclohexane	10 U	10	1	03/28/24 20:38	
Styrene	5.0 U	5.0	1	03/28/24 20:38	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/28/24 20:38	
Toluene	5.0 U	5.0	1	03/28/24 20:38	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-18
Lab Code: R2402345-018

Service Request: R2402345
Date Collected: 03/21/24 17:10
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/28/24 20:38	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/28/24 20:38	
Vinyl Chloride	5.0 U	5.0	1	03/28/24 20:38	
cis-1,2-Dichloroethene	5.3	5.0	1	03/28/24 20:38	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 20:38	
m,p-Xylenes	5.0 U	5.0	1	03/28/24 20:38	
o-Xylene	5.0 U	5.0	1	03/28/24 20:38	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/28/24 20:38	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 20:38	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	03/28/24 20:38	
Dibromofluoromethane	100	80 - 116	03/28/24 20:38	
Toluene-d8	95	87 - 121	03/28/24 20:38	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-19
Lab Code: R2402345-019

Service Request: R2402345
Date Collected: 03/22/24 12:25
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/29/24 14:31	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/29/24 14:31	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/29/24 14:31	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/29/24 14:31	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/29/24 14:31	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/29/24 14:31	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/29/24 14:31	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/29/24 14:31	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/29/24 14:31	
1,2-Dibromoethane	5.0 U	5.0	1	03/29/24 14:31	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/29/24 14:31	
1,2-Dichloroethane	5.0 U	5.0	1	03/29/24 14:31	
1,2-Dichloropropane	5.0 U	5.0	1	03/29/24 14:31	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/29/24 14:31	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/29/24 14:31	
1,4-Dioxane	100 U	100	1	03/29/24 14:31	
2-Butanone (MEK)	10 U	10	1	03/29/24 14:31	
2-Hexanone	10 U	10	1	03/29/24 14:31	
4-Methyl-2-pentanone	10 U	10	1	03/29/24 14:31	
Acetone	10 U	10	1	03/29/24 14:31	
Benzene	5.0 U	5.0	1	03/29/24 14:31	
Bromochloromethane	5.0 U	5.0	1	03/29/24 14:31	
Bromodichloromethane	5.0 U	5.0	1	03/29/24 14:31	
Bromoform	5.0 U	5.0	1	03/29/24 14:31	
Bromomethane	5.0 U	5.0	1	03/29/24 14:31	
Carbon Disulfide	10 U	10	1	03/29/24 14:31	
Carbon Tetrachloride	5.0 U	5.0	1	03/29/24 14:31	
Chlorobenzene	5.0 U	5.0	1	03/29/24 14:31	
Chloroethane	5.0 U	5.0	1	03/29/24 14:31	
Chloroform	5.0 U	5.0	1	03/29/24 14:31	
Chloromethane	5.0 U	5.0	1	03/29/24 14:31	
Cyclohexane	10 U	10	1	03/29/24 14:31	
Dibromochloromethane	5.0 U	5.0	1	03/29/24 14:31	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/29/24 14:31	
Dichloromethane	5.0 U	5.0	1	03/29/24 14:31	
Ethylbenzene	5.0 U	5.0	1	03/29/24 14:31	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/29/24 14:31	
Methyl Acetate	10 U	10	1	03/29/24 14:31	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/29/24 14:31	
Methylcyclohexane	10 U	10	1	03/29/24 14:31	
Styrene	5.0 U	5.0	1	03/29/24 14:31	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/29/24 14:31	
Toluene	5.0 U	5.0	1	03/29/24 14:31	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-19
Lab Code: R2402345-019

Service Request: R2402345
Date Collected: 03/22/24 12:25
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/29/24 14:31	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/29/24 14:31	
Vinyl Chloride	5.0 U	5.0	1	03/29/24 14:31	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 14:31	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 14:31	
m,p-Xylenes	5.0 U	5.0	1	03/29/24 14:31	
o-Xylene	5.0 U	5.0	1	03/29/24 14:31	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 14:31	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 14:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/29/24 14:31	
Dibromofluoromethane	101	80 - 116	03/29/24 14:31	
Toluene-d8	102	87 - 121	03/29/24 14:31	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-20
Lab Code: R2402345-020

Service Request: R2402345
Date Collected: 03/22/24 10:21
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/29/24 14:54	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/29/24 14:54	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/29/24 14:54	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/29/24 14:54	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/29/24 14:54	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/29/24 14:54	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/29/24 14:54	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/29/24 14:54	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/29/24 14:54	
1,2-Dibromoethane	5.0 U	5.0	1	03/29/24 14:54	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/29/24 14:54	
1,2-Dichloroethane	5.0 U	5.0	1	03/29/24 14:54	
1,2-Dichloropropane	5.0 U	5.0	1	03/29/24 14:54	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/29/24 14:54	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/29/24 14:54	
1,4-Dioxane	100 U	100	1	03/29/24 14:54	
2-Butanone (MEK)	10 U	10	1	03/29/24 14:54	
2-Hexanone	10 U	10	1	03/29/24 14:54	
4-Methyl-2-pentanone	10 U	10	1	03/29/24 14:54	
Acetone	10 U	10	1	03/29/24 14:54	
Benzene	5.0 U	5.0	1	03/29/24 14:54	
Bromochloromethane	5.0 U	5.0	1	03/29/24 14:54	
Bromodichloromethane	5.0 U	5.0	1	03/29/24 14:54	
Bromoform	5.0 U	5.0	1	03/29/24 14:54	
Bromomethane	5.0 U	5.0	1	03/29/24 14:54	
Carbon Disulfide	10 U	10	1	03/29/24 14:54	
Carbon Tetrachloride	5.0 U	5.0	1	03/29/24 14:54	
Chlorobenzene	5.0 U	5.0	1	03/29/24 14:54	
Chloroethane	5.0 U	5.0	1	03/29/24 14:54	
Chloroform	5.0 U	5.0	1	03/29/24 14:54	
Chloromethane	5.0 U	5.0	1	03/29/24 14:54	
Cyclohexane	10 U	10	1	03/29/24 14:54	
Dibromochloromethane	5.0 U	5.0	1	03/29/24 14:54	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/29/24 14:54	
Dichloromethane	5.0 U	5.0	1	03/29/24 14:54	
Ethylbenzene	5.0 U	5.0	1	03/29/24 14:54	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/29/24 14:54	
Methyl Acetate	10 U	10	1	03/29/24 14:54	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/29/24 14:54	
Methylcyclohexane	10 U	10	1	03/29/24 14:54	
Styrene	5.0 U	5.0	1	03/29/24 14:54	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/29/24 14:54	
Toluene	5.0 U	5.0	1	03/29/24 14:54	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: MW-20
Lab Code: R2402345-020

Service Request: R2402345
Date Collected: 03/22/24 10:21
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/29/24 14:54	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/29/24 14:54	
Vinyl Chloride	5.0 U	5.0	1	03/29/24 14:54	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 14:54	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 14:54	
m,p-Xylenes	5.0 U	5.0	1	03/29/24 14:54	
o-Xylene	5.0 U	5.0	1	03/29/24 14:54	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 14:54	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 14:54	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85 - 122	03/29/24 14:54	
Dibromofluoromethane	100	80 - 116	03/29/24 14:54	
Toluene-d8	101	87 - 121	03/29/24 14:54	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: MW-21
Lab Code: R2402345-021

Service Request: R2402345
Date Collected: 03/22/24 12:54
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/29/24 15:17	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/29/24 15:17	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/29/24 15:17	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/29/24 15:17	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/29/24 15:17	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/29/24 15:17	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/29/24 15:17	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/29/24 15:17	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/29/24 15:17	
1,2-Dibromoethane	5.0 U	5.0	1	03/29/24 15:17	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/29/24 15:17	
1,2-Dichloroethane	5.0 U	5.0	1	03/29/24 15:17	
1,2-Dichloropropane	5.0 U	5.0	1	03/29/24 15:17	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/29/24 15:17	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/29/24 15:17	
1,4-Dioxane	100 U	100	1	03/29/24 15:17	
2-Butanone (MEK)	10 U	10	1	03/29/24 15:17	
2-Hexanone	10 U	10	1	03/29/24 15:17	
4-Methyl-2-pentanone	10 U	10	1	03/29/24 15:17	
Acetone	10 U	10	1	03/29/24 15:17	
Benzene	5.0 U	5.0	1	03/29/24 15:17	
Bromochloromethane	5.0 U	5.0	1	03/29/24 15:17	
Bromodichloromethane	5.0 U	5.0	1	03/29/24 15:17	
Bromoform	5.0 U	5.0	1	03/29/24 15:17	
Bromomethane	5.0 U	5.0	1	03/29/24 15:17	
Carbon Disulfide	10 U	10	1	03/29/24 15:17	
Carbon Tetrachloride	5.0 U	5.0	1	03/29/24 15:17	
Chlorobenzene	5.0 U	5.0	1	03/29/24 15:17	
Chloroethane	5.0 U	5.0	1	03/29/24 15:17	
Chloroform	5.0 U	5.0	1	03/29/24 15:17	
Chloromethane	5.0 U	5.0	1	03/29/24 15:17	
Cyclohexane	10 U	10	1	03/29/24 15:17	
Dibromochloromethane	5.0 U	5.0	1	03/29/24 15:17	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/29/24 15:17	
Dichloromethane	5.0 U	5.0	1	03/29/24 15:17	
Ethylbenzene	5.0 U	5.0	1	03/29/24 15:17	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/29/24 15:17	
Methyl Acetate	10 U	10	1	03/29/24 15:17	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/29/24 15:17	
Methylcyclohexane	10 U	10	1	03/29/24 15:17	
Styrene	5.0 U	5.0	1	03/29/24 15:17	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/29/24 15:17	
Toluene	5.0 U	5.0	1	03/29/24 15:17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: MW-21
Lab Code: R2402345-021

Service Request: R2402345
Date Collected: 03/22/24 12:54
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/29/24 15:17	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/29/24 15:17	
Vinyl Chloride	5.0 U	5.0	1	03/29/24 15:17	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 15:17	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 15:17	
m,p-Xylenes	5.0 U	5.0	1	03/29/24 15:17	
o-Xylene	5.0 U	5.0	1	03/29/24 15:17	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 15:17	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 15:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	03/29/24 15:17	
Dibromofluoromethane	100	80 - 116	03/29/24 15:17	
Toluene-d8	99	87 - 121	03/29/24 15:17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: DR-1
Lab Code: R2402345-022

Service Request: R2402345
Date Collected: 03/21/24 12:40
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	13 U	13	2.5	03/29/24 17:35	
1,1,2,2-Tetrachloroethane	13 U	13	2.5	03/29/24 17:35	
1,1,2-Trichloroethane	13 U	13	2.5	03/29/24 17:35	
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	13	2.5	03/29/24 17:35	
1,1-Dichloroethane (1,1-DCA)	13 U	13	2.5	03/29/24 17:35	
1,1-Dichloroethylene (1,1-DCE)	13 U	13	2.5	03/29/24 17:35	
1,2,3-Trichlorobenzene	13 U	13	2.5	03/29/24 17:35	
1,2,4-Trichlorobenzene	13 U	13	2.5	03/29/24 17:35	
1,2-Dibromo-3-chloropropane (DBCP)	13 U	13	2.5	03/29/24 17:35	
1,2-Dibromoethane	13 U	13	2.5	03/29/24 17:35	
1,2-Dichlorobenzene	13 U	13	2.5	03/29/24 17:35	
1,2-Dichloroethane	13 U	13	2.5	03/29/24 17:35	
1,2-Dichloropropane	13 U	13	2.5	03/29/24 17:35	
1,3-Dichlorobenzene	13 U	13	2.5	03/29/24 17:35	
1,4-Dichlorobenzene	13 U	13	2.5	03/29/24 17:35	
1,4-Dioxane	250 U	250	2.5	03/29/24 17:35	
2-Butanone (MEK)	25 U	25	2.5	03/29/24 17:35	
2-Hexanone	25 U	25	2.5	03/29/24 17:35	
4-Methyl-2-pentanone	25 U	25	2.5	03/29/24 17:35	
Acetone	25 U	25	2.5	03/29/24 17:35	
Benzene	13 U	13	2.5	03/29/24 17:35	
Bromochloromethane	13 U	13	2.5	03/29/24 17:35	
Bromodichloromethane	13 U	13	2.5	03/29/24 17:35	
Bromoform	13 U	13	2.5	03/29/24 17:35	
Bromomethane	13 U	13	2.5	03/29/24 17:35	
Carbon Disulfide	25 U	25	2.5	03/29/24 17:35	
Carbon Tetrachloride	13 U	13	2.5	03/29/24 17:35	
Chlorobenzene	13 U	13	2.5	03/29/24 17:35	
Chloroethane	13 U	13	2.5	03/29/24 17:35	
Chloroform	13 U	13	2.5	03/29/24 17:35	
Chloromethane	13 U	13	2.5	03/29/24 17:35	
Cyclohexane	25 U	25	2.5	03/29/24 17:35	
Dibromochloromethane	13 U	13	2.5	03/29/24 17:35	
Dichlorodifluoromethane (CFC 12)	13 U	13	2.5	03/29/24 17:35	
Dichloromethane	13 U	13	2.5	03/29/24 17:35	
Ethylbenzene	13 U	13	2.5	03/29/24 17:35	
Isopropylbenzene (Cumene)	13 U	13	2.5	03/29/24 17:35	
Methyl Acetate	25 U	25	2.5	03/29/24 17:35	
Methyl tert-Butyl Ether	13 U	13	2.5	03/29/24 17:35	
Methylcyclohexane	25 U	25	2.5	03/29/24 17:35	
Styrene	13 U	13	2.5	03/29/24 17:35	
Tetrachloroethene (PCE)	13 U	13	2.5	03/29/24 17:35	
Toluene	13 U	13	2.5	03/29/24 17:35	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: DR-1
Lab Code: R2402345-022

Service Request: R2402345
Date Collected: 03/21/24 12:40
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	330	13	2.5	03/29/24 17:35	
Trichlorofluoromethane (CFC 11)	13 U	13	2.5	03/29/24 17:35	
Vinyl Chloride	13 U	13	2.5	03/29/24 17:35	
cis-1,2-Dichloroethene	110	13	2.5	03/29/24 17:35	
cis-1,3-Dichloropropene	13 U	13	2.5	03/29/24 17:35	
m,p-Xylenes	13 U	13	2.5	03/29/24 17:35	
o-Xylene	13 U	13	2.5	03/29/24 17:35	
trans-1,2-Dichloroethene	13 U	13	2.5	03/29/24 17:35	
trans-1,3-Dichloropropene	13 U	13	2.5	03/29/24 17:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	03/29/24 17:35	
Dibromofluoromethane	99	80 - 116	03/29/24 17:35	
Toluene-d8	99	87 - 121	03/29/24 17:35	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: DR-2
Lab Code: R2402345-023

Service Request: R2402345
Date Collected: 03/21/24 13:47
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/29/24 13:22	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/29/24 13:22	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/29/24 13:22	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/29/24 13:22	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/29/24 13:22	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/29/24 13:22	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/29/24 13:22	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/29/24 13:22	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/29/24 13:22	
1,2-Dibromoethane	5.0 U	5.0	1	03/29/24 13:22	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/29/24 13:22	
1,2-Dichloroethane	5.0 U	5.0	1	03/29/24 13:22	
1,2-Dichloropropane	5.0 U	5.0	1	03/29/24 13:22	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/29/24 13:22	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/29/24 13:22	
1,4-Dioxane	100 U	100	1	03/29/24 13:22	
2-Butanone (MEK)	10 U	10	1	03/29/24 13:22	
2-Hexanone	10 U	10	1	03/29/24 13:22	
4-Methyl-2-pentanone	10 U	10	1	03/29/24 13:22	
Acetone	10 U	10	1	03/29/24 13:22	
Benzene	5.0 U	5.0	1	03/29/24 13:22	
Bromochloromethane	5.0 U	5.0	1	03/29/24 13:22	
Bromodichloromethane	5.0 U	5.0	1	03/29/24 13:22	
Bromoform	5.0 U	5.0	1	03/29/24 13:22	
Bromomethane	5.0 U	5.0	1	03/29/24 13:22	
Carbon Disulfide	10 U	10	1	03/29/24 13:22	
Carbon Tetrachloride	5.0 U	5.0	1	03/29/24 13:22	
Chlorobenzene	5.0 U	5.0	1	03/29/24 13:22	
Chloroethane	5.0 U	5.0	1	03/29/24 13:22	
Chloroform	5.0 U	5.0	1	03/29/24 13:22	
Chloromethane	5.0 U	5.0	1	03/29/24 13:22	
Cyclohexane	10 U	10	1	03/29/24 13:22	
Dibromochloromethane	5.0 U	5.0	1	03/29/24 13:22	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/29/24 13:22	
Dichloromethane	5.0 U	5.0	1	03/29/24 13:22	
Ethylbenzene	5.0 U	5.0	1	03/29/24 13:22	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/29/24 13:22	
Methyl Acetate	10 U	10	1	03/29/24 13:22	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/29/24 13:22	
Methylcyclohexane	10 U	10	1	03/29/24 13:22	
Styrene	5.0 U	5.0	1	03/29/24 13:22	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/29/24 13:22	
Toluene	5.0 U	5.0	1	03/29/24 13:22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/21/24 13:47
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	DR-2	Units:	ug/L
Lab Code:	R2402345-023	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	22	5.0	1	03/29/24 13:22	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/29/24 13:22	
Vinyl Chloride	5.0 U	5.0	1	03/29/24 13:22	
cis-1,2-Dichloroethene	150	5.0	1	03/29/24 13:22	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 13:22	
m,p-Xylenes	5.0 U	5.0	1	03/29/24 13:22	
o-Xylene	5.0 U	5.0	1	03/29/24 13:22	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 13:22	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 13:22	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	03/29/24 13:22	
Dibromofluoromethane	94	80 - 116	03/29/24 13:22	
Toluene-d8	101	87 - 121	03/29/24 13:22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: DR-3
Lab Code: R2402345-024

Service Request: R2402345
Date Collected: 03/21/24 14:10
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/29/24 15:40	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/29/24 15:40	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/29/24 15:40	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/29/24 15:40	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/29/24 15:40	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/29/24 15:40	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/29/24 15:40	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/29/24 15:40	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/29/24 15:40	
1,2-Dibromoethane	5.0 U	5.0	1	03/29/24 15:40	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/29/24 15:40	
1,2-Dichloroethane	5.0 U	5.0	1	03/29/24 15:40	
1,2-Dichloropropane	5.0 U	5.0	1	03/29/24 15:40	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/29/24 15:40	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/29/24 15:40	
1,4-Dioxane	100 U	100	1	03/29/24 15:40	
2-Butanone (MEK)	10 U	10	1	03/29/24 15:40	
2-Hexanone	10 U	10	1	03/29/24 15:40	
4-Methyl-2-pentanone	10 U	10	1	03/29/24 15:40	
Acetone	10 U	10	1	03/29/24 15:40	
Benzene	5.0 U	5.0	1	03/29/24 15:40	
Bromochloromethane	5.0 U	5.0	1	03/29/24 15:40	
Bromodichloromethane	5.0 U	5.0	1	03/29/24 15:40	
Bromoform	5.0 U	5.0	1	03/29/24 15:40	
Bromomethane	5.0 U	5.0	1	03/29/24 15:40	
Carbon Disulfide	10 U	10	1	03/29/24 15:40	
Carbon Tetrachloride	5.0 U	5.0	1	03/29/24 15:40	
Chlorobenzene	5.0 U	5.0	1	03/29/24 15:40	
Chloroethane	5.0 U	5.0	1	03/29/24 15:40	
Chloroform	5.0 U	5.0	1	03/29/24 15:40	
Chloromethane	5.0 U	5.0	1	03/29/24 15:40	
Cyclohexane	10 U	10	1	03/29/24 15:40	
Dibromochloromethane	5.0 U	5.0	1	03/29/24 15:40	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/29/24 15:40	
Dichloromethane	5.0 U	5.0	1	03/29/24 15:40	
Ethylbenzene	5.0 U	5.0	1	03/29/24 15:40	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/29/24 15:40	
Methyl Acetate	10 U	10	1	03/29/24 15:40	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/29/24 15:40	
Methylcyclohexane	10 U	10	1	03/29/24 15:40	
Styrene	5.0 U	5.0	1	03/29/24 15:40	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/29/24 15:40	
Toluene	5.0 U	5.0	1	03/29/24 15:40	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: DR-3
Lab Code: R2402345-024

Service Request: R2402345
Date Collected: 03/21/24 14:10
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	21	5.0	1	03/29/24 15:40	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/29/24 15:40	
Vinyl Chloride	5.0 U	5.0	1	03/29/24 15:40	
cis-1,2-Dichloroethene	11	5.0	1	03/29/24 15:40	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 15:40	
m,p-Xylenes	5.0 U	5.0	1	03/29/24 15:40	
o-Xylene	5.0 U	5.0	1	03/29/24 15:40	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 15:40	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 15:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	03/29/24 15:40	
Dibromofluoromethane	102	80 - 116	03/29/24 15:40	
Toluene-d8	101	87 - 121	03/29/24 15:40	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: DR-4
Lab Code: R2402345-025

Service Request: R2402345
Date Collected: 03/21/24 15:00
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/29/24 16:03	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/29/24 16:03	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/29/24 16:03	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/29/24 16:03	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/29/24 16:03	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/29/24 16:03	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/29/24 16:03	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/29/24 16:03	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/29/24 16:03	
1,2-Dibromoethane	5.0 U	5.0	1	03/29/24 16:03	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/29/24 16:03	
1,2-Dichloroethane	5.0 U	5.0	1	03/29/24 16:03	
1,2-Dichloropropane	5.0 U	5.0	1	03/29/24 16:03	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/29/24 16:03	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/29/24 16:03	
1,4-Dioxane	100 U	100	1	03/29/24 16:03	
2-Butanone (MEK)	10 U	10	1	03/29/24 16:03	
2-Hexanone	10 U	10	1	03/29/24 16:03	
4-Methyl-2-pentanone	10 U	10	1	03/29/24 16:03	
Acetone	10 U	10	1	03/29/24 16:03	
Benzene	5.0 U	5.0	1	03/29/24 16:03	
Bromochloromethane	5.0 U	5.0	1	03/29/24 16:03	
Bromodichloromethane	5.0 U	5.0	1	03/29/24 16:03	
Bromoform	5.0 U	5.0	1	03/29/24 16:03	
Bromomethane	5.0 U	5.0	1	03/29/24 16:03	
Carbon Disulfide	10 U	10	1	03/29/24 16:03	
Carbon Tetrachloride	5.0 U	5.0	1	03/29/24 16:03	
Chlorobenzene	5.0 U	5.0	1	03/29/24 16:03	
Chloroethane	5.0 U	5.0	1	03/29/24 16:03	
Chloroform	5.0 U	5.0	1	03/29/24 16:03	
Chloromethane	5.0 U	5.0	1	03/29/24 16:03	
Cyclohexane	10 U	10	1	03/29/24 16:03	
Dibromochloromethane	5.0 U	5.0	1	03/29/24 16:03	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/29/24 16:03	
Dichloromethane	5.0 U	5.0	1	03/29/24 16:03	
Ethylbenzene	5.0 U	5.0	1	03/29/24 16:03	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/29/24 16:03	
Methyl Acetate	10 U	10	1	03/29/24 16:03	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/29/24 16:03	
Methylcyclohexane	10 U	10	1	03/29/24 16:03	
Styrene	5.0 U	5.0	1	03/29/24 16:03	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/29/24 16:03	
Toluene	5.0 U	5.0	1	03/29/24 16:03	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: DR-4
Lab Code: R2402345-025

Service Request: R2402345
Date Collected: 03/21/24 15:00
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	16	5.0	1	03/29/24 16:03	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/29/24 16:03	
Vinyl Chloride	5.0 U	5.0	1	03/29/24 16:03	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 16:03	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 16:03	
m,p-Xylenes	5.0 U	5.0	1	03/29/24 16:03	
o-Xylene	5.0 U	5.0	1	03/29/24 16:03	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 16:03	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 16:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85 - 122	03/29/24 16:03	
Dibromofluoromethane	102	80 - 116	03/29/24 16:03	
Toluene-d8	104	87 - 121	03/29/24 16:03	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: G-1
Lab Code: R2402345-026

Service Request: R2402345
Date Collected: 03/21/24 15:30
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/29/24 16:26	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/29/24 16:26	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/29/24 16:26	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/29/24 16:26	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/29/24 16:26	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/29/24 16:26	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/29/24 16:26	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/29/24 16:26	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/29/24 16:26	
1,2-Dibromoethane	5.0 U	5.0	1	03/29/24 16:26	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/29/24 16:26	
1,2-Dichloroethane	5.0 U	5.0	1	03/29/24 16:26	
1,2-Dichloropropane	5.0 U	5.0	1	03/29/24 16:26	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/29/24 16:26	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/29/24 16:26	
1,4-Dioxane	100 U	100	1	03/29/24 16:26	
2-Butanone (MEK)	10 U	10	1	03/29/24 16:26	
2-Hexanone	10 U	10	1	03/29/24 16:26	
4-Methyl-2-pentanone	10 U	10	1	03/29/24 16:26	
Acetone	10 U	10	1	03/29/24 16:26	
Benzene	5.0 U	5.0	1	03/29/24 16:26	
Bromochloromethane	5.0 U	5.0	1	03/29/24 16:26	
Bromodichloromethane	5.0 U	5.0	1	03/29/24 16:26	
Bromoform	5.0 U	5.0	1	03/29/24 16:26	
Bromomethane	5.0 U	5.0	1	03/29/24 16:26	
Carbon Disulfide	10 U	10	1	03/29/24 16:26	
Carbon Tetrachloride	5.0 U	5.0	1	03/29/24 16:26	
Chlorobenzene	5.0 U	5.0	1	03/29/24 16:26	
Chloroethane	5.0 U	5.0	1	03/29/24 16:26	
Chloroform	5.0 U	5.0	1	03/29/24 16:26	
Chloromethane	5.0 U	5.0	1	03/29/24 16:26	
Cyclohexane	10 U	10	1	03/29/24 16:26	
Dibromochloromethane	5.0 U	5.0	1	03/29/24 16:26	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/29/24 16:26	
Dichloromethane	5.0 U	5.0	1	03/29/24 16:26	
Ethylbenzene	5.0 U	5.0	1	03/29/24 16:26	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/29/24 16:26	
Methyl Acetate	10 U	10	1	03/29/24 16:26	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/29/24 16:26	
Methylcyclohexane	10 U	10	1	03/29/24 16:26	
Styrene	5.0 U	5.0	1	03/29/24 16:26	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/29/24 16:26	
Toluene	5.0 U	5.0	1	03/29/24 16:26	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: G-1
Lab Code: R2402345-026

Service Request: R2402345
Date Collected: 03/21/24 15:30
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/29/24 16:26	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/29/24 16:26	
Vinyl Chloride	5.0 U	5.0	1	03/29/24 16:26	
cis-1,2-Dichloroethene	9.8	5.0	1	03/29/24 16:26	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 16:26	
m,p-Xylenes	5.0 U	5.0	1	03/29/24 16:26	
o-Xylene	5.0 U	5.0	1	03/29/24 16:26	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 16:26	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 16:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/29/24 16:26	
Dibromofluoromethane	103	80 - 116	03/29/24 16:26	
Toluene-d8	101	87 - 121	03/29/24 16:26	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: G-2
Lab Code: R2402345-027

Service Request: R2402345
Date Collected: 03/21/24 16:00
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	04/02/24 03:22	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	04/02/24 03:22	
1,1,2-Trichloroethane	5.0 U	5.0	1	04/02/24 03:22	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	04/02/24 03:22	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	04/02/24 03:22	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	04/02/24 03:22	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	04/02/24 03:22	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	04/02/24 03:22	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	04/02/24 03:22	
1,2-Dibromoethane	5.0 U	5.0	1	04/02/24 03:22	
1,2-Dichlorobenzene	5.0 U	5.0	1	04/02/24 03:22	
1,2-Dichloroethane	5.0 U	5.0	1	04/02/24 03:22	
1,2-Dichloropropane	5.0 U	5.0	1	04/02/24 03:22	
1,3-Dichlorobenzene	5.0 U	5.0	1	04/02/24 03:22	
1,4-Dichlorobenzene	5.0 U	5.0	1	04/02/24 03:22	
1,4-Dioxane	100 U	100	1	04/02/24 03:22	
2-Butanone (MEK)	10 U	10	1	04/02/24 03:22	
2-Hexanone	10 U	10	1	04/02/24 03:22	
4-Methyl-2-pentanone	10 U	10	1	04/02/24 03:22	
Acetone	10 U	10	1	04/02/24 03:22	
Benzene	5.0 U	5.0	1	04/02/24 03:22	
Bromochloromethane	5.0 U	5.0	1	04/02/24 03:22	
Bromodichloromethane	5.0 U	5.0	1	04/02/24 03:22	
Bromoform	5.0 U	5.0	1	04/02/24 03:22	
Bromomethane	5.0 U	5.0	1	04/02/24 03:22	
Carbon Disulfide	10 U	10	1	04/02/24 03:22	
Carbon Tetrachloride	5.0 U	5.0	1	04/02/24 03:22	
Chlorobenzene	5.0 U	5.0	1	04/02/24 03:22	
Chloroethane	5.0 U	5.0	1	04/02/24 03:22	
Chloroform	5.0 U	5.0	1	04/02/24 03:22	
Chloromethane	5.0 U	5.0	1	04/02/24 03:22	
Cyclohexane	10 U	10	1	04/02/24 03:22	
Dibromochloromethane	5.0 U	5.0	1	04/02/24 03:22	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	04/02/24 03:22	
Dichloromethane	5.0 U	5.0	1	04/02/24 03:22	
Ethylbenzene	5.0 U	5.0	1	04/02/24 03:22	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	04/02/24 03:22	
Methyl Acetate	10 U	10	1	04/02/24 03:22	
Methyl tert-Butyl Ether	5.0 U	5.0	1	04/02/24 03:22	
Methylcyclohexane	10 U	10	1	04/02/24 03:22	
Styrene	5.0 U	5.0	1	04/02/24 03:22	
Tetrachloroethene (PCE)	5.0 U	5.0	1	04/02/24 03:22	
Toluene	5.0 U	5.0	1	04/02/24 03:22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: G-2
Lab Code: R2402345-027

Service Request: R2402345
Date Collected: 03/21/24 16:00
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	04/02/24 03:22	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	04/02/24 03:22	
Vinyl Chloride	5.0 U	5.0	1	04/02/24 03:22	
cis-1,2-Dichloroethene	46	5.0	1	04/02/24 03:22	
cis-1,3-Dichloropropene	5.0 U	5.0	1	04/02/24 03:22	
m,p-Xylenes	5.0 U	5.0	1	04/02/24 03:22	
o-Xylene	5.0 U	5.0	1	04/02/24 03:22	
trans-1,2-Dichloroethene	5.0 U	5.0	1	04/02/24 03:22	
trans-1,3-Dichloropropene	5.0 U	5.0	1	04/02/24 03:22	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	04/02/24 03:22	
Dibromofluoromethane	97	80 - 116	04/02/24 03:22	
Toluene-d8	101	87 - 121	04/02/24 03:22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: G-3
Lab Code: R2402345-028

Service Request: R2402345
Date Collected: 03/22/24 12:10
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/29/24 17:12	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/29/24 17:12	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/29/24 17:12	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/29/24 17:12	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/29/24 17:12	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/29/24 17:12	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/29/24 17:12	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/29/24 17:12	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/29/24 17:12	
1,2-Dibromoethane	5.0 U	5.0	1	03/29/24 17:12	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/29/24 17:12	
1,2-Dichloroethane	5.0 U	5.0	1	03/29/24 17:12	
1,2-Dichloropropane	5.0 U	5.0	1	03/29/24 17:12	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/29/24 17:12	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/29/24 17:12	
1,4-Dioxane	100 U	100	1	03/29/24 17:12	
2-Butanone (MEK)	10 U	10	1	03/29/24 17:12	
2-Hexanone	10 U	10	1	03/29/24 17:12	
4-Methyl-2-pentanone	10 U	10	1	03/29/24 17:12	
Acetone	10 U	10	1	03/29/24 17:12	
Benzene	5.0 U	5.0	1	03/29/24 17:12	
Bromochloromethane	5.0 U	5.0	1	03/29/24 17:12	
Bromodichloromethane	5.0 U	5.0	1	03/29/24 17:12	
Bromoform	5.0 U	5.0	1	03/29/24 17:12	
Bromomethane	5.0 U	5.0	1	03/29/24 17:12	
Carbon Disulfide	10 U	10	1	03/29/24 17:12	
Carbon Tetrachloride	5.0 U	5.0	1	03/29/24 17:12	
Chlorobenzene	5.0 U	5.0	1	03/29/24 17:12	
Chloroethane	5.0 U	5.0	1	03/29/24 17:12	
Chloroform	5.0 U	5.0	1	03/29/24 17:12	
Chloromethane	5.0 U	5.0	1	03/29/24 17:12	
Cyclohexane	10 U	10	1	03/29/24 17:12	
Dibromochloromethane	5.0 U	5.0	1	03/29/24 17:12	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/29/24 17:12	
Dichloromethane	5.0 U	5.0	1	03/29/24 17:12	
Ethylbenzene	5.0 U	5.0	1	03/29/24 17:12	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/29/24 17:12	
Methyl Acetate	10 U	10	1	03/29/24 17:12	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/29/24 17:12	
Methylcyclohexane	10 U	10	1	03/29/24 17:12	
Styrene	5.0 U	5.0	1	03/29/24 17:12	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/29/24 17:12	
Toluene	5.0 U	5.0	1	03/29/24 17:12	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: G-3
Lab Code: R2402345-028

Service Request: R2402345
Date Collected: 03/22/24 12:10
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	13	5.0	1	03/29/24 17:12	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/29/24 17:12	
Vinyl Chloride	5.0 U	5.0	1	03/29/24 17:12	
cis-1,2-Dichloroethene	92	5.0	1	03/29/24 17:12	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 17:12	
m,p-Xylenes	5.0 U	5.0	1	03/29/24 17:12	
o-Xylene	5.0 U	5.0	1	03/29/24 17:12	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 17:12	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 17:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	03/29/24 17:12	
Dibromofluoromethane	98	80 - 116	03/29/24 17:12	
Toluene-d8	98	87 - 121	03/29/24 17:12	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/22/24
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	MW-X	Units:	ug/L
Lab Code:	R2402345-029	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	13 U	13	2.5	03/29/24 14:08	
1,1,2,2-Tetrachloroethane	13 U	13	2.5	03/29/24 14:08	
1,1,2-Trichloroethane	13 U	13	2.5	03/29/24 14:08	
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	13	2.5	03/29/24 14:08	
1,1-Dichloroethane (1,1-DCA)	13 U	13	2.5	03/29/24 14:08	
1,1-Dichloroethylene (1,1-DCE)	13 U	13	2.5	03/29/24 14:08	
1,2,3-Trichlorobenzene	13 U	13	2.5	03/29/24 14:08	
1,2,4-Trichlorobenzene	13 U	13	2.5	03/29/24 14:08	
1,2-Dibromo-3-chloropropane (DBCP)	13 U	13	2.5	03/29/24 14:08	
1,2-Dibromoethane	13 U	13	2.5	03/29/24 14:08	
1,2-Dichlorobenzene	13 U	13	2.5	03/29/24 14:08	
1,2-Dichloroethane	13 U	13	2.5	03/29/24 14:08	
1,2-Dichloropropane	13 U	13	2.5	03/29/24 14:08	
1,3-Dichlorobenzene	13 U	13	2.5	03/29/24 14:08	
1,4-Dichlorobenzene	13 U	13	2.5	03/29/24 14:08	
1,4-Dioxane	250 U	250	2.5	03/29/24 14:08	
2-Butanone (MEK)	25 U	25	2.5	03/29/24 14:08	
2-Hexanone	25 U	25	2.5	03/29/24 14:08	
4-Methyl-2-pentanone	25 U	25	2.5	03/29/24 14:08	
Acetone	25 U	25	2.5	03/29/24 14:08	
Benzene	13 U	13	2.5	03/29/24 14:08	
Bromochloromethane	13 U	13	2.5	03/29/24 14:08	
Bromodichloromethane	13 U	13	2.5	03/29/24 14:08	
Bromoform	13 U	13	2.5	03/29/24 14:08	
Bromomethane	13 U	13	2.5	03/29/24 14:08	
Carbon Disulfide	25 U	25	2.5	03/29/24 14:08	
Carbon Tetrachloride	13 U	13	2.5	03/29/24 14:08	
Chlorobenzene	13 U	13	2.5	03/29/24 14:08	
Chloroethane	13 U	13	2.5	03/29/24 14:08	
Chloroform	13 U	13	2.5	03/29/24 14:08	
Chloromethane	13 U	13	2.5	03/29/24 14:08	
Cyclohexane	25 U	25	2.5	03/29/24 14:08	
Dibromochloromethane	13 U	13	2.5	03/29/24 14:08	
Dichlorodifluoromethane (CFC 12)	13 U	13	2.5	03/29/24 14:08	
Dichloromethane	13 U	13	2.5	03/29/24 14:08	
Ethylbenzene	13 U	13	2.5	03/29/24 14:08	
Isopropylbenzene (Cumene)	13 U	13	2.5	03/29/24 14:08	
Methyl Acetate	25 U	25	2.5	03/29/24 14:08	
Methyl tert-Butyl Ether	13 U	13	2.5	03/29/24 14:08	
Methylcyclohexane	25 U	25	2.5	03/29/24 14:08	
Styrene	13 U	13	2.5	03/29/24 14:08	
Tetrachloroethene (PCE)	13 U	13	2.5	03/29/24 14:08	
Toluene	13 U	13	2.5	03/29/24 14:08	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/22/24
Sample Matrix:	Water	Date Received:	03/22/24 16:00
Sample Name:	MW-X	Units:	ug/L
Lab Code:	R2402345-029	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	300	13	2.5	03/29/24 14:08	
Trichlorofluoromethane (CFC 11)	13 U	13	2.5	03/29/24 14:08	
Vinyl Chloride	13 U	13	2.5	03/29/24 14:08	
cis-1,2-Dichloroethene	110	13	2.5	03/29/24 14:08	
cis-1,3-Dichloropropene	13 U	13	2.5	03/29/24 14:08	
m,p-Xylenes	13 U	13	2.5	03/29/24 14:08	
o-Xylene	13 U	13	2.5	03/29/24 14:08	
trans-1,2-Dichloroethene	13 U	13	2.5	03/29/24 14:08	
trans-1,3-Dichloropropene	13 U	13	2.5	03/29/24 14:08	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	03/29/24 14:08	
Dibromofluoromethane	100	80 - 116	03/29/24 14:08	
Toluene-d8	101	87 - 121	03/29/24 14:08	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: Field Blank
Lab Code: R2402345-030

Service Request: R2402345
Date Collected: 03/22/24 13:05
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/29/24 17:58	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/29/24 17:58	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/29/24 17:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/29/24 17:58	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/29/24 17:58	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/29/24 17:58	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/29/24 17:58	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/29/24 17:58	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/29/24 17:58	
1,2-Dibromoethane	5.0 U	5.0	1	03/29/24 17:58	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/29/24 17:58	
1,2-Dichloroethane	5.0 U	5.0	1	03/29/24 17:58	
1,2-Dichloropropane	5.0 U	5.0	1	03/29/24 17:58	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/29/24 17:58	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/29/24 17:58	
1,4-Dioxane	100 U	100	1	03/29/24 17:58	
2-Butanone (MEK)	10 U	10	1	03/29/24 17:58	
2-Hexanone	10 U	10	1	03/29/24 17:58	
4-Methyl-2-pentanone	10 U	10	1	03/29/24 17:58	
Acetone	10 U	10	1	03/29/24 17:58	
Benzene	5.0 U	5.0	1	03/29/24 17:58	
Bromochloromethane	5.0 U	5.0	1	03/29/24 17:58	
Bromodichloromethane	5.0 U	5.0	1	03/29/24 17:58	
Bromoform	5.0 U	5.0	1	03/29/24 17:58	
Bromomethane	5.0 U	5.0	1	03/29/24 17:58	
Carbon Disulfide	10 U	10	1	03/29/24 17:58	
Carbon Tetrachloride	5.0 U	5.0	1	03/29/24 17:58	
Chlorobenzene	5.0 U	5.0	1	03/29/24 17:58	
Chloroethane	5.0 U	5.0	1	03/29/24 17:58	
Chloroform	5.0 U	5.0	1	03/29/24 17:58	
Chloromethane	5.0 U	5.0	1	03/29/24 17:58	
Cyclohexane	10 U	10	1	03/29/24 17:58	
Dibromochloromethane	5.0 U	5.0	1	03/29/24 17:58	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/29/24 17:58	
Dichloromethane	5.0 U	5.0	1	03/29/24 17:58	
Ethylbenzene	5.0 U	5.0	1	03/29/24 17:58	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/29/24 17:58	
Methyl Acetate	10 U	10	1	03/29/24 17:58	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/29/24 17:58	
Methylcyclohexane	10 U	10	1	03/29/24 17:58	
Styrene	5.0 U	5.0	1	03/29/24 17:58	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/29/24 17:58	
Toluene	5.0 U	5.0	1	03/29/24 17:58	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: Field Blank
Lab Code: R2402345-030

Service Request: R2402345
Date Collected: 03/22/24 13:05
Date Received: 03/22/24 16:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/29/24 17:58	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/29/24 17:58	
Vinyl Chloride	5.0 U	5.0	1	03/29/24 17:58	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 17:58	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 17:58	
m,p-Xylenes	5.0 U	5.0	1	03/29/24 17:58	
o-Xylene	5.0 U	5.0	1	03/29/24 17:58	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 17:58	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 17:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/29/24 17:58	
Dibromofluoromethane	97	80 - 116	03/29/24 17:58	
Toluene-d8	98	87 - 121	03/29/24 17:58	



QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates) **Service Request:** R2402345
Project: Gowanda/6974.96
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Dibromofluoromethane 80 - 116	Toluene-d8 87 - 121
MW-1	R2402345-001	93	99	101
MW-2	R2402345-002	95	104	97
MW-3	R2402345-003	94	100	93
MW-4	R2402345-004	99	104	102
MW-5	R2402345-005	102	103	103
MW-6	R2402345-006	105	104	106
MW-7	R2402345-007	95	99	100
MW-8	R2402345-008	97	100	101
MW-9	R2402345-009	95	100	101
MW-10	R2402345-010	98	100	96
MW-11	R2402345-011	100	102	102
MW-12	R2402345-012	93	100	93
MW-13	R2402345-013	103	100	98
MW-14	R2402345-014	99	100	96
MW-15	R2402345-015	96	102	103
MW-16	R2402345-016	104	101	95
MW-17	R2402345-017	97	102	93
MW-18	R2402345-018	90	100	95
MW-19	R2402345-019	97	101	102
MW-20	R2402345-020	104	100	101
MW-21	R2402345-021	100	100	99
DR-1	R2402345-022	96	99	99
DR-2	R2402345-023	103	94	101
DR-3	R2402345-024	99	102	101
DR-4	R2402345-025	104	102	104
G-1	R2402345-026	97	103	101
G-2	R2402345-027	100	97	101
G-3	R2402345-028	98	98	98
MW-X	R2402345-029	94	100	101
Field Blank	R2402345-030	97	97	98
Lab Control Sample	RQ2403192-03	101	100	102
Method Blank	RQ2403192-04	104	104	112
MW-2 MS	RQ2403192-05	104	106	103
MW-2 DMS	RQ2403192-06	104	104	100
Lab Control Sample	RQ2403242-04	102	102	102
Method Blank	RQ2403242-06	106	103	107
Lab Control Sample	RQ2403299-03	94	104	97

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates) **Service Request:** R2402345
Project: Gowanda/6974.96
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
Method Blank	RQ2403299-04	99	99	99
Lab Control Sample	RQ2403364-03	105	105	103
Method Blank	RQ2403364-04	97	102	101

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/22/24
Sample Matrix:	Water	Date Received:	03/22/24
		Date Analyzed:	03/27/24
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW-2	Units:	ug/L
Lab Code:	R2402345-002	Basis:	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

Analyte Name	Sample Result	Matrix Spike RQ2403192-05			Duplicate Matrix Spike RQ2403192-06					
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane (TCA)	5.0 U	50.3	50.0	101	54.0	50.0	108	74-127	7	30
1,1,2,2-Tetrachloroethane	5.0 U	44.7	50.0	89	46.5	50.0	93	72-122	4	30
1,1,2-Trichloroethane	5.0 U	48.1	50.0	96	47.7	50.0	95	82-121	<1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	45.2	50.0	90	49.2	50.0	98	50-147	8	30
1,1-Dichloroethane (1,1-DCA)	5.0 U	50.0	50.0	100	53.5	50.0	107	74-132	7	30
1,1-Dichloroethylene (1,1-DCE)	5.0 U	44.7	50.0	89	49.3	50.0	99	71-118	10	30
1,2,3-Trichlorobenzene	5.0 U	41.6	50.0	83	43.7	50.0	87	59-129	5	30
1,2,4-Trichlorobenzene	5.0 U	40.3	50.0	81	39.5	50.0	79	69-122	2	30
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	43.9	50.0	88	42.3	50.0	85	37-150	4	30
1,2-Dibromoethane	5.0 U	47.0	50.0	94	47.8	50.0	96	67-127	2	30
1,2-Dichlorobenzene	5.0 U	42.1	50.0	84	46.2	50.0	92	77-120	9	30
1,2-Dichloroethane	5.0 U	49.0	50.0	98	51.1	50.0	102	68-130	4	30
1,2-Dichloropropene	5.0 U	48.2	50.0	96	50.7	50.0	101	79-124	5	30
1,3-Dichlorobenzene	5.0 U	43.1	50.0	86	45.9	50.0	92	83-121	6	30
1,4-Dichlorobenzene	5.0 U	42.5	50.0	85	45.5	50.0	91	82-120	7	30
1,4-Dioxane	100 U	885	1000	88	929	1000	93	44-154	5	30
2-Butanone (MEK)	10 U	41.6	50.0	83	43.8	50.0	88	61-137	5	30
2-Hexanone	10 U	46.5	50.0	93	49.4	50.0	99	56-132	6	30
4-Methyl-2-pentanone	10 U	48.1	50.0	96	50.5	50.0	101	60-141	5	30
Acetone	10 U	39.7	50.0	79	42.1	50.0	84	35-183	6	30
Benzene	5.0 U	50.4	50.0	101	53.2	50.0	106	76-129	5	30
Bromochloromethane	5.0 U	49.2	50.0	98	52.9	50.0	106	80-122	7	30
Bromodichloromethane	5.0 U	49.7	50.0	99	52.4	50.0	105	78-133	5	30
Bromoform	5.0 U	49.7	50.0	99	54.0	50.0	108	58-133	8	30
Bromomethane	5.0 U	44.2	50.0	88	48.3	50.0	97	10-184	9	30
Carbon Disulfide	10 U	41.2	50.0	82	46.1	50.0	92	59-140	11	30
Carbon Tetrachloride	5.0 U	50.3	50.0	101	52.7	50.0	105	65-135	5	30
Chlorobenzene	5.0 U	45.6	50.0	91	49.0	50.0	98	76-125	7	30
Chloroethane	5.0 U	37.9	50.0	76	40.7	50.0	81	48-146	7	30
Chloroform	5.0 U	48.4	50.0	97	51.3	50.0	103	75-130	6	30
Chloromethane	5.0 U	46.4	50.0	93	51.1	50.0	102	55-160	10	30
Cyclohexane	10 U	47.3	50.0	95	46.8	50.0	94	52-145	1	30
Dibromochloromethane	5.0 U	48.1	50.0	96	48.5	50.0	97	72-128	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	03/22/24
Sample Matrix:	Water	Date Received:	03/22/24
		Date Analyzed:	03/27/24
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW-2	Units:	ug/L
Lab Code:	R2402345-002	Basis:	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

Analyte Name	Sample Result	Matrix Spike RQ2403192-05			Duplicate Matrix Spike RQ2403192-06					
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane (CFC 12)	5.0 U	30.1	50.0	60	31.7	50.0	63	49-154	5	30
Dichloromethane	5.0 U	48.4	50.0	97	53.3	50.0	107	73-122	10	30
Ethylbenzene	5.0 U	47.1	50.0	94	49.8	50.0	100	72-134	6	30
Isopropylbenzene (Cumene)	5.0 U	45.7	50.0	91	48.2	50.0	96	77-128	5	30
Methyl Acetate	10 U	31.5	50.0	63	32.2	50.0	64	26-121	2	30
Methyl tert-Butyl Ether	5.0 U	48.4	50.0	97	51.4	50.0	103	75-119	6	30
Methylcyclohexane	10 U	41.1	50.0	82	41.4	50.0	83	45-146	<1	30
Styrene	5.0 U	45.4	50.0	91	49.0	50.0	98	74-136	8	30
Tetrachloroethylene (PCE)	5.0 U	45.6	50.0	91	42.8	50.0	86	72-125	6	30
Toluene	5.0 U	49.3	50.0	99	51.9	50.0	104	79-119	5	30
Trichloroethylene (TCE)	5.0 U	48.5	50.0	97	50.9	50.0	102	74-122	5	30
Trichlorofluoromethane (CFC 11)	5.0 U	48.4	50.0	97	51.7	50.0	103	71-136	6	30
Vinyl Chloride	5.0 U	39.0	50.0	78	43.5	50.0	87	74-159	11	30
cis-1,2-Dichloroethene	5.0 U	50.3	50.0	101	55.0	50.0	110	77-127	9	30
cis-1,3-Dichloropropene	5.0 U	48.5	50.0	97	50.6	50.0	101	52-134	4	30
m,p-Xylenes	5.0 U	95.7	100	96	102	100	102	80-126	6	30
o-Xylene	5.0 U	47.4	50.0	95	50.6	50.0	101	79-123	7	30
trans-1,2-Dichloroethene	5.0 U	45.4	50.0	91	50.1	50.0	100	73-118	10	30
trans-1,3-Dichloropropene	5.0 U	47.3	50.0	95	49.4	50.0	99	71-133	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: RQ2403192-04

Service Request: R2402345
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/27/24 15:55	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/27/24 15:55	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/27/24 15:55	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/27/24 15:55	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/27/24 15:55	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/27/24 15:55	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/27/24 15:55	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/27/24 15:55	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/27/24 15:55	
1,2-Dibromoethane	5.0 U	5.0	1	03/27/24 15:55	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/27/24 15:55	
1,2-Dichloroethane	5.0 U	5.0	1	03/27/24 15:55	
1,2-Dichloropropane	5.0 U	5.0	1	03/27/24 15:55	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/27/24 15:55	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/27/24 15:55	
1,4-Dioxane	100 U	100	1	03/27/24 15:55	
2-Butanone (MEK)	10 U	10	1	03/27/24 15:55	
2-Hexanone	10 U	10	1	03/27/24 15:55	
4-Methyl-2-pentanone	10 U	10	1	03/27/24 15:55	
Acetone	10 U	10	1	03/27/24 15:55	
Benzene	5.0 U	5.0	1	03/27/24 15:55	
Bromochloromethane	5.0 U	5.0	1	03/27/24 15:55	
Bromodichloromethane	5.0 U	5.0	1	03/27/24 15:55	
Bromoform	5.0 U	5.0	1	03/27/24 15:55	
Bromomethane	5.0 U	5.0	1	03/27/24 15:55	
Carbon Disulfide	10 U	10	1	03/27/24 15:55	
Carbon Tetrachloride	5.0 U	5.0	1	03/27/24 15:55	
Chlorobenzene	5.0 U	5.0	1	03/27/24 15:55	
Chloroethane	5.0 U	5.0	1	03/27/24 15:55	
Chloroform	5.0 U	5.0	1	03/27/24 15:55	
Chloromethane	5.0 U	5.0	1	03/27/24 15:55	
Cyclohexane	10 U	10	1	03/27/24 15:55	
Dibromochloromethane	5.0 U	5.0	1	03/27/24 15:55	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/27/24 15:55	
Dichloromethane	5.0 U	5.0	1	03/27/24 15:55	
Ethylbenzene	5.0 U	5.0	1	03/27/24 15:55	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/27/24 15:55	
Methyl Acetate	10 U	10	1	03/27/24 15:55	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/27/24 15:55	
Methylcyclohexane	10 U	10	1	03/27/24 15:55	
Styrene	5.0 U	5.0	1	03/27/24 15:55	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/27/24 15:55	
Toluene	5.0 U	5.0	1	03/27/24 15:55	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Colliers Engineering & Design (Formerly Bergmann Associates)	Service Request:	R2402345
Project:	Gowanda/6974.96	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA
Sample Name:	Method Blank	Units:	ug/L
Lab Code:	RQ2403192-04	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/27/24 15:55	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/27/24 15:55	
Vinyl Chloride	5.0 U	5.0	1	03/27/24 15:55	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 15:55	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 15:55	
m,p-Xylenes	5.0 U	5.0	1	03/27/24 15:55	
o-Xylene	5.0 U	5.0	1	03/27/24 15:55	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/27/24 15:55	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/27/24 15:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85 - 122	03/27/24 15:55	
Dibromofluoromethane	104	80 - 116	03/27/24 15:55	
Toluene-d8	112	87 - 121	03/27/24 15:55	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: RQ2403242-06

Service Request: R2402345
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/28/24 12:58	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/28/24 12:58	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/28/24 12:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/28/24 12:58	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/28/24 12:58	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/28/24 12:58	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/28/24 12:58	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/28/24 12:58	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/28/24 12:58	
1,2-Dibromoethane	5.0 U	5.0	1	03/28/24 12:58	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/28/24 12:58	
1,2-Dichloroethane	5.0 U	5.0	1	03/28/24 12:58	
1,2-Dichloropropane	5.0 U	5.0	1	03/28/24 12:58	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/28/24 12:58	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/28/24 12:58	
1,4-Dioxane	100 U	100	1	03/28/24 12:58	
2-Butanone (MEK)	10 U	10	1	03/28/24 12:58	
2-Hexanone	10 U	10	1	03/28/24 12:58	
4-Methyl-2-pentanone	10 U	10	1	03/28/24 12:58	
Acetone	10 U	10	1	03/28/24 12:58	
Benzene	5.0 U	5.0	1	03/28/24 12:58	
Bromochloromethane	5.0 U	5.0	1	03/28/24 12:58	
Bromodichloromethane	5.0 U	5.0	1	03/28/24 12:58	
Bromoform	5.0 U	5.0	1	03/28/24 12:58	
Bromomethane	5.0 U	5.0	1	03/28/24 12:58	
Carbon Disulfide	10 U	10	1	03/28/24 12:58	
Carbon Tetrachloride	5.0 U	5.0	1	03/28/24 12:58	
Chlorobenzene	5.0 U	5.0	1	03/28/24 12:58	
Chloroethane	5.0 U	5.0	1	03/28/24 12:58	
Chloroform	5.0 U	5.0	1	03/28/24 12:58	
Chloromethane	5.0 U	5.0	1	03/28/24 12:58	
Cyclohexane	10 U	10	1	03/28/24 12:58	
Dibromochloromethane	5.0 U	5.0	1	03/28/24 12:58	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/28/24 12:58	
Dichloromethane	5.0 U	5.0	1	03/28/24 12:58	
Ethylbenzene	5.0 U	5.0	1	03/28/24 12:58	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/28/24 12:58	
Methyl Acetate	10 U	10	1	03/28/24 12:58	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/28/24 12:58	
Methylcyclohexane	10 U	10	1	03/28/24 12:58	
Styrene	5.0 U	5.0	1	03/28/24 12:58	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/28/24 12:58	
Toluene	5.0 U	5.0	1	03/28/24 12:58	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: Method Blank
Lab Code: RQ2403242-06

Service Request: R2402345
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/28/24 12:58	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/28/24 12:58	
Vinyl Chloride	5.0 U	5.0	1	03/28/24 12:58	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/28/24 12:58	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 12:58	
m,p-Xylenes	5.0 U	5.0	1	03/28/24 12:58	
o-Xylene	5.0 U	5.0	1	03/28/24 12:58	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/28/24 12:58	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/28/24 12:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85 - 122	03/28/24 12:58	
Dibromofluoromethane	103	80 - 116	03/28/24 12:58	
Toluene-d8	107	87 - 121	03/28/24 12:58	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: RQ2403299-04

Service Request: R2402345
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	03/29/24 12:59	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/29/24 12:59	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/29/24 12:59	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/29/24 12:59	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/29/24 12:59	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	03/29/24 12:59	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/29/24 12:59	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/29/24 12:59	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/29/24 12:59	
1,2-Dibromoethane	5.0 U	5.0	1	03/29/24 12:59	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/29/24 12:59	
1,2-Dichloroethane	5.0 U	5.0	1	03/29/24 12:59	
1,2-Dichloropropane	5.0 U	5.0	1	03/29/24 12:59	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/29/24 12:59	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/29/24 12:59	
1,4-Dioxane	100 U	100	1	03/29/24 12:59	
2-Butanone (MEK)	10 U	10	1	03/29/24 12:59	
2-Hexanone	10 U	10	1	03/29/24 12:59	
4-Methyl-2-pentanone	10 U	10	1	03/29/24 12:59	
Acetone	10 U	10	1	03/29/24 12:59	
Benzene	5.0 U	5.0	1	03/29/24 12:59	
Bromochloromethane	5.0 U	5.0	1	03/29/24 12:59	
Bromodichloromethane	5.0 U	5.0	1	03/29/24 12:59	
Bromoform	5.0 U	5.0	1	03/29/24 12:59	
Bromomethane	5.0 U	5.0	1	03/29/24 12:59	
Carbon Disulfide	10 U	10	1	03/29/24 12:59	
Carbon Tetrachloride	5.0 U	5.0	1	03/29/24 12:59	
Chlorobenzene	5.0 U	5.0	1	03/29/24 12:59	
Chloroethane	5.0 U	5.0	1	03/29/24 12:59	
Chloroform	5.0 U	5.0	1	03/29/24 12:59	
Chloromethane	5.0 U	5.0	1	03/29/24 12:59	
Cyclohexane	10 U	10	1	03/29/24 12:59	
Dibromochloromethane	5.0 U	5.0	1	03/29/24 12:59	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/29/24 12:59	
Dichloromethane	5.0 U	5.0	1	03/29/24 12:59	
Ethylbenzene	5.0 U	5.0	1	03/29/24 12:59	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/29/24 12:59	
Methyl Acetate	10 U	10	1	03/29/24 12:59	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/29/24 12:59	
Methylcyclohexane	10 U	10	1	03/29/24 12:59	
Styrene	5.0 U	5.0	1	03/29/24 12:59	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/29/24 12:59	
Toluene	5.0 U	5.0	1	03/29/24 12:59	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: Method Blank
Lab Code: RQ2403299-04

Service Request: R2402345
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	03/29/24 12:59	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/29/24 12:59	
Vinyl Chloride	5.0 U	5.0	1	03/29/24 12:59	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 12:59	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 12:59	
m,p-Xylenes	5.0 U	5.0	1	03/29/24 12:59	
o-Xylene	5.0 U	5.0	1	03/29/24 12:59	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/29/24 12:59	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/29/24 12:59	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	03/29/24 12:59	
Dibromofluoromethane	99	80 - 116	03/29/24 12:59	
Toluene-d8	99	87 - 121	03/29/24 12:59	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: RQ2403364-04

Service Request: R2402345
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	04/01/24 23:08	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	04/01/24 23:08	
1,1,2-Trichloroethane	5.0 U	5.0	1	04/01/24 23:08	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	04/01/24 23:08	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	04/01/24 23:08	
1,1-Dichloroethylene (1,1-DCE)	5.0 U	5.0	1	04/01/24 23:08	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	04/01/24 23:08	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	04/01/24 23:08	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	04/01/24 23:08	
1,2-Dibromoethane	5.0 U	5.0	1	04/01/24 23:08	
1,2-Dichlorobenzene	5.0 U	5.0	1	04/01/24 23:08	
1,2-Dichloroethane	5.0 U	5.0	1	04/01/24 23:08	
1,2-Dichloropropane	5.0 U	5.0	1	04/01/24 23:08	
1,3-Dichlorobenzene	5.0 U	5.0	1	04/01/24 23:08	
1,4-Dichlorobenzene	5.0 U	5.0	1	04/01/24 23:08	
1,4-Dioxane	100 U	100	1	04/01/24 23:08	
2-Butanone (MEK)	10 U	10	1	04/01/24 23:08	
2-Hexanone	10 U	10	1	04/01/24 23:08	
4-Methyl-2-pentanone	10 U	10	1	04/01/24 23:08	
Acetone	10 U	10	1	04/01/24 23:08	
Benzene	5.0 U	5.0	1	04/01/24 23:08	
Bromochloromethane	5.0 U	5.0	1	04/01/24 23:08	
Bromodichloromethane	5.0 U	5.0	1	04/01/24 23:08	
Bromoform	5.0 U	5.0	1	04/01/24 23:08	
Bromomethane	5.0 U	5.0	1	04/01/24 23:08	
Carbon Disulfide	10 U	10	1	04/01/24 23:08	
Carbon Tetrachloride	5.0 U	5.0	1	04/01/24 23:08	
Chlorobenzene	5.0 U	5.0	1	04/01/24 23:08	
Chloroethane	5.0 U	5.0	1	04/01/24 23:08	
Chloroform	5.0 U	5.0	1	04/01/24 23:08	
Chloromethane	5.0 U	5.0	1	04/01/24 23:08	
Cyclohexane	10 U	10	1	04/01/24 23:08	
Dibromochloromethane	5.0 U	5.0	1	04/01/24 23:08	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	04/01/24 23:08	
Dichloromethane	5.0 U	5.0	1	04/01/24 23:08	
Ethylbenzene	5.0 U	5.0	1	04/01/24 23:08	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	04/01/24 23:08	
Methyl Acetate	10 U	10	1	04/01/24 23:08	
Methyl tert-Butyl Ether	5.0 U	5.0	1	04/01/24 23:08	
Methylcyclohexane	10 U	10	1	04/01/24 23:08	
Styrene	5.0 U	5.0	1	04/01/24 23:08	
Tetrachloroethene (PCE)	5.0 U	5.0	1	04/01/24 23:08	
Toluene	5.0 U	5.0	1	04/01/24 23:08	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Sample Name: Method Blank
Lab Code: RQ2403364-04

Service Request: R2402345
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	1	04/01/24 23:08	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	04/01/24 23:08	
Vinyl Chloride	5.0 U	5.0	1	04/01/24 23:08	
cis-1,2-Dichloroethene	5.0 U	5.0	1	04/01/24 23:08	
cis-1,3-Dichloropropene	5.0 U	5.0	1	04/01/24 23:08	
m,p-Xylenes	5.0 U	5.0	1	04/01/24 23:08	
o-Xylene	5.0 U	5.0	1	04/01/24 23:08	
trans-1,2-Dichloroethene	5.0 U	5.0	1	04/01/24 23:08	
trans-1,3-Dichloropropene	5.0 U	5.0	1	04/01/24 23:08	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	04/01/24 23:08	
Dibromofluoromethane	102	80 - 116	04/01/24 23:08	
Toluene-d8	101	87 - 121	04/01/24 23:08	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Service Request: R2402345
Date Analyzed: 03/27/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2403192-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.2	20.0	96	75-125
1,1,2,2-Tetrachloroethane	8260C	18.8	20.0	94	78-126
1,1,2-Trichloroethane	8260C	19.8	20.0	99	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	18.5	20.0	92	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	20.2	20.0	101	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	18.0	20.0	90	69-142
1,2,3-Trichlorobenzene	8260C	20.7	20.0	104	67-136
1,2,4-Trichlorobenzene	8260C	19.5	20.0	97	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	18.2	20.0	91	55-136
1,2-Dibromoethane	8260C	20.4	20.0	102	82-127
1,2-Dichlorobenzene	8260C	19.1	20.0	95	80-119
1,2-Dichloroethane	8260C	20.4	20.0	102	71-127
1,2-Dichloropropene	8260C	19.1	20.0	96	80-119
1,3-Dichlorobenzene	8260C	18.8	20.0	94	83-121
1,4-Dichlorobenzene	8260C	19.0	20.0	95	79-119
1,4-Dioxane	8260C	356	400	89	44-154
2-Butanone (MEK)	8260C	15.5	20.0	77	61-137
2-Hexanone	8260C	17.1	20.0	86	63-124
4-Methyl-2-pentanone	8260C	17.6	20.0	88	66-124
Acetone	8260C	14.7	20.0	74	40-161
Benzene	8260C	19.1	20.0	96	79-119
Bromochloromethane	8260C	20.1	20.0	101	81-126
Bromodichloromethane	8260C	19.5	20.0	98	81-123
Bromoform	8260C	20.8	20.0	104	65-146
Bromomethane	8260C	16.6	20.0	83	42-166
Carbon Disulfide	8260C	17.9	20.0	90	66-128
Carbon Tetrachloride	8260C	18.1	20.0	90	70-127
Chlorobenzene	8260C	18.9	20.0	94	80-121
Chloroethane	8260C	14.3	20.0	71	62-131
Chloroform	8260C	19.5	20.0	98	79-120
Chloromethane	8260C	18.2	20.0	91	72-179
Cyclohexane	8260C	19.3	20.0	96	69-120
Dibromochloromethane	8260C	19.7	20.0	98	72-128

Printed 4/2/2024 5:11:54 PM

Superset Reference:24-0000692890 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Service Request: R2402345
Date Analyzed: 03/27/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2403192-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	11.6	20.0	58 *	59-155
Dichloromethane	8260C	20.5	20.0	103	73-122
Ethylbenzene	8260C	18.6	20.0	93	76-120
Isopropylbenzene (Cumene)	8260C	18.2	20.0	91	77-128
Methyl Acetate	8260C	13.6	20.0	68	61-133
Methyl tert-Butyl Ether	8260C	21.1	20.0	106	75-118
Methylcyclohexane	8260C	18.8	20.0	94	51-129
Styrene	8260C	19.4	20.0	97	80-124
Tetrachloroethylene (PCE)	8260C	18.0	20.0	90	72-125
Toluene	8260C	18.9	20.0	95	79-119
Trichloroethene (TCE)	8260C	18.1	20.0	90	74-122
Trichlorofluoromethane (CFC 11)	8260C	18.6	20.0	93	71-136
Vinyl Chloride	8260C	15.5	20.0	77	74-159
cis-1,2-Dichloroethene	8260C	19.3	20.0	97	80-121
cis-1,3-Dichloropropene	8260C	19.6	20.0	98	77-122
m,p-Xylenes	8260C	38.3	40.0	96	80-126
o-Xylene	8260C	19.2	20.0	96	79-123
trans-1,2-Dichloroethene	8260C	18.2	20.0	91	73-118
trans-1,3-Dichloropropene	8260C	19.5	20.0	98	71-133

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Service Request: R2402345
Date Analyzed: 03/28/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2403242-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	21.8	20.0	109	75-125
1,1,2,2-Tetrachloroethane	8260C	19.9	20.0	99	78-126
1,1,2-Trichloroethane	8260C	21.3	20.0	107	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	20.8	20.0	104	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	21.3	20.0	106	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	20.1	20.0	100	69-142
1,2,3-Trichlorobenzene	8260C	21.2	20.0	106	67-136
1,2,4-Trichlorobenzene	8260C	21.5	20.0	108	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	19.0	20.0	95	55-136
1,2-Dibromoethane	8260C	21.5	20.0	108	82-127
1,2-Dichlorobenzene	8260C	21.4	20.0	107	80-119
1,2-Dichloroethane	8260C	21.2	20.0	106	71-127
1,2-Dichloropropene	8260C	21.3	20.0	106	80-119
1,3-Dichlorobenzene	8260C	21.8	20.0	109	83-121
1,4-Dichlorobenzene	8260C	21.1	20.0	106	79-119
1,4-Dioxane	8260C	398	400	99	44-154
2-Butanone (MEK)	8260C	17.4	20.0	87	61-137
2-Hexanone	8260C	20.5	20.0	103	63-124
4-Methyl-2-pentanone	8260C	20.2	20.0	101	66-124
Acetone	8260C	16.6	20.0	83	40-161
Benzene	8260C	22.0	20.0	110	79-119
Bromochloromethane	8260C	21.5	20.0	107	81-126
Bromodichloromethane	8260C	21.6	20.0	108	81-123
Bromoform	8260C	22.4	20.0	112	65-146
Bromomethane	8260C	19.3	20.0	97	42-166
Carbon Disulfide	8260C	18.4	20.0	92	66-128
Carbon Tetrachloride	8260C	21.9	20.0	110	70-127
Chlorobenzene	8260C	21.3	20.0	107	80-121
Chloroethane	8260C	16.0	20.0	80	62-131
Chloroform	8260C	20.9	20.0	105	79-120
Chloromethane	8260C	20.9	20.0	105	72-179
Cyclohexane	8260C	20.3	20.0	102	69-120
Dibromochloromethane	8260C	21.7	20.0	109	72-128

Printed 4/2/2024 5:11:57 PM

Superset Reference:24-0000692890 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Service Request: R2402345
Date Analyzed: 03/28/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2403242-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	14.4	20.0	72	59-155
Dichloromethane	8260C	21.6	20.0	108	73-122
Ethylbenzene	8260C	21.8	20.0	109	76-120
Isopropylbenzene (Cumene)	8260C	21.9	20.0	109	77-128
Methyl Acetate	8260C	13.6	20.0	68	61-133
Methyl tert-Butyl Ether	8260C	20.9	20.0	104	75-118
Methylcyclohexane	8260C	19.4	20.0	97	51-129
Styrene	8260C	22.2	20.0	111	80-124
Tetrachloroethylene (PCE)	8260C	21.7	20.0	109	72-125
Toluene	8260C	21.8	20.0	109	79-119
Trichloroethene (TCE)	8260C	21.5	20.0	108	74-122
Trichlorofluoromethane (CFC 11)	8260C	21.4	20.0	107	71-136
Vinyl Chloride	8260C	17.4	20.0	87	74-159
cis-1,2-Dichloroethene	8260C	21.6	20.0	108	80-121
cis-1,3-Dichloropropene	8260C	21.6	20.0	108	77-122
m,p-Xylenes	8260C	44.0	40.0	110	80-126
o-Xylene	8260C	22.1	20.0	110	79-123
trans-1,2-Dichloroethene	8260C	20.5	20.0	103	73-118
trans-1,3-Dichloropropene	8260C	21.2	20.0	106	71-133

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Service Request: R2402345
Date Analyzed: 03/29/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2403299-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	20.2	20.0	101	75-125
1,1,2,2-Tetrachloroethane	8260C	15.8	20.0	79	78-126
1,1,2-Trichloroethane	8260C	17.9	20.0	90	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	19.5	20.0	97	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.7	20.0	98	80-124
1,1-Dichloroethylene (1,1-DCE)	8260C	18.9	20.0	95	69-142
1,2,3-Trichlorobenzene	8260C	19.3	20.0	97	67-136
1,2,4-Trichlorobenzene	8260C	19.6	20.0	98	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	14.8	20.0	74	55-136
1,2-Dibromoethane	8260C	19.9	20.0	99	82-127
1,2-Dichlorobenzene	8260C	19.5	20.0	97	80-119
1,2-Dichloroethane	8260C	19.1	20.0	95	71-127
1,2-Dichloropropane	8260C	19.1	20.0	95	80-119
1,3-Dichlorobenzene	8260C	19.5	20.0	98	83-121
1,4-Dichlorobenzene	8260C	19.4	20.0	97	79-119
1,4-Dioxane	8260C	295	400	74	44-154
2-Butanone (MEK)	8260C	13.1	20.0	65	61-137
2-Hexanone	8260C	17.5	20.0	88	63-124
4-Methyl-2-pentanone	8260C	16.3	20.0	81	66-124
Acetone	8260C	13.9	20.0	69	40-161
Benzene	8260C	19.9	20.0	100	79-119
Bromochloromethane	8260C	19.9	20.0	99	81-126
Bromodichloromethane	8260C	19.3	20.0	97	81-123
Bromoform	8260C	18.6	20.0	93	65-146
Bromomethane	8260C	18.5	20.0	93	42-166
Carbon Disulfide	8260C	16.8	20.0	84	66-128
Carbon Tetrachloride	8260C	20.6	20.0	103	70-127
Chlorobenzene	8260C	19.4	20.0	97	80-121
Chloroethane	8260C	14.8	20.0	74	62-131
Chloroform	8260C	19.4	20.0	97	79-120
Chloromethane	8260C	19.1	20.0	95	72-179
Cyclohexane	8260C	18.8	20.0	94	69-120
Dibromochloromethane	8260C	19.7	20.0	99	72-128

Printed 4/2/2024 5:11:58 PM

Superset Reference:24-0000692890 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Service Request: R2402345
Date Analyzed: 03/29/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2403299-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	13.4	20.0	67	59-155
Dichloromethane	8260C	20.3	20.0	102	73-122
Ethylbenzene	8260C	20.7	20.0	103	76-120
Isopropylbenzene (Cumene)	8260C	20.4	20.0	102	77-128
Methyl Acetate	8260C	11.8	20.0	59 *	61-133
Methyl tert-Butyl Ether	8260C	18.4	20.0	92	75-118
Methylcyclohexane	8260C	18.1	20.0	90	51-129
Styrene	8260C	20.7	20.0	103	80-124
Tetrachloroethylene (PCE)	8260C	19.3	20.0	97	72-125
Toluene	8260C	18.8	20.0	94	79-119
Trichloroethene (TCE)	8260C	19.6	20.0	98	74-122
Trichlorofluoromethane (CFC 11)	8260C	20.0	20.0	100	71-136
Vinyl Chloride	8260C	16.6	20.0	83	74-159
cis-1,2-Dichloroethene	8260C	20.0	20.0	100	80-121
cis-1,3-Dichloropropene	8260C	19.5	20.0	97	77-122
m,p-Xylenes	8260C	42.0	40.0	105	80-126
o-Xylene	8260C	20.9	20.0	104	79-123
trans-1,2-Dichloroethene	8260C	19.1	20.0	95	73-118
trans-1,3-Dichloropropene	8260C	18.3	20.0	92	71-133

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Service Request: R2402345
Date Analyzed: 04/01/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2403364-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	20.0	20.0	100	75-125
1,1,2,2-Tetrachloroethane	8260C	18.9	20.0	94	78-126
1,1,2-Trichloroethane	8260C	20.7	20.0	104	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	18.8	20.0	94	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.9	20.0	100	80-124
1,1-Dichloroethylene (1,1-DCE)	8260C	19.7	20.0	99	69-142
1,2,3-Trichlorobenzene	8260C	21.8	20.0	109	67-136
1,2,4-Trichlorobenzene	8260C	20.4	20.0	102	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	18.4	20.0	92	55-136
1,2-Dibromoethane	8260C	20.6	20.0	103	82-127
1,2-Dichlorobenzene	8260C	20.6	20.0	103	80-119
1,2-Dichloroethane	8260C	19.4	20.0	97	71-127
1,2-Dichloropropene	8260C	19.4	20.0	97	80-119
1,3-Dichlorobenzene	8260C	20.7	20.0	104	83-121
1,4-Dichlorobenzene	8260C	20.3	20.0	102	79-119
1,4-Dioxane	8260C	367	400	92	44-154
2-Butanone (MEK)	8260C	15.0	20.0	75	61-137
2-Hexanone	8260C	17.3	20.0	86	63-124
4-Methyl-2-pentanone	8260C	17.7	20.0	89	66-124
Acetone	8260C	16.6	20.0	83	40-161
Benzene	8260C	21.0	20.0	105	79-119
Bromochloromethane	8260C	21.4	20.0	107	81-126
Bromodichloromethane	8260C	20.6	20.0	103	81-123
Bromoform	8260C	21.4	20.0	107	65-146
Bromomethane	8260C	17.9	20.0	90	42-166
Carbon Disulfide	8260C	18.0	20.0	90	66-128
Carbon Tetrachloride	8260C	20.0	20.0	100	70-127
Chlorobenzene	8260C	20.4	20.0	102	80-121
Chloroethane	8260C	14.8	20.0	74	62-131
Chloroform	8260C	19.7	20.0	98	79-120
Chloromethane	8260C	19.4	20.0	97	72-179
Cyclohexane	8260C	19.1	20.0	96	69-120
Dibromochloromethane	8260C	20.8	20.0	104	72-128

Printed 4/2/2024 5:11:59 PM

Superset Reference:24-0000692890 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Colliers Engineering & Design (Formerly Bergmann Associates)
Project: Gowanda/6974.96
Sample Matrix: Water

Service Request: R2402345
Date Analyzed: 04/01/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2403364-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	12.7	20.0	64	59-155
Dichloromethane	8260C	20.4	20.0	102	73-122
Ethylbenzene	8260C	20.8	20.0	104	76-120
Isopropylbenzene (Cumene)	8260C	20.9	20.0	105	77-128
Methyl Acetate	8260C	11.7	20.0	59 *	61-133
Methyl tert-Butyl Ether	8260C	19.7	20.0	99	75-118
Methylcyclohexane	8260C	19.0	20.0	95	51-129
Styrene	8260C	21.0	20.0	105	80-124
Tetrachloroethylene (PCE)	8260C	20.9	20.0	104	72-125
Toluene	8260C	20.6	20.0	103	79-119
Trichloroethene (TCE)	8260C	20.9	20.0	104	74-122
Trichlorofluoromethane (CFC 11)	8260C	19.4	20.0	97	71-136
Vinyl Chloride	8260C	16.5	20.0	82	74-159
cis-1,2-Dichloroethene	8260C	20.9	20.0	105	80-121
cis-1,3-Dichloropropene	8260C	19.5	20.0	98	77-122
m,p-Xylenes	8260C	42.8	40.0	107	80-126
o-Xylene	8260C	21.1	20.0	106	79-123
trans-1,2-Dichloroethene	8260C	19.8	20.0	99	73-118
trans-1,3-Dichloropropene	8260C	18.9	20.0	95	71-133

APPENDIX B:

FIELD FORMS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/22/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-1
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 5.9
 Depth to bottom of the well: 16.02
 Length of water column in well: 10.12

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.6496
 3 Well volumes (= length water column X gal/foot X 3): 4.95
 Actual volume purged prior to sampling: 5
 Sampling Methodology: Hand bailing
 Sampling Equipment: Bailer
 Well Recharged? N/A
 Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	1577.8	NTU								
Temperature	6.9	°C								
pH	7.06									
Conductivity	0.571	SPC ms/cm								
Oxygen	5.93	DO mg/L								
Salinity										

Time sample was collected: 8:49

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/22/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-2
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 5.4
 Depth to bottom of the well: 17.15
 Length of water column in well: 11.75

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.92

3 Well volumes (= length water column X gal/foot X 3): 5.75

Actual volume purged prior to sampling: 6

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	1712.3	NTU								
Temperature	6.1	°C								
pH	7.29									
Conductivity	0.502	SPC ms/cm								
Oxygen	9.85	DO mg/L								
Salinity										

Time sample was collected: 9:08

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/22/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-3
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 6.1
 Depth to bottom of the well: 16.30
 Length of water column in well: 10.20

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.66
 3 Well volumes (= length water column X gal/foot X 3): 4.99
 Actual volume purged prior to sampling: 5
 Sampling Methodology: Hand bailing
 Sampling Equipment: Bailer
 Well Recharged? N/A
 Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	677.25	NTU								
Temperature	8	°C								
pH	6.95									
Conductivity	0.445	SPC ms/cm								
Oxygen	6.15	DO mg/L								
Salinity										

Time sample was collected: 9:32

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/22/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



**Engineering
& Design**

GROUNDWATER SAMPLE POINT

Well Number: MW-4
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 7.05
 Depth to bottom of the well: 15.78
 Length of water column in well: 8.73

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.423

3 Well volumes (= length water column X gal/foot X 3): 4.269

Actual volume purged prior to sampling: 4.50

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	3401.9	NTU								
Temperature	7.8	°C								
pH	6.9									
Conductivity	0.568	SPC ms/cm								
Oxygen	6.1	DO mg/L								
Salinity										

Time sample was collected: 9:56

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/22/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-5
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 10.82
 Depth to bottom of the well: 13.95
 Length of water column in well: 3.13

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 0.51

3 Well volumes (= length water column X gal/foot X 3): 1.53

Actual volume purged prior to sampling: 1.75

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	4310.3	NTU								
Temperature	6.1	°C								
pH	6.96									
Conductivity	0.636	SPC ms/cm								
Oxygen	7.87	DO mg/L								
Salinity										

Time sample was collected: 10:33

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
Project Number: 23006924A
Site Location: Gowanda, New York
Sample Date: 3/22/2024
Weather: 24 Degrees F, Overcast
Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-6
Location:
Casing Diameter: 2"

Depth to water, below top of casing: 13.24
Depth to bottom of the well: 22.88
Length of water column in well: 9.64

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.57
3 Well volumes (= length water column X gal/foot X 3): 4.71
Actual volume purged prior to sampling: 4.75
Sampling Methodology: Hand bailing
Sampling Equipment: Bailer
Well Recharged? N/A
Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	3051.6	NTU								
Temperature	8.5	°C								
pH	7.09									
Conductivity	0.712	SPC ms/cm								
Oxygen	5.8	DO mg/L								
Salinity										

Time sample was collected: 10:55

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-7
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 13.24
 Depth to bottom of the well: 21.8
 Length of water column in well: 8.56

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.4

3 Well volumes (= length water column X gal/foot X 3): 4.19
 Actual volume purged prior to sampling: 4.25

Sampling Methodology: Hand bailing
 Sampling Equipment: Bailer

Well Recharged? N/A
 Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	3429.6	NTU								
Temperature	9.1	°C								
pH	7.12									
Conductivity	0.614	SPC ms/cm								
Oxygen	5.8	DO mg/L								
Salinity										

Time sample was collected: 16:26

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/22/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

Well Number: MW-8
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 9.21
 Depth to bottom of the well: 17.65
 Length of water column in well: 8.44

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.38
 3 Well volumes (= length water column X gal/foot X 3): 4.127
 Actual volume purged prior to sampling: 4.25
 Sampling Methodology: Hand bailing
 Sampling Equipment: Bailer
 Well Recharged? N/A
 Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	3715.24	NTU								
Temperature	6.6	°C								
pH	7.18									
Conductivity	0.886	SPC ms/cm								
Oxygen	5.78	DO mg/L								
Salinity										

Time sample was collected: 7:50

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

Well Number: MW-9
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 8.48
 Depth to bottom of the well: 20.96
 Length of water column in well: 12.48

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 2.03

3 Well volumes (= length water column X gal/foot X 3): 6.103

Actual volume purged prior to sampling: 6.25

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	586.94	NTU								
Temperature	6.2	°C								
pH	6.80									
Conductivity	0.891	SPC ms/cm								
Oxygen	7.21	DO mg/L								
Salinity										

Time sample was collected: 17:45

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
Project Number: 23006924A
Site Location: Gowanda, New York
Sample Date: 3/22/2024
Weather: 24 Degrees F, Overcast
Personnel: Justin L. O'Brien



Engineering & Design

GROUNDWATER SAMPLE POINT

Well Number: MW-10
Location:
Casing Diameter: 2"

Depth to water, below top of casing: 6.35
Depth to bottom of the well: 19.44
Length of water column in well: 13.09

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 2.1

3 Well volumes (= length water column X gal/foot X 3): 6.40

Actual volume purged prior to sampling: 6.5

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	1607.5	NTU								
Temperature	5.4	°C								
pH	7.37									
Conductivity	0.537	SPC ms/cm								
Oxygen	7.95	DO mg/L								
Salinity										

Time sample was collected: 8:20

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-11
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 5.8
 Depth to bottom of the well: 15.48
 Length of water column in well: 9.68

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.5778
 3 Well volumes (= length water column X gal/foot X 3): 4.7335

Actual volume purged prior to sampling: 4.75

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	844.03	NTU								
Temperature	11.10	°C								
pH	6.72									
Conductivity	0.71	SPC ms/cm								
Oxygen	6.43	DO mg/L								
Salinity										

Time sample was collected: 12:15

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
Project Number: 23006924A
Site Location: Gowanda, New York
Sample Date: 3/21/2024
Weather: 27 Degrees F, Overcast
Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-12
Location:
Casing Diameter: 2"

Depth to water, below top of casing: 6.61
Depth to bottom of the well: 17.38
Length of water column in well: 10.77

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.76
3 Well volumes (= length water column X gal/foot X 3): 5.27
Actual volume purged prior to sampling: 5.33
Sampling Methodology: Hand bailing
Sampling Equipment: Bailer
Well Recharged? N/A
Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	844.03	NTU								
Temperature	10.3	°C								
pH	6.76									
Conductivity	0.586	SPC ms/cm								
Oxygen	3.52	DO mg/L								
Salinity										

Time sample was collected: 13:30

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-13
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 6.94
 Depth to bottom of the well: 17.40
 Length of water column in well: 10.46

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.705
 3 Well volumes (= length water column X gal/foot X 3): 5.1149
 Actual volume purged prior to sampling: 5.25
 Sampling Methodology: Hand bailing
 Sampling Equipment: Bailer
 Well Recharged? N/A
 Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	2105.4	NTU								
Temperature	10.6	°C								
pH	6.86									
Conductivity	0.491	SPC ms/cm								
Oxygen	4.43	DO mg/L								
Salinity										

Time sample was collected: 13:08

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degree F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-14
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 10.6
 Depth to bottom of the well: 18.15
 Length of water column in well: 7.55

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.23

3 Well volumes (= length water column X gal/foot X 3): 3.69

Actual volume purged prior to sampling: 3.75

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	2115.76	NTU								
Temperature	11.6	°C								
pH	6.84									
Conductivity	0.635	SPC ms/cm								
Oxygen	6.08	DO mg/L								
Salinity										

Time sample was collected: 14:18

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-15
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 10.51
 Depth to bottom of the well: 19.80
 Length of water column in well: 9.29

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.5143

3 Well volumes (= length water column X gal/foot X 3): 4.54

Actual volume purged prior to sampling: 4.75

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged?

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	3494.3	NTU								
Temperature	11	°C								
pH	6.84									
Conductivity	0.556	SPC ms/cm								
Oxygen	7.08	DO mg/L								
Salinity										

Time sample was collected: 14:32

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-16
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 12.9
 Depth to bottom of the well: 23.26
 Length of water column in well: 10.36

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.69

3 Well volumes (= length water column X gal/foot X 3): 5.066

Actual volume purged prior to sampling: 5.25

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	2488.6	NTU								
Temperature	8.9	°C								
pH	6.81									
Conductivity	0.635	SPC ms/cm								
Oxygen	4.89	DO mg/L								
Salinity										

Time sample was collected: 16:43

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/22/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-17
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 13.09
 Depth to bottom of the well: 25.18
 Length of water column in well: 12.09

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.9707
 3 Well volumes (= length water column X gal/foot X 3): 5.912
 Actual volume purged prior to sampling: 6
 Sampling Methodology: Hand bailing
 Sampling Equipment: Bailer
 Well Recharged? N/A
 Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	3559.2	NTU								
Temperature	6.6	°C								
pH	7.13									
Conductivity	0.582	SPC ms/cm								
Oxygen	8.88	DO mg/L								
Salinity										

Time sample was collected: 11:30

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-18
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 9.2
 Depth to bottom of the well: 25.0
 Length of water column in well: 15.80

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 2.5754

3 Well volumes (= length water column X gal/foot X 3): 7.73

Actual volume purged prior to sampling: 7.75

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged?

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	857.19	NTU								
Temperature	7.8	°C								
pH	7.47									
Conductivity	0.636	SPC ms/cm								
Oxygen	10.4	DO mg/L								
Salinity										

Time sample was collected: 17:10

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/22/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-19R
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 7.72
 Depth to bottom of the well: 17.67
 Length of water column in well: 9.95

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.6
 3 Well volumes (= length water column X gal/foot X 3): 4.87
 Actual volume purged prior to sampling: 5.0
 Sampling Methodology: Hand bailing
 Sampling Equipment: Bailer
 Well Recharged? N/A
 Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	759.54	NTU								
Temperature	7	°C								
pH	7.11									
Conductivity	1.247	SPC ms/cm								
Oxygen	7.36	DO mg/L								
Salinity										

Time sample was collected: 12:25

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/22/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-20
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 9.65
 Depth to bottom of the well: 14.75
 Length of water column in well: 5.1

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 0.8313

3 Well volumes (= length water column X gal/foot X 3): 2.49

Actual volume purged prior to sampling: 2.75

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	4593.5	NTU								
Temperature	5.1	°C								
pH	7.04									
Conductivity	0.008	SPC ms/cm								
Oxygen	8.43	DO mg/L								
Salinity										

Time sample was collected: 10:21

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2023
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/22/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: MW-21
 Location:
 Casing Diameter: 2"

Depth to water, below top of casing: 9.68
 Depth to bottom of the well: 15.82
 Length of water column in well: 6.14

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 1.0008

3 Well volumes (= length water column X gal/foot X 3): 3.00

Actual volume purged prior to sampling: 3

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	504.91	NTU								
Temperature	6.7	°C								
pH	7.17									
Conductivity	1.157	SPC ms/cm								
Oxygen	7.33	DO mg/L								
Salinity										

Time sample was collected: 12:54

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: DR-1
 Location:
 Casing Diameter: 4"

Depth to water, below top of casing: 7.09
 Depth to bottom of the well: 18.06
 Length of water column in well: 10.97

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 7.1634

3 Well volumes (= length water column X gal/foot X 3): 21.49
 Actual volume purged prior to sampling: 21.50

Sampling Methodology: Hand bailing
 Sampling Equipment: Bailer

Well Recharged? N/A
 Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	2148.9	NTU								
Temperature	9	°C								
pH	7.13									
Conductivity	0.634	SPC ms/cm								
Oxygen	7.34	DO mg/L								
Salinity										

Time sample was collected: 12:40
 MW-X taken from this well

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

Well Number: DR-2
 Location:
 Casing Diameter: 4"

Depth to water, below top of casing: 6.9
 Depth to bottom of the well: 18.06
 Length of water column in well: 11.16

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 7.2875

3 Well volumes (= length water column X gal/foot X 3): 21.86

Actual volume purged prior to sampling: 22

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	1104.1	NTU								
Temperature	10.6	°C								
pH	6.88									
Conductivity	0.636	SPC ms/cm								
Oxygen	3.85	DO mg/L								
Salinity										

Time sample was collected: 13:47

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

Well Number: DR-3
 Location:
 Casing Diameter: 4"

Depth to water, below top of casing: 11.58
 Depth to bottom of the well: 20.45
 Length of water column in well: 8.87

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 5.8

3 Well volumes (= length water column X gal/foot X 3): 17.376

Actual volume purged prior to sampling: 17.50

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	552.25	NTU								
Temperature	11.1	°C								
pH	6.66									
Conductivity	0.624	SPC ms/cm								
Oxygen	4.96	DO mg/L								
Salinity										

Time sample was collected: 14:10

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
Project Number: 23006924A
Site Location: Gowanda, New York
Sample Date: 3/21/2024
Weather: 24 Degrees F, Overcast
Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: DR-4
Location:
Casing Diameter: 4"

Depth to water, below top of casing: 11.6
Depth to bottom of the well: 19.69
Length of water column in well: 8.09

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 5.28

3 Well volumes (= length water column X gal/foot X 3): 15.85

Actual volume purged prior to sampling: 16.00

Sampling Methodology:

Sampling Equipment: Hand bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	1936.3	NTU								
Temperature	11.4	°C								
pH	6.82									
Conductivity	0.581	SPC ms/cm								
Oxygen	5.17	DO mg/L								
Salinity										

Time sample was collected: 15:00

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/21/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: G-1
 Location:
 Casing Diameter: 4"

Depth to water, below top of casing: 11.75
 Depth to bottom of the well: 22.98
 Length of water column in well: 11.23

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 7.3332

3 Well volumes (= length water column X gal/foot X 3): 22.00
 Actual volume purged prior to sampling: 22.00

Sampling Methodology: Hand bailing
 Sampling Equipment: Bailer

Well Recharged? N/A
 Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	856.04	NTU								
Temperature	10.4	°C								
pH	7.08									
Conductivity	0.603	SPC ms/cm								
Oxygen	7.59	DO mg/L								
Salinity										

Time sample was collected: 15:30

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
Project Number: 23006924A
Site Location: Gowanda, New York
Sample Date: 3/21/2024
Weather: 24 Degrees F, Overcast
Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

Well Number: G-2
Location:
Casing Diameter: 4"

Depth to water, below top of casing: 11.7
Depth to bottom of the well: 20.72
Length of water column in well: 9.02

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 5.8901

3 Well volumes (= length water column X gal/foot X 3): 17.67

Actual volume purged prior to sampling: 17.75

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	503.88	NTU								
Temperature	10.6	°C								
pH	6.79									
Conductivity	0.623	SPC ms/cm								
Oxygen	2.35	DO mg/L								
Salinity										

Time sample was collected: 16:00

COMMENTS

GROUNDWATER SAMPLING WORKSHEET

PROJECT NAME: Gowanda Q1 2024
 Project Number: 23006924A
 Site Location: Gowanda, New York
 Sample Date: 3/22/2024
 Weather: 24 Degrees F, Overcast
 Personnel: Justin L. O'Brien



Engineering
& Design

GROUNDWATER SAMPLE POINT

Well Number: G-3
 Location:
 Casing Diameter: 4"

Depth to water, below top of casing: 10.04
 Depth to bottom of the well: 18.15
 Length of water column in well: 8.11

Well Dia.	Volume/Foot
1"	0.041 gal/foot
2"	0.163 gal/foot
4"	0.653 gal/foot
6"	1.469 gal/foot
8"	2.611 gal/foot

Volume of water in well casing, gallons: 5.30

3 Well volumes (= length water column X gal/foot X 3): 15.89

Actual volume purged prior to sampling: 16.00

Sampling Methodology: Hand bailing

Sampling Equipment: Bailer

Well Recharged? N/A

Required Analysis:

FIELD PARAMETER MEASUREMENTS

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	713.8	NTU								
Temperature	7.3	°C								
pH	7.23									
Conductivity	0.617	SPC ms/cm								
Oxygen	8.35	DO mg/L								
Salinity										

Time sample was collected: 12:10

COMMENTS

CALIBRATION SHEETS



Calibration Certificate

rev 8/9/11

Work Order No.: SE-128873
Date of Service: 03/19/24
Order Time: 2:19:33 PM

Unit Under Test: YSI ProDSS, 4m Cable

Asset No.: FA04505 Technician Joshua Young
Serial No: 20K100761 / 20K10172

Initials: _____

TEST	Specification	Result
Standard Calibration	Pass/Fail	Pass

TEST STANDARDS USED:

DESCRIPTION	LOT NO./EXPIRATION DATE	QUANTITY
7.00 mS Conductivity Standard Solution	Lot No. 3GL0530 Exp. 12/2024	1
pH 7.00 Standard Solution	Lot No. 2GK014 Exp. 11/2024	1
pH 10.00 Standard Solution	Lot No. 3GL0168 Exp. 12/2025	1
pH 4.00 Standard Solution	Lot No. 3GD1144 Exp. 04/2025	1
ORP Standard Solution	Lot No. 23D100185 Exp. 04/11/2028	1
Air Saturated Water		1
Turbidity Free Water	Lot No. 2GK873 Exp. 11/2024	1
100 NTU AMCO Turbidity Standard	Lot No. 22420023 Exp. 05/2024	1

TEST EQUIPMENT USED:

DESCRIPTION	ASSET NO.	SERIAL NO.	DATE OF LAST CAL	DATE CAL DUE

Test Equipment and standards are traceable to National standards.