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# 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 2023 (Q1 2023)



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Issued: June 6, 2023

DASNY Project No.: 3136109999





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## 1.0 INTRODUCTION

Bergmann is submitting this groundwater characterization report for the first quarter 2023 sampling event, conducted on March 9th and 10th, 2023, 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 9th and March 10th, 2023. 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 2022 and included analysis of groundwater samples from the (21) site-related groundwater monitoring wells and all seven (7) groundwater recovery wells.

### 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) was operated from 2005 to 2013 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. Bergmann 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 2013, and an ISCO treatment was implemented in May 2015 and a second round of injections 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 2023 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 has not been 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 2023 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 9 and March 10, 2023. Depth to groundwater measurements were obtained from twenty-eight (28) wells (including 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, to allow for an accurate representation of groundwater without collecting sediment from within the wells. 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 PRR dated 2019. A single duplicate sample and a field 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 – 2023.



### 3.0 LOCAL GROUNDWATER FLOW CHARACTERIZATION

The Site potentiometric surface pattern and groundwater flow direction was determined for March 2023 using water table elevations measured at each well. Groundwater elevations and well reference elevations were calculated using depth to water values obtained on March 9 and March 10, 2023. The well gauging values and groundwater elevations are provided in Table 1 – Groundwater Elevations and Field Measurements – March 2023.

The March 2023 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 2023 water table elevations range from 764.96 feet (ft) above mean sea level (AMSL) at MW-21, to 774.12 ft. AMSL at MW-10. The average table water elevation was 769.87 ft AMSL, which is a decrease from the average groundwater elevation of the previous sampling event in December of 2022 (770.51 ft AMSL).

The site-wide average groundwater elevation decreased by approximately 0.64 ft when compared to the previous sampling event from December 2022. 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 2023 Groundwater Elevation Contours are presented on Figure 1 – March 2023 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 9 and March 10, 2023. 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:

- Trichloroethene (TCE)
- 1,1,1 Trichloroethane (TCA)
- Cis-1,2-Dichloroethene (Cis-DCE)
- Trans-1,2-Dichloroethene (Trans-1,2-DCE)
- Vinyl Chloride (VC)

CVOCS values, as present throughout this report, in the text, charts, and Tables 2, 3, and 4, are not representative of all CVOCS detected, but are the of the sum of detected concentration of TCE, Cis-DCE, TRANS-1,2-DCE, VC, and TCA.

### 4.2 MONITORING WELL GROUNDWATER ANALYSIS SUMMARY

The March 2023 analytical results indicate detection of three (3) chlorinated VOCs in monitoring well samples: TCE, and Cis-DCE. Chlorinated VOCs were detected in groundwater samples from nine (9) of the twenty-one (21) monitoring wells sampled. Analytical results are summarized in Table 2 – March 2023 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 2023 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.

VOCs were not detected in groundwater from twelve (12) of the sampled monitoring wells.

Groundwater samples from nine (9) monitoring wells had detectable chlorinated VOCs at concentrations above applicable Class GA Standards. The monitoring well with the highest CVOCS were detected at monitoring wells MW-1 (449.00 parts per billion (ppb)), which is in the area of historically greatest impacted groundwater.

Concentrations in three (3) of the twenty-one (21) monitoring well groundwater samples increased when compared to the March 2023 sampling event while concentrations in twelve (12) of the twenty-one (21) monitoring well groundwater samples decreased. The concentrations of CVOCS in six (6) monitoring wells remain unchanged. The current sampling analytical results indicate an average site-wide decrease in CVOCS of approximately 91.93% since the activation of the GTS in May 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 86.54% monitoring of these wells since 2002.

The CVOCS concentrations decreased at monitoring well MW-1 relative to the prior sampling event. The CVOCS concentration at monitoring well MW-1 for the March 2023 sampling event was 449.00 parts per billion (ppb), a decrease from the December 2022 value of 869.6 ppb. Since activation of the GTS, detected VOCs at MW-1 have increased by 41.54%.





Monitoring well MW-11 increased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at MW-11 for the March 2023 sampling event is 304.0 ppb, an increase from the December 2022 value of 291.4 ppb. Since activation of the GTS in May 2005, detected VOCs at MW-11 have decreased by 93.46%.

Monitoring well MW-12 increased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at MW-12 for the March 2023 sampling event is 170.0 ppb, an increase from the December 2022 value of 93.65 ppb. MW-12 is nearest to recovery well DR-2, in close proximity to the center of the building. Since activation of the GTS in May 2005, detected VOCs at MW-12 have decreased by 98.66%.

Monitoring well MW-13 decreased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at monitoring well MW-13 for the March 2023 sampling event was non-detect, a decrease from the December 2022 sampling event, which was 2.06 ppb. Since activation of the GTS, detected VOCs at MW-13 have decreased by 100.0%.

Monitoring well MW-14 increased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at MW-14 for the March 2023 sampling event is 63.90 ppb, an increase from the December 2022 value of 52.30 ppb. MW-14 is nearest to recovery well DR-3. Since activation of the GTS in May 2005 detected VOCs at MW-14 have decreased by 79.73%

Monitoring well MW-15 decreased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at MW-15 for the March 2023 sampling event was non-detect, a decrease from the December 2022 sampling event, which was 5.20 ppb. MW-15 is nearest to recovery well DR-4. Since activation of the GTS in May 2005, the detected VOCs at MW-15 have decreased by 100%.

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 2022 sampling event.

Monitoring wells MW-18, MW-19R and MW-21 are located off-site along Torrance Place. These three (3) wells are considered to be beyond the radius of influence for the Day Habilitation groundwater treatment system. The current analytical results indicate a non-detection of CVOCs for MW-18. Monitoring well MW-21 was added to the sampling list at the request of the NYSDEC beginning with the June 2015 sampling event. It was first noted that during the August 2017 sampling event that wells MW-19R and MW-21 were not sampled because they were inaccessible. It was observed that the wells were likely paved over by a re-sealing of the Torrance Place road surface. These wells were uncovered after the July 2019 sampling event, and subsequent sampling events. Well MW-19R had a CVOC concentration that was non-detect, and well MW-21 had a CVOC concentration of 5.20 ppb during the March 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 2023 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 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. A ISCO injection application was implemented for the Gowanda Electronics site in June 2014.

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 2023 sampling event, all of the seven (7) recovery wells were sampled.

The March 2023 analytical results indicate detection of chlorinated VOCs in all seven (7) recovery well samples that include: TCE, Cis-DCE, VC and Trans-1,2-DCE. CVOCs detected in the seven (7) recovery wells for which past data is available have decreased overall since activation of the GTS in May 2002. The average decrease in CVOCs for the current sampling event is 91.36% relative to concentrations prior to GTS activation in 2002. Relative percent decrease in CVOCs for all monitoring wells and recovery wells are shown on Table 4 – Percent Reductions in Total Groundwater CVOCs.

Recovery well DR-1 decreased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at DR-1 for the March 2023 sampling event is 570.0 ppb, a decrease from the December 2022 value of 940.40 ppb. The current sampling event indicates a decrease in CVOCs at DR-1 of 92.88% since activation of the GTS. Recovery well DR-1 is located closest to MW-1 in an area of historically highest concentrations.

Recovery well DR-2 decreased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at DR-2 for the March 2023 sampling event is 86.0 ppb, a decrease from the December 2022 value of 214.90 ppb. The current sampling event indicates a decrease in CVOCs at DR-2 of 95.71% since activation of the GTS.

Recovery well DR-3 decreased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at DR-3 for the March 2023 sampling event is 41.0 ppb, a decrease from the December 2022 value of 69.30 ppb. The current sampling event indicates a decrease in CVOCs at DR-3 of 97.22% since activation of the GTS.

Recovery well DR-4 decreased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at DR-4 for the March 2023 sampling event is 15.0 ppb, a decrease from the December 2022 value of 28.1 ppb. The current sampling event indicates a decrease in CVOCs at DR-4 of 99.15% since activation of the GTS.

Recovery well G-1 decreased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at G-1 for the March 2023 sampling event is 33.50 ppb, a decrease from the December 2022 value of 53.85 ppb. The current sampling event indicates a decrease in CVOCs at G-1 of 93.85% since activation of the GTS.

Recovery well G-2 decreased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at G-2 for the March 2023 sampling event is 30.0 ppb, a decrease from the December 2022 value of 44.58 ppb. The current sampling event indicates a decrease in CVOCs at G-2 of 92.21% since activation of the GTS.

Recovery well G-3 decreased in targeted chlorinated VOCs relative to the prior sampling event. The CVOC concentration at G-3 for the March 2023 sampling event is 127.0 ppb, a decrease from the December 2022 value of 182.89 ppb. The current sampling event indicates an increase in CVOCs at G-3 of 68.49% since activation of the GTS.



Laboratory analytical results are included in Appendix A. Recovery well locations and analytical results are shown on Figure 3 – March 2023 Distribution of Groundwater Analytical Results: Recovery Wells.

#### 4.5 QUALITY ASSURANCE AND QUALITY CONTROL SAMPLES

An equipment blank was collected. The analytical results for this equipment blank were non-detect. A trip blank was supplied by the laboratory for the March 2023 sampling event and was analyzed and was also 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 REMEDIATION SYSTEM EFFICIENCY

### 5.1 IMPACT OF THE GTS RECOVERY WELLS

Groundwater analytical charts for the seven (7) sampled recovery wells and the nearest relative monitoring well were created to illustrate the impact of the GTS on recovery wells at the Day Habilitation Center.

Chart 1 compares the sample results from the sampled groundwater recovery wells (DR-1, DR-2, DR-3, DR-4, G-1, G-2, G-3). Since activation of the GTS in May 2005, all seven (7) sampled groundwater recovery wells have demonstrated a general decrease in CVOC concentration.

Chart 2 displays the relationship between monitoring wells MW-1, MW-11, and recovery well DR-1. The current CVOCs at MW-1 (449.00 ppb) show a decrease from the December 2022 sampling event (869.6 ppb). The current CVOCs at MW-11 (304.0 ppb) show an increase from the December 2022 sampling event (291.4 ppb). The current CVOCs at DR-1 (570.0 ppb) shows a decrease from the December 2022 sampling event (940.40 ppb).

Chart 3 compares analytical results between recovery well DR-2 and MW-12. These wells are located north of the wells outlined in Chart 1 and represent the northern limit of the highest concentration within the impacted area. The current CVOCs at MW-12 (170.0 ppb) show an increase from the December 2022 sampling event (93.65 ppb). The current CVOCs at recovery well DR-2 (86.0 ppb) show a decrease from the December 2022 sampling event (214.90 ppb).

Chart 4 compares the relationship between wells DR-3 and MW-14 which are located in the central portion of the Gowanda Day Habilitation building. The current CVOCs at MW-14 (63.90 ppb) show an increase from the December 2022 sampling event (52.3 ppb). The current CVOCs at recovery well DR-3 (41.0 ppb) show a decrease from the December 2022 sampling event (69.30 ppb).

Chart 5 compares analytical results between recovery well DR-4 and MW-15. These wells are located at the center-north portion of the building. The current CVOCs at MW-15 (non-detect) show a decrease from the December 2022 sampling event (5.20 ppb). The current CVOCs at recovery well DR-4 (15.0 ppb) show a decrease from the December 2022 sampling event (28.1 ppb).

Chart 6 compares analytical results between recovery well G-1 and monitoring well MW-17. The recovery well is located in the northern portion of the building and MW-17 is located along the northern property line. The current sampling event CVOCs at recovery well MW-17 (7.30 ppb) showed a decrease from the December 2022 sampling event (226.32 ppb). The current CVOCs at recovery well G-1 (33.50 ppb) show a decrease from the December 2022 sampling event (53.85 ppb).

Chart 7 compares analytical results between recovery well G-2 and MW-7 which are located in the northeastern portion of the building. This area is at the apparent western perimeter of the plume. Recovery well G-2 had a CVOC concentration of 30.0 ppb, which shows an decrease from the December 2022 sampling event (44.58 ppb). The March 2023 CVOCs of MW-7 (22.0 ppb) show a decrease from the December 2022 sampling event (23.87 ppb).

Chart 8 compares analytical results between recovery well G-3 which is located at the northeastern portion of the building and MW-17 which is located along the northern property boundary of the plume. This area is at the western perimeter of the plume. The March 2023 CVOCs at monitoring well MW-17 (7.30 ppb) showed a decrease from the December 2022 sampling event (226.32 ppb). The current CVOCs at recovery well G-3 (127.0 ppb) show a decrease from the December 2022 sampling event (182.89 ppb).



## 5.2 EXTENT OF IMPACTED GROUNDWATER

The area of highest impacted groundwater is consistent with prior sampling events. The bulk of the contaminant mass appears to be concentrated beneath the building in the source area, in the vicinity of monitoring well MW-1 and MW-11, extending north to recovery well DR-2. The concentration of chlorinated VOCs in the source area have been reduced as a result of historic cleanup activities.

When operating, the GTS maintained an area of hydraulic containment for recovery wells within the source area of the plume. The GTS was successful in hydraulically containing most of the contaminant plume on the property and minimizing further migration. The GTS was not operating during this monitoring period and overall sample results are similar to previous quarterly sampling results. Therefore, residual CVOCs in the plume have not migrated and appear to be stabilized when compared to sample results with the operation of the GTS during previous monitoring events.

Overall reduction of contaminants in the majority of the monitoring and recovery wells has occurred due to completed remediation at the Site when compared to pre-remediation levels during the past fifteen (15) years of sampling.

## 5.3 FUTURE GROUNDWATER MONITORING AND ANALYSIS ACTIVITIES

The condition of the SVE and GTS was discussed with the NYSDEC representative, and it was agreed upon that these remediation systems would be deactivated to allow for groundwater level recovery during the implementation of an ISCO groundwater treatment and subsequent sampling events. Bergmann performed an ISCO injection application in May (round 1) and September (round 2) 2015 to address the remaining residual contamination at the Site in lieu of costly repair of the SVE and GTS. The SVE and GTS equipment remains on site in the event that re-activation is required in the future. However, system components may need repair and/or replacement prior to re-activation. The next site-wide groundwater sampling and laboratory analysis event is scheduled for Q2 2023. Future groundwater sampling events will be conducted to track the effects of the ISCO injections on impacted groundwater and to evaluate seasonal changes in water table elevations. In addition, the evaluation of groundwater flow direction and movement of plume at the site will be monitored and recorded during future sampling events.



# **TABLES**

**Table 1 Groundwater Elevations and Field Measurements March 2023**

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)	4.40	5.20	9.70	7.90	10.40	12.90	13.02	8.35	8.57	5.90
Groundwater Elevation	773.83	772.88	768.68	770.53	768.21	768.20	767.92	772.98	774.04	774.12
Well Diameter	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"
Product Thickness	ND	NA	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	11.62	11.95	6.60	7.88	3.55	9.98	8.78	9.30	12.39	13.54
Minimum Purge Volume (gal)	1.89	1.95	1.08	1.28	0.58	1.63	1.4	1.52	2.02	2.2
3 Volumes	5.68	5.84	3.23	3.853	1.74	4.88	4.29	4.55	6.06	6.62
Actual volume purged	5.75	6.00	3.25	4.00	2.00	5.00	4.33	4.75	6.25	6.75
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)	5.92	5.00	7.84	10.10	10.20	12.20	12.78	9.40	8.2	8.90	9.8
Groundwater Elevation	772.66	773.50	770.55	768.33	768.18	768.23	767.07	766.99	766.0	769.14	764.96
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	9.56	12.38	9.56	8.05	9.60	11.06	12.40	15.60	9.47	5.85	6.02
Minimum Purge Volume (gal)	1.56	2.02	1.56	1.31	1.56	1.8	2.02	2.54	1.5	1.0	1.0
3 Volumes	4.67	6.05	4.67	3.94	4.69	5.41	6.06	7.63	4.63	2.86	2.94
Actual volume purged	4.75	6.25	4.75	4.00	4.75	5.50	6.25	7.75	4.75	3.00	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 = -0.71'

	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)	6.85	6.62	11.35	11.20	11.46	11.40	9.80
Groundwater Elevation	772.81	773.31	768.43	768.44	768.37	768.32	769.62
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	11.21	11.44	9.10	8.49	11.52	9.32	8.35
Minimum Purge Volume (gal)	7.32	7.47	5.94	5.54	7.52	6.09	5.45
3 Volumes	21.960	22.41	17.83	16.63	22.57	18.258	16.36
Actual volume purged	22.00	22.50	18.0	16.75	22.75	18.50	16.50
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 2023 Analytical Results Summary

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

### Monitoring Well MW-1

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	Mar 2023	NYS Guidance Value
TCE		<b>720.00</b>	<b>400.00</b>	5.0
CIS		<b>140.00</b>	<b>49.00</b>	5.0
TRANS		<b>9.60</b>	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>869.60</b>	<b>449.00</b>	

### Monitoring Well MW-4

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	Mar 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	

### Monitoring Well MW-2

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		0.33	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		0.33	ND	

### Monitoring Well MW-5

Sample Date: 3/10/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		0.69	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		0.69	ND	

### Monitoring Well MW-3

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		0.20	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		0.20	ND	

### Monitoring Well MW-6

Sample Date: 3/10/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		ND	ND	5.0
CIS		<b>46.00</b>	<b>34.00</b>	5.0
TRANS		ND	ND	5.0
VC		<b>54.00</b>	<b>28.00</b>	2.0
TCA		ND	ND	5.0
Total VOCs		<b>100.00</b>	<b>62.00</b>	

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 2023 Analytical Results Summary

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

### Monitoring Well MW-7

Sample Date: 3/10/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		0.42	ND	5.0
CIS		<b>23.00</b>	<b>22.00</b>	5.0
TRANS		ND	ND	5.0
VC		0.45	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>23.87</b>	<b>22.00</b>	

### Monitoring Well MW-10

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 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	

### Monitoring Well MW-8

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 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	

### Monitoring Well MW-11

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		<b>110.00</b>	<b>230.00</b>	5.0
CIS		<b>170.00</b>	<b>74.00</b>	5.0
TRANS		4.20	ND	5.0
VC		<b>7.20</b>	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>291.40</b>	<b>304.00</b>	

### Monitoring Well MW-9

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 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	

### Monitoring Well MW-12

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		<b>30.00</b>	<b>20.00</b>	5.0
CIS		<b>61.00</b>	<b>150.00</b>	5.0
TRANS		2.00	ND	5.0
VC		0.65	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>93.65</b>	<b>170.00</b>	

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 2023 Analytical Results Summary

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

### Monitoring Well MW-13

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		1.10	ND	5.0
CIS		0.96	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		2.06	ND	

### Monitoring Well MW-14

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		<b>17.00</b>	<b>7.90</b>	5.0
CIS		<b>34.00</b>	<b>56.00</b>	5.0
TRANS		ND	ND	5.0
VC		1.30	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>52.30</b>	<b>63.90</b>	

### Monitoring Well MW-15

Sample Date: 3/9/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		3.90	ND	5.0
CIS		1.30	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>5.20</b>	ND	

### Monitoring Well MW-16

Sample Date: 3/10/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		0.36	ND	5.0
CIS		<b>26.00</b>	<b>23.00</b>	5.0
TRANS		ND	ND	5.0
VC		0.30	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>26.66</b>	<b>23.00</b>	

### Monitoring Well MW-17

Sample Date: 3/10/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		<b>14.00</b>	<b>7.30</b>	5.0
CIS		<b>210.00</b>	ND	5.0
TRANS		1.60	ND	5.0
VC		0.72	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>226.32</b>	<b>7.30</b>	

### Monitoring Well MW-18

Sample Date: 3/10/2023

#### Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		0.75	ND	5.0
CIS		<b>5.10</b>	ND	5.0
TRANS		ND	ND	5.0
VC		0.09	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>5.94</b>	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 2023 Analytical Results Summary**

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

**Monitoring Well MW-19R**

Sample Date: 3/10/2023

## Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 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	

**Monitoring Well MW-20**

Sample Date: 3/10/2023

## Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 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	

**Monitoring Well MW-21**

Sample Date: 3/10/2023

## Sampling Events

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		2.00	ND	5.0
CIS		<b>14.00</b>	<b>5.20</b>	5.0
TRANS		ND	ND	5.0
VC		0.35	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>16.35</b>	<b>5.20</b>	

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 2023 Analytical Results Summary

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

### Recovery Well DR-1 Sampling Events

Sample Date: 3/9/2023

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		<b>770.00</b>	<b>470.00</b>	5.0
CIS		<b>150.00</b>	<b>100.00</b>	5.0
TRANS		<b>9.40</b>	ND	5.0
VC		<b>11.00</b>	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>940.40</b>	<b>570.00</b>	

### Recovery Well DR-4 Sampling Events

Sample Date: 3/9/2023

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		<b>21.00</b>	<b>15.00</b>	5.0
CIS		<b>7.10</b>	ND	5.0
TRANS		ND	ND	5.0
VC		ND	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>28.10</b>	<b>15.00</b>	

### Recovery Well DR-2 Sampling Events

Sample Date: 3/9/2023

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		<b>48.00</b>	<b>19.00</b>	5.0
CIS		<b>160.00</b>	<b>67.00</b>	5.0
TRANS		1.50	ND	5.0
VC		<b>5.40</b>	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>214.90</b>	<b>86.00</b>	

### Recovery Well G-1 Sampling Events

Sample Date: 3/9/2023

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		<b>5.90</b>	<b>7.50</b>	5.0
CIS		<b>47.00</b>	<b>26.00</b>	5.0
TRANS		ND	ND	5.0
VC		0.95	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>53.85</b>	<b>33.50</b>	

### Recovery Well DR-3 Sampling Events

Sample Date: 3/9/2023

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		<b>28.00</b>	<b>19.00</b>	5.0
CIS		<b>39.00</b>	<b>22.00</b>	5.0
TRANS		1.0	ND	5.0
VC		1.3	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>69.30</b>	<b>41.00</b>	

### Recovery Well G-2 Sampling Events

Sample Date: 3/9/2023

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		0.48	ND	5.0
CIS		<b>43.00</b>	<b>30.00</b>	5.0
TRANS		ND	ND	5.0
VC		1.10	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>44.58</b>	<b>30.00</b>	

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 2023 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: 3/10/2023

Analyte	in ppb	'Dec 2022	'Mar 2023	NYS Guidance Value
TCE		<b>21.00</b>	<b>17.00</b>	5.0
CIS		<b>160.00</b>	<b>110.00</b>	5.0
TRANS		1.40	ND	5.0
VC		0.49	ND	2.0
TCA		ND	ND	5.0
Total VOCs		<b>182.89</b>	<b>127.00</b>	

**Duplicate Blank (DR-1)**  
 Sampling Events

Sample Date: 3/9/2023

Analyte	in ppb	'Mar 2023	NYS Guidance Value
TCE		<b>470.00</b>	5.0
CIS		<b>97.00</b>	5.0
TRANS		ND	5.0
VC		ND	2.0
TCA		ND	5.0
Total VOCs		<b>567.00</b>	

**Equipment Blank**  
 Sampling Events

Sample Date: 3/10/2023

Analyte	in ppb	'Dec 2022	'Mar 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  
 NS = Not Sampled. No analysis performed during this sampling event.  
 Results expressed as parts per billion (ppb).  
 Total VOCs values are not the total VOCs detected, but the sum of TCE, CIS, TRANS, VC, and TCA detected.

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

**Table 3 Historic Groundwater Analysis Results Summary**  
 Gowanda Day Habilitation Center  
 4 Industrial Place, Gowanda, New York  
 VCA # V-00463-9

Monitoring Well Number	MONITORING WELLS																																						
	Total VOCs Mar 2023 (ppb)	Total VOCs Dec 2022 (ppb)	Total VOCs Sep 2022 (ppb)	Total VOCs Jun 2022 (ppb)	Total VOCs Mar 2021 (ppb)	Total VOCs Nov 2021 (ppb)	Total VOCs Sep 2021 (ppb)	Total VOCs Jun 2021 (ppb)	Total VOCs Mar 2020 (ppb)	Total VOCs Nov 2020 (ppb)	Total VOCs Sep 2020 (ppb)	Total VOCs Jun 2020 (ppb)	Total VOCs Feb 2020 (ppb)	Total VOCs Oct 2019 (ppb)	Total VOCs Aug 2019 (ppb)	Total VOCs July 2019 (ppb)	Total VOCs May 2018 (ppb)	Total VOCs April 2018 (ppb)	Total VOCs Nov 2017 (ppb)	Total VOCs Aug 2017 (ppb)	Total VOCs Nov 2016 (ppb)	Total VOCs Sep 2016 (ppb)	Total VOCs Jun 2016 (ppb)	Total VOCs Nov 2015 (ppb)	Total VOCs Aug 2015 (ppb)	Total VOCs Nov 2014 (ppb)	Total VOCs Sep 2014 (ppb)	Total VOCs Jun 2014 (ppb)	Total VOCs Dec 2013 (ppb)	Total VOCs Jul 2013 (ppb)	Total VOCs Apr 2013 (ppb)	Total VOCs Dec 2012 (ppb)	Total VOCs Jun 2012 (ppb)	Total VOCs Mar 2012 (ppb)					
MW-1	449.00	869.60	1,002.30	529.40	382.59	990.46	404.62	928.90	344.70	1,020.00	991.80	983.50	1,009.00	698.00	1,081.00	1,080.00	1,190.00	1,110.00	374.00	1,013.00	1,467.00	838.00	580.00	1,530.00	1,470.00	350.00	430.00	300.00	420.00	990.00	1,740.00	830.00	910.00	1,440.00	528.00	889.00			
MW-2	ND	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS			
MW-3	ND	0.20	1.14	1.04	0.26	ND	ND	1.31	1.14	ND	0.30	ND	0.28	0.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
MW-4	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
MW-5	ND	0.89	0.75	1.00	0.60	1.20	1.50	0.79	1.80	ND	0.51	0.42	0.47	0.52	0.90	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS			
MW-6	62.00	100.00	184.00	89.00	92.21	112.00	95.00	78.00	81.20	66.00	79.41	64.80	99.10	92.64	86.63	81.00	84.00	77.00	76.00	100.00	91.00	87.00	100.00	120.00	96.00	86.00	81.00	110.00	110.00	96.00	94.00	130.00	99.00	93.00	99.00	86.70	85.70		
MW-7	22.00	23.87	8.76	30.26	33.06	29.16	102.37	94.74	173.67	ND	73.89	1.16	65.58	99.00	27.83	ND	ND	ND	ND	5.80	26.00	110.00	62.00	83.00	49.00	130.00	68.00	ND	180.00	190.00	29.00	ND	18.00	ND	151.56	30.90			
MW-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-11	304.00	291.40	350.00	200.10	420.60	495.40	386.30	498.70	546.50	584.00	1,274.00	624.60	889.30	937.40	1,059.00	899.30	282.00	499.00	1,169.00	470.00	525.00	646.00	445.00	859.00	1,069.00	830.00	444.00	530.00	451.00	375.00	450.00	710.00	880.00	510.00	570.00	790.00	498.00	617.00	
MW-12	170.00	93.65	78.30	168.10	271.90	125.40	65.89	65.88	60.05	84.00	147.03	116.54	54.00	54.48	79.00	53.00	25.00	100.00	113.00	31.00	40.00	7.10	7.80	15.80	28.80	62.00	97.00	120.00	126.00	136.00	200.00	212.00	173.00	149.30	196.60	142.00	86.50	148.22	
MW-13	ND	2.06	0.96	2.06	6.11	1.83	0.95	2.40	1.34	ND	2.70	3.40	2.10	0.50	1.38	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-14	63.90	52.30	91.90	31.00	104.45	91.86	84.40	20.80	63.40	13.00	19.20	34.00	33.00	26.50	25.30	30.70	22.30	22.80	28.00	38.00	22.10	76.00	100.00	57.00	81.00	96.00	52.00	99.00	68.00	68.00	54.00	73.00	94.00	49.00	71.00	47.00	39.70	76.60	
MW-15	ND	5.00	3.70	14.10	9.40	15.60	24.89	2.60	25.80	ND	5.00	2.90	7.60	8.10	4.80	ND	6.60	ND	ND	7.40	11.00	23.80	11.00	9.80	14.00	8.10	9.80	32.00	31.00	6.10	ND	8.80	7.00	ND	12.00	26.26	6.25		
MW-16	23.00	26.66	9.72	41.79	35.02	31.75	22.56	14.32	11.29	13.00	37.43	26.62	7.11	31.53	37.81	41.00	10.00	41.00	43.00	32.00	36.00	14.00	20.00	37.00	31.00	13.00	6.80	ND	5.20	9.40	21.00	24.00	20.00	8.40	24.00	18.00	4.36	12.20	
MW-17	7.30	226.32	172.22	11.79	85.32	85.27	230.86	173.60	271.20	295.00	266.20	16.20	193.01	342.00	277.00	218.00	285.00	112.50	5.10	222.00	396.00	375.00	465.00	425.00	460.00	410.00	NS	336.00	394.00	410.00	339.00	167.00	420.00	400.00	21.30	430.00	381.00	260.10	
MW-18	ND	5.84	7.01	0.43	3.88	6.42	6.33	1.55	7.13	ND	2.27	0.73	1.60	3.10	2.80	ND	ND	ND	ND	6.30	ND	10.00	26.00	6.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16.60	2.33	
MW-19R	ND	ND	0.22	0.32	0.30	0.29	0.34	0.50	0.36	ND	0.26	0.19	0.28	0.60	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21	5.20	16.36	26.48	6.35	7.76	16.27	19.16	5.60	32.04	11.00	5.90	23.50	24.49	18.33	NS	NS	NS	NS	NS	NS	17.00	39.00	8.70	20.00	20.00	10.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-X (DUP)	567.00	281.30	215.80	1.20	109.45	6.50	ND	152.40	100.46	13.00	2.40	3.30	1,119.90	1,118.90	914.60	ND	ND	434.00	NS	490.00	NS	1,735.00	879.00	550.00	1,729.00	410.00	360.00	407.00	300.00	400.00	870.00	990.00	1,850.00	540.00	186.80	1,450.00	521.00	913.00	
EB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Recovery Well Number	RECOVERY WELLS																																						
	Total VOCs Mar 2023 (ppb)	Total VOCs Dec 2022 (ppb)	Total VOCs Sep 2022 (ppb)	Total VOCs Jun 2022 (ppb)	Total VOCs Mar 2021 (ppb)	Total VOCs Nov 2021 (ppb)	Total VOCs Sep 2021 (ppb)	Total VOCs Jun 2021 (ppb)	Total VOCs Mar 2020 (ppb)	Total VOCs Nov 2020 (ppb)	Total VOCs Sep 2020 (ppb)	Total VOCs Jun 2020 (ppb)	Total VOCs Feb 2020 (ppb)	Total VOCs Oct 2019 (ppb)	Total VOCs Aug 2019 (ppb)	Total VOCs July 2019 (ppb)	Total VOCs Nov 2018 (ppb)	Total VOCs August 2018 (ppb)	Total VOCs May 2018 (ppb)	Total VOCs April 2018 (ppb)	Total VOCs Nov 2017 (ppb)	Total VOCs Aug 2017 (ppb)	Total VOCs Nov 2016 (ppb)	Total VOCs Sep 2016 (ppb)	Total VOCs Jun 2016 (ppb)	Total VOCs Nov 2015 (ppb)	Total VOCs Aug 2015 (ppb)	Total VOCs Jun 2015 (ppb)	Total VOCs Mar 2015 (ppb)	Total VOCs Nov 2014 (ppb)	Total VOCs Sep 2014 (ppb)	Total VOCs Jun 2014 (ppb)	Total VOCs Dec 2013 (ppb)	Total VOCs Jul 2013 (ppb)	Total VOCs Apr 2013 (ppb)	Total VOCs Dec 2012 (ppb)	Total VOCs Jun 2012 (ppb)	Total VOCs Mar 2012 (ppb)	
DR-1	570.00	940.40	229.80	341.00	663.90	598.60	98.06	485.30	117.80	909.00	1222.00	1123.60	912.80	1038.00	1832.00	1310.00	1510.00	1318.00	1070.00	1540.00	1970.00	617.00	610.00	210.00	319.00	160.00	NS	21.70	63.00	55.00	75.00	132.00	87.00	73.00	82.00	43.00	29.38	673.60	
DR-2	96.00	214.90	129.70	100.15	129.15	251.30	162.40	144.20	111.60	116.00	129.70	137.80	185.90	192.00	156.00	129.00	130.00	181.00	193.00	193.00	157.00	218.00	215.00	190.00	187.00	291.00	253.00	162.00	224.00	231.00	207.00	302.00	256.00	293.00	19.00	229.90	305.90		
DR-3	41.00	69.30	76.95	85.71	75.20	94.88	85.26	66.77	81.73	63.00	81.80	67.70	99.70	101.00	91.00	73.00	87.00	125.40	34.00	48.00	NS	98.00	154.00	62.00	45.00	76.00	83.00	55.00	181.00	210.00	83.00	89.00	123.00	62.00	73.00	42.00	116.96	24.90	
DR-4	15.00	28.10	31.25	24.40	29.00	34.60	34.10	31.90	42.34	29.90	30.60	32.40	40.60	46.60	40.00	37.20	48.00	31.20	31.60	46.00	52.00	73.00	95.00	83.00	94.00	110.00	71.00	147.00	156.00	148.00	96.00	64.00	68.00	79.00	37.00	90.00	122.60	ND	
G-1	33.50	53.85	87.50	41.88	47.21	53.88	51.83	45.82	100.60	53.00	37.60	50.10	70.00	78.70	50.40	74.60	77.00	40.00	22.00	70.00	73.50	85.00	105.60	99.70	80.30	ND	68.00	146.00	101.00	105.00	80.00	78.00	96.20	69.10	55.80	52.80	98.55	65.58	
G-2	30.00	44.98	33.91	67.69	45.35	52.67	45.40	64.38	37.46	54.00	30.90	18.80	90.49	90.00	69.00	25.00	68.00	50.00	46.00	8.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
G-3	127.00	182.89	182.69	160.61	153.75	185.80	226.09	177.73	236.35	235.00	272.36	335.52	305.34	309.65	309.65	15.00	322.00	NS	NS	NS	NS	293.00	404.00	420.00	282.00	370.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

NS= This well not included in this sampling event.  
 ND = Not Detected, results less than Method Detection Limit.  
 Impacted north recovery line wells: MW-5, MW-6, MW-7, MW-16, MW-17, MW-21  
 All compounds are measured in parts per billion (ppb).  
 VOC - Volatile Organic Compounds.  
 DUP - Duplicate Sample  
 EB - Equipment Field Blank Sample  
 \* - Sample was broken in transit and not able to be analyzed  
 DWS - Different Well Sampled than previous listed.



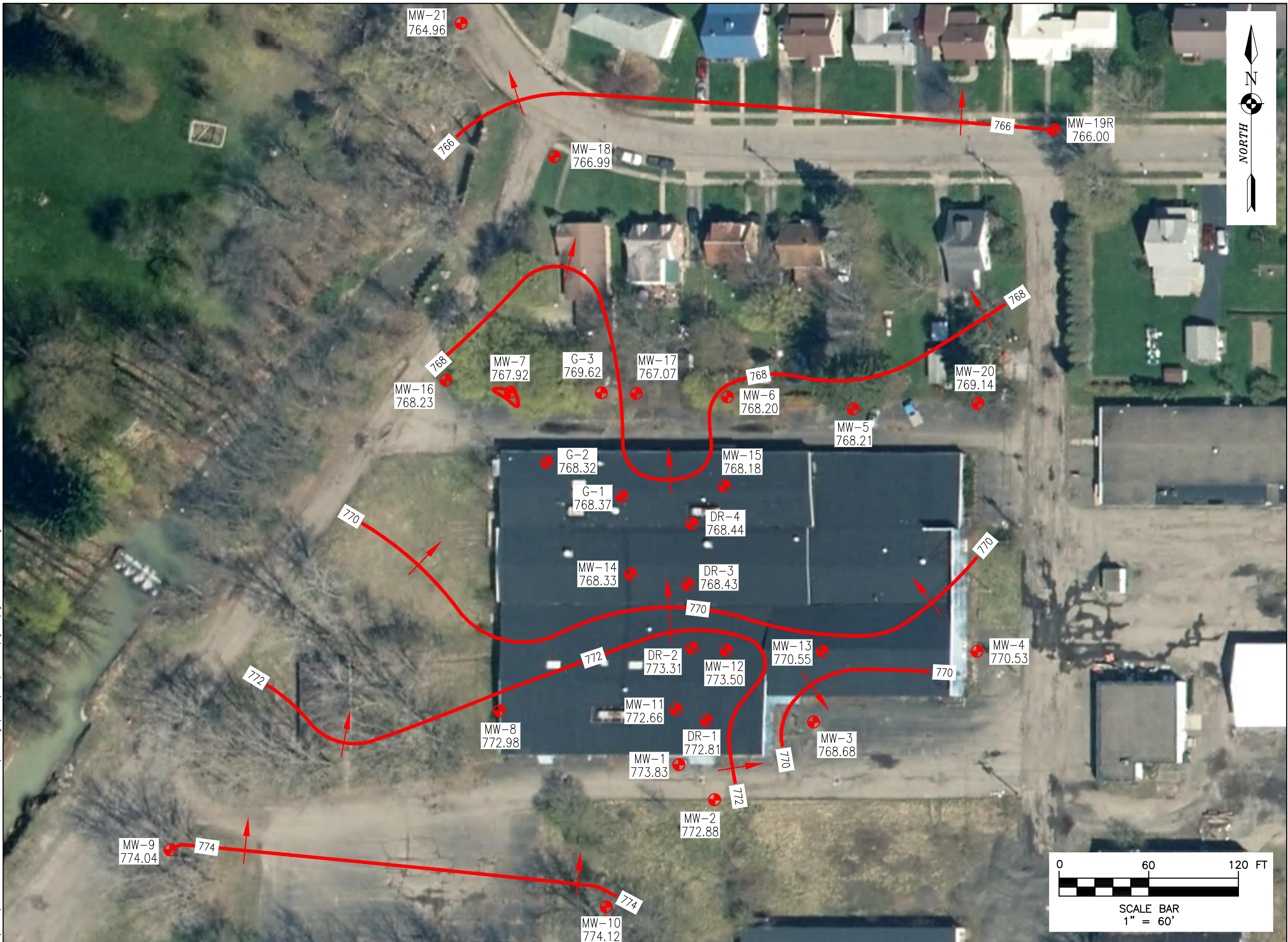






# FIGURES

I:\DASNY\014263.12 DASNY-Gowanda 2022 O&M AE\3.0 Design\3.8 Reports\Q1 2023\Figures\Figure 1 March 2023.dwg



**DASNY**  
**Gowanda Day Habilitation Center**  
 4 Industrial Place  
 Gowanda, New York



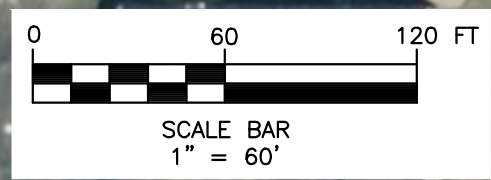
Bergmann Associates, Architects, Engineers, Landscape Architects & Surveyors, D.P.C.  
 280 East Broad Street  
 Suite 200  
 Rochester, NY 14604  
 office: 585.232.5135  
 fax: 585.232.4652  
 www.bergmannpc.com

REVISIONS				
NO.	DATE	DESCRIPTION	REV.	CKD

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

Project Manager: J. O'BRIEN	Checked By: J. O'BRIEN
Designed By: C. WOOD	Drawn By: C. WOOD
Date Issued: 04/08/2023	Scale: 1" = 60'
Project Number: 14263.12	



**MARCH 2023 WATER LEVEL CONTOUR MAP**

Drawing Number:

**FIGURE 1**

**Gowanda Day  
Habilitation Center**

**4 Industrial Place  
Gowanda, NY**



**BERGMANN**  
ARCHITECTS ENGINEERS PLANNERS

**Figure 2**

**March 2023  
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 2023  
Distribution of  
Groundwater  
Analytical Results:  
Recovery Wells**

0 25 50 75 100



Feet

N

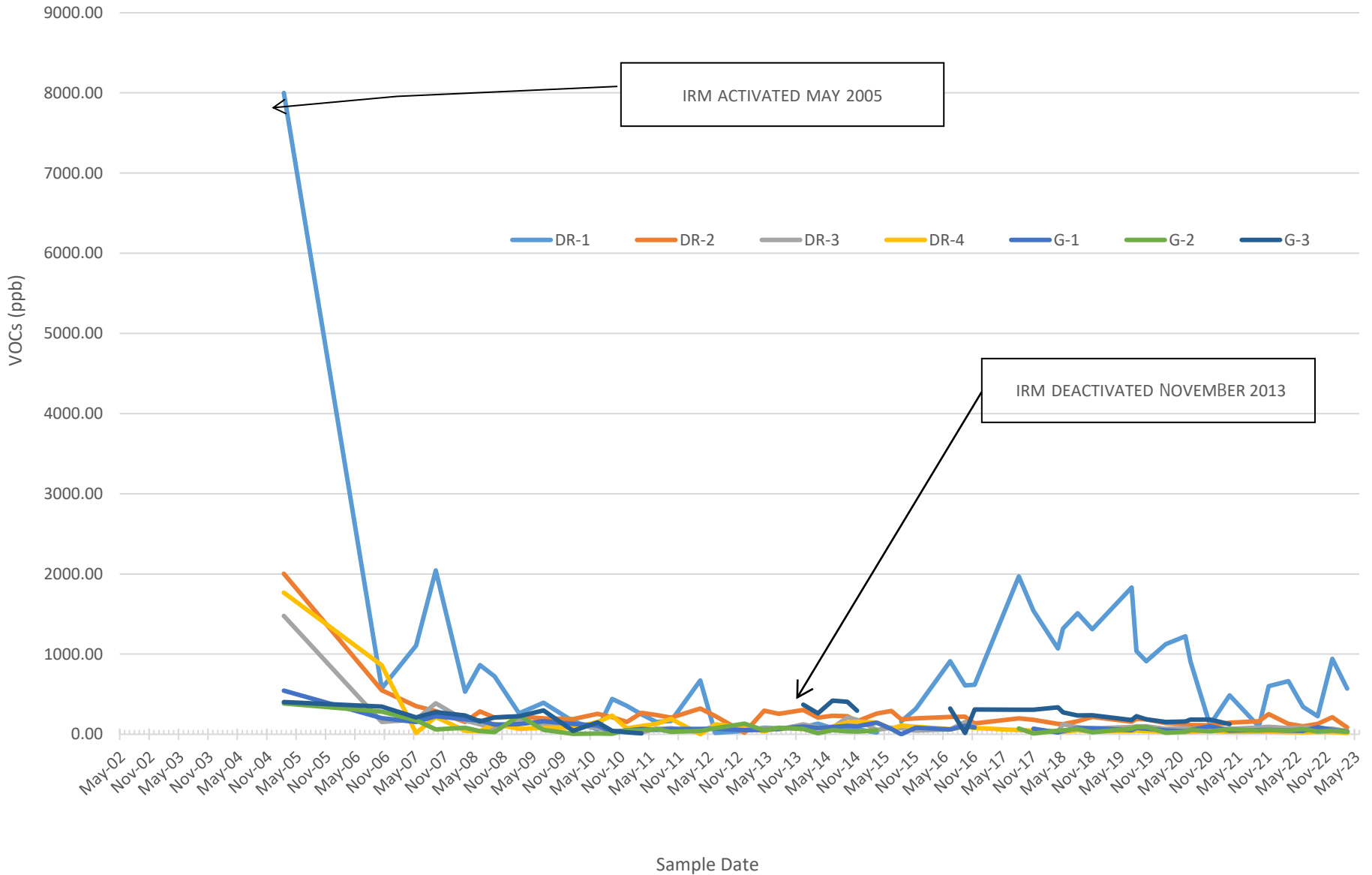




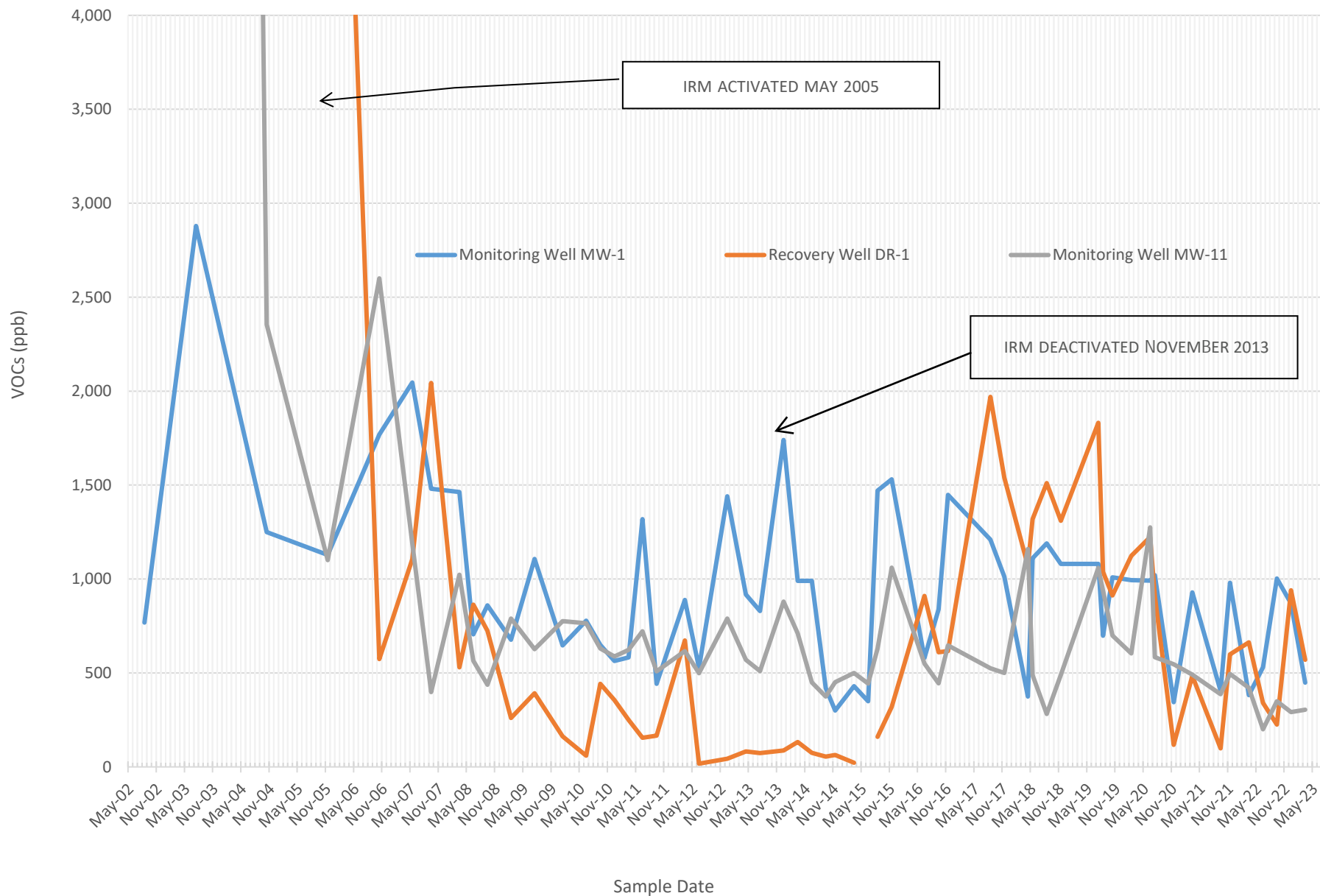
# CHARTS



### Groundwater Recovery Wells DR-1, DR-2, DR-3, DR-4, G-1, G-2, and G-3

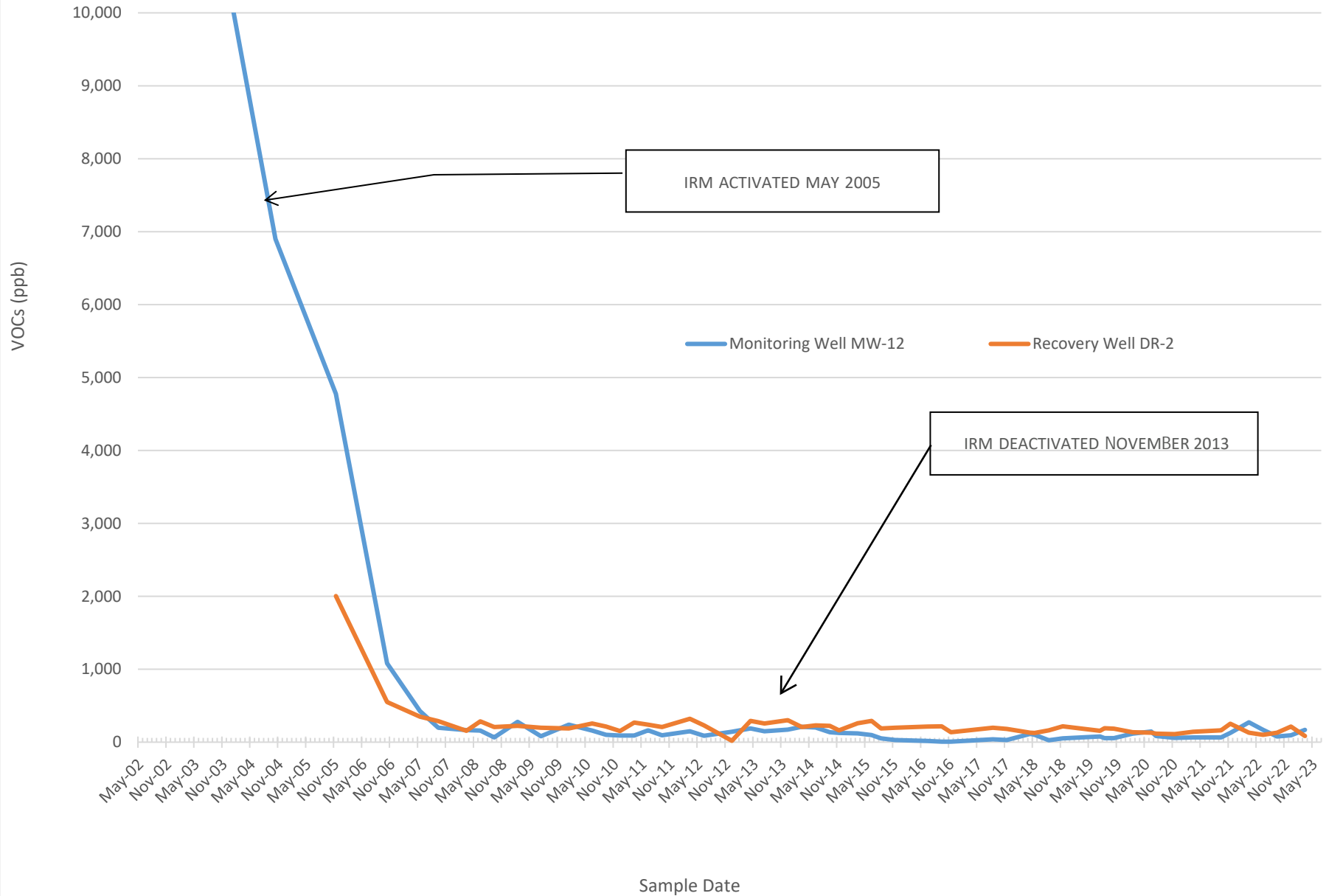


MW-1, DR-1 and MW-11





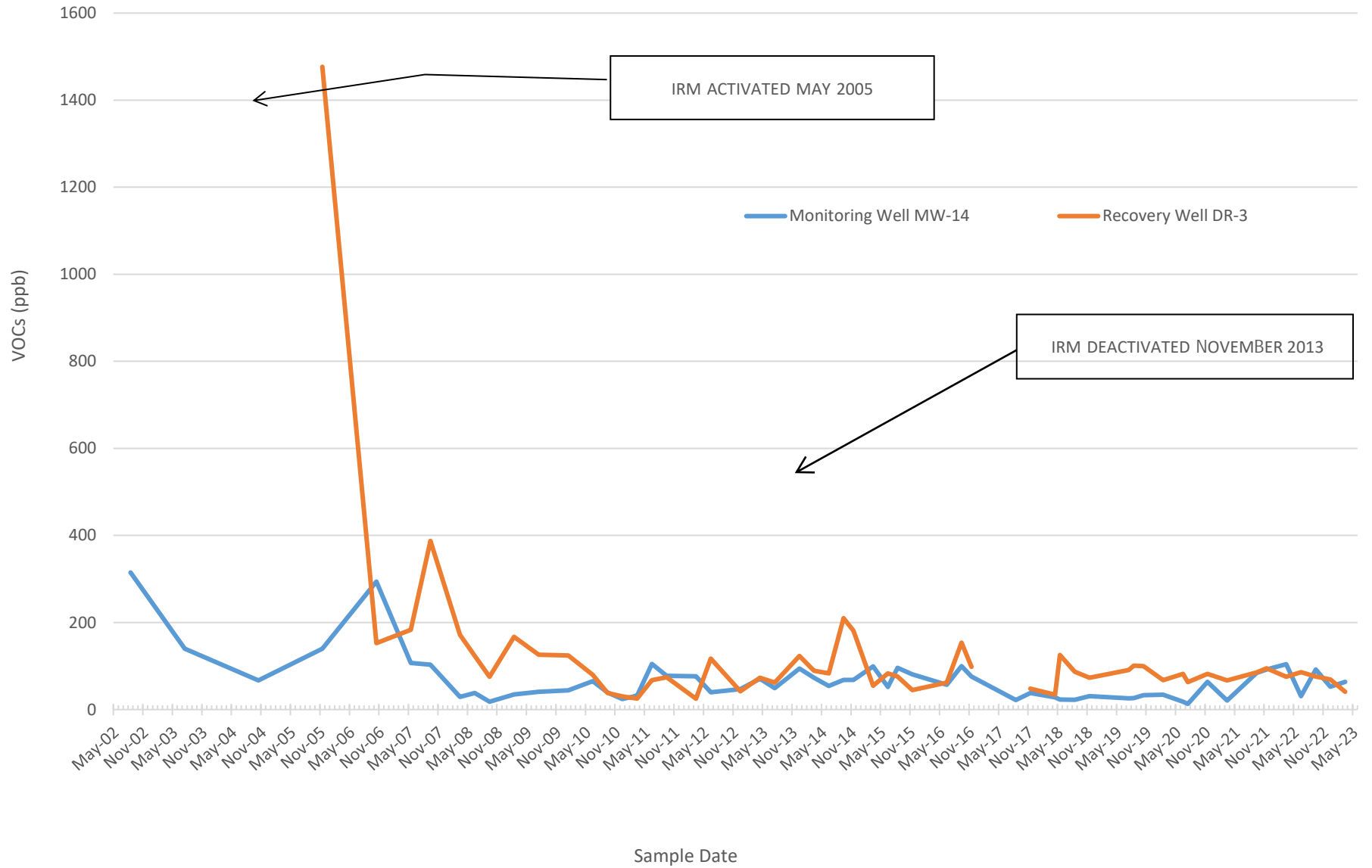
MW-12 and DR-2





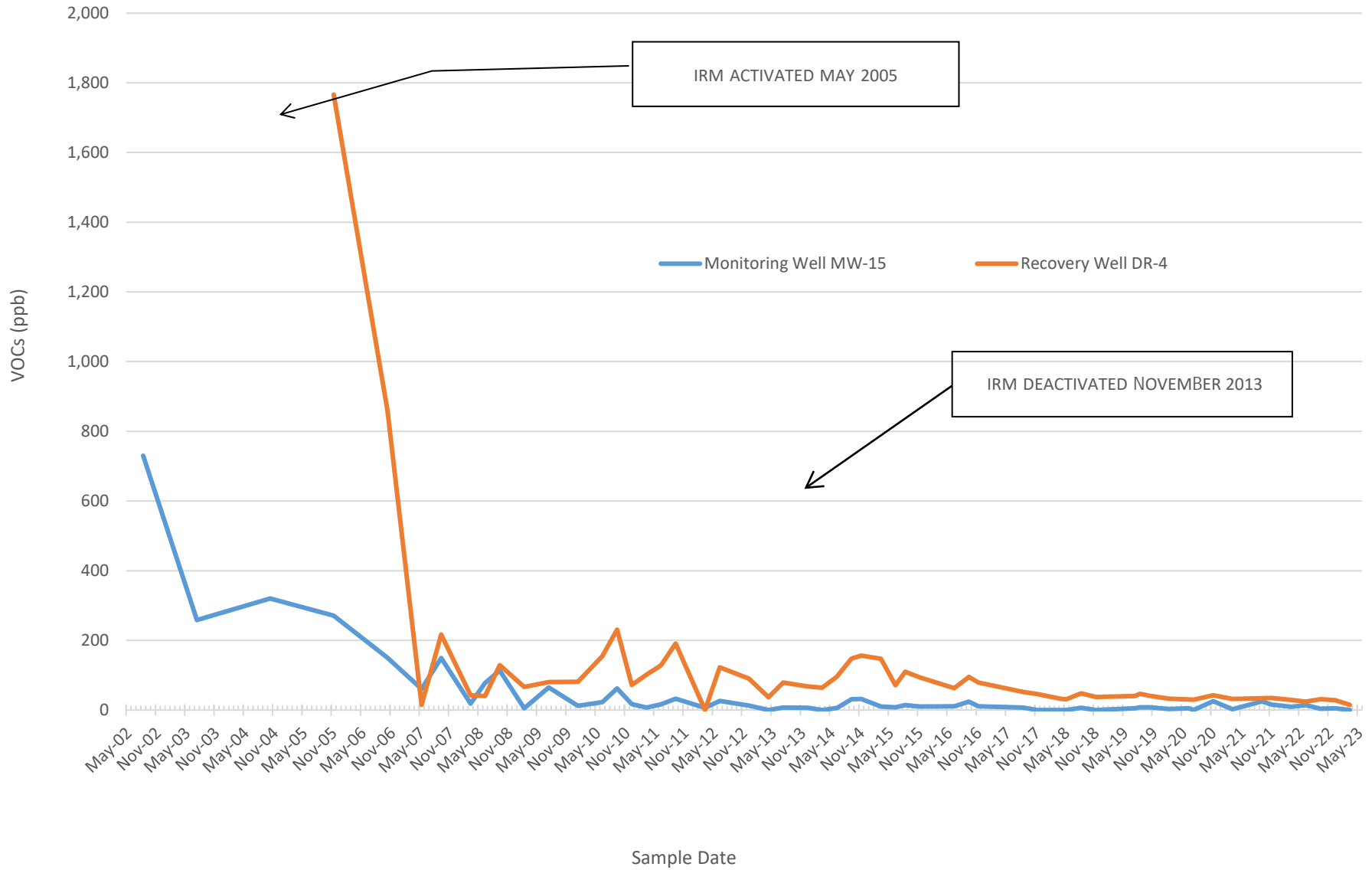


### MW-14 and DR-3

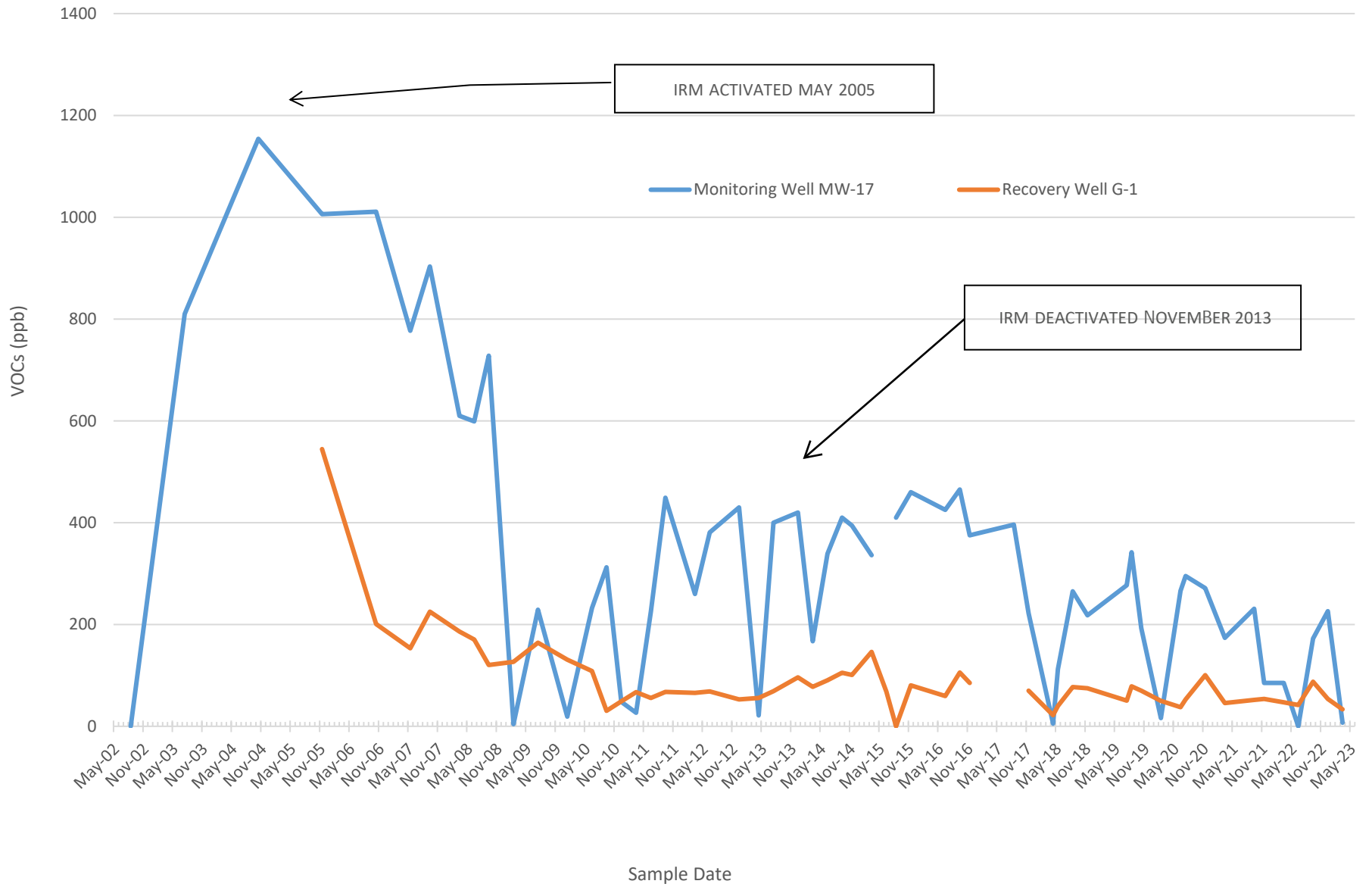




### MW-15 and DR-4

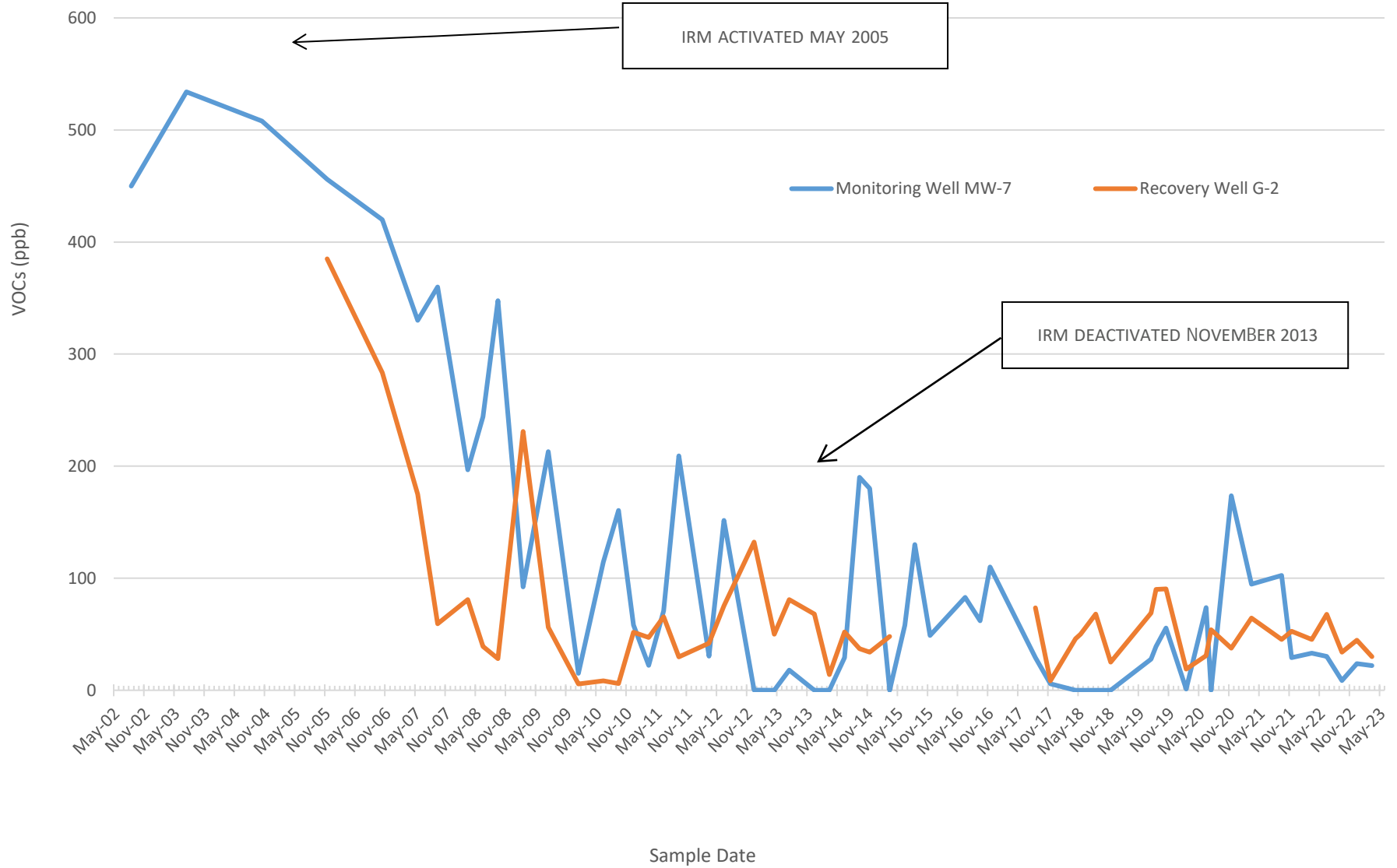


MW-17 and G-1



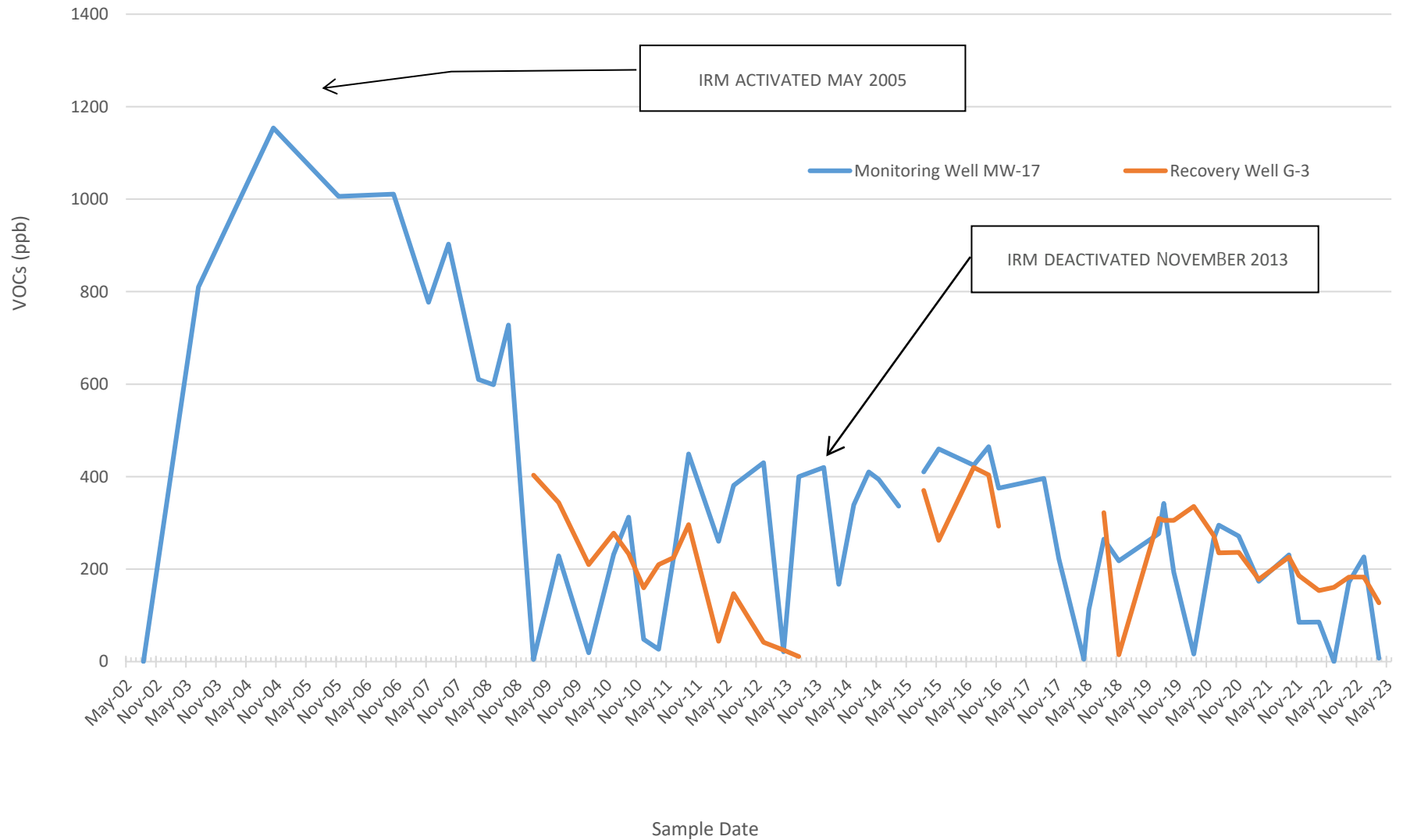


### MW-7 and G-2





### MW-17 and G-3





# APPENDICES



# **ANALYTICAL RESULTS**



April 05, 2023

Service Request No:R2302091

Ariadna Cheremeteff  
Bergmann Associates, Incorporated  
280 East Broad Street  
Suite 200  
Rochester, NY 14604

**Laboratory Results for: Q1 Gowanda 2023**

Dear Ariadna,

Enclosed are the results of the sample(s) submitted to our laboratory March 10, 2023  
For your reference, these analyses have been assigned our service request number **R2302091**.

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](mailto:Chris.Leavy@alsglobal.com).

Respectfully submitted,

**ALS Group USA, Corp. dba ALS Environmental**

Christopher Leavy  
Project Manager

**ADDRESS** 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623  
**PHONE** +1 585 288 5380 | **FAX** +1 585 288 8475  
ALS Group USA, Corp.  
dba ALS Environmental





# 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](http://www.alsglobal.com)



**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Received:** 03/10/2023

**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:**

Twenty water samples were received for analysis at ALS Environmental on 03/10/2023. 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:**

No significant anomalies were noted with this analysis.

A handwritten signature in black ink, appearing to be "WZ", is written over a horizontal line.

Approved by \_\_\_\_\_

Date 03/21/2023



### 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.

<b>CLIENT ID: MW-1</b>	<b>Lab ID: R2302091-001</b>
------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	49			25	ug/L	8260C
Trichloroethene (TCE)	400			25	ug/L	8260C

<b>CLIENT ID: MW-6</b>	<b>Lab ID: R2302091-006</b>
------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	34			5.0	ug/L	8260C
Vinyl Chloride	28			5.0	ug/L	8260C

<b>CLIENT ID: MW-7</b>	<b>Lab ID: R2302091-007</b>
------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	22			5.0	ug/L	8260C

<b>CLIENT ID: MW-11</b>	<b>Lab ID: R2302091-011</b>
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	74			13	ug/L	8260C
Trichloroethene (TCE)	230			13	ug/L	8260C

<b>CLIENT ID: MW-12</b>	<b>Lab ID: R2302091-012</b>
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	150			5.0	ug/L	8260C
Trichloroethene (TCE)	20			5.0	ug/L	8260C

<b>CLIENT ID: MW-14</b>	<b>Lab ID: R2302091-014</b>
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	56			5.0	ug/L	8260C
Trichloroethene (TCE)	7.9			5.0	ug/L	8260C

<b>CLIENT ID: MW-16</b>	<b>Lab ID: R2302091-016</b>
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	23			5.0	ug/L	8260C

<b>CLIENT ID: MW-17</b>	<b>Lab ID: R2302091-017</b>
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Trichloroethene (TCE)	7.3			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](http://www.alsglobal.com)

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12

**Service Request:**R2302091

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2302091-001	MW-1	3/9/2023	1538
R2302091-002	MW-2	3/9/2023	1555
R2302091-003	MW-3	3/9/2023	1618
R2302091-004	MW-4	3/9/2023	1633
R2302091-005	MW-5	3/10/2023	0808
R2302091-006	MW-6	3/10/2023	0835
R2302091-007	MW-7	3/10/2023	1000
R2302091-008	MW-8	3/9/2023	1423
R2302091-009	MW-9	3/9/2023	1512
R2302091-010	MW-10	3/9/2023	1447
R2302091-011	MW-11	3/9/2023	1320
R2302091-012	MW-12	3/9/2023	1220
R2302091-013	MW-13	3/9/2023	1231
R2302091-014	MW-14	3/9/2023	1111
R2302091-015	MW-15	3/9/2023	1050
R2302091-016	MW-16	3/10/2023	1126
R2302091-017	MW-17	3/10/2023	0906
R2302091-018	MW-18	3/10/2023	1159
R2302091-019	MW-19R	3/10/2023	1018
R2302091-020	MW-20	3/10/2023	0750







# Cooler Receipt and Preservation Check Form

R2302091

5

Bergmann Associates, Incorporated  
Q1 Gowanda 2023



Project/Client Bergmann Folder Number \_\_\_\_\_

Cooler received on 3/10/23 by: SES

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y <u>(N)</u>
2	Custody papers properly completed (ink, signed)?	Y <u>(N)</u>
3	Did all bottles arrive in good condition (unbroken)?	Y <u>(N)</u>
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	Y <u>(N)</u>
5a	Perchlorate samples have required headspace?	Y N <u>(NA)</u>
5b	Did <u>VOA vials</u> Alk, or Sulfide have sig* bubbles?	Y <u>(N)</u> NA
6	Where did the bottles originate?	<u>ALS/ROO</u> CLIENT
7	Soil VOA received as: Bulk Encore 5035set	<u>(NA)</u>

8. Temperature Readings Date: 3/10/23 Time: 1520 ID: IR#7 (IR#11) From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>8.8</u>						
Within 0-6°C?	Y <u>(N)</u>	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y 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: ROO2 by SES on 3/10/23 at 1522  
5035 samples placed in storage location: \_\_\_\_\_ by \_\_\_\_\_ on \_\_\_\_\_ at \_\_\_\_\_ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check\*\*: Date: 3/13/23 Time: 09105 by: HE

- 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 (N/A)
- 13. Were dissolved metals filtered in the field? YES NO (N/A)
- 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 <sub>3</sub>								
<2		H <sub>2</sub> SO <sub>4</sub>								
<4		NaHSO <sub>4</sub>								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (625, 608, CN), ascorbic (phenol).					
		Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>								
		ZnAcetate	-	-						
		HCl	**	**	<u>22080153</u>	<u>06/25</u>				

\*\*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: 091222-3AXH  
Explain all Discrepancies/ Other Comments: \_\_\_\_\_

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: HE  
PC Secondary Review: \_\_\_\_\_

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





## 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](http://www.alsglobal.com)

## REPORT QUALIFIERS AND DEFINITIONS

<p><b>U</b> 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.</p> <p><b>J</b> 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 &gt;40% difference between two GC columns (pesticides/Aroclors).</p> <p><b>B</b> Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.</p> <p><b>E</b> Inorganics- Concentration is estimated due to the serial dilution was outside control limits.</p> <p><b>E</b> Organics- Concentration has exceeded the calibration range for that specific analysis.</p> <p><b>D</b> 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> <p><b>*</b> 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.</p> <p><b>H</b> Analysis was performed out of hold time for tests that have an “immediate” hold time criteria.</p> <p><b>#</b> Spike was diluted out.</p>	<p><b>+</b> Correlation coefficient for MSA is &lt;0.995.</p> <p><b>N</b> Inorganics- Matrix spike recovery was outside laboratory limits.</p> <p><b>N</b> Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.</p> <p><b>S</b> Concentration has been determined using Method of Standard Additions (MSA).</p> <p><b>W</b> Post-Digestion Spike recovery is outside control limits and the sample absorbance is &lt;50% of the spike absorbance.</p> <p><b>P</b> Concentration &gt;40% difference between the two GC columns.</p> <p><b>C</b> Confirmed by GC/MS</p> <p><b>Q</b> DoD reports: indicates a pesticide/Aroclor is not confirmed (<math>\geq 100\%</math> Difference between two GC columns).</p> <p><b>X</b> See Case Narrative for discussion.</p> <p><b>MRL</b> Method Reporting Limit. Also known as:</p> <p><b>LOQ</b> Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.</p> <p><b>MDL</b> 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).</p> <p><b>LOD</b> Limit of Detection. A value at or above the MDL which has been verified to be detectable.</p> <p><b>ND</b> Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.</p>
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### Rochester Lab ID # for State Accreditations<sup>1</sup>



NELAP 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

<sup>1</sup> 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 or go to <https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental>

# ALS Laboratory Group

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## 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:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12

**Service Request:** R2302091

**Sample Name:** MW-1  
**Lab Code:** R2302091-001  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-2  
**Lab Code:** R2302091-002  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-3  
**Lab Code:** R2302091-003  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-4  
**Lab Code:** R2302091-004  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-5  
**Lab Code:** R2302091-005  
**Sample Matrix:** Water

**Date Collected:** 03/10/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

ALS Group USA, Corp.  
dba ALS Environmental

Analyst Summary report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12

**Service Request:** R2302091

**Sample Name:** MW-6  
**Lab Code:** R2302091-006  
**Sample Matrix:** Water

**Date Collected:** 03/10/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-7  
**Lab Code:** R2302091-007  
**Sample Matrix:** Water

**Date Collected:** 03/10/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-8  
**Lab Code:** R2302091-008  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-9  
**Lab Code:** R2302091-009  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-10  
**Lab Code:** R2302091-010  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12

**Service Request:** R2302091

**Sample Name:** MW-11  
**Lab Code:** R2302091-011  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-12  
**Lab Code:** R2302091-012  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-13  
**Lab Code:** R2302091-013  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-14  
**Lab Code:** R2302091-014  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-15  
**Lab Code:** R2302091-015  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

ALS Group USA, Corp.  
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Analyst Summary report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12

**Service Request:** R2302091

**Sample Name:** MW-16  
**Lab Code:** R2302091-016  
**Sample Matrix:** Water

**Date Collected:** 03/10/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-17  
**Lab Code:** R2302091-017  
**Sample Matrix:** Water

**Date Collected:** 03/10/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-18  
**Lab Code:** R2302091-018  
**Sample Matrix:** Water

**Date Collected:** 03/10/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-19R  
**Lab Code:** R2302091-019  
**Sample Matrix:** Water

**Date Collected:** 03/10/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER

**Sample Name:** MW-20  
**Lab Code:** R2302091-020  
**Sample Matrix:** Water

**Date Collected:** 03/10/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
FNAEGLER



## 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.	





# 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](http://www.alsglobal.com)



## Volatile Organic Compounds by GC/MS

**ALS Environmental—Rochester Laboratory**  
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Phone (585) 288-5380 Fax (585) 288-8475  
[www.alsglobal.com](http://www.alsglobal.com)

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 15:38  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-1  
**Lab Code:** R2302091-001

**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)	25 U	25	5	03/17/23 07:57	
1,1,2,2-Tetrachloroethane	25 U	25	5	03/17/23 07:57	
1,1,2-Trichloroethane	25 U	25	5	03/17/23 07:57	
1,1,2-Trichloro-1,2,2-trifluoroethane	25 U	25	5	03/17/23 07:57	
1,1-Dichloroethane (1,1-DCA)	25 U	25	5	03/17/23 07:57	
1,1-Dichloroethene (1,1-DCE)	25 U	25	5	03/17/23 07:57	
1,2,3-Trichlorobenzene	25 U	25	5	03/17/23 07:57	
1,2,4-Trichlorobenzene	25 U	25	5	03/17/23 07:57	
1,2-Dibromo-3-chloropropane (DBCP)	25 U	25	5	03/17/23 07:57	
1,2-Dibromoethane	25 U	25	5	03/17/23 07:57	
1,2-Dichlorobenzene	25 U	25	5	03/17/23 07:57	
1,2-Dichloroethane	25 U	25	5	03/17/23 07:57	
1,2-Dichloropropane	25 U	25	5	03/17/23 07:57	
1,3-Dichlorobenzene	25 U	25	5	03/17/23 07:57	
1,4-Dichlorobenzene	25 U	25	5	03/17/23 07:57	
1,4-Dioxane	500 U	500	5	03/17/23 07:57	
2-Butanone (MEK)	50 U	50	5	03/17/23 07:57	
2-Hexanone	50 U	50	5	03/17/23 07:57	
4-Methyl-2-pentanone	50 U	50	5	03/17/23 07:57	
Acetone	50 U	50	5	03/17/23 07:57	
Benzene	25 U	25	5	03/17/23 07:57	
Bromochloromethane	25 U	25	5	03/17/23 07:57	
Bromodichloromethane	25 U	25	5	03/17/23 07:57	
Bromoform	25 U	25	5	03/17/23 07:57	
Bromomethane	25 U	25	5	03/17/23 07:57	
Carbon Disulfide	50 U	50	5	03/17/23 07:57	
Carbon Tetrachloride	25 U	25	5	03/17/23 07:57	
Chlorobenzene	25 U	25	5	03/17/23 07:57	
Chloroethane	25 U	25	5	03/17/23 07:57	
Chloroform	25 U	25	5	03/17/23 07:57	
Chloromethane	25 U	25	5	03/17/23 07:57	
Cyclohexane	50 U	50	5	03/17/23 07:57	
Dibromochloromethane	25 U	25	5	03/17/23 07:57	
Dichlorodifluoromethane (CFC 12)	25 U	25	5	03/17/23 07:57	
Dichloromethane	25 U	25	5	03/17/23 07:57	
Ethylbenzene	25 U	25	5	03/17/23 07:57	
Isopropylbenzene (Cumene)	25 U	25	5	03/17/23 07:57	
Methyl Acetate	50 U	50	5	03/17/23 07:57	
Methyl tert-Butyl Ether	25 U	25	5	03/17/23 07:57	
Methylcyclohexane	50 U	50	5	03/17/23 07:57	
Styrene	25 U	25	5	03/17/23 07:57	
Tetrachloroethene (PCE)	25 U	25	5	03/17/23 07:57	
Toluene	25 U	25	5	03/17/23 07:57	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 15:38  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-1  
**Lab Code:** R2302091-001

**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)	<b>400</b>	25	5	03/17/23 07:57	
Trichlorofluoromethane (CFC 11)	25 U	25	5	03/17/23 07:57	
Vinyl Chloride	25 U	25	5	03/17/23 07:57	
cis-1,2-Dichloroethene	<b>49</b>	25	5	03/17/23 07:57	
cis-1,3-Dichloropropene	25 U	25	5	03/17/23 07:57	
m,p-Xylenes	25 U	25	5	03/17/23 07:57	
o-Xylene	25 U	25	5	03/17/23 07:57	
trans-1,2-Dichloroethene	25 U	25	5	03/17/23 07:57	
trans-1,3-Dichloropropene	25 U	25	5	03/17/23 07:57	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	03/17/23 07:57	
Dibromofluoromethane	95	80 - 116	03/17/23 07:57	
Toluene-d8	97	87 - 121	03/17/23 07:57	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 15:55  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-2  
**Lab Code:** R2302091-002

**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	03/17/23 00:53	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 00:53	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 00:53	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 00:53	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 00:53	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 00:53	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 00:53	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 00:53	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 00:53	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 00:53	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 00:53	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 00:53	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 00:53	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 00:53	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 00:53	
1,4-Dioxane	100 U	100	1	03/17/23 00:53	
2-Butanone (MEK)	10 U	10	1	03/17/23 00:53	
2-Hexanone	10 U	10	1	03/17/23 00:53	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 00:53	
Acetone	10 U	10	1	03/17/23 00:53	
Benzene	5.0 U	5.0	1	03/17/23 00:53	
Bromochloromethane	5.0 U	5.0	1	03/17/23 00:53	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 00:53	
Bromoform	5.0 U	5.0	1	03/17/23 00:53	
Bromomethane	5.0 U	5.0	1	03/17/23 00:53	
Carbon Disulfide	10 U	10	1	03/17/23 00:53	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 00:53	
Chlorobenzene	5.0 U	5.0	1	03/17/23 00:53	
Chloroethane	5.0 U	5.0	1	03/17/23 00:53	
Chloroform	5.0 U	5.0	1	03/17/23 00:53	
Chloromethane	5.0 U	5.0	1	03/17/23 00:53	
Cyclohexane	10 U	10	1	03/17/23 00:53	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 00:53	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 00:53	
Dichloromethane	5.0 U	5.0	1	03/17/23 00:53	
Ethylbenzene	5.0 U	5.0	1	03/17/23 00:53	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 00:53	
Methyl Acetate	10 U	10	1	03/17/23 00:53	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 00:53	
Methylcyclohexane	10 U	10	1	03/17/23 00:53	
Styrene	5.0 U	5.0	1	03/17/23 00:53	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 00:53	
Toluene	5.0 U	5.0	1	03/17/23 00:53	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 15:55  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-2  
**Lab Code:** R2302091-002

**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	03/17/23 00:53	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 00:53	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 00:53	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 00:53	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 00:53	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 00:53	
o-Xylene	5.0 U	5.0	1	03/17/23 00:53	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 00:53	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 00:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	03/17/23 00:53	
Dibromofluoromethane	96	80 - 116	03/17/23 00:53	
Toluene-d8	97	87 - 121	03/17/23 00:53	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 16:18  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-3  
**Lab Code:** R2302091-003

**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	03/17/23 01:15	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 01:15	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 01:15	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 01:15	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 01:15	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 01:15	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 01:15	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 01:15	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 01:15	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 01:15	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 01:15	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 01:15	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 01:15	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 01:15	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 01:15	
1,4-Dioxane	100 U	100	1	03/17/23 01:15	
2-Butanone (MEK)	10 U	10	1	03/17/23 01:15	
2-Hexanone	10 U	10	1	03/17/23 01:15	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 01:15	
Acetone	10 U	10	1	03/17/23 01:15	
Benzene	5.0 U	5.0	1	03/17/23 01:15	
Bromochloromethane	5.0 U	5.0	1	03/17/23 01:15	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 01:15	
Bromoform	5.0 U	5.0	1	03/17/23 01:15	
Bromomethane	5.0 U	5.0	1	03/17/23 01:15	
Carbon Disulfide	10 U	10	1	03/17/23 01:15	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 01:15	
Chlorobenzene	5.0 U	5.0	1	03/17/23 01:15	
Chloroethane	5.0 U	5.0	1	03/17/23 01:15	
Chloroform	5.0 U	5.0	1	03/17/23 01:15	
Chloromethane	5.0 U	5.0	1	03/17/23 01:15	
Cyclohexane	10 U	10	1	03/17/23 01:15	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 01:15	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 01:15	
Dichloromethane	5.0 U	5.0	1	03/17/23 01:15	
Ethylbenzene	5.0 U	5.0	1	03/17/23 01:15	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 01:15	
Methyl Acetate	10 U	10	1	03/17/23 01:15	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 01:15	
Methylcyclohexane	10 U	10	1	03/17/23 01:15	
Styrene	5.0 U	5.0	1	03/17/23 01:15	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 01:15	
Toluene	5.0 U	5.0	1	03/17/23 01:15	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 16:18  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-3  
**Lab Code:** R2302091-003

**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	03/17/23 01:15	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 01:15	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 01:15	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 01:15	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 01:15	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 01:15	
o-Xylene	5.0 U	5.0	1	03/17/23 01:15	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 01:15	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 01:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/17/23 01:15	
Dibromofluoromethane	94	80 - 116	03/17/23 01:15	
Toluene-d8	97	87 - 121	03/17/23 01:15	



**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 16:33  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-4  
**Lab Code:** R2302091-004

**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	03/17/23 01:37	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 01:37	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 01:37	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 01:37	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 01:37	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 01:37	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 01:37	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 01:37	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 01:37	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 01:37	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 01:37	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 01:37	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 01:37	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 01:37	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 01:37	
1,4-Dioxane	100 U	100	1	03/17/23 01:37	
2-Butanone (MEK)	10 U	10	1	03/17/23 01:37	
2-Hexanone	10 U	10	1	03/17/23 01:37	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 01:37	
Acetone	10 U	10	1	03/17/23 01:37	
Benzene	5.0 U	5.0	1	03/17/23 01:37	
Bromochloromethane	5.0 U	5.0	1	03/17/23 01:37	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 01:37	
Bromoform	5.0 U	5.0	1	03/17/23 01:37	
Bromomethane	5.0 U	5.0	1	03/17/23 01:37	
Carbon Disulfide	10 U	10	1	03/17/23 01:37	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 01:37	
Chlorobenzene	5.0 U	5.0	1	03/17/23 01:37	
Chloroethane	5.0 U	5.0	1	03/17/23 01:37	
Chloroform	5.0 U	5.0	1	03/17/23 01:37	
Chloromethane	5.0 U	5.0	1	03/17/23 01:37	
Cyclohexane	10 U	10	1	03/17/23 01:37	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 01:37	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 01:37	
Dichloromethane	5.0 U	5.0	1	03/17/23 01:37	
Ethylbenzene	5.0 U	5.0	1	03/17/23 01:37	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 01:37	
Methyl Acetate	10 U	10	1	03/17/23 01:37	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 01:37	
Methylcyclohexane	10 U	10	1	03/17/23 01:37	
Styrene	5.0 U	5.0	1	03/17/23 01:37	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 01:37	
Toluene	5.0 U	5.0	1	03/17/23 01:37	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 16:33  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-4  
**Lab Code:** R2302091-004

**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	03/17/23 01:37	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 01:37	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 01:37	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 01:37	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 01:37	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 01:37	
o-Xylene	5.0 U	5.0	1	03/17/23 01:37	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 01:37	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 01:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	03/17/23 01:37	
Dibromofluoromethane	94	80 - 116	03/17/23 01:37	
Toluene-d8	96	87 - 121	03/17/23 01:37	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 08:08  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-5  
**Lab Code:** R2302091-005

**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	03/17/23 02:00	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 02:00	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 02:00	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 02:00	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 02:00	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 02:00	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:00	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:00	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 02:00	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 02:00	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:00	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 02:00	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 02:00	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:00	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:00	
1,4-Dioxane	100 U	100	1	03/17/23 02:00	
2-Butanone (MEK)	10 U	10	1	03/17/23 02:00	
2-Hexanone	10 U	10	1	03/17/23 02:00	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 02:00	
Acetone	10 U	10	1	03/17/23 02:00	
Benzene	5.0 U	5.0	1	03/17/23 02:00	
Bromochloromethane	5.0 U	5.0	1	03/17/23 02:00	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 02:00	
Bromoform	5.0 U	5.0	1	03/17/23 02:00	
Bromomethane	5.0 U	5.0	1	03/17/23 02:00	
Carbon Disulfide	10 U	10	1	03/17/23 02:00	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 02:00	
Chlorobenzene	5.0 U	5.0	1	03/17/23 02:00	
Chloroethane	5.0 U	5.0	1	03/17/23 02:00	
Chloroform	5.0 U	5.0	1	03/17/23 02:00	
Chloromethane	5.0 U	5.0	1	03/17/23 02:00	
Cyclohexane	10 U	10	1	03/17/23 02:00	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 02:00	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 02:00	
Dichloromethane	5.0 U	5.0	1	03/17/23 02:00	
Ethylbenzene	5.0 U	5.0	1	03/17/23 02:00	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 02:00	
Methyl Acetate	10 U	10	1	03/17/23 02:00	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 02:00	
Methylcyclohexane	10 U	10	1	03/17/23 02:00	
Styrene	5.0 U	5.0	1	03/17/23 02:00	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 02:00	
Toluene	5.0 U	5.0	1	03/17/23 02:00	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 08:08  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-5  
**Lab Code:** R2302091-005

**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	03/17/23 02:00	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 02:00	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 02:00	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 02:00	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:00	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 02:00	
o-Xylene	5.0 U	5.0	1	03/17/23 02:00	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 02:00	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	03/17/23 02:00	
Dibromofluoromethane	95	80 - 116	03/17/23 02:00	
Toluene-d8	96	87 - 121	03/17/23 02:00	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 08:35  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-6  
**Lab Code:** R2302091-006

**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	03/17/23 02:22	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 02:22	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 02:22	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 02:22	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 02:22	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 02:22	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:22	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:22	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 02:22	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 02:22	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:22	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 02:22	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 02:22	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:22	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:22	
1,4-Dioxane	100 U	100	1	03/17/23 02:22	
2-Butanone (MEK)	10 U	10	1	03/17/23 02:22	
2-Hexanone	10 U	10	1	03/17/23 02:22	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 02:22	
Acetone	10 U	10	1	03/17/23 02:22	
Benzene	5.0 U	5.0	1	03/17/23 02:22	
Bromochloromethane	5.0 U	5.0	1	03/17/23 02:22	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 02:22	
Bromoform	5.0 U	5.0	1	03/17/23 02:22	
Bromomethane	5.0 U	5.0	1	03/17/23 02:22	
Carbon Disulfide	10 U	10	1	03/17/23 02:22	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 02:22	
Chlorobenzene	5.0 U	5.0	1	03/17/23 02:22	
Chloroethane	5.0 U	5.0	1	03/17/23 02:22	
Chloroform	5.0 U	5.0	1	03/17/23 02:22	
Chloromethane	5.0 U	5.0	1	03/17/23 02:22	
Cyclohexane	10 U	10	1	03/17/23 02:22	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 02:22	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 02:22	
Dichloromethane	5.0 U	5.0	1	03/17/23 02:22	
Ethylbenzene	5.0 U	5.0	1	03/17/23 02:22	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 02:22	
Methyl Acetate	10 U	10	1	03/17/23 02:22	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 02:22	
Methylcyclohexane	10 U	10	1	03/17/23 02:22	
Styrene	5.0 U	5.0	1	03/17/23 02:22	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 02:22	
Toluene	5.0 U	5.0	1	03/17/23 02:22	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 08:35  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-6  
**Lab Code:** R2302091-006

**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	03/17/23 02:22	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 02:22	
Vinyl Chloride	<b>28</b>	5.0	1	03/17/23 02:22	
cis-1,2-Dichloroethene	<b>34</b>	5.0	1	03/17/23 02:22	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:22	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 02:22	
o-Xylene	5.0 U	5.0	1	03/17/23 02:22	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 02:22	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:22	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/17/23 02:22	
Dibromofluoromethane	94	80 - 116	03/17/23 02:22	
Toluene-d8	95	87 - 121	03/17/23 02:22	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 10:00  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-7  
**Lab Code:** R2302091-007

**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	03/17/23 02:44	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 02:44	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 02:44	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 02:44	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 02:44	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 02:44	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:44	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:44	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 02:44	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 02:44	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:44	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 02:44	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 02:44	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:44	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:44	
1,4-Dioxane	100 U	100	1	03/17/23 02:44	
2-Butanone (MEK)	10 U	10	1	03/17/23 02:44	
2-Hexanone	10 U	10	1	03/17/23 02:44	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 02:44	
Acetone	10 U	10	1	03/17/23 02:44	
Benzene	5.0 U	5.0	1	03/17/23 02:44	
Bromochloromethane	5.0 U	5.0	1	03/17/23 02:44	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 02:44	
Bromoform	5.0 U	5.0	1	03/17/23 02:44	
Bromomethane	5.0 U	5.0	1	03/17/23 02:44	
Carbon Disulfide	10 U	10	1	03/17/23 02:44	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 02:44	
Chlorobenzene	5.0 U	5.0	1	03/17/23 02:44	
Chloroethane	5.0 U	5.0	1	03/17/23 02:44	
Chloroform	5.0 U	5.0	1	03/17/23 02:44	
Chloromethane	5.0 U	5.0	1	03/17/23 02:44	
Cyclohexane	10 U	10	1	03/17/23 02:44	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 02:44	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 02:44	
Dichloromethane	5.0 U	5.0	1	03/17/23 02:44	
Ethylbenzene	5.0 U	5.0	1	03/17/23 02:44	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 02:44	
Methyl Acetate	10 U	10	1	03/17/23 02:44	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 02:44	
Methylcyclohexane	10 U	10	1	03/17/23 02:44	
Styrene	5.0 U	5.0	1	03/17/23 02:44	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 02:44	
Toluene	5.0 U	5.0	1	03/17/23 02:44	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 10:00  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-7  
**Lab Code:** R2302091-007

**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	03/17/23 02:44	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 02:44	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 02:44	
cis-1,2-Dichloroethene	<b>22</b>	5.0	1	03/17/23 02:44	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:44	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 02:44	
o-Xylene	5.0 U	5.0	1	03/17/23 02:44	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 02:44	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/17/23 02:44	
Dibromofluoromethane	95	80 - 116	03/17/23 02:44	
Toluene-d8	95	87 - 121	03/17/23 02:44	



**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 14:23  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-8  
**Lab Code:** R2302091-008

**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	03/17/23 03:07	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 03:07	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 03:07	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 03:07	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 03:07	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 03:07	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 03:07	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 03:07	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 03:07	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 03:07	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:07	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 03:07	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 03:07	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:07	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:07	
1,4-Dioxane	100 U	100	1	03/17/23 03:07	
2-Butanone (MEK)	10 U	10	1	03/17/23 03:07	
2-Hexanone	10 U	10	1	03/17/23 03:07	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 03:07	
Acetone	10 U	10	1	03/17/23 03:07	
Benzene	5.0 U	5.0	1	03/17/23 03:07	
Bromochloromethane	5.0 U	5.0	1	03/17/23 03:07	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 03:07	
Bromoform	5.0 U	5.0	1	03/17/23 03:07	
Bromomethane	5.0 U	5.0	1	03/17/23 03:07	
Carbon Disulfide	10 U	10	1	03/17/23 03:07	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 03:07	
Chlorobenzene	5.0 U	5.0	1	03/17/23 03:07	
Chloroethane	5.0 U	5.0	1	03/17/23 03:07	
Chloroform	5.0 U	5.0	1	03/17/23 03:07	
Chloromethane	5.0 U	5.0	1	03/17/23 03:07	
Cyclohexane	10 U	10	1	03/17/23 03:07	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 03:07	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 03:07	
Dichloromethane	5.0 U	5.0	1	03/17/23 03:07	
Ethylbenzene	5.0 U	5.0	1	03/17/23 03:07	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 03:07	
Methyl Acetate	10 U	10	1	03/17/23 03:07	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 03:07	
Methylcyclohexane	10 U	10	1	03/17/23 03:07	
Styrene	5.0 U	5.0	1	03/17/23 03:07	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 03:07	
Toluene	5.0 U	5.0	1	03/17/23 03:07	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water  
**Sample Name:** MW-8  
**Lab Code:** R2302091-008

**Service Request:** R2302091  
**Date Collected:** 03/09/23 14:23  
**Date Received:** 03/10/23 14:45  
**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	03/17/23 03:07	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 03:07	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 03:07	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 03:07	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 03:07	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 03:07	
o-Xylene	5.0 U	5.0	1	03/17/23 03:07	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 03:07	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 03:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/17/23 03:07	
Dibromofluoromethane	93	80 - 116	03/17/23 03:07	
Toluene-d8	95	87 - 121	03/17/23 03:07	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 15:12  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-9  
**Lab Code:** R2302091-009

**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	03/17/23 03:29	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 03:29	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 03:29	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 03:29	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 03:29	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 03:29	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 03:29	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 03:29	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 03:29	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 03:29	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:29	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 03:29	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 03:29	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:29	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:29	
1,4-Dioxane	100 U	100	1	03/17/23 03:29	
2-Butanone (MEK)	10 U	10	1	03/17/23 03:29	
2-Hexanone	10 U	10	1	03/17/23 03:29	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 03:29	
Acetone	10 U	10	1	03/17/23 03:29	
Benzene	5.0 U	5.0	1	03/17/23 03:29	
Bromochloromethane	5.0 U	5.0	1	03/17/23 03:29	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 03:29	
Bromoform	5.0 U	5.0	1	03/17/23 03:29	
Bromomethane	5.0 U	5.0	1	03/17/23 03:29	
Carbon Disulfide	10 U	10	1	03/17/23 03:29	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 03:29	
Chlorobenzene	5.0 U	5.0	1	03/17/23 03:29	
Chloroethane	5.0 U	5.0	1	03/17/23 03:29	
Chloroform	5.0 U	5.0	1	03/17/23 03:29	
Chloromethane	5.0 U	5.0	1	03/17/23 03:29	
Cyclohexane	10 U	10	1	03/17/23 03:29	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 03:29	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 03:29	
Dichloromethane	5.0 U	5.0	1	03/17/23 03:29	
Ethylbenzene	5.0 U	5.0	1	03/17/23 03:29	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 03:29	
Methyl Acetate	10 U	10	1	03/17/23 03:29	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 03:29	
Methylcyclohexane	10 U	10	1	03/17/23 03:29	
Styrene	5.0 U	5.0	1	03/17/23 03:29	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 03:29	
Toluene	5.0 U	5.0	1	03/17/23 03:29	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 15:12  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-9  
**Lab Code:** R2302091-009

**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	03/17/23 03:29	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 03:29	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 03:29	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 03:29	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 03:29	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 03:29	
o-Xylene	5.0 U	5.0	1	03/17/23 03:29	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 03:29	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 03:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	03/17/23 03:29	
Dibromofluoromethane	96	80 - 116	03/17/23 03:29	
Toluene-d8	96	87 - 121	03/17/23 03:29	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 14:47  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-10  
**Lab Code:** R2302091-010

**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	03/17/23 03:51	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 03:51	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 03:51	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 03:51	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 03:51	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 03:51	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 03:51	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 03:51	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 03:51	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 03:51	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:51	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 03:51	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 03:51	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:51	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:51	
1,4-Dioxane	100 U	100	1	03/17/23 03:51	
2-Butanone (MEK)	10 U	10	1	03/17/23 03:51	
2-Hexanone	10 U	10	1	03/17/23 03:51	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 03:51	
Acetone	10 U	10	1	03/17/23 03:51	
Benzene	5.0 U	5.0	1	03/17/23 03:51	
Bromochloromethane	5.0 U	5.0	1	03/17/23 03:51	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 03:51	
Bromoform	5.0 U	5.0	1	03/17/23 03:51	
Bromomethane	5.0 U	5.0	1	03/17/23 03:51	
Carbon Disulfide	10 U	10	1	03/17/23 03:51	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 03:51	
Chlorobenzene	5.0 U	5.0	1	03/17/23 03:51	
Chloroethane	5.0 U	5.0	1	03/17/23 03:51	
Chloroform	5.0 U	5.0	1	03/17/23 03:51	
Chloromethane	5.0 U	5.0	1	03/17/23 03:51	
Cyclohexane	10 U	10	1	03/17/23 03:51	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 03:51	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 03:51	
Dichloromethane	5.0 U	5.0	1	03/17/23 03:51	
Ethylbenzene	5.0 U	5.0	1	03/17/23 03:51	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 03:51	
Methyl Acetate	10 U	10	1	03/17/23 03:51	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 03:51	
Methylcyclohexane	10 U	10	1	03/17/23 03:51	
Styrene	5.0 U	5.0	1	03/17/23 03:51	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 03:51	
Toluene	5.0 U	5.0	1	03/17/23 03:51	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 14:47  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-10  
**Lab Code:** R2302091-010

**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	03/17/23 03:51	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 03:51	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 03:51	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 03:51	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 03:51	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 03:51	
o-Xylene	5.0 U	5.0	1	03/17/23 03:51	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 03:51	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 03:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/17/23 03:51	
Dibromofluoromethane	96	80 - 116	03/17/23 03:51	
Toluene-d8	96	87 - 121	03/17/23 03:51	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 13:20  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-11  
**Lab Code:** R2302091-011

**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	03/17/23 07:12	
1,1,2,2-Tetrachloroethane	13 U	13	2.5	03/17/23 07:12	
1,1,2-Trichloroethane	13 U	13	2.5	03/17/23 07:12	
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	13	2.5	03/17/23 07:12	
1,1-Dichloroethane (1,1-DCA)	13 U	13	2.5	03/17/23 07:12	
1,1-Dichloroethene (1,1-DCE)	13 U	13	2.5	03/17/23 07:12	
1,2,3-Trichlorobenzene	13 U	13	2.5	03/17/23 07:12	
1,2,4-Trichlorobenzene	13 U	13	2.5	03/17/23 07:12	
1,2-Dibromo-3-chloropropane (DBCP)	13 U	13	2.5	03/17/23 07:12	
1,2-Dibromoethane	13 U	13	2.5	03/17/23 07:12	
1,2-Dichlorobenzene	13 U	13	2.5	03/17/23 07:12	
1,2-Dichloroethane	13 U	13	2.5	03/17/23 07:12	
1,2-Dichloropropane	13 U	13	2.5	03/17/23 07:12	
1,3-Dichlorobenzene	13 U	13	2.5	03/17/23 07:12	
1,4-Dichlorobenzene	13 U	13	2.5	03/17/23 07:12	
1,4-Dioxane	250 U	250	2.5	03/17/23 07:12	
2-Butanone (MEK)	25 U	25	2.5	03/17/23 07:12	
2-Hexanone	25 U	25	2.5	03/17/23 07:12	
4-Methyl-2-pentanone	25 U	25	2.5	03/17/23 07:12	
Acetone	25 U	25	2.5	03/17/23 07:12	
Benzene	13 U	13	2.5	03/17/23 07:12	
Bromochloromethane	13 U	13	2.5	03/17/23 07:12	
Bromodichloromethane	13 U	13	2.5	03/17/23 07:12	
Bromoform	13 U	13	2.5	03/17/23 07:12	
Bromomethane	13 U	13	2.5	03/17/23 07:12	
Carbon Disulfide	25 U	25	2.5	03/17/23 07:12	
Carbon Tetrachloride	13 U	13	2.5	03/17/23 07:12	
Chlorobenzene	13 U	13	2.5	03/17/23 07:12	
Chloroethane	13 U	13	2.5	03/17/23 07:12	
Chloroform	13 U	13	2.5	03/17/23 07:12	
Chloromethane	13 U	13	2.5	03/17/23 07:12	
Cyclohexane	25 U	25	2.5	03/17/23 07:12	
Dibromochloromethane	13 U	13	2.5	03/17/23 07:12	
Dichlorodifluoromethane (CFC 12)	13 U	13	2.5	03/17/23 07:12	
Dichloromethane	13 U	13	2.5	03/17/23 07:12	
Ethylbenzene	13 U	13	2.5	03/17/23 07:12	
Isopropylbenzene (Cumene)	13 U	13	2.5	03/17/23 07:12	
Methyl Acetate	25 U	25	2.5	03/17/23 07:12	
Methyl tert-Butyl Ether	13 U	13	2.5	03/17/23 07:12	
Methylcyclohexane	25 U	25	2.5	03/17/23 07:12	
Styrene	13 U	13	2.5	03/17/23 07:12	
Tetrachloroethene (PCE)	13 U	13	2.5	03/17/23 07:12	
Toluene	13 U	13	2.5	03/17/23 07:12	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 13:20  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-11  
**Lab Code:** R2302091-011

**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)	<b>230</b>	13	2.5	03/17/23 07:12	
Trichlorofluoromethane (CFC 11)	13 U	13	2.5	03/17/23 07:12	
Vinyl Chloride	13 U	13	2.5	03/17/23 07:12	
cis-1,2-Dichloroethene	<b>74</b>	13	2.5	03/17/23 07:12	
cis-1,3-Dichloropropene	13 U	13	2.5	03/17/23 07:12	
m,p-Xylenes	13 U	13	2.5	03/17/23 07:12	
o-Xylene	13 U	13	2.5	03/17/23 07:12	
trans-1,2-Dichloroethene	13 U	13	2.5	03/17/23 07:12	
trans-1,3-Dichloropropene	13 U	13	2.5	03/17/23 07:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	03/17/23 07:12	
Dibromofluoromethane	93	80 - 116	03/17/23 07:12	
Toluene-d8	95	87 - 121	03/17/23 07:12	



**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 12:20  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-12  
**Lab Code:** R2302091-012

**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	03/17/23 04:14	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 04:14	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 04:14	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 04:14	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 04:14	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 04:14	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:14	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:14	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 04:14	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 04:14	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:14	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 04:14	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 04:14	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:14	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:14	
1,4-Dioxane	100 U	100	1	03/17/23 04:14	
2-Butanone (MEK)	10 U	10	1	03/17/23 04:14	
2-Hexanone	10 U	10	1	03/17/23 04:14	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 04:14	
Acetone	10 U	10	1	03/17/23 04:14	
Benzene	5.0 U	5.0	1	03/17/23 04:14	
Bromochloromethane	5.0 U	5.0	1	03/17/23 04:14	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 04:14	
Bromoform	5.0 U	5.0	1	03/17/23 04:14	
Bromomethane	5.0 U	5.0	1	03/17/23 04:14	
Carbon Disulfide	10 U	10	1	03/17/23 04:14	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 04:14	
Chlorobenzene	5.0 U	5.0	1	03/17/23 04:14	
Chloroethane	5.0 U	5.0	1	03/17/23 04:14	
Chloroform	5.0 U	5.0	1	03/17/23 04:14	
Chloromethane	5.0 U	5.0	1	03/17/23 04:14	
Cyclohexane	10 U	10	1	03/17/23 04:14	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 04:14	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 04:14	
Dichloromethane	5.0 U	5.0	1	03/17/23 04:14	
Ethylbenzene	5.0 U	5.0	1	03/17/23 04:14	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 04:14	
Methyl Acetate	10 U	10	1	03/17/23 04:14	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 04:14	
Methylcyclohexane	10 U	10	1	03/17/23 04:14	
Styrene	5.0 U	5.0	1	03/17/23 04:14	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 04:14	
Toluene	5.0 U	5.0	1	03/17/23 04:14	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 12:20  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-12  
**Lab Code:** R2302091-012

**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)	<b>20</b>	5.0	1	03/17/23 04:14	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 04:14	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 04:14	
cis-1,2-Dichloroethene	<b>150</b>	5.0	1	03/17/23 04:14	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:14	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 04:14	
o-Xylene	5.0 U	5.0	1	03/17/23 04:14	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 04:14	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	03/17/23 04:14	
Dibromofluoromethane	96	80 - 116	03/17/23 04:14	
Toluene-d8	95	87 - 121	03/17/23 04:14	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 12:31  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-13  
**Lab Code:** R2302091-013

**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	03/17/23 04:36	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 04:36	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 04:36	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 04:36	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 04:36	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 04:36	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:36	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:36	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 04:36	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 04:36	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:36	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 04:36	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 04:36	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:36	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:36	
1,4-Dioxane	100 U	100	1	03/17/23 04:36	
2-Butanone (MEK)	10 U	10	1	03/17/23 04:36	
2-Hexanone	10 U	10	1	03/17/23 04:36	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 04:36	
Acetone	10 U	10	1	03/17/23 04:36	
Benzene	5.0 U	5.0	1	03/17/23 04:36	
Bromochloromethane	5.0 U	5.0	1	03/17/23 04:36	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 04:36	
Bromoform	5.0 U	5.0	1	03/17/23 04:36	
Bromomethane	5.0 U	5.0	1	03/17/23 04:36	
Carbon Disulfide	10 U	10	1	03/17/23 04:36	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 04:36	
Chlorobenzene	5.0 U	5.0	1	03/17/23 04:36	
Chloroethane	5.0 U	5.0	1	03/17/23 04:36	
Chloroform	5.0 U	5.0	1	03/17/23 04:36	
Chloromethane	5.0 U	5.0	1	03/17/23 04:36	
Cyclohexane	10 U	10	1	03/17/23 04:36	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 04:36	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 04:36	
Dichloromethane	5.0 U	5.0	1	03/17/23 04:36	
Ethylbenzene	5.0 U	5.0	1	03/17/23 04:36	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 04:36	
Methyl Acetate	10 U	10	1	03/17/23 04:36	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 04:36	
Methylcyclohexane	10 U	10	1	03/17/23 04:36	
Styrene	5.0 U	5.0	1	03/17/23 04:36	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 04:36	
Toluene	5.0 U	5.0	1	03/17/23 04:36	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 12:31  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-13  
**Lab Code:** R2302091-013

**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	03/17/23 04:36	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 04:36	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 04:36	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 04:36	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:36	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 04:36	
o-Xylene	5.0 U	5.0	1	03/17/23 04:36	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 04:36	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	03/17/23 04:36	
Dibromofluoromethane	94	80 - 116	03/17/23 04:36	
Toluene-d8	94	87 - 121	03/17/23 04:36	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 11:11  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-14  
**Lab Code:** R2302091-014

**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	03/17/23 04:58	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 04:58	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 04:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 04:58	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 04:58	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 04:58	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:58	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:58	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 04:58	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 04:58	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:58	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 04:58	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 04:58	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:58	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:58	
1,4-Dioxane	100 U	100	1	03/17/23 04:58	
2-Butanone (MEK)	10 U	10	1	03/17/23 04:58	
2-Hexanone	10 U	10	1	03/17/23 04:58	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 04:58	
Acetone	10 U	10	1	03/17/23 04:58	
Benzene	5.0 U	5.0	1	03/17/23 04:58	
Bromochloromethane	5.0 U	5.0	1	03/17/23 04:58	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 04:58	
Bromoform	5.0 U	5.0	1	03/17/23 04:58	
Bromomethane	5.0 U	5.0	1	03/17/23 04:58	
Carbon Disulfide	10 U	10	1	03/17/23 04:58	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 04:58	
Chlorobenzene	5.0 U	5.0	1	03/17/23 04:58	
Chloroethane	5.0 U	5.0	1	03/17/23 04:58	
Chloroform	5.0 U	5.0	1	03/17/23 04:58	
Chloromethane	5.0 U	5.0	1	03/17/23 04:58	
Cyclohexane	10 U	10	1	03/17/23 04:58	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 04:58	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 04:58	
Dichloromethane	5.0 U	5.0	1	03/17/23 04:58	
Ethylbenzene	5.0 U	5.0	1	03/17/23 04:58	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 04:58	
Methyl Acetate	10 U	10	1	03/17/23 04:58	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 04:58	
Methylcyclohexane	10 U	10	1	03/17/23 04:58	
Styrene	5.0 U	5.0	1	03/17/23 04:58	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 04:58	
Toluene	5.0 U	5.0	1	03/17/23 04:58	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 11:11  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-14  
**Lab Code:** R2302091-014

**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)	<b>7.9</b>	5.0	1	03/17/23 04:58	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 04:58	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 04:58	
cis-1,2-Dichloroethene	<b>56</b>	5.0	1	03/17/23 04:58	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:58	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 04:58	
o-Xylene	5.0 U	5.0	1	03/17/23 04:58	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 04:58	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	03/17/23 04:58	
Dibromofluoromethane	96	80 - 116	03/17/23 04:58	
Toluene-d8	96	87 - 121	03/17/23 04:58	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 10:50  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-15  
**Lab Code:** R2302091-015

**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	03/17/23 05:21	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 05:21	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 05:21	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 05:21	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 05:21	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 05:21	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 05:21	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 05:21	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 05:21	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 05:21	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:21	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 05:21	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 05:21	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:21	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:21	
1,4-Dioxane	100 U	100	1	03/17/23 05:21	
2-Butanone (MEK)	10 U	10	1	03/17/23 05:21	
2-Hexanone	10 U	10	1	03/17/23 05:21	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 05:21	
Acetone	10 U	10	1	03/17/23 05:21	
Benzene	5.0 U	5.0	1	03/17/23 05:21	
Bromochloromethane	5.0 U	5.0	1	03/17/23 05:21	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 05:21	
Bromoform	5.0 U	5.0	1	03/17/23 05:21	
Bromomethane	5.0 U	5.0	1	03/17/23 05:21	
Carbon Disulfide	10 U	10	1	03/17/23 05:21	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 05:21	
Chlorobenzene	5.0 U	5.0	1	03/17/23 05:21	
Chloroethane	5.0 U	5.0	1	03/17/23 05:21	
Chloroform	5.0 U	5.0	1	03/17/23 05:21	
Chloromethane	5.0 U	5.0	1	03/17/23 05:21	
Cyclohexane	10 U	10	1	03/17/23 05:21	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 05:21	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 05:21	
Dichloromethane	5.0 U	5.0	1	03/17/23 05:21	
Ethylbenzene	5.0 U	5.0	1	03/17/23 05:21	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 05:21	
Methyl Acetate	10 U	10	1	03/17/23 05:21	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 05:21	
Methylcyclohexane	10 U	10	1	03/17/23 05:21	
Styrene	5.0 U	5.0	1	03/17/23 05:21	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 05:21	
Toluene	5.0 U	5.0	1	03/17/23 05:21	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23 10:50  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-15  
**Lab Code:** R2302091-015

**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	03/17/23 05:21	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 05:21	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 05:21	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 05:21	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 05:21	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 05:21	
o-Xylene	5.0 U	5.0	1	03/17/23 05:21	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 05:21	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 05:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/17/23 05:21	
Dibromofluoromethane	98	80 - 116	03/17/23 05:21	
Toluene-d8	96	87 - 121	03/17/23 05:21	



**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 11:26  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-16  
**Lab Code:** R2302091-016

**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	03/17/23 05:43	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 05:43	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 05:43	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 05:43	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 05:43	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 05:43	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 05:43	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 05:43	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 05:43	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 05:43	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:43	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 05:43	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 05:43	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:43	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:43	
1,4-Dioxane	100 U	100	1	03/17/23 05:43	
2-Butanone (MEK)	10 U	10	1	03/17/23 05:43	
2-Hexanone	10 U	10	1	03/17/23 05:43	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 05:43	
Acetone	10 U	10	1	03/17/23 05:43	
Benzene	5.0 U	5.0	1	03/17/23 05:43	
Bromochloromethane	5.0 U	5.0	1	03/17/23 05:43	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 05:43	
Bromoform	5.0 U	5.0	1	03/17/23 05:43	
Bromomethane	5.0 U	5.0	1	03/17/23 05:43	
Carbon Disulfide	10 U	10	1	03/17/23 05:43	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 05:43	
Chlorobenzene	5.0 U	5.0	1	03/17/23 05:43	
Chloroethane	5.0 U	5.0	1	03/17/23 05:43	
Chloroform	5.0 U	5.0	1	03/17/23 05:43	
Chloromethane	5.0 U	5.0	1	03/17/23 05:43	
Cyclohexane	10 U	10	1	03/17/23 05:43	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 05:43	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 05:43	
Dichloromethane	5.0 U	5.0	1	03/17/23 05:43	
Ethylbenzene	5.0 U	5.0	1	03/17/23 05:43	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 05:43	
Methyl Acetate	10 U	10	1	03/17/23 05:43	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 05:43	
Methylcyclohexane	10 U	10	1	03/17/23 05:43	
Styrene	5.0 U	5.0	1	03/17/23 05:43	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 05:43	
Toluene	5.0 U	5.0	1	03/17/23 05:43	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 11:26  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-16  
**Lab Code:** R2302091-016

**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	03/17/23 05:43	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 05:43	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 05:43	
cis-1,2-Dichloroethene	<b>23</b>	5.0	1	03/17/23 05:43	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 05:43	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 05:43	
o-Xylene	5.0 U	5.0	1	03/17/23 05:43	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 05:43	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 05:43	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/17/23 05:43	
Dibromofluoromethane	97	80 - 116	03/17/23 05:43	
Toluene-d8	95	87 - 121	03/17/23 05:43	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 09:06  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-17  
**Lab Code:** R2302091-017

**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	03/18/23 07:39	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/18/23 07:39	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/18/23 07:39	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/18/23 07:39	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/18/23 07:39	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/18/23 07:39	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/18/23 07:39	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/18/23 07:39	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/18/23 07:39	
1,2-Dibromoethane	5.0 U	5.0	1	03/18/23 07:39	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/18/23 07:39	
1,2-Dichloroethane	5.0 U	5.0	1	03/18/23 07:39	
1,2-Dichloropropane	5.0 U	5.0	1	03/18/23 07:39	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/18/23 07:39	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/18/23 07:39	
1,4-Dioxane	100 U	100	1	03/18/23 07:39	
2-Butanone (MEK)	10 U	10	1	03/18/23 07:39	
2-Hexanone	10 U	10	1	03/18/23 07:39	
4-Methyl-2-pentanone	10 U	10	1	03/18/23 07:39	
Acetone	10 U	10	1	03/18/23 07:39	
Benzene	5.0 U	5.0	1	03/18/23 07:39	
Bromochloromethane	5.0 U	5.0	1	03/18/23 07:39	
Bromodichloromethane	5.0 U	5.0	1	03/18/23 07:39	
Bromoform	5.0 U	5.0	1	03/18/23 07:39	
Bromomethane	5.0 U	5.0	1	03/18/23 07:39	
Carbon Disulfide	10 U	10	1	03/18/23 07:39	
Carbon Tetrachloride	5.0 U	5.0	1	03/18/23 07:39	
Chlorobenzene	5.0 U	5.0	1	03/18/23 07:39	
Chloroethane	5.0 U	5.0	1	03/18/23 07:39	
Chloroform	5.0 U	5.0	1	03/18/23 07:39	
Chloromethane	5.0 U	5.0	1	03/18/23 07:39	
Cyclohexane	10 U	10	1	03/18/23 07:39	
Dibromochloromethane	5.0 U	5.0	1	03/18/23 07:39	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/18/23 07:39	
Dichloromethane	5.0 U	5.0	1	03/18/23 07:39	
Ethylbenzene	5.0 U	5.0	1	03/18/23 07:39	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/18/23 07:39	
Methyl Acetate	10 U	10	1	03/18/23 07:39	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/18/23 07:39	
Methylcyclohexane	10 U	10	1	03/18/23 07:39	
Styrene	5.0 U	5.0	1	03/18/23 07:39	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/18/23 07:39	
Toluene	5.0 U	5.0	1	03/18/23 07:39	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 09:06  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-17  
**Lab Code:** R2302091-017

**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)	7.3	5.0	1	03/18/23 07:39	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/18/23 07:39	
Vinyl Chloride	5.0 U	5.0	1	03/18/23 07:39	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/18/23 07:39	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/18/23 07:39	
m,p-Xylenes	5.0 U	5.0	1	03/18/23 07:39	
o-Xylene	5.0 U	5.0	1	03/18/23 07:39	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/18/23 07:39	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/18/23 07:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/18/23 07:39	
Dibromofluoromethane	96	80 - 116	03/18/23 07:39	
Toluene-d8	96	87 - 121	03/18/23 07:39	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 11:59  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-18  
**Lab Code:** R2302091-018

**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	03/17/23 06:05	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 06:05	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 06:05	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 06:05	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 06:05	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 06:05	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 06:05	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 06:05	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 06:05	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 06:05	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 06:05	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 06:05	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 06:05	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 06:05	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 06:05	
1,4-Dioxane	100 U	100	1	03/17/23 06:05	
2-Butanone (MEK)	10 U	10	1	03/17/23 06:05	
2-Hexanone	10 U	10	1	03/17/23 06:05	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 06:05	
Acetone	10 U	10	1	03/17/23 06:05	
Benzene	5.0 U	5.0	1	03/17/23 06:05	
Bromochloromethane	5.0 U	5.0	1	03/17/23 06:05	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 06:05	
Bromoform	5.0 U	5.0	1	03/17/23 06:05	
Bromomethane	5.0 U	5.0	1	03/17/23 06:05	
Carbon Disulfide	10 U	10	1	03/17/23 06:05	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 06:05	
Chlorobenzene	5.0 U	5.0	1	03/17/23 06:05	
Chloroethane	5.0 U	5.0	1	03/17/23 06:05	
Chloroform	5.0 U	5.0	1	03/17/23 06:05	
Chloromethane	5.0 U	5.0	1	03/17/23 06:05	
Cyclohexane	10 U	10	1	03/17/23 06:05	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 06:05	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 06:05	
Dichloromethane	5.0 U	5.0	1	03/17/23 06:05	
Ethylbenzene	5.0 U	5.0	1	03/17/23 06:05	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 06:05	
Methyl Acetate	10 U	10	1	03/17/23 06:05	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 06:05	
Methylcyclohexane	10 U	10	1	03/17/23 06:05	
Styrene	5.0 U	5.0	1	03/17/23 06:05	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 06:05	
Toluene	5.0 U	5.0	1	03/17/23 06:05	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 11:59  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-18  
**Lab Code:** R2302091-018

**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	03/17/23 06:05	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 06:05	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 06:05	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 06:05	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 06:05	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 06:05	
o-Xylene	5.0 U	5.0	1	03/17/23 06:05	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 06:05	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 06:05	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/17/23 06:05	
Dibromofluoromethane	98	80 - 116	03/17/23 06:05	
Toluene-d8	95	87 - 121	03/17/23 06:05	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 10:18  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-19R  
**Lab Code:** R2302091-019

**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	03/17/23 06:28	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 06:28	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 06:28	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 06:28	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 06:28	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 06:28	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 06:28	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 06:28	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 06:28	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 06:28	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 06:28	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 06:28	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 06:28	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 06:28	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 06:28	
1,4-Dioxane	100 U	100	1	03/17/23 06:28	
2-Butanone (MEK)	10 U	10	1	03/17/23 06:28	
2-Hexanone	10 U	10	1	03/17/23 06:28	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 06:28	
Acetone	10 U	10	1	03/17/23 06:28	
Benzene	5.0 U	5.0	1	03/17/23 06:28	
Bromochloromethane	5.0 U	5.0	1	03/17/23 06:28	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 06:28	
Bromoform	5.0 U	5.0	1	03/17/23 06:28	
Bromomethane	5.0 U	5.0	1	03/17/23 06:28	
Carbon Disulfide	10 U	10	1	03/17/23 06:28	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 06:28	
Chlorobenzene	5.0 U	5.0	1	03/17/23 06:28	
Chloroethane	5.0 U	5.0	1	03/17/23 06:28	
Chloroform	5.0 U	5.0	1	03/17/23 06:28	
Chloromethane	5.0 U	5.0	1	03/17/23 06:28	
Cyclohexane	10 U	10	1	03/17/23 06:28	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 06:28	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 06:28	
Dichloromethane	5.0 U	5.0	1	03/17/23 06:28	
Ethylbenzene	5.0 U	5.0	1	03/17/23 06:28	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 06:28	
Methyl Acetate	10 U	10	1	03/17/23 06:28	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 06:28	
Methylcyclohexane	10 U	10	1	03/17/23 06:28	
Styrene	5.0 U	5.0	1	03/17/23 06:28	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 06:28	
Toluene	5.0 U	5.0	1	03/17/23 06:28	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 10:18  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-19R  
**Lab Code:** R2302091-019

**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	03/17/23 06:28	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 06:28	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 06:28	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 06:28	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 06:28	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 06:28	
o-Xylene	5.0 U	5.0	1	03/17/23 06:28	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 06:28	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 06:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/17/23 06:28	
Dibromofluoromethane	96	80 - 116	03/17/23 06:28	
Toluene-d8	97	87 - 121	03/17/23 06:28	



**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 07:50  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-20  
**Lab Code:** R2302091-020

**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	03/17/23 06:50	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 06:50	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 06:50	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 06:50	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 06:50	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 06:50	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 06:50	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 06:50	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 06:50	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 06:50	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 06:50	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 06:50	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 06:50	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 06:50	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 06:50	
1,4-Dioxane	100 U	100	1	03/17/23 06:50	
2-Butanone (MEK)	10 U	10	1	03/17/23 06:50	
2-Hexanone	10 U	10	1	03/17/23 06:50	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 06:50	
Acetone	10 U	10	1	03/17/23 06:50	
Benzene	5.0 U	5.0	1	03/17/23 06:50	
Bromochloromethane	5.0 U	5.0	1	03/17/23 06:50	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 06:50	
Bromoform	5.0 U	5.0	1	03/17/23 06:50	
Bromomethane	5.0 U	5.0	1	03/17/23 06:50	
Carbon Disulfide	10 U	10	1	03/17/23 06:50	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 06:50	
Chlorobenzene	5.0 U	5.0	1	03/17/23 06:50	
Chloroethane	5.0 U	5.0	1	03/17/23 06:50	
Chloroform	5.0 U	5.0	1	03/17/23 06:50	
Chloromethane	5.0 U	5.0	1	03/17/23 06:50	
Cyclohexane	10 U	10	1	03/17/23 06:50	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 06:50	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 06:50	
Dichloromethane	5.0 U	5.0	1	03/17/23 06:50	
Ethylbenzene	5.0 U	5.0	1	03/17/23 06:50	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 06:50	
Methyl Acetate	10 U	10	1	03/17/23 06:50	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 06:50	
Methylcyclohexane	10 U	10	1	03/17/23 06:50	
Styrene	5.0 U	5.0	1	03/17/23 06:50	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 06:50	
Toluene	5.0 U	5.0	1	03/17/23 06:50	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/10/23 07:50  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-20  
**Lab Code:** R2302091-020

**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	03/17/23 06:50	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 06:50	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 06:50	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 06:50	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 06:50	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 06:50	
o-Xylene	5.0 U	5.0	1	03/17/23 06:50	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 06:50	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 06:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/17/23 06:50	
Dibromofluoromethane	93	80 - 116	03/17/23 06:50	
Toluene-d8	95	87 - 121	03/17/23 06:50	



## 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](http://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](http://www.alsglobal.com)

**ALS Group USA, Corp.**  
dba ALS Environmental

QA/QC Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091

**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
		85-122	80-116	87-121
MW-1	R2302091-001	98	95	97
MW-2	R2302091-002	96	96	97
MW-3	R2302091-003	97	94	97
MW-4	R2302091-004	98	94	96
MW-5	R2302091-005	96	95	96
MW-6	R2302091-006	97	94	95
MW-7	R2302091-007	97	95	95
MW-8	R2302091-008	97	93	95
MW-9	R2302091-009	96	96	96
MW-10	R2302091-010	97	96	96
MW-11	R2302091-011	99	93	95
MW-12	R2302091-012	96	96	95
MW-13	R2302091-013	95	94	94
MW-14	R2302091-014	96	96	96
MW-15	R2302091-015	97	98	96
MW-16	R2302091-016	97	97	95
MW-17	R2302091-017	97	96	96
MW-18	R2302091-018	97	98	95
MW-19R	R2302091-019	97	96	97
MW-20	R2302091-020	97	93	95
Method Blank	RQ2303096-04	98	92	95
Method Blank	RQ2303133-05	96	96	95
Lab Control Sample	RQ2303096-03	98	95	95
Lab Control Sample	RQ2303133-03	98	96	95
Duplicate Lab Control Sample	RQ2303133-04	99	97	95
MW-1 MS	RQ2303096-05	102	97	97
MW-1 DMS	RQ2303096-06	101	98	96

ALS Group USA, Corp.  
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QA/QC Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23  
**Date Received:** 03/10/23  
**Date Analyzed:** 03/17/23  
**Date Extracted:** NA

**Duplicate Matrix Spike Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** MW-1  
**Lab Code:** R2302091-001  
**Analysis Method:** 8260C  
**Prep Method:** EPA 5030C

**Units:** ug/L  
**Basis:** NA

Analyte Name	Sample Result	Matrix Spike RQ2303096-05			Duplicate Matrix Spike RQ2303096-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	25 U	241	250	97	263	250	105	74-127	8	30
1,1,2,2-Tetrachloroethane	25 U	228	250	91	236	250	94	72-122	4	30
1,1,2-Trichloroethane	25 U	221	250	88	233	250	93	82-121	5	30
1,1,2-Trichloro-1,2,2-trifluoroethane	25 U	226	250	91	229	250	92	50-147	1	30
1,1-Dichloroethane (1,1-DCA)	25 U	245	250	98	253	250	101	74-132	3	30
1,1-Dichloroethene (1,1-DCE)	25 U	241	250	96	253	250	101	71-118	5	30
1,2,3-Trichlorobenzene	25 U	219	250	88	227	250	91	59-129	3	30
1,2,4-Trichlorobenzene	25 U	221	250	88	225	250	90	69-122	2	30
1,2-Dibromo-3-chloropropane (DBCP)	25 U	236	250	95	245	250	98	37-150	3	30
1,2-Dibromoethane	25 U	236	250	94	250	250	100	67-127	6	30
1,2-Dichlorobenzene	25 U	222	250	89	227	250	91	77-120	2	30
1,2-Dichloroethane	25 U	239	250	96	249	250	99	68-130	4	30
1,2-Dichloropropane	25 U	244	250	98	255	250	102	79-124	4	30
1,3-Dichlorobenzene	25 U	227	250	91	234	250	94	83-121	3	30
1,4-Dichlorobenzene	25 U	221	250	88	225	250	90	82-120	2	30
1,4-Dioxane	500 U	4430	5000	89	5160	5000	103	44-154	15	30
2-Butanone (MEK)	50 U	235	250	94	251	250	100	61-137	7	30
2-Hexanone	50 U	242	250	97	264	250	106	56-132	9	30
4-Methyl-2-pentanone	50 U	232	250	93	257	250	103	60-141	10	30
Acetone	50 U	292	250	117	321	250	128	35-183	9	30
Benzene	25 U	236	250	94	250	250	100	76-129	6	30
Bromochloromethane	25 U	221	250	88	233	250	93	80-122	6	30
Bromodichloromethane	25 U	220	250	88	235	250	94	78-133	7	30
Bromoform	25 U	217	250	87	245	250	98	58-133	12	30
Bromomethane	25 U	197	250	79	198	250	79	10-184	<1	30
Carbon Disulfide	50 U	204	250	82	220	250	88	59-140	7	30
Carbon Tetrachloride	25 U	244	250	97	261	250	104	65-135	7	30
Chlorobenzene	25 U	231	250	92	244	250	97	76-125	5	30
Chloroethane	25 U	210	250	84	224	250	89	48-146	6	30
Chloroform	25 U	229	250	92	241	250	97	75-130	5	30
Chloromethane	25 U	264	250	106	293	250	117	55-160	10	30
Cyclohexane	50 U	241	250	96	241	250	96	52-145	<1	30
Dibromochloromethane	25 U	227	250	91	243	250	97	72-128	7	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:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** 03/09/23  
**Date Received:** 03/10/23  
**Date Analyzed:** 03/17/23  
**Date Extracted:** NA

**Duplicate Matrix Spike Summary**  
**Volatile Organic Compounds by GC/MS**

**Sample Name:** MW-1  
**Lab Code:** R2302091-001  
**Analysis Method:** 8260C  
**Prep Method:** EPA 5030C

**Units:** ug/L  
**Basis:** NA

Analyte Name	Sample Result	Matrix Spike RQ2303096-05			Duplicate Matrix Spike RQ2303096-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Dichlorodifluoromethane (CFC 12)	25 U	203	250	81	214	250	86	49-154	6	30
Dichloromethane	25 U	204	250	82	225	250	90	73-122	10	30
Ethylbenzene	25 U	237	250	95	244	250	98	72-134	3	30
Isopropylbenzene (Cumene)	25 U	250	250	100	259	250	104	77-128	4	30
Methyl Acetate	50 U	264	250	106	278	250	111	26-121	5	30
Methyl tert-Butyl Ether	25 U	228	250	91	248	250	99	75-119	8	30
Methylcyclohexane	50 U	227	250	91	228	250	91	45-146	<1	30
Styrene	25 U	238	250	95	253	250	101	74-136	6	30
Tetrachloroethene (PCE)	25 U	230	250	92	247	250	99	72-125	7	30
Toluene	25 U	237	250	95	248	250	99	79-119	4	30
Trichloroethene (TCE)	400	648	250	98	665	250	105	74-122	3	30
Trichlorofluoromethane (CFC 11)	25 U	248	250	99	268	250	107	71-136	8	30
Vinyl Chloride	25 U	217	250	87	236	250	95	74-159	9	30
cis-1,2-Dichloroethene	49	291	250	97	294	250	98	77-127	<1	30
cis-1,3-Dichloropropene	25 U	216	250	86	236	250	95	52-134	9	30
m,p-Xylenes	25 U	475	500	95	497	500	99	80-126	5	30
o-Xylene	25 U	236	250	94	252	250	101	79-123	7	30
trans-1,2-Dichloroethene	25 U	239	250	96	258	250	103	73-118	8	30
trans-1,3-Dichloropropene	25 U	230	250	92	246	250	99	71-133	7	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:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** RQ2303096-04

**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	03/17/23 00:30	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 00:30	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 00:30	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 00:30	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 00:30	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 00:30	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 00:30	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 00:30	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 00:30	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 00:30	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 00:30	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 00:30	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 00:30	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 00:30	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 00:30	
1,4-Dioxane	100 U	100	1	03/17/23 00:30	
2-Butanone (MEK)	10 U	10	1	03/17/23 00:30	
2-Hexanone	10 U	10	1	03/17/23 00:30	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 00:30	
Acetone	10 U	10	1	03/17/23 00:30	
Benzene	5.0 U	5.0	1	03/17/23 00:30	
Bromochloromethane	5.0 U	5.0	1	03/17/23 00:30	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 00:30	
Bromoform	5.0 U	5.0	1	03/17/23 00:30	
Bromomethane	5.0 U	5.0	1	03/17/23 00:30	
Carbon Disulfide	10 U	10	1	03/17/23 00:30	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 00:30	
Chlorobenzene	5.0 U	5.0	1	03/17/23 00:30	
Chloroethane	5.0 U	5.0	1	03/17/23 00:30	
Chloroform	5.0 U	5.0	1	03/17/23 00:30	
Chloromethane	5.0 U	5.0	1	03/17/23 00:30	
Cyclohexane	10 U	10	1	03/17/23 00:30	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 00:30	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 00:30	
Dichloromethane	5.0 U	5.0	1	03/17/23 00:30	
Ethylbenzene	5.0 U	5.0	1	03/17/23 00:30	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 00:30	
Methyl Acetate	10 U	10	1	03/17/23 00:30	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 00:30	
Methylcyclohexane	10 U	10	1	03/17/23 00:30	
Styrene	5.0 U	5.0	1	03/17/23 00:30	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 00:30	
Toluene	5.0 U	5.0	1	03/17/23 00:30	



**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** RQ2303096-04

**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	03/17/23 00:30	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 00:30	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 00:30	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 00:30	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 00:30	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 00:30	
o-Xylene	5.0 U	5.0	1	03/17/23 00:30	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 00:30	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 00:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	03/17/23 00:30	
Dibromofluoromethane	92	80 - 116	03/17/23 00:30	
Toluene-d8	95	87 - 121	03/17/23 00:30	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** RQ2303133-05

**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	03/18/23 00:46	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/18/23 00:46	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/18/23 00:46	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/18/23 00:46	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/18/23 00:46	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/18/23 00:46	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/18/23 00:46	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/18/23 00:46	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/18/23 00:46	
1,2-Dibromoethane	5.0 U	5.0	1	03/18/23 00:46	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/18/23 00:46	
1,2-Dichloroethane	5.0 U	5.0	1	03/18/23 00:46	
1,2-Dichloropropane	5.0 U	5.0	1	03/18/23 00:46	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/18/23 00:46	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/18/23 00:46	
1,4-Dioxane	100 U	100	1	03/18/23 00:46	
2-Butanone (MEK)	10 U	10	1	03/18/23 00:46	
2-Hexanone	10 U	10	1	03/18/23 00:46	
4-Methyl-2-pentanone	10 U	10	1	03/18/23 00:46	
Acetone	10 U	10	1	03/18/23 00:46	
Benzene	5.0 U	5.0	1	03/18/23 00:46	
Bromochloromethane	5.0 U	5.0	1	03/18/23 00:46	
Bromodichloromethane	5.0 U	5.0	1	03/18/23 00:46	
Bromoform	5.0 U	5.0	1	03/18/23 00:46	
Bromomethane	5.0 U	5.0	1	03/18/23 00:46	
Carbon Disulfide	10 U	10	1	03/18/23 00:46	
Carbon Tetrachloride	5.0 U	5.0	1	03/18/23 00:46	
Chlorobenzene	5.0 U	5.0	1	03/18/23 00:46	
Chloroethane	5.0 U	5.0	1	03/18/23 00:46	
Chloroform	5.0 U	5.0	1	03/18/23 00:46	
Chloromethane	5.0 U	5.0	1	03/18/23 00:46	
Cyclohexane	10 U	10	1	03/18/23 00:46	
Dibromochloromethane	5.0 U	5.0	1	03/18/23 00:46	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/18/23 00:46	
Dichloromethane	5.0 U	5.0	1	03/18/23 00:46	
Ethylbenzene	5.0 U	5.0	1	03/18/23 00:46	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/18/23 00:46	
Methyl Acetate	10 U	10	1	03/18/23 00:46	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/18/23 00:46	
Methylcyclohexane	10 U	10	1	03/18/23 00:46	
Styrene	5.0 U	5.0	1	03/18/23 00:46	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/18/23 00:46	
Toluene	5.0 U	5.0	1	03/18/23 00:46	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** RQ2303133-05

**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	03/18/23 00:46	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/18/23 00:46	
Vinyl Chloride	5.0 U	5.0	1	03/18/23 00:46	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/18/23 00:46	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/18/23 00:46	
m,p-Xylenes	5.0 U	5.0	1	03/18/23 00:46	
o-Xylene	5.0 U	5.0	1	03/18/23 00:46	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/18/23 00:46	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/18/23 00:46	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	03/18/23 00:46	
Dibromofluoromethane	96	80 - 116	03/18/23 00:46	
Toluene-d8	95	87 - 121	03/18/23 00:46	

ALS Group USA, Corp.  
dba ALS Environmental

QA/QC Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Analyzed:** 03/16/23

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Units:**ug/L  
**Basis:**NA

**Lab Control Sample**  
RQ2303096-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.6	20.0	98	75-125
1,1,2,2-Tetrachloroethane	8260C	19.8	20.0	99	78-126
1,1,2-Trichloroethane	8260C	18.6	20.0	93	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	18.4	20.0	92	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.6	20.0	98	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	19.3	20.0	97	69-142
1,2,3-Trichlorobenzene	8260C	18.8	20.0	94	67-136
1,2,4-Trichlorobenzene	8260C	19.9	20.0	100	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	17.6	20.0	88	55-136
1,2-Dibromoethane	8260C	19.2	20.0	96	82-127
1,2-Dichlorobenzene	8260C	19.1	20.0	95	80-119
1,2-Dichloroethane	8260C	19.8	20.0	99	71-127
1,2-Dichloropropane	8260C	19.6	20.0	98	80-119
1,3-Dichlorobenzene	8260C	19.7	20.0	98	83-121
1,4-Dichlorobenzene	8260C	19.2	20.0	96	79-119
1,4-Dioxane	8260C	387	400	97	44-154
2-Butanone (MEK)	8260C	21.1	20.0	105	61-137
2-Hexanone	8260C	20.5	20.0	103	63-124
4-Methyl-2-pentanone	8260C	19.4	20.0	97	66-124
Acetone	8260C	23.9	20.0	119	40-161
Benzene	8260C	19.2	20.0	96	79-119
Bromochloromethane	8260C	18.7	20.0	93	81-126
Bromodichloromethane	8260C	17.5	20.0	88	81-123
Bromoform	8260C	16.3	20.0	82	65-146
Bromomethane	8260C	20.5	20.0	103	42-166
Carbon Disulfide	8260C	17.2	20.0	86	66-128
Carbon Tetrachloride	8260C	18.1	20.0	91	70-127
Chlorobenzene	8260C	19.3	20.0	97	80-121
Chloroethane	8260C	17.1	20.0	86	62-131
Chloroform	8260C	18.3	20.0	91	79-120
Chloromethane	8260C	22.3	20.0	112	72-179
Cyclohexane	8260C	18.8	20.0	94	69-120
Dibromochloromethane	8260C	17.0	20.0	85	72-128

ALS Group USA, Corp.  
dba ALS Environmental

QA/QC Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Analyzed:** 03/16/23

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Units:**ug/L  
**Basis:**NA

**Lab Control Sample**  
RQ2303096-03

<b>Analyte Name</b>	<b>Analytical Method</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Dichlorodifluoromethane (CFC 12)	8260C	16.5	20.0	82	59-155
Dichloromethane	8260C	18.2	20.0	91	73-122
Ethylbenzene	8260C	18.9	20.0	95	76-120
Isopropylbenzene (Cumene)	8260C	19.7	20.0	98	77-128
Methyl Acetate	8260C	22.5	20.0	113	61-133
Methyl tert-Butyl Ether	8260C	20.5	20.0	102	75-118
Methylcyclohexane	8260C	18.5	20.0	93	51-129
Styrene	8260C	19.4	20.0	97	80-124
Tetrachloroethene (PCE)	8260C	18.7	20.0	94	72-125
Toluene	8260C	19.1	20.0	95	79-119
Trichloroethene (TCE)	8260C	18.1	20.0	90	74-122
Trichlorofluoromethane (CFC 11)	8260C	20.3	20.0	101	71-136
Vinyl Chloride	8260C	17.7	20.0	89	74-159
cis-1,2-Dichloroethene	8260C	19.0	20.0	95	80-121
cis-1,3-Dichloropropene	8260C	17.9	20.0	89	77-122
m,p-Xylenes	8260C	38.7	40.0	97	80-126
o-Xylene	8260C	19.3	20.0	96	79-123
trans-1,2-Dichloroethene	8260C	18.7	20.0	93	73-118
trans-1,3-Dichloropropene	8260C	20.1	20.0	100	71-133

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QA/QC Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Analyzed:** 03/17/23

**Duplicate Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Units:**ug/L  
**Basis:**NA

Analyte Name	Lab Control Sample RQ2303133-03				Duplicate Lab Control Sample RQ2303133-04					
	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane (TCA)	8260C	19.0	20.0	95	18.1	20.0	91	75-125	5	30
1,1,2,2-Tetrachloroethane	8260C	20.4	20.0	102	20.0	20.0	100	78-126	2	30
1,1,2-Trichloroethane	8260C	18.9	20.0	94	18.3	20.0	92	82-121	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	18.3	20.0	91	17.1	20.0	85	67-124	7	30
1,1-Dichloroethane (1,1-DCA)	8260C	20.2	20.0	101	19.0	20.0	95	80-124	6	30
1,1-Dichloroethene (1,1-DCE)	8260C	19.0	20.0	95	18.6	20.0	93	69-142	2	30
1,2,3-Trichlorobenzene	8260C	20.4	20.0	102	18.4	20.0	92	67-136	11	30
1,2,4-Trichlorobenzene	8260C	20.5	20.0	103	19.0	20.0	95	75-132	7	30
1,2-Dibromo-3-chloropropane (DBCP)	8260C	19.4	20.0	97	18.0	20.0	90	55-136	8	30
1,2-Dibromoethane	8260C	20.3	20.0	102	19.2	20.0	96	82-127	6	30
1,2-Dichlorobenzene	8260C	19.8	20.0	99	18.2	20.0	91	80-119	8	30
1,2-Dichloroethane	8260C	19.7	20.0	99	19.3	20.0	96	71-127	2	30
1,2-Dichloropropane	8260C	19.2	20.0	96	19.0	20.0	95	80-119	<1	30
1,3-Dichlorobenzene	8260C	20.3	20.0	102	19.0	20.0	95	83-121	7	30
1,4-Dichlorobenzene	8260C	19.8	20.0	99	18.3	20.0	91	79-119	8	30
1,4-Dioxane	8260C	401	400	100	387	400	97	44-154	3	30
2-Butanone (MEK)	8260C	21.9	20.0	110	19.9	20.0	100	61-137	10	30
2-Hexanone	8260C	20.9	20.0	105	20.1	20.0	101	63-124	4	30
4-Methyl-2-pentanone	8260C	19.9	20.0	100	19.5	20.0	97	66-124	2	30
Acetone	8260C	24.7	20.0	123	23.6	20.0	118	40-161	4	30
Benzene	8260C	19.1	20.0	95	18.1	20.0	91	79-119	5	30
Bromochloromethane	8260C	18.4	20.0	92	18.3	20.0	92	81-126	<1	30
Bromodichloromethane	8260C	18.0	20.0	90	17.4	20.0	87	81-123	4	30
Bromoform	8260C	17.8	20.0	89	17.6	20.0	88	65-146	1	30
Bromomethane	8260C	20.2	20.0	101	18.3	20.0	91	42-166	10	30
Carbon Disulfide	8260C	16.7	20.0	83	16.0	20.0	80	66-128	4	30
Carbon Tetrachloride	8260C	18.8	20.0	94	17.7	20.0	88	70-127	6	30
Chlorobenzene	8260C	19.4	20.0	97	18.1	20.0	91	80-121	7	30
Chloroethane	8260C	16.6	20.0	83	15.9	20.0	79	62-131	4	30
Chloroform	8260C	19.5	20.0	98	18.4	20.0	92	79-120	6	30
Chloromethane	8260C	22.4	20.0	112	21.9	20.0	109	72-179	2	30
Cyclohexane	8260C	17.9	20.0	90	18.0	20.0	90	69-120	<1	30
Dibromochloromethane	8260C	18.7	20.0	94	18.2	20.0	91	72-128	3	30

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QA/QC Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302091  
**Date Analyzed:** 03/17/23

**Duplicate Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Units:**ug/L  
**Basis:**NA

Analyte Name	Lab Control Sample RQ2303133-03				Duplicate Lab Control Sample RQ2303133-04				RPD	RPD Limit
	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits		
Dichlorodifluoromethane (CFC 12)	8260C	17.0	20.0	85	15.2	20.0	76	59-155	11	30
Dichloromethane	8260C	17.9	20.0	89	16.8	20.0	84	73-122	6	30
Ethylbenzene	8260C	19.5	20.0	98	18.5	20.0	93	76-120	5	30
Isopropylbenzene (Cumene)	8260C	20.0	20.0	100	18.6	20.0	93	77-128	7	30
Methyl Acetate	8260C	21.5	20.0	107	20.9	20.0	104	61-133	3	30
Methyl tert-Butyl Ether	8260C	20.9	20.0	104	19.5	20.0	97	75-118	7	30
Methylcyclohexane	8260C	17.2	20.0	86	17.0	20.0	85	51-129	1	30
Styrene	8260C	20.0	20.0	100	18.7	20.0	94	80-124	7	30
Tetrachloroethene (PCE)	8260C	19.3	20.0	97	17.6	20.0	88	72-125	9	30
Toluene	8260C	19.0	20.0	95	18.3	20.0	92	79-119	3	30
Trichloroethene (TCE)	8260C	18.6	20.0	93	17.8	20.0	89	74-122	4	30
Trichlorofluoromethane (CFC 11)	8260C	20.2	20.0	101	19.2	20.0	96	71-136	5	30
Vinyl Chloride	8260C	17.1	20.0	85	16.3	20.0	82	74-159	4	30
cis-1,2-Dichloroethene	8260C	19.5	20.0	98	18.5	20.0	93	80-121	5	30
cis-1,3-Dichloropropene	8260C	18.7	20.0	93	18.1	20.0	90	77-122	3	30
m,p-Xylenes	8260C	39.4	40.0	98	37.1	40.0	93	80-126	6	30
o-Xylene	8260C	19.5	20.0	97	18.7	20.0	93	79-123	4	30
trans-1,2-Dichloroethene	8260C	19.1	20.0	96	18.6	20.0	93	73-118	3	30
trans-1,3-Dichloropropene	8260C	21.0	20.0	105	20.2	20.0	101	71-133	4	30



April 05, 2023

Service Request No:R2302093

Ariadna Cheremeteff  
Bergmann Associates, Incorporated  
280 East Broad Street  
Suite 200  
Rochester, NY 14604

**Laboratory Results for: Q1 Gowanda 2023**

Dear Ariadna,

Enclosed are the results of the sample(s) submitted to our laboratory March 10, 2023  
For your reference, these analyses have been assigned our service request number **R2302093**.

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](mailto:Chris.Leavy@alsglobal.com).

Respectfully submitted,

**ALS Group USA, Corp. dba ALS Environmental**

Christopher Leavy  
Project Manager

**ADDRESS**

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

**PHONE** +1 585 288 5380 | **FAX** +1 585 288 8475

ALS Group USA, Corp.  
dba ALS Environmental





# 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](http://www.alsglobal.com)



**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Received:** 03/10/2023

**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:**

Eleven water samples were received for analysis at ALS Environmental on 03/10/2023. 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:**

No significant anomalies were noted with this analysis.

A handwritten signature in black ink, appearing to be "WZ", is written over a horizontal line.

Approved by \_\_\_\_\_

Date 03/20/2023



### 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.

<b>CLIENT ID: MW-21</b>	<b>Lab ID: R2302093-001</b>
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	5.2			5.0	ug/L	8260C

<b>CLIENT ID: DR-1</b>	<b>Lab ID: R2302093-002</b>
------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	100			25	ug/L	8260C
Trichloroethene (TCE)	470			25	ug/L	8260C

<b>CLIENT ID: DR-2</b>	<b>Lab ID: R2302093-003</b>
------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	67			5.0	ug/L	8260C
Trichloroethene (TCE)	19			5.0	ug/L	8260C

<b>CLIENT ID: DR-3</b>	<b>Lab ID: R2302093-004</b>
------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	22			5.0	ug/L	8260C
Trichloroethene (TCE)	19			5.0	ug/L	8260C

<b>CLIENT ID: G-1</b>	<b>Lab ID: R2302093-006</b>
-----------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	26			5.0	ug/L	8260C
Trichloroethene (TCE)	7.5			5.0	ug/L	8260C

<b>CLIENT ID: G-2</b>	<b>Lab ID: R2302093-007</b>
-----------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	30			5.0	ug/L	8260C

<b>CLIENT ID: G-3</b>	<b>Lab ID: R2302093-008</b>
-----------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	110			5.0	ug/L	8260C
Trichloroethene (TCE)	17			5.0	ug/L	8260C

<b>CLIENT ID: MW-X</b>	<b>Lab ID: R2302093-009</b>
------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	97			25	ug/L	8260C
Trichloroethene (TCE)	470			25	ug/L	8260C

<b>CLIENT ID: DR-4</b>	<b>Lab ID: R2302093-005</b>
------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Trichloroethene (TCE)	15			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](http://www.alsglobal.com)

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12

**Service Request:**R2302093

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2302093-001	MW-21	3/10/2023	1035
R2302093-002	DR-1	3/9/2023	1305
R2302093-003	DR-2	3/9/2023	1150
R2302093-004	DR-3	3/9/2023	1356
R2302093-005	DR-4	3/9/2023	1100
R2302093-006	G-1	3/9/2023	1015
R2302093-007	G-2	3/9/2023	0948
R2302093-008	G-3	3/10/2023	0938
R2302093-009	MW-X	3/9/2023	
R2302093-010	EB - Field Blank	3/10/2023	1206
R2302093-011	Trip Blank	3/10/2023	







# Cooler Receipt and Preservation Check Form

R2302093 5

Bergmann Associates, Incorporated  
61 Gowanda 2023



Project/Client Bergmann Folder Number \_\_\_\_\_

Cooler received on 3/10/23 by: SES COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y <u>(N)</u>	5a	Perchlorate samples have required headspace?	Y N <u>(NA)</u>
2	Custody papers properly completed (ink, signed)?	<u>(Y)</u> N	5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	Y <u>(N)</u> NA
3	Did all bottles arrive in good condition (unbroken)?	<u>(Y)</u> N	6	Where did the bottles originate?	ALS/ROO CLIENT
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	<u>(Y)</u> N	7	Soil VOA received as:	Bulk Encore 5035set <u>(NA)</u>

8. Temperature Readings Date: 3/10/23 Time: 1520 ID: IR#7 (IR#11) From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>8.8</u>						
Within 0-6°C?	Y <u>(N)</u>	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y 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: ROO2 by SES on 3/10/23 at 1522  
5035 samples placed in storage location: \_\_\_\_\_ by \_\_\_\_\_ on \_\_\_\_\_ at \_\_\_\_\_ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check\*\*: Date: 3/13/23 Time: 09:27 by: ME

- 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 (N/A)
- 13. Were dissolved metals filtered in the field? YES NO (N/A)
- 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 <sub>3</sub>								
≤2		H <sub>2</sub> SO <sub>4</sub>								
<4		NaHSO <sub>4</sub>								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (625, 608, CN), ascorbic (phenol).					
		Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>								
		ZnAcetate	-	-						
		HCl	**	**	<u>22080153</u>	<u>06/05</u>				

\*\*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: 101022-3AXH

Explain all Discrepancies/ Other Comments:

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: ME  
PC Secondary Review: \_\_\_\_\_

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





## Miscellaneous Forms

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Phone (585) 288-5380 Fax (585) 288-8475  
[www.alsglobal.com](http://www.alsglobal.com)

## REPORT QUALIFIERS AND DEFINITIONS

<p><b>U</b> 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.</p> <p><b>J</b> 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 &gt;40% difference between two GC columns (pesticides/Aroclors).</p> <p><b>B</b> Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.</p> <p><b>E</b> Inorganics- Concentration is estimated due to the serial dilution was outside control limits.</p> <p><b>E</b> Organics- Concentration has exceeded the calibration range for that specific analysis.</p> <p><b>D</b> 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> <p><b>*</b> 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.</p> <p><b>H</b> Analysis was performed out of hold time for tests that have an “immediate” hold time criteria.</p> <p><b>#</b> Spike was diluted out.</p>	<p><b>+</b> Correlation coefficient for MSA is &lt;0.995.</p> <p><b>N</b> Inorganics- Matrix spike recovery was outside laboratory limits.</p> <p><b>N</b> Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.</p> <p><b>S</b> Concentration has been determined using Method of Standard Additions (MSA).</p> <p><b>W</b> Post-Digestion Spike recovery is outside control limits and the sample absorbance is &lt;50% of the spike absorbance.</p> <p><b>P</b> Concentration &gt;40% difference between the two GC columns.</p> <p><b>C</b> Confirmed by GC/MS</p> <p><b>Q</b> DoD reports: indicates a pesticide/Aroclor is not confirmed (<math>\geq 100\%</math> Difference between two GC columns).</p> <p><b>X</b> See Case Narrative for discussion.</p> <p><b>MRL</b> Method Reporting Limit. Also known as:</p> <p><b>LOQ</b> Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.</p> <p><b>MDL</b> 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).</p> <p><b>LOD</b> Limit of Detection. A value at or above the MDL which has been verified to be detectable.</p> <p><b>ND</b> Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.</p>
---	--

### Rochester Lab ID # for State Accreditations<sup>1</sup>



NELAP 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

<sup>1</sup> 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 or go to <https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental>

# ALS Laboratory Group

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## 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:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12

**Service Request:** R2302093

**Sample Name:** MW-21  
**Lab Code:** R2302093-001  
**Sample Matrix:** Water

**Date Collected:** 03/10/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
KRUEST

**Sample Name:** DR-1  
**Lab Code:** R2302093-002  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
KRUEST

**Sample Name:** DR-2  
**Lab Code:** R2302093-003  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
KRUEST

**Sample Name:** DR-3  
**Lab Code:** R2302093-004  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
KRUEST

**Sample Name:** DR-4  
**Lab Code:** R2302093-005  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
KRUEST

ALS Group USA, Corp.  
dba ALS Environmental

Analyst Summary report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12

**Service Request:** R2302093

**Sample Name:** G-1  
**Lab Code:** R2302093-006  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
KRUEST

**Sample Name:** G-2  
**Lab Code:** R2302093-007  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
KRUEST

**Sample Name:** G-3  
**Lab Code:** R2302093-008  
**Sample Matrix:** Water

**Date Collected:** 03/10/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
KRUEST

**Sample Name:** MW-X  
**Lab Code:** R2302093-009  
**Sample Matrix:** Water

**Date Collected:** 03/9/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
KRUEST

**Sample Name:** EB - Field Blank  
**Lab Code:** R2302093-010  
**Sample Matrix:** Water

**Date Collected:** 03/10/23  
**Date Received:** 03/10/23

**Analysis Method**  
8260C

**Extracted/Digested By**

**Analyzed By**  
KRUEST

**ALS Group USA, Corp.**

dba ALS Environmental

Analyst Summary report

**Client:** Bergmann Associates, Incorporated

**Service Request:** R2302093

**Project:** Q1 Gowanda 2023/14263.12

**Sample Name:** Trip Blank

**Date Collected:** 03/10/23

**Lab Code:** R2302093-011

**Date Received:** 03/10/23

**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.	



# 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](http://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](http://www.alsglobal.com)

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/10/23 10:35  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-21  
**Lab Code:** R2302093-001

**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	03/17/23 02:58	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 02:58	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 02:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 02:58	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 02:58	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 02:58	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:58	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:58	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 02:58	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 02:58	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:58	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 02:58	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 02:58	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:58	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:58	
1,4-Dioxane	100 U	100	1	03/17/23 02:58	
2-Butanone (MEK)	10 U	10	1	03/17/23 02:58	
2-Hexanone	10 U	10	1	03/17/23 02:58	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 02:58	
Acetone	10 U	10	1	03/17/23 02:58	
Benzene	5.0 U	5.0	1	03/17/23 02:58	
Bromochloromethane	5.0 U	5.0	1	03/17/23 02:58	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 02:58	
Bromoform	5.0 U	5.0	1	03/17/23 02:58	
Bromomethane	5.0 U	5.0	1	03/17/23 02:58	
Carbon Disulfide	10 U	10	1	03/17/23 02:58	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 02:58	
Chlorobenzene	5.0 U	5.0	1	03/17/23 02:58	
Chloroethane	5.0 U	5.0	1	03/17/23 02:58	
Chloroform	5.0 U	5.0	1	03/17/23 02:58	
Chloromethane	5.0 U	5.0	1	03/17/23 02:58	
Cyclohexane	10 U	10	1	03/17/23 02:58	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 02:58	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 02:58	
Dichloromethane	5.0 U	5.0	1	03/17/23 02:58	
Ethylbenzene	5.0 U	5.0	1	03/17/23 02:58	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 02:58	
Methyl Acetate	10 U	10	1	03/17/23 02:58	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 02:58	
Methylcyclohexane	10 U	10	1	03/17/23 02:58	
Styrene	5.0 U	5.0	1	03/17/23 02:58	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 02:58	
Toluene	5.0 U	5.0	1	03/17/23 02:58	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/10/23 10:35  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-21  
**Lab Code:** R2302093-001

**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	03/17/23 02:58	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 02:58	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 02:58	
cis-1,2-Dichloroethene	<b>5.2</b>	5.0	1	03/17/23 02:58	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:58	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 02:58	
o-Xylene	5.0 U	5.0	1	03/17/23 02:58	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 02:58	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	03/17/23 02:58	
Dibromofluoromethane	96	80 - 116	03/17/23 02:58	
Toluene-d8	99	87 - 121	03/17/23 02:58	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 13:05  
**Date Received:** 03/10/23 14:45

**Sample Name:** DR-1  
**Lab Code:** R2302093-002

**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)	25 U	25	5	03/17/23 21:00	
1,1,2,2-Tetrachloroethane	25 U	25	5	03/17/23 21:00	
1,1,2-Trichloroethane	25 U	25	5	03/17/23 21:00	
1,1,2-Trichloro-1,2,2-trifluoroethane	25 U	25	5	03/17/23 21:00	
1,1-Dichloroethane (1,1-DCA)	25 U	25	5	03/17/23 21:00	
1,1-Dichloroethene (1,1-DCE)	25 U	25	5	03/17/23 21:00	
1,2,3-Trichlorobenzene	25 U	25	5	03/17/23 21:00	
1,2,4-Trichlorobenzene	25 U	25	5	03/17/23 21:00	
1,2-Dibromo-3-chloropropane (DBCP)	25 U	25	5	03/17/23 21:00	
1,2-Dibromoethane	25 U	25	5	03/17/23 21:00	
1,2-Dichlorobenzene	25 U	25	5	03/17/23 21:00	
1,2-Dichloroethane	25 U	25	5	03/17/23 21:00	
1,2-Dichloropropane	25 U	25	5	03/17/23 21:00	
1,3-Dichlorobenzene	25 U	25	5	03/17/23 21:00	
1,4-Dichlorobenzene	25 U	25	5	03/17/23 21:00	
1,4-Dioxane	500 U	500	5	03/17/23 21:00	
2-Butanone (MEK)	50 U	50	5	03/17/23 21:00	
2-Hexanone	50 U	50	5	03/17/23 21:00	
4-Methyl-2-pentanone	50 U	50	5	03/17/23 21:00	
Acetone	50 U	50	5	03/17/23 21:00	
Benzene	25 U	25	5	03/17/23 21:00	
Bromochloromethane	25 U	25	5	03/17/23 21:00	
Bromodichloromethane	25 U	25	5	03/17/23 21:00	
Bromoform	25 U	25	5	03/17/23 21:00	
Bromomethane	25 U	25	5	03/17/23 21:00	
Carbon Disulfide	50 U	50	5	03/17/23 21:00	
Carbon Tetrachloride	25 U	25	5	03/17/23 21:00	
Chlorobenzene	25 U	25	5	03/17/23 21:00	
Chloroethane	25 U	25	5	03/17/23 21:00	
Chloroform	25 U	25	5	03/17/23 21:00	
Chloromethane	25 U	25	5	03/17/23 21:00	
Cyclohexane	50 U	50	5	03/17/23 21:00	
Dibromochloromethane	25 U	25	5	03/17/23 21:00	
Dichlorodifluoromethane (CFC 12)	25 U	25	5	03/17/23 21:00	
Dichloromethane	25 U	25	5	03/17/23 21:00	
Ethylbenzene	25 U	25	5	03/17/23 21:00	
Isopropylbenzene (Cumene)	25 U	25	5	03/17/23 21:00	
Methyl Acetate	50 U	50	5	03/17/23 21:00	
Methyl tert-Butyl Ether	25 U	25	5	03/17/23 21:00	
Methylcyclohexane	50 U	50	5	03/17/23 21:00	
Styrene	25 U	25	5	03/17/23 21:00	
Tetrachloroethene (PCE)	25 U	25	5	03/17/23 21:00	
Toluene	25 U	25	5	03/17/23 21:00	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 13:05  
**Date Received:** 03/10/23 14:45

**Sample Name:** DR-1  
**Lab Code:** R2302093-002

**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)	<b>470</b>	25	5	03/17/23 21:00	
Trichlorofluoromethane (CFC 11)	25 U	25	5	03/17/23 21:00	
Vinyl Chloride	25 U	25	5	03/17/23 21:00	
cis-1,2-Dichloroethene	<b>100</b>	25	5	03/17/23 21:00	
cis-1,3-Dichloropropene	25 U	25	5	03/17/23 21:00	
m,p-Xylenes	25 U	25	5	03/17/23 21:00	
o-Xylene	25 U	25	5	03/17/23 21:00	
trans-1,2-Dichloroethene	25 U	25	5	03/17/23 21:00	
trans-1,3-Dichloropropene	25 U	25	5	03/17/23 21:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	03/17/23 21:00	
Dibromofluoromethane	102	80 - 116	03/17/23 21:00	
Toluene-d8	104	87 - 121	03/17/23 21:00	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 11:50  
**Date Received:** 03/10/23 14:45

**Sample Name:** DR-2  
**Lab Code:** R2302093-003

**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	03/17/23 03:41	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 03:41	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 03:41	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 03:41	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 03:41	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 03:41	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 03:41	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 03:41	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 03:41	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 03:41	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:41	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 03:41	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 03:41	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:41	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 03:41	
1,4-Dioxane	100 U	100	1	03/17/23 03:41	
2-Butanone (MEK)	10 U	10	1	03/17/23 03:41	
2-Hexanone	10 U	10	1	03/17/23 03:41	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 03:41	
Acetone	10 U	10	1	03/17/23 03:41	
Benzene	5.0 U	5.0	1	03/17/23 03:41	
Bromochloromethane	5.0 U	5.0	1	03/17/23 03:41	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 03:41	
Bromoform	5.0 U	5.0	1	03/17/23 03:41	
Bromomethane	5.0 U	5.0	1	03/17/23 03:41	
Carbon Disulfide	10 U	10	1	03/17/23 03:41	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 03:41	
Chlorobenzene	5.0 U	5.0	1	03/17/23 03:41	
Chloroethane	5.0 U	5.0	1	03/17/23 03:41	
Chloroform	5.0 U	5.0	1	03/17/23 03:41	
Chloromethane	5.0 U	5.0	1	03/17/23 03:41	
Cyclohexane	10 U	10	1	03/17/23 03:41	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 03:41	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 03:41	
Dichloromethane	5.0 U	5.0	1	03/17/23 03:41	
Ethylbenzene	5.0 U	5.0	1	03/17/23 03:41	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 03:41	
Methyl Acetate	10 U	10	1	03/17/23 03:41	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 03:41	
Methylcyclohexane	10 U	10	1	03/17/23 03:41	
Styrene	5.0 U	5.0	1	03/17/23 03:41	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 03:41	
Toluene	5.0 U	5.0	1	03/17/23 03:41	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 11:50  
**Date Received:** 03/10/23 14:45

**Sample Name:** DR-2  
**Lab Code:** R2302093-003

**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)	<b>19</b>	5.0	1	03/17/23 03:41	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 03:41	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 03:41	
cis-1,2-Dichloroethene	<b>67</b>	5.0	1	03/17/23 03:41	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 03:41	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 03:41	
o-Xylene	5.0 U	5.0	1	03/17/23 03:41	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 03:41	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 03:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85 - 122	03/17/23 03:41	
Dibromofluoromethane	103	80 - 116	03/17/23 03:41	
Toluene-d8	106	87 - 121	03/17/23 03:41	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 13:56  
**Date Received:** 03/10/23 14:45

**Sample Name:** DR-3  
**Lab Code:** R2302093-004

**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	03/17/23 04:03	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 04:03	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 04:03	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 04:03	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 04:03	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 04:03	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:03	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:03	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 04:03	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 04:03	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:03	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 04:03	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 04:03	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:03	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:03	
1,4-Dioxane	100 U	100	1	03/17/23 04:03	
2-Butanone (MEK)	10 U	10	1	03/17/23 04:03	
2-Hexanone	10 U	10	1	03/17/23 04:03	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 04:03	
Acetone	10 U	10	1	03/17/23 04:03	
Benzene	5.0 U	5.0	1	03/17/23 04:03	
Bromochloromethane	5.0 U	5.0	1	03/17/23 04:03	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 04:03	
Bromoform	5.0 U	5.0	1	03/17/23 04:03	
Bromomethane	5.0 U	5.0	1	03/17/23 04:03	
Carbon Disulfide	10 U	10	1	03/17/23 04:03	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 04:03	
Chlorobenzene	5.0 U	5.0	1	03/17/23 04:03	
Chloroethane	5.0 U	5.0	1	03/17/23 04:03	
Chloroform	5.0 U	5.0	1	03/17/23 04:03	
Chloromethane	5.0 U	5.0	1	03/17/23 04:03	
Cyclohexane	10 U	10	1	03/17/23 04:03	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 04:03	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 04:03	
Dichloromethane	5.0 U	5.0	1	03/17/23 04:03	
Ethylbenzene	5.0 U	5.0	1	03/17/23 04:03	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 04:03	
Methyl Acetate	10 U	10	1	03/17/23 04:03	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 04:03	
Methylcyclohexane	10 U	10	1	03/17/23 04:03	
Styrene	5.0 U	5.0	1	03/17/23 04:03	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 04:03	
Toluene	5.0 U	5.0	1	03/17/23 04:03	



**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 13:56  
**Date Received:** 03/10/23 14:45

**Sample Name:** DR-3  
**Lab Code:** R2302093-004

**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)	<b>19</b>	5.0	1	03/17/23 04:03	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 04:03	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 04:03	
cis-1,2-Dichloroethene	<b>22</b>	5.0	1	03/17/23 04:03	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:03	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 04:03	
o-Xylene	5.0 U	5.0	1	03/17/23 04:03	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 04:03	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	03/17/23 04:03	
Dibromofluoromethane	96	80 - 116	03/17/23 04:03	
Toluene-d8	99	87 - 121	03/17/23 04:03	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 11:00  
**Date Received:** 03/10/23 14:45

**Sample Name:** DR-4  
**Lab Code:** R2302093-005

**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	03/17/23 04:24	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 04:24	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 04:24	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 04:24	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 04:24	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 04:24	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:24	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:24	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 04:24	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 04:24	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:24	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 04:24	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 04:24	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:24	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:24	
1,4-Dioxane	100 U	100	1	03/17/23 04:24	
2-Butanone (MEK)	10 U	10	1	03/17/23 04:24	
2-Hexanone	10 U	10	1	03/17/23 04:24	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 04:24	
Acetone	10 U	10	1	03/17/23 04:24	
Benzene	5.0 U	5.0	1	03/17/23 04:24	
Bromochloromethane	5.0 U	5.0	1	03/17/23 04:24	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 04:24	
Bromoform	5.0 U	5.0	1	03/17/23 04:24	
Bromomethane	5.0 U	5.0	1	03/17/23 04:24	
Carbon Disulfide	10 U	10	1	03/17/23 04:24	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 04:24	
Chlorobenzene	5.0 U	5.0	1	03/17/23 04:24	
Chloroethane	5.0 U	5.0	1	03/17/23 04:24	
Chloroform	5.0 U	5.0	1	03/17/23 04:24	
Chloromethane	5.0 U	5.0	1	03/17/23 04:24	
Cyclohexane	10 U	10	1	03/17/23 04:24	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 04:24	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 04:24	
Dichloromethane	5.0 U	5.0	1	03/17/23 04:24	
Ethylbenzene	5.0 U	5.0	1	03/17/23 04:24	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 04:24	
Methyl Acetate	10 U	10	1	03/17/23 04:24	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 04:24	
Methylcyclohexane	10 U	10	1	03/17/23 04:24	
Styrene	5.0 U	5.0	1	03/17/23 04:24	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 04:24	
Toluene	5.0 U	5.0	1	03/17/23 04:24	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 11:00  
**Date Received:** 03/10/23 14:45

**Sample Name:** DR-4  
**Lab Code:** R2302093-005

**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)	<b>15</b>	5.0	1	03/17/23 04:24	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 04:24	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 04:24	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 04:24	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:24	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 04:24	
o-Xylene	5.0 U	5.0	1	03/17/23 04:24	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 04:24	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	03/17/23 04:24	
Dibromofluoromethane	95	80 - 116	03/17/23 04:24	
Toluene-d8	99	87 - 121	03/17/23 04:24	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 10:15  
**Date Received:** 03/10/23 14:45

**Sample Name:** G-1  
**Lab Code:** R2302093-006

**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	03/17/23 04:46	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 04:46	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 04:46	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 04:46	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 04:46	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 04:46	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:46	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 04:46	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 04:46	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 04:46	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:46	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 04:46	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 04:46	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:46	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 04:46	
1,4-Dioxane	100 U	100	1	03/17/23 04:46	
2-Butanone (MEK)	10 U	10	1	03/17/23 04:46	
2-Hexanone	10 U	10	1	03/17/23 04:46	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 04:46	
Acetone	10 U	10	1	03/17/23 04:46	
Benzene	5.0 U	5.0	1	03/17/23 04:46	
Bromochloromethane	5.0 U	5.0	1	03/17/23 04:46	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 04:46	
Bromoform	5.0 U	5.0	1	03/17/23 04:46	
Bromomethane	5.0 U	5.0	1	03/17/23 04:46	
Carbon Disulfide	10 U	10	1	03/17/23 04:46	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 04:46	
Chlorobenzene	5.0 U	5.0	1	03/17/23 04:46	
Chloroethane	5.0 U	5.0	1	03/17/23 04:46	
Chloroform	5.0 U	5.0	1	03/17/23 04:46	
Chloromethane	5.0 U	5.0	1	03/17/23 04:46	
Cyclohexane	10 U	10	1	03/17/23 04:46	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 04:46	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 04:46	
Dichloromethane	5.0 U	5.0	1	03/17/23 04:46	
Ethylbenzene	5.0 U	5.0	1	03/17/23 04:46	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 04:46	
Methyl Acetate	10 U	10	1	03/17/23 04:46	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 04:46	
Methylcyclohexane	10 U	10	1	03/17/23 04:46	
Styrene	5.0 U	5.0	1	03/17/23 04:46	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 04:46	
Toluene	5.0 U	5.0	1	03/17/23 04:46	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 10:15  
**Date Received:** 03/10/23 14:45

**Sample Name:** G-1  
**Lab Code:** R2302093-006

**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)	7.5	5.0	1	03/17/23 04:46	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 04:46	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 04:46	
cis-1,2-Dichloroethene	26	5.0	1	03/17/23 04:46	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:46	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 04:46	
o-Xylene	5.0 U	5.0	1	03/17/23 04:46	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 04:46	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 04:46	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	03/17/23 04:46	
Dibromofluoromethane	96	80 - 116	03/17/23 04:46	
Toluene-d8	99	87 - 121	03/17/23 04:46	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 09:48  
**Date Received:** 03/10/23 14:45

**Sample Name:** G-2  
**Lab Code:** R2302093-007

**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	03/17/23 05:07	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 05:07	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 05:07	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 05:07	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 05:07	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 05:07	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 05:07	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 05:07	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 05:07	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 05:07	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:07	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 05:07	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 05:07	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:07	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:07	
1,4-Dioxane	100 U	100	1	03/17/23 05:07	
2-Butanone (MEK)	10 U	10	1	03/17/23 05:07	
2-Hexanone	10 U	10	1	03/17/23 05:07	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 05:07	
Acetone	10 U	10	1	03/17/23 05:07	
Benzene	5.0 U	5.0	1	03/17/23 05:07	
Bromochloromethane	5.0 U	5.0	1	03/17/23 05:07	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 05:07	
Bromoform	5.0 U	5.0	1	03/17/23 05:07	
Bromomethane	5.0 U	5.0	1	03/17/23 05:07	
Carbon Disulfide	10 U	10	1	03/17/23 05:07	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 05:07	
Chlorobenzene	5.0 U	5.0	1	03/17/23 05:07	
Chloroethane	5.0 U	5.0	1	03/17/23 05:07	
Chloroform	5.0 U	5.0	1	03/17/23 05:07	
Chloromethane	5.0 U	5.0	1	03/17/23 05:07	
Cyclohexane	10 U	10	1	03/17/23 05:07	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 05:07	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 05:07	
Dichloromethane	5.0 U	5.0	1	03/17/23 05:07	
Ethylbenzene	5.0 U	5.0	1	03/17/23 05:07	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 05:07	
Methyl Acetate	10 U	10	1	03/17/23 05:07	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 05:07	
Methylcyclohexane	10 U	10	1	03/17/23 05:07	
Styrene	5.0 U	5.0	1	03/17/23 05:07	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 05:07	
Toluene	5.0 U	5.0	1	03/17/23 05:07	

ALS Group USA, Corp.  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23 09:48  
**Date Received:** 03/10/23 14:45

**Sample Name:** G-2  
**Lab Code:** R2302093-007

**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	03/17/23 05:07	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 05:07	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 05:07	
cis-1,2-Dichloroethene	30	5.0	1	03/17/23 05:07	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 05:07	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 05:07	
o-Xylene	5.0 U	5.0	1	03/17/23 05:07	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 05:07	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 05:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	03/17/23 05:07	
Dibromofluoromethane	98	80 - 116	03/17/23 05:07	
Toluene-d8	101	87 - 121	03/17/23 05:07	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/10/23 09:38  
**Date Received:** 03/10/23 14:45

**Sample Name:** G-3  
**Lab Code:** R2302093-008

**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	03/17/23 05:29	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 05:29	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 05:29	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 05:29	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 05:29	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 05:29	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 05:29	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 05:29	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 05:29	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 05:29	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:29	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 05:29	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 05:29	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:29	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 05:29	
1,4-Dioxane	100 U	100	1	03/17/23 05:29	
2-Butanone (MEK)	10 U	10	1	03/17/23 05:29	
2-Hexanone	10 U	10	1	03/17/23 05:29	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 05:29	
Acetone	10 U	10	1	03/17/23 05:29	
Benzene	5.0 U	5.0	1	03/17/23 05:29	
Bromochloromethane	5.0 U	5.0	1	03/17/23 05:29	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 05:29	
Bromoform	5.0 U	5.0	1	03/17/23 05:29	
Bromomethane	5.0 U	5.0	1	03/17/23 05:29	
Carbon Disulfide	10 U	10	1	03/17/23 05:29	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 05:29	
Chlorobenzene	5.0 U	5.0	1	03/17/23 05:29	
Chloroethane	5.0 U	5.0	1	03/17/23 05:29	
Chloroform	5.0 U	5.0	1	03/17/23 05:29	
Chloromethane	5.0 U	5.0	1	03/17/23 05:29	
Cyclohexane	10 U	10	1	03/17/23 05:29	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 05:29	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 05:29	
Dichloromethane	5.0 U	5.0	1	03/17/23 05:29	
Ethylbenzene	5.0 U	5.0	1	03/17/23 05:29	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 05:29	
Methyl Acetate	10 U	10	1	03/17/23 05:29	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 05:29	
Methylcyclohexane	10 U	10	1	03/17/23 05:29	
Styrene	5.0 U	5.0	1	03/17/23 05:29	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 05:29	
Toluene	5.0 U	5.0	1	03/17/23 05:29	



**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/10/23 09:38  
**Date Received:** 03/10/23 14:45

**Sample Name:** G-3  
**Lab Code:** R2302093-008

**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)	<b>17</b>	5.0	1	03/17/23 05:29	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 05:29	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 05:29	
cis-1,2-Dichloroethene	<b>110</b>	5.0	1	03/17/23 05:29	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 05:29	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 05:29	
o-Xylene	5.0 U	5.0	1	03/17/23 05:29	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 05:29	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 05:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	03/17/23 05:29	
Dibromofluoromethane	101	80 - 116	03/17/23 05:29	
Toluene-d8	103	87 - 121	03/17/23 05:29	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-X  
**Lab Code:** R2302093-009

**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)	25 U	25	5	03/17/23 21:21	
1,1,2,2-Tetrachloroethane	25 U	25	5	03/17/23 21:21	
1,1,2-Trichloroethane	25 U	25	5	03/17/23 21:21	
1,1,2-Trichloro-1,2,2-trifluoroethane	25 U	25	5	03/17/23 21:21	
1,1-Dichloroethane (1,1-DCA)	25 U	25	5	03/17/23 21:21	
1,1-Dichloroethene (1,1-DCE)	25 U	25	5	03/17/23 21:21	
1,2,3-Trichlorobenzene	25 U	25	5	03/17/23 21:21	
1,2,4-Trichlorobenzene	25 U	25	5	03/17/23 21:21	
1,2-Dibromo-3-chloropropane (DBCP)	25 U	25	5	03/17/23 21:21	
1,2-Dibromoethane	25 U	25	5	03/17/23 21:21	
1,2-Dichlorobenzene	25 U	25	5	03/17/23 21:21	
1,2-Dichloroethane	25 U	25	5	03/17/23 21:21	
1,2-Dichloropropane	25 U	25	5	03/17/23 21:21	
1,3-Dichlorobenzene	25 U	25	5	03/17/23 21:21	
1,4-Dichlorobenzene	25 U	25	5	03/17/23 21:21	
1,4-Dioxane	500 U	500	5	03/17/23 21:21	
2-Butanone (MEK)	50 U	50	5	03/17/23 21:21	
2-Hexanone	50 U	50	5	03/17/23 21:21	
4-Methyl-2-pentanone	50 U	50	5	03/17/23 21:21	
Acetone	50 U	50	5	03/17/23 21:21	
Benzene	25 U	25	5	03/17/23 21:21	
Bromochloromethane	25 U	25	5	03/17/23 21:21	
Bromodichloromethane	25 U	25	5	03/17/23 21:21	
Bromoform	25 U	25	5	03/17/23 21:21	
Bromomethane	25 U	25	5	03/17/23 21:21	
Carbon Disulfide	50 U	50	5	03/17/23 21:21	
Carbon Tetrachloride	25 U	25	5	03/17/23 21:21	
Chlorobenzene	25 U	25	5	03/17/23 21:21	
Chloroethane	25 U	25	5	03/17/23 21:21	
Chloroform	25 U	25	5	03/17/23 21:21	
Chloromethane	25 U	25	5	03/17/23 21:21	
Cyclohexane	50 U	50	5	03/17/23 21:21	
Dibromochloromethane	25 U	25	5	03/17/23 21:21	
Dichlorodifluoromethane (CFC 12)	25 U	25	5	03/17/23 21:21	
Dichloromethane	25 U	25	5	03/17/23 21:21	
Ethylbenzene	25 U	25	5	03/17/23 21:21	
Isopropylbenzene (Cumene)	25 U	25	5	03/17/23 21:21	
Methyl Acetate	50 U	50	5	03/17/23 21:21	
Methyl tert-Butyl Ether	25 U	25	5	03/17/23 21:21	
Methylcyclohexane	50 U	50	5	03/17/23 21:21	
Styrene	25 U	25	5	03/17/23 21:21	
Tetrachloroethene (PCE)	25 U	25	5	03/17/23 21:21	
Toluene	25 U	25	5	03/17/23 21:21	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/09/23  
**Date Received:** 03/10/23 14:45

**Sample Name:** MW-X  
**Lab Code:** R2302093-009

**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)	<b>470</b>	25	5	03/17/23 21:21	
Trichlorofluoromethane (CFC 11)	25 U	25	5	03/17/23 21:21	
Vinyl Chloride	25 U	25	5	03/17/23 21:21	
cis-1,2-Dichloroethene	<b>97</b>	25	5	03/17/23 21:21	
cis-1,3-Dichloropropene	25 U	25	5	03/17/23 21:21	
m,p-Xylenes	25 U	25	5	03/17/23 21:21	
o-Xylene	25 U	25	5	03/17/23 21:21	
trans-1,2-Dichloroethene	25 U	25	5	03/17/23 21:21	
trans-1,3-Dichloropropene	25 U	25	5	03/17/23 21:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	03/17/23 21:21	
Dibromofluoromethane	103	80 - 116	03/17/23 21:21	
Toluene-d8	105	87 - 121	03/17/23 21:21	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/10/23 12:06  
**Date Received:** 03/10/23 14:45

**Sample Name:** EB - Field Blank  
**Lab Code:** R2302093-010

**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	03/17/23 02:37	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 02:37	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 02:37	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 02:37	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 02:37	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 02:37	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:37	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:37	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 02:37	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 02:37	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:37	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 02:37	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 02:37	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:37	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:37	
1,4-Dioxane	100 U	100	1	03/17/23 02:37	
2-Butanone (MEK)	10 U	10	1	03/17/23 02:37	
2-Hexanone	10 U	10	1	03/17/23 02:37	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 02:37	
Acetone	10 U	10	1	03/17/23 02:37	
Benzene	5.0 U	5.0	1	03/17/23 02:37	
Bromochloromethane	5.0 U	5.0	1	03/17/23 02:37	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 02:37	
Bromoform	5.0 U	5.0	1	03/17/23 02:37	
Bromomethane	5.0 U	5.0	1	03/17/23 02:37	
Carbon Disulfide	10 U	10	1	03/17/23 02:37	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 02:37	
Chlorobenzene	5.0 U	5.0	1	03/17/23 02:37	
Chloroethane	5.0 U	5.0	1	03/17/23 02:37	
Chloroform	5.0 U	5.0	1	03/17/23 02:37	
Chloromethane	5.0 U	5.0	1	03/17/23 02:37	
Cyclohexane	10 U	10	1	03/17/23 02:37	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 02:37	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 02:37	
Dichloromethane	5.0 U	5.0	1	03/17/23 02:37	
Ethylbenzene	5.0 U	5.0	1	03/17/23 02:37	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 02:37	
Methyl Acetate	10 U	10	1	03/17/23 02:37	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 02:37	
Methylcyclohexane	10 U	10	1	03/17/23 02:37	
Styrene	5.0 U	5.0	1	03/17/23 02:37	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 02:37	
Toluene	5.0 U	5.0	1	03/17/23 02:37	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/10/23 12:06  
**Date Received:** 03/10/23 14:45

**Sample Name:** EB - Field Blank  
**Lab Code:** R2302093-010

**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	03/17/23 02:37	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 02:37	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 02:37	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 02:37	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:37	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 02:37	
o-Xylene	5.0 U	5.0	1	03/17/23 02:37	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 02:37	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	03/17/23 02:37	
Dibromofluoromethane	96	80 - 116	03/17/23 02:37	
Toluene-d8	100	87 - 121	03/17/23 02:37	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/10/23  
**Date Received:** 03/10/23 14:45

**Sample Name:** Trip Blank  
**Lab Code:** R2302093-011

**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	03/17/23 02:15	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 02:15	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 02:15	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 02:15	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 02:15	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 02:15	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:15	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 02:15	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 02:15	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 02:15	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:15	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 02:15	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 02:15	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:15	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 02:15	
1,4-Dioxane	100 U	100	1	03/17/23 02:15	
2-Butanone (MEK)	10 U	10	1	03/17/23 02:15	
2-Hexanone	10 U	10	1	03/17/23 02:15	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 02:15	
Acetone	10 U	10	1	03/17/23 02:15	
Benzene	5.0 U	5.0	1	03/17/23 02:15	
Bromochloromethane	5.0 U	5.0	1	03/17/23 02:15	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 02:15	
Bromoform	5.0 U	5.0	1	03/17/23 02:15	
Bromomethane	5.0 U	5.0	1	03/17/23 02:15	
Carbon Disulfide	10 U	10	1	03/17/23 02:15	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 02:15	
Chlorobenzene	5.0 U	5.0	1	03/17/23 02:15	
Chloroethane	5.0 U	5.0	1	03/17/23 02:15	
Chloroform	5.0 U	5.0	1	03/17/23 02:15	
Chloromethane	5.0 U	5.0	1	03/17/23 02:15	
Cyclohexane	10 U	10	1	03/17/23 02:15	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 02:15	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 02:15	
Dichloromethane	5.0 U	5.0	1	03/17/23 02:15	
Ethylbenzene	5.0 U	5.0	1	03/17/23 02:15	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 02:15	
Methyl Acetate	10 U	10	1	03/17/23 02:15	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 02:15	
Methylcyclohexane	10 U	10	1	03/17/23 02:15	
Styrene	5.0 U	5.0	1	03/17/23 02:15	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 02:15	
Toluene	5.0 U	5.0	1	03/17/23 02:15	

ALS Group USA, Corp.  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** 03/10/23  
**Date Received:** 03/10/23 14:45

**Sample Name:** Trip Blank  
**Lab Code:** R2302093-011

**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	03/17/23 02:15	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 02:15	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 02:15	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 02:15	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:15	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 02:15	
o-Xylene	5.0 U	5.0	1	03/17/23 02:15	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 02:15	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 02:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	03/17/23 02:15	
Dibromofluoromethane	96	80 - 116	03/17/23 02:15	
Toluene-d8	97	87 - 121	03/17/23 02:15	



# 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](http://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](http://www.alsglobal.com)

ALS Group USA, Corp.  
dba ALS Environmental

QA/QC Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093

**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
		85-122	80-116	87-121
MW-21	R2302093-001	98	96	99
DR-1	R2302093-002	99	102	104
DR-2	R2302093-003	106	103	106
DR-3	R2302093-004	100	96	99
DR-4	R2302093-005	99	95	99
G-1	R2302093-006	98	96	99
G-2	R2302093-007	98	98	101
G-3	R2302093-008	102	101	103
MW-X	R2302093-009	101	103	105
EB - Field Blank	R2302093-010	100	96	100
Trip Blank	R2302093-011	98	96	97
Method Blank	RQ2303103-10	96	95	96
Method Blank	RQ2303153-04	100	98	102
Lab Control Sample	RQ2303103-08	104	102	102
Duplicate Lab Control Sample	RQ2303103-09	97	99	99
Lab Control Sample	RQ2303153-03	104	101	102

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** RQ2303103-10

**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	03/16/23 23:02	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/16/23 23:02	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/16/23 23:02	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/16/23 23:02	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/16/23 23:02	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/16/23 23:02	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/16/23 23:02	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/16/23 23:02	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/16/23 23:02	
1,2-Dibromoethane	5.0 U	5.0	1	03/16/23 23:02	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/16/23 23:02	
1,2-Dichloroethane	5.0 U	5.0	1	03/16/23 23:02	
1,2-Dichloropropane	5.0 U	5.0	1	03/16/23 23:02	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/16/23 23:02	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/16/23 23:02	
1,4-Dioxane	100 U	100	1	03/16/23 23:02	
2-Butanone (MEK)	10 U	10	1	03/16/23 23:02	
2-Hexanone	10 U	10	1	03/16/23 23:02	
4-Methyl-2-pentanone	10 U	10	1	03/16/23 23:02	
Acetone	10 U	10	1	03/16/23 23:02	
Benzene	5.0 U	5.0	1	03/16/23 23:02	
Bromochloromethane	5.0 U	5.0	1	03/16/23 23:02	
Bromodichloromethane	5.0 U	5.0	1	03/16/23 23:02	
Bromoform	5.0 U	5.0	1	03/16/23 23:02	
Bromomethane	5.0 U	5.0	1	03/16/23 23:02	
Carbon Disulfide	10 U	10	1	03/16/23 23:02	
Carbon Tetrachloride	5.0 U	5.0	1	03/16/23 23:02	
Chlorobenzene	5.0 U	5.0	1	03/16/23 23:02	
Chloroethane	5.0 U	5.0	1	03/16/23 23:02	
Chloroform	5.0 U	5.0	1	03/16/23 23:02	
Chloromethane	5.0 U	5.0	1	03/16/23 23:02	
Cyclohexane	10 U	10	1	03/16/23 23:02	
Dibromochloromethane	5.0 U	5.0	1	03/16/23 23:02	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/16/23 23:02	
Dichloromethane	5.0 U	5.0	1	03/16/23 23:02	
Ethylbenzene	5.0 U	5.0	1	03/16/23 23:02	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/16/23 23:02	
Methyl Acetate	10 U	10	1	03/16/23 23:02	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/16/23 23:02	
Methylcyclohexane	10 U	10	1	03/16/23 23:02	
Styrene	5.0 U	5.0	1	03/16/23 23:02	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/16/23 23:02	
Toluene	5.0 U	5.0	1	03/16/23 23:02	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** RQ2303103-10

**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	03/16/23 23:02	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/16/23 23:02	
Vinyl Chloride	5.0 U	5.0	1	03/16/23 23:02	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/16/23 23:02	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/16/23 23:02	
m,p-Xylenes	5.0 U	5.0	1	03/16/23 23:02	
o-Xylene	5.0 U	5.0	1	03/16/23 23:02	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/16/23 23:02	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/16/23 23:02	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	03/16/23 23:02	
Dibromofluoromethane	95	80 - 116	03/16/23 23:02	
Toluene-d8	96	87 - 121	03/16/23 23:02	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** RQ2303153-04

**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	03/17/23 20:17	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	03/17/23 20:17	
1,1,2-Trichloroethane	5.0 U	5.0	1	03/17/23 20:17	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	03/17/23 20:17	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	03/17/23 20:17	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	03/17/23 20:17	
1,2,3-Trichlorobenzene	5.0 U	5.0	1	03/17/23 20:17	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	03/17/23 20:17	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	03/17/23 20:17	
1,2-Dibromoethane	5.0 U	5.0	1	03/17/23 20:17	
1,2-Dichlorobenzene	5.0 U	5.0	1	03/17/23 20:17	
1,2-Dichloroethane	5.0 U	5.0	1	03/17/23 20:17	
1,2-Dichloropropane	5.0 U	5.0	1	03/17/23 20:17	
1,3-Dichlorobenzene	5.0 U	5.0	1	03/17/23 20:17	
1,4-Dichlorobenzene	5.0 U	5.0	1	03/17/23 20:17	
1,4-Dioxane	100 U	100	1	03/17/23 20:17	
2-Butanone (MEK)	10 U	10	1	03/17/23 20:17	
2-Hexanone	10 U	10	1	03/17/23 20:17	
4-Methyl-2-pentanone	10 U	10	1	03/17/23 20:17	
Acetone	10 U	10	1	03/17/23 20:17	
Benzene	5.0 U	5.0	1	03/17/23 20:17	
Bromochloromethane	5.0 U	5.0	1	03/17/23 20:17	
Bromodichloromethane	5.0 U	5.0	1	03/17/23 20:17	
Bromoform	5.0 U	5.0	1	03/17/23 20:17	
Bromomethane	5.0 U	5.0	1	03/17/23 20:17	
Carbon Disulfide	10 U	10	1	03/17/23 20:17	
Carbon Tetrachloride	5.0 U	5.0	1	03/17/23 20:17	
Chlorobenzene	5.0 U	5.0	1	03/17/23 20:17	
Chloroethane	5.0 U	5.0	1	03/17/23 20:17	
Chloroform	5.0 U	5.0	1	03/17/23 20:17	
Chloromethane	5.0 U	5.0	1	03/17/23 20:17	
Cyclohexane	10 U	10	1	03/17/23 20:17	
Dibromochloromethane	5.0 U	5.0	1	03/17/23 20:17	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	03/17/23 20:17	
Dichloromethane	5.0 U	5.0	1	03/17/23 20:17	
Ethylbenzene	5.0 U	5.0	1	03/17/23 20:17	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	03/17/23 20:17	
Methyl Acetate	10 U	10	1	03/17/23 20:17	
Methyl tert-Butyl Ether	5.0 U	5.0	1	03/17/23 20:17	
Methylcyclohexane	10 U	10	1	03/17/23 20:17	
Styrene	5.0 U	5.0	1	03/17/23 20:17	
Tetrachloroethene (PCE)	5.0 U	5.0	1	03/17/23 20:17	
Toluene	5.0 U	5.0	1	03/17/23 20:17	

**ALS Group USA, Corp.**  
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Analytical Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** RQ2303153-04

**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	03/17/23 20:17	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	03/17/23 20:17	
Vinyl Chloride	5.0 U	5.0	1	03/17/23 20:17	
cis-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 20:17	
cis-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 20:17	
m,p-Xylenes	5.0 U	5.0	1	03/17/23 20:17	
o-Xylene	5.0 U	5.0	1	03/17/23 20:17	
trans-1,2-Dichloroethene	5.0 U	5.0	1	03/17/23 20:17	
trans-1,3-Dichloropropene	5.0 U	5.0	1	03/17/23 20:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	03/17/23 20:17	
Dibromofluoromethane	98	80 - 116	03/17/23 20:17	
Toluene-d8	102	87 - 121	03/17/23 20:17	

ALS Group USA, Corp.  
dba ALS Environmental

QA/QC Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Analyzed:** 03/17/23

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Units:**ug/L  
**Basis:**NA

**Lab Control Sample**  
RQ2303153-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.0	20.0	95	75-125
1,1,2,2-Tetrachloroethane	8260C	19.9	20.0	100	78-126
1,1,2-Trichloroethane	8260C	21.2	20.0	106	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	20.0	20.0	100	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	20.3	20.0	102	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	21.5	20.0	107	69-142
1,2,3-Trichlorobenzene	8260C	18.9	20.0	94	67-136
1,2,4-Trichlorobenzene	8260C	19.1	20.0	96	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	19.9	20.0	100	55-136
1,2-Dibromoethane	8260C	21.6	20.0	108	82-127
1,2-Dichlorobenzene	8260C	20.3	20.0	102	80-119
1,2-Dichloroethane	8260C	18.9	20.0	94	71-127
1,2-Dichloropropane	8260C	20.2	20.0	101	80-119
1,3-Dichlorobenzene	8260C	20.6	20.0	103	83-121
1,4-Dichlorobenzene	8260C	20.0	20.0	100	79-119
1,4-Dioxane	8260C	406	400	101	44-154
2-Butanone (MEK)	8260C	18.7	20.0	94	61-137
2-Hexanone	8260C	19.4	20.0	97	63-124
4-Methyl-2-pentanone	8260C	18.8	20.0	94	66-124
Acetone	8260C	18.8	20.0	94	40-161
Benzene	8260C	20.5	20.0	102	79-119
Bromochloromethane	8260C	20.4	20.0	102	81-126
Bromodichloromethane	8260C	19.1	20.0	95	81-123
Bromoform	8260C	21.1	20.0	105	65-146
Bromomethane	8260C	25.3	20.0	127	42-166
Carbon Disulfide	8260C	20.1	20.0	100	66-128
Carbon Tetrachloride	8260C	19.3	20.0	96	70-127
Chlorobenzene	8260C	21.1	20.0	105	80-121
Chloroethane	8260C	20.9	20.0	104	62-131
Chloroform	8260C	18.8	20.0	94	79-120
Chloromethane	8260C	19.7	20.0	99	72-179
Cyclohexane	8260C	18.9	20.0	94	69-120
Dibromochloromethane	8260C	20.7	20.0	103	72-128

ALS Group USA, Corp.  
dba ALS Environmental

QA/QC Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Analyzed:** 03/17/23

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Units:**ug/L  
**Basis:**NA

**Lab Control Sample**  
RQ2303153-03

<b>Analyte Name</b>	<b>Analytical Method</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Dichlorodifluoromethane (CFC 12)	8260C	16.8	20.0	84	59-155
Dichloromethane	8260C	20.4	20.0	102	73-122
Ethylbenzene	8260C	20.3	20.0	102	76-120
Isopropylbenzene (Cumene)	8260C	21.4	20.0	107	77-128
Methyl Acetate	8260C	17.3	20.0	87	61-133
Methyl tert-Butyl Ether	8260C	19.9	20.0	100	75-118
Methylcyclohexane	8260C	20.3	20.0	102	51-129
Styrene	8260C	21.6	20.0	108	80-124
Tetrachloroethene (PCE)	8260C	20.3	20.0	102	72-125
Toluene	8260C	20.4	20.0	102	79-119
Trichloroethene (TCE)	8260C	21.1	20.0	106	74-122
Trichlorofluoromethane (CFC 11)	8260C	20.0	20.0	100	71-136
Vinyl Chloride	8260C	17.6	20.0	88	74-159
cis-1,2-Dichloroethene	8260C	20.6	20.0	103	80-121
cis-1,3-Dichloropropene	8260C	21.6	20.0	108	77-122
m,p-Xylenes	8260C	42.1	40.0	105	80-126
o-Xylene	8260C	21.2	20.0	106	79-123
trans-1,2-Dichloroethene	8260C	21.0	20.0	105	73-118
trans-1,3-Dichloropropene	8260C	20.7	20.0	103	71-133



ALS Group USA, Corp.  
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QA/QC Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Analyzed:** 03/16/23

**Duplicate Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Units:**ug/L  
**Basis:**NA

Analyte Name	Lab Control Sample RQ2303103-08				Duplicate Lab Control Sample RQ2303103-09					
	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane (TCA)	8260C	19.3	20.0	96	19.9	20.0	100	75-125	3	30
1,1,2,2-Tetrachloroethane	8260C	25.3	20.0	126	23.7	20.0	119	78-126	6	30
1,1,2-Trichloroethane	8260C	22.4	20.0	112	21.8	20.0	109	82-121	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	19.7	20.0	98	20.7	20.0	104	67-124	5	30
1,1-Dichloroethane (1,1-DCA)	8260C	20.5	20.0	103	21.2	20.0	106	80-124	3	30
1,1-Dichloroethene (1,1-DCE)	8260C	22.5	20.0	113	22.4	20.0	112	69-142	<1	30
1,2,3-Trichlorobenzene	8260C	21.8	20.0	109	21.6	20.0	108	67-136	<1	30
1,2,4-Trichlorobenzene	8260C	21.2	20.0	106	21.1	20.0	106	75-132	<1	30
1,2-Dibromo-3-chloropropane (DBCP)	8260C	25.3	20.0	126	24.6	20.0	123	55-136	3	30
1,2-Dibromoethane	8260C	22.0	20.0	110	22.1	20.0	111	82-127	<1	30
1,2-Dichlorobenzene	8260C	22.5	20.0	112	21.7	20.0	109	80-119	4	30
1,2-Dichloroethane	8260C	18.2	20.0	91	19.0	20.0	95	71-127	4	30
1,2-Dichloropropane	8260C	20.2	20.0	101	21.9	20.0	109	80-119	8	30
1,3-Dichlorobenzene	8260C	22.2	20.0	111	21.9	20.0	110	83-121	1	30
1,4-Dichlorobenzene	8260C	21.9	20.0	110	21.3	20.0	107	79-119	3	30
1,4-Dioxane	8260C	479	400	120	512	400	128	44-154	7	30
2-Butanone (MEK)	8260C	17.1	20.0	86	19.2	20.0	96	61-137	12	30
2-Hexanone	8260C	18.5	20.0	93	19.6	20.0	98	63-124	6	30
4-Methyl-2-pentanone	8260C	17.7	20.0	88	19.1	20.0	96	66-124	8	30
Acetone	8260C	18.6	20.0	93	19.5	20.0	98	40-161	5	30
Benzene	8260C	20.6	20.0	103	21.6	20.0	108	79-119	5	30
Bromochloromethane	8260C	20.8	20.0	104	21.4	20.0	107	81-126	3	30
Bromodichloromethane	8260C	19.8	20.0	99	19.6	20.0	98	81-123	<1	30
Bromoform	8260C	24.5	20.0	123	24.0	20.0	120	65-146	2	30
Bromomethane	8260C	27.6	20.0	138	25.9	20.0	130	42-166	6	30
Carbon Disulfide	8260C	19.3	20.0	97	19.8	20.0	99	66-128	3	30
Carbon Tetrachloride	8260C	19.1	20.0	96	20.1	20.0	100	70-127	5	30
Chlorobenzene	8260C	21.0	20.0	105	21.7	20.0	108	80-121	3	30
Chloroethane	8260C	21.6	20.0	108	21.8	20.0	109	62-131	<1	30
Chloroform	8260C	19.6	20.0	98	19.9	20.0	100	79-120	2	30
Chloromethane	8260C	20.5	20.0	102	21.6	20.0	108	72-179	5	30
Cyclohexane	8260C	18.0	20.0	90	18.8	20.0	94	69-120	4	30
Dibromochloromethane	8260C	22.1	20.0	111	21.6	20.0	108	72-128	2	30

ALS Group USA, Corp.  
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QA/QC Report

**Client:** Bergmann Associates, Incorporated  
**Project:** Q1 Gowanda 2023/14263.12  
**Sample Matrix:** Water

**Service Request:** R2302093  
**Date Analyzed:** 03/16/23

**Duplicate Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Units:**ug/L  
**Basis:**NA

Analyte Name	Lab Control Sample RQ2303103-08				Duplicate Lab Control Sample RQ2303103-09					
	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane (CFC 12)	8260C	17.5	20.0	87	18.0	20.0	90	59-155	3	30
Dichloromethane	8260C	20.7	20.0	104	21.6	20.0	108	73-122	4	30
Ethylbenzene	8260C	21.1	20.0	105	21.3	20.0	107	76-120	1	30
Isopropylbenzene (Cumene)	8260C	21.9	20.0	110	22.5	20.0	113	77-128	3	30
Methyl Acetate	8260C	16.9	20.0	84	17.6	20.0	88	61-133	4	30
Methyl tert-Butyl Ether	8260C	20.2	20.0	101	20.7	20.0	103	75-118	2	30
Methylcyclohexane	8260C	19.6	20.0	98	20.3	20.0	102	51-129	3	30
Styrene	8260C	22.7	20.0	113	22.8	20.0	114	80-124	<1	30
Tetrachloroethene (PCE)	8260C	20.9	20.0	105	21.6	20.0	108	72-125	3	30
Toluene	8260C	20.6	20.0	103	21.7	20.0	109	79-119	5	30
Trichloroethene (TCE)	8260C	21.1	20.0	106	21.7	20.0	109	74-122	3	30
Trichlorofluoromethane (CFC 11)	8260C	20.3	20.0	101	21.0	20.0	105	71-136	4	30
Vinyl Chloride	8260C	18.8	20.0	94	18.6	20.0	93	74-159	<1	30
cis-1,2-Dichloroethene	8260C	20.7	20.0	104	21.8	20.0	109	80-121	5	30
cis-1,3-Dichloropropene	8260C	21.5	20.0	107	21.8	20.0	109	77-122	1	30
m,p-Xylenes	8260C	42.6	40.0	107	44.4	40.0	111	80-126	4	30
o-Xylene	8260C	21.6	20.0	108	22.0	20.0	110	79-123	2	30
trans-1,2-Dichloroethene	8260C	21.8	20.0	109	21.9	20.0	109	73-118	<1	30
trans-1,3-Dichloropropene	8260C	21.1	20.0	106	21.4	20.0	107	71-133	1	30



# FIELD FORMS

**GROUNDWATER SAMPLING WORKSHEET**



**BERGMANN**  
ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/9/2023  
 Weather: 31 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 4.4  
 Depth to bottom of the well: 16.02  
 Length of water column in well: 11.62

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: 1.8941  
 3 Well volumes (= length water column X gal/foot X 3): 5.68  
 Actual volume purged prior to sampling: 5.75

Sampling Methodology: Hand bailing  
 Sampling Equipment: Bailer

Well Recharged? N/A  
 Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	435.17	NTU								
Temperature	9	°C								
pH	7.58									
Conductivity	0.0062	SPC ms/cm								
Oxygen	7.31	DO mg/L								
Salinity										

Time sample was collected: 15:38

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



**BERGMANN**  
ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
Project Number: 14263.12  
Site Location: Gowanda, New York  
Sample Date: 3/9/2023  
Weather: 31 Degrees F  
Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 5.2  
Depth to bottom of the well: 17.15  
Length of water column in well: 11.95

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: 1.95  
3 Well volumes (= length water column X gal/foot X 3): 5.84  
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	523.62	NTU								
Temperature	9	°C								
pH	7.02									
Conductivity	0.4492	SPC ms/cm								
Oxygen	4.55	DO mg/L								
Salinity										

Time sample was collected: 15:55

**COMMENTS** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



**BERGMANN**  
ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/9/2023  
 Weather: 31 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 9.7  
 Depth to bottom of the well: 16.30  
 Length of water column in well: 6.60

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: 1.1  
 3 Well volumes (= length water column X gal/foot X 3): 3.23  
 Actual volume purged prior to sampling: 3.25

Sampling Methodology: Hand bailing  
 Sampling Equipment: Bailer

Well Recharged? N/A  
 Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	432.19	NTU								
Temperature	8.8	°C								
pH	7.08									
Conductivity	0.249	SPC ms/cm								
Oxygen	6.39	DO mg/L								
Salinity										

Time sample was collected: 16:18

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



**BERGMANN**  
ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
Project Number: 14263.12  
Site Location: Gowanda, New York  
Sample Date: 3/9/2023  
Weather: 31 Degrees F  
Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 7.9  
Depth to bottom of the well: 15.78  
Length of water column in well: 7.88

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: 1.2844  
3 Well volumes (= length water column X gal/foot X 3): 3.8533  
Actual volume purged prior to sampling: 4

Sampling Methodology: Hand bailing  
Sampling Equipment: Bailer

Well Recharged? N/A  
Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	347.65	NTU								
Temperature	8.9	°C								
pH	6.97									
Conductivity	0.603	SPC ms/cm								
Oxygen	7.58	DO mg/L								
Salinity										

Time sample was collected: 16:33

**COMMENTS** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



**BERGMANN**  
ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/10/2023  
 Weather: 29 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 10.4  
 Depth to bottom of the well: 13.95  
 Length of water column in well: 3.55

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: 0.58  
 3 Well volumes (= length water column X gal/foot X 3): 1.74  
 Actual volume purged prior to sampling: 2.00

Sampling Methodology: Hand bailing  
 Sampling Equipment: Bailer

Well Recharged? N/A  
 Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	346.76	NTU								
Temperature	7.3	°C								
pH	6.85									
Conductivity	0.3462	SPC ms/cm								
Oxygen	6.7	DO mg/L								
Salinity										

Time sample was collected: 8:08

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**GROUNDWATER SAMPLING WORKSHEET**



**BERGMANN**  
ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
Project Number: 14263.12  
Site Location: Gowanda, New York  
Sample Date: 3/10/2023  
Weather: 29 Degrees F  
Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 12.9  
Depth to bottom of the well: 22.88  
Length of water column in well: 9.98

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: 1.63  
3 Well volumes (= length water column X gal/foot X 3): 4.88  
Actual volume purged prior to sampling: 5.00  
Sampling Methodology: Hand bailing  
Sampling Equipment: Bailer  
Well Recharged? N/A  
Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	337.43	NTU								
Temperature	10.1	°C								
pH	7.14									
Conductivity	0.657	SPC ms/cm								
Oxygen	5.35	DO mg/L								
Salinity										

Time sample was collected: 8:35

**COMMENTS** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
Project Number: 14263.12  
Site Location: Gowanda, New York  
Sample Date: 3/10/2023  
Weather: 29 Degrees F  
Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 13.02  
Depth to bottom of the well: 21.8  
Length of water column in well: 8.78

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): 4.29  
Actual volume purged prior to sampling: 4.33

Sampling Methodology: Hand bailing  
Sampling Equipment: Bailer

Well Recharged? N/A  
Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	357.23	NTU								
Temperature	9.7	°C								
pH	6.85									
Conductivity	0.562	SPC ms/cm								
Oxygen	4.1	DO mg/L								
Salinity										

Time sample was collected: 10:00

**COMMENTS** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**

**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/9/2023  
 Weather: 31 Degrees F  
 Personnel: Justin L. O'Brien



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**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 8.35  
 Depth to bottom of the well: 17.65  
 Length of water column in well: 9.30

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: 1.52  
 3 Well volumes (= length water column X gal/foot X 3): 4.548  
 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	247.23	NTU								
Temperature	9.5	°C								
pH	7.07									
Conductivity	1.007	SPC ms/cm								
Oxygen	5.89	DO mg/L								
Salinity										

Time sample was collected: 14:23

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
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**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/9/2023  
 Weather: 31 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 8.57  
 Depth to bottom of the well: 20.96  
 Length of water column in well: 12.39

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: 2.02  
 3 Well volumes (= length water column X gal/foot X 3): 6.059  
 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	263.42	NTU								
Temperature	8.5	°C								
pH	6.83									
Conductivity	0.79	SPC ms/cm								
Oxygen	6.93	DO mg/L								
Salinity										

Time sample was collected: 15:12

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/9/2023  
 Weather: 31 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 5.9  
 Depth to bottom of the well: 19.44  
 Length of water column in well: 13.54

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: 2.2  
 3 Well volumes (= length water column X gal/foot X 3): 6.62  
 Actual volume purged prior to sampling: 6.75

Sampling Methodology: Hand bailing  
 Sampling Equipment: Bailer

Well Recharged? N/A  
 Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	326.58	NTU								
Temperature	7.2	°C								
pH	7.5									
Conductivity	0.449	SPC ms/cm								
Oxygen	10.2	DO mg/L								
Salinity										

Time sample was collected: 14:47

**COMMENTS** \_\_\_\_\_  
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**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
Project Number: 14263.12  
Site Location: Gowanda, New York  
Sample Date: 3/9/2023  
Weather: 31 Degrees F  
Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 5.92  
Depth to bottom of the well: 15.48  
Length of water column in well: 9.56

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: 1.5583  
3 Well volumes (= length water column X gal/foot X 3): 4.6748  
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	353.21	NTU								
Temperature	9.4	°C								
pH	6.94									
Conductivity	0.629	SPC ms/cm								
Oxygen	3.17	DO mg/L								
Salinity										

Time sample was collected: 13:20  
MX-X from this well

**COMMENTS**  
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\_\_\_\_\_  
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**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/9/2023  
 Weather: 31 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 5.0  
 Depth to bottom of the well: 17.38  
 Length of water column in well: 12.38

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: 2.02  
 3 Well volumes (= length water column X gal/foot X 3): 6.05  
 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	232.06	NTU								
Temperature	10.3	°C								
pH	6.93									
Conductivity	0.573	SPC ms/cm								
Oxygen	5.2	DO mg/L								
Salinity										

Time sample was collected: 12:20

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
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**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
Project Number: 14263.12  
Site Location: Gowanda, New York  
Sample Date: 3/9/2023  
Weather: 31 Degrees F  
Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 7.84  
Depth to bottom of the well: 17.40  
Length of water column in well: 9.56

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: 1.5583  
3 Well volumes (= length water column X gal/foot X 3): 4.6748  
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	463.23	NTU								
Temperature	11.3	°C								
pH	6.93									
Conductivity	0.506	SPC ms/cm								
Oxygen	3.25	DO mg/L								
Salinity										

Time sample was collected: 12:31

**COMMENTS** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/9/2023  
 Weather: 31 Degrees F  
 Personnel: \_\_\_\_\_

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 10.1  
 Depth to bottom of the well: 18.15  
 Length of water column in well: 8.05

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: 1.31  
 3 Well volumes (= length water column X gal/foot X 3): 3.94  
 Actual volume purged prior to sampling: 4  
 Sampling Methodology: Hand bailing  
 Sampling Equipment: Bailer  
 \_\_\_\_\_  
 Well Recharged? N/A  
 Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	397.00	NTU								
Temperature	11.5	°C								
pH	7.02									
Conductivity	0.0097	SPC ms/cm								
Oxygen	12.59	DO mg/L								
Salinity										

Time sample was collected: 11:11

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
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**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
Project Number: 14263.12  
Site Location: Gowanda, New York  
Sample Date: 3/9/2023  
Weather: 31 Degrees F  
Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 10.2  
Depth to bottom of the well: 19.80  
Length of water column in well: 9.60

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: 1.5648  
3 Well volumes (= length water column X gal/foot X 3): 4.69  
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	419.3	NTU								
Temperature	11.2	°C								
pH	6.89									
Conductivity	0.46	SPC ms/cm								
Oxygen	5.72	DO mg/L								
Salinity										

Time sample was collected: 10:30

**COMMENTS** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/10/2023  
 Weather: 29 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 12.2  
 Depth to bottom of the well: 23.26  
 Length of water column in well: 11.06

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: 1.8028  
 3 Well volumes (= length water column X gal/foot X 3): 5.4083  
 Actual volume purged prior to sampling: 5.5

Sampling Methodology: Hand bailing  
 Sampling Equipment: Bailer

Well Recharged? N/A  
 Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	470	NTU								
Temperature	9.3	°C								
pH	7.11									
Conductivity	0.378	SPC ms/cm								
Oxygen	8.05	DO mg/L								
Salinity										

Time sample was collected: 11:26

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/10/2023  
 Weather: 29 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 12.78  
 Depth to bottom of the well: 25.18  
 Length of water column in well: 12.4

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: 2.0212  
 3 Well volumes (= length water column X gal/foot X 3): 6.0636  
 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	326.76	NTU								
Temperature	7.8	°C								
pH	7.04									
Conductivity	0.473	SPC ms/cm								
Oxygen	9.03	DO mg/L								
Salinity										

Time sample was collected: 9:06

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/10/2023  
 Weather: 29 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 9.4  
 Depth to bottom of the well: 25.0  
 Length of water column in well: 15.6

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: 2.5428  
 3 Well volumes (= length water column X gal/foot X 3): 7.63  
 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	382	NTU								
Temperature	8.2	°C								
pH	7.21									
Conductivity	0.607	SPC ms/cm								
Oxygen	9.63	DO mg/L								
Salinity										

Time sample was collected: 11:59

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/10/2023  
 Weather: 29 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 8.2  
 Depth to bottom of the well: 17.67  
 Length of water column in well: 9.47

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: 1.5  
 3 Well volumes (= length water column X gal/foot X 3): 4.63  
 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	475	NTU								
Temperature	6.9	°C								
pH	7.22									
Conductivity	0.493	SPC ms/cm								
Oxygen	9.56	DO mg/L								
Salinity										

Time sample was collected: 10:18

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



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ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/10/2023  
 Weather: 29 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 8.9  
 Depth to bottom of the well: 14.75  
 Length of water column in well: 5.85

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: 0.9536  
 3 Well volumes (= length water column X gal/foot X 3): 2.8607  
 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	132.3	NTU								
Temperature	7.4	°C								
pH	7.13									
Conductivity	0.345	SPC ms/cm								
Oxygen	8.8	DO mg/L								
Salinity										

Time sample was collected: 7:50

**COMMENTS** \_\_\_\_\_  
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**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/10/2023  
 Weather: 29 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 9.8  
 Depth to bottom of the well: 15.82  
 Length of water column in well: 6.02

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: 0.9813  
 3 Well volumes (= length water column X gal/foot X 3): 2.94  
 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	543	NTU								
Temperature	8.1	°C								
pH	7.07									
Conductivity	0.355	SPC ms/cm								
Oxygen	4.21	DO mg/L								
Salinity										

Time sample was collected: 10:35

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**GROUNDWATER SAMPLING WORKSHEET**



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ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/9/2023  
 Weather: 31 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 6.85  
 Depth to bottom of the well: 18.06  
 Length of water column in well: 11.21

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: 7.3201  
 3 Well volumes (= length water column X gal/foot X 3): 21.96  
 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	453	NTU								
Temperature	8.8	°C								
pH	7.07									
Conductivity	0.528	SPC ms/cm								
Oxygen	5.72	DO mg/L								
Salinity										

Time sample was collected: 13:05

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
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**GROUNDWATER SAMPLING WORKSHEET**



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**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/9/2023  
 Weather: 31 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 6.62  
 Depth to bottom of the well: 18.06  
 Length of water column in well: 11.44

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: 7.4703  
 3 Well volumes (= length water column X gal/foot X 3): 22.41  
 Actual volume purged prior to sampling: 22.5

Sampling Methodology: Hand bailing  
 Sampling Equipment: Bailer

Well Recharged? N/A  
 Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	316.37	NTU								
Temperature	10.9	°C								
pH	7.08									
Conductivity	0.513	SPC ms/cm								
Oxygen	5.71	DO mg/L								
Salinity										

Time sample was collected: 11:50

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**

**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/9/2023  
 Weather: 31 Degrees F  
 Personnel: Justin L. O'Brien



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**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 11.35  
 Depth to bottom of the well: 20.45  
 Length of water column in well: 9.10

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: 5.9  
 3 Well volumes (= length water column X gal/foot X 3): 17.827  
 Actual volume purged prior to sampling: 18

Sampling Methodology: Hand bailing  
 Sampling Equipment: Bailer

Well Recharged? N/A  
 Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	356.72	NTU								
Temperature	9.3	°C								
pH	7.01									
Conductivity	0.528	SPC ms/cm								
Oxygen	4.87	DO mg/L								
Salinity										

Time sample was collected: 13:56

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



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ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
Project Number: 14263.12  
Site Location: Gowanda, New York  
Sample Date: 3/9/2023  
Weather: 31 Degrees F  
Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 11.2  
Depth to bottom of the well: 19.69  
Length of water column in well: 8.49

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: 5.54  
3 Well volumes (= length water column X gal/foot X 3): 16.63  
Actual volume purged prior to sampling: 16.75

Sampling Methodology: \_\_\_\_\_  
Sampling Equipment: Hand bailer

Well Recharged? N/A  
Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	209.57	NTU								
Temperature	11.7	°C								
pH	7.01									
Conductivity	0.301	SPC ms/cm								
Oxygen	4.59	DO mg/L								
Salinity										

Time sample was collected: 11:00

**COMMENTS** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



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ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
Project Number: 14263.12  
Site Location: Gowanda, New York  
Sample Date: 3/9/2023  
Weather: 31 Degrees F  
Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 11.46  
Depth to bottom of the well: 22.98  
Length of water column in well: 11.52

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: 7.5226  
3 Well volumes (= length water column X gal/foot X 3): 22.568  
Actual volume purged prior to sampling: 22.75

Sampling Methodology: Hand bailing  
Sampling Equipment: Bailer

Well Recharged? N/A  
Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	329	NTU								
Temperature	11.7	°C								
pH	7.01									
Conductivity	0.562	SPC ms/cm								
Oxygen	3.9	DO mg/L								
Salinity										

Time sample was collected: 10:15

**COMMENTS** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



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ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/9/2023  
 Weather: 31 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 11.4  
 Depth to bottom of the well: 20.72  
 Length of water column in well: 9.32

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: 6.086  
 3 Well volumes (= length water column X gal/foot X 3): 18.258  
 Actual volume purged prior to sampling: 18.5

Sampling Methodology: Hand bailing  
 Sampling Equipment: Bailer

Well Recharged? N/A  
 Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	303.9	NTU								
Temperature	11.3	°C								
pH	7.05									
Conductivity	0.563	SPC ms/cm								
Oxygen	8.47	DO mg/L								
Salinity										

Time sample was collected: 9:48

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**GROUNDWATER SAMPLING WORKSHEET**



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ARCHITECTS ENGINEERS PLANNERS

**PROJECT NAME:** Gowanda Q1 2023  
 Project Number: 14263.12  
 Site Location: Gowanda, New York  
 Sample Date: 3/10/2023  
 Weather: 29 Degrees F  
 Personnel: Justin L. O'Brien

**GROUNDWATER SAMPLE POINT**

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

Depth to water, below top of casing: 9.8  
 Depth to bottom of the well: 18.15  
 Length of water column in well: 8.35

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: 5.45  
 3 Well volumes (= length water column X gal/foot X 3): 16.36  
 Actual volume purged prior to sampling: 16.50

Sampling Methodology: Hand bailing  
 Sampling Equipment: Bailer

Well Recharged? N/A  
 Required Analysis: \_\_\_\_\_

**FIELD PARAMETER MEASUREMENTS**

Parameter:	Accumulated Volume Purged in Gallons									
Turbidity	437.56	NTU								
Temperature	8.8	°C								
pH	7.08									
Conductivity	0.498	SPC ms/cm								
Oxygen	5.68	DO mg/L								
Salinity										

Time sample was collected: 9:38

**COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



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# **ELAP CERTIFICATION**



NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



Expires 12:01 AM April 01, 2024  
Issued April 01, 2023  
Revised April 04, 2023

**CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE**

*Issued in accordance with and pursuant to section 502 Public Health Law of New York State*

**MS. CHRISTINE KUTZER**  
**ALS ENVIRONMENTAL - ROCHESTER**  
**1565 JEFFERSON ROAD BUILDING 300, SUITE 360**  
**ROCHESTER, NY 14623**

**NY Lab Id No: 10145**

*is hereby APPROVED as an Environmental Laboratory in conformance with the  
National Environmental Laboratory Accreditation Conference Standards (2016) for the category  
ENVIRONMENTAL ANALYSES NON POTABLE WATER  
All approved analytes are listed below:*

**Acrylates**

Acrolein (Propenal)	EPA 8260C EPA 624.1
Acrylonitrile	EPA 8260C EPA 624.1
Ethyl methacrylate	EPA 8260C
Methyl acrylonitrile	EPA 8260C
Methyl methacrylate	EPA 8260C

**Amines**

1,2-Diphenylhydrazine	EPA 625.1 EPA 8270D
1,4-Phenylenediamine	EPA 8270D
1-Naphthylamine	EPA 8270D
2-Naphthylamine	EPA 8270D
2-Nitroaniline	EPA 8270D
3-Nitroaniline	EPA 8270D
4-Chloroaniline	EPA 8270D
4-Nitroaniline	EPA 8270D
5-Nitro-o-toluidine	EPA 8270D
Aniline	EPA 625.1 EPA 8270D
Carbazole	EPA 625.1 EPA 8270D
Diphenylamine	EPA 8270D
Methapyrilene	EPA 8270D
Pronamide	EPA 8270D
Propionitrile	EPA 8260C
Pyridine	EPA 625.1



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**Amines**

Pyridine EPA 8270D

**Benzidines**

3,3'-Dichlorobenzidine EPA 625.1  
EPA 8270D  
3,3'-Dimethylbenzidine EPA 8270D  
Benzidine EPA 625.1  
EPA 8270D

**Chlorinated Hydrocarbon Pesticides**

4,4'-DDD EPA 8081B  
EPA 608.3  
4,4'-DDE EPA 8081B  
EPA 608.3  
4,4'-DDT EPA 8081B  
EPA 608.3  
Aldrin EPA 8081B  
EPA 608.3  
alpha-BHC EPA 8081B  
EPA 608.3  
alpha-Chlordane EPA 8081B  
EPA 608.3  
beta-BHC EPA 8081B  
EPA 608.3  
Chlordane Total EPA 8081B  
EPA 608.3  
Chlorobenzilate EPA 8270D  
delta-BHC EPA 8081B



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**Chlorinated Hydrocarbon Pesticides**

delta-BHC	EPA 608.3
Diallate	EPA 8270D
Dieldrin	EPA 8081B
	EPA 608.3
Endosulfan I	EPA 8081B
	EPA 608.3
Endosulfan II	EPA 8081B
	EPA 608.3
Endosulfan sulfate	EPA 8081B
	EPA 608.3
Endrin	EPA 8081B
	EPA 608.3
Endrin aldehyde	EPA 8081B
	EPA 608.3
Endrin Ketone	EPA 8081B
gamma-Chlordane	EPA 8081B
	EPA 608.3
Heptachlor	EPA 8081B
	EPA 608.3
Heptachlor epoxide	EPA 8081B
	EPA 608.3
Isodrin	EPA 8270D
Kepone	EPA 8270D
Lindane	EPA 8081B
	EPA 608.3
Methoxychlor	EPA 8081B
	EPA 608.3



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**Chlorinated Hydrocarbon Pesticides**

Mirex	EPA 8081B
PCNB	EPA 8270D
Toxaphene	EPA 8081B EPA 608.3

**Chlorinated Hydrocarbons**

1,2,3-Trichlorobenzene	EPA 8260C
1,2,4,5-Tetrachlorobenzene	EPA 8270D
1,2,4-Trichlorobenzene	EPA 625.1 EPA 8270D
2-Chloronaphthalene	EPA 625.1 EPA 8270D
Hexachlorobenzene	EPA 625.1 EPA 8270D
Hexachlorobutadiene	EPA 625.1 EPA 8270D
Hexachlorocyclopentadiene	EPA 625.1 EPA 8270D
Hexachloroethane	EPA 625.1 EPA 8270D
Hexachloropropene	EPA 8270D
Pentachlorobenzene	EPA 8270D

**Chlorophenoxy Acid Pesticides**

2,4,5-T	EPA 8151A
2,4,5-TP (Silvex)	EPA 8151A
2,4-D	EPA 8151A
Dicamba	EPA 8151A

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**Chlorophenoxy Acid Pesticides**

Dinoseb	EPA 8151A
	EPA 8270D
Pentachlorophenol	EPA 8151A

**Demand**

Biochemical Oxygen Demand	SM 5210B-2016
Carbonaceous BOD	SM 5210B-2016
Chemical Oxygen Demand	EPA 410.4, Rev. 2.0 (1993)

**Fuel Oxygenates**

Di-isopropyl ether	EPA 8260C
	EPA 8015C
Ethanol	EPA 8015C
Methyl tert-butyl ether	EPA 8260C
	EPA 624.1
tert-amyl methyl ether (TAME)	EPA 8260C
tert-butyl alcohol	EPA 8260C
	EPA 624.1
tert-butyl ethyl ether (ETBE)	EPA 8260C

**Haloethers**

2,2'-Oxybis(1-chloropropane)	EPA 625.1
	EPA 8270D
4-Bromophenylphenyl ether	EPA 625.1
	EPA 8270D
4-Chlorophenylphenyl ether	EPA 625.1
	EPA 8270D
Bis(2-chloroethoxy)methane	EPA 625.1
	EPA 8270D

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**Haloethers**

Bis(2-chloroethyl)ether                   EPA 625.1  
EPA 8270D

**Low Level Polynuclear Aromatics**

Acenaphthene Low Level               EPA 8270D  
Acenaphthylene Low Level           EPA 8270D  
Anthracene Low Level                 EPA 8270D  
Benzo(a)anthracene Low Level       EPA 8270D  
Benzo(a)pyrene Low Level           EPA 8270D  
Benzo(b)fluoranthene Low Level     EPA 8270D  
Benzo(g,h,i)perylene Low Level     EPA 8270D  
Benzo(k)fluoranthene Low Level     EPA 8270D  
Chrysene Low Level                  EPA 8270D  
Dibenzo(a,h)anthracene Low Level   EPA 8270D  
Fluoranthene Low Level               EPA 8270D  
Fluorene Low Level                  EPA 8270D  
Indeno(1,2,3-cd)pyrene Low Level   EPA 8270D  
Naphthalene Low Level               EPA 8270D  
Phenanthrene Low Level               EPA 8270D  
Pyrene Low Level                     EPA 8270D

**Metals I**

Barium, Total                           EPA 200.7, Rev. 4.4 (1994)  
EPA 6010C  
EPA 6020A  
EPA 200.8, Rev. 5.4 (1994)  
Cadmium, Total                         EPA 200.7, Rev. 4.4 (1994)  
EPA 6010C

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**Metals I**

Cadmium, Total	EPA 6020A EPA 200.8, Rev. 5.4 (1994)
Calcium, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C
Chromium, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A EPA 200.8, Rev. 5.4 (1994)
Copper, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A EPA 200.8, Rev. 5.4 (1994)
Iron, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C
Lead, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A EPA 200.8, Rev. 5.4 (1994)
Magnesium, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C
Manganese, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A EPA 200.8, Rev. 5.4 (1994)
Nickel, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A

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**Metals I**

Nickel, Total	EPA 200.8, Rev. 5.4 (1994)
Potassium, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C
Silver, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A
Sodium, Total	EPA 200.8, Rev. 5.4 (1994) EPA 200.7, Rev. 4.4 (1994) EPA 6010C
Strontium, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C

**Metals II**

Aluminum, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 200.8, Rev. 5.4 (1994)
Antimony, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A EPA 200.8, Rev. 5.4 (1994)
Arsenic, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A EPA 200.8, Rev. 5.4 (1994)
Beryllium, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A EPA 200.8, Rev. 5.4 (1994)

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*Issued in accordance with and pursuant to section 502 Public Health Law of New York State*

**MS. CHRISTINE KUTZER**  
**ALS ENVIRONMENTAL - ROCHESTER**  
**1565 JEFFERSON ROAD BUILDING 300, SUITE 360**  
**ROCHESTER, NY 14623**

**NY Lab Id No: 10145**

*is hereby APPROVED as an Environmental Laboratory in conformance with the  
National Environmental Laboratory Accreditation Conference Standards (2016) for the category  
ENVIRONMENTAL ANALYSES NON POTABLE WATER  
All approved analytes are listed below:*

**Metals II**

Chromium VI	EPA 218.6, Rev. 3.3 (1994) EPA 7196A EPA 7199 SM 3500-Cr B-2011
Mercury, Low Level	EPA 1631E
Mercury, Total	EPA 245.1, Rev. 3.0 (1994) EPA 7470A
Selenium, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A
Vanadium, Total	EPA 200.8, Rev. 5.4 (1994) EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A
Zinc, Total	EPA 200.8, Rev. 5.4 (1994) EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A EPA 200.8, Rev. 5.4 (1994)

**Metals III**

Cobalt, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A EPA 200.8, Rev. 5.4 (1994)
Molybdenum, Total	EPA 200.7, Rev. 4.4 (1994) EPA 6010C EPA 6020A

**Serial No.: 67712**

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**Metals III**

Molybdenum, Total	EPA 200.8, Rev. 5.4 (1994)
Thallium, Total	EPA 200.7, Rev. 4.4 (1994)
	EPA 6010C
	EPA 6020A
	EPA 200.8, Rev. 5.4 (1994)
Tin, Total	EPA 200.7, Rev. 4.4 (1994)
	EPA 6010C
Titanium, Total	EPA 200.7, Rev. 4.4 (1994)
	EPA 6010C
Uranium (Mass)	EPA 6020A

**Mineral**

Alkalinity	SM 2320B-2011
Calcium Hardness	SM 2340B-2011
Chloride	EPA 300.0, Rev. 2.1 (1993)
	EPA 9056A
Fluoride, Total	EPA 300.0, Rev. 2.1 (1993)
	EPA 9056A
Hardness, Total	SM 2340C-2011
	SM 2340B-2011
Sulfate (as SO <sub>4</sub> )	EPA 300.0, Rev. 2.1 (1993)
	EPA 9056A

**Miscellaneous**

Boron, Total	EPA 200.7, Rev. 4.4 (1994)
	EPA 6010C
Bromide	EPA 300.0, Rev. 2.1 (1993)
	EPA 9056A

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**Miscellaneous**

Color	SM 2120B-2011
Corrosivity	SM 2330-2016
Cyanide, Available	SM 4500-CN G-2016
Cyanide, Total	Kelada-01 SM 4500-CN E-2016 EPA 335.4, Rev. 1.0 (1993) EPA 9012B
Formaldehyde	EPA 8315A
non-Polar Extractable Material (TPH)	EPA 1664B
Oil and Grease Total Recoverable	EPA 1664B
Organic Carbon, Total	SM 5310B-2014 SM 5310C-2014 EPA 9060A
Phenols	EPA 420.4, Rev. 1.0 (1993) EPA 9066
Specific Conductance	EPA 120.1 (Rev. 1982)
Sulfide (as S)	SM 4500-S2- F-2011 EPA 9034
Turbidity	EPA 180.1, Rev. 2.0 (1993)

**Nitroaromatics and Isophorone**

1,3,5-Trinitrobenzene	EPA 8270D
1,3-Dinitrobenzene	EPA 8270D
1,4-Naphthoquinone	EPA 8270D
2,4-Dinitrotoluene	EPA 625.1 EPA 8270D
2,6-Dinitrotoluene	EPA 625.1 EPA 8270D

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**Nitroaromatics and Isophorone**

4-Nitroquinoline-1-oxide	EPA 8270D
Isophorone	EPA 625.1
	EPA 8270D
Nitrobenzene	EPA 625.1
	EPA 8270D

**Nitrosoamines**

N-Nitrosodiethylamine	EPA 8270D
N-Nitrosodimethylamine	EPA 625.1
	EPA 8270D
N-Nitrosodi-n-butylamine	EPA 8270D
N-Nitrosodi-n-propylamine	EPA 625.1
	EPA 8270D
N-Nitrosodiphenylamine	EPA 625.1
	EPA 8270D
N-nitrosomethylethylamine	EPA 8270D
N-nitrosomorpholine	EPA 8270D
N-nitrosopiperidine	EPA 8270D
N-Nitrosopyrrolidine	EPA 8270D

**Nutrient**

Ammonia (as N)	EPA 350.1, Rev. 2.0 (1993)
Kjeldahl Nitrogen, Total	EPA 351.2, Rev. 2.0 (1993)
Nitrate (as N)	EPA 353.2, Rev. 2.0 (1993)
	EPA 300.0, Rev. 2.1 (1993)
	EPA 9056A
Nitrate-Nitrite (as N)	EPA 353.2, Rev. 2.0 (1993)
Nitrite (as N)	EPA 353.2, Rev. 2.0 (1993)

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**Nutrient**

Nitrite (as N)	EPA 300.0, Rev. 2.1 (1993) EPA 9056A
Orthophosphate (as P)	EPA 365.1, Rev. 2.0 (1993)
Phosphorus, Total	EPA 365.1, Rev. 2.0 (1993)

**Organophosphate Pesticides**

Atrazine	EPA 8270D
Dimethoate	EPA 8270D
Disulfoton	EPA 8270D
Famphur	EPA 8270D
Parathion ethyl	EPA 8270D
Parathion methyl	EPA 8270D
Phorate	EPA 8270D
Sulfotepp	EPA 8270D
Thionazin	EPA 8270D

**Petroleum Hydrocarbons**

Diesel Range Organics	EPA 8015C
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**Phthalate Esters**

Benzyl butyl phthalate	EPA 625.1 EPA 8270D
Bis(2-ethylhexyl) phthalate	EPA 625.1 EPA 8270D
Diethyl phthalate	EPA 625.1 EPA 8270D
Dimethyl phthalate	EPA 625.1 EPA 8270D
Di-n-butyl phthalate	EPA 625.1

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**Phthalate Esters**

Di-n-butyl phthalate	EPA 8270D
Di-n-octyl phthalate	EPA 625.1
	EPA 8270D

**Polychlorinated Biphenyls**

Aroclor 1016 (PCB-1016)	EPA 8082A
	EPA 608.3
Aroclor 1221 (PCB-1221)	EPA 8082A
	EPA 608.3
Aroclor 1232 (PCB-1232)	EPA 8082A
	EPA 608.3
Aroclor 1242 (PCB-1242)	EPA 8082A
	EPA 608.3
Aroclor 1248 (PCB-1248)	EPA 8082A
	EPA 608.3
Aroclor 1254 (PCB-1254)	EPA 8082A
	EPA 608.3
Aroclor 1260 (PCB-1260)	EPA 8082A
	EPA 608.3
Aroclor 1262 (PCB-1262)	EPA 8082A
Aroclor 1268 (PCB-1268)	EPA 8082A

**Polynuclear Aromatics**

2-Acetylaminofluorene	EPA 8270D
3-Methylcholanthrene	EPA 8270D
7,12-Dimethylbenzyl (a) anthracene	EPA 8270D
Acenaphthene	EPA 625.1
	EPA 8270D

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**Polynuclear Aromatics**

Acenaphthylene	EPA 625.1 EPA 8270D
Anthracene	EPA 625.1 EPA 8270D
Benzo(a)anthracene	EPA 625.1 EPA 8270D
Benzo(a)pyrene	EPA 625.1 EPA 8270D
Benzo(b)fluoranthene	EPA 625.1 EPA 8270D
Benzo(g,h,i)perylene	EPA 625.1 EPA 8270D
Benzo(k)fluoranthene	EPA 625.1 EPA 8270D
Chrysene	EPA 625.1 EPA 8270D
Dibenzo(a,h)anthracene	EPA 625.1 EPA 8270D
Fluoranthene	EPA 625.1 EPA 8270D
Fluorene	EPA 625.1 EPA 8270D
Indeno(1,2,3-cd)pyrene	EPA 625.1 EPA 8270D
Naphthalene	EPA 625.1 EPA 8270D
Phenanthrene	EPA 625.1



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**Polynuclear Aromatics**

Phenanthrene	EPA 8270D
Pyrene	EPA 625.1
	EPA 8270D

**Priority Pollutant Phenols**

2,3,4,6 Tetrachlorophenol	EPA 8270D
2,4,5-Trichlorophenol	EPA 625.1
	EPA 8270D
2,4,6-Trichlorophenol	EPA 625.1
	EPA 8270D
2,4-Dichlorophenol	EPA 625.1
	EPA 8270D
2,4-Dimethylphenol	EPA 625.1
	EPA 8270D
2,4-Dinitrophenol	EPA 625.1
	EPA 8270D
2,6-Dichlorophenol	EPA 8270D
2-Chlorophenol	EPA 625.1
	EPA 8270D
2-Methyl-4,6-dinitrophenol	EPA 625.1
	EPA 8270D
2-Methylphenol	EPA 625.1
	EPA 8270D
2-Nitrophenol	EPA 625.1
	EPA 8270D
3-Methylphenol	EPA 625.1
	EPA 8270D
4-Chloro-3-methylphenol	EPA 625.1

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**Priority Pollutant Phenols**

4-Chloro-3-methylphenol	EPA 8270D
4-Methylphenol	EPA 625.1
	EPA 8270D
4-Nitrophenol	EPA 625.1
	EPA 8270D
Cresols, Total	EPA 8270D
Pentachlorophenol	EPA 625.1
	EPA 8270D
Phenol	EPA 625.1
	EPA 8270D

**Residue**

Settleable Solids	SM 2540 F-2015
Solids, Total	SM 2540 B-2015
Solids, Total Dissolved	SM 2540 C-2015
Solids, Total Suspended	SM 2540 D-2015
Solids, Volatile	SM 2540 E-2015

**Semi-Volatile Organics**

1,1'-Biphenyl	EPA 8270D
1,2-Dichlorobenzene, Semi-volatile	EPA 8270D
1,3-Dichlorobenzene, Semi-volatile	EPA 8270D
1,4-Dichlorobenzene, Semi-volatile	EPA 8270D
2-Methylnaphthalene	EPA 625.1
	EPA 8270D
2-Picoline	EPA 8270D
4-Amino biphenyl	EPA 8270D
Acetophenone	EPA 625.1

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**Semi-Volatile Organics**

Acetophenone	EPA 8270D
alpha-Terpineol	EPA 625.1
Aramite	EPA 8270D
Benzaldehyde	EPA 8270D
Benzoic Acid	EPA 8270D
Benzyl alcohol	EPA 8270D
Caprolactam	EPA 8270D
Dibenzofuran	EPA 8270D
Ethyl methanesulfonate	EPA 8270D
Isosafrole	EPA 8270D
Methyl methanesulfonate	EPA 8270D
O,O,O-Triethyl phosphorothioate	EPA 8270D
p-Dimethylaminoazobenzene	EPA 8270D
Phenacetin	EPA 8270D
Safrole	EPA 8270D

**Volatile Aromatics**

1,2,4-Trichlorobenzene, Volatile	EPA 8260C
1,2,4-Trimethylbenzene	EPA 8260C
1,2-Dichlorobenzene	EPA 8260C
	EPA 624.1
1,3,5-Trimethylbenzene	EPA 8260C
1,3-Dichlorobenzene	EPA 8260C
	EPA 624.1
1,4-Dichlorobenzene	EPA 8260C
	EPA 624.1
2-Chlorotoluene	EPA 8260C
4-Chlorotoluene	EPA 8260C

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**Volatile Aromatics**

Benzene	EPA 8260C EPA 624.1
Bromobenzene	EPA 8260C
Chlorobenzene	EPA 8260C EPA 624.1
Ethyl benzene	EPA 8260C EPA 624.1
Isopropylbenzene	EPA 8260C
m/p-Xylenes	EPA 8260C EPA 624.1
Naphthalene, Volatile	EPA 8260C EPA 624.1
n-Butylbenzene	EPA 8260C
n-Propylbenzene	EPA 8260C
o-Xylene	EPA 8260C EPA 624.1
p-Isopropyltoluene (P-Cymene)	EPA 8260C
sec-Butylbenzene	EPA 8260C
Styrene	EPA 8260C EPA 624.1
tert-Butylbenzene	EPA 8260C
Toluene	EPA 8260C EPA 624.1
Total Xylenes	EPA 8260C EPA 624.1

**Volatile Halocarbons**

1,1,1,2-Tetrachloroethane	EPA 8260C
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**Volatile Halocarbons**

1,1,1-Trichloroethane	EPA 8260C EPA 624.1
1,1,2,2-Tetrachloroethane	EPA 8260C EPA 624.1
1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260C EPA 624.1
1,1,2-Trichloroethane	EPA 8260C EPA 624.1
1,1-Dichloroethane	EPA 8260C EPA 624.1
1,1-Dichloroethene	EPA 8260C EPA 624.1
1,1-Dichloropropene	EPA 8260C
1,2,3-Trichloropropane	EPA 8260C
1,2-Dibromo-3-chloropropane	EPA 8260C
1,2-Dibromoethane	EPA 8260C
1,2-Dichloro-1,1,2-Trifluoroethane	EPA 8260C
1,2-Dichloroethane	EPA 8260C EPA 624.1
1,2-Dichloropropane	EPA 8260C EPA 624.1
1,3-Dichloropropane	EPA 8260C
2,2-Dichloropropane	EPA 8260C
2-Chloro-1,3-butadiene (Chloroprene)	EPA 8260C
2-Chloroethylvinyl ether	EPA 8260C EPA 624.1
3-Chloropropene (Allyl chloride)	EPA 8260C



**Serial No.: 67712**

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NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



Expires 12:01 AM April 01, 2024  
Issued April 01, 2023  
Revised April 04, 2023

**CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE**

*Issued in accordance with and pursuant to section 502 Public Health Law of New York State*

**MS. CHRISTINE KUTZER**  
**ALS ENVIRONMENTAL - ROCHESTER**  
**1565 JEFFERSON ROAD BUILDING 300, SUITE 360**  
**ROCHESTER, NY 14623**

**NY Lab Id No: 10145**

*is hereby APPROVED as an Environmental Laboratory in conformance with the  
National Environmental Laboratory Accreditation Conference Standards (2016) for the category  
ENVIRONMENTAL ANALYSES NON POTABLE WATER  
All approved analytes are listed below:*

**Volatile Halocarbons**

Bromochloromethane	EPA 8260C
Bromodichloromethane	EPA 8260C
	EPA 624.1
Bromoform	EPA 8260C
	EPA 624.1
Bromomethane	EPA 8260C
	EPA 624.1
Carbon tetrachloride	EPA 8260C
	EPA 624.1
Chloroethane	EPA 8260C
	EPA 624.1
Chloroform	EPA 8260C
	EPA 624.1
Chloromethane	EPA 8260C
	EPA 624.1
cis-1,2-Dichloroethene	EPA 8260C
	EPA 624.1
cis-1,3-Dichloropropene	EPA 8260C
	EPA 624.1
Dibromochloromethane	EPA 8260C
	EPA 624.1
Dibromomethane	EPA 8260C
Dichlorodifluoromethane	EPA 8260C
	EPA 624.1
Hexachlorobutadiene, Volatile	EPA 8260C
Methyl iodide	EPA 8260C
Methylene chloride	EPA 8260C



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All approved analytes are listed below:*

**Volatile Halocarbons**

Methylene chloride	EPA 624.1
Tetrachloroethene	EPA 8260C
	EPA 624.1
trans-1,2-Dichloroethene	EPA 8260C
	EPA 624.1
trans-1,3-Dichloropropene	EPA 8260C
	EPA 624.1
trans-1,4-Dichloro-2-butene	EPA 8260C
Trichloroethene	EPA 8260C
	EPA 624.1
Trichlorofluoromethane	EPA 8260C
	EPA 624.1
Vinyl chloride	EPA 8260C
	EPA 624.1

**Volatiles Organics**

1,4-Dioxane	EPA 8260C
	EPA 8270D
	EPA 8270D SIM
2-Butanone (Methylethyl ketone)	EPA 8260C
2-Hexanone	EPA 8260C
2-Nitropropane	EPA 8260C
4-Methyl-2-Pentanone	EPA 8260C
	EPA 624.1
Acetone	EPA 8260C
	EPA 624.1
Acetonitrile	EPA 8260C
	EPA 624.1



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All approved analytes are listed below:*

**Volatiles Organics**

Carbon Disulfide	EPA 8260C
Cyclohexane	EPA 8260C
Di-ethyl ether	EPA 8260C
Ethyl Acetate	EPA 8260C
	EPA 8015C
Ethylene Glycol	EPA 8015C
Isobutyl alcohol	EPA 8260C
	EPA 8015C
Isopropanol	EPA 8260C
Methanol	EPA 8015C
Methyl acetate	EPA 8260C
Methyl cyclohexane	EPA 8260C
n-Butanol	EPA 8260C
o-Toluidine	EPA 8270D
Propylene Glycol	EPA 8015C
Tetrahydrofuran	EPA 8260C
	EPA 624.1
Vinyl acetate	EPA 8260C
	EPA 624.1

**Sample Preparation Methods**

EPA 5030C  
EPA 200.2  
EPA 9030B  
EPA 3010A  
EPA 3005A  
EPA 3510C  
EPA 3535A

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# **CALIBRATION FORM**





# INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

797 Cromwell Park Dr.  
Suite Q  
Glen Burnie, MD 21061

## Pine Environmental Services, Inc.

**Instrument ID** 212541  
**Description** YSI Pro Plus  
**Calibrated** 3/7/2023 12:09:22PM

<b>Manufacturer</b> YSI	<b>State Certified</b>
<b>Model Number</b> 605000	<b>Status</b> Pass
<b>Serial Number/ Lot Number</b> 22F101905	<b>Temp °C</b> 20
<b>Location</b> Maryland	<b>Humidity %</b> 25
<b>Department</b>	

### Calibration Specifications

<b>Group #</b> 1	<b>Range Acc %</b> 0.0000
<b>Group Name</b> PH	<b>Reading Acc %</b> 3.0000
<b>Stated Accy</b> Pct of Reading	<b>Plus/Minus</b> 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
7.00 / 7.00	PH	7.00	PH	7.04	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	4.08	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	9.84	10.00	0.00%	Pass

<b>Group #</b> 2	<b>Range Acc %</b> 0.0000
<b>Group Name</b> Conductivity	<b>Reading Acc %</b> 3.0000
<b>Stated Accy</b> Pct of Reading	<b>Plus/Minus</b> 0.000

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
1.413 / 1.413	ms/cm	1.413	ms/cm	1.521	1.413	0.00%	Pass

<b>Group #</b> 3	<b>Range Acc %</b> 0.0000
<b>Group Name</b> Redox (ORP)	<b>Reading Acc %</b> 3.0000
<b>Stated Accy</b> Pct of Reading	<b>Plus/Minus</b> 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
240.00 / 240.00	mv	240.00	mv	218.70	240.00	0.00%	Pass

<b>Group #</b> 4	<b>Range Acc %</b> 0.0000
<b>Group Name</b> Dissolved Oxygen Span	<b>Reading Acc %</b> 3.0000
<b>Stated Accy</b> Pct of Reading	<b>Plus/Minus</b> 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
100.00 / 100.00	%	100.00	%	81.10	100.00	0.00%	Pass



## INSTRUMENT CALIBRATION REPORT

**Pine Environmental Services LLC**

797 Cromwell Park Dr.  
Suite Q  
Glen Burnie, MD 21061

### **Pine Environmental Services, Inc.**

**Instrument ID** 212541  
**Description** YSI Pro Plus  
**Calibrated** 3/7/2023 12:09:22PM

<u>Test Instruments Used During the Calibration</u>					<u>(As Of Cal Entry Date)</u>	
<u>Test Standard ID</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Model Number</u>	<u>Serial Number / Lot Number</u>	<u>Last Cal Date/ Opened Date</u>	<u>Next Cal Date / Expiration Date</u>
MD COND 1.413 0GL235	MD COND 1.413 0GL235	Pine Environmental Services, Inc.	31986	0GL235	12/31/2021	
MD ORP 240 2GL022	MD ORP 240 2GL022	Pine Environmental Services, Inc.				9/30/2023
MD PH10 1GC1067	MD PH10 1GC1067	Pine Environmental Services, Inc.		1GC1067	3/30/2023	
MD PH4 1GC1084	MD PH4 1GC1084	Pine Environmental Services, Inc.	32017	1GC1084		3/31/2023
MD PH7 1GD151	MD PH7 1GD151	Pine Environmental Services, Inc.	32025	1GD151		4/30/2023

#### Notes about this calibration

**Calibration Result** Calibration Successful  
**Who Calibrated** Chuck Wallace

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

**Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment**  
**Please call 800-301-9663 for Technical Assistance**