# Semi-Annual Groundwater Monitoring Report
# December 2024
# Town and Country Dry Cleaners Site (828149)
# Brighton, New York

## Work Assignment No. D009806-34

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## LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| µg/L | Microgram(s) per liter |
| AWQS | Ambient Water Quality Standards |
| COC | Contaminant of concern |
| DCE | Dichloroethene |
| EA | EA Engineering and Geology, P.C. |
| EPA | U.S. Environmental Protection Agency |
| IRM | Interim Remedial Measure |
| MACTEC | MACTEC Engineering and Consulting, P.C. |
| No. | Number |
| NYS | New York State |
| NYSDEC | New York State Department of Environmental Conservation |
| PCE | Tetrachloroethene |
| SCO | Soil cleanup objective |
| Site | Town and Country Dry Cleaners Site |
| SMP | Site Management Plan |
| TCE | Trichloroethene |
| VOC | Volatile organic compound |

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# 1. BACKGROUND

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering and Geology, P.C. (EA) under Work Assignment Number (No.) D009806-34 to perform site management activities, including annual groundwater sampling, at the Town and Country Dry Cleaners Site (NYSDEC Site No. 828149). This Groundwater Monitoring Report documents site management activities conducted in May 2024. Activities were completed in accordance with the applicable guidelines and requirements of NYSDEC.

The Site is located at 2308 and 2310 Monroe Avenue, in the town of Brighton, Monroe County, New York (**Figures 1 and 2**). The Site operated as a dry cleaning and laundry facility from 1969 to 2021. The primary dry cleaning solvent, tetrachloroethene (PCE), was used from 1969 to May 2011, when its use was reportedly discontinued. PCE was observed as high as 38,000 milligrams per kilogram from a soil sample collected just below the bottom of an unlined catch basin that was previously located to the rear (i.e., northeast) of the site building in 2013 (MACTEC Engineering and Consulting, P.C. [MACTEC] 2016a). The contaminants of concern (COCs) include PCE, trichloroethene (TCE), *cis*-1,2-dichloroethene (DCE), and vinyl chloride, which are associated with the historic use as a dry cleaning facility.

## 1.1 SITE DESCRIPTION

The Site is located at 2308 and 2310 Monroe Avenue in the town of Brighton, Monroe County. The 0.39-acre site is in a mixed commercial/residential area on the northeast side of the town. Most of the Site is occupied by the on-site building with a paved parking area on the north side. The on-site building is occupied by an inactive dry cleaning business. The Site is bound by Monroe Avenue to the south, commercial properties to the west and east, and a residential neighborhood to the north (NYSDEC 2020).

## 1.2 PROJECT BACKGROUND

During Fall 2015, an Interim Remedial Measure (IRM) (**Figure 2**) was conducted to remove the chlorinated volatile organic compound (VOC) impacted soil immediately below and surrounding the catch basin, and to replace the unlined catch basin with a new sealed, concrete-lined catch basin (MACTEC 2016b). The catch basin was located to the northeast of the on-site building. Prior to backfilling the excavation, the bottom and sides were sprayed with a chemical oxidant, sodium permanganate, prior to backfilling.

NYSDEC issued a Record of Decision in March 2017 (NYSDEC 2017a), and the selected remedy included:

- Excavation and off-site disposal of all on-site soils which exceed the New York State (NYS) soil cleanup objectives (SCOs) for commercial use.

- Excavation and off-site disposal of all off-site soil which exceed NYS SCOs for residential use.

- In situ enhanced biodegradation to treat PCE and its associated degradation products in groundwater in an area to be determined during the remedial design.

In 2017, a Pre-Design Investigation was completed to delineate the extent of soil PCE contamination exceeding residential SCOs for the off-site property and commercial SCOs on-site. The sample results were used during the remedial design to calculate volume estimates for excavation and off-site disposal. Groundwater sample results indicated contaminant concentrations and extent were consistent with previous investigations and display limited potential for reductive dechlorination of PCE (MACTEC 2018).

In 2019, groundwater samples were collected to assess groundwater concentrations post soil removal IRM (MACTEC 2019). Results indicated concentrations of PCE, TCE, *cis*-1,2-DCE, and vinyl chloride above Class GA NYS Ambient Water Quality Standards (AWQS) (NYSDEC 1993). Concentrations of PCE detected in groundwater in May 2019 were generally lower than historical values. The highest concentrations of PCE were observed adjacent to and downgradient of the IRM removal area at MW-1 (2,000 micrograms per liter [µg/L]), MW-2 (63,000 µg/L), MW-13 (2,400 µg/L), and DP-14 (8,100 µg/L). Two wells near the IRM removal area, MW-2B (20 µg/L) and DP-16 (300 µg/L), had concentrations of PCE slightly higher than historic values.

In 2021, NYSDEC performed a soil removal action to remove remaining on-site soil with COCs above commercial use SCOs and to remove off-site soil with COCs above residential SCOs. The soil remedial action removed the largest source of groundwater contamination. This soil removal action generally met the objectives, although some contamination exceeding SCOs for commercial use remain at depth on the north edge of the property where further excavation was not possible or practical because of excavation sloping requirements (MACTEC 2023).

Currently the site is managed under a draft Site Management Plan (SMP) with groundwater sampling conducted semi-annually for VOCs (EA 2024). The monitoring well network consists of 25 wells that are analyzed for VOCs and 4 of those wells are analyzed for geochemical parameters and dissolved gases to evaluate monitored natural attenuation of the VOC plume.

## 1.3 OBJECTIVES

Monitoring well inspections and groundwater sampling were conducted in December 2024 to characterize the current groundwater plume to evaluate the contaminant trends of VOCs that have impacted the site groundwater.

## 1.4 REPORT ORGANIZATION

A summary of the December 2024 inspection and groundwater sampling activities is provided in Section 2. Analytical results are presented in Section 3. Conclusion and recommendations are discussed in Section 4.

The following are also provided as appendices:

- **Appendix A—**Field Forms
- **Appendix B—**Daily Inspection Report
- **Appendix C—**Data Verification Checklist
- **Appendix D—**Trend Evaluation Graphs

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# 2. FIELD INVESTIGATION

Field activities included monitoring well assessments/inspections, groundwater gauging, and sampling of the existing monitoring well network (**Table 1**). Field forms from the inspection and sample collection events are provided in **Appendix A**. Groundwater monitoring was conducted according to the SMP (EA 2024).

## 2.1 MONITORING WELL ASSESSMENTS

During the sampling event, EA located 19 of the 25 on-site and off-site wells, 3 of which could not be sampled. Monitoring wells MW-1, MW-02B, MW-08, DP-11, DP-14, and GEMW-1 were not found. Three monitoring wells (MW-10, DP-16, and MW-16B) were unable to be sampled for the following various reasons:

- MW-10 could not be sampled due to low water level.
- DP-16 and MW-16B appeared to be abandoned and sealed.

MW-17B was not initially able to be opened due to a frozen J-plug, but the field crew managed to open it before sampling. In addition, DP-17, DP-18, and MW-19B require additional screws/bolts, which will be replaced at the next sampling event. The Daily Inspection Reports are available in **Appendix B**.

## 2.2 GROUNDWATER GAUGING

A site-wide gauging event was performed prior to sampling. According to the December 2024 gauging data, groundwater in both the overburden and shallow bedrock at the Site flows in an east-southeast direction (**Figures 3 and 4**).

## 2.3 GROUNDWATER SAMPLING

VOC samples were collected from 16 of the 25 wells listed in the SMP. The samples collected are summarized in **Table 2**. The 16 wells included 10 on-site and 6 off-site wells sampled using a peristaltic pump and the low flow sampling procedures. GEMW-2 was purged dry, and samples were collected upon recharge. MW-10 was assumed dry due to low water level, and samples were not collected. The remaining wells in the network were sampled over the course of the day event. All VOC samples were submitted for U.S. Environmental Protection Agency (EPA) Method 8260D.

## 2.4 LABORATORY ANALYSIS

Samples were submitted to SGS North America Inc of Dayton, New Jersey. Laboratory analytical results are available upon request.

## 2.5 DATA VERIFICATION

EA has completed data verification on all laboratory analytical data to:

- Check that sample IDs in the laboratory report match the chain-of-custody.
- Ensure analytical methods and analyte lists are correct and verified against the chain-of-custody.
- Verify that sample receipt conditions are noted in laboratory report.
- Ensure that sample preservation was appropriate and verified by the laboratory.
- Confirm that holding times were met.
- Verify that detection and quantitation limits are appropriate for the project.
- Confirm that quality control samples met project requirements for frequency and field quality control. Check field duplicate relative percent differences.
- Verify the laboratory has provided the correct data deliverable (Cat A or Cat B) report and NYSDEC EQuIS Electronic Data Deliverable.

The Data Verification Checklist is provided in **Appendix C**.

# 3. GROUNDWATER SAMPLING RESULTS

Results for VOCs are discussed below and presented in **Tables 3 and 4**. Analytical results for the December 2024 sampling effort are presented on **Figure 5**.

## 3.1 VOLATILE ORGANIC COMPOUND RESULTS

The following sections detail the PCE, trichloroethene (TCE), and *cis*-1,2-dichloroethene (DCE) results in on-site and offsite monitoring wells. Vinyl chloride was not detected in any of the groundwater samples.

### 3.1.1 Volatile Organic Compound Results for On-site Monitoring Wells

PCE was detected in eight overburden wells and one bedrock well. Seven wells had concentrations exceeding NYS AWQS of 5 µg/L. PCE in onsite bedrock well MW-13B was not detected above standards. Detected concentrations ranged from 68.2 µg/L (GEMW-2) to 843 µg/L (DP-15) in overburden wells. The four wells with the greatest concentrations of PCE were overburden wells:

- DP-10: 266 µg/L
- MW-3: 441 µg/L
- MW-13: 441 µg/L
- DP-15: 843 µg/L

The extent of PCE in groundwater is presented on **Figures 6 and 7**.

TCE concentrations were detected in eight overburden wells and one bedrock wells. Detected concentrations ranged from 0.84 J to 239 µg/L in the overburden, and TCE was detected at 2.2 µg/L in the bedrock well. Results from five overburden monitoring wells exceed AWQS of 5 µg/L. The overburden wells containing TCE concentrations above AWQS include DP-10, DP-15, MW-03, MW-02, and MW-13.The extent of TCE in groundwater is presented on **Figures 8 and 9**.

*Cis*-1,2-DCE was detected in seven overburden wells and one bedrock wells. Concentrations ranged from 1.1 to 547 µg/L in the overburden, and *cis*-1,2-DCE was detected at 8.2 µg/L in the bedrock well. Results from five overburden and one bedrock monitoring wells exceed AWQS of 5 µg/L. The overburden wells containing *cis*-1,2-DCE concentrations above AWQS include DP-10, DP-15, MW-02, MW-03, and MW-13; the bedrock wells that showed exceedances was MW-13B. The extent of *cis*-1,2-DCE in groundwater is presented on **Figure 10**.

Vinyl chloride was detected in two overburden wells and one bedrock well. Concentrations ranged from 0.67 J to 112 µg/L in the overburden and 0.67 J µg/L in the bedrock well. Results from one overburden well containing vinyl chloride exceed AWQS of 2 µg/L. The overburden well that showed exceedance was MW-03.

### 3.1.2 Volatile Organic Compound Results in Off-site Monitoring Wells

PCE was detected off-site in two overburden wells and two bedrock wells. Both overburden wells and bedrock well MW-19B had concentrations exceeding NYS AWQS of 5 µg/L. The extent of PCE in groundwater is presented on **Figures 6 and 7**.

TCE concentrations were detected offsite in one overburden wells and one bedrock well. Overburden well DP-19 (13.6 µg/L) and bedrock well MW-19B (10.2 µg/L) had concentrations exceeding NYS AWQS of 5 µg/L. The extent of TCE in groundwater is presented on **Figures 8 and 9**.

*Cis*-1,2-DCE was detected offsite in one overburden wells and one bedrock wells. Overburden well DP-19 (15.9 µg/L) and bedrock well MW-19B (22.2 µg/L) had concentrations exceeding NYS AWQS of 5 µg/L. The extent of *cis*-1,2-DCE in groundwater is presented on **Figure 10**.

The behavior of the plume appears to be stable, because the sentinel well concentrations for all COCs remain static during the last four sample events. The plume appears to be well bounded, except for the southern extent (i.e., south of DP-19 and MW-19B). A summary of sampling results for VOCs is presented on **Figure 5**. Historical analytical results for VOC concentrations are presented in **Tables 3 and 4**.

## 3.2 TREND EVALUATION

The Mann-Kendall test was used to statistically evaluate trends for PCE, TCE, and *cis*-1,2-DCE concentrations over time in 13 representative wells (DP-10, DP-15, DP-18, DP-19, DP-21, GEMW- 02, MW-01, MW-02, MW-03, MW-13, MW-13B, MW-19B, and MW-21B). The Mann-Kendall Test is a non-parametric test that can be used to define the stability of a solute plume (i.e., stable, diminishing, or expanding) based on concentration trends at individual wells. To evaluate plume stability, four or more independent sampling events are required.

The following steps comprise the Mann-Kendall Test:

- ***Step 1—Well Data***: Contaminant concentrations are entered for each sampling event. Only those events for which numeric or non-detect values are available are included. In the event of a non-detect value, one-half the laboratory reporting limit was used for previous sampling events.

- ***Step 2—Data Comparisons***: Compare data sequentially, comparing sample event 1 to sample events 2 through n, then sampling event 2 to sampling events 3 through n, etc. Each row is filled with a 1, 0, or -1 as follows:

  — Concentration of Event xi > Event 1: Enter +1
  — Concentration of Event xi = Event 1: Enter 0
  — Concentration of Event xi < Event 1: Enter -1.

Where: n = total number of sampling events
$x_i$ = value of given sample event, with I = 2 to n

All rows are completed in the same manner until all sampling events are included.

- ***Step 3— Mann-Kendall Statistic***: Each row is then summed (e.g., 0+0+-1+-1+0 = -2) and the sum is recorded in the far right-hand column. The right-hand column is then summed to get the total sum. This total value represents the Mann-Kendall Statistic "S" for the data from an individual well.

- ***Step 4—Determine Probability p***: A probability table in EPA (1998) was used to determine the probability p.

- ***Step 5—Hypothesis Testing***: The null hypothesis (no trend) was tested against the alternative hypotheses; H1 (upward trend) and H2 (downward trend). A 95 percent confidence interval was used for hypothesis testing.

A Mann-Kendall trend analysis was performed for overburden and bedrock monitoring wells with data from the seven most recent sampling events from July 2013 to December 2024. Contaminant concentrations were analyzed for representative wells screened in both aquifers. The following wells were selected because they have data available from the greatest number of sampling events:

- Overburden Wells: DP-10, DP-15, DP-18, DP-19, DP-21, GEMW-02, MW-01, MW-02, MW-03, and MW-13.

- Bedrock Wells: MW-13B, MW-19B, and MW-21B

Over the 11-year span, the trend analysis indicated that most wells are either stable or decreasing in concentrations of PCE, TCE, and *cis*-1,2-DCE. Overburden well DP-19 indicated an increasing trend for PCE, TCE, and *cis*-1,2-DCE. Bedrock well MW-13B indicated a slight increasing trend for TCE and an increasing trend for *cis*-1,2-DCE. Several wells showed no trend for any of the analytes. Results of the Mann-Kendall Analyses are presented in **Appendix D** and are summarized in the following sections. The Mann-Kendall Analysis utilized the historical data from **Tables 3 and 4**.

### 3.2.1 PCE Concentration Trends

In the overburden aquifer, PCE concentrations are decreasing in DP-15, GEMW-02, MW-01, MW-02, MW-03, and MW-13; increasing in DP-19; and stable in DP-21. Other select wells (DP-10, DP-18,) do not show a concentration trend.

In the bedrock aquifer, PCE concentration trends are stable in MW-13B and MW-21B. No trend was identified in MW-19B.

### 3.2.2 TCE Concentration Trends

In the overburden aquifer, TCE concentrations are decreasing in DP-15, GEMW-02, MW-01, MW-02, MW-03, and MW-13; increasing in DP-19; and probably decreasing trend in DP-10. Monitoring well DP-18 did not show a concentration trend for TCE.

TCE concentration in the bedrock aquifer showed an increasing trend found in MW-13B, a probably increasing trend found in MW-19B, and no concentration trend in MW-21B.

### 3.2.3 *Cis*-1,2-DCE Concentration Trends

In the overburden aquifer, *cis*-1,2-DCE concentrations are decreasing in GEMW-02, MW-01, MW-02, and MW-03; probably decreasing in DP-15; increasing in DP-19; and stable in MW-13. Monitoring wells DP-10 and MW-18 did not show a concentration trend for *cis*-1,2-DCE.

Concentration trends for *cis*-1,2-DCE show an increasing trend in MW-13B, and slightly increasing trend in MW-19B. No trend was identified in MW-21B.

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# 4. CONCLUSIONS AND RECOMMENDATIONS

The extent of the CVOC plume appears stable and well bounded around the source area. The Mann-Kendall trend analysis for the last 11 years (2013 to 2024) indicates that most wells are either stable or slowly decreasing in concentrations of PCE, TCE, and *cis*-1,2-DCE. Monitoring well DP-19 has a slight increasing trend from 2013 to 2024 for PCE (19 to 54.8 µg/L), TCE (4.9 to 13.6 µg/L), and *cis*-1,2-DCE (6.7 to 15.9 µg/L). In addition, MW-13B has a slightly increasing trend for TCE and an increasing trend of *cis*-1,2-DCE, with concentrations of *cis*-1,2-DCE that exceed the Class GA AWQS in 2024.

Although concentrations are above Class GA AWQS, the observed CVOCs are orders of magnitude below the concentrations observed before the IRM and soil excavation remedial actions.
It is recommended that the site monitoring program continue with bi-annual sampling in 2025, with the next event occurring in the second quarter of 2025. Annual sampling of monitoring wells with per- and polyfluoroalkyl substances concentrations exceeding Class GA Ambient Water Quality Guidance Values is recommended. Those wells include DP-10, DP-15, MW-1, MW-3, and MW-13.

Although PCE daughter products TCE and *cis*-1,2-DCE are persistent in groundwater, the elevated concentrations of PCE suggest a slow process of degradation. It is recommended to implement the selected remedy of in situ enhanced biodegradation from the Record of Decision (NYSDEC 2017b) that was not previously implemented during the remedial action (MACTEC 2023). These conditions would thus facilitate complete breakdown of chlorinated solvents.

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# 5. REFERENCES

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# Tables

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## Table 1. Monitoring Well Details and Gauging Data

| Location ID | Targeted Unit | Northing | Easting | Ground Elevation (ft amsl) | TOC Elevation (ft amsl) | Historic Length (ft bgs) | Screen Length (ft) | DTW[1] (ft btoc) | Groundwater Elevation (ft amsl) | DTB[1] (ft btoc) | DTB (ft amsl) | Top of Screen (ft amsl) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DP-10 | Overburden | 1138737.73 | 1422305.44 | 477.84 | 477.53 | 9.8 | 6.0 | 3.72 | 473.81 | 9.24 | 468.29 | 474.10 |
| DP-11 | Overburden | 1138734.19 | 1422359.91 | 478.37 | 478.05 | 12.8 | 8.0 | -- | -- | -- | -- | 473.70 |
| DP-12 | Overburden | 1138700.85 | 1422352.85 | 477.42 | 477.09 | 20.8 | 10.0 | 10.73 | 466.36 | 19.75 | 457.34 | 466.70 |
| DP-14 | Overburden | 1138717.51 | 1422261.09 | 477.14 | 476.82 | NA | 5.0 | -- | -- | -- | -- | -- |
| DP-15 | Overburden | 1138744.94 | 1422284.51 | 477.25 | 476.98 | 10.1 | 5.0 | 3.11 | 473.87 | 9.35 | 467.63 | 476.98 |
| DP-16 | Overburden | 1138766.08 | 1422168.18 | 479.06 | 478.77 | 10.4 | 5.0 | -- | -- | -- | -- | 473.8 |
| DP-17 | Overburden | 1138699.91 | 1422092.66 | 479.89 | 479.50 | 16.9 | 10.0 | 6.80 | 472.70 | 16.16 | 463.34 | 473.1 |
| DP-18 | Overburden | 1138578.39 | 1422161.46 | 478.82 | 478.29 | 10.9 | 6.0 | 6.25 | 472.04 | 10.27 | 468.02 | 474.0 |
| DP-19 | Overburden | 1138532.70 | 1422378.17 | 475.49 | 475.15 | 13.3 | 10.0 | 4.54 | 470.61 | 12.95 | 462.20 | 472.3 |
| DP-20 | Overburden | 1138477.85 | 1422664.27 | 474.21 | 473.80 | 15.1 | 10.0 | 11.24 | 462.56 | 14.65 | 459.15 | 469.2 |
| DP-21 | Overburden | 1138650.76 | 1422923.25 | 468.55 | 468.15 | 10.8 | 8.0 | 7.23 | 460.92 | 10.37 | 457.78 | 465.9 |
| GEMW-1 | Overburden | 1138768.73 | 1422148.96 | 479.70 | 479.57 | 15.0 | 10.0 | -- | -- | -- | -- | -- |
| GEMW-2 | Overburden | 1138751.76 | 1422130.52 | 480.36 | 480.25 | 15.0 | 10.0 | 7.80 | 472.45 | 14.52 | 465.73 | 470.7 |
| MW-1 | Overburden | 1138762.61 | 1422240.53 | 477.40 | 477.05 | NA | 5.0 | -- | -- | -- | -- | -- |
| MW-2 | Overburden | 1138726.34 | 1422216.42 | 477.13 | 476.87 | NA | 5.0 | 4.33 | 472.54 | 22.5 | 454.37 | 459.4 |
| MW-2B | Bedrock | 1138727.39 | 1422222.76 | 477.06 | 476.71 | 23.0 | 5.0 | -- | -- | -- | -- | 458.0 |
| MW-3 | Overburden | 1138741.96 | 1422179.86 | 478.37 | 478.00 | NA | 5.0 | 5.13 | 472.87 | 10.5 | 467.50 | 472.5 |
| MW-8 | Overburden | 1138868.41 | 1422501.18 | 473.10 | 473.04 | NA | 5.0 | -- | -- | -- | -- | -- |
| MW-10 | Overburden | 1138876.06 | 1422009.43 | 482.11 | 481.70 | NA | 5.0 | 7.31 | 474.39 | 9.44 | 472.26 | -- |
| MW-13 | Overburden | 1138720.92 | 1422285.49 | 477.39 | 480.36 | 10.0 | 5.0 | 6.41 | 473.95 | 12.90 | 467.46 | 472.4 |
| MW-13B | Bedrock | 1138716.73 | 1422294.21 | 477.80 | 480.37 | 23.2 | 5.0 | 9.21 | 471.16 | 25 | 455.37 | 459.8 |
| MW-16B | Bedrock | 1138763.12 | 1422164.89 | 478.95 | 478.58 | 20.5 | 5.0 | -- | -- | -- | -- | 463.5 |
| MW-17B | Bedrock | 1138696.71 | 1422088.47 | 479.75 | 479.35 | 27.8 | 5.0 | 7.2 | 472.15 | 27.05 | 452.30 | 457.0 |
| MW-19B | Bedrock | 1138531.53 | 1422373.04 | 475.69 | 475.35 | 21.5 | 5.0 | 4.79 | 470.56 | 21.01 | 454.34 | 459.2 |
| MW-21B | Bedrock | 1138654.47 | 1422923.58 | 468.55 | 468.15 | 20.0 | 5.0 | 7.72 | 460.43 | 19.49 | 448.66 | 453.7 |

Notes:

1. DTW and DTB was measured on 23 December 2024.

-- = Well not measured during monitoring event
amsl = Above mean sea level
btoc = Below top of casing
DTB = Depth to bottom
DTW = Depth to water
ft = Foot (feet)
ID = Identification
NA = Not applicable
TOC = Top of casing

Horizontal Coordinates reference to the New York State Plane Coordinate System, West Zone (3103) based on NAD 83 (2011).
Vertical Datum is NAVD88. Survey conducted by Prudent Engineering, dated 8/12/2013.

## Table 2. Summary Of Samples Collected (December 2024)

| Well ID | Sample ID | Sample Date | Sample Time | MS/MSD | Location |
|---|---|---|---|---|---|
| DP-10 | 828149-DP-10 | 12/23/2024 | 14:36 | N | On-site |
| DP-12 | 828149-DP-12 | 12/23/2024 | 14:22 | N | On-site |
| DP-15 | 828149-DP-15 | 12/23/2024 | 12:14 | N | On-site |
| DP-17 | 828149-DP-17 | 12/23/2024 | 12:38 | N | On-site |
| DP-18 | 828149-DP-18 | 12/23/2024 | 11:54 | N | Off-site |
| DP-19 | 828149-DP-19 | 12/23/2024 | 15:30 | N | Off-site |
| DP-20 | 828149-DP-20 | 12/23/2024 | 16:46 | N | Off-site |
| DP-21 | 828149-DP-21 | 12/23/2024 | 16:36 | N | Off-site |
| GEMW-2 | 828149-GEMW-2 | 12/23/2024 | 14:21 | N | On-site |
| MW-3 | 828149-MW-3 | 12/23/2024 | 13:49 | N | On-site |
| MW-2 | 828149-MW-2 | 12/23/2024 | 15:35 | N | On-site |
| MW-13 | 828149-MW-13 | 12/23/2024 | 13:16 | **Y** | On-site |
| MW-13B | 828149-MW-13B | 12/23/2024 | 14:02 | N | On-site |
| MW-17B | 828149-MW-17B | 12/23/2024 | 15:38 | N | Off-site |
| MW-19B | 828149-MW-19B | 12/23/2024 | 16:17 | N | Off-site |
| MW-21B | 828149-MW-21B | 12/23/2024 | 17:13 | N | Off-site |
| **QC Samples** | | | | | |
| **Well ID** | **Sample ID** | **Sample Date** | | **QC Type** | |
| MW-3 | 828149-DUP-20241223 | 12/23/2024 | --- | Field Duplicate | |
| NA | 828149-TB-01-20241223 | 12/19/2024 | Lab Filled | Trip Blank | |

Notes:

ID = Identification

MS = Matrix spike

MSD = Matrix spike duplicate

NA= Not applicable/available

QC= Quality control

# Table 3. Historical Bedrock VOC Analytical Results

| | Location ID | MW-2B | | | | |
|---|---|---|---|---|---|---|
| | Sample Name | 828149-MW2B20 | 828149-MW2B20D | 828149-MW02B020 | 828149-MW02B020 | 828149-MW02B020 |
| | Parent Sample ID | | 828149-MW2B20 | | | |
| | Sample Date | 7/24/2013 | 7/24/2013 | 4/26/2016 | 10/12/2017 | 5/7/2019 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | |
| Acetone | 50 | µg/L | < 10 U | < 10 UJ | < 5 U | < 5.0 U | < 5 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | 3.4 | 3 | 3.9 | 4.9 | **7.4** |
| Tetrachloroethylene (PCE) | 5 | µg/L | **16** | **16** | **12** | **8.5** | **20** |
| Trichloroethylene (TCE) | 5 | µg/L | 3.2 | 3 | 3.5 | 3.5 | **6** |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U |

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
U = Analyte not detected.
VOC = Volatile organic compounds
**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 3. Historical Bedrock VOC Analytical Results

| | Location ID | MW-13B | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Sample Name | 828149-MW13B20 | 828149-MW013B023 | 828149-MW013B023 | 828149-MW013B023 | 828149-MW-13B | 828149-MW-13B-20231127 | 828149-MW-13B-20240508 | 828149-MW-13B-20241223 |
| | Parent Sample ID | | | | | | | | |
| | Sample Date | 7/24/2013 | 4/28/2016 | 10/11/2017 | 5/7/2019 | 6/5/2023 | 11/27/2023 | 5/8/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | |
| Acetone | 50 | µg/L | < 10 U | < 5 U | < 5.0 U | < 5 U | < 50 U | < 3.1 U | < 3.1 U | < 3.1 U |
| Carbon Disulfide | 60 | µg/L | 0.34 J | < 1 U | < 1.0 U | 4.1 | < 5 U | < 1.8 U | < 1.8 U | < 1.8 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.50 U | < 0.50 U | < 0.50 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | 0.51 J | 0.93 J | 2 | 2 | **7** | 4.6 | 5 | **8.2** |
| Tetrachloroethylene (PCE) | 5 | µg/L | 0.65 J | 3.6 | 3.3 | 1.6 | 1 | 3 | 0.71 J | 1.5 |
| Trichloroethylene (TCE) | 5 | µg/L | 0.38 J | 0.73 J | 1.3 | 1.2 | 1.9 | 2.3 | 1.2 | 2.2 |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.52 U | < 0.52 U | < 0.52 U |

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
U = Analyte not detected.
VOC = Volatile organic compounds
**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 3. Historical Bedrock VOC Analytical Results

| Location ID | | | MW-16B | | | |
|---|---|---|---|---|---|---|
| Sample Name | | | 828149-MW16B17 | 828149-MW016B023 | 828149-MW016B023 | 828149-MW16B023 |
| Parent Sample ID | | | | | | |
| Sample Date | | | 7/22/2013 | 4/27/2016 | 10/10/2017 | 5/6/2019 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | |
| Acetone | 50 | µg/L | < 10 U | < 5 U | < 5.0 U | < 5 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | 0.45 J | 0.75 J | 0.42 J | 0.95 J |
| Tetrachloroethylene (PCE) | 5 | µg/L | 0.43 J | 0.63 J | 0.39 J | 0.95 J |
| Trichloroethylene (TCE) | 5 | µg/L | < 1 U | 0.38 J | < 1.0 U | 0.45 J |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U |

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
U = Analyte not detected.
VOC = Volatile organic compounds
**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 3. Historical Bedrock VOC Analytical Results

| | Location ID | MW-17B | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Sample Name | 828149-MW17B25 | 828149-MW017B0180 | 828149-MW017B018 | 828149-MW017B0180 | 828149-MW-17B | 828149-MW-17B-20231127 | 828149-MW-17B-20240507 | 828149-MW-17B-20241223 |
| | Parent Sample ID | | | | | | | | |
| | Sample Date | 7/23/2013 | 4/26/2016 | 10/11/2017 | 5/8/2019 | 6/5/2023 | 11/27/2023 | 5/7/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | |
| Acetone | 50 | µg/L | < 10 U | < 5 U | < 5.0 U | < 5 U | < 50 U | < 3.1 U | < 3.1 U | < 3.1 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 1 U | < 1.0 U | 4.5 | < 5 U | < 1.8 U | < 1.8 U | < 1.8 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.50 U | < 0.50 U | < 0.50 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.51 U | < 0.51 U | < 0.51 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.56 U | < 0.56 U | < 0.56 U |
| Trichloroethylene (TCE) | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.53 U | < 0.53 U | < 0.53 U |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.52 U | < 0.52 U | < 0.52 U |

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
U = Analyte not detected.
VOC = Volatile organic compounds
**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 3. Historical Bedrock VOC Analytical Results

| | | Location ID | MW-19B | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | 828149-MW19B17 | 828149-MW019B025 | 828149-MW019B025 | 828149-MW019B025 | 828149-MW-19B | 828149-MW-19B-20231128 | 828149-MW-19B-20240507 | 828149-MW-19B-20241223 |
| | | Parent Sample ID | | | | | | | | |
| | | Sample Date | 7/23/2013 | 4/27/2016 | 10/11/2017 | 5/8/2019 | 6/6/2023 | 11/28/2023 | 5/7/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | |
| Acetone | 50 | µg/L | < 10 U | < 5 U | < 5.0 U | < 5 UJ | < 50 U | < 3.1 U | < 3.1 U | < 3.1 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 1 UJ | < 1.0 U | < 1 UJ | < 5 U | < 1.8 U | < 1.8 U | < 1.8 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 UJ | 0.63 J | < 0.50 U | < 0.50 U | < 0.50 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **7.7** | **9.8** | **12** | **9.4 J** | < 1 U | **19.3** | **16** | **22.2** |
| Tetrachloroethylene (PCE) | 5 | µg/L | 4.2 | **10** | **13** | **13 J** | 4.3 | **12.9** | **10.5** | **14.4** |
| Trichloroethylene (TCE) | 5 | µg/L | 4.4 | **6.2** | **8.4** | **6.9 J** | < 1 U | **9.4** | **7.5** | **10.2** |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 2 U | 0.82 J | < 0.52 U | 0.67 J |

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
U = Analyte not detected.
VOC = Volatile organic compounds
**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 3. Historical Bedrock VOC Analytical Results

| | Location ID | MW-21B | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Sample Name | 828149-MW21B17 | 828149-MW021B019 | 828149-MW021B019 | 828149-MW021B019 | 828149-MW-21B | 828149-MW-21B-20231128 | 828149-MW-21B-20240507 | 828149-MW-21B-20241223 |
| | Parent Sample ID | | | | | | | | |
| | Sample Date | 7/23/2013 | 4/27/2016 | 10/11/2017 | 5/8/2019 | 6/6/2023 | 11/28/2023 | 5/7/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | |
| Acetone | 50 | µg/L | < 10 U | < 5 U | 2.2 J | < 5 U | < 50 U | < 3.1 U | < 3.1 U | < 3.1 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 5 U | < 1.8 U | < 1.8 U | 2.3 |
| Chloroform | 7 | µg/L | 0.74 J | 1.5 | 3.4 | < 1 U | < 2 U | 2 | < 0.50 U | 1 |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | 0.38 J | **12** | < 0.51 U | < 0.51 U | < 0.51 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **6** | **5.7** | **8.3** | **6** | **9.2** | **6.4** | 2.5 | **5.1** |
| Trichloroethylene (TCE) | 5 | µg/L | 0.62 J | 0.5 J | 0.73 J | 0.59 J | **7.7** | < 0.53 U | < 0.53 U | < 0.53 U |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | 0.71 J | < 0.52 U | < 0.52 U | < 0.52 U |

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
U = Analyte not detected.
VOC = Volatile organic compounds
**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

# Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | DP-10 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-GW010019 | 828149-DP1007 | 828149-DP010008 | 828149-DP010008 | 828149-DP010008 | 828149-DP-10-20231128 | 828149-DP-10-20240507 | 828149-DP-10-20241223 |
| Parent Sample ID | | | | | | | | | | |
| Sample Date | | | 5/22/2013 | 7/24/2013 | 4/26/2016 | 10/11/2017 | 5/8/2019 | 11/28/2023 | 5/7/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 1 U | 1.5 J | 0.5 J | 1.8 J | < 1 U | < 0.54 U | < 2.7 U | < 0.54 U |
| 1,1-Dichloroethane | 5 | µg/L | < 1 U | 0.46 J | 0.22 J | 1.2 J | < 1 U | < 0.57 U | < 2.8 U | < 0.57 U |
| 1,1-Dichloroethene | 5 | µg/L | < 1 U | < 2 U | < 1 U | < 5.0 U | < 1 U | < 0.59 U | < 3.0 U | < 0.59 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | NA | < 40 UJ | < 200 U | < 40 U | < 0.050 U | < 0.20 U | NA |
| Acetone | 50 | µg/L | 4.1 J | < 20 U | 1.4 J | 9.4 J | < 5 U | < 3.1 U | < 15 U | < 3.1 U |
| Benzene | 1 | µg/L | 0.28 J | < 2 U | < 1 U | < 5.0 U | < 1 U | < 0.43 U | < 2.1 U | < 0.43 U |
| Bromodichloromethane | 50 | µg/L | < 1 U | < 2 U | < 1 U | < 5.0 U | < 1 U | < 0.45 U | < 2.3 U | < 0.45 U |
| Bromomethane | 5 | µg/L | < 2 UJ | < 4 U | < 1 U | < 5.0 U | < 1 U | < 1.6 U | < 8.2 U | < 1.6 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 2 U | < 1 U | < 5.0 U | < 1 U | < 1.8 U | < 9.0 U | < 1.8 U |
| Chloroethane | 5 | µg/L | < 2 U | < 4 U | < 1 U | < 5.0 U | < 1 U | < 0.73 U | < 3.6 U | < 0.73 U |
| Chloroform | 7 | µg/L | < 1 U | < 2 U | < 1 U | < 5.0 U | < 1 U | < 0.50 U | < 2.5 U | < 0.50 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 2 U | < 4 U | < 1 U | < 5.0 U | < 1 U | < 0.76 U | < 3.8 U | < 0.76 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | 3.1 | **110** | **29** | **100** | **55** | **121** | **128** | **87.5** |
| Cyclohexane | NSL | µg/L | 0.47 J | < 4 U | < 1 U | < 5.0 U | < 1 U | < 0.78 U | < 3.9 U | < 0.78 U |
| Ethylbenzene | 5 | µg/L | < 1 U | < 2 U | < 1 U | < 5.0 U | < 1 U | < 0.60 U | < 3.0 U | < 0.60 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | 0.63 J | < 4 U | < 2 U | < 10 U | < 2 U | < 0.78 U | < 3.9 U | < 0.78 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 5 U | < 10 U | < 5 U | < 25 U | < 5 U | < 2.7 U | < 14 U | < 2.7 U |
| Methylcyclohexane | NSL | µg/L | 0.79 J | < 2 U | < 1 U | < 5.0 U | < 1 U | < 0.60 U | < 3.0 U | 2.2 J |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 1 U | < 2 U | < 1 U | < 5.0 U | < 1 U | < 0.59 U | < 3.0 U | < 0.59 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | 0.41 J | **1500** | **530** | **5300** | **120** | **302** | **887** | **266** |
| Toluene | 5 | µg/L | 0.6 J | < 2 U | < 1 U | < 5.0 U | < 1 U | < 0.49 U | < 2.5 U | < 0.49 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 1 U | 1.3 J | 1 | < 5.0 U | 0.45 J | 0.61 J | < 2.7 U | < 0.54 U |
| Trichloroethylene (TCE) | 5 | µg/L | 1 | **170** | **130** | **140** | **38** | **67.2** | **85.4** | **52.1** |
| Vinyl Chloride | 2 | µg/L | 0.38 J | < 2 U | < 1 U | < 5.0 U | < 1 U | < 0.52 U | < 2.6 U | 0.67 J |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| | | Location ID | DP-11 | DP-12 | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Sample Name | 828149-DP011012 | 828149-DP1217 | 828149-DP012015 | 828149-DP012015 | 828149-DP012015 | 828149-DP-12-20241223 |
| | | Parent Sample ID | | | | | | |
| | | Sample Date | 5/8/2019 | 7/24/2013 | 4/26/2016 | 10/10/2017 | 5/8/2019 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.54 U |
| 1,1-Dichloroethane | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.57 U |
| 1,1-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.59 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | < 40 U | NA | < 40 UJ | < 40 U | < 40 UJ | NA |
| Acetone | 50 | µg/L | < 5 U | < 10 U | 5.2 | < 5.0 U | < 5 UJ | < 3.1 U |
| Benzene | 1 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.43 U |
| Bromodichloromethane | 50 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.45 U |
| Bromomethane | 5 | µg/L | < 1 U | < 2 UJ | < 1 U | < 1.0 U | < 1 UJ | < 1.6 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 1.8 U |
| Chloroethane | 5 | µg/L | < 1 U | < 2 U | < 1 U | < 1.0 U | < 1 UJ | < 0.73 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.50 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 1 U | < 2 U | < 1 U | < 1.0 U | < 1 UJ | < 0.76 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | < 1 U | 0.64 J | 0.46 J | 1.7 | 0.54 J | 2.7 |
| Cyclohexane | NSL | µg/L | < 1 U | < 2 U | < 1 U | < 1.0 U | < 1 UJ | < 0.78 U |
| Ethylbenzene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.60 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 2 U | < 2 U | < 2 U | < 2.0 U | < 2 UJ | < 0.78 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 5 U | < 5 U | < 5 U | < 5.0 U | < 5 UJ | < 2.7 U |
| Methylcyclohexane | NSL | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.60 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.59 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | 0.96 J | 0.81 J | < 1 U | < 1.0 U | 0.59 J | 4.5 |
| Toluene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.49 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.54 U |
| Trichloroethylene (TCE) | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.53 U |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.52 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | DP-14 | | | |
|---|---|---|---|---|---|---|
| Sample Name | | | 828149-DP1407 | 828149-DP014009 | 828149-DP014009 | 828149-DP014009 |
| Parent Sample ID | | | | | | |
| Sample Date | | | 7/24/2013 | 4/26/2016 | 10/11/2017 | 5/7/2019 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| 1,1-Dichloroethane | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| 1,1-Dichloroethene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | < 2000 UJ | < 2000 U | < 2000 U |
| Acetone | 50 | µg/L | < 500 U | < 250 U | < 250 U | < 250 U |
| Benzene | 1 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| Bromodichloromethane | 50 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| Bromomethane | 5 | µg/L | < 100 UJ | < 50 U | < 50 U | < 50 U |
| Carbon Disulfide | 60 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| Chloroethane | 5 | µg/L | < 100 U | < 50 U | < 50 U | < 50 U |
| Chloroform | 7 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 100 U | < 50 U | < 50 U | < 50 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **870** | **450** | **550** | **340** |
| Cyclohexane | NSL | µg/L | < 100 U | < 50 U | < 50 U | < 50 U |
| Ethylbenzene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 100 U | < 100 U | < 100 U | < 100 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 250 U | < 250 U | < 250 U | < 250 U |
| Methylcyclohexane | NSL | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **13000** | **9400** | **12000** | **8100** |
| Toluene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |
| Trichloroethylene (TCE) | 5 | µg/L | **500** | **360** | **420** | **310** |
| Vinyl Chloride | 2 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | DP-15 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-DP1507 | 828149-DP015009 | 828149-DP015009 | 828149-DP015009 | 828149-DP-15 | 828149-DP-15-20231127 | 828149-DP-15-20240507 | 828149-DP-15-20241223 |
| Parent Sample ID | | | | | | | | | | |
| Sample Date | | | 7/24/2013 | 4/27/2016 | 10/11/2017 | 5/8/2019 | 6/6/2023 | 11/27/2023 | 5/7/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 20 U | < 5.4 U | < 2.7 U | < 1.3 U |
| 1,1-Dichloroethane | 5 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 20 U | < 5.7 U | < 2.8 U | < 1.4 U |
| 1,1-Dichloroethene | 5 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 20 U | < 5.9 U | < 3.0 U | < 1.5 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | < 800 UJ | < 2000 U | < 200 U | < 0.21 U | < 0.050 U | < 0.20 U | NA |
| Acetone | 50 | µg/L | < 250 U | < 100 U | < 250 U | < 25 U | < 1000 U | < 31 U | < 15 U | < 7.6 U |
| Benzene | 1 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 20 U | < 4.3 U | < 2.1 U | < 1.1 U |
| Bromodichloromethane | 50 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 10 U | < 4.5 U | < 2.3 U | < 1.1 U |
| Bromomethane | 5 | µg/L | < 50 UJ | < 20 U | < 50 U | < 5 U | < 40 U | < 16 U | < 8.2 U | < 4.1 U |
| Carbon Disulfide | 60 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 100 U | < 18 U | < 9.0 U | < 4.5 U |
| Chloroethane | 5 | µg/L | < 50 U | < 20 U | < 50 U | < 5 U | < 40 U | < 7.3 U | < 3.6 U | < 1.8 U |
| Chloroform | 7 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 40 U | < 5.0 U | < 2.5 U | < 1.3 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 50 U | < 20 U | < 50 U | < 5 U | < 40 U | < 7.6 U | < 3.8 U | < 1.9 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **230** | **190** | **220** | **47** | **88** | **129** | **54.1** | **87.4** |
| Cyclohexane | NSL | µg/L | < 50 U | < 20 U | < 50 U | < 5 U | NA | < 7.8 U | < 3.9 U | < 2.0 U |
| Ethylbenzene | 5 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 20 U | < 6.0 U | < 3.0 U | < 1.5 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 50 U | < 40 U | < 100 U | < 10 U | < 40 U | < 7.8 U | < 3.9 U | < 2.0 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 130 U | < 100 U | < 250 U | < 25 U | **63 J** | < 27 U | < 14 U | < 6.8 U |
| Methylcyclohexane | NSL | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 20 U | < 6.0 U | < 3.0 U | < 1.5 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 20 U | < 5.9 U | < 3.0 U | < 1.5 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **8500** | **5900** | **6800** | **1300** | **1200** | **2300** | **658** | **843** |
| Toluene | 5 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 20 U | < 4.9 U | < 2.5 U | < 1.2 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 20 U | < 5.4 U | < 2.7 U | 1.9 J |
| Trichloroethylene (TCE) | 5 | µg/L | **410** | **210** | **210** | **59** | **36** | **103** | **37.9** | **49.1** |
| Vinyl Chloride | 2 | µg/L | < 25 U | < 20 U | < 50 U | < 5 U | < 40 U | < 5.2 U | < 2.6 U | < 1.3 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | DP-16 | | | |
|---|---|---|---|---|---|---|
| Sample Name | | | 828149-DP1607 | 828149-DP016009 | 828149-DP016009 | 828149-DP016009 |
| Parent Sample ID | | | | | | |
| Sample Date | | | 7/23/2013 | 4/27/2016 | 10/11/2017 | 5/8/2019 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 2 U |
| 1,1-Dichloroethane | 5 | µg/L | 0.35 J | < 1 U | 0.35 J | 0.44 J |
| 1,1-Dichloroethene | 5 | µg/L | 3.7 | 1.1 | 2.1 | 3.8 |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | < 40 UJ | < 40 U | < 80 U |
| Acetone | 50 | µg/L | < 10 U | < 5 U | 1.8 J | < 10 U |
| Benzene | 1 | µg/L | < 1 U | < 1 U | < 1.0 U | < 2 U |
| Bromodichloromethane | 50 | µg/L | < 1 U | < 1 U | < 1.0 U | < 2 U |
| Bromomethane | 5 | µg/L | < 2 UJ | < 1 U | < 1.0 U | < 2 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 1 U | < 1.0 U | < 2 U |
| Chloroethane | 5 | µg/L | < 2 U | < 1 U | 0.59 J | < 2 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1.0 U | < 2 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 2 U | < 1 U | < 1.0 U | < 2 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **270** | **130** | **300** | **610** |
| Cyclohexane | NSL | µg/L | < 2 U | < 1 U | < 1.0 U | < 2 U |
| Ethylbenzene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 2 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 2 U | < 2 U | < 2.0 U | < 4 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 5 U | < 5 U | < 5.0 U | < 10 U |
| Methylcyclohexane | NSL | µg/L | < 1 U | < 1 U | < 1.0 U | < 2 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 2 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **96** | **75** | **140** | **300** |
| Toluene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 2 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | 2.1 | 3.6 | 1.8 | 4 |
| Trichloroethylene (TCE) | 5 | µg/L | **32** | **22** | **38** | **91** |
| Vinyl Chloride | 2 | µg/L | **120** | **23** | **36 J** | **32** |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | DP-17 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-DP1714 | 828149-DP017015 | 828149-DP017015 | 828149-DP017015 | 828149-DP-17 | 828149-DP-17-20231127 | 828149-DP-17-20240507 | 828149-DP-17-20241223 |
| Parent Sample ID | | | | | | | | | | |
| Sample Date | | | 7/23/2013 | 4/26/2016 | 10/12/2017 | 5/8/2019 | 6/5/2023 | 11/27/2023 | 5/7/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.54 U | < 0.54 U | < 0.54 U |
| 1,1-Dichloroethane | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.57 U | < 0.57 U | < 0.57 U |
| 1,1-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | < 40 UJ | < 0.40 U | < 40 U | < 0.2 U | < 0.050 U | NA | NA |
| Acetone | 50 | µg/L | < 10 U | 1.4 J | < 5.0 U | < 5 U | < 50 U | < 3.1 U | < 3.1 U | < 3.1 U |
| Benzene | 1 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.43 U | < 0.43 U | < 0.43 U |
| Bromodichloromethane | 50 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 0.5 U | < 0.45 U | < 0.45 U | < 0.45 U |
| Bromomethane | 5 | µg/L | < 2 UJ | < 1 U | < 1.0 U | < 1 UJ | < 2 U | < 1.6 U | < 1.6 U | < 1.6 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 1 UJ | < 1.0 U | < 1 U | < 5 U | < 1.8 U | < 1.8 U | < 1.8 U |
| Chloroethane | 5 | µg/L | < 2 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.73 U | < 0.73 U | < 0.73 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.50 U | < 0.50 U | < 0.50 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 2 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.76 U | < 0.76 U | < 0.76 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.51 U | < 0.51 U | < 0.51 U |
| Cyclohexane | NSL | µg/L | < 2 U | < 1 U | < 1.0 U | < 1 U | NA | < 0.78 U | < 0.78 U | < 0.78 U |
| Ethylbenzene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 2 U | < 2 U | < 2.0 U | < 2 U | < 2 U | < 0.78 U | < 0.78 U | < 0.78 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 5 U | < 5 U | < 5.0 U | < 5 U | < 20 U | < 2.7 U | < 2.7 U | < 2.7 U |
| Methylcyclohexane | NSL | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | 0.48 J | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.56 U | < 0.56 U | < 0.56 U |
| Toluene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.49 U | < 0.49 U | < 0.49 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.54 U | < 0.54 U | < 0.54 U |
| Trichloroethylene (TCE) | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.53 U | < 0.53 U | < 0.53 U |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.52 U | < 0.52 U | < 0.52 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | DP-18 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-DP1807 | 828149-DP018009 | 828149-DP018009 | 828149-DP018009 | 828149-DP-18 | 828149-DP-18-20231127 | 828149-DP-18-20240507 | 828149-DP-18-20241223 |
| Parent Sample ID | | | | | | | | | | |
| Sample Date | | | 7/23/2013 | 4/27/2016 | 10/11/2017 | 5/7/2019 | 6/6/2023 | 11/27/2023 | 5/7/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.54 U | < 0.54 U | < 0.54 U |
| 1,1-Dichloroethane | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.57 U | < 0.57 U | < 0.57 U |
| 1,1-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | < 40 UJ | < 40 U | < 40 U | < 0.21 U | < 0.050 U | < 0.20 U | NA |
| Acetone | 50 | µg/L | 3.1 J | < 5 U | 1.7 J | < 5 U | 4.0 J | < 3.1 U | < 3.1 U | < 3.1 U |
| Benzene | 1 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.43 U | < 0.43 U | < 0.43 U |
| Bromodichloromethane | 50 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 0.5 U | < 0.45 U | < 0.45 U | < 0.45 U |
| Bromomethane | 5 | µg/L | < 2 UJ | < 1 U | < 1.0 U | < 1 U | < 2 U | < 1.6 U | < 1.6 U | < 1.6 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 5 U | < 1.8 U | < 1.8 U | < 1.8 U |
| Chloroethane | 5 | µg/L | < 2 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.73 U | < 0.73 U | < 0.73 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.50 U | < 0.50 U | < 0.50 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 2 U | < 1 U | 0.23 J | < 1 U | < 2 U | < 0.76 U | < 0.76 U | < 0.76 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | 0.78 J | 1.5 | < 1.0 U | < 1 U | 0.58 J | 1.2 | 0.76 J | 1.1 |
| Cyclohexane | NSL | µg/L | < 2 U | < 1 U | < 1.0 U | < 1 U | NA | < 0.78 U | < 0.78 U | < 0.78 U |
| Ethylbenzene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 2 U | < 2 U | < 2.0 U | < 2 U | < 2 U | < 0.78 U | < 0.78 U | < 0.78 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | 1.7 J | < 5 U | < 5.0 U | < 5 U | < 20 U | < 2.7 U | < 2.7 U | < 2.7 U |
| Methylcyclohexane | NSL | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | 1.4 | 3.7 | 3.1 | < 1 U | 1.7 | 4 | 2.1 | 3 |
| Toluene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.49 U | < 0.49 U | < 0.49 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.54 U | < 0.54 U | < 0.54 U |
| Trichloroethylene (TCE) | 5 | µg/L | 0.79 J | 1.5 | < 1.0 U | < 1 U | 0.90 J | 1.8 | 1 | 1.5 |
| Vinyl Chloride | 2 | µg/L | < 1 U | 0.6 J | < 1.0 U | < 1 U | < 2 U | < 0.52 U | < 0.52 U | < 0.52 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | DP-19 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-GW019014 | 828149-DP1910 | 828149-DP019012 | 828149-DP019012 | 828149-DP019012 | 828149-DP-19 | 828149-DP-19-20231128 | 828149-DP-19-20240507 | 828149-DP-19-20241223 |
| Parent Sample ID | | | | | | | | | | | |
| Sample Date | | | 5/23/2013 | 7/24/2013 | 4/27/2016 | 10/11/2017 | 5/8/2019 | 6/6/2023 | 11/28/2023 | 5/7/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 1 U | < 0.54 U | < 0.54 U | < 0.54 U |
| 1,1-Dichloroethane | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 1 U | < 0.57 U | < 0.57 U | < 0.57 U |
| 1,1-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | NA | < 40 UJ | < 40 U | < 40 UJ | < 0.21 U | < 0.050 U | NA | NA |
| Acetone | 50 | µg/L | < 10 U | < 10 UJ | < 5 U | < 5.0 U | < 5 UJ | < 50 U | < 3.1 U | < 3.1 U | < 3.1 U |
| Benzene | 1 | µg/L | 0.2 J | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 1 U | < 0.43 U | < 0.43 U | < 0.43 U |
| Bromodichloromethane | 50 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 0.5 U | < 0.45 U | < 0.45 U | < 0.45 U |
| Bromomethane | 5 | µg/L | < 2 UJ | < 2 UJ | < 1 U | < 1.0 U | < 1 UJ | < 2 U | < 1.6 U | < 1.6 U | < 1.6 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 5 U | < 1.8 U | < 1.8 U | < 1.8 U |
| Chloroethane | 5 | µg/L | < 2 U | < 2 U | < 1 U | < 1.0 U | < 1 UJ | < 2 U | < 0.73 U | < 0.73 U | < 0.73 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 2 U | < 0.50 U | < 0.50 U | < 0.50 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 2 U | < 2 U | < 1 U | < 1.0 U | < 1 UJ | < 2 U | < 0.76 U | < 0.76 U | < 0.76 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **6.5** | **6.7** | **7.3** | **12** | **7.8 J** | **9.4** | **15.8** | **12.3** | **15.9** |
| Cyclohexane | NSL | µg/L | 0.29 J | < 2 U | < 1 U | < 1.0 U | < 1 UJ | NA | < 0.78 U | < 0.78 U | < 0.78 U |
| Ethylbenzene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | 0.34 J | < 2 U | < 2 U | < 2.0 U | < 2 UJ | < 2 U | < 0.78 U | < 0.78 U | < 0.78 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 5 U | < 5 UJ | < 5 U | < 5.0 U | < 5 UJ | < 20 U | < 2.7 U | < 2.7 U | < 2.7 U |
| Methylcyclohexane | NSL | µg/L | 0.48 J | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **17** | **19** | **16** | **28** | **19 J** | **41** | **52.9** | **41.8** | **54.8** |
| Toluene | 5 | µg/L | 0.44 J | < 1 U | < 1 U | < 1.0 U | < 1 UJ | < 1 U | < 0.49 U | < 0.49 U | < 0.49 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | 0.21 J | < 1 U | < 0.54 U | < 0.54 U | < 0.54 U |
| Trichloroethylene (TCE) | 5 | µg/L | 4.4 | 4.9 | 4.9 | **8.5** | **5.5 J** | **10** | **13.8** | **10.6** | **13.6** |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 UJ | 0.29 J | < 0.52 U | < 0.52 U | < 0.52 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | DP-20 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-GW020015 | 828149-GW020019 | 828149-DP2012 | 828149-DP020012 | 828149-DP020012 | 828149-DP020012 | 828149-DP-20 | 828149-DP-20-20240507 | 828149-DP-20-20241223 |
| Parent Sample ID | | | | | | | | | | | |
| Sample Date | | | 5/23/2013 | 5/23/2013 | 7/23/2013 | 4/27/2016 | 10/11/2017 | 5/8/2019 | 6/6/2023 | 5/7/2024 | 12/23/2024 |
| Analyte | NYSDEC AWQS[1] | Unit | Result | Result | Result | Result | Result | Result | Result | Result | Result |
| **Method SW8260** | | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.54 U | < 0.54 U |
| 1,1-Dichloroethane | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.57 U | < 0.57 U |
| 1,1-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.59 UJ | < 0.59 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | NA | NA | < 40 UJ | < 40 U | < 40 U | < 0.21 U | < 0.20 U | NA |
| Acetone | 50 | µg/L | 8.9 J | < 10 U | < 10 UJ | 5.7 | 4.2 J | < 5 U | 2.7 J | < 3.1 U | < 3.1 U |
| Benzene | 1 | µg/L | **1.8** | 0.49 J | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.43 U | < 0.43 U |
| Bromodichloromethane | 50 | µg/L | < 1 U | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 0.5 U | < 0.45 U | < 0.45 U |
| Bromomethane | 5 | µg/L | < 2 UJ | < 2 UJ | < 2 UJ | < 1 U | < 1.0 U | < 1 U | < 2 U | < 1.6 U | < 1.6 U |
| Carbon Disulfide | 60 | µg/L | 0.41 J | 0.27 J | < 1 U | < 1 U | < 1.0 U | < 1 U | < 5 U | < 1.8 UJ | < 1.8 U |
| Chloroethane | 5 | µg/L | < 2 U | < 2 U | < 2 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.73 U | < 0.73 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.50 U | < 0.50 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 2 U | < 2 U | < 2 U | < 1 U | < 1.0 U | 0.28 J | < 2 U | < 0.76 U | < 0.76 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.51 U | < 0.51 U |
| Cyclohexane | NSL | µg/L | 1.8 J | 0.64 J | 0.25 J | < 1 U | < 1.0 U | < 1 U | NA | < 0.78 U | < 0.78 U |
| Ethylbenzene | 5 | µg/L | 0.28 J | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | 2.7 | 0.78 J | < 2 U | < 2 U | < 2.0 U | < 2 U | < 2 U | < 0.78 U | < 0.78 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | 1.6 J | < 5 U | < 5 UJ | < 5 U | < 5.0 U | < 5 U | < 20 U | < 2.7 U | < 2.7 U |
| Methylcyclohexane | NSL | µg/L | 2.8 | 1.1 | 0.48 J | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | 0.78 J | 0.27 J | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.59 U | < 0.59 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | < 1 U | < 1 U | < 1 U | 0.46 J | 0.78 J | < 1 U | < 1 U | < 0.56 U | < 0.56 U |
| Toluene | 5 | µg/L | 3.1 | 0.97 J | 0.26 J | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.49 U | < 0.49 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.54 UJ | < 0.54 U |
| Trichloroethylene (TCE) | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.53 U | < 0.53 U |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.52 U | < 0.52 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | DP-21 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-GW021011 | 828149-DP2107 | 828149-DP021009 | 828149-DP021009 | 828149-DP021009 | 828149-DP-21 | 828149-DP-21-20231128 | 828149-DP-21-20240507 | 828149-DP-21-20241223 |
| Parent Sample ID | | | | | | | | | | | |
| Sample Date | | | 5/23/2013 | 7/23/2013 | 4/27/2016 | 10/11/2017 | 5/8/2019 | 6/6/2023 | 11/28/2023 | 5/7/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.54 U | < 0.54 U | < 0.54 U |
| 1,1-Dichloroethane | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.57 U | < 0.57 U | < 0.57 U |
| 1,1-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | NA | < 40 UJ | < 40 U | < 40 U | < 0.21 U | < 0.050 U | NA | NA |
| Acetone | 50 | µg/L | 5.2 J | < 10 UJ | < 5 U | 1.8 J | < 5 U | < 50 U | < 3.1 U | < 3.1 U | < 3.1 U |
| Benzene | 1 | µg/L | 0.82 J | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.43 U | < 0.43 U | < 0.43 U |
| Bromodichloromethane | 50 | µg/L | < 1 U | 1.2 | < 1 U | < 1.0 U | < 1 U | < 0.5 U | < 0.45 U | < 0.45 U | < 0.45 U |
| Bromomethane | 5 | µg/L | < 2 UJ | < 2 UJ | < 1 U | < 1.0 U | < 1 U | < 2 U | < 1.6 U | < 1.6 U | < 1.6 U |
| Carbon Disulfide | 60 | µg/L | 0.33 J | < 1 U | < 1 U | < 1.0 U | < 1 U | < 5 U | < 1.8 U | < 1.8 U | < 1.8 U |
| Chloroethane | 5 | µg/L | < 2 U | < 2 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.73 U | < 0.73 U | < 0.73 U |
| Chloroform | 7 | µg/L | 4.2 | **15** | 0.55 J | **8.3** | 0.3 J | 2.7 | **8.2** | < 0.50 U | 1.6 |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 2 U | < 2 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.76 U | < 0.76 U | < 0.76 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.51 U | < 0.51 U | < 0.51 U |
| Cyclohexane | NSL | µg/L | 1.6 J | < 2 U | < 1 U | < 1.0 U | < 1 U | NA | < 0.78 U | < 0.78 U | < 0.78 U |
| Ethylbenzene | 5 | µg/L | 0.21 J | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | 2.4 | < 2 U | < 2 U | < 2.0 U | < 2 U | < 2 U | < 0.78 U | < 0.78 U | < 0.78 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 5 U | < 5 UJ | < 5 U | < 5.0 U | < 5 U | < 20 U | < 2.7 U | < 2.7 U | < 2.7 U |
| Methylcyclohexane | NSL | µg/L | 2.9 | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | 0.66 J | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | 1.9 | 2.1 | 3.8 | **5.4** | 1.8 | 1.6 | 2.4 | 1.6 | 2.1 |
| Toluene | 5 | µg/L | 2.2 | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.49 U | < 0.49 U | < 0.49 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.54 U | < 0.54 U | < 0.54 U |
| Trichloroethylene (TCE) | 5 | µg/L | < 1 U | < 1 U | < 1 U | 0.33 J | < 1 U | < 1 U | < 0.53 U | < 0.53 U | < 0.53 U |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.52 U | < 0.52 U | < 0.52 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | GEMW-1 | | | |
|---|---|---|---|---|---|---|
| Sample Name | | | 828149-GEMW001014 | 828149-GEMW001014 | 828149-GEMW001014 | 828149-GEMW001014 |
| Parent Sample ID | | | | | | |
| Sample Date | | | 7/24/2013 | 4/27/2016 | 10/11/2017 | 5/7/2019 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 1 U | < 2 U | < 5.0 U | < 1 U |
| 1,1-Dichloroethane | 5 | µg/L | 0.38 J | < 2 U | < 5.0 U | < 1 U |
| 1,1-Dichloroethene | 5 | µg/L | 5 | **5.2** | **5.2** | 1.1 |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | < 80 UJ | < 200 U | < 40 U |
| Acetone | 50 | µg/L | < 10 U | 4.6 J | < 25 U | < 5 U |
| Benzene | 1 | µg/L | < 1 U | < 2 U | < 5.0 U | < 1 U |
| Bromodichloromethane | 50 | µg/L | < 1 U | < 2 U | < 5.0 U | < 1 U |
| Bromomethane | 5 | µg/L | < 2 U | < 2 U | < 5.0 U | < 1 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 2 U | < 5.0 U | < 1 U |
| Chloroethane | 5 | µg/L | < 2 U | < 2 U | < 5.0 U | < 1 U |
| Chloroform | 7 | µg/L | < 1 U | < 2 U | < 5.0 U | < 1 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 2 U | < 2 U | < 5.0 U | < 1 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **310** | **600** | **520** | **150** |
| Cyclohexane | NSL | µg/L | < 2 U | < 2 U | < 5.0 U | < 1 U |
| Ethylbenzene | 5 | µg/L | < 1 U | < 2 U | < 5.0 U | < 1 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 2 U | < 4 U | < 10 U | < 2 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 5 U | < 10 U | < 25 U | < 5 U |
| Methylcyclohexane | NSL | µg/L | < 1 U | < 2 U | < 5.0 U | < 1 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 1 U | < 2 U | < 5.0 U | < 1 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **76** | **200** | **250** | **93** |
| Toluene | 5 | µg/L | < 1 U | < 2 U | < 5.0 U | < 1 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | 2.4 | 5 | 3.5 J | 1.2 |
| Trichloroethylene (TCE) | 5 | µg/L | **69** | **120** | **120** | **38** |
| Vinyl Chloride | 2 | µg/L | **69** | **32** | **15 J** | **7.3** |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | GEMW-2 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-GEMW002014 | 828149-GEMW002014 | 828149-GEMW002014 | 828149-GEMW002014 | 828149-GEMW-2 | 828149-GEMW-2-20231128 | 828149-GEMW-2-20240507 | 828149-GEMW-2-20241223 |
| Parent Sample ID | | | | | | | | | | |
| Sample Date | | | 7/24/2013 | 4/26/2016 | 10/10/2017 | 5/8/2019 | 6/6/2023 | 11/28/2023 | 5/7/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.54 U | < 0.54 U | < 0.54 U |
| 1,1-Dichloroethane | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.57 U | < 0.57 U | < 0.57 U |
| 1,1-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | < 40 UJ | < 40 U | < 40 U | < 0.21 U | < 0.050 U | NA | NA |
| Acetone | 50 | µg/L | < 10 U | 1.7 J | < 5.0 U | < 5 U | < 50 U | < 3.1 U | < 3.1 U | < 3.1 U |
| Benzene | 1 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.43 U | < 0.43 U | < 0.43 U |
| Bromodichloromethane | 50 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 0.5 U | < 0.45 U | < 0.45 U | < 0.45 U |
| Bromomethane | 5 | µg/L | < 2 U | < 1 U | 0.31 J | < 1 U | < 2 U | < 1.6 U | < 1.6 U | < 1.6 U |
| Carbon Disulfide | 60 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 5 U | < 1.8 U | < 1.8 U | < 1.8 U |
| Chloroethane | 5 | µg/L | < 2 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.73 U | < 0.73 U | < 0.73 U |
| Chloroform | 7 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.50 U | < 0.50 U | < 0.50 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 2 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.76 U | < 0.76 U | < 0.76 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **14** | 4 | 3.3 | 0.94 J | 0.27 J | < 0.51 U | < 0.51 U | < 0.51 U |
| Cyclohexane | NSL | µg/L | < 2 U | < 1 U | < 1.0 U | < 1 U | NA | < 0.78 U | < 0.78 U | < 0.78 U |
| Ethylbenzene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 2 U | < 2 U | < 2.0 U | < 2 U | < 2 U | < 0.78 U | < 0.78 U | < 0.78 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 5 U | < 5 U | < 5.0 U | < 5 U | < 20 U | < 2.7 U | < 2.7 U | < 2.7 U |
| Methylcyclohexane | NSL | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **230** | **130** | **150** | **81** | **67** | **71** | **66.8** | **68.2** |
| Toluene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.49 U | < 0.49 U | < 0.49 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 1 U | < 0.54 U | < 0.54 U | < 0.54 U |
| Trichloroethylene (TCE) | 5 | µg/L | 5 | 2.2 | 3.3 | 0.93 J | 1.1 | 1.3 | 0.82 J | 0.84 J |
| Vinyl Chloride | 2 | µg/L | < 1 U | < 1 U | < 1.0 U | < 1 U | < 2 U | < 0.52 U | < 0.52 U | < 0.52 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | MW-1 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-MW001010 | 828149-MW001010 | 828149-MW001010D | 828149-MW001010 | 828149-MW001010D | 828149-MW001010 | 828149-MW001010D | 828149-MW-1-20231127 | 828149-MW-1-20240508 |
| Parent Sample ID | | | | | 828149-MW001010 | | 828149-MW001010 | | 828149-MW001010 | | |
| Sample Date | | | 7/24/2013 | 4/26/2016 | 4/26/2016 | 10/10/2017 | 10/10/2017 | 5/7/2019 | 5/7/2019 | 11/27/2023 | 5/8/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 5.4 U | < 2.7 U |
| 1,1-Dichloroethane | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 5.7 U | < 2.8 U |
| 1,1-Dichloroethene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 5.9 U | < 3.0 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | < 2000 UJ | < 2000 UJ | < 2000 U | < 2000 U | < 800 U | < 800 U | < 0.050 U | < 0.20 U |
| Acetone | 50 | µg/L | < 500 U | < 250 U | < 250 U | < 250 U | < 250 U | < 100 U | < 100 U | < 31 U | < 15 U |
| Benzene | 1 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 4.3 U | < 2.1 U |
| Bromodichloromethane | 50 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 4.5 U | < 2.3 U |
| Bromomethane | 5 | µg/L | < 100 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 UJ | < 20 UJ | < 16 U | < 8.2 U |
| Carbon Disulfide | 60 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 18 U | < 9.0 U |
| Chloroethane | 5 | µg/L | < 100 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 7.3 U | < 3.6 U |
| Chloroform | 7 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 5.0 U | < 2.5 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 100 U | < 50 U | < 50 U | **13 J** | < 50 U | < 20 U | < 20 U | < 7.6 U | < 3.8 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **660** | **320** | **330** | **340** | **310** | **34** | **38** | **27.6** | **31.2** |
| Cyclohexane | NSL | µg/L | < 100 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 7.8 U | < 3.9 U |
| Ethylbenzene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 6.0 U | < 3.0 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 100 U | < 100 U | < 100 U | < 100 U | < 100 U | < 40 U | < 40 U | < 7.8 U | < 3.9 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 250 U | < 250 U | < 250 U | < 250 U | < 250 U | < 100 U | < 100 U | < 27 U | < 14 U |
| Methylcyclohexane | NSL | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 6.0 U | < 3.0 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 5.9 U | < 3.0 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **11000** | **8400** | **8500** | **9700** | **9600** | **1900 J+** | **2000 J+** | **2570** | **907** |
| Toluene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 4.9 U | < 2.5 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 5.4 U | < 2.7 U |
| Trichloroethylene (TCE) | 5 | µg/L | **260** | **180** | **190** | **260** | **240** | **34** | **35** | **21.1** | **11.5** |
| Vinyl Chloride | 2 | µg/L | < 50 U | < 50 U | < 50 U | < 50 U | < 50 U | < 20 U | < 20 U | < 5.2 U | < 2.6 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | MW-2 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-MW002010 | 828149-MW002010 | 828149-MW002010 | 828149-MW002010 | 828149-MW-2 | 828149-FD-01 | 828149-MW-2-20231127 | 828149-FD-01-20231127 | 828149-MW-2-20240507 | 828149-MW-2-20241223 |
| Parent Sample ID | | | | | | | | 828149-MW-2 | | 828149-MW-2-20231127 | | |
| Sample Date | | | 7/24/2013 | 4/27/2016 | 10/11/2017 | 5/8/2019 | 6/5/2023 | 6/5/2023 | 11/27/2023 | 11/27/2023 | 5/7/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 1 U | < 1 U | < 0.54 U | < 0.54 U | < 0.54 U | < 0.54 U |
| 1,1-Dichloroethane | 5 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 1 U | < 1 U | < 0.57 U | < 0.57 U | < 0.57 U | < 0.57 U |
| 1,1-Dichloroethene | 5 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 1 U | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U | < 0.59 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | < 20000 UJ | < 20000 U | < 20000 U | < 0.2 U | < 0.21 U | < 0.050 U | < 0.050 U | NA | NA |
| Acetone | 50 | µg/L | < 2500 UJ | < 2500 U | < 2500 U | < 2500 U | < 50 U | < 50 U | < 3.1 U | < 3.1 U | < 3.1 U | < 3.1 U |
| Benzene | 1 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 1 U | < 1 U | < 0.43 U | < 0.43 U | < 0.43 U | < 0.43 U |
| Bromodichloromethane | 50 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 0.5 U | < 0.5 U | < 0.45 U | < 0.45 U | < 0.45 U | < 0.45 U |
| Bromomethane | 5 | µg/L | < 500 UJ | < 500 U | < 500 U | < 500 U | < 2 U | < 2 U | < 1.6 U | < 1.6 U | < 1.6 U | < 1.6 U |
| Carbon Disulfide | 60 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 5 U | < 5 U | < 1.8 U | < 1.8 U | < 1.8 U | < 1.8 U |
| Chloroethane | 5 | µg/L | < 500 U | < 500 U | < 500 U | < 500 U | < 2 U | < 2 U | < 0.73 U | < 0.73 U | < 0.73 U | < 0.73 U |
| Chloroform | 7 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 2 U | < 2 U | < 0.50 U | < 0.50 U | < 0.50 U | < 0.50 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 500 U | < 500 U | < 500 U | < 500 U | < 2 U | < 2 U | < 0.76 U | < 0.76 U | < 0.76 U | < 0.76 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **260** | < 500 U | < 500 U | < 500 U | **22** | **21** | **21.1** | **21.2** | **19** | **25.6** |
| Cyclohexane | NSL | µg/L | < 500 U | < 500 U | < 500 U | < 500 U | NA | NA | < 0.78 U | < 0.78 U | < 0.78 U | < 0.78 U |
| Ethylbenzene | 5 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U | < 0.60 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 500 U | < 1000 U | < 1000 U | < 1000 U | < 2 U | < 2 U | < 0.78 U | < 0.78 U | < 0.78 U | < 0.78 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 1300 UJ | < 2500 U | < 2500 U | < 2500 U | < 20 U | < 20 U | < 2.7 U | < 2.7 U | < 2.7 U | < 2.7 U |
| Methylcyclohexane | NSL | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 1 U | < 1 U | < 0.60 U | < 0.60 U | < 0.60 U | < 0.60 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 1 U | < 1 U | < 0.59 U | < 0.59 U | < 0.59 U | < 0.59 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **90000** | **85000** | **69000** | **63000** | **69** | **70** | **65.2** | **70.3** | **76.4** | **87.4** |
| Toluene | 5 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 1 U | < 1 U | < 0.49 U | < 0.49 U | < 0.49 U | < 0.49 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | 0.31 J | 0.36 J | < 0.54 U | < 0.54 U | < 0.54 U | < 0.54 U |
| Trichloroethylene (TCE) | 5 | µg/L | **410** | **240 J** | **170 J** | **160 J** | **18** | **17** | **17.5** | **17.6** | **17.8** | **23.9** |
| Vinyl Chloride | 2 | µg/L | < 250 U | < 500 U | < 500 U | < 500 U | < 2 U | < 2 U | < 0.52 U | < 0.52 U | < 0.52 U | < 0.52 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | MW-3 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-MW003010 | 828149-MW003010D | 828149-MW003009 | 828149-MW003009D | 828149-MW003009 | 828149-MW003009D | 828149-MW003009 | 828149-MW003009D | 828149-MW-3 |
| Parent Sample ID | | | | 828149-MW003010 | | 828149-MW003009 | | 828149-MW003009 | | 828149-MW003009 | |
| Sample Date | | | 7/23/2013 | 7/23/2013 | 4/27/2016 | 4/27/2016 | 10/12/2017 | 10/12/2017 | 5/6/2019 | 5/6/2019 | 6/6/2023 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 5 U | < 10 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 40 U |
| 1,1-Dichloroethane | 5 | µg/L | < 5 U | < 10 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 40 U |
| 1,1-Dichloroethene | 5 | µg/L | **16** | **15** | **11** | **11** | **8.5** | **8.2** | **6.2** | **6.3** | < 40 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | NA | < 200 UJ | < 200 UJ | **1.1** | < 200 U | < 200 U | < 200 U | < 0.2 U |
| Acetone | 50 | µg/L | < 50 U | < 100 UJ | 7 J | 7.1 J | < 25 U | < 25 U | < 25 U | < 25 U | < 2000 U |
| Benzene | 1 | µg/L | < 5 U | < 10 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 40 U |
| Bromodichloromethane | 50 | µg/L | < 5 U | < 10 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 20 U |
| Bromomethane | 5 | µg/L | < 10 U | < 20 UJ | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 80 U |
| Carbon Disulfide | 60 | µg/L | < 5 U | < 10 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 200 U |
| Chloroethane | 5 | µg/L | < 10 U | < 20 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 80 U |
| Chloroform | 7 | µg/L | < 5 U | < 10 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 80 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 10 U | < 20 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 80 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **890** | **840** | **850** | **710** | **670** | **690** | **530** | **530** | **330** |
| Cyclohexane | NSL | µg/L | < 10 U | < 20 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | NA |
| Ethylbenzene | 5 | µg/L | < 5 U | < 10 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 40 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 10 U | < 20 U | < 10 U | < 10 U | < 10 U | < 10 U | < 10 U | < 10 U | < 80 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 25 U | 16 J | < 25 U | < 25 U | < 25 U | < 25 U | < 25 U | < 25 U | < 800 U |
| Methylcyclohexane | NSL | µg/L | < 5 U | < 10 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 40 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 5 U | < 10 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 40 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **2200** | **1800** | **790** | **790** | **650** | **670** | **390** | **380** | **2000** |
| Toluene | 5 | µg/L | < 5 U | < 10 U | < 5 U | < 5 U | < 5.0 U | < 5.0 U | < 5 U | < 5 U | < 40 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | **7.1** | **6 J** | **12** | **12** | **5.1** | **5.3** | 3.6 J | 3.6 J | < 40 U |
| Trichloroethylene (TCE) | 5 | µg/L | **450** | **410** | **320** | **240** | **310** | **320** | **220** | **220** | **160** |
| Vinyl Chloride | 2 | µg/L | **260** | **260** | **200** | **160** | **200 J** | **200 J** | **190** | **190** | < 80 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | MW-3 | | | | | MW-10 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-MW-3-20231127 | 828149-MW-3-20240508 | 828149-DUP-20240508 | 828149-MW-3-20241223 | 828149-FD-01-20241223 | 828149-MW010010 | 828149-MW010010 | 828149-MW010010 | 828149-MW010010 |
| Parent Sample ID | | | | | 828149-MW-3-20240508 | | 828149-MW-3-20241223 | | | | |
| Sample Date | | | 11/27/2023 | 5/8/2024 | 5/8/2024 | 12/23/2024 | 12/23/2024 | 7/24/2013 | 4/28/2016 | 10/11/2017 | 5/9/2019 |
| Analyte | NYSDEC AWQS[1] | Unit | Result | Result | Result | Result | Result | Result | Result | Result | Result |
| **Method SW8260** | | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 11 U | < 5.4 U | < 5.4 U | < 0.54 U | < 0.54 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| 1,1-Dichloroethane | 5 | µg/L | < 11 U | < 5.7 U | < 5.7 U | < 0.57 U | < 0.57 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| 1,1-Dichloroethene | 5 | µg/L | < 12 U | < 5.9 U | < 5.9 U | **7.6** | **7.2** | < 1 U | < 1 U | < 1.0 U | < 1 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | < 0.050 U | < 0.20 U | < 0.20 U | NA | NA | NA | < 40 UJ | < 40 U | < 40 U |
| Acetone | 50 | µg/L | < 61 U | < 31 U | < 31 U | < 3.1 U | < 3.1 U | < 10 U | 1.6 J | 1.4 J | < 5 U |
| Benzene | 1 | µg/L | < 8.5 U | < 4.3 U | < 4.3 U | < 0.43 U | < 0.43 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| Bromodichloromethane | 50 | µg/L | < 9.0 U | < 4.5 U | < 4.5 U | < 0.45 U | < 0.45 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| Bromomethane | 5 | µg/L | < 33 U | < 16 U | < 16 U | < 1.6 U | < 1.6 U | < 2 U | < 1 U | < 1.0 U | < 1 U |
| Carbon Disulfide | 60 | µg/L | < 36 U | < 18 U | < 18 U | < 1.8 U | < 1.8 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| Chloroethane | 5 | µg/L | < 15 U | < 7.3 U | < 7.3 U | < 0.73 U | < 0.73 U | < 2 U | < 1 U | < 1.0 U | < 1 U |
| Chloroform | 7 | µg/L | < 10 U | < 5.0 U | < 5.0 U | < 0.50 U | < 0.50 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 15 U | < 7.6 U | < 7.6 U | < 0.76 U | < 0.76 U | < 2 U | < 1 U | < 1.0 U | < 1 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **1210** | **182** | **188** | **547** | **529** | < 1 U | < 1 U | 4.5 | < 1 U |
| Cyclohexane | NSL | µg/L | < 16 U | < 7.8 U | < 7.8 U | < 0.78 U | < 0.78 U | < 2 U | < 1 U | < 1.0 U | < 1 U |
| Ethylbenzene | 5 | µg/L | < 12 U | < 6.0 U | < 6.0 U | < 0.60 U | < 0.60 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | < 16 U | < 7.8 U | < 7.8 U | < 0.78 U | < 0.78 U | < 2 U | < 2 U | < 2.0 U | < 2 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 55 U | < 27 U | < 27 U | < 2.7 U | < 2.7 U | < 5 U | < 5 U | < 5.0 U | < 5 U |
| Methylcyclohexane | NSL | µg/L | < 12 U | < 6.0 U | < 6.0 U | < 0.60 U | < 0.60 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 12 U | < 5.9 U | < 5.9 U | < 0.59 U | < 0.59 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **3220** | **1730** | **1750** | **441** | **405** | **28** | < 1 U | **130** | < 1 U |
| Toluene | 5 | µg/L | < 9.8 U | < 4.9 U | < 4.9 U | < 0.49 U | < 0.49 U | < 1 U | < 1 U | < 1.0 U | < 1 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 11 U | < 5.4 U | < 5.4 U | 4.5 | 4 | < 1 U | < 1 U | < 1.0 U | < 1 U |
| Trichloroethylene (TCE) | 5 | µg/L | **475** | **68.4** | **69.9** | **239** | **229** | 0.38 J | < 1 U | 3 | < 1 U |
| Vinyl Chloride | 2 | µg/L | **52.9** | < 5.2 U | < 5.2 U | **112** | **114** | < 1 U | < 1 U | < 1.0 U | < 1 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

## Table 4. Historical Overburden VOC Analytical Results

| Location ID | | | MW-13 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name | | | 828149-MW1307 | 828149-MW013012 | 828149-MW013012 | 828149-MW013012 | 828149-MW-13 | 828149-MW-13-20231127 | 828149-MW-13-20240508 | 828149-MW-13-20241223 |
| Parent Sample ID | | | | | | | | | | |
| Sample Date | | | 7/24/2013 | 4/28/2016 | 10/12/2017 | 5/7/2019 | 6/5/2023 | 11/27/2023 | 5/8/2024 | 12/23/2024 |
| **Analyte** | **NYSDEC AWQS[1]** | **Unit** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| **Method SW8260** | | | | | | | | | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 50 U | < 2.7 U | < 2.1 U | < 2.7 U |
| 1,1-Dichloroethane | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 50 U | < 2.8 U | < 2.3 U | < 2.8 U |
| 1,1-Dichloroethene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 50 U | < 3.0 U | < 2.4 U | < 3.0 U |
| 1,4-Dioxane (P-Dioxane) | 0.35 | µg/L | NA | < 2000 UJ | 0.26 J | < 400 U | < 0.2 U | < 0.050 U | < 0.20 U | NA |
| Acetone | 50 | µg/L | < 500 U | < 250 U | < 250 U | < 50 U | < 2500 U | < 15 U | < 12 U | < 15 U |
| Benzene | 1 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 50 U | < 2.1 U | < 1.7 U | < 2.1 U |
| Bromodichloromethane | 50 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 25 U | < 2.3 U | < 1.8 U | < 2.3 U |
| Bromomethane | 5 | µg/L | < 100 UJ | < 50 U | < 50 U | < 10 U | < 100 U | < 8.2 U | < 6.6 U | < 8.2 U |
| Carbon Disulfide | 60 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 250 U | < 9.0 U | < 7.2 U | < 9.0 U |
| Chloroethane | 5 | µg/L | < 100 U | < 50 U | < 50 U | < 10 U | < 100 U | < 3.6 U | < 2.9 U | < 3.6 U |
| Chloroform | 7 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 100 U | < 2.5 U | < 2.0 U | < 2.5 U |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 100 U | < 50 U | < 50 U | < 10 U | < 100 U | < 3.8 U | < 3.0 U | < 3.8 U |
| *Cis* -1,2-Dichloroethylene | 5 | µg/L | **680** | **590** | **770** | **160** | **170** | **195** | **163** | **170** |
| Cyclohexane | NSL | µg/L | < 100 U | < 50 U | < 50 U | < 10 U | NA | < 3.9 U | < 3.1 U | < 3.9 U |
| Ethylbenzene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 50 U | < 3.0 U | < 2.4 U | < 3.0 U |
| M,P-Xylene (Sum Of Isomers) | 5 | µg/L | NA | < 100 U | < 100 U | < 20 U | < 100 U | < 3.9 U | < 3.1 U | < 3.9 U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 250 U | < 250 U | < 250 U | < 50 U | < 1000 U | < 14 U | < 11 U | < 14 U |
| Methylcyclohexane | NSL | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 50 U | < 3.0 U | < 2.4 U | < 3.0 U |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 50 U | < 3.0 U | < 2.4 U | < 3.0 U |
| Tetrachloroethylene (PCE) | 5 | µg/L | **14000** | **12000** | **4100** | **2300** | **3200** | **1130** | **1160** | **616** |
| Toluene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 50 U | < 2.5 U | < 2.0 U | < 2.5 U |
| *Trans* -1,2-Dichloroethene | 5 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 50 U | < 2.7 U | < 2.1 U | < 2.7 U |
| Trichloroethylene (TCE) | 5 | µg/L | **380** | **350** | **200** | **190** | **120** | **71.8** | **89.5** | **92.7** |
| Vinyl Chloride | 2 | µg/L | < 50 U | < 50 U | < 50 U | < 10 U | < 100 U | < 2.6 U | < 2.1 U | < 2.6 U |

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

U = Analyte not detected.

VOC = Volatile organic compounds

**Bold** and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

# Figures

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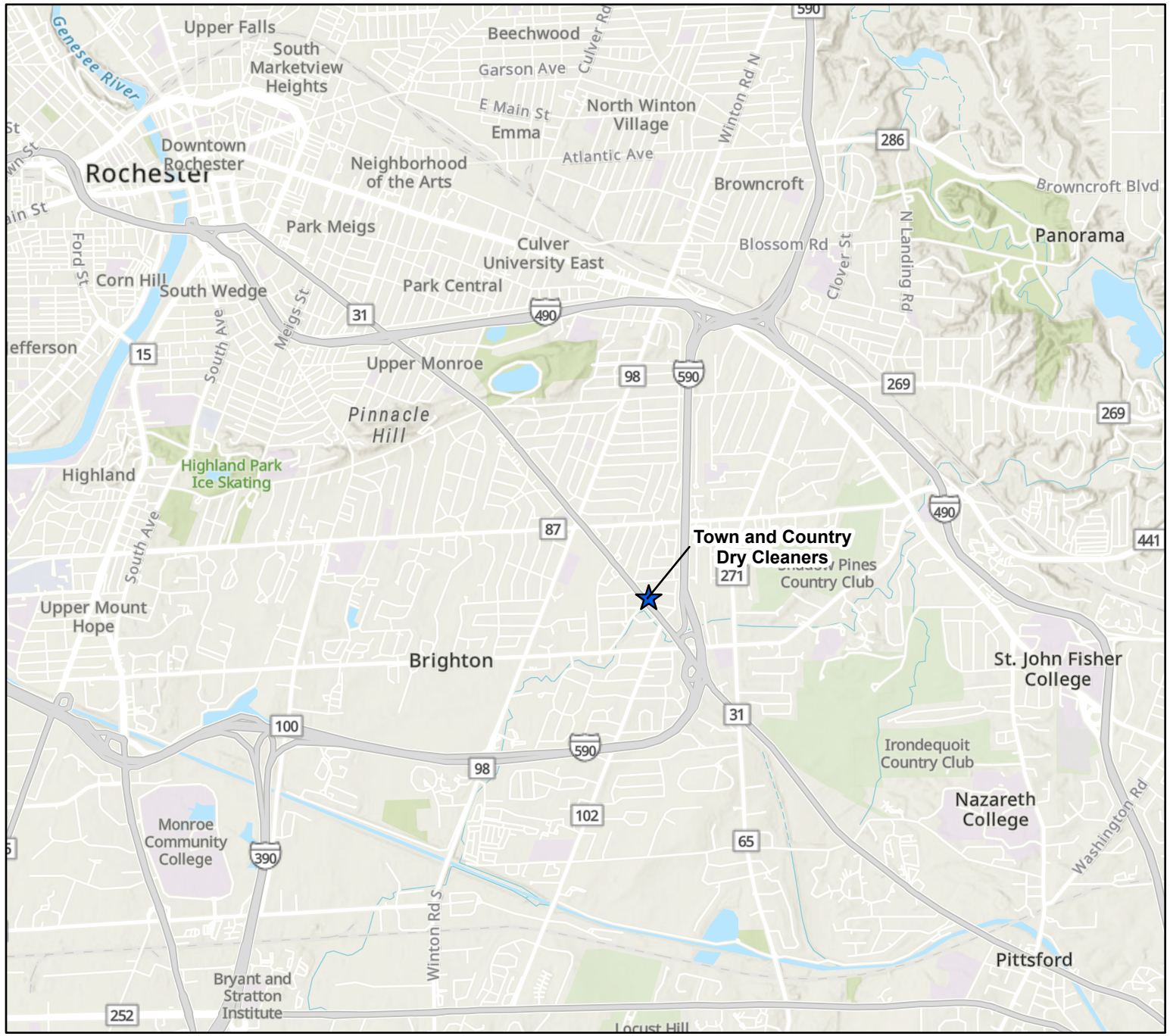
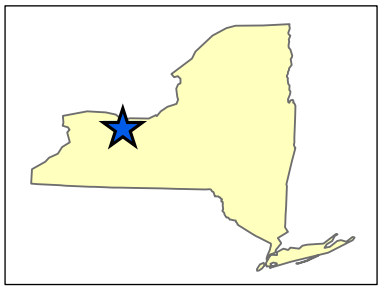


**Legend**

★ Site Location

0 0.5 1
Miles

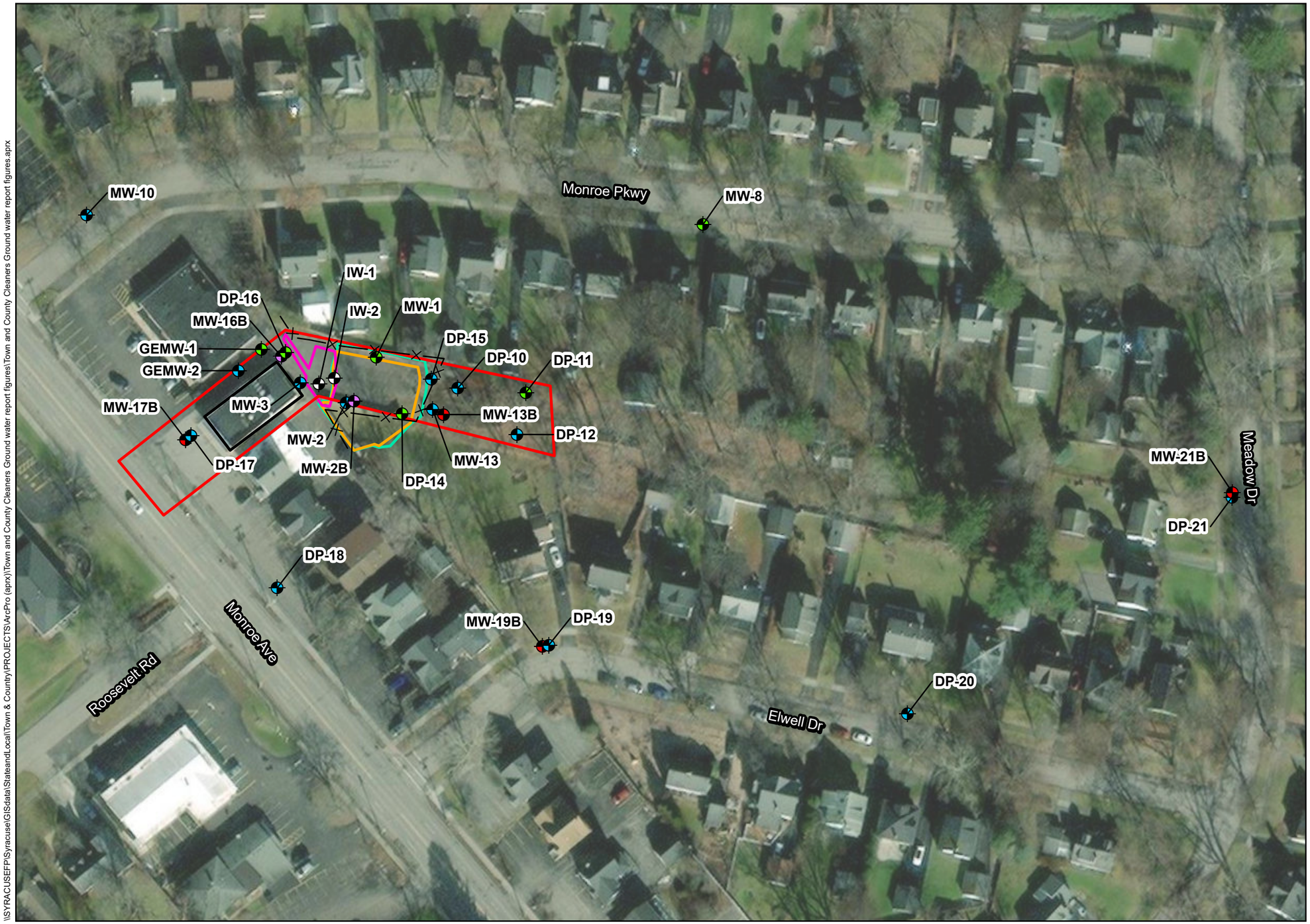
N

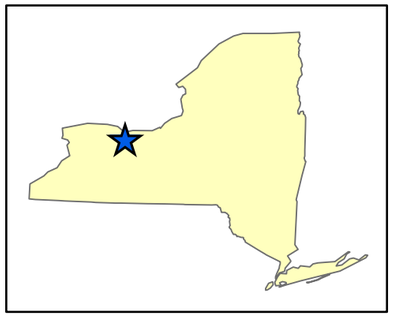
Map Date: 2/26/2025
Projection: NAD83 State Plane New York West (in feet)

NEW YORK STATE Department of Environmental Conservation

**Figure 1**
**GENERAL SITE LOCATION**
Town and Country Dry Cleaners (828149)
Brighton, New York

\\SYRACUSEFP\Syracuse\GISdata\StateandLocal\Town & Country\PROJECTS\ArcPro (aprx)\Town and County Cleaners Ground water report figures\Town and County Cleaners Ground water report figures.aprx



**Legend**

- Site Boundary
- Site Building
- Approximate Limit of Completed Hazardous Excavation
- Approximate Limit of Completed Non-Hazardous Evacuation
- Limit of IRM Excavation
- Fencing

**Monitoring Well Network**

- Overburden Well
- Bedrock Well
- Overburden Well Not Found
- Bedrock Well Not Found
- Injection Well

Notes:
IRM: Interim Remedial Measure

0 50 100
US Feet

N

Map Date: 2/26/2025
Projection: NAD83 State Plane New York West (in feet)

NEW YORK STATE Department of Environmental Conservation

**Figure 2**
**SITE LAYOUT**
Town and Country Dry Cleaners (828149)
Brighton, New York

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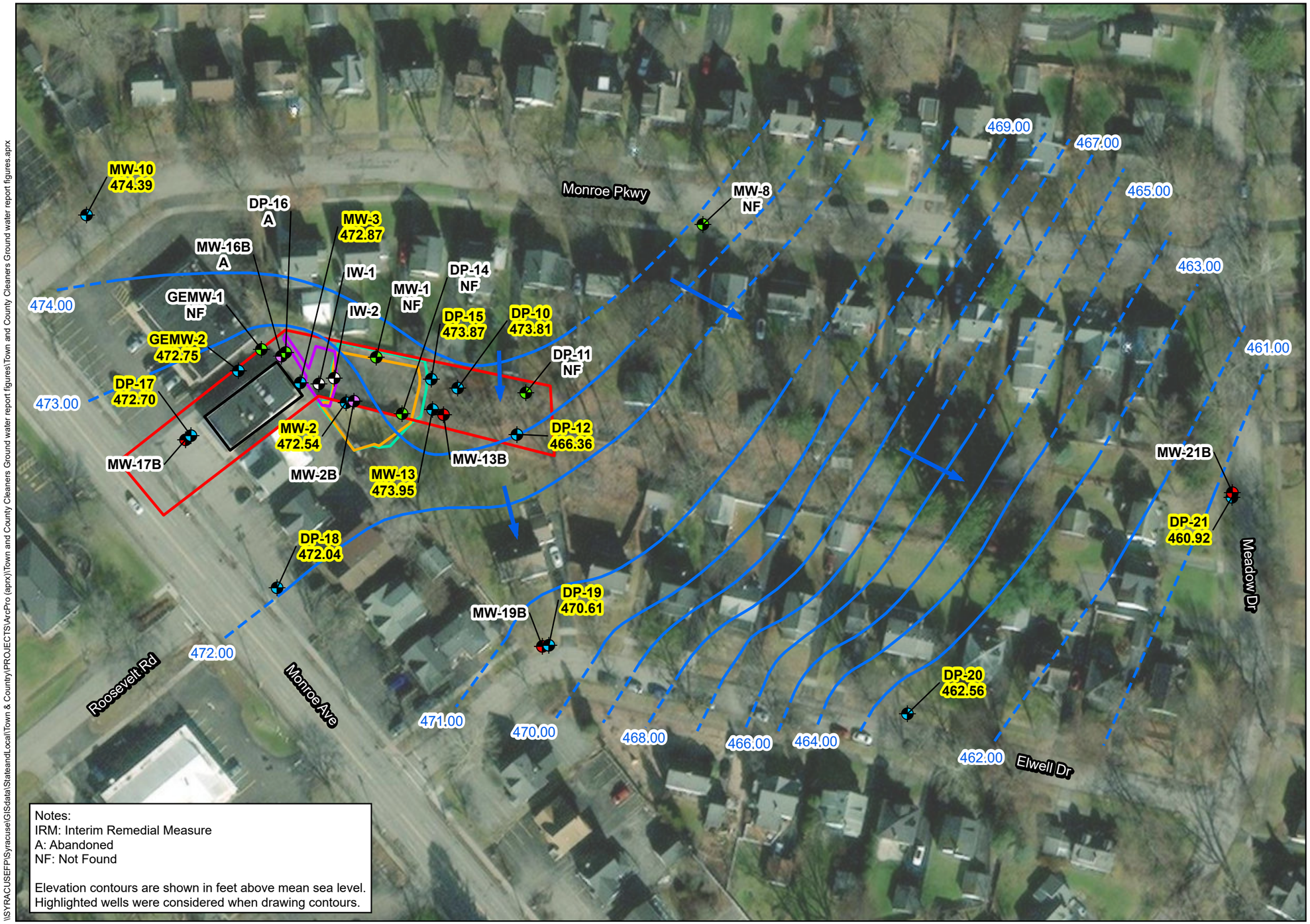
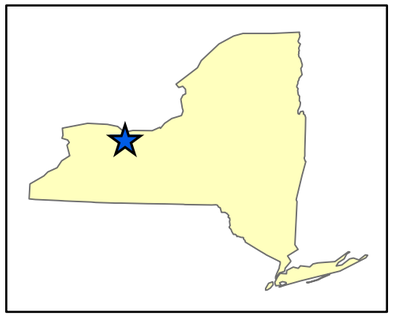



Notes:
IRM: Interim Remedial Measure
A: Abandoned
NF: Not Found

Elevation contours are shown in feet above mean sea level.
Highlighted wells were considered when drawing contours.



**Legend**

- Site Boundary
- Site Building
- Approximate Limit of Completed Hazardous Excavation
- Approximate Limit of Completed Non-Hazardous Evacuation
- Limit of IRM Excavation
- Approximate Overburden Groundwater Elevation
- Inferred Overburden Groundwater Elevation
- Groundwater Flow Direction

**Monitoring Well Network**

- Overburden Well
- Bedrock Well
- Overburden Well Not Found
- Bedrock Well Not Found
- Injection Well

0 50 100
US Feet

N

Map Date: 2/26/2025
Projection: NAD83 State Plane New York West (in feet)

NEW YORK STATE Department of Environmental Conservation

**Figure 3**
**DECEMBER 2024 OVERBURDEN GROUNDWATER ELEVATION CONTOURS**
Town and Country Dry Cleaners (828149)
Brighton, New York

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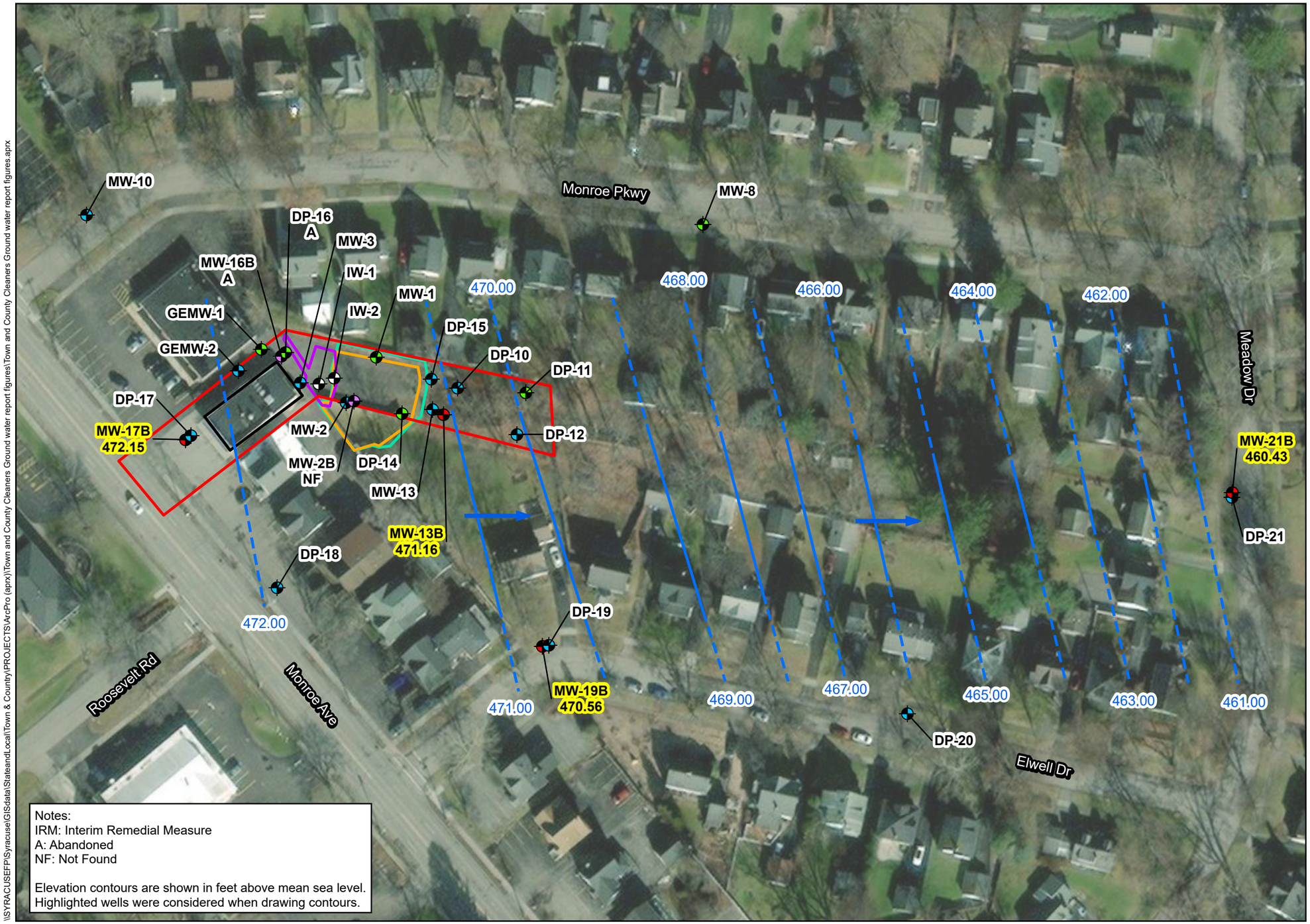
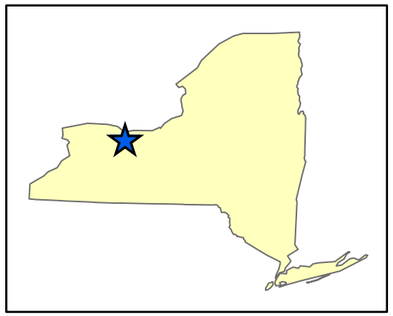



Notes:
IRM: Interim Remedial Measure
A: Abandoned
NF: Not Found

Elevation contours are shown in feet above mean sea level.
Highlighted wells were considered when drawing contours.



**Legend**

- Site Boundary
- Site Building
- Approximate Limit of Completed Hazardous Excavation
- Approximate Limit of Completed Non-Hazardous Evacuation
- Limit of IRM Excavation
- Approximate Bedrock Groundwater Elevation
- Inferred Bedrock Groundwater Elevation
- Groundwater Flow Direction

**Monitoring Well Network**

- Overburden Well
- Bedrock Well
- Overburden Well Not Found
- Bedrock Well Not Found
- Injection Well

0 50 100
US Feet

N

Map Date: 2/26/2025
Projection: NAD83 State Plane New York West (in feet)

NEW YORK STATE Department of Environmental Conservation

**Figure 4**
**DECEMBER 2024 BEDROCK GROUNDWATER ELEVATION CONTOURS**
Town and Country Dry Cleaners (828149)
Brighton, New York

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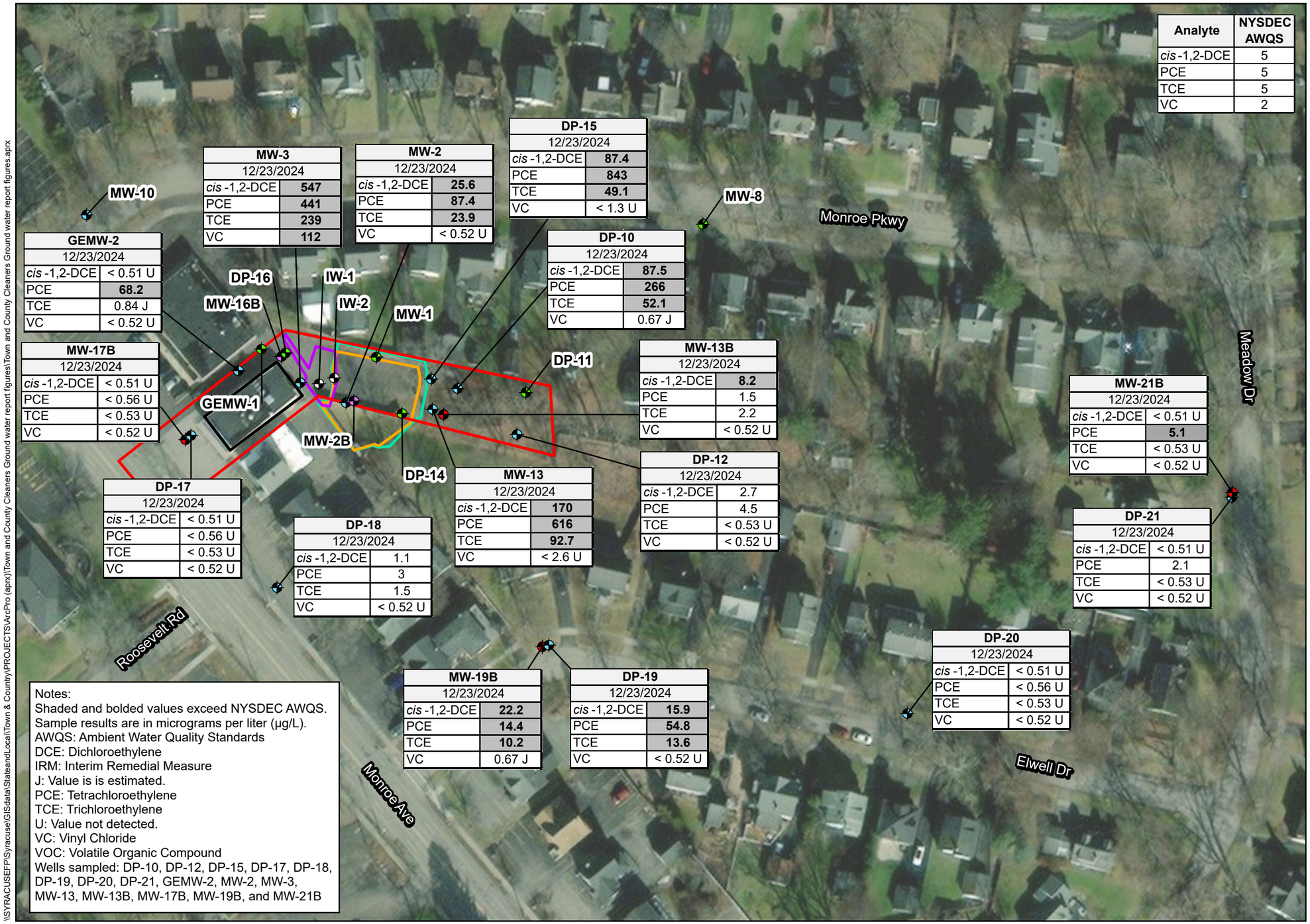


| Analyte | NYSDEC AWQS |
|---|---|
| *cis* -1,2-DCE | 5 |
| PCE | 5 |
| TCE | 5 |
| VC | 2 |

Notes:
Shaded and bolded values exceed NYSDEC AWQS.
Sample results are in micrograms per liter (µg/L).
AWQS: Ambient Water Quality Standards
DCE: Dichloroethylene
IRM: Interim Remedial Measure
J: Value is is estimated.
PCE: Tetrachloroethylene
TCE: Trichloroethylene
U: Value not detected.
VC: Vinyl Chloride
VOC: Volatile Organic Compound
Wells sampled: DP-10, DP-12, DP-15, DP-17, DP-18, DP-19, DP-20, DP-21, GEMW-2, MW-2, MW-3, MW-13, MW-13B, MW-17B, MW-19B, and MW-21B

**Legend**

- Site Boundary
- Site Building
- Approximate Limit of Completed Hazardous Excavation
- Approximate Limit of Completed Non-Hazardous Evacuation
- Limit of IRM Excavation

**Monitoring Well Network**

- Overburden Well
- Bedrock Well
- Overburden Well - Not Found
- Bedrock Well - Not Found
- Injection Well

0 50 100
US Feet

N

Map Date: 2/26/2025
Projection: NAD83 State Plane New York West (in feet)

NEW YORK STATE Department of Environmental Conservation

**Figure 5**
**DECEMBER 2024 VOC ANALYTICAL RESULTS**
Town and Country Dry Cleaners (828149)
Brighton, New York

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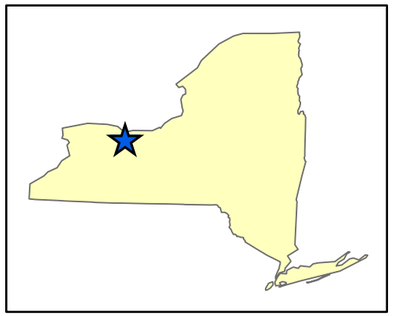

**Legend**

- Site Boundary
- Site Building

**PCE Concentration (µg/L)**

- 5-10
- 10-100
- 100+

**Monitoring Well Network**

- Overburden Well
- Bedrock Well
- Overburden Well Not Found
- Bedrock Well Not Found
- Injection Well

0 50 100
US Feet

N

Map Date: 2/26/2025
Projection: NAD83 State Plane New York West (in feet)

NEW YORK STATE Department of Environmental Conservation

**Figure 6**
**DECEMBER 2024 PCE CONCENTRATIONS IN OVERBURDEN**
Town and Country Dry Cleaners (828149)
Brighton, New York

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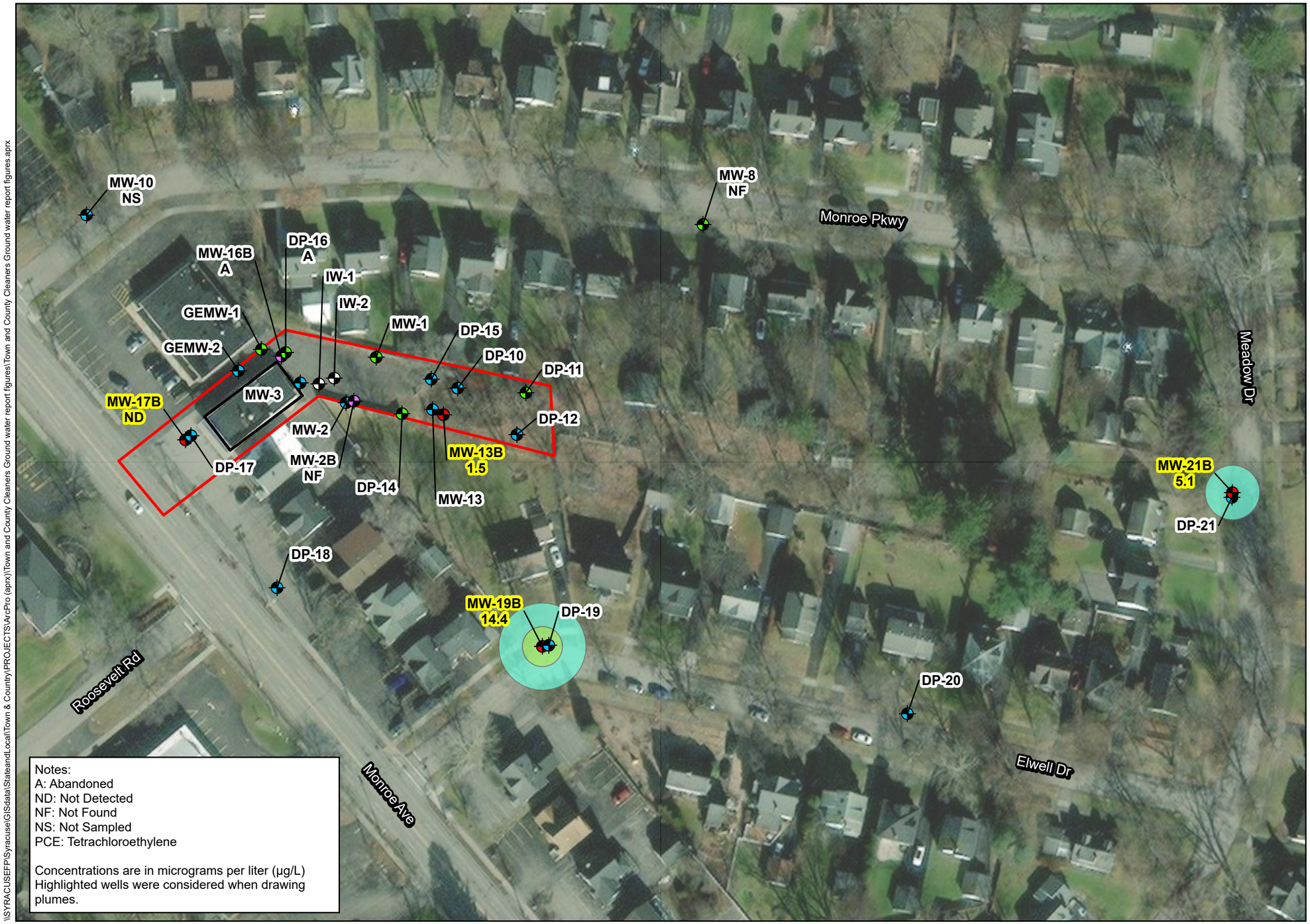


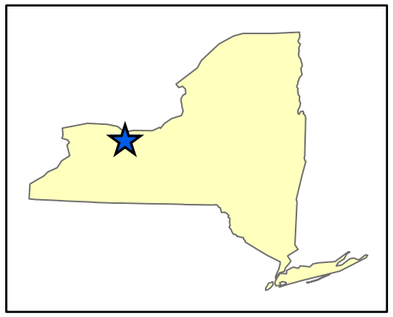

**Legend**

- Site Boundary
- Site Building

**PCE Concentration (µg/L)**

- 5-10
- 10+

**Monitoring Well Network**

- Overburden Well
- Bedrock Well
- Overburden Well Not Found
- Bedrock Well Not Found
- Injection Well

0 50 100
US Feet

N

Map Date: 4/28/2025
Projection: NAD83 State Plane New York West (in feet)

NEW YORK STATE Department of Environmental Conservation

**Figure 7**
**DECEMBER 2024 PCE CONCENTRATIONS IN BEDROCK**
Town and Country Dry Cleaners (828149)
Brighton, New York

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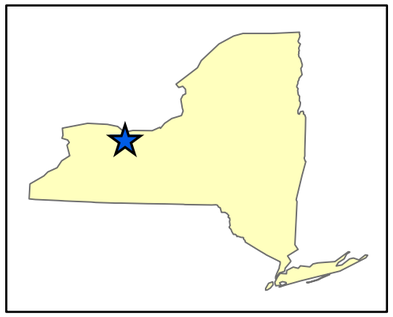

**Legend**

- Site Building
- Site Boundary

**TCE Concentration (µg/L)**

- 5-10
- 10-100
- 100+

**Monitoring Well Network**

- Overburden Well
- Bedrock Well
- Overburden Well Not Found
- Bedrock Well Not Found
- Injection Well

0 50 100
US Feet

N

Map Date: 2/26/2025
Projection: NAD83 State Plane New York West (in feet)

NEW YORK STATE Department of Environmental Conservation

**Figure 8**
**DECEMBER 2024 TCE CONCENTRATIONS IN OVERBURDEN**
Town and Country Dry Cleaners (828149)
Brighton, New York

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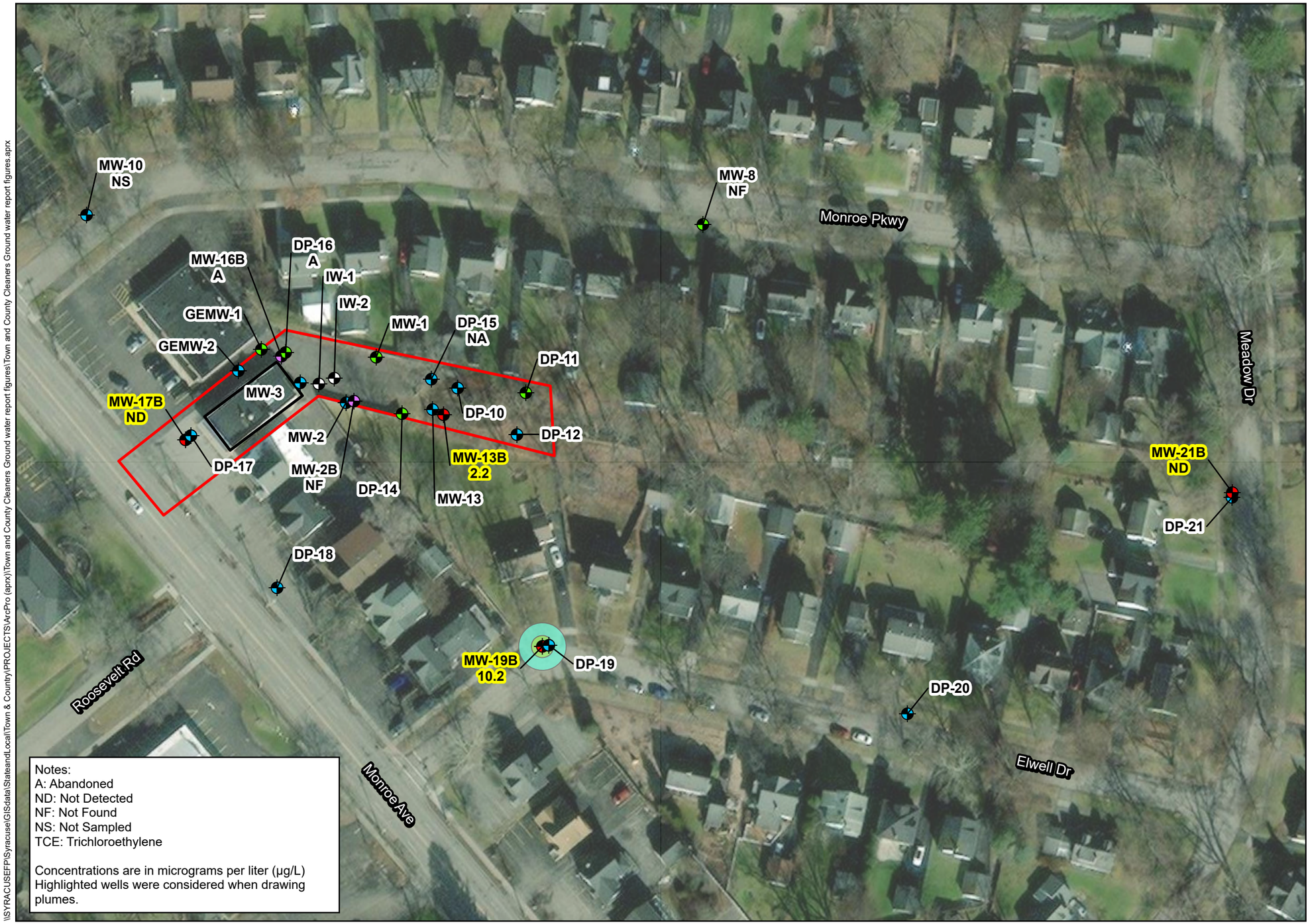
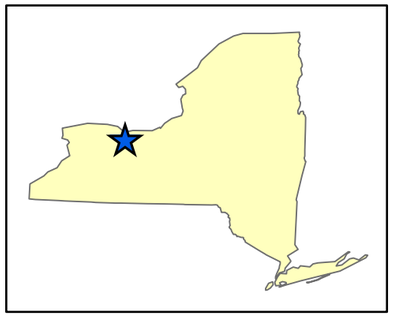



Notes:
A: Abandoned
ND: Not Detected
NF: Not Found
NS: Not Sampled
TCE: Trichloroethylene

Concentrations are in micrograms per liter (µg/L)
Highlighted wells were considered when drawing plumes.



**Legend**

Site Boundary
Site Building

**TCE Concentration (µg/L)**

5-10
10+

**Monitoring Well Network**

Overburden Well
Bedrock Well
Overburden Well Not Found
Bedrock Well Not Found
Injection Well

0 50 100
US Feet

N

Map Date: 4/28/2025
Projection: NAD83 State Plane New York West (in feet)

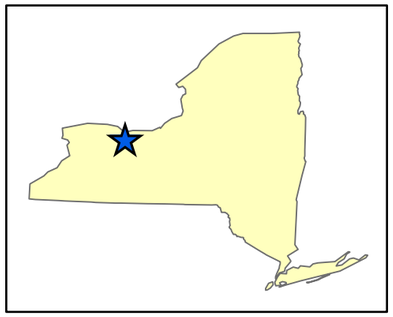
NEW YORK STATE Department of Environmental Conservation

**Figure 9**
**DECEMBER 2024 TCE CONCENTRATIONS IN BEDROCK**
Town and Country Dry Cleaners (828149)
Brighton, New York

\\SYRACUSEFP\Syracuse\GIS\data\StateandLocal\Town & Country\PROJECTS\ArcPro (aprx)\Town and County Cleaners Ground water report figures\Town and County Cleaners Ground water report figures.aprx


Notes:
A: Abandoned
ND: Not Detected
NF: Not Found
NS: Not Sampled
DCE: Dichloroethylene

Concentrations are in micrograms per liter (µg/L)
Highlighted wells were considered when drawing plumes.



**Legend**

Site Boundary
Site Building

**Cis-1,2-DCE Concentration (µg/L)**

5-10
10-100
100+

**Monitoring Well Network**

Overburden Well
Bedrock Well
Overburden Well Not Found
Bedrock Well Not Found
Injection Well

0 50 100
US Feet

N

Map Date: 2/26/2025
Projection: NAD83 State Plane New York West (in feet)

NEW YORK STATE | Department of Environmental Conservation

**Figure 10**
**DECEMBER 2024 CIS-1,2-DCE CONCENTRATIONS IN OVERBURDEN**
Town and Country Dry Cleaners (828149)
Brighton, New York

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# Appendix A

# Field Forms

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n & County (828149) 12/23/24

Wx: 9°F, Cloudy, 6 mph S
H. Redell, C. Zook, C. Derrick (EA) onsite
M. Gilkey (EA) onsite
Calibrate PID and Horibas
Begin gauging onsite wells
Begin gauging offsite wells
Start purge @ GEMW-2
Start purge @ DP-15
Start purge @ DP-18
GEMW-2 goes dry
Sample DP-18 for VOC's
Start purge @ DP-17
Sample DP-15 for VOC's
Sample DP-17 for VOC's
Start purge @ MW-13
Sample MW-13 for VOC's w/ MS/MSD
Start purge @ MW-3
Start purge @ MW-13B
Sample MW-3 for VOC's w/ DUP
Start purge @ DP-12
Sample MW-13B for VOC's
Start purge @ DP-10
Sample GEMW-2 for VOC's
Sample DP-12 for VOC's
Sample DP-10 for VOC's

Town & Country (828149) 12/23/24 29

Wx: 30°F, Cloudy, 6 mph SE

1440 Could not locate MW-1
1505 Start purge @ MW-2
1508 Start purge @ [redacted] DP-19
1508 Start purge @ MW-17B
1530 Sample DP-19 for VOCs
1535 Sample MW-2 for VOCs
1538 Sample [redacted] MW-17B for VOCs
1553 Start purge @ MW-19B
1609 Start purge @ DP-21
1616 Start purge @ DP-20
1617 Sample MW-19B for VOCs
1636 Sample DP-21 for VOCs
1640 MW-10 could not be sampled due to low water level.
1646 Sample DP-20 for VOCs and start purge @ MW-21B
1713 Sample MW-21B for VOCs
1730 Load equipment and samples
1745 Secure drums
1800 Everyone offsite

H Redell
12.23.24

Rite in the Rain

**Site Name:** Town and Country

**Team:** HB, MG, CZ, CD

| Well ID | Installed Depth (ft) | Screen Interval (ft) | Measuring Point Elev (ft) | Date and Time | DTW (ft MRP) | Measured Well Depth (ft) | PID (ppm) | Product | Comments |
|---|---|---|---|---|---|---|---|---|---|
| DP-010 | 9.25 | 3.70-9.70 | 477.53 | 12/23/2024 9:23 AM | 3.72 | 9.24 | 0 | | |
| DP-012 | 20.50 | 10.70-20.70 | 477.09 | 12/23/2024 9:50 AM | 10.73 | 19.75 | 0 | | |
| DP-015 | 9.41 | 5.00-10.00 | 476.98 | 12/23/2024 10:00 AM | 3.11 | 9.35 | 0.3 | | |
| DP-017 | 16.25 | 6.80-16.80 | 479.50 | 12/23/2024 9:02 AM | 6.8 | 16.16 | 0 | | |
| DP-018 | 10.29 | 4.80-10.80 | 478.29 | 12/23/2024 10:00 AM | 6.25 | 10.27 | 0 | | |
| DP-019 | 12.86 | 3.20-13.20 | 475.15 | 12/23/2024 10:00 AM | 4.54 | 12.95 | 0 | | |
| DP-020 | 14.67 | 5.00-15.00 | 473.80 | 12/23/2024 10:00 AM | 11.24 | 14.65 | 0 | | |
| DP-021 | 10.34 | 2.70-10.70 | 468.15 | 12/23/2024 10:27 AM | 7.33 | 10.37 | 0 | | |
| GEMW-2 | 14.59 | 5.00-15.00 | 480.25 | 12/23/2024 9:07 AM | 7.8 | 14.52 | 0 | | |
| MW-10 | 8.55 | 4.60-9.60 | 481.70 | 12/23/2024 10:00 AM | 7.31 | 9.44 | 0 | | |
| MW-13 | 12.93 | 5.00-10.00 | 480.36 | 12/23/2024 9:39 AM | 6.41 | 12.9 | 14.5 | | |
| MW-13B | 21.57 | 18.00-23.00 | 480.37 | 12/23/2024 9:35 AM | 9.21 | 25 | 0.5 | | |
| MW-17B | 27.33 | 22.80-27.80 | 479.35 | 12/23/2024 10:00 AM | 7.2 | 27.05 | 0 | | WLM meter approximate due to complications with WLM |
| MW-19B | 21.08 | 16.50-21.50 | 475.35 | 12/23/2024 10:00 AM | 4.79 | 21.01 | 0.6 | | |
| MW-2 | 22.55 | 5.70-10.70 | 476.87 | 12/23/2024 9:19 AM | 4.33 | 22.5 | 1.6 | | |
| MW-21B | 19.49 | 15.00-20.00 | 468.15 | 12/23/2024 10:23 AM | 7.72 | 19.49 | 0 | | |
| MW-3 | 7.62 | 5.40-10.40 | 478.00 | 12/23/2024 10:00 AM | 5.13 | 10.5 | 0.9 | | |

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| DP-010 | M. Gilkey | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| DP-010 | | Weather = Overcast clouds, Temperature (F) = 27.4, Humidity = 68, Wind Direction = 200, Wind Speed = 5.8, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Solonist WLM 101 | 12/23/2024 | 477.53 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 10:00 AM | 1 |

| | |
|---|---|
| **Purge Date:** 12/23/2024 | **Purge Time:** 14:18 |
| **Purge Method:** Geotech peristaltic pump | **Field Technician:** M. Gilkey |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 19.75 | 0 | 9.02 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 10.73 | 0 | Geotech peristaltic pump / 210304 |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 9.02 | 0 | 15 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 14:18 | 10.81 | 6.81 | -39.00 | 1.17 | 626.00 | 0.95 | 0.00 | 0.3 | 0 |
| 14:21 | 10.03 | 6.78 | -31.00 | 1.17 | 800.00 | 0.69 | 0.00 | 0.3 | 0.9 |
| 14:24 | 9.74 | 6.77 | -18.00 | 1.17 | 800.00 | 0.36 | 0.00 | 0.3 | 0.9 |
| 14:27 | 10.19 | 6.77 | -18.00 | 1.21 | 800.00 | 0.14 | 0.00 | 0.3 | 0.9 |
| 14:30 | 10.34 | 6.76 | -8.00 | 1.2 | 49.70 | 0 | 0.00 | 0.3 | 0.9 |
| 14:33 | 10.33 | 6.75 | -4.00 | 1.2 | 48.10 | 0 | 0.00 | 0.3 | 0.9 |
| 14:36 | 10.34 | 6.74 | 1.00 | 1.19 | 48.00 | 0 | 0.00 | 0.3 | 0.9 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | 5.4 | **Sampling Time:** | 02:36 PM |
| **Samplers:** | M. Gilkey | **Split Sample With:** | |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

PID: 0.0 ppm

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| DP-012 | M. Gilkey | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| DP-012 | | Weather = overcast clouds, Temperature (F) = 27.4, Humidity = 68, Wind Direction = 200, Wind Speed = 5.8, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Solonst WLM 101 | 12/23/2024 | 477.09 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 10:00 AM | 1 |

| | |
|---|---|
| **Purge Date:** 12/23/2024 | **Purge Time:** 14:18 |
| **Purge Method:** Geotech Perristaltic Pump | **Field Technician:** M. Gilkey |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 19.75 | 0 | 9.02 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 10.73 | 0 | Geotech Perristaltic Pump / 210304 |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 9.02 | 0 | 15 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 14:18 | 10.18 | 6.81 | -39.00 | 1.17 | 626.00 | 0.95 | 0.00 | 0.3 | 0 |
| 14:21 | 10.03 | 6.78 | -31.00 | 1.17 | 800.00 | 0.69 | 0.00 | 0.3 | 0.9 |
| 14:24 | 9.74 | 6.77 | -18.00 | 1.17 | 800.00 | 0.36 | 0.00 | 0.3 | 0.9 |
| 14:27 | 10.19 | 6.77 | -18.00 | 1.21 | 800.00 | 0.14 | 0.00 | 0.3 | 0.9 |
| 14:30 | 10.34 | 6.76 | -8.00 | 1.2 | 49.70 | 0 | 0.00 | 0.3 | 0.9 |
| 14:33 | 10.33 | 6.75 | -4.00 | 1.2 | 48.10 | 0 | 0.00 | 0.3 | 0.9 |
| 14:36 | 10.34 | 6.74 | 1.00 | 1.19 | 48.00 | 0 | 0.00 | 0.3 | 0.9 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | | **Sampling Time:** | 02:36 PM |
| **Samplers:** | M. Gilkey | **Split Sample With:** | |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

Pid: 0.0 ppm

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| DP-015 | C Zook | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| DP-015 | | Weather = Partly cloudy , Temperature (F) = 25, Humidity = 68, Wind Direction = 193, Wind Speed = 8, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Solonst WLM 101 | 12/23/2024 | 476.98 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 10:00 AM | 1 |

| | | | |
|---|---|---|---|
| **Purge Date:** | 12/23/2024 | **Purge Time:** | 11:15 |
| **Purge Method:** | Geotech Perristaltic Pump | **Field Technician:** | C Zook |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 9.35 | 0 | 6.24 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 3.11 | 0 | Geotech Perristaltic Pump /210304 |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 6.24 | 0 | 7 |

# GROUNDWATER SAMPLING PURGE FORM

| Water Quality Parameters | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Time (hrs)** | **Temp (°C)** | **pH (pH units)** | **ORP (mV)** | **Conductiviity (S/m)** | **Turbidity (ntu)** | **DO (mg/L)** | **DTW (ft btoc)** | **Rate (Lpm)** | **Volume (liters)** |
| 11:15 | 4.27 | 6.16 | 185.00 | 1.1 | 1000.00 | 2.87 | 3.11 | 0.3 | 0 |
| 11:18 | 7.44 | 6.34 | 155.00 | 1.03 | 1000.00 | 1.61 | 3.11 | 0.3 | 0.9 |
| 11:21 | 8.85 | 6.36 | 152.00 | 1.01 | 1000.00 | 0.88 | 3.11 | 0.3 | 0.9 |
| 11:24 | 9.92 | 6.34 | 149.00 | 1.01 | 506.00 | 0.38 | 3.11 | 0.3 | 0.9 |
| 11:27 | 10.04 | 6.33 | 148.00 | 1.01 | 344.00 | 0.07 | 3.11 | 0.3 | 0.9 |
| 11:30 | 10.17 | 6.32 | 147.00 | 1.02 | 249.00 | 0.04 | 3.11 | 0.3 | 0.9 |
| 11:33 | 10.14 | 6.33 | 145.00 | 1.02 | 215.00 | 0.03 | 3.11 | 0.3 | 0.9 |
| 11:36 | 10.19 | 6.34 | 145.00 | 1.02 | 194.00 | 0.07 | 3.11 | 0.3 | 0.9 |
| 11:39 | 10.25 | 6.34 | 146.00 | 1.02 | 196.00 | 0.13 | 3.11 | 0.3 | 0.9 |
| 11:42 | 10.28 | 6.35 | 146.00 | 1.02 | 250.00 | 0.2 | 3.11 | 0.3 | 0.9 |
| 11:45 | 10.41 | 6.37 | 145.00 | 1.03 | 275.00 | 1.75 | 3.11 | 0.3 | 0.9 |
| 11:48 | 10.24 | 6.41 | 145.00 | 1.03 | 200.00 | 2 | 3.11 | 0.3 | 0.9 |
| 11:51 | 10.42 | 6.40 | 145.00 | 1.02 | 250.00 | 2.3 | 3.11 | 0.3 | 0.9 |
| 11:56 | 10.18 | 6.56 | 98.00 | 1.01 | 800.00 | 1.36 | 3.11 | 0.3 | 1.5 |
| 11:59 | 10.24 | 6.54 | 99.00 | 1.01 | 727.00 | 1.3 | 3.11 | 0.3 | 0.9 |
| 12:02 | 10.37 | 6.51 | 105.00 | 1.02 | 415.00 | 0.57 | 3.11 | 0.3 | 0.9 |
| 12:05 | 10.48 | 6.52 | 111.00 | 1.03 | 254.00 | 0 | 3.11 | 0.3 | 0.9 |
| 12:08 | 10.55 | 6.53 | 115.00 | 1.03 | 331.00 | 0 | 3.11 | 0.3 | 0.9 |
| 12:11 | 10.60 | 6.53 | 117.00 | 1.03 | 305.00 | 0 | 3.11 | 0.3 | 0.9 |
| 12:14 | 10.65 | 6.55 | 121.00 | 1.04 | 299.00 | 0.05 | 3.11 | 0.3 | 0.9 |

**Total Quantity of Water Removed (L):** _____ **Sampling Time:** 12:14 PM

**Samplers:** C Zook **Split Sample With:** _____

**Sampling Date:** 12/23/2024 **Sample Type:** N

**COMMENTS AND OBSERVATIONS:**

Pid: 0.3 ppm

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| DP-017 | C. Derrick | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| DP-017 | No odor, cloudy | Weather = overcast clouds, Temperature (F) = 23, Humidity = 75, Wind Direction = 190, Wind Speed = 5.8, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Heron dipper t | 12/23/2024 | 479.50 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 09:02 AM | 1 |

| | |
|---|---|
| **Purge Date:** 12/23/2024 | **Purge Time:** 12:08 |
| **Purge Method:** Peristaltic | **Field Technician:** C. Derrick |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 16.16 | 0 | 9.36 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 6.8 | 0 | Peristaltic (3155) |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 9.36 | 0 | 11 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 12:08 | 12.38 | 5.87 | 174.00 | 3.15 | 1000.00 | 0.14 | 0.00 | 0.25 | 0 |
| 12:11 | 12.34 | 5.88 | 170.00 | 3.14 | 808.00 | 0.38 | 0.00 | 0.25 | 0.75 |
| 12:14 | 12.72 | 5.88 | 163.00 | 3.12 | 893.00 | 0 | 0.00 | 0.25 | 0.75 |
| 12:17 | 13.00 | 5.90 | 156.00 | 3.14 | 956.00 | 0 | 0.00 | 0.25 | 0.75 |
| 12:20 | 13.23 | 5.92 | 152.00 | 3.16 | 984.00 | 0 | 0.00 | 0.25 | 0.75 |
| 12:23 | 13.18 | 5.94 | 142.00 | 3.21 | 660.00 | 0 | 0.00 | 0.25 | 0.75 |
| 12:26 | 13.35 | 5.94 | 135.00 | 3.22 | 492.00 | 0 | 0.00 | 0.25 | 0.75 |
| 12:29 | 13.31 | 5.95 | 120.00 | 3.24 | 403.00 | 0 | 0.00 | 0.25 | 0.75 |
| 12:32 | 13.47 | 5.96 | 116.00 | 3.27 | 320.00 | 0 | 0.00 | 0.25 | 0.75 |
| 12:35 | 13.52 | 5.96 | 112.00 | 3.28 | 310.00 | 0 | 0.00 | 0.25 | 0.75 |
| 12:38 | 13.65 | 5.97 | 108.00 | 3.31 | 305.00 | 0 | 0.00 | 0.25 | 0.75 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | 7.5 | **Sampling Time:** | 12:38 PM |
| **Samplers:** | C. Derrick | **Split Sample With:** | None |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| DP-018 | M. Gilkey | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| DP-018 | | Weather = Cloudy, Temperature (F) = 37, Humidity = , Wind Direction = , Wind Speed = , Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Soloist WLM 101 | 12/23/2024 | 478.29 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 11:24 AM | 1 |

| | | | |
|---|---|---|---|
| **Purge Date:** | 12/23/2024 | **Purge Time:** | 11:30 |
| **Purge Method:** | Geotech Peristatlic Pump | **Field Technician:** | M. Gilkey |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 10.27 | 0 | 4.02 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 6.25 | 0 | Geotech Peristatlic Pump / 210304 |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 4.02 | 0 | 8 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 11:30 | 12.40 | 6.64 | 205.00 | 3.08 | 1000.00 | 3.04 | 0.00 | 0.25 | 0 |
| 11:33 | 12.17 | 6.88 | 168.00 | 3.56 | 1000.00 | 3.15 | 0.00 | 0.25 | 0.75 |
| 11:36 | 12.98 | 6.85 | 147.00 | 4.29 | 1000.00 | 3.31 | 0.00 | 0.25 | 0.75 |
| 11:39 | 12.97 | 6.88 | 133.00 | 4.45 | 1000.00 | 3.49 | 0.00 | 0.25 | 0.75 |
| 11:42 | 13.02 | 6.88 | 126.00 | 4.6 | 1000.00 | 3.31 | 0.00 | 0.25 | 0.75 |
| 11:45 | 13.05 | 6.84 | 117.00 | 4.79 | 1000.00 | 2.55 | 0.00 | 0.25 | 0.75 |
| 11:48 | 13.34 | 6.82 | 107.00 | 4.82 | 1000.00 | 2.45 | 0.00 | 0.25 | 0.75 |
| 11:51 | 13.37 | 6.82 | 103.00 | 4.77 | 1000.00 | 2.7 | 0.00 | 0.25 | 0.75 |
| 11:54 | 13.35 | 6.82 | 101.00 | 4.79 | 1000.00 | 2.7 | 0.00 | 0.25 | 0.75 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | | **Sampling Time:** | 11:54 AM |
| **Samplers:** | M. Gilkey | **Split Sample With:** | |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| DP-019 | M. Gilkey | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| DP-019 | | Weather = light snow, Temperature (F) = 27.5, Humidity = 70, Wind Direction = 113, Wind Speed = 6, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Soloist WLM | 12/23/2024 | 475.15 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 10:00 AM | 1 |

| | | | |
|---|---|---|---|
| **Purge Date:** | 12/23/2024 | **Purge Time:** | 15:06 |
| **Purge Method:** | Geotech Peristatlic Pump | **Field Technician:** | M. Gilkey |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 12.95 | 0 | 8.41 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 4.54 | 0 | Geotech Peristatlic Pump / 210304 |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 8.41 | 0 | 9 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 15:06 | 11.78 | 7.05 | 44.00 | 1.5 | 453.00 | 0.73 | 0.00 | 0.25 | 0 |
| 15:09 | 12.21 | 7.02 | 45.00 | 1.51 | 341.00 | 0.2 | 0.00 | 0.25 | 0.75 |
| 15:12 | 12.87 | 6.98 | 45.00 | 1.51 | 152.00 | 0 | 0.00 | 0.25 | 0.75 |
| 15:15 | 13.06 | 6.97 | 45.00 | 1.53 | 102.00 | 0 | 0.00 | 0.25 | 0.75 |
| 15:18 | 13.32 | 6.97 | 45.00 | 1.53 | 74.00 | 0 | 0.00 | 0.25 | 0.75 |
| 15:21 | 13.36 | 6.97 | 45.00 | 1.53 | 49.70 | 0 | 0.00 | 0.25 | 0.75 |
| 15:24 | 13.44 | 6.98 | 45.00 | 1.54 | 48.10 | 0 | 0.00 | 0.25 | 0.75 |
| 15:27 | 13.38 | 6.98 | 46.00 | 1.54 | 47.50 | 0 | 0.00 | 0.25 | 0.75 |
| 15:30 | 13.37 | 6.99 | 46.00 | 1.53 | 46.30 | 0 | 0.00 | 0.25 | 0.75 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | | **Sampling Time:** | 03:30 PM |
| **Samplers:** | M. Gilkey | **Split Sample With:** | |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| DP-020 | C Zook | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| DP-020 | | Weather = Cloudy , Temperature (F) = 26, Humidity = 60, Wind Direction = 193, Wind Speed = 7, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Solonst WLM | 12/23/2024 | 473.80 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 10:00 AM | 1 |

| | | | |
|---|---|---|---|
| **Purge Date:** | 12/23/2024 | **Purge Time:** | 16:16 |
| **Purge Method:** | Geotech Perristaltic Pump | **Field Technician:** | C Zook |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 14.65 | 0 | 3.41 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 11.24 | 0 | Geotech Perristaltic Pump |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 3.41 | 0 | 13 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 16:16 | 8.40 | 6.87 | 43.00 | 1.88 | 404.00 | 1.38 | 0.00 | 0.3 | 0 |
| 16:19 | 8.49 | 6.86 | 24.00 | 1.88 | 198.00 | 1.27 | 0.00 | 0.3 | 0.9 |
| 16:22 | 8.57 | 6.86 | 17.00 | 1.87 | 128.00 | 0.72 | 0.00 | 0.3 | 0.9 |
| 16:25 | 8.79 | 6.86 | 14.00 | 1.86 | 109.00 | 0.26 | 0.00 | 0.3 | 0.9 |
| 16:28 | 9.07 | 6.87 | 15.00 | 1.86 | 47.90 | 0.14 | 0.00 | 0.3 | 0.9 |
| 16:31 | 9.13 | 6.87 | 15.00 | 1.86 | 36.90 | 0 | 0.00 | 0.3 | 0.9 |
| 16:34 | 9.27 | 6.88 | 14.00 | 1.85 | 29.10 | 0 | 0.00 | 0.3 | 0.9 |
| 16:37 | 9.22 | 6.88 | 14.00 | 1.86 | 18.50 | 0 | 0.00 | 0.3 | 0.9 |
| 16:40 | 9.18 | 6.89 | 14.00 | 1.86 | 12.50 | 0 | 0.00 | 0.3 | 0.9 |
| 16:43 | 9.17 | 6.89 | 14.00 | 1.87 | 11.60 | 0 | 0.00 | 0.3 | 0.9 |
| 16:46 | 9.30 | 6.90 | 15.00 | 1.86 | 11.00 | 14 | 0.00 | 0.3 | 0.9 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | | **Sampling Time:** | 04:46 PM |
| **Samplers:** | C Zook | **Split Sample With:** | |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

Pid: 0.0 ppm

# Well Purging and Sampling Form

| | | | | | |
|---|---|---|---|---|---|
| **Site Name:** | **Town and Country** | **Well Location ID:** | **DP-021** | **Alias:** **DP-021** | **Page:** **1 / 1** |
| **Project Location:** | **DP-021** | **Sampling Staff:** | **C. Derrick** | | **Date:** **12/23/2024** |
| **Project No:** | **Town and Country** | **Weather:** | **Weather = light snow, Temperature (F) = 27.5, Humidity = 72, Wind Direction = 113, Wind Speed = 3, Rain (1hr) = 1** | | |

## Well Construction Data

| | | | | | |
|---|---|---|---|---|---|
| Well Diameter: | 2" PVC | Constructed Well Depth (ft): | | Ground Surface Elevation (ft amsl): | 468.15 |
| Screen Interval (ft bTOC): | 2.7-10.7 | TOC Elevation (ft asml): | | Measured Depth of Well (ft bTOC): | 10.37 |

## Equipment Information

| | | | | | |
|---|---|---|---|---|---|
| Sampling Method: | Peristaltic | PID Type/ID: | Mini Rae 3000 (39968) | Water Level Indicator Type/ID: | Heron dipper t |
| Pump Type ID: | Peristaltic (3155) | Turbidity Meter Type/ID: | | Water Quality Meter Type/ID: | Horiba (24305) |

## Field Measurements

| | | | | | |
|---|---|---|---|---|---|
| Initial Depth to Water (ft bTOC): | 7.33 | Purge Start Time: | 16:09 | Initial Purge Rate: | 0.25 |
| Final Depth to Water (ft bTOC): | 0.00 | Purge End Time: | 16:36 | Total Drawdown: | 0.00 |
| Pump Intake Depth (ft bTOC): | 8.5 | Total Volume Removed (mL): | 6.75 | Total Pump Time: | 27 |
| Well/Pad Condition: | | | | | |

## Purge Information

| Time | Temp (°C) | Conductivity (mS/cm) | DO (mg/L) | pH | ORP (mV) | Turbidity (NTU) | Depth to Water (bTOC) | Purge Rate (mL/min) | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 16:09 | 9.34 | 0.99 | 4.32 | 6.63 | 43.00 | 891.00 | 0.00 | 0.25 | No WL due to 1 in well |
| 16:12 | 9.22 | 0.984 | 3.72 | 6.56 | 68.00 | 1000.00 | 0.00 | 0.25 | |
| 16:15 | 10.32 | 0.94 | 3.32 | 6.51 | 82.00 | 1000.00 | 0.00 | 0.25 | |
| 16:18 | 10.57 | 0.931 | 2.76 | 6.49 | 90.00 | 678.00 | 0.00 | 0.25 | |
| 16:21 | 10.83 | 0.911 | 2.27 | 6.48 | 95.00 | 309.00 | 0.00 | 0.25 | |
| 16:24 | 10.82 | 0.899 | 2.13 | 6.47 | 97.00 | 226.00 | 0.00 | 0.25 | |
| 16:27 | 10.93 | 0.884 | 1.99 | 6.46 | 103.00 | 120.00 | 0.00 | 0.25 | |
| 16:30 | 10.91 | 0.875 | 1.92 | 6.45 | 106.00 | 110.00 | 0.00 | 0.25 | |
| 16:33 | 10.99 | 0.868 | 1.87 | 6.45 | 108.00 | 108.00 | 0.00 | 0.25 | |
| 16:36 | 11.11 | 0.865 | 1.8 | 6.44 | 110.00 | 102.00 | 0.00 | 0.25 | |

## Sample Collection

| | | | |
|---|---|---|---|
| Sample Date: | 12/23/2024 | Sample Comments (Appearance/Odor): | No odor, cloudy |
| Sample Time: | 04:36:00 PM | Analyses: | Vocs |
| Sample ID: | DP-021 | | |
| Include Duplicate and MSMSD Sample IDs | | | |

Sampler: C. Derrick

Signature: 


Reviewed By:

Date:

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| GEMW-2 | C. Derrick | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| GEMW-2 | Dry at purge @1146, sample upon recharge @1421 | Weather = overcast clouds, Temperature (F) = 20.8, Humidity = 78, Wind Direction = 190, Wind Speed = 5.8, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Heron dipper t | 12/23/2024 | 480.25 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 09:07 AM | 1 |

| | |
|---|---|
| **Purge Date:** 12/23/2024 | **Purge Time:** 11:12 |
| **Purge Method:** Peristaltic | **Field Technician:** C. Derrick |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 14.52 | 0 | 6.72 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 7.8 | 0 | Peristaltic (3155) |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 6.72 | 0 | 11 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 11:12 | 8.39 | 5.00 | 228.00 | 0.897 | 834.00 | 3.63 | 0.00 | 0.25 | 0 |
| 11:15 | 10.05 | 5.30 | 197.00 | 0.874 | 798.00 | 2.53 | 0.00 | 0.25 | 0.75 |
| 11:18 | 10.75 | 5.42 | 188.00 | 0.858 | 942.00 | 2.74 | 0.00 | 0.25 | 0.75 |
| 11:21 | 11.00 | 5.49 | 184.00 | 0.857 | 793.00 | 2.77 | 0.00 | 0.25 | 0.75 |
| 11:24 | 11.86 | 5.58 | 180.00 | 0.841 | 539.00 | 2.76 | 0.00 | 0.25 | 0.75 |
| 11:27 | 12.04 | 5.62 | 178.00 | 0.832 | 406.00 | 2.73 | 0.00 | 0.25 | 0.75 |
| 11:30 | 12.03 | 5.72 | 176.00 | 0.832 | 317.00 | 3.06 | 0.00 | 0.25 | 0.75 |
| 11:33 | 12.07 | 5.74 | 175.00 | 0.842 | 312.00 | 2.68 | 0.00 | 0.25 | 0.75 |
| 11:36 | 12.43 | 5.79 | 173.00 | 0.852 | 299.00 | 2.33 | 0.00 | 0.25 | 0.75 |
| 11:39 | 12.38 | 5.83 | 173.00 | 0.854 | 250.00 | 2.35 | 0.00 | 0.25 | 0.75 |
| 11:42 | 12.70 | 5.86 | 174.00 | 0.851 | 241.00 | 2.78 | 0.00 | 0.25 | 0.75 |
| 11:45 | 13.19 | 5.89 | 175.00 | 0.838 | 264.00 | 3.32 | 0.00 | 0.25 | 0.75 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | 8.25 | **Sampling Time:** | 02:21 PM |
| **Samplers:** | C. Derrick | **Split Sample With:** | None |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| MW-2 | C Zook | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| MW-2 | | Weather = Cloudy , Temperature (F) = 26.6, Humidity = 69, Wind Direction = 193, Wind Speed = 8, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Soloist WLM 101 | 12/23/2024 | 476.87 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 10:00 AM | 2 |

| | |
|---|---|
| **Purge Date:** 12/23/2024 | **Purge Time:** 15:05 |
| **Purge Method:** Geotech Perristaltic Pump | **Field Technician:** C Zook |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 22.5 | 2.96 | 18.15 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 4.35 | 53.724 | Geotech Perristlatic Pump |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 18.15 | 8.88 | 8 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 15:05 | 11.11 | 7.13 | 125.00 | 1.2 | 7.12 | 1.13 | 4.35 | 0.3 | 0 |
| 15:08 | 12.15 | 7.11 | 118.00 | 1.2 | 31.70 | 0.98 | 4.35 | 0.3 | 0.9 |
| 15:11 | 12.13 | 7.05 | 77.00 | 1.19 | 32.70 | 0.59 | 4.35 | 0.3 | 0.9 |
| 15:14 | 11.69 | 7.03 | 60.00 | 1.19 | 25.20 | 0.47 | 4.35 | 0.3 | 0.9 |
| 15:17 | 11.66 | 7.03 | 57.00 | 1.19 | 22.30 | 0.46 | 4.35 | 0.3 | 0.9 |
| 15:20 | 11.72 | 7.02 | 47.00 | 1.18 | 15.80 | 0.22 | 4.35 | 0.3 | 0.9 |
| 15:23 | 11.89 | 7.01 | 40.00 | 1.17 | 11.60 | 0.17 | 4.35 | 0.3 | 0.9 |
| 15:26 | 11.90 | 7.01 | 38.00 | 1.17 | 10.10 | 0.17 | 4.35 | 0.3 | 0.9 |
| 15:29 | 12.16 | 7.00 | 36.00 | 1.18 | 11.20 | 0.16 | 4.35 | 0.3 | 0.9 |
| 15:32 | 12.16 | 7.01 | 34.00 | 1.18 | 9.20 | 0.17 | 4.35 | 0.3 | 0.9 |
| 15:35 | 12.24 | 7.01 | 33.00 | 1.17 | 9.30 | 0.18 | 4.36 | 0.3 | 0.9 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | 9 | **Sampling Time:** | 03:35 PM |
| **Samplers:** | C Zook | **Split Sample With:** | |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

Pid: 1.6 ppm

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| MW-3 | C. Zook | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| MW-3 | | Weather = , Temperature (F) = , Humidity = , Wind Direction = , Wind Speed = , Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Soloist WLM 101 | 12/23/2024 | 478.00 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 11:47 AM | 4 |

| | |
|---|---|
| **Purge Date:** 12/23/2024 | **Purge Time:** 13:22 |
| **Purge Method:** Geotech Peristatlic Pump | **Field Technician:** C. Zook |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 10.5 | 3.51 | 5.37 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 5.13 | 18.8487 | Geotech Peristatlic Pump / 210304 |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 5.37 | 10.53 | 8 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 13:22 | 11.11 | 7.52 | 135.00 | 1.13 | 1000.00 | 1.03 | 5.13 | 0.25 | 0 |
| 13:25 | 11.16 | 7.42 | 127.00 | 1.24 | 1000.00 | 0.26 | 5.13 | 0.25 | 0.75 |
| 13:28 | 11.50 | 7.38 | 81.00 | 1.26 | 1000.00 | 0.11 | 5.13 | 0.25 | 0.75 |
| 13:31 | 11.71 | 7.33 | -4.00 | 1.27 | 1000.00 | 0 | 5.13 | 0.25 | 0.75 |
| 13:34 | 11.70 | 7.29 | -24.00 | 1.3 | 1000.00 | 0 | 5.13 | 0.25 | 0.75 |
| 13:37 | 11.71 | 7.27 | -38.00 | 1.32 | 1000.00 | 0 | 5.13 | 0.25 | 0.75 |
| 13:40 | 11.67 | 7.26 | -46.00 | 1.33 | 1000.00 | 0 | 5.13 | 0.25 | 0.75 |
| 13:43 | 11.65 | 7.25 | -49.00 | 1.34 | 1000.00 | 0 | 5.13 | 0.25 | 0.75 |
| 13:46 | 11.71 | 7.24 | -53.00 | 1.35 | 1000.00 | 0 | 5.13 | 0.25 | 0.75 |
| 13:49 | 11.72 | 7.23 | -54.00 | 1.35 | 1000.00 | 0 | 5.13 | 0.25 | 0.75 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | | **Sampling Time:** | 01:49 PM |
| **Samplers:** | C. Zook | **Split Sample With:** | |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | FD |

**COMMENTS AND OBSERVATIONS:**

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| MW-13 | M. Gilkey | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| MW-13 | | Weather = broken clouds, Temperature (F) = 26.1, Humidity = 69, Wind Direction = 190, Wind Speed = 8, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Soloist WLM 101 | 12/23/2024 | 480.36 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 10:00 AM | 2 |

| | |
|---|---|
| **Purge Date:** 12/23/2024 | **Purge Time:** 12:52 |
| **Purge Method:** Geotech Perristaltic Pump | **Field Technician:** M. Gilkey |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 12.9 | 1.06 | 6.49 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 6.41 | 6.8794 | Geotech Perristaltic Pump / 210304 |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 6.49 | 3.18 | 7 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 12:52 | 9.99 | 7.19 | 119.00 | 1.28 | 181.00 | 3.98 | 6.42 | 0.3 | 0 |
| 12:55 | 9.94 | 7.02 | 119.00 | 1.29 | 118.00 | 1.39 | 6.42 | 0.3 | 0.9 |
| 12:58 | 10.07 | 6.97 | 118.00 | 1.34 | 103.00 | 1.49 | 6.42 | 0.3 | 0.9 |
| 13:01 | 10.08 | 6.95 | 118.00 | 1.37 | 82.10 | 1.37 | 6.42 | 0.3 | 0.9 |
| 13:04 | 10.00 | 6.94 | 116.00 | 1.39 | 67.00 | 0.58 | 6.42 | 0.3 | 0.9 |
| 13:07 | 10.04 | 6.93 | 114.00 | 1.39 | 53.60 | 0.32 | 6.42 | 0.3 | 0.9 |
| 13:10 | 10.11 | 6.93 | 113.00 | 1.39 | 49.80 | 0.31 | 6.42 | 0.3 | 0.9 |
| 13:13 | 10.17 | 6.93 | 112.00 | 1.38 | 47.50 | 0.31 | 6.42 | 0.3 | 0.9 |
| 13:16 | 10.16 | 6.93 | 112.00 | 1.38 | 45.90 | 0.3 | 6.42 | 0.3 | 0.9 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | | **Sampling Time:** | 01:16 PM |
| **Samplers:** | M. Gilkey | **Split Sample With:** | MS/MSD |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | MS/MSD |

**COMMENTS AND OBSERVATIONS:**

Pid: 14.5

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| MW-13B | M. Gilkey | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| MW-13B | | Weather = overcast clouds, Temperature (F) = 26.9, Humidity = 69, Wind Direction = 90, Wind Speed = 2, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Soloist WLM 101 | 12/23/2024 | 480.37 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 10:00 AM | 2 |

| | |
|---|---|
| **Purge Date:** 12/23/2024 | **Purge Time:** 13:32 |
| **Purge Method:** Geotech Perristaltic Pump | **Field Technician:** M. Gilkey |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 25 | 2.57 | 15.79 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 9.21 | 40.5803 | Geotech Perristaltic Pump / 210304 |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 15.79 | 7.71 | 15 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 13:32 | 11.62 | 7.27 | 49.00 | 1.08 | 119.00 | 1.78 | 11.66 | 0.3 | 0 |
| 13:35 | 11.39 | 7.19 | 20.00 | 1.09 | 77.60 | 1.33 | 11.66 | 0.3 | 0.9 |
| 13:38 | 11.59 | 7.13 | -5.00 | 1.08 | 60.20 | 0.5 | 11.66 | 0.3 | 0.9 |
| 13:41 | 11.54 | 7.12 | -19.00 | 1.08 | 47.00 | 0.32 | 11.66 | 0.3 | 0.9 |
| 13:44 | 11.54 | 7.12 | -32.00 | 1.08 | 44.00 | 0.23 | 11.66 | 0.3 | 0.9 |
| 13:47 | 11.63 | 7.11 | -49.00 | 1.07 | 39.50 | 0.2 | 11.66 | 0.3 | 0.9 |
| 13:50 | 11.69 | 7.11 | -65.00 | 1.06 | 38.10 | 0.09 | 11.66 | 0.3 | 0.9 |
| 13:53 | 11.50 | 7.11 | -81.00 | 1.05 | 36.00 | 0 | 11.66 | 0.3 | 0.9 |
| 13:56 | 11.67 | 7.11 | -87.00 | 1.04 | 35.90 | 0 | 11.66 | 0.3 | 0.9 |
| 13:59 | 11.65 | 7.11 | -95.00 | 1.05 | 35.75 | 0 | 11.66 | 0.3 | 0.9 |
| 14:02 | 11.65 | 7.12 | -99.00 | 1.05 | 35.12 | 0 | 11.62 | 0.3 | 0.9 |
| 14:05 | 11.65 | 7.11 | -100.00 | 1.05 | 34.90 | 0 | 11.62 | 0.3 | 0.9 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | | **Sampling Time:** | 02:05 PM |
| **Samplers:** | M. Gilkey | **Split Sample With:** | |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

Pid: 0.5 ppm

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| MW-17B | C. Derrick | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| MW-17B | No odor, cloudy | Weather = light snow, Temperature (F) = 27.3, Humidity = 71, Wind Direction = 90, Wind Speed = 3, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Heron dipper t | 12/23/2024 | 479.35 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 02:44 PM | 2 |

| | |
|---|---|
| **Purge Date:** 12/23/2024 | **Purge Time:** 15:08 |
| **Purge Method:** Peristaltic | **Field Technician:** C. Derrick |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 27.05 | 3.24 | 19.85 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 7.2 | 64.314 | Peristaltic (3155) |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 19.85 | 9.72 | 24 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 15:08 | 8.56 | 6.37 | 138.00 | 3.79 | 601.00 | 3.96 | 0.00 | 0.25 | 0 |
| 15:11 | 8.82 | 6.43 | 133.00 | 3.27 | 429.00 | 0.76 | 0.00 | 0.25 | 0.75 |
| 15:14 | 10.37 | 6.41 | 130.00 | 3.26 | 365.00 | 0.52 | 0.00 | 0.25 | 0.75 |
| 15:17 | 10.64 | 6.40 | 127.00 | 3.25 | 318.00 | 0.37 | 0.00 | 0.25 | 0.75 |
| 15:20 | 10.70 | 6.40 | 127.00 | 3.24 | 304.00 | 0.38 | 0.00 | 0.25 | 0.75 |
| 15:23 | 10.82 | 6.38 | 54.00 | 2.96 | 267.00 | 0.19 | 0.00 | 0.25 | 0.75 |
| 15:26 | 10.85 | 6.37 | -20.00 | 2.77 | 213.00 | 0.1 | 0.00 | 0.25 | 0.75 |
| 15:29 | 10.80 | 6.36 | -42.00 | 2.57 | 192.00 | 0 | 0.00 | 0.25 | 0.75 |
| 15:32 | 10.83 | 6.36 | -52.00 | 2.34 | 173.00 | 0 | 0.00 | 0.25 | 0.75 |
| 15:35 | 10.80 | 6.36 | -54.00 | 2.28 | 178.00 | 0 | 0.00 | 0.25 | 0.75 |
| 15:38 | 10.80 | 6.35 | -61.00 | 2.22 | 180.00 | 0 | 0.00 | 0.25 | 0.75 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | 7.5 | **Sampling Time:** | 03:38 PM |
| **Samplers:** | C. Derrick | **Split Sample With:** | None |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| MW-19B | M. Gilkey | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| MW-19B | | Weather = light snow, Temperature (F) = 27.3, Humidity = 72, Wind Direction = 158, Wind Speed = 2, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Soloist WLM 101 | 12/23/2024 | 475.35 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 12:00 AM | 2 |

| | | | |
|---|---|---|---|
| **Purge Date:** | 12/23/2024 | **Purge Time:** | 15:53 |
| **Purge Method:** | Geotech Peristatlic Pump | **Field Technician:** | M. Gilkey |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 21.01 | 2.64 | 16.22 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 4.79 | 42.8208 | Geotech Peristatlic Pump / 210304 |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 16.22 | 7.92 | 15 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 15:53 | 12.30 | 7.30 | 53.00 | 1.32 | 55.50 | 5.7 | 0.00 | 0.25 | 0 |
| 15:56 | 12.85 | 7.05 | 37.00 | 1.31 | 34.60 | 0.5 | 0.00 | 0.25 | 0.75 |
| 15:59 | 13.19 | 6.99 | 7.00 | 1.32 | 26.80 | 0 | 0.00 | 0.25 | 0.75 |
| 16:02 | 13.16 | 6.98 | -12.00 | 1.34 | 22.60 | 0 | 0.00 | 0.25 | 0.75 |
| 16:05 | 13.31 | 6.98 | -26.00 | 1.36 | 16.80 | 0 | 0.00 | 0.25 | 0.75 |
| 16:08 | 13.37 | 6.97 | -32.00 | 1.37 | 13.80 | 0 | 0.00 | 0.25 | 0.75 |
| 16:11 | 13.44 | 6.97 | -35.00 | 1.4 | 13.00 | 0 | 0.00 | 0.25 | 0.75 |
| 16:14 | 13.43 | 6.97 | -38.00 | 1.41 | 13.30 | 0 | 0.00 | 0.25 | 0.75 |
| 16:17 | 13.45 | 6.97 | -41.00 | 1.44 | 13.50 | 0 | 0.00 | 0.25 | 0.75 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | | **Sampling Time:** | 04:17 PM |
| **Samplers:** | M. Gilkey | **Split Sample With:** | |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

# GROUNDWATER SAMPLING PURGE FORM

| Well ID: | EA Personnel: | Client: |
|---|---|---|
| MW-21B | C. Derrick | NYSDEC |
| **Location:** | **Well Condition:** | **Weather:** |
| MW-21B | No odor, clear | Weather = overcast clouds, Temperature (F) = 28.1, Humidity = 70, Wind Direction = 113, Wind Speed = 2, Rain (1hr) = 1 |
| **Sounding Method:** | **Gauge Date:** | **Measurement Ref:** |
| Heron dipper t | 12/23/2024 | 468.15 |
| **Stick Up/Down (ft):** | **Gauge Time:** | **Well Diameter (in):** |
| 0.00 | 10:23 AM | 2 |

| | |
|---|---|
| **Purge Date:** 12/23/2024 | **Purge Time:** 16:46 |
| **Purge Method:** Peristaltic | **Field Technician:** C. Derrick |

| Well Volume | | |
|---|---|---|
| **A. Well Depth (ft):** | **D. Well Volume (ft):** | **Depth/Height of Top of PVC:** |
| 19.49 | 1.92 | 11.77 |
| **B. Depth to Water (ft):** | **E. Well Volume (gal) (C*D):** | **Pump Type:** |
| 7.72 | 22.5984 | Peristaltic (3155) |
| **C. Liquid Depth (ft) (A-B):** | **F. Three Well Volumes (gal) (E3):** | **Pump Intake Depth:** |
| 11.77 | 5.76 | 14 |

**Water Quality Parameters**

| Time (hrs) | Temp (°C) | pH (pH units) | ORP (mV) | Conductiviity (S/m) | Turbidity (ntu) | DO (mg/L) | DTW (ft btoc) | Rate (Lpm) | Volume (liters) |
|---|---|---|---|---|---|---|---|---|---|
| 16:46 | 11.20 | 6.45 | -58.00 | 1.02 | 68.90 | 0.43 | 7.80 | 0.25 | 0 |
| 16:49 | 11.53 | 6.43 | -48.00 | 0.996 | 51.20 | 0.16 | 7.81 | 0.25 | 0.75 |
| 16:52 | 11.67 | 6.42 | -34.00 | 0.985 | 49.50 | 0 | 7.82 | 0.25 | 0.75 |
| 16:55 | 11.99 | 6.41 | -24.00 | 0.984 | 47.20 | 0 | 7.82 | 0.25 | 0.75 |
| 16:58 | 12.10 | 6.40 | -16.00 | 0.978 | 45.50 | 0 | 7.83 | 0.25 | 0.75 |
| 17:01 | 12.24 | 6.39 | -4.00 | 0.977 | 45.70 | 0 | 7.83 | 0.25 | 0.75 |
| 17:04 | 12.35 | 6.39 | -7.00 | 0.969 | 44.20 | 0 | 7.84 | 0.25 | 0.75 |
| 17:07 | 12.36 | 6.38 | -20.00 | 0.974 | 36.70 | 0 | 7.84 | 0.25 | 0.75 |
| 17:10 | 12.37 | 6.38 | -26.00 | 0.982 | 36.00 | 0 | 7.83 | 0.25 | 0.75 |
| 17:13 | 12.39 | 6.38 | -29.00 | 0.985 | 35.60 | 0 | 7.83 | 0.25 | 0.75 |

| | | | |
|---|---|---|---|
| **Total Quantity of Water Removed (L):** | 6.75 | **Sampling Time:** | 05:13 PM |
| **Samplers:** | C. Derrick | **Split Sample With:** | None |
| **Sampling Date:** | 12/23/2024 | **Sample Type:** | N |

**COMMENTS AND OBSERVATIONS:**

# Appendix B

# Daily Inspection Reports

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NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

**Contract No. D009806**
**DEC PM – J.Stefansky**
**Engineer PM – A. Etringer**
**Engineer Insp. – H. Bedell**

**Site Location:** 2310 Monroe Ave, Brighton 14618

| Weather Conditions | | | | |
|---|---|---|---|---|
| **General Description** | Partly Cloudy | AM | Partly Cloudy | PM |
| **Temperature** | 9F | AM | 30F | PM |
| **Wind** | S 6 mph | AM | SE 6 mph | PM |

**Health & Safety**
**If any box below is checked "Yes", provide explanation under "Health & Safety Comments".**

| | | | |
|---|---|---|---|
| Were there any changes to the Health & Safety Plan? | *Yes | No X | NA |
| Were there any exceedances of the perimeter air monitoring reported on this date? | *Yes | No | NA X |
| Were there any nuisance issues reported/observed on this date? | *Yes | No X | NA |

**Health & Safety Comments**

Cautious of extremely cold temperatures and ensuring we take frequent breaks to warm up.

| **Summary of Work Performed** | Arrived at site: | 0815 | Departed Site: | 1800 |
|---|---|---|---|---|

(0815) H. Bedell, C. Zook, M. Gilkey, C. Derrick (EA) onsite.
(0830) Hold safety tailgate meeting. Calibrate Horibas and PIDs.
(0900) Begin gauging onsite wells
(1000) Begin gauging offsite wells
(1112) Start purge GEMW-2
(1115) Start purge DP-15
(1130) Start purge DP-18
(1146) GEMW-2 goes dry
(1154) Sample 828149-DP-18-20241223 for VOCs
(1208) Start purge DP-17
(1214) Sample 828149-DP-15-20241223 for VOCs
(1238) Sample 828149-DP-17-20241223 for VOCs
(1252) Start purge MW-13
(1316) Sample 828149-MW-13-20241223 for VOCs w/ MS/MSD
(1322) Start purge MW-3
(1332) Start purge MW-13B
(1349) Sample 828149-MW-3-20241223 for VOCs w/ Duplicate
(1352) Start purge DP-12
(1402) Sample 828149-MW-13B-20241223 for VOCs
(1418) Start purge DP-10
(1421) Sample 828149-GEMW-2-20241223 for VOCs
(1422) Sample 828149-DP-12-20241223 for VOCs
(1436) Sample 828149-DP-10-20241223 for VOCs
(1440) Unable to locate MW-1
(1505) Start purge MW-2
(1506) Start purge DP-19
(1508) Start purge MW-17B
(1530) Sample 828149-DP-19-20241223 for VOCs
(1535) Sample 828149-MW-2-20241223 for VOCs
(1538) Sample 828149-MW-17B-20241223 for VOCs
(1553) Start purge MW-19B
(1609) Start purge DP-21
(1616) Start purge DP-20
(1617) Sample 828149-MW-19B-20241223 for VOCs
(1636) Sample 828149-DP-21-20241223 for VOCs
(1640) MW-10 could not be sampled due to low water level.
(1646) Sample 828149-DP-20-20241223 for VOCs. Start purge MW-21B.
(1713) Sample 828149-MW-21B-20241223 for VOCs
(1730) Load and pack up equipment and samples
(1745) Secure IDW drums
(1800) EA offsite

| Well ID | Purge Start Time | Sample Time | QA/QC | DRY? |
|---|---|---|---|---|
| MW-3 | 1322 | 1349 | Duplicate | No |
| MW-13 | 1252 | 1316 | MS/MSD | No |
| MW-13B | 1332 | 1402 | No | No |
| MW-2 | 1505 | 1535 | No | No |
| GEMW-2 | 1112 | 1421 | No | Yes |
| DP-10 | 1418 | 1436 | No | No |
| DP-12 | 1352 | 1422 | No | No |
| DP-15 | 1115 | 1214 | No | No |
| DP-17 | 1208 | 1238 | No | No |
| DP-18 | 1130 | 1154 | No | No |
| DP-19 | 1506 | 1530 | No | No |
| DP-20 | 1616 | 1646 | No | No |
| DP-21 | 1609 | 1636 | No | No |
| MW-17B | 1508 | 1538 | No | No |
| MW-19B | 1553 | 1617 | No | No |
| MW-21B | 1646 | 1713 | No | No |
| | | | | |

**Equipment/Material Tracking**
**If any box below is checked "Yes", provide explanation under "Material Tracking Comments".**

| | | | |
|---|---|---|---|
| Were there any vehicles which did not display proper D.O.T numbers and placards? | *Yes | No | NA X |
| Were there any vehicles which were not tarped? | * Yes | No | NA X |
| Were there any vehicles which were not decontaminated prior to exiting the work site? | * Yes | No | NA X |

**Personnel and Equipment**

| Individual | Company | Trade | Total Hours |
|---|---|---|---|
| Hannah Bedell | EA | Engineer | 9.75 |
| Moriah Gilkey | EA | Engineer | 9.75 |
| Clara Zook | EA | Intern | 9,75 |
| Cassie Derrick | EA | Geologist | 9.75 |
| | | | |

| Equipment Description | Contractor/Vendor | Quantity | Used |
|---|---|---|---|
| Horiba | Pine Environmental | 4 | Y |
| Honeywell MiniRAE 3000+ | Pine Environmental | 3 | Y |
| Peristaltic Pumps | Pine Environmental | 4 | Y |
| Solonist Water Level Meters | Pine Environmental | 4 | Y |
| 55-Gallon Steel Drum | Pine Environmental | 1 | Y |
| Hand Tools | EA | NA | Y |
| Ford Expedition | EA | 1 | Y |
| Ford F-150 Truck | EA | 2 | Y |
| | | | |

| Material Description | Imported/ Delivered to Site | Exported off Site | Waste Profile (If Applicable) | Source or Disposal Facility (If Applicable) | Daily Loads | Daily Weight (tons)* |
|---|---|---|---|---|---|---|
| | | | | | | |

**Equipment/Material Tracking Comments:**

**Visitors to Site**

| Name | Representing | Entered Exclusion/CRZ Zone | |
|---|---|---|---|
| None | | **Yes** | **No** |
| | | **Yes** | **No** |

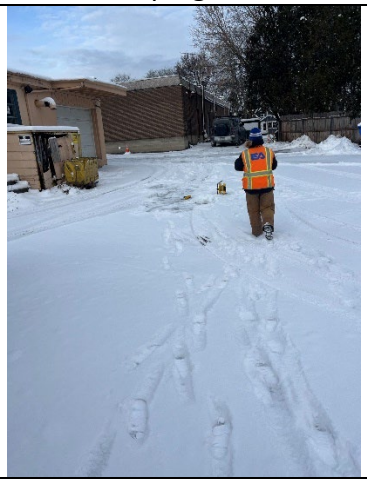
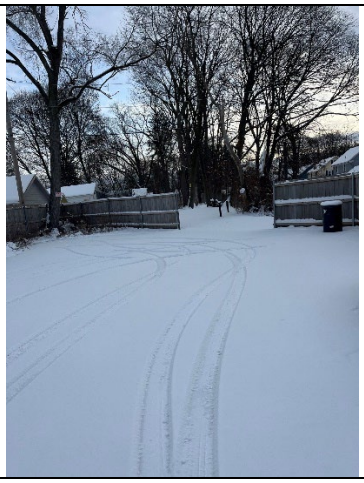
**Site Representatives**

| Name | Representing |
|---|---|
| Hannah Bedell | **EA** |
| Moriah Gilkey | **EA** |
| | |
| | |

| **Project Schedule Comments** | |
|---|---|
| Sample coolers were organized, packed, and shipped via FedEx following the Christmas holiday on Thursday 12/26. | |
| **Issues Pending** | |
| • None. | |
| **Interaction with Public, Property Owners, Media, etc.** | |
| Property owner approached us stating he thought a well on the property had been damaged. We gave him our project manager's email to contact with his concerns. | |
| **Site Inspector(s):** Hannah Bedell | **Date: 12/23/2024** |

Videos of discreet operations have been provided to the DEC Project Manager to facilitate understanding of the ongoing work? Yes ☐ No ☐ N/A ☒

# Photo Log

| | |
|---|---|
|  |  |
| MW-17B J-plug frozen shut | View of MW-2 location |
|  |  |
| Looking in the direction of MW-3 near back of property | View looking east towards MW-13 and MW-13B |
|  |  |
| Locating DP-18 | DP-18 covered in ice |

| | |
|---|---|
|  |  |
| IDW drums staged in the back of the property | Groundwater purge setup on DP-20 |

## REMEDIAL ACTIVITIES AT PROPERTIES

| | | |
|---|---|---|
| 1. Does anyone at this location have any symptoms of a respiratory infection (e.g., cough, sore throat, fever, or shortness of breath)? | Yes ☐ | No ☒ |
| 2. Have anyone at this location been tested and confirmed to have COVID-19? | Yes ☐ | No ☒ |
| 3. Were personal protective gloves, masks, and eye protection being used? | Yes ☐ | No ☒ |
| 4. Does the Department and its contractors have your permission to enter the property at this time? | Yes ☒ | No ☐ |
| 5. If Yes to 1 or 2, follow the latest NYSDOH COVID-19 guidance: https://coronavirus.health.ny.gov/home | Yes ☐ | No ☐ |
| Comments:<br>N/A | | |

## ON-SITE WASTE STORAGE

| | | | |
|---|---|---|---|
| Drums, roll offs and piles are staged in secure areas? | Yes ☒ | No ☐ | N/A☐ |
| Liners and berms have been installed if necessary to prevent cross contamination of clean areas? | Yes ☐ | No ☐ | N/A☒ |
| Containers are in good condition or properly overpacked? | Yes ☐ | No ☐ | N/A☒ |
| Waste materials are scheduled to be properly characterized and disposed of prior to demobilization? | Yes ☐ | No ☐ | N/A☒ |
| Complying with RCRA 90 day storage limitation for hazardous waste? | Yes ☐ | No ☐ | N/A☒ |
| Piles are securely covered when not in use? | Yes ☐ | No ☐ | N/A☒ |
| Containers are closed when not in use? | Yes ☐ | No ☐ | N/A☒ |
| Staging areas should be inspected periodically and any issues addressed immediately? | Yes ☐ | No ☐ | N/A☒ |
| Signage and labeling comply with RCRA requirements for all staging areas and containers? | Yes ☐ | No ☐ | N/A☒ |
| If any issues noted, has Contractor been notified? | Yes ☐ | No ☐ | N/A☒ |
| Comments:<br>NA | | | |

## NUISANCE CHECKLIST

| | | | |
|---|---|---|---|
| Were there any community complaints related to work on this date? | Yes ☐ | No ☒ | N/A☐ |
| Were there any odors detected on this date? | Yes ☐ | No ☒ | N/A☐ |
| Was noise outside specification and/or above background on this date? | Yes ☐ | No ☒ | N/A☐ |
| Were vibration readings outside specification and/or above background on this date? | Yes ☐ | No ☐ | N/A☒ |
| Any visible dust observed beyond the work perimeter on this date? | Yes ☐ | No ☐ | N/A☒ |
| Any visible contrast (turbidity) beyond engineering controls observed on this date? | Yes ☐ | No ☐ | N/A☒ |
| Was turbidity checked at the outfall(s)? | AM ☐ | PM ☐ | N/A☒ |
| Were any property owners NOT provided advance notice for work performed on this property on this date? | Yes ☐ | No ☐ | N/A☒ |

| | | | |
|---|---|---|---|
| Was the temporary fabric structure closed at the end of the day? | Yes ☐ | No ☐ | N/A☒ |
| Has Contractor failed to protect all foundations and structures adjacent to and adjoining the site which are affected by the excavations or other operations connected with performance of the Work? | Yes ☐ | No ☐ | N/A☒ |
| If yes, has Contractor been notified? | Yes ☐ | No ☐ | N/A☒ |
| Comments:<br>N/A | | | |

## RESILIENCE/GREEN REMEDIATION CHECKLIST

| | | | |
|---|---|---|---|
| Is site power procured from renewable energy sources (e.g., solar, wind, geothermal, biomass and biogas)? | Yes ☐ | No ☐ | N/A☒ |
| Is the Contractor employing 2007 or newer or retrofitted (BART*) diesel on-road trucks and non-road equipment? | Yes ☐ | No ☐ | N/A☒ |
| Is vehicle idling adequately reduced per 6NYCRR Part 217-3? | Yes ☐ | No ☐ | N/A☒ |
| Have equipment operators been trained in the idling requirements of 6NYCRR Part 217-3? | Yes ☐ | No ☐ | N/A☒ |
| Is BART-equipped equipment properly maintained and working? | Yes ☐ | No ☐ | N/A☒ |
| Is work being sequenced to avoid double handling? | Yes ☐ | No ☐ | N/A☒ |
| Is there an onsite recycling program for CONTRACTOR-generated wastes and is it complied with? | Yes ☐ | No ☐ | N/A☒ |
| Are office trailer heating and cooling systems maintained at efficient set points, have programable thermostats been installed? | Yes ☐ | No ☐ | N/A☒ |
| Are products and materials used in performance of the work appropriately certified (e.g., LEED, Energy Star, Sustainable Forestry Initiative®, etc.)? | Yes ☐ | No ☐ | N/A☒ |
| Are resiliency features included in the design, or completed remedy properly installed and/or maintained (flood control, storm water controls, erosion measures, etc.)? | Yes ☐ | No ☐ | N/A☒ |
| Are green remediation elements included in the design, or completed remedy properly installed and/or maintained (e.g., porous pavement, geothermal, variable speed drives, native plantings, natural stream bank restoration, etc.)? | Yes ☐ | No ☐ | N/A☒ |
| Has Contractor been notified of any deficiencies? | Yes ☐ | No ☐ | N/A☒ |
| Are remote/call in job meetings being held in lieu of meeting in person where possible? | Yes ☐ | No ☐ | N/A☒ |
| Comments:<br>N/A | | | |

* BART – Best Available Retrofit Technology

# Appendix C

# Data Verification Checklist

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# BASIC DATA VERIFICATION AND USABILITY CHECKLIST

| Verification Step | Yes/No | Notes/Deficiencies |
|---|---|---|
| **Field Verification** | | |
| Were all planned samples collected? | No | MW-1 and MW-8 were not located. MW-10 could not be sampled due to low water level. |
| Were there variances that modified collection of planned samples (e.g. moved sample locations, insufficient sample volume)? | No | |
| Were field forms and field logbooks completed correctly? | Yes | |
| Were all field Standard Operating Procedures followed? | Yes | |
| Are any field data unreasonable (e.g., pH > 14, or negative dissolved oxygen or turbidity)? | No | |
| **Chain-of-Custody and Laboratory Login Information** | | |
| Were chain-of-custodies prepared according to Standard Operating Procedures, and signed and dated for each transfer? | Yes | |
| Were samples preserved appropriately (<6 degrees Celsius, chemical preservative as necessary, containers, headspace, etc.)? | Yes | |
| Were samples logged in properly by the laboratory? Was the condition of samples at receipt documented? | Yes | |
| **Laboratory Checks** | | |
| Does the analytical data report contain the proper information (e.g., sample identifications, sample date, reporting units, etc.)? | Yes | |
| Were samples analyzed and data reported according to the chain-of-custody? | Yes | |
| Were holding times achieved? | Yes | |
| Were there any blank (field or method) detections that affected the usability of data for project samples? | No | |
| Were any other laboratory quality control issues (e.g., laboratory spike or surrogate recoveries) that affect the usability of data noted in the case narrative? | No | |
| Are data in the electronic data deliverables consistent with those reported in the analytical data reports, based on a spot-check (recommended minimum 10 percent)? | Yes | |
| **Additional Checks** | | |
| Calculate relative percent differences for field duplicates and associated original sample results to verify acceptable values (50 and 30 percent for solid and liquid samples, respectively). | All acceptable values (<30) | Cis-1,2 DCE = 3.34<br>PCE = 8.50<br>TCE= 4.27<br>VC = 1.76 |
| Assess data completeness (planned analyses versus usable analyses). | 84% | Goal: 100% |
| Check reporting/detection limits against sensitivity requirements. | Yes | |
| Are the data reasonable? Are there any unexpected anomalies relative to historical data? | Yes | There are no unexpected anomalies |

As necessary, add additional page(s) documenting any data usability issues.

# Appendix D

# Trend Evaluation Graphs

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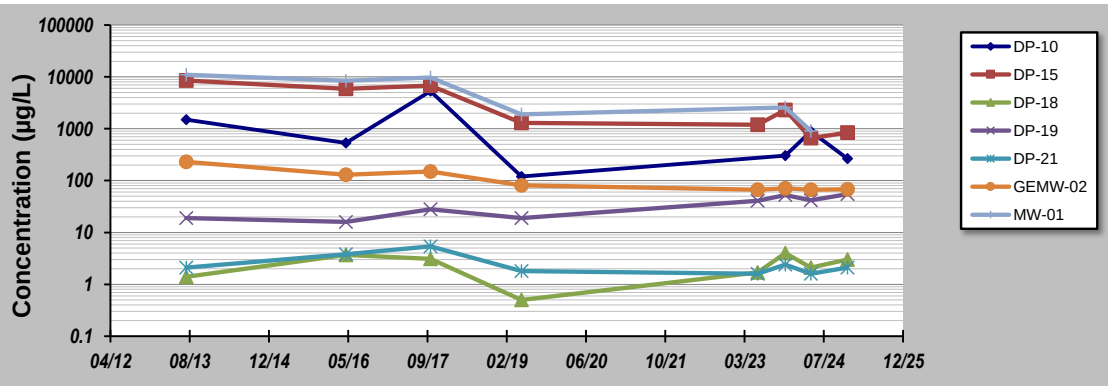
# GSI MANN-KENDALL TOOLKIT
## for Constituent Trend Analysis

| | | | |
|---|---|---|---|
| Evaluation Date: | January-25 | Job ID: | 1602534.0020 |
| Facility Name: | Town and Country Cleaners Site | Constituent: | PCE |
| Conducted By: | EA Engineering and Geology, P.C. | Concentration Units: | µg/L |

| Sampling Point ID: | DP-10 | DP-15 | DP-18 | DP-19 | DP-21 | GEMW-02 | MW-01 |
|---|---|---|---|---|---|---|---|
| Sampling Event | Sampling Date | PCE CONCENTRATION (µg/L) | | | | | | |
| 1 | 24-Jul-13 | 1500 | 8500 | 1.4 | 19 | 2.1 | 230 | 11000 |
| 2 | 26-Apr-16 | 530 | 5900 | 3.7 | 16 | 3.8 | 130 | 8400 |
| 3 | 11-Oct-17 | 5300 | 6800 | 3.1 | 28 | 5.4 | 150 | 9700 |
| 4 | 8-May-19 | 120 | 1300 | 0.5 | 19 | 1.8 | 81 | 1900 |
| 5 | 6-Jun-23 | | 1200 | 1.7 | 41 | 1.6 | 67 | |
| 6 | 27-Nov-23 | 302 | 2300 | 4.0 | 52.9 | 2.4 | 71 | 2570 |
| 7 | 7-May-24 | 887 | 658 | 2.1 | 41.8 | 1.6 | 66.8 | 907 |
| 8 | 23-Dec-24 | 266 | 843.0 | 3.0 | 54.8 | 2.1 | 68.2 | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| Coefficient of Variation: | | 1.44 | 0.91 | 0.50 | 0.46 | 0.51 | 0.54 | 0.77 |
| Mann-Kendall Statistic (S): | | -7 | -20 | 4 | 21 | -8 | -20 | -11 |
| Confidence Factor: | | 80.9% | 99.3% | 64.0% | 99.6% | 80.1% | 99.3% | 97.2% |
| Concentration Trend: | | No Trend | Decreasing | No Trend | Increasing | Stable | Decreasing | Decreasing |




**Notes:**

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

# GSI MANN-KENDALL TOOLKIT
## for Constituent Trend Analysis

| | | | |
|---|---|---|---|
| Evaluation Date: | January-25 | Job ID: | 1602534.0020 |
| Facility Name: | Town and Country Cleaners Site | Constituent: | PCE |
| Conducted By: | EA Engineering and Geology, P.C. | Concentration Units: | µg/L |

| Sampling Point ID: | MW-02 | MW-03 | MW-13 | MW-13B | MW-19B | MW-21B |
|---|---|---|---|---|---|---|
| Sampling Event | Sampling Date | PCE CONCENTRATION (µg/L) | | | | | |
| 1 | 24-Jul-13 | 90000 | 2200 | 14000 | 0.65 | 4.2 | 6 |
| 2 | 26-Apr-16 | 85000 | 790 | 12000 | 3.6 | 10 | 5.7 |
| 3 | 11-Oct-17 | 69000 | 650 | 4100 | 3.3 | 13 | 8.3 |
| 4 | 8-May-19 | 63000 | 390 | 2300 | 1.6 | 13 | 6 |
| 5 | 6-Jun-23 | 69 | | 3200 | 1 | 4.3 | 9.2 |
| 6 | 27-Nov-23 | 65.2 | | 1130 | 3 | 12.9 | 6.4 |
| 7 | 7-May-24 | 76.4 | | 1160.0 | 0.71 | 10.5 | 2.5 |
| 8 | 23-Dec-24 | 87.4 | 441.0 | 616.0 | 1.5 | 14.4 | 5.1 |
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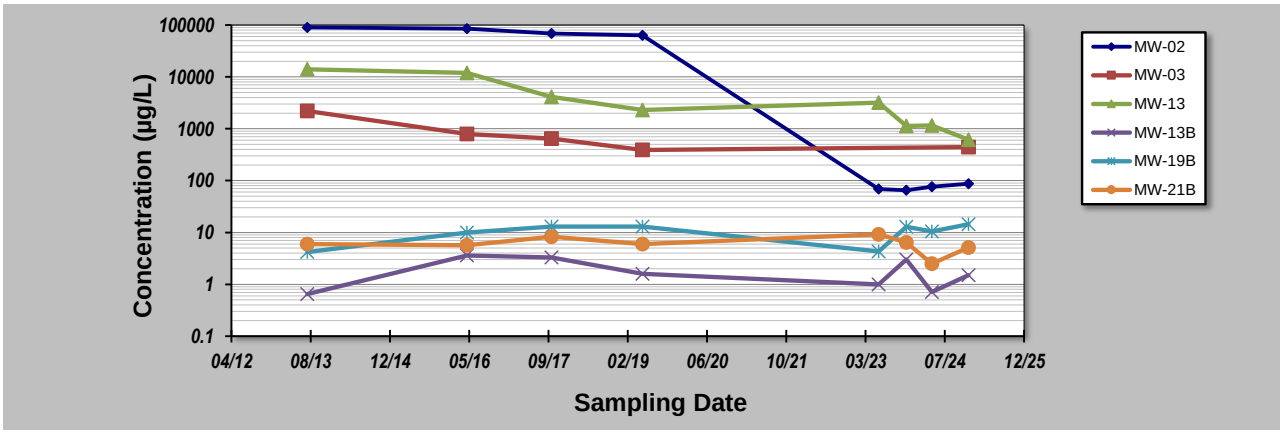
| Coefficient of Variation: | | 1.09 | 0.84 | 1.08 | 0.63 | 0.39 | 0.33 |
| Mann-Kendall Statistic (S): | | -18 | -8 | -24 | -6 | 11 | -5 |
| Confidence Factor: | | 98.4% | 95.8% | 99.9% | 72.6% | 88.7% | 68.3% |
| Concentration Trend: | | Decreasing | Decreasing | Decreasing | Stable | No Trend | Stable |




**Notes:**

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

# GSI MANN-KENDALL TOOLKIT
## for Constituent Trend Analysis

| | | | |
|---|---|---|---|
| Evaluation Date: | January-25 | Job ID: | 1602534.0020 |
| Facility Name: | Town and Country Cleaners Site | Constituent: | TCE |
| Conducted By: | EA Engineering and Geology, P.C. | Concentration Units: | µg/L |

| Sampling Point ID: | DP-10 | DP-15 | DP-18 | DP-19 | GEMW-02 | MW-01 | MW-02 |
|---|---|---|---|---|---|---|---|
| Sampling Event | Sampling Date | TCE CONCENTRATION (µg/L) | | | | | | |
| 1 | 24-Jul-13 | 170 | 410 | 0.79 | 4.9 | 5 | 260 | 410 |
| 2 | 26-Apr-16 | 130 | 210 | 1.5 | 4.9 | 2.2 | 180 | 240 |
| 3 | 11-Oct-17 | 140 | 210 | 0.5 | 8.5 | 3.3 | 260 | 170 |
| 4 | 8-May-19 | 28 | 59 | 0.5 | 5.5 | 0.93 | 34 | 160 |
| 5 | 6-Jun-23 | | 36 | 0.9 | 10.0 | 1.1 | | 18 |
| 6 | 27-Nov-23 | 67.2 | 103 | 1.8 | 13.8 | 1.3 | 21 | 18 |
| 7 | 7-May-24 | 85.4 | 37.9 | 1.0 | 10.6 | 0.82 | 11.5 | 17.8 |
| 8 | 23-Dec-24 | 52.1 | 49.1 | 1.5 | 13.6 | 0.8 | | 23.9 |
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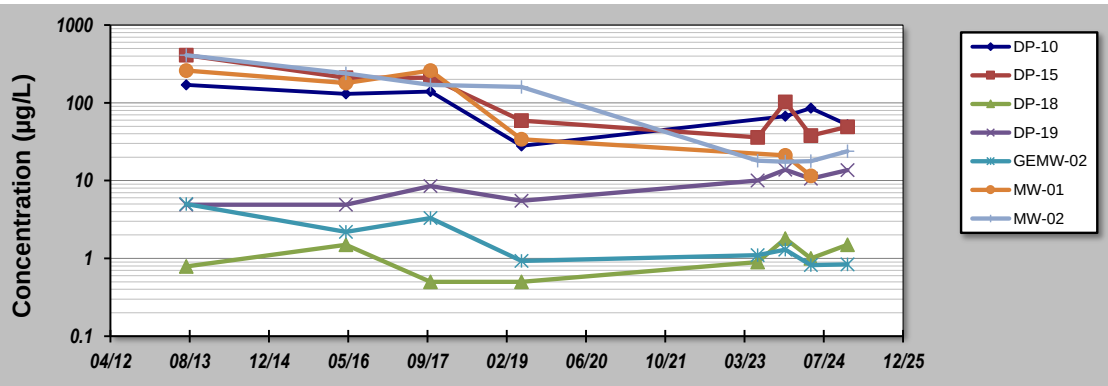
| Coefficient of Variation: | | 0.54 | 0.94 | 0.46 | 0.41 | 0.78 | 0.94 | 1.08 |
| Mann-Kendall Statistic (S): | | -11 | -17 | 10 | 21 | -18 | -12 | -20 |
| Confidence Factor: | | 93.2% | 97.7% | 86.2% | 99.6% | 98.4% | 98.2% | 99.3% |
| Concentration Trend: | | Prob. Decreasing | Decreasing | No Trend | Increasing | Decreasing | Decreasing | Decreasing |




**Notes:**

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
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# GSI MANN-KENDALL TOOLKIT
## for Constituent Trend Analysis

| | | | |
|---|---|---|---|
| Evaluation Date: | January-25 | Job ID: | 1602534.0020 |
| Facility Name: | Town and Country Cleaners Site | Constituent: | TCE |
| Conducted By: | EA Engineering and Geology, P.C. | Concentration Units: | µg/L |

| Sampling Point ID: | MW-03 | MW-13 | MW-13B | MW-19B | MW-21B | | |
|---|---|---|---|---|---|---|---|
| Sampling Event | Sampling Date | TCE CONCENTRATION (µg/L) | | | | | | |
| 1 | 24-Jul-13 | 450 | 380 | 0.38 | 4.4 | 0.62 | | |
| 2 | 26-Apr-16 | 320 | 350 | 0.73 | 6.2 | 0.5 | | |
| 3 | 11-Oct-17 | 310 | 200 | 1.3 | 8.4 | 0.73 | | |
| 4 | 8-May-19 | 220 | 190 | 1.2 | 6.9 | 0.59 | | |
| 5 | 6-Jun-23 | | 120 | 1.9 | 0.5 | 7.7 | | |
| 6 | 27-Nov-23 | | 71.8 | 2.3 | 9.4 | 0.3 | | |
| 7 | 7-May-24 | | 89.5 | 1.2 | 7.5 | | | |
| 8 | 23-Dec-24 | 239.0 | 92.7 | 2.2 | 10.2 | 0.3 | | |
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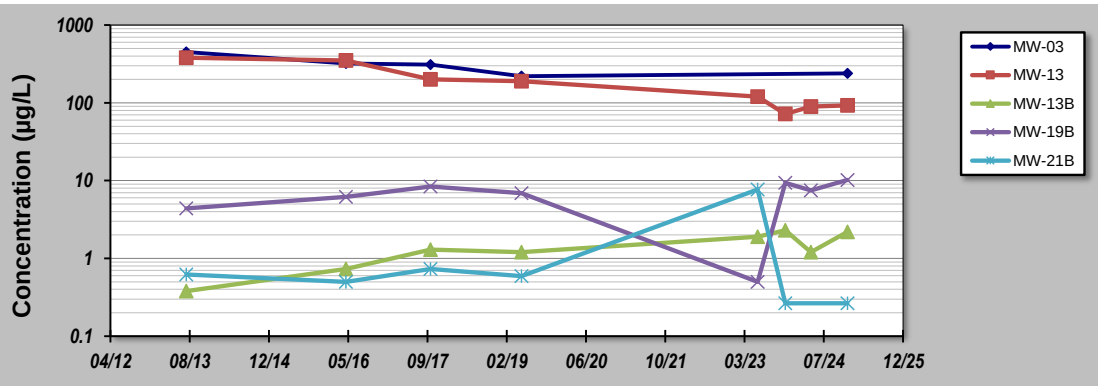
| Coefficient of Variation: | | 0.29 | 0.64 | 0.49 | 0.46 | 1.79 | | |
| Mann-Kendall Statistic (S): | | -8 | -22 | 17 | 14 | -6 | | |
| Confidence Factor: | | 95.8% | 99.8% | 97.7% | 94.6% | 76.4% | | |
| Concentration Trend: | | Decreasing | Decreasing | Increasing | Prob. Increasing | No Trend | | |




**Notes:**

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
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# GSI MANN-KENDALL TOOLKIT
## for Constituent Trend Analysis

| | | | |
|---|---|---|---|
| Evaluation Date: | January-25 | Job ID: | 1602534.0020 |
| Facility Name: | Town and Country Cleaners Site | Constituent: | cis-1,2-DCE |
| Conducted By: | EA Engineering and Geology, P.C. | Concentration Units: | µg/L |

| Sampling Point ID: | | DP-10 | DP-15 | DP-18 | DP-19 | GEMW-02 | MW-01 | MW-02 |
|---|---|---|---|---|---|---|---|---|
| Sampling Event | Sampling Date | CIS-1,2-DCE CONCENTRATION (µg/L) | | | | | | |
| 1 | 24-Jul-13 | 110 | 230 | 0.78 | 6.7 | 14 | 660 | 260 |
| 2 | 26-Apr-16 | 29 | 190 | 1.5 | 7.3 | 4 | 320 | 250 |
| 3 | 11-Oct-17 | 100 | 220 | 0.5 | 12 | 3.3 | 340 | 250 |
| 4 | 8-May-19 | 55 | 47 | 0.5 | 7.8 | 0.94 | 34 | 250 |
| 5 | 6-Jun-23 | | 88 | 0.58 | 9.4 | 0.27 | | 22 |
| 6 | 27-Nov-23 | 121 | 129 | 1.2 | 15.8 | 0.26 | 27.6 | 21.1 |
| 7 | 7-May-24 | 128.0 | 54.1 | 0.76 | 12.3 | 0.26 | 31.2 | 19.0 |
| 8 | 23-Dec-24 | 87.5 | 87.4 | 1.1 | 15.9 | 0.26 | | 25.6 |
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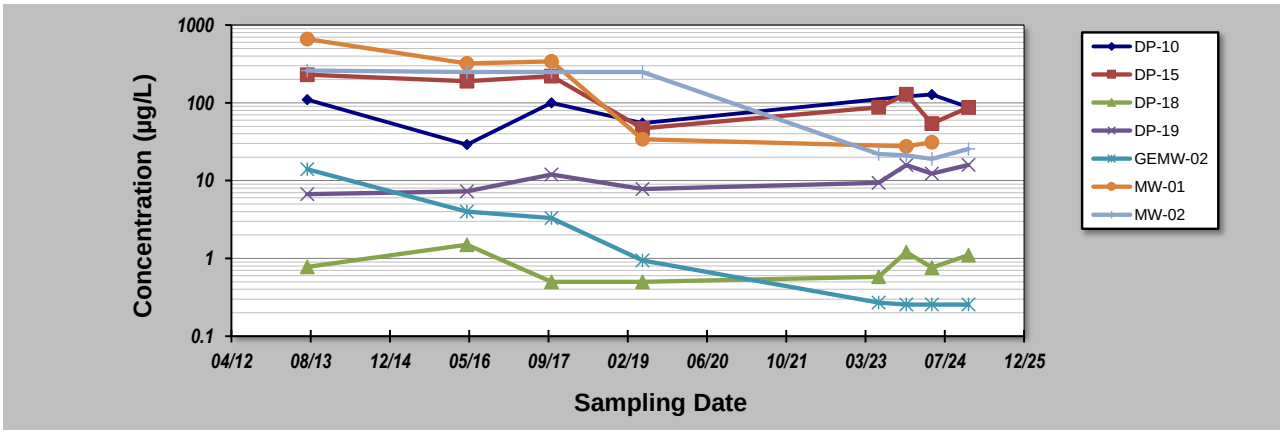
| Coefficient of Variation: | | 0.40 | 0.56 | 0.42 | 0.34 | 1.62 | 1.08 | 0.90 |
| Mann-Kendall Statistic (S): | | 5 | -14 | 3 | 22 | -25 | -11 | -19 |
| Confidence Factor: | | 71.9% | 94.6% | 59.4% | 99.8% | 100.0% | 97.2% | 98.9% |
| Concentration Trend: | | No Trend | Prob. Decreasing | No Trend | Increasing | Decreasing | Decreasing | Decreasing |

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# GSI MANN-KENDALL TOOLKIT
## for Constituent Trend Analysis

| | | | |
|---|---|---|---|
| Evaluation Date: | January-25 | Job ID: | 1602534.0020 |
| Facility Name: | Town and Country Cleaners Site | Constituent: | cis-1,2-DCE |
| Conducted By: | EA Engineering and Geology, P.C. | Concentration Units: | µg/L |

| Sampling Point ID: | MW-03 | MW-13 | MW-13B | MW-19B | MW-21B | | |
|---|---|---|---|---|---|---|---|
| Sampling Event | Sampling Date | CIS-1,2-DCE CONCENTRATION (µg/L) | | | | | | |
| 1 | 24-Jul-13 | 890 | 680 | 0.51 | 7.7 | 0.5 | | |
| 2 | 26-Apr-16 | 850 | 590 | 0.93 | 9.8 | 0.5 | | |
| 3 | 11-Oct-17 | 670 | 770 | 2 | 12 | 0.5 | | |
| 4 | 8-May-19 | 530 | 160 | 2 | 9.4 | 0.38 | | |
| 5 | 6-Jun-23 | | 170 | 7 | 0.5 | 12.0 | | |
| 6 | 27-Nov-23 | | 195 | 4.6 | 19.3 | 0.3 | | |
| 7 | 7-May-24 | | 163.0 | 5.0 | 16.0 | | | |
| 8 | 23-Dec-24 | 547.0 | 170.0 | 8.2 | 22.2 | 0.3 | | |
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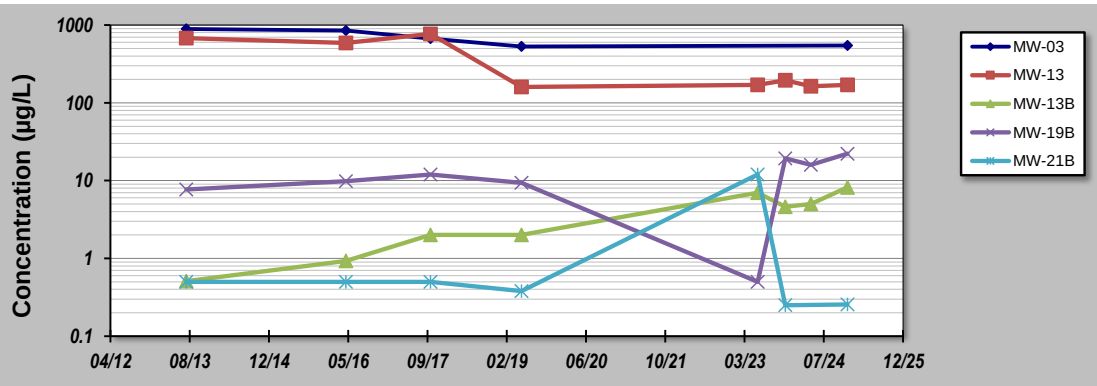
| Coefficient of Variation: | | 0.24 | 0.74 | 0.76 | 0.57 | 2.13 | | |
| Mann-Kendall Statistic (S): | | -8 | -11 | 23 | 14 | -8 | | |
| Confidence Factor: | | 95.8% | 88.7% | 99.9% | 94.6% | 84.5% | | |
| Concentration Trend: | | Decreasing | Stable | Increasing | Prob. Increasing | No Trend | | |

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