2023 Annual Report
Dinaburg Distributing, Inc. Site
Rochester, New York
NYSDEC Site Number 828103

Prepared for

New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12207

Prepared by

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November 2024
Version: FINAL
EA Project No. 1602534.18

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ACRONYMS AND ABBREVIATIONS

°F	Degrees Fahrenheit
ug/L	Micrograms per liter
%	Percent
bgs	Below ground surface
cells/mL	Cells per milliliter
DCE	Dichloroethylene
DHC	*Dehalococcoides*
EA	EA Engineering, P.C. and its affiliate EA Science and Technology
EPA	U.S. Environmental Protection Agency
ERH	Electrical resistance heating
ft	Foot/feet
IRM	Interim Remedial Measure
MACTEC	MACTEC Engineering and Geology, P.C.
MNA	Monitored natural attenuation
MPE	Multi-phase extraction
No.	Number
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OU	Operable unit
PCE	Tetrachloroethene
PDB	Passive diffusion bag
RAO	Remedial action objective
ROD	Record of Decision
SCO	Soil cleanup objective
Site	Dinaburg Distributing, Inc.
SMP	Site Management Plan
SSDS	Sub-slab depressurization system
TCE	Trichloroethene
URS	URS Corporation
VOC	Volatile organic compound

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1. BACKGROUND

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C. and its affiliate EA Science and Technology (EA) under Work Assignment Number (No.) D009806-34 to perform site management activities, including annual groundwater sampling, at the Dinaburg Distributing Inc. Site (Site No. 828103). This Annual Report documents the field events from the year 2023. The groundwater monitoring activities were completed in accordance with the applicable guidelines and requirements of NYSDEC.

The Site is located at 1012 South Clinton Avenue in the city of Rochester, Monroe County, New York (**Figure 1-1**). The Site occupies approximately 0.25 acres on two parcels; one, a "T" shaped lot (Tax Map 121.74-5-68), was the former location of Dinaburg Distributing, and the second parcel (Tax Map 121.74-5-66) historically contained a residence (referred to as 350 Benton Street). The former site building located on the main parcel and a house located on the second parcel at 350 Benton Street were demolished in 2004 (MACTEC Engineering and Geology, P.C. [MACTEC] 2011). The boundaries of the Site are more fully described in the Site Management Plan (SMP) (EA 2023).

1.1 SITE DESCRIPTION AND PHYSICAL SETING

The Site is zoned mixed commercial/residential and is currently vacant and surfaced with a combination of pavement and grass. The Site is bounded by commercial properties to the northwest, residential properties to the northeast, South Clinton Avenue to the southwest, and Benton Street and commercial and residential properties to the southeast (**Figure 1-2**).

The Site, approximately 515 feet (ft) above mean sea level, is roughly 6,000 ft east of the Genesee River and approximately 1,000 ft north of the Pinnacle Hills, which are between 100 to 200 ft higher in elevation than the Site (**Figure 1-1**). The site topography is nearly flat with a slight slope down towards the streets to the southwest and southeast. Surface water run-off is collected by a storm water/sewer system underlying the adjacent streets (MACTEC 2023a).

The area climate is characterized by moderately warm summers and cold winters. Mean monthly temperatures range from 26.2 degrees Fahrenheit (°F) in January to 72.3°F in July. Average annual precipitation is 35 inches. Average annual snowfall is 102 inches (National Oceanic and Atmospheric Administration 2024). There are no nearby water bodies that receive direct runoff from the Site. Surface drainage from the site generally flows to storm sewer drains and then to the municipal wastewater treatment system.

The Site is underlain by approximately 20 to 25 ft of overburden consisting of man-made fill overlying glacial deposits including glaciolacustrine (lacustrine) sediments and lodgement till (till). The fill material consists of re-worked silty sand and contains gravel, bricks, concrete, and wood. The fill material ranges in thickness from 0 to approximately 8 ft in and immediately around the Site, and, where present, overlies glaciolacustrine sediments (MACTEC 2011).

Glacial deposits are generally continuous across the Site, with some lateral variability in grain size composition (MACTEC 2011). Glaciolacustrine sediments consist of stratified clayey silt, sandy

silt, and silty clay interbedded with thin sand layers ranging from a few inches to a few ft thick. Lacustrine deposits overlie till and do not appear to contact bedrock. Till consists of angular dolostone fragments with occasional boulders in a silty clay matrix. Till overlies gravelly weathered bedrock that becomes more competent with depth. Bedrock at the Site consists of a low relief Silurian age dolostone of the Lockport Group, described as medium gray, hard, fine to medium grained, mostly featureless or with some zones of wavy carbonaceous laminae.

The hydrology beneath the Site consists of a shallow water table which is fairly flat; regionally, bedrock groundwater in the Rochester area flows to Lake Ontario. Groundwater at the Site is present in both overburden and bedrock, with depth to water between 5 and 8 ft below ground surface (bgs) in overburden; between 8 and 9 ft bgs in the overburden/weathered bedrock interface zone; and greater than 10 ft bgs bedrock. The direction of local groundwater flow is interpreted to be from the east and northeast to the west, southwest, and southeast (as influenced by the local sewer system) in both the shallow glacial deposits and the deep overburden/bedrock interface units (URS Corporation [URS] 2001).

1.2 INVESTIGATION HISTORY

The Site property and buildings were reportedly used as an automobile repair shop from approximately 1950 through 1969. From 1971 to 1993, the Site was occupied by Dinaburg Distributing, which operated a dry-cleaning supply company selling chemical solvents to various dry cleaners in the area (Sear-Brown Group, Inc. 1995). Trichloroethene (TCE) and tetrachloroethene (PCE) were stored in aboveground storage tanks located inside the north section of the Site building (URS 2001). As a result of Site operations, chlorinated solvents were released through spills and leaks to the ground surface both inside and outside the former building in the vicinity of the former Benton Street driveway. In addition, discharges of PCE, fuel oil/diesel, and Varsal (mineral spirits) had occurred at the Site (Empire Soils Investigations, Inc. 1994). Several field investigations at the Site identified high concentrations of chlorinated compounds representative of dry-cleaning solvents, specifically PCE, TCE, and their breakdown products, in Site soil and groundwater. The investigations are listed in **Table 1-1.**

The identified contaminants in soil at the Site are chlorinated compounds representative of dry-cleaning solvents, specifically PCE and TCE, with PCE occurring at higher concentrations. The highest contaminant concentrations were detected in shallow soil beneath the tank storage room at the back (north) of the former Dinaburg building, beneath a building extension adjacent to the Benton Street driveway, and beneath the adjacent driveways at the 350 and 338 Benton Street properties. Concentrations in soil generally decreased with depth in the vadose zone. Contamination also appeared to have migrated laterally away from entry points. Concentrations of PCE, TCE, *cis*-1,2-dichloroethene (DCE), 1,1-dichloroethane, xylene, and 1,1,1-trichloroethane in soil exceeded NYSDEC Unrestricted Use soil cleanup objectives (SCOs) (MACTEC 2011).

The primary contaminants of concern in groundwater are PCE and TCE, which were detected in overburden groundwater at concentrations exceeding the NYSDEC Class GA groundwater criteria (URS 2001). Contaminated groundwater was determined to flow away from the source areas in directions ranging primarily from southeast to west, as controlled by the predominant groundwater flow directions. PCE, TCE, 1,2-dichloroethene (total), and vinyl chloride were also detected in

bedrock groundwater, with concentrations at bedrock monitoring well MW-03C that exceed Class GA groundwater criteria.

1.3 REMEDIAL HISTORY

The following Interim Remedial Measures (IRMs) have been conducted at the Site:

- In 1999, NYSDEC installed a soil vapor extraction system to address potential indoor air contamination associated with soil vapor intrusion at two adjacent properties. The operation of the system was discontinued as part of the second IRM.

- In 2005, NYSDEC conducted a limited soil removal of 370 cubic yards and installed a multi-phase extraction (MPE) system that operated from 2006 to 2011. The MPE system included 18 MPE wells installed to the top of the till layer (10 to 15 ft bgs) and 3 extraction wells installed at the overburden/bedrock interface. A sub-slab depressurization system (SSDS) was also installed at an adjacent residence to address potential indoor air contamination by volatile organic compounds (VOCs) associated with soil vapor.

In 2011, the Site was subsequently divided into two operable units (OUs) as presented below. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate, or mitigate a release, threat of release, or exposure pathway resulting from the site contamination. The operable unites of the Site include the following:

- OU1: on-site soil (i.e., the primary source area)
- OU2: groundwater and soil vapor plumes attributed to the soil source area.

An ROD for OU1 was issued in March 2011, and the selected remedy was the implementation of an electrical resistance heating (ERH) system to address on-site source area soil (NYSDEC 2011). The ERH system, installed to the top of bedrock, operated from May to December 2015. The ERH remedy successfully remediated site soils to Residential Use SCOs. In addition, the ROD required the following ICs/ECs be implemented at the Site:

- An Environmental Easement for the property that, a) requires a periodic certification of ICs/ECs, b) allows the use and development of the property for residential use, and c) requires compliance with the NYSDEC-approved SMP.

- An SMP that includes an IC/EC Plan, a Monitoring Plan, and an Operation and Maintenance Plan.

Upon completion of the OU1 soil remedy, additional groundwater monitoring wells were installed off-site to evaluate the extent of the chlorinated VOC groundwater plume. Several rounds of groundwater samples were collected as part of the OU2 (groundwater) remedial investigation (RI) conducted in 2018 and 2019 (MACTEC 2020).

The ROD for OU2 was issued in March 2021 (NYSDEC 2021). The OU2 ROD recommended No Further Action with the following ICs/ECs to be implemented at the Site:

- Modification of the OU1 IC to add an Environmental Easement for the property that restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH).

- Maintaining the existing off-site Sub-slab depressurization system.

- An SMP to be integrated into the OU1 SMP.

An SMP (EA 2023) was prepared to manage the remaining contamination, which included soil, groundwater, and soil vapor. The remaining contamination in soil does not exceed Residential Use SCOs. Contaminants are present in groundwater at and in the vicinity of the Site at concentrations above NYSDEC Class GA standards. Soil vapor intrusion testing was conducted in 2005 and 2009, and the VOCs present in soil vapor led to the installation of a sub-slab depressurization system at an adjacent property. Future buildings constructed at the Site will require operation of an SSDS due to remaining groundwater contamination.

Following the implementation of the SMP, groundwater sampling is conducted annually at the Site. The groundwater monitoring network consists of 37 wells that are tested for VOCs, and 7 of those wells are tested for MNA parameters. This report documents the annual sampling for the year 2023.

2. FIELD ACTIVITIES

Field activities included monitoring well assessments/inspections, groundwater gauging, and sampling of the existing monitoring well network (**Table 2-1**). Monitoring well locations are presented on **Figure 1-2**. Daily field reports are provided in **Appendix A**. The site inspection checklist from 30 March 2023 is included in **Appendix B**. Field forms from the inspection and sample collection events are provided in **Appendix C**. Groundwater monitoring was conducted according to the Site Management Plan (EA 2023).

A summary of the field activities for 2023 are provided below:

- 30 March 2023—Site-wide inspection with NYSDEC and monitoring well assessment
- 27 July 2023—Site inspection and attempted delivery of access agreements
- 31 August 2023—Site inspection with property owner/manager
- 11-14 September 2023—Well maintenance, repair, and redevelopment
- 25-27 September 2023—Groundwater sampling.

2.1 SITE-WIDE INSPECTIONS

An annual site-wide inspection was conducted on 30 March 2023 and included an assessment of monitoring wells for general conditions; specifically, well casings, collars, labels, locks, covers, caps, risers, and annular spaces were inspected. An additional visual inspection of on-site garbage and debris was performed on 27 July 2023 and included an attempted delivery of access agreements to property owners. A third inspection was performed on 31 August 2023 while meeting with the property owner/manager. There were no severe weather conditions or emergencies during the year 2023, and therefore additional inspections were not conducted. The off-site SSDS is monitored by individual property owners and is not included in this report.

2.2 MONITORING WELL ASSESSMENT

Several monitoring wells were in disrepair during the annual site-wide inspection (i.e., missing/stripped bolts, missing j-plugs, covers missing, surface completions broken/cracked beyond use). Subsequent well maintenance activities were conducted during the annual groundwater monitoring event in September 2023 as presented in **Table 2-2** and on daily inspection reports included in **Appendix A**. Locks, J- plugs, and bolts were added to select wells and eyelets rethreaded. Six monitoring wells were redeveloped including MW-08K, MW-09S, MW-18S, MW-19S, MW-22K and MW-24K during the week of 11 September 2023.

2.3 GROUNDWATER GAUGING

Groundwater gauging was conducted on 25 September 2023. Groundwater levels were measured with a Heron® water level meter to the nearest 0.01 ft from a reference point marked on the top of the inner casing. Water levels and groundwater elevations are provided in **Table 2-1**. Overburden groundwater elevations and interpreted groundwater contours are presented on **Figure 2-1** and overburden/bedrock interface groundwater elevations and interpreted groundwater contours are presented on **Figure 2-2**. Groundwater elevations in overburden wells indicate overburden

groundwater primarily flowing north/northwest, but with some radial flow to the east and northeast. Groundwater elevations in overburden/bedrock interface wells indicate groundwater primarily flowing eastward toward the Site, with radial flow at the Site toward the south and west. Field forms are presented in **Appendix C**.

2.4 GROUNDWATER SAMPLING

Groundwater samples were collected from 33 of 37 monitoring wells using low-flow sampling procedures. Four of the monitoring wells were not sampled for various reasons: MW-01, MW-01A, and GWE-1 were paved over and inaccessible; and MW-11K was damaged at approximately 3.5 ft bgs. Water quality field parameters including temperature, pH, dissolved oxygen, conductivity, turbidity, and oxidation-reduction potential were monitored throughout purging and groundwater samples were collected when groundwater parameters had stabilized over three consecutive readings, indicating that formation water was being drawn. Quality assurance /quality control samples collected for groundwater samples included two matrix spike /matrix spike duplicates and two field duplicates. Each groundwater sample was collected for off-site laboratory analysis of VOCs by U.S. Environmental Protection Agency (EPA) Method 8260.

Seven wells (MW-03A, MW-03CA, MW-08K, MW-13K, MW-14KA, MW-19S, and MW-20S) representing the source area overburden/bedrock interface groundwater and shallow bedrock groundwater and downgradient overburden/interface groundwater, as well as the background well MW-8K, were sampled for monitored natural attenuation (MNA) parameters, including:

- Alkalinity by Standard Method 2320B
- Nitrate and Sulfate by Standard Method 300.0
- Chloride and Sulfide by Standard Method 4500S2 F
- Iron and manganese by EPA Method 6010D
- Ethene, ethane, methane, and Carbon Dioxide by EPA Method RSK-175
- Total organic carbon by Standard Method 5310B.

In addition to the SMP required sampling, microbial sampling was conducted at MW-13K, MW-03CA, and MW-20S with a standard bio-trap sampling method. The bio-traps were installed in September 2023 and collected in October 2023. The 3 samples were sent to Microbial Insights for analysis by the QuantArray®-Chlor method. The purpose of the analysis was to provide an evaluation of potential biodegradation of common chlorinated contaminants through anerobic and aerobic (co)metabolic pathways. Samples were collected from near source area wells MW-20S and MW-03CA and downgradient overburden/bedrock interface well MW-13K.

2.5 LABORATORY ANALYSIS

Samples were analyzed by SGS North America Inc. in Dayton, New Jersey. Laboratory results were validated by Environmental Data Services, LTD in accordance with NYSDEC DER-10 validation guidelines. Laboratory results are presented in **Appendix D**, and a Data Usability Summary Report is provided in **Appendix E**. Data was determined to be usable as qualified during data validation. No data was rejected, and analytical results for samples collected were considered valid and usable with qualifications as noted in the Data Usability Summary Report.

3. MONITORING RESULTS

Annual groundwater monitoring was conducted from 25 to 27 September 2023 and included measurement of water levels and collection and analysis of groundwater samples from 33 of 37 monitoring wells in accordance with the SMP (**Table 2-1**). Four monitoring wells were either inaccessible (MW-01, MW-01A, and GWE-1) or damaged (MW-11K). Monitoring well locations are presented on **Figure 1-2**. Daily field reports for groundwater monitoring are provided in **Appendix A**.

3.1 INSPECTION RESULTS

EA conducted multiple inspections to monitor the property owner's progress of cleaning up the Site. An excessive amount of on-site debris (recreational vehicles, piles of wood, garbage, and overground vegetation) was documented during the inspections of 30 March and 27 July 2023. By 31 August 2023, the inspection indicated that the property owner was cleaning up the property in preparation for the third quarter sampling. EA personnel met with the property owner on-site to locate the monitoring wells network and identify any monitoring well accessibility issues. No evidence of demolition or construction activities or disturbances to the Site was observed during the inspections. The usage of the property was in compliance with designated use as residential, restricted residential, or commercial.

3.2 GROUNDWATER RESULTS

Analytical results from the sampling event conducted during the reporting period (September 2023) are included in **Table 3-1** for VOCs, **Table 3-2** for MNA parameters, and **Table 3-3** for microbial population. Overburden groundwater chlorinated VOC concentrations from the September 2023 sampling event are depicted on **Figure 3-1** and overburden/bedrock interface chlorinated VOC concentrations are shown on **Figure 3-2**.

3.2.1 Volatile Organic Compound Results

VOCs were detected in 21 of the 33 monitoring wells sampled exceeding NYSDEC Class GA standards (6 New York Code of Rules and Regulations [NYCRR] Part 703.5 Water Quality Regulations, as presented in the Division of Water Technical and Operational Guidance Series 1.1.1, 1998, as amended). VOCs included 1,1-Dichloroethane, 1,1-Dichloroethene, *Cis*-1,2-DCE, PCE, *trans*-1,2-DCE, TCE, and/or vinyl chloride. The highest concentrations of the primary contaminants of concern (PCE and TCE and their degradation products *cis*-1,2-DCE and vinyl chloride) were as follows:

- PCE concentration of 37,100 µg/L detected at overburden well MW-20S, located in the southwestern corner of the Site near Benton Street.

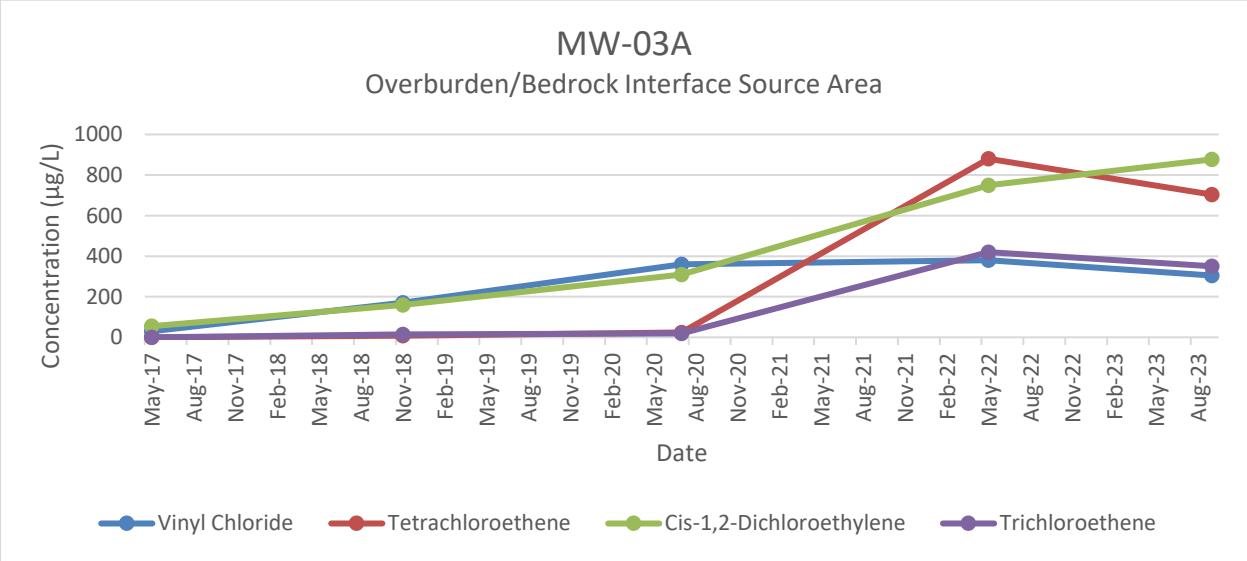
- TCE concentration of 3,170 µg/L detected at overburden/bedrock interface well MW-14KA, located at the eastern edge of the Site near adjacent property.

- *Cis*-1,2-DCE concentration of 2,800 µg/L detected at overburden/bedrock interface well MW-14KA, located at the eastern edge of the Site near adjacent property.

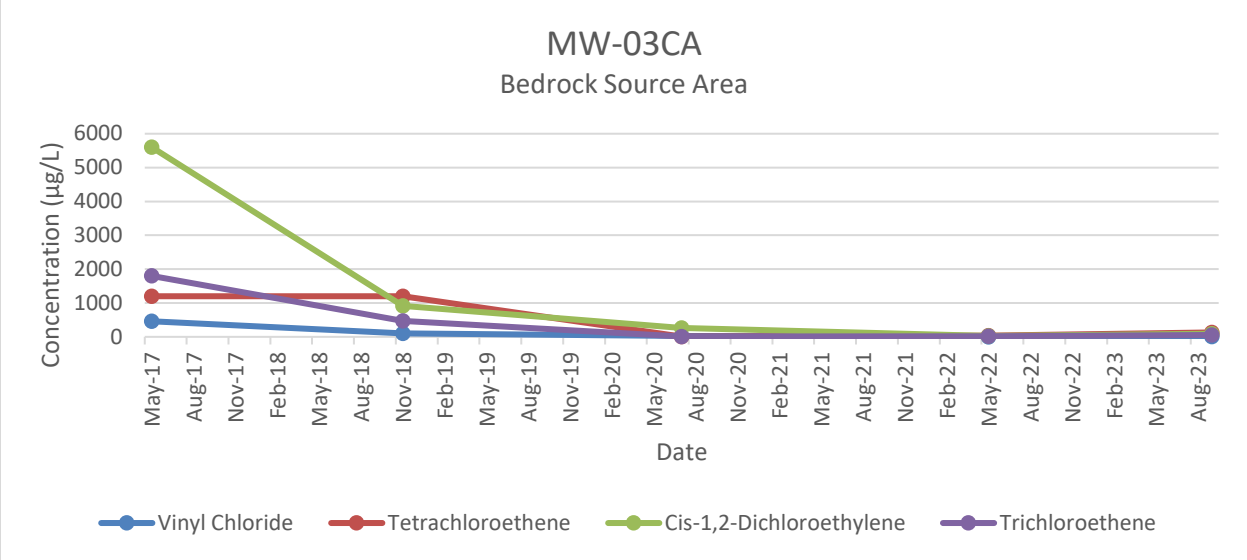
- Vinyl chloride concentration of 539 µg/L detected at overburden/bedrock interface well MW-13K, located north of the southern edge of the property near Benton Street.

Table 3-4 presents PCE, TCE, *cis*-1,2-DCE, and vinyl chloride concentrations in groundwater over time from May 2009 through September 2023. The Mann-Kendall Toolkit was used to statistically evaluate trends in PCE, TCE, and *cis*-1,2-DCE concentrations over time. Mann-Kendall plots are provided in **Appendix F**. A summary of PCE, TCE, *cis*-1,2-DCE, and vinyl chloride concentrations detected in select representative wells from the monitoring well network is provided below. Trend graphs are presented for each well with the available data post-ERH remediation, from May 2017 to September 2023. Electronic data covering the years 2019 and 2021 were not available.

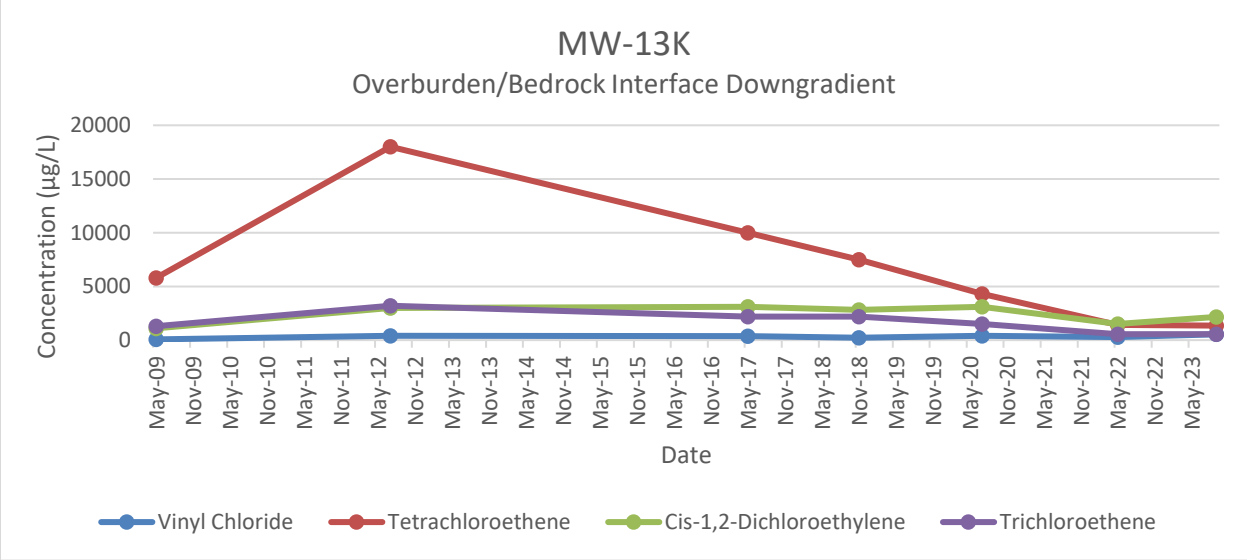
MW-03A: Overburden/bedrock interface monitoring well within the source area. Results from the Mann-Kendall Toolkit indicated concentration trends of no trend for PCE and TCE and an increasing trend for *cis*-1,2-DCE.



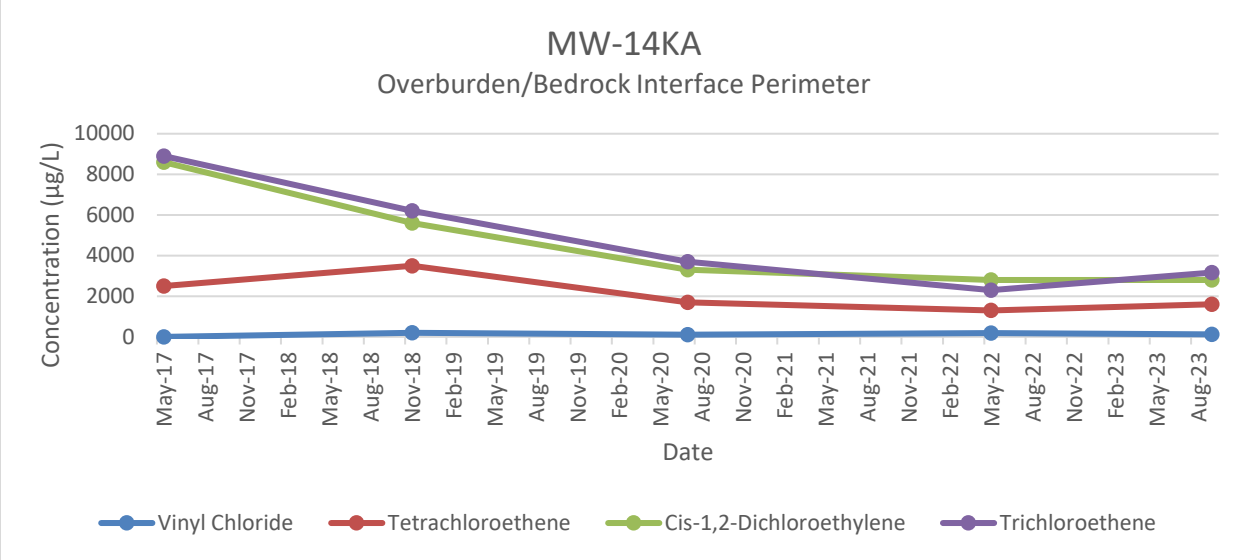
MW-03CA: Shallow bedrock monitoring well within the source area. Results from the Mann-Kendall Toolkit indicated no concentration trend for PCE, TCE, and *cis*-1,2-DCE.



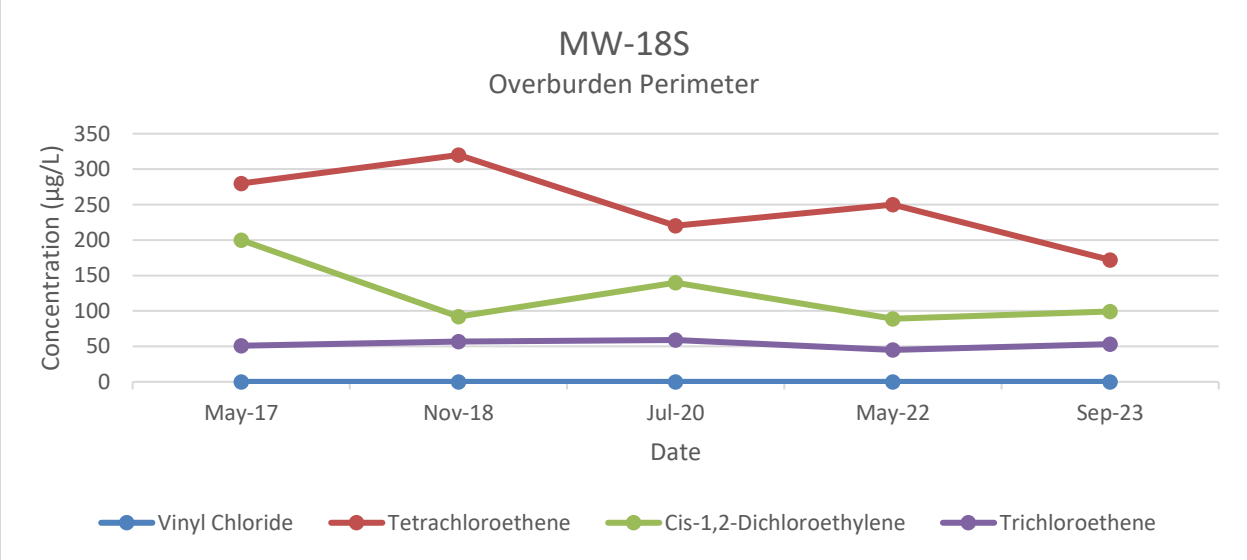
MW-13K: Overburden/bedrock interface monitoring well near the western/downgradient perimeter of the Site. Results from the Mann-Kendall Toolkit indicated concentration trends of probability decreasing for PCE and stable for TCE and *cis*-1,2-DCE.



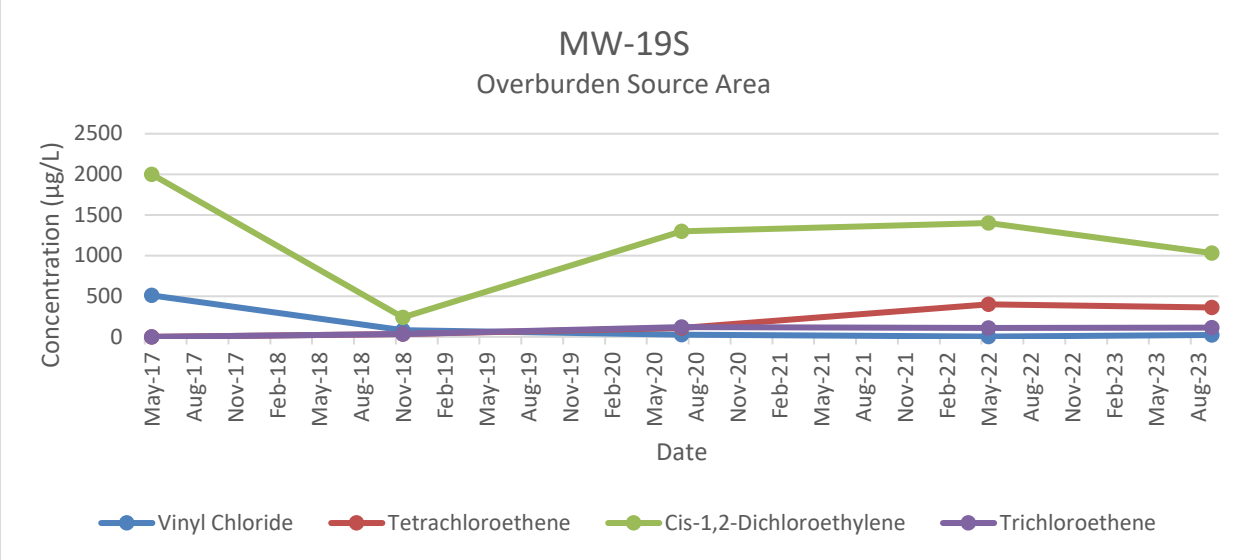
MW-14KA: Overburden/bedrock interface monitoring well near the eastern perimeter of the Site. Results from the Mann-Kendall Toolkit indicated stable concentration trends for PCE, TCE, and *cis*-1,2-DCE.



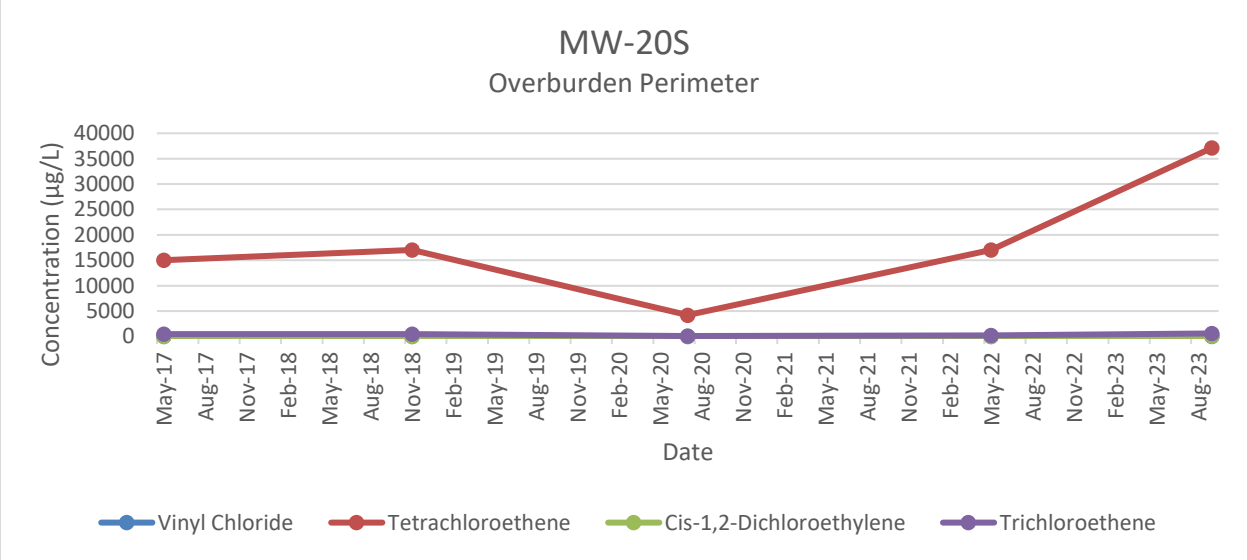
MW-18S: Overburden monitoring well along the northern perimeter of the source area. Results from the Mann-Kendall Toolkit indicated stable concentration trends for PCE, TCE, and *cis*-1,2-DCE.

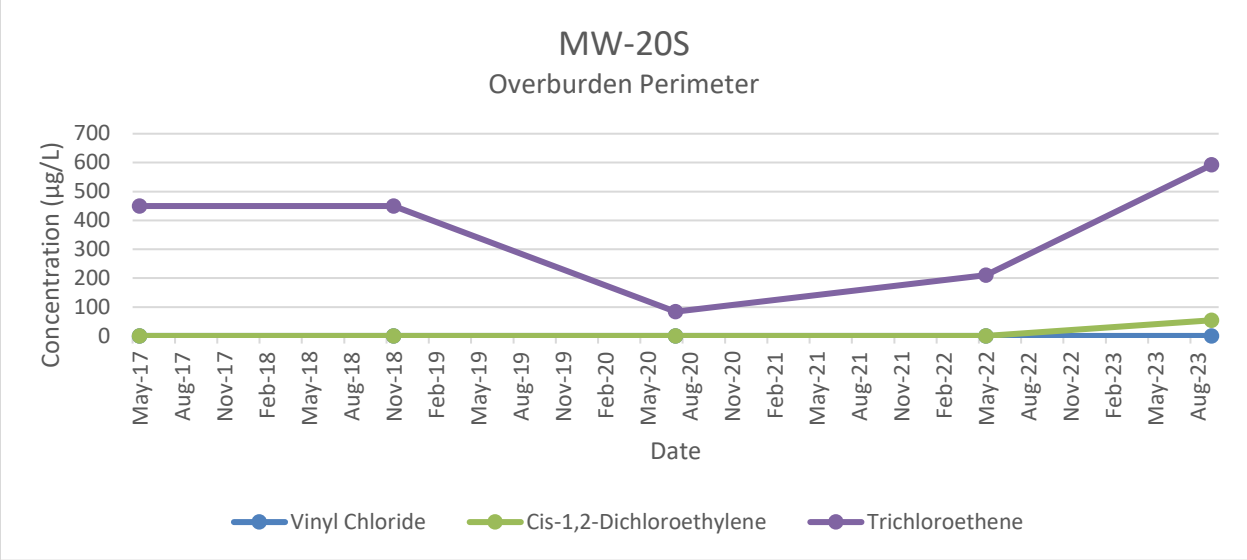


MW-19S: Overburden monitoring well in the source area. Results from the Mann-Kendall Toolkit indicated a stable concentration trend for *cis*-1,2-DCE. The Mann-Kendall evaluation did not include PCE and TCE because of lack of data (i.e., limit of detection).

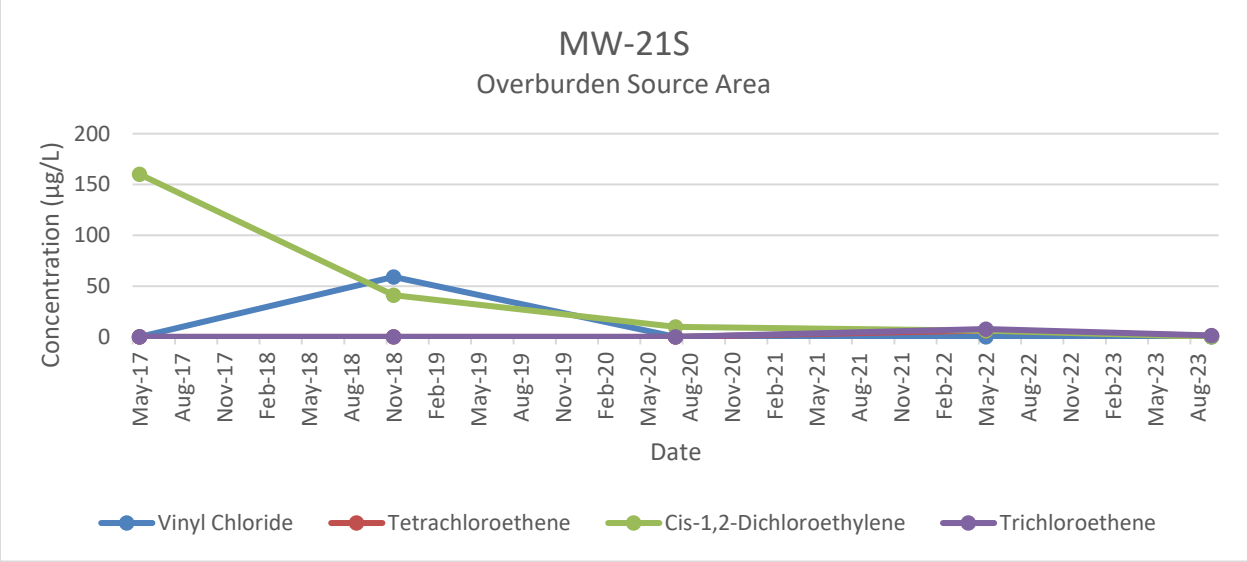


MW-20S: Overburden monitoring well near the southeast perimeter of the source area. Multiple graphs are provided for MW-20S for clarity of the data that may be difficult to interpret from one graph alone. Results from the Mann-Kendall Toolkit indicated no concentration trends for PCE and TCE. The Mann-Kendall evaluation did not include *cis*-1,2-DCE because of lack of data (i.e., limit of detection).





MW-21S: Overburden monitoring well within the source area. Results from the Mann-Kendall Toolkit indicated a decreasing concentration trend for *cis*-1,2-DCE. Mann-Kendall evaluation was not conducted for PCE and TCE because of lack of data (i.e., limit of detection).



Concentrations of chlorinated VOCs in most of the overburden wells and in the overburden/bedrock interface wells have shown a steady decrease since the ERH remedy was completed in 2015. The primary exception is the vicinity of MW-20S, where chlorinated VOC (primarily PCE) concentrations have fluctuated post-remediation but remain high (PCE at a concentration of 37,100 µg/L). Concentrations in the nearby overburden well and MW-19S and overburden/bedrock interface well MW-03A have also increased slightly over the last four years, although concentrations detected in MW-03A are a mixture of the four primary chlorinated compounds and concentrations in MW-19S are 68 percent *cis*-1,2-DCE. This is a possible indication that the PCE detected in MW-20S is migrating slowly to the north in overburden

groundwater but is also being broken down into degradation products through natural attenuation processes.

3.2.2 Monitored Natural Attenuation Results and Evaluation

As a secondary evaluation the EPA screening tool was used to complete preliminary screening for anaerobic degradation processes (**Table 3-5**). The screening tool uses field parameters and analytical data to determine the potential for biological reductive dechlorination at the site. EA utilized the screening assessment to further evaluate current site conditions. Following is the scoring rationale:

- 0–5 indicates *inadequate* evidence for anaerobic biodegradation
- 6–14 indicates *limited* evidence for anaerobic biodegradation
- 15–20 indicates *adequate* evidence for anaerobic biodegradation
- >20 indicates *strong* evidence for anaerobic biodegradation.

All wells sampled for natural attenuation parameters were used to determine the potential for reductive dechlorination at the Site. Scores range from 1 to 21 with 28% falling in the 0 to 5 bracket, 43% falling into 6 to 14 bracket, 14% falling into the 15 to 20 bracket, and 14 % falling in the greater than 20 scoring bracket. Based on the EPA screening tool, the evidence of anaerobic biodegradation ranges from the *inadequate* category up to the *strong* category, at the select wells. Inadequate evidence is seen at the background well and MW-20S, the well with the greatest concentration of PCE.

Approximately 70% of the select wells show limited evidence of anerobic biodegradation, and a closer inspection of the geochemistry data will provide the limiting factors of the biodegradation process. Degradation of organic contaminants in groundwater is accomplished by biochemical oxidation reactions where one compound (i.e., electron donor) loses electrons and is oxidized and the other compound (i.e., electron acceptor) receives electrons and is reduces. The compound that is reduces (i.e., receives or gains electrons) is termed as a terminal electron acceptor. Oxygen, nitrate, ferric iron, and sulfate minerals in the aquifer can serve as the terminal electron acceptors, and the presence of these terminal electron acceptors provides a better understanding of the limiting factors of biodegradation. Dissolved oxygen is the most preferred terminal electron acceptor relative to others used by microorganisms for the biodegradation of the contaminants. Since dissolved oxygen is greater than 0.5 milligram per liter (mg/L) for 6 of the 7 wells, the predominant microbial process is aerobic biodegradation. Nitrate is the next most preferred terminal electron acceptor after dissolved oxygen. The presence of nitrate less than 1 mg/L in 5 of the 7 wells indicates denitrification is occurring. Ferric iron is used as a terminal electron acceptor during anerobic biodegradation of organic carbon. The presence of Iron II greater than 1 mg/L in 4 of the 7 wells indicates Iron III reduction is occurring. Sulfate can be used as a terminal electron acceptor for anerobic degradation of organic contaminants. The presence of sulfate greater than 20 mg/L for all 7 wells indicates that the conditions are not reducing. In summary, the aquifer of the site exhibits signs of aerobic respiration, denitrification, and iron reduction. The limiting factor for the aquifer is dissolved oxygen that is preventing anaerobic biodegradation, which would lead to sulfate reduction. Sulfate reduction is expected to occur after the dissolved oxygen, nitrate, and ferric ion have been depleted.

Concentration trends indicate that chlorinated VOCs are continuing to decrease along the perimeter of the Site in groundwater in both the overburden and the overburden/bedrock interface. This indicates that natural attenuation processes are successfully lowering concentrations towards meeting the remedial goals of restoring the aquifer to pre-release conditions, to the extent practicable. However, with the continued high concentrations of VOCs in groundwater in the south/central portion of the Site, the time necessary to reach these goals remains indefinite.

3.2.3 Microbial Sampling

Results quantify *Dehalococcoides* (DHC), the only known bacterial group capable of complete reductive dechlorination of PCE and trichloroethylene (TCE) to ethene. The QuantArray-Chlor results shows that naturally occurring conditions for anaerobic dechlorination of PCE exist, in order of most favorable to least favorable, at MW-13K, MW-03CA, and MW-20S. Naturally occurring cell concentrations witnessed in sampling results for DHC at MW-13K, MW-03CA, and MW-20S are 7.64×10^3 cells per milliliter (cells/mL), 2.52×10^3 cells/mL, and $< 2.50 \times 10^1$ cells/mL, respectively. However, DHC concentrations were less than the concentration of 1×10^4 cells/mL screening criterion used to identify sites where biological reductive dechlorination is predicted to proceed. A summary of microbial sample results are provided in **Table 3-3**.

3.3 GROUNDWATER RESULTS, EFFECTIVENESS, AND PROTECTIVENESS

Concentrations of chlorinated VOCs in September 2023 continued to be detected in overburden and overburden/bedrock interface wells at concentrations above NYSDEC Class GA standards. Data from the groundwater sampling event completed during the reporting period exhibit mostly decreasing or stable trends in PCE and degradation product concentrations in overburden and bedrock groundwater, with the exception of results at and in the vicinity of MW-20S. PCE concentrations at overburden monitoring well MW-20S, which nearly coincides with a boundary line of the ERH area, have increased from 17,000 µg/L in 2018 and 2022 to 37,100 µg/L in 2023. The PCE concentration at this location is orders of magnitude greater than the ambient water quality standard of 5 µg/L for PCE (NYSDEC 1998). PCE at nearby overburden wells MW-17S and 19S and overburden/bedrock interface well MW-15K also increased in September 2023 as follows:

- PCE and TCE increasing at MW-17S by an order of magnitude from 33 µg/L PCE and 18 µg/L TCE in May 2022 to 114 µg/L PCE and 118 µg/LTCE in September 2023. However, the 2023 concentrations were similar to that detected in May 2017 (130 µg/L PCE and 110 µg/L TCE).

- PCE and TCE increasing at MW-19S from 34 µg/L PCE and 35 µg/L TCE in November 2018 to 360 µg/L PCE and 112 µg/L TCE in September 2023. However, the 2023 concentrations are similar to that detected in May 2022 (400 µg/L PCE and 110 µg/L TCE).

- PCE increasing at MW-15K from an estimated 220 µg/L in May 2022 to 404 µg/L in September 2023; however, concentrations were less than the May 2017 and November 2018 concentrations (estimated 900 and 990 µg/L).

The conditions of the aquifer indicate that approximately 70% of the selected wells have inadequate to limited evidence of anerobic biodegradation. As mentioned previously, the presence of dissolved oxygen is preventing anaerobic biodegradation and strong reducing conditions. The presence of PCE and TCE degradation products indicates that some biodegradation is likely occurring. Microbial sampling for select wells in October 2023 indicated presence of DHC at concentrations less than the screening criterion used to identify sites where biological reductive dechlorination is predicted to proceed. As expected, the monitoring wells (MW-13 and MW-03A) with a greater population of DHC also have stronger evidence for anerobic biodegradation – these wells show signs of denitrification and ferric iron reduction. Likewise, the monitoring well with the least population of DHC (MW-20S) also has inadequate evidence for anerobic biodegradation. Monitoring well MW-20S exhibited the greatest VOC concentration, and only denitrification was identified.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

The goal of the ROD (NYSDEC 2021) is to establish a remedial approach for the Site that protects human health and the environment. Therefore, groundwater quality must meet and satisfy the ambient water quality standard guidance for Class GA groundwater as defined by NYSDEC Technical and Operational Guidance Series 1.1.1 (NYSDEC 1998). Although the remedy continues to remain protective of human health, the remedy is not effective in reducing VOC concentrations to below NYSDEC Class GA standards in certain areas. Based on the continued high concentrations in groundwater in the south/central portion of the Site and current aquifer conditions, the time necessary to reach the remedial goals remains indefinite.

The remaining contaminants of concern are those that show concentrations above groundwater screening levels. The 2023 inspection confirmed compliance with all ICs and all aspects of ECs to be in good condition.

4.2 RECOMMENDATIONS

Based on site observations and groundwater analytical results, the following changes to site management activities are recommended. Recommendations will be incorporated into the SMP pending NYSDEC approval.

4.2.1 Sub-Slab Depressurization System Inspection

It is recommended that off-site SSDS inspections continue to be conducted by individual property owners to verify it is operating properly.

4.2.2 Site-Wide Inspection

It is recommended that the Site-wide inspection continue to be performed annually and conducted in conjunction with the annual groundwater monitoring event.

4.2.3 Groundwater Monitoring

It is recommended that groundwater sampling continue to be performed annually for the parameters identified in the 2023 SMP. Concentrations of chlorinated VOCs continue to be greater than NYSDEC Class GA standards. Although concentrations in most wells at the Site exhibit mostly decreasing or stable trends, PCE concentrations have increased in the vicinity of overburden monitoring well MW-20S, with a significant increase noted at MW-20S. Groundwater quality data generated in 2024 should also be reviewed to determine if concentrations diminish in the vicinity of MW-20S, or if additional remedial measures should be considered for this area of the Site.

4.2.4 Remedial System Optimization

According to the ROD for OU2 (NYSDEC 2021), additional remediation is expected if it appears that natural processes alone will not address the contamination. There is evidence of some biodegradation is occurring at the Site, but the rate of degradation cannot compete with the rate of rebound of PCE and TCE. The ROD of OU2 states that the contingency remedial action will dependent on the information collected, but it was anticipated that enhanced bioremediation would be the expected contingency remedial action (NYSDEC 2021). The rebound at monitoring well MW-20S suggests a remaining source in the soil. It is recommended that additional soil and groundwater data be collected and analyzed from the installation of new source area borings bedrock monitoring wells. This new data will be evaluated to provide options that would be effective in aiding remedial efforts. A remedial system optimization plan is forthcoming.

5. REFERENCES

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Tables

Table 1-1. Chronological List of Investigations and Record Documents

Report Title	Year
Phase I Environmental Site Assessment, Empire Soils Investigations, Inc	1994
Phase I Environmental Site Assessment Addendum, Empire Soils Investigations, Inc.	1994
Soil Vapor Survey Report, Marcor of New York, Inc.	1994
Basement Survey and Air Monitoring Report, Sear Brown Group, Inc.	1995
Environmental Site Characterization Report, Sear Brown Group, Inc	1995
Progress Report, Voluntary Investigation, Sear Brown Group, Inc.	1997
Voluntary Investigation Report, Sear Brown Group, Inc	1998
Soil Gas Survey Report, Galson Consulting	1999
Geoprobe Survey, Zebra Environmental Corp.	1999
EMFLUX® Passive, Non-Invasive Soil-Gas Survey, BEACON Environmental Services, Inc.	2000
Final Remedial Investigation Report, URS	2001
Pre-Design Investigation, URS	2004
Supplemental Soil Gas Sampling Letter Report, URS	2004
Site CAD Drawing, Site Plan Survey Information, URS	2006
Daily Field Activity Report, URS	2006
Final Remediation Report, URS	2007
Evaluation of Remedial System Performance – Soil Sampling Assessment Report, URS	2008
Data Assessment Summary, URS	2010
Evaluation of Remedial System Performance Memorandum, URS	2006 to 2010
Remedial Investigation/Feasibility Study Report, MACTEC	2011
Record of Decision, Operable Unit 1, NYSDEC	2011
Remedial Design Baseline Groundwater Sampling Letter Report, MACTEC	2012
Final Construction Completion Report OU1 Remedial Action, MACTEC	2017
Groundwater Sampling Report, MACTEC	2017
Remedial Investigation/Feasibility Report - Operable Unit 2, MACTEC	2020
Groundwater Sampling Report, MACTEC	2020
Record of Decision, Operable Unit 2, NYSDEC	2021
Site Management Plan, EA	2023

Notes:
EA = EA Engineering, P.C. and its affiliate EA Science and Technology
MACTEC = MACTEC Engineering and Geology, P.C
UPR = URS Corporation

Table 2-1. Monitoring Well Details

Location	Northing	Easting	Riser Elevation	Casing Elevation	Ground Elevation	Bedrock Elevation	Well Material	DTB (ft bgs)	Screen Length (ft)	Depth of Bedrock Encountered (ft)	Screened Zone	DTW[1] (ft BTOR)	GW Elevation (ft amsl)
MW-01	1145163.2	1412088.1	512.06	512.36	512.43	491.73	PVC	20.4	5	20.7	interface	NA	NA
MW-0lA	1145167.7	1412095.5	512.05	512.43	512.52	NA	PVC	8.0	5	NA	overburden	NA	NA
MW-03A	1145186.92	1412206.46	512.12	512.47	512.47	490.67	SS	24.5	5	21.8	interface	9.63	502.49
MW-03CA	1145190.51	1412204.76	511.78	512.38	512.38	489.48	SS	30.5	5	22.9	bedrock	11.99	499.79
MW-03D	1145187.694	1412200.493	511.84	512.54	512.53	490.53	PVC	51.65	10	22.0	bedrock	18.37	493.47
MW-04	1145082.5	1412145.9	512.01	512.38	512.3	489.2	PVC	24.1	15	23.1	overburden/interface	9.76	502.25
MW-05	1145059.9	1412071.4	512.49	512.78	512.72	489.12	PVC	24.6	15	23.6	overburden/interface	9.85	502.64
MW-06	1145321.2	1412126.4	510.54	511.01	511.01	491.11	PVC	20.6	15	19.9	overburden/interface	8.03	502.51
MW-8K	1145200.5	1412282.8	511.24	511.61	511.57	493.77	PVC	19.2	10	17.8	interface	8.35	502.89
MW-8S	1145202.9	1412286.3	512.00*	511.54	511.52	NA	PVC	16.0	10	NA	overburden	7.56	502.71
MW-9K	1145215.1	1412036.0	512.01	512.26	512.27	488.97	PVC	22.7	10	23.3	interface	9.48	502.53
MW-9S	1145222.5	1412032.2	511.32*	512.24	512.22	NA	PVC	16.0	10	NA	overburden	8.8	501.07
MW-10K	1145250.0	1412155.1	511.49	511.9	511.84	489.84	PVC	21.8	10	22.0	interface	8.59	502.90
MW-10S	1145262.1	1412157	511.58*	511.74	511.7	NA	PVC	16.0	10	NA	overburden	8.1	502.15
MW-11K	1145145.6	1412256.6	511.12	511.61	511.6	494.1	PVC	18.2	10	17.50	interface	NA	NA
MW-11S	1145152.0	1412267.5	511.36	511.58	511.6	NA	PVC	14.0	10	NA	overburden	8.26	503.10
MW-12K	1145115.8	1412213.0	511.67	512.09	512.09	492.79	PVC	19.5	5	19.3	interface	8.9	502.77
MW-12S	1145111.0	1412204.1	511.53	512.01	512.01	NA	PVC	14.0	5	NA	overburden	8.25	503.28
MW-13K	1145154.4	1412083.7	512.13	512.41	512.41	493.21	PVC	21.5	5	19.2	interface	9.34	502.79
MW-14KA	1145231.02	1412219.57	511.78	512.11	512.11	491.11	SS	24.4	5	21.0	interface	9.3	502.48
MW-15K	1145175.74	1412133	512.74	512.85	512.85	489.35	SS	25.3	5	23.5	interface	10.19	502.55
MW-15S	1145179.92	1412130.36	512.52	513.04	513.04	NA	SS	15.0	10	NA	overburden	7.77	504.75
MW-16K	1145216.5	1412228.09	511.83	512.26	512.26	489.06	SS	25.5	5	23.2	interface	9.26	502.57
MW-16S	1145252.27	1412212.19	512.48	512.69	512.69	NA	SS	15.5	10	NA	overburden	9.55	502.93
MW-17S	1145220.51	1412226.64	511.59	512.2	512.2	NA	SS	15.5	10	NA	overburden	8.11	503.48
MW-18S	1145233.7	1412171.5	512.74	513.02	513.02	NA	SS	15.0	10	NA	overburden	8.79	503.95
MW-19S	1145201.46	1412191.41	512.54	512.78	512.78	NA	SS	14.8	10	NA	overburden	8.63	503.91
MW-20S	1145162.95	1412199.08	512.67	512.93	512.93	NA	SS	15.4	10	NA	overburden	9.38	503.29
MW-21S	1145203.8	1412157.97	512.44	512.87	512.87	NA	SS	15.0	10	NA	overburden	8.44	504.00
PZ-22S	1145257.935	1412260.71	511.47	511.85	511.85	NA	PVC	12.3	10	NA	overburden	7.83	503.64
MW-22K	1145257.935	1412260.71	511.48	511.85	511.85	494.35	PVC	28.6	10	17.5	interface	8.98	502.50
MW-23K	1145137.253	1412014.991	511.69	512.41	512.41	490.91	PVC	31.0	10	21.5	interface	8.98	502.71
PZ-24S	1145137.6	1411903.275	512.06	512.46	512.44	NA	PVC	14.3	10	NA	overburden	8.35	503.71
MW-24K	1145137.6	1411903.275	512.06	512.46	512.44	494.44	PVC	28.3	10	18.0	interface	8.33	503.73
GWE-1	1145169.4	1412098.4	511.98	512.43	512.43	491.73	PVC	20.7	3	20.7	interface	NA	NA
GWE-2	1145152	1412176.3	511.94	512.35	512.35	489.35	PVC	23.0	3	23.0	interface	9.21	502.73
MPE-17	1145160.2	1412170.8	511.97	512.47	512.47	NA	PVC	13.5	7.5	NA	overburden	7.15	504.82

Table 2-1. Monitoring Well Details

Notes:
1. DTW was measured during the September 2023 sampling event.
*Elevation estimated due to riser being shortened during site maintenance
amsl = Above mean sea level
bgs = Below ground surface
BTOR = Below top of riser
DTB = Depth to bottom as installed
DTW = Depth to water
ft = Feet(foot)
NA = Not available
PVC = Polyvinyl Chloride
SS = Stainless Steel

Table 2-2. September 2023 Monitoring Well Maintenance

Well ID	Located (Y/N)	Accessible (Y/N)	Riser Pipe Elevation (ft amsl)	DTB (ft bgs)	Maintenance Notes	Corrective Measures
MW-01	N	N	512.06	NA	Paved over, could not locate	Marked possible location, did not dig
MW-01A	N	N	512.05	NA	Paved over, could not locate	Marked possible location, did not dig
MW-03A	Y	Y	512.12	21.4	Missing bolts	Replaced bolts
MW-03CA	Y	Y	511.78	33.1	Missing bolts	Replaced bolts
MW-03D	Y	Y	511.84	52.1	Missing lock	Added lock
MW-04	Y	Y	512.01	24.4	Missing lock	Replaced bolts and j-plug; requires lock
MW-05	Y	Y	512.49	24.8	Missing lock	Replaced bolts
MW-06	Y	Y	510.54	21.2	Missing well cap and lock	Replaced bolts and j-plug
MW-08K	Y	Y	511.24	24.4	High turbidity	Redeveloped well, replaced bolts
MW-08S	Y	Y	511.27	16.3	Broken well cap, missing lock	Shortened riser by approximately 1 inch (Needs to be resurveyed), replaced bolts and j-plug
MW-09K	Y	Y	512.01	23	Missing lock	Rethreaded 3 bolt seats; lock required
MW-09S	Y	N	511.87	NM	Could not open well cover	Shortened riser by approximately 2 inches (Needs to be resurveyed), replaced j-plug, redeveloped well
MW-10K	Y	Y	511.49	22.2	No casing cover, missing j-plug/cap	Well cover installed, sealed concrete pad
MW-10S	Y	Y	511.25	16.5	Hole in well cap	Shortened riser by approximately 1 inch (Needs to be resurveyed), replaced j-plug
MW-11K	Y	Y	511.12	NM	PVC broken ~3.5' down	Replaced bolts
MW-11S	Y	Y	511.36	14.2	Missing j-plug/cap and lock	Replaced bolts; lock required
MW-12K	Y	Y	511.67	19.9	Missing lock and bolts	Replaced bolts and j-plug
MW-12S	Y	Y	511.53	14.5	Missing lock	Lock required
MW-13K	Y	Y	512.13	21.8	Missing lock and j-plug	Replaced j-plug
MW-14KA	Y	Y	511.78	25.4	Missing lock	Added lock
MW-15K	Y	Y	512.74	25.3	Missing lock and j-plug	Added lock, replaced j-plug
MW-15S	Y	Y	512.52	15.2	Missing lock	Added lock
MW-16K	Y	Y	511.83	25.3	Missing lock	Added lock
MW-16S	Y	Y	512.48	15.3	Missing lock	Added lock
MW-17S	Y	Y	511.59	15.2	Missing lock	Added lock
MW-18S	Y	Y	512.74	15.2	Missing lock	Added lock, replaced j-plug, redeveloped well
MW-19S	Y	Y	512.54	15.2	Missing lock	Added lock, replaced bolts and j-plug, redeveloped well
MW-20S	Y	Y	512.67	15.2	Missing bolts	Replaced bolts
MW-21S	Y	Y	512.44	15.1	Missing lock	Added lock
PZ-22S	Y	N	511.47	NA	Car parked over well, missing lock	Lock required
MW-22K	Y	N	511.48	NA	Car parked over well, missing lock	Redeveloped well; lock required
MW-23K	Y	Y	511.69	31	Good condition	None
PZ-24S	N	N	512.06	12.7	Could not locate	Located
MW-24K	Y	Y	512.06	28.3	Could not locate	Located and redeveloped well
GWE-1	N	N	511.98	NA	Paved over, could not locate	Marked possible location, did not dig
GWE-2	Y	Y	511.94	22.5	Good condition	None
MPE-17	Y	Y	511.97	13.8	Good condition	None

Notes:
Monitoring well maintenance was performed during the September 2023 sampling event.
amsl = above mean sea level
bgs = below ground surface
DTB = Depth to bottom
ft = feet(foot)
ID = Identification
N = No
NA = Not available
NM = Not measured
Y = Yes

Table 3-1. Concentrations of VOCs in Groundwater

			Location ID	GWE-2	MPE-17	MW-03A	MW-03CA	MW-03D	MW-04	MW-04	MW-05	MW-06
			Sample Name	828103-GWE-2-09262023	828103-MPE-17-09262023	828103-MW-03A-09252023	828103-MW-03CA-09252023	828103-MW-03D-09272023	828103-MW-04-09262023	828103-DUP-02-09262023	828103-MW-05-09262023	828103-MW-06-09262023
			Parent Sample ID							828103-MW-04-09262023		
			Sample Date	9/26/2023	9/26/2023	9/25/2023	9/25/2023	9/27/2023	9/26/2023	9/26/2023	9/26/2023	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
VOCs (SW8260)												
1,1-Dichloroethane	5	µg/L		5.8	< 0.57 U	1	< 0.57 U	< 0.57 U	< 0.57 U	< 0.57 U	< 0.57 U	< 0.57 U
1,1-Dichloroethene	5	µg/L		1.3	< 0.59 U	4	0.6 J	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U
1,2,3-Trichlorobenzene	5	µg/L		< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
1,2,4-Trichlorobenzene	5	µg/L		< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
1,2-Dibromo-3-Chloropropane	0.04	µg/L		< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U
1,2-Dibromoethane (Ethylene Dibromide)	NSL	µg/L		< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U
1,2-Dichlorobenzene	3	µg/L		< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U
1,2-Dichloroethane	0.6	µg/L		< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
1,2-Dichloropropane	1	µg/L		< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
1,3-Dichlorobenzene	3	µg/L		< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U
1,4-Dichlorobenzene	3	µg/L		< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
2-Hexanone	50	µg/L		< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U
Acetone	50	µg/L		< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U
Benzene	1	µg/L		< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
Bromochloromethane	5	µg/L		< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U
Bromodichloromethane	50	µg/L		< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U
Bromoform	50	µg/L		< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U
Bromomethane	5	µg/L		< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U
Carbon Disulfide	60	µg/L		< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Carbon Tetrachloride	5	µg/L		< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U
Chlorobenzene	5	µg/L		< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Chloroethane	5	µg/L		< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U
Chloroform	7	µg/L		< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Chloromethane (Methyl Chloride)	NSL	µg/L		< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U
Cis-1,2-Dichloroethylene	5	µg/L		96.9	< 0.51 U	877	89.4	3.8	< 0.51 U	< 0.51 U	< 0.51 U	7.2
Cis-1,3-Dichloropropene	0.4	µg/L		< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U
Cyclohexane	NSL	µg/L		< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U
Dibromochloromethane	50	µg/L		< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Dichlorodifluoromethane	5	µg/L		< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Ethylbenzene	5	µg/L		< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L		< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U
M,P-Xylene (Sum Of Isomers)	NSL	µg/L		< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U
Methyl Acetate	NSL	µg/L		< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L		< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NSL	µg/L		< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U
Methylcyclohexane	NSL	µg/L		< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
Methylene Chloride	5	µg/L		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L		< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U
Styrene	5	µg/L		< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U
Tert-Butyl Methyl Ether	10	µg/L		< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L		74.8	15.8	704	130	1.4	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Toluene	5	µg/L		< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L		6.4	< 0.54 U	5.3	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U
Trans-1,3-Dichloropropene	0.4	µg/L		< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
Trichloroethylene (TCE)	5	µg/L		50.7	0.7 J	350	57.9	6.2	< 0.53 U	< 0.53 U	< 0.53 U	3.8
Trichlorofluoromethane	5	µg/L		< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U
Vinyl Chloride	2	µg/L		0.55 J	< 0.52 U	305	6.9	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U
Xylenes	5	µg/L		< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U

(1) NYSDEC Ambient Water Quality Standard (AWQS) Class GA (Standard/guidance values) (Technical and Operational Guidance Series [TOGS] 1.1.1).
µg/L = Microgram(s) per liter.
J = Concentration is estimated.
NSL = No screening level available.
NYSDEC = New York State Department of Environmental Conservation
TOC = Total organic carbon
U = Analyte not detected.
VOC = Volatile organic compound
Concentrations exceeding the screening level are shaded gray.

Table 3-1. Concentrations of VOCs in Groundwater

			Location ID	MW-08K	MW-08S	MW-09K	MW-09S	MW-10K	MW-10S	MW-11S	MW-12K	MW-12S
			Sample Name	828103-MW-08K-09252023	828103-MW-08S-09262023	828103-MW-09K-09262023	828103-MW-09S-09262023	828103-MW-10K-09262023	828103-MW-10S-09262023	828103-MW-11S-09262023	828103-MW-12K-09262023	828103-MW-12S-09262023
			Parent Sample ID									
			Sample Date	9/25/2023	9/26/2023	9/26/2023	9/26/2023	9/26/2023	9/26/2023	9/26/2023	9/26/2023	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
VOCs (SW8260)												
1,1-Dichloroethane	5	µg/L		< 0.57 U	< 0.57 U	< 0.57 U	< 0.57 U	1.7	< 0.57 U	< 0.57 U	< 0.57 U	< 0.57 U
1,1-Dichloroethene	5	µg/L		< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	1.9	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U
1,2,3-Trichlorobenzene	5	µg/L		< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
1,2,4-Trichlorobenzene	5	µg/L		< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
1,2-Dibromo-3-Chloropropane	0.04	µg/L		< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U
1,2-Dibromoethane (Ethylene Dibromide)	NSL	µg/L		< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U
1,2-Dichlorobenzene	3	µg/L		< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U
1,2-Dichloroethane	0.6	µg/L		< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
1,2-Dichloropropane	1	µg/L		< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
1,3-Dichlorobenzene	3	µg/L		< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U
1,4-Dichlorobenzene	3	µg/L		< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
2-Hexanone	50	µg/L		< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U
Acetone	50	µg/L		< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U
Benzene	1	µg/L		< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
Bromochloromethane	5	µg/L		< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U
Bromodichloromethane	50	µg/L		< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U
Bromoform	50	µg/L		< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U
Bromomethane	5	µg/L		< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U
Carbon Disulfide	60	µg/L		< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Carbon Tetrachloride	5	µg/L		< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U
Chlorobenzene	5	µg/L		< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Chloroethane	5	µg/L		< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U
Chloroform	7	µg/L		< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Chloromethane (Methyl Chloride)	NSL	µg/L		< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U
Cis-1,2-Dichloroethylene	5	µg/L		< 0.51 U	< 0.51 U	91.4	< 0.51 U	163	10.4	< 0.51 U	< 0.51 U	< 0.51 U
Cis-1,3-Dichloropropene	0.4	µg/L		< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U
Cyclohexane	NSL	µg/L		< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U
Dibromochloromethane	50	µg/L		< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Dichlorodifluoromethane	5	µg/L		< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Ethylbenzene	5	µg/L		< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L		< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U
M,P-Xylene (Sum Of Isomers)	NSL	µg/L		< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U
Methyl Acetate	NSL	µg/L		< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L		< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NSL	µg/L		< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U
Methylcyclohexane	NSL	µg/L		< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
Methylene Chloride	5	µg/L		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L		< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U
Styrene	5	µg/L		< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U
Tert-Butyl Methyl Ether	10	µg/L		< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L		< 0.56 U	< 0.56 U	27	< 0.56 U	< 0.56 U	3	< 0.56 U	< 0.56 U	< 0.56 U
Toluene	5	µg/L		< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L		< 0.54 U	< 0.54 U	0.88 J	< 0.54 U	2	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U
Trans-1,3-Dichloropropene	0.4	µg/L		< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
Trichloroethylene (TCE)	5	µg/L		< 0.53 U	< 0.53 U	21.8	< 0.53 U	496	12.5	< 0.53 U	5.1	< 0.53 U
Trichlorofluoromethane	5	µg/L		< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U
Vinyl Chloride	2	µg/L		< 0.52 U	< 0.52 U	10.3	< 0.52 U	0.64 J	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U
Xylenes	5	µg/L		< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U

(1) NYSDEC Ambient Water Quality Standard (AWQS) Class GA (Standard/guidance values) (Technical and Operational Guidance Series [TOGS] 1.1.1).
µg/L = Microgram(s) per liter.
J = Concentration is estimated.
NSL = No screening level available.
NYSDEC = New York State Department of Environmental Conservation
TOC = Total organic carbon
U = Analyte not detected.
VOC = Volatile organic compound
Concentrations exceeding the screening level are shaded gray.

Table 3-1. Concentrations of VOCs in Groundwater

			Location ID	MW-13K	MW-13K	MW-14KA	MW-15K	MW-15S	MW-16K	MW-16S	MW-17S	MW-18S
			Sample Name	828103-MW-13K-09252023	828103-DUP-01-09252023	828103-MW-14KA-09252023	828103-MW-15K-09252023	828103-MW-15S-09252023	828103-MW-16K-09272023	828103-MW-16S-09272023	828103-MW-17S-09272023	828103-MW-18S-09272023
			Parent Sample ID		828103-MW-13K-09252023							
			Sample Date	9/25/2023	9/25/2023	9/25/2023	9/25/2023	9/25/2023	9/27/2023	9/27/2023	9/27/2023	9/27/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
VOCs (SW8260)												
1,1-Dichloroethane	5	µg/L		4.2 J	3.5 J	< 5.7 U	8.7	< 0.57 U	< 0.57 U	< 0.57 U	< 0.57 U	< 0.57 U
1,1-Dichloroethene	5	µg/L		6.9	5	8.9 J	11.9	< 0.59 U	1	< 0.59 U	< 0.59 U	< 0.59 U
1,2,3-Trichlorobenzene	5	µg/L		< 2.5 U	< 2.5 U	< 5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
1,2,4-Trichlorobenzene	5	µg/L		< 2.5 U	< 2.5 U	< 5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
1,2-Dibromo-3-Chloropropane	0.04	µg/L		< 2.6 U	< 2.6 U	< 5.3 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U
1,2-Dibromoethane (Ethylene Dibromide)	NSL	µg/L		< 2.4 U	< 2.4 U	< 4.8 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U
1,2-Dichlorobenzene	3	µg/L		< 2.7 U	< 2.7 U	< 5.3 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U
1,2-Dichloroethane	0.6	µg/L		< 3 U	< 3 U	< 6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
1,2-Dichloropropane	1	µg/L		< 2.5 U	< 2.5 U	< 5.1 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
1,3-Dichlorobenzene	3	µg/L		< 2.7 U	< 2.7 U	< 5.4 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U
1,4-Dichlorobenzene	3	µg/L		< 2.5 U	< 2.5 U	< 5.1 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
2-Hexanone	50	µg/L		< 24 U	< 24 U	< 48 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U
Acetone	50	µg/L		< 15 U	< 15 U	< 31 U	< 3.1 U	3.9 J	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U
Benzene	1	µg/L		< 2.1 U	< 2.1 U	< 4.3 U	0.59	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
Bromochloromethane	5	µg/L		< 2.4 U	< 2.4 U	< 4.8 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U
Bromodichloromethane	50	µg/L		< 2.3 U	< 2.3 U	< 4.5 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U
Bromoform	50	µg/L		< 3.2 U	< 3.2 U	< 6.3 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U
Bromomethane	5	µg/L		< 8.2 U	< 8.2 U	< 16 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U
Carbon Disulfide	60	µg/L		< 9 U	< 9 U	< 18 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Carbon Tetrachloride	5	µg/L		< 2.8 U	< 2.8 U	< 5.5 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U
Chlorobenzene	5	µg/L		< 2.8 U	< 2.8 U	< 5.6 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Chloroethane	5	µg/L		< 3.6 U	< 3.6 U	< 7.3 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U
Chloroform	7	µg/L		< 2.5 U	< 2.5 U	< 5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Chloromethane (Methyl Chloride)	NSL	µg/L		< 3.8 U	< 3.8 U	< 7.6 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U
Cis-1,2-Dichloroethylene	5	µg/L		2170	1730	2800	231	2.5	320	26.8	1.9	99.3
Cis-1,3-Dichloropropene	0.4	µg/L		< 2.4 U	< 2.4 U	< 4.7 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U
Cyclohexane	NSL	µg/L		< 3.9 U	< 3.9 U	< 7.8 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U
Dibromochloromethane	50	µg/L		< 2.8 U	< 2.8 U	< 5.6 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Dichlorodifluoromethane	5	µg/L		< 2.8 U	< 2.8 U	< 5.6 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Ethylbenzene	5	µg/L		< 3 U	< 3 U	< 6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L		< 3.2 U	< 3.2 U	< 6.5 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U
M,P-Xylene (Sum Of Isomers)	NSL	µg/L		< 3.9 U	< 3.9 U	< 7.8 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U
Methyl Acetate	NSL	µg/L		< 4 U	< 4 U	< 8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L		< 14 U	< 14 U	< 27 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NSL	µg/L		< 24 U	< 24 U	< 49 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U
Methylcyclohexane	NSL	µg/L		< 3 U	< 3 U	< 6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
Methylene Chloride	5	µg/L		< 5 U	< 5 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L		< 3 U	< 3 U	< 5.9 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U
Styrene	5	µg/L		< 2.4 U	< 2.4 U	< 4.9 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U
Tert-Butyl Methyl Ether	10	µg/L		< 2.5 U	< 2.5 U	< 5.1 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L		1350	1290	1600	404	150	189	24.5	114	172
Toluene	5	µg/L		< 2.5 U	< 2.5 U	< 4.9 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L		14.9	11.7	13.5	1.6	< 0.54 U	2.9	< 0.54 U	< 0.54 U	0.74 J
Trans-1,3-Dichloropropene	0.4	µg/L		< 2.2 U	< 2.2 U	< 4.3 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
Trichloroethylene (TCE)	5	µg/L		556	451	3170	255	83.3	236	199	118	53.2
Trichlorofluoromethane	5	µg/L		< 2 U	< 2 U	< 4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U
Vinyl Chloride	2	µg/L		539	356	130	12.9	< 0.52 U	8.8	< 0.52 U	< 0.52 U	< 0.52 U
Xylenes	5	µg/L		< 3 U	< 3 U	< 5.9 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U

(1) NYSDEC Ambient Water Quality Standard (AWQS) Class GA (Standard/guidance values) (Technical and Operational Guidance Series [TOGS] 1.1.1).
µg/L = Microgram(s) per liter.
J = Concentration is estimated.
NSL = No screening level available.
NYSDEC = New York State Department of Environmental Conservation
TOC = Total organic carbon
U = Analyte not detected.
VOC = Volatile organic compound
Concentrations exceeding the screening level are shaded gray.

Table 3-1. Concentrations of VOCs in Groundwater

			Location ID	MW-19S	MW-20S	MW-21S	MW-22K	MW-23K	MW-24K	PZ-22S	PZ-24S
			Sample Name	828103-MW-19S-09252023	828103-MW-20S-09252023	828103-MW-21S-09272023	828103-MW-22K-09262023	828103-MW-23K-09262023	828103-MW-24K-09262023	828103-PZ-22S-09262023	828103-PZ-24S-09262023
			Parent Sample ID								
			Sample Date	9/25/2023	9/25/2023	9/27/2023	9/26/2023	9/26/2023	9/26/2023	9/26/2023	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
VOCs (SW8260)											
1,1-Dichloroethane	5	µg/L		< 0.57 U	< 57 U	< 0.57 U	< 0.57 U	< 0.57 U	< 0.57 U	< 0.57 U	< 0.57 U
1,1-Dichloroethene	5	µg/L		< 0.59 U	< 59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U
1,2,3-Trichlorobenzene	5	µg/L		< 0.5 U	< 50 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
1,2,4-Trichlorobenzene	5	µg/L		< 0.5 U	< 50 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
1,2-Dibromo-3-Chloropropane	0.04	µg/L		< 0.53 U	< 53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U
1,2-Dibromoethane (Ethylene Dibromide)	NSL	µg/L		< 0.48 U	< 48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U
1,2-Dichlorobenzene	3	µg/L		< 0.53 U	< 53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U
1,2-Dichloroethane	0.6	µg/L		< 0.6 U	< 60 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
1,2-Dichloropropane	1	µg/L		< 0.51 U	< 51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
1,3-Dichlorobenzene	3	µg/L		< 0.54 U	< 54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U
1,4-Dichlorobenzene	3	µg/L		< 0.51 U	< 51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
2-Hexanone	50	µg/L		< 4.8 U	< 480 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U	< 4.8 U
Acetone	50	µg/L		< 3.1 U	< 310 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U	< 3.1 U
Benzene	1	µg/L		< 0.43 U	< 43 U	0.52	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
Bromochloromethane	5	µg/L		< 0.48 U	< 48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U
Bromodichloromethane	50	µg/L		< 0.45 U	< 45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.45 U
Bromoform	50	µg/L		< 0.63 U	< 63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U
Bromomethane	5	µg/L		< 1.6 U	< 160 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U
Carbon Disulfide	60	µg/L		< 1.8 U	< 180 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Carbon Tetrachloride	5	µg/L		< 0.55 U	< 55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U	< 0.55 U
Chlorobenzene	5	µg/L		< 0.56 U	< 56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Chloroethane	5	µg/L		< 0.73 U	< 73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U
Chloroform	7	µg/L		< 0.5 U	< 50 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Chloromethane (Methyl Chloride)	NSL	µg/L		< 0.76 U	< 76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U	< 0.76 U
Cis-1,2-Dichloroethylene	5	µg/L		1030	54.2 J	< 0.51 U	18.6	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
Cis-1,3-Dichloropropene	0.4	µg/L		< 0.47 U	< 47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.47 U
Cyclohexane	NSL	µg/L		< 0.78 U	< 78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U
Dibromochloromethane	50	µg/L		< 0.56 U	< 56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Dichlorodifluoromethane	5	µg/L		< 0.56 U	< 56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Ethylbenzene	5	µg/L		< 0.6 U	< 60 U	0.67 J	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L		< 0.65 U	< 65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U
M,P-Xylene (Sum Of Isomers)	NSL	µg/L		< 0.78 U	< 78 U	1	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U
Methyl Acetate	NSL	µg/L		< 0.8 U	< 80 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L		< 2.7 U	< 270 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NSL	µg/L		< 4.9 U	< 490 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U
Methylcyclohexane	NSL	µg/L		< 0.6 U	< 60 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
Methylene Chloride	5	µg/L		< 1 U	< 100 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L		< 0.59 U	< 59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U
Styrene	5	µg/L		< 0.49 U	< 49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U
Tert-Butyl Methyl Ether	10	µg/L		< 0.51 U	< 51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L		360	37100	0.95 J	2.4	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U
Toluene	5	µg/L		< 0.49 U	< 49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L		14.8	< 54 U	2.4	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.54 U
Trans-1,3-Dichloropropene	0.4	µg/L		< 0.43 U	< 43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
Trichloroethylene (TCE)	5	µg/L		112	592	1.2	3.8	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U
Trichlorofluoromethane	5	µg/L		< 0.4 U	< 40 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U	< 0.4 U
Vinyl Chloride	2	µg/L		23.3	< 52 U	< 0.52 U	0.77 J	< 0.52 U	< 0.52 U	< 0.52 U	< 0.52 U
Xylenes	5	µg/L		< 0.59 U	< 59 U	1	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U	< 0.59 U

(1) NYSDEC Ambient Water Quality Standard (AWQS) Class GA (Standard/guidance values) (Technical and Operational Guidance Series [TOGS] 1.1.1).
µg/L = Microgram(s) per liter.
J = Concentration is estimated.
NSL = No screening level available.
NYSDEC = New York State Department of Environmental Conservation
TOC = Total organic carbon
U = Analyte not detected.
VOC = Volatile organic compound
Concentrations exceeding the screening level are shaded gray.

Table 3-2. Concentrations of MNA Parameters in Groundwater

			Location ID	MW-03A	MW-03CA	MW-08K	MW-13K	MW-13K
			Sample Name	828103-MW-03A-09252023	828103-MW-03CA-09252023	828103-MW-08K-09252023	828103-MW-13K-09252023	828103-DUP-01-09252023
			Parent Sample ID					828103-MW-13K-09252023
			Sample Date	9/25/2023	9/25/2023	9/25/2023	9/25/2023	9/25/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**Result**	**Result**	**Result**	**Result**	**Result**
Anions (SM4500S-F/SW9056)								
Sulfide (SM4500S-F)	0.05	mg/L		< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U
Chloride (As Cl) (SW9056)	250	mg/L		128	180	102	232	204
Sulfate (As SO4) (SW9056)	250	mg/L		81.7	117	41.3	88.6	104
Nitrogen								
Nitrogen, Nitrite (SM4500B)	1	mg/L		< 0.003 U	< 0.003 U	0.02	< 0.003 U	< 0.003 U
Nitrogen, Nitrate-Nitrite (EPA 353.2)	NSL	mg/L		< 0.09 U	< 0.09 U	14.7	< 0.09 U	< 0.09 U
Nitrogen, Nitrate (As N) (Calculated)	10	mg/L		< 0.093 U	< 0.093 U	14.7	< 0.093 U	< 0.093 U
Total Metals (SW6010D)								
Iron	300	µg/L		1540	1090	636	1160	1170
Manganese	300	µg/L		41.8	38.2	428	89.2	85.5
Dissolved Gases (RSK-175)								
Carbon Dioxide	NSL	µg/L		5770	5500	6330	7010	9560
Ethane	NSL	µg/L		1.6	< 0.14 U	< 0.14 U	10.4	7.53
Ethene	NSL	µg/L		34.3	0.53	< 0.16 U	34.5	25
Methane	NSL	µg/L		56.4	4.49	0.19	267	173
Alkalinity (SM2320B)								
Alkalinity, Total (As $CaCO_3$)	NSL	mg/L		341	322	319	372	379
TOC (SM5310B)								
Total Organic Carbon	NSL	mg/L		4.7	1.5	1.3	2.5	1.9

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µg/L = Microgram(s) per liter.
mg/L = Miligram(s) per liter.
J = Concentration is estimated.
MNA = Monitored natural attenuation
NSL = No screening level available.
NYSDEC = New York State Department of Environmental Conservation
TOC = Total organic carbon
U = Analyte not detected.
Concentrations exceeding the screening level are shaded gray.

Table 3-2. Concentrations of MNA Parameters in Groundwater

			Location ID	MW-14KA	MW-19S	MW-20S
			Sample Name	828103-MW-14KA-09252023	828103-MW-19S-09252023	828103-MW-20S-09252023
			Parent Sample ID			
			Sample Date	9/25/2023	9/25/2023	9/25/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**Result**	**Result**	**Result**
Anions (SM4500S-F/SW9056)						
Sulfide (SM4500S-F)	0.05	mg/L		< 0.48 U	< 0.48 U	< 0.48 U
Chloride (As Cl) (SW9056)	250	mg/L		131	8.2	117
Sulfate (As SO4) (SW9056)	250	mg/L		94.4	47.9	84.3
Nitrogen						
Nitrogen, Nitrite (SM4500B)	1	mg/L		< 0.003 U	0.13	0.02
Nitrogen, Nitrate-Nitrite (EPA 353.2)	NSL	mg/L		< 0.09 U	5.5	0.65
Nitrogen, Nitrate (As N) (Calculated)	10	mg/L		< 0.093 U	5.4	0.62
Total Metals (SW6010D)						
Iron	300	µg/L		967	1080	32.1
Manganese	300	µg/L		39.6	69.6	61.8
Dissolved Gases (RSK-175)						
Carbon Dioxide	NSL	µg/L		7200	14400	7450
Ethane	NSL	µg/L		1.3	0.14 J	< 0.14 U
Ethene	NSL	µg/L		9.84	1.5	< 0.16 U
Methane	NSL	µg/L		48.5	0.94	0.46
Alkalinity (SM2320B)						
Alkalinity, Total (As $CaCO_3$)	NSL	mg/L		326	413	426
TOC (SM5310B)						
Total Organic Carbon	NSL	mg/L		3	5.8	4.8

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µg/L = Microgram(s) per liter.
mg/L = Miligram(s) per liter.
J = Concentration is estimated.
MNA = Monitored natural attenuation
NSL = No screening level available.
NYSDEC = New York State Department of Environmental Conservation
TOC = Total organic carbon
U = Analyte not detected.
Concentrations exceeding the screening level are shaded gray.

Table 3-3. Results for Microbical Sampling in Groundwater

Location ID	MW-13K	MW-03CA	MW-20S
Sample Name	828103-MW-13K-10262023	828103-MW-03CA-10262023	828103-MW-20S-10262023
Parent Sample ID			
Sample Date	10/26/2023	10/26/2023	10/26/2023
Analyte	**Result**	**Result**	**Result**
Reducive Dechlorination			
Dehalococcoides (DHC)	**7.64E+03**	**2.51E+03**	<2.50E+01
tceA Reductase (TCE)	**4.98E+02**	**4.43E+01**	<2.50E+01
BAV1 Vinyl Chloride Reductase (BVC)	**1.19E+02**	**5.84E+01**	<2.50E+01
Vinyl Chloride Reductase (VCR)	**8.92E+01**	**6.79E+02**	<2.50E+01
Dehalobacter spp. (DHBt)	**8.61E+04**	**3.52E+04**	<2.50E+02
Dehalobacter DCM (DCM)	<2.5E+02	<2.5E+02	<2.50E+02
Dehalogenimona s spp. (DHG)	**1.57E+03**	**1.88E+04**	<2.50E+02
cer A Reductase (CER)	<2.50E+02	<2.50E+02	<2.50E+02
trans -1,2-DCE Reductase (TDR)	<2.50E+02	<2.50E+02	<2.50E+02
Desulfitobacterium spp. (DSB)	**1.64E+04**	**3.82E+04**	<2.50E+02
Dehalobium chlorocoercia (DECO)	**2.56E+04**	**8.16E+03**	**2.00E+03**
Desulfuromonas spp. (DSM)	<2.50E+02	<2.50E+02	**6.88E+01 (J)**
PCE Reductase (PCE-1)	<2.50E+02	<2.50E+02	<2.50E+02
PCE Reductase (PCE-2)	**4.01E+04**	**5.39E+03**	<2.50E+02
Chloroform Reductase (CFR)	<2.50E+02	<2.50E+02	<2.50E+02
1,1 DCA Reductase (DCA)	<2.50E+02	<2.50E+02	<2.50E+02
1,2 DCA Reducatase (DCAR)	<2.50E+02	<2.50E+02	<2.50E+02
Aerobic (Co)Metabolic			
Soluble Methane Monooxygenase (SMMO)	<2.50E+02	<2.50E+02	<2.50E+02
Toluene Dioxygenase (TOD)	<2.50E+02	<2.50E+02	<2.50E+02
Phenol Hydroxylase (PHE)	**1.48E+05**	**2.85E+04**	**1.27E+05**
Trichlorobnzene Dioxygenase (TCBO)	<2.50E+02	<2.50E+02	<2.50E+02
Toluene Monooxygenase 2 (RDEG)	**1.44E+05**	**2.93E+04**	**1.55E+05**
Toluene Monooxygenase (RMO)	<2.50E+02	**1.35E+03**	<2.50E+02
Ethene Monooxygenase (EtnC)	**3.50E+03**	**2.47E+03**	<2.50E+02
Epoxalkane Transferasc (EtnE)	**5.44E+03**	<2.50E+02	**1.23E+04**

Table 3-3. Results for Microbical Sampling in Groundwater

Location ID	MW-13K	MW-03CA	MW-20S
Sample Name	828103-MW-13K-10262023	828103-MW-03CA-10262023	828103-MW-20S-10262023
Parent Sample ID			
Sample Date	10/26/2023	10/26/2023	10/26/2023
Analyte	**Result**	**Result**	**Result**
Dichloromethane Dehalogenase (DCMA)	<2.50E+02	<2.50E+02	<2.50E+02

Table 3-3. Results for Microbical Sampling in Groundwater

Location ID	MW-13K	MW-03CA	MW-20S
Sample Name	828103-MW-13K-10262023	828103-MW-03CA-10262023	828103-MW-20S-10262023
Parent Sample ID			
Sample Date	10/26/2023	10/26/2023	10/26/2023
Analyte	**Result**	**Result**	**Result**
Other			
Total Eubacteria (EBAC)	**4.55E+08**	**4.85E+06**	**3.43E+07**
Sulfate Reducing Bacteria (APS)	**2.99E+05**	**4.09E+05**	**1.52E+05**
Methanogens (MGN)	**1.21E+02 (J)**	**3.84E+03**	**1.28E+01 (J)**

Notes:

< = Results Not Detected

J = Estimated gene copies Bblow project quantity limit but above laboraory quantity limit

Bold values indiate a value greater than method detection limits.

Table 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden				
			Location ID	MPE-17				
			Sample Name	828103-MPE17010	828103-MPE17012	828103-MPE17012	828103-MPE17012	828103-MPE-17-09262023
			Parent Sample					
			Sample Date	7/11/2012	2/14/2019	7/16/2020	5/26/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**				
1,1,1-Trichloroethane (TCA)	5	µg/L		1.3	< 0.82 U	< 0.82 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L		1	< 0.38 U	< 0.38 U	< 1 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L		0.78 J	< 0.29 U	< 0.29 U	< 1 UJ	< 0.59 U
Acetone	50	µg/L		< 0.98 U	3.1 J	< 3.0 U	NA	< 3.1 U
Benzene	1	µg/L		< 0.21 U	< 0.41 U	< 0.41 U	NA	< 0.43 U
Bromodichloromethane	50	µg/L		< 0.2 U	< 0.39 U	< 0.39 U	< 1 UJ	< 0.45 U
Carbon Disulfide	60	µg/L		< 0.2 U	< 0.19 U	< 0.19 U	< 1 UJ	< 1.8 U
Chloroform	7	µg/L		0.28 J	< 0.34 U	< 0.34 U	< 1 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L		1.4	< 0.81 U	< 0.81 U	< 1 UJ	< 0.51 U
Ethylbenzene	5	µg/L		< 0.2 U	< 0.74 U	< 0.74 U	NA	< 0.6 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L		< 0.51 U	< 1.3 U	< 1.3 U	NA	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L		**9**	**7.9**	**10**	**7.2 J**	**15.8**
Trans-1,2-Dichloroethene	5	µg/L		< 0.2 U	< 0.9 U	< 0.90 U	< 1 UJ	< 0.54 U
Trichloroethylene (TCE)	5	µg/L		3.9	0.49 J	0.6 J	0.28 J	0.7 J
Vinyl Chloride	2	µg/L		< 0.23 U	< 0.9 U	< 0.90 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.
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 3-4. Historical VOCs in Groundwater

		Sample Depth	Overburden				
		Location ID	MW-08S				
		Sample Name	828103-MW08S1117	828103-MW08S011	828103-MW08S011	828103-MW08S011	828103-MW-08S-09262023
		Parent Sample					
		Sample Date	5/24/2017	11/27/2018	7/15/2020	5/26/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**	**VOC Method SW8260**				
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.82 U	< 0.82 U	< 0.82 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.38 U	< 0.38 U	< 0.38 U	< 1 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 0.29 U	< 0.29 U	< 0.29 U	< 1 UJ	< 0.59 U
Acetone	50	µg/L	< 3 U	< 3 U	< 3.0 U	NA	< 3.1 U
Benzene	1	µg/L	< 0.41 U	< 0.41 U	< 0.41 U	NA	< 0.43 U
Bromodichloromethane	50	µg/L	< 0.39 U	< 0.39 U	< 0.39 U	< 1 UJ	< 0.45 U
Carbon Disulfide	60	µg/L	< 0.19 U	< 0.19 U	< 0.19 U	< 1 UJ	< 1.8 U
Chloroform	7	µg/L	< 0.34 U	< 0.34 U	< 0.34 U	< 1 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	< 0.81 U	< 0.81 U	< 0.81 U	< 1 UJ	< 0.51 U
Ethylbenzene	5	µg/L	< 0.74 U	< 0.74 U	< 0.74 U	NA	< 0.6 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 1.3 U	< 1.3 U	NA	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L	< 0.36 U	< 0.36 U	< 0.36 U	< 1 UJ	< 0.56 U
Trans-1,2-Dichloroethene	5	µg/L	< 0.9 U	< 0.9 U	< 0.90 U	< 1 UJ	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	< 0.46 U	< 0.46 U	< 0.46 U	< 1 UJ	< 0.53 U
Vinyl Chloride	2	µg/L	< 0.9 U	< 0.9 U	< 0.90 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.
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 3-4. Historical VOCs in Groundwater

		Sample Depth	Overburden			
		Location ID	MW-09S			
		Sample Name	828103-MW09S1177	828103-MW9S5012	828103-MW09S012	828103-MW-09S-09262023
		Parent Sample				
		Sample Date	5/24/2017	11/28/2018	7/15/2020	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**	**VOC Method SW8260**			
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.82 U	< 0.82 U	< 0.82 U	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.38 U	< 0.38 U	< 0.38 U	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 0.29 U	< 0.29 U	< 0.29 U	< 0.59 U
Acetone	50	µg/L	< 3 U	< 3 U	< 3.0 U	< 3.1 U
Benzene	1	µg/L	< 0.41 U	< 0.41 U	< 0.41 U	< 0.43 U
Bromodichloromethane	50	µg/L	< 0.39 U	< 0.39 U	< 0.39 U	< 0.45 U
Carbon Disulfide	60	µg/L	< 0.19 U	< 0.19 U	< 0.19 U	< 1.8 U
Chloroform	7	µg/L	< 0.34 U	< 0.34 U	< 0.34 U	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	< 0.81 U	< 0.81 U	< 0.81 U	< 0.51 U
Ethylbenzene	5	µg/L	< 0.74 U	< 0.74 U	< 0.74 U	< 0.6 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 1.3 U	< 1.3 U	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L	< 0.36 U	< 0.36 U	< 0.36 U	< 0.56 U
Trans-1,2-Dichloroethene	5	µg/L	< 0.9 U	< 0.9 U	< 0.90 U	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	< 0.46 U	< 0.46 U	< 0.46 U	< 0.53 U
Vinyl Chloride	2	µg/L	< 0.9 U	< 0.9 U	< 0.90 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 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden				
			Location ID	MW-10S				
			Sample Name	828103-MW10S1117	828103-MW10S012	828103-MW10S012	828103-MW10S012	828103-MW-10S-09262023
			Parent Sample					
			Sample Date	5/25/2017	11/28/2018	7/14/2020	5/25/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**				
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.82 U	< 0.82 U	< 0.82 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.38 U	< 0.38 U	< 0.38 U	< 1 U	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 0.29 U	< 0.29 U	< 0.29 U	< 1 U	< 0.59 U
Acetone	50	µg/L	< 3 U	< 3 U	< 3.0 U	NA	< 3.1 U
Benzene	1	µg/L	< 0.41 U	< 0.41 U	< 0.41 U	NA	< 0.43 U
Bromodichloromethane	50	µg/L	< 0.39 U	< 0.39 U	< 0.39 U	< 1 U	< 0.45 U
Carbon Disulfide	60	µg/L	< 0.19 U	< 0.19 U	< 0.19 U	< 1 U	< 1.8 U
Chloroform	7	µg/L	< 0.34 U	< 0.34 U	< 0.34 U	< 1 U	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	**5.6**	1.3	2.7	1.1	**10.4**
Ethylbenzene	5	µg/L	< 0.74 U	< 0.74 U	< 0.74 U	NA	< 0.6 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 1.3 U	< 1.3 U	NA	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L	**50**	**24**	**16**	**8.8**	3
Trans-1,2-Dichloroethene	5	µg/L	< 0.9 U	< 0.9 U	< 0.90 U	< 1 U	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	**49**	**19**	**19**	**13**	**12.5**
Vinyl Chloride	2	µg/L	< 0.9 U	< 0.9 U	< 0.90 U	< 1 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 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden				
			Location ID	MW-11S				
			Sample Name	828103-MW11S01209	828103-MW11S0917	828103-MW11S010	828103-MW11S010	828103-MW11S010	828103-MW-11S-09262023
			Parent Sample						
			Sample Date	5/26/2009	5/23/2017	11/27/2018	7/14/2020	5/26/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**					
1,1,1-Trichloroethane (TCA)	5	µg/L		< 0.4 U	< 0.82 U	< 0.82 U	< 0.82 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L		< 0.36 U	< 0.38 U	< 0.38 U	< 0.38 U	< 1 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L		< 0.47 U	< 0.29 U	< 0.29 U	< 0.29 U	< 1 UJ	< 0.59 U
Acetone	50	µg/L		< 2.8 U	< 3 U	< 3 U	< 3.0 U	NA	< 3.1 U
Benzene	1	µg/L		< 0.32 U	< 0.41 U	< 0.41 U	< 0.41 U	NA	< 0.43 U
Bromodichloromethane	50	µg/L		< 0.36 U	< 0.39 U	< 0.39 U	< 0.39 U	< 1 UJ	< 0.45 U
Carbon Disulfide	60	µg/L		< 0.54 U	< 0.19 U	< 0.19 U	< 0.19 U	< 1 UJ	< 1.8 U
Chloroform	7	µg/L		< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 1 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L		< 0.35 U	< 0.81 U	< 0.81 U	< 0.81 U	< 1 UJ	< 0.51 U
Ethylbenzene	5	µg/L		< 0.53 U	< 0.74 U	< 0.74 U	< 0.74 U	NA	< 0.6 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L		< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	NA	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L		< 0.27 UJ	< 0.36 U	< 0.36 U	< 0.36 U	< 1 UJ	< 0.56 U
Trans-1,2-Dichloroethene	5	µg/L		< 0.41 U	< 0.9 U	< 0.9 U	< 0.90 U	< 1 UJ	< 0.54 U
Trichloroethylene (TCE)	5	µg/L		< 0.28 U	< 0.46 U	< 0.46 U	< 0.46 U	< 1 UJ	< 0.53 U
Vinyl Chloride	2	µg/L		< 0.34 U	< 0.9 U	< 0.9 U	< 0.90 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.
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 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden					
			Location ID	MW-12S					
			Sample Name	828103-MW12S01009	828103-MW12S1117	828103-MW12S010	828103-MW12S010	828103-MW12S010D 828103-MW12S010_07_15_2020	828103-MW12S010	828103-MW-12S-09262023
			Parent Sample							
			Sample Date	5/25/2009	5/23/2017	11/27/2018	7/15/2020	7/15/2020	5/26/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**						
1,1,1-Trichloroethane (TCA)	5	µg/L		< 0.4 U	< 0.82 U	< 0.82 U	< 0.82 U	< 0.82 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L		< 0.36 U	< 0.38 U	< 0.38 U	< 0.38 U	< 0.38 U	< 1 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L		< 0.47 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 1 UJ	< 0.59 U
Acetone	50	µg/L		< 2.8 U	< 3 U	< 3 U	< 3.0 U	< 3.0 U	NA	< 3.1 U
Benzene	1	µg/L		< 0.32 U	< 0.41 U	< 0.41 U	< 0.41 U	< 0.41 U	NA	< 0.43 U
Bromodichloromethane	50	µg/L		< 0.36 U	< 0.39 U	< 0.39 U	< 0.39 U	< 0.39 U	< 1 UJ	< 0.45 U
Carbon Disulfide	60	µg/L		< 0.54 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U	< 1 UJ	< 1.8 U
Chloroform	7	µg/L		< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 1 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L		< 0.35 U	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U	< 1 UJ	< 0.51 U
Ethylbenzene	5	µg/L		< 0.53 U	< 0.74 U	< 0.74 U	< 0.74 U	< 0.74 U	NA	< 0.6 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L		< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	NA	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L		< 0.27 UJ	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 1 UJ	< 0.56 U
Trans-1,2-Dichloroethene	5	µg/L		< 0.41 U	< 0.9 U	< 0.9 U	< 0.90 U	< 0.90 U	< 1 UJ	< 0.54 U
Trichloroethylene (TCE)	5	µg/L		< 0.28 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.46 U	< 1 UJ	< 0.53 U
Vinyl Chloride	2	µg/L		< 0.34 U	< 0.9 U	< 0.9 U	< 0.90 U	< 0.90 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.
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 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden				
			Location ID	MW-15S				
			Sample Name	828103-MW15S1017	828103-MW15S010	828103-MW15S010	828103-MW15S010	828103-MW-15S-09252023
			Parent Sample					
			Sample Date	5/22/2017	11/28/2018	7/15/2020	5/24/2022	9/25/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**				
1,1,1-Trichloroethane (TCA)	5	µg/L	< 8.2 U	< 1.6 U	< 1.6 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 3.8 U	< 0.76 U	< 0.76 U	< 1 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 2.9 U	< 0.58 U	< 0.58 U	< 1 UJ	< 0.59 U
Acetone	50	µg/L	< 30 U	< 6 U	< 6.0 U	NA	3.9 J
Benzene	1	µg/L	< 4.1 U	< 0.82 U	< 0.82 U	NA	< 0.43 U
Bromodichloromethane	50	µg/L	< 3.9 U	< 0.78 U	< 0.78 U	< 1 UJ	< 0.45 U
Carbon Disulfide	60	µg/L	< 1.9 U	< 0.38 U	< 0.38 U	< 1 UJ	< 1.8 U
Chloroform	7	µg/L	< 3.4 U	< 0.68 U	< 0.68 U	< 1 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	**13**	**19**	3.3	2.5 J	2.5
Ethylbenzene	5	µg/L	< 7.4 U	< 1.5 U	< 1.5 U	NA	< 0.6 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 13 U	< 2.6 U	< 2.6 U	NA	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L	**240**	**100**	**150**	**100 J**	**150**
Trans-1,2-Dichloroethene	5	µg/L	< 9 U	< 1.8 U	< 1.8 U	< 1 UJ	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	**100**	**52**	**82**	**45 J**	**83.3**
Vinyl Chloride	2	µg/L	< 9 U	< 1.8 U	< 1.8 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.
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 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden				
			Location ID	MW-16S				
			Sample Name	828103-MW16S1017	828103-MW16S010	828103-MW16S010	828103-MW16S010	828103-MW-16S-09272023
			Parent Sample					
			Sample Date	5/22/2017	11/29/2018	7/17/2020	5/24/2022	9/27/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**				
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.82 U	< 6.6 U	< 6.6 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.38 U	< 3 U	< 3.0 U	< 1 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 0.29 U	< 2.3 U	< 2.3 U	< 1 UJ	< 0.59 U
Acetone	50	µg/L	< 3 U	< 24 U	< 24 U	NA	< 3.1 U
Benzene	1	µg/L	< 0.41 U	< 3.3 U	< 3.3 U	NA	< 0.43 U
Bromodichloromethane	50	µg/L	< 0.39 U	< 3.1 U	< 3.1 U	< 1 UJ	< 0.45 U
Carbon Disulfide	60	µg/L	0.44 J	< 1.5 U	< 1.5 U	< 1 UJ	< 1.8 U
Chloroform	7	µg/L	< 0.34 U	< 2.7 U	< 2.7 U	< 1 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	1.6	**10**	< 6.5 U	4 J	**26.8**
Ethylbenzene	5	µg/L	< 0.74 U	< 5.9 U	< 5.9 U	NA	< 0.6 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 11 U	< 11 U	NA	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L	**6.7**	**34**	**23**	**19 J**	**24.5**
Trans-1,2-Dichloroethene	5	µg/L	< 0.9 U	< 7.2 U	< 7.2 U	< 1 UJ	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	**33**	**350**	**220**	**160 J**	**199**
Vinyl Chloride	2	µg/L	< 0.9 U	< 7.2 U	< 7.2 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.
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 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden				
			Location ID	MW-17S				
			Sample Name	828103-MW17S1017	828103-MW17S010	828103-MW17S010	828103-MW17S010	828103-MW-17S-09272023
			Parent Sample					
			Sample Date	5/23/2017	11/29/2018	7/17/2020	5/25/2022	9/27/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**				
1,1,1-Trichloroethane (TCA)	5	µg/L	< 3.3 U	< 0.82 U	< 0.82 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 1.5 U	< 0.38 U	< 0.38 U	< 1 U	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 1.2 U	< 0.29 U	< 0.29 U	< 1 U	< 0.59 U
Acetone	50	µg/L	< 12 U	< 3 U	< 3.0 U	NA	< 3.1 U
Benzene	1	µg/L	< 1.6 U	< 0.41 U	< 0.41 U	NA	< 0.43 U
Bromodichloromethane	50	µg/L	< 1.6 U	< 0.39 U	< 0.39 U	< 1 U	< 0.45 U
Carbon Disulfide	60	µg/L	< 0.76 U	< 0.19 U	< 0.19 U	< 1 U	< 1.8 U
Chloroform	7	µg/L	< 1.4 U	< 0.34 U	< 0.34 U	< 1 U	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	< 3.2 U	< 0.81 U	< 0.81 U	< 1 U	1.9
Ethylbenzene	5	µg/L	< 3 U	< 0.74 U	< 0.74 U	NA	< 0.6 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 5.3 U	< 1.3 U	< 1.3 U	NA	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L	**130**	**32**	**25**	**33**	**114**
Trans-1,2-Dichloroethene	5	µg/L	< 3.6 U	< 0.9 U	< 0.90 U	< 1 U	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	**110**	**18**	**12**	**13**	**118**
Vinyl Chloride	2	µg/L	< 3.6 U	< 0.9 U	< 0.90 U	< 1 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 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden			
			Location ID	MW-18S			
			Sample Name	828103-MW18S1017	828103-MW18S010	828103-MW18S010	828103-MW18S010
			Parent Sample				
			Sample Date	5/22/2017	11/29/2018	7/16/2020	5/25/2022
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**			
1,1,1-Trichloroethane (TCA)	5	µg/L		< 8.2 U	< 4.1 U	< 4.1 U	NA
1,1-Dichloroethane	5	µg/L		< 3.8 U	< 1.9 U	< 1.9 U	< 2.5 UJ
1,1-Dichloroethene	5	µg/L		< 2.9 U	< 1.5 U	< 1.5 U	< 2.5 UJ
Acetone	50	µg/L		< 30 U	< 15 U	< 15 U	NA
Benzene	1	µg/L		< 4.1 U	< 2.1 U	< 2.1 U	NA
Bromodichloromethane	50	µg/L		< 3.9 U	< 2 U	< 2.0 U	< 2.5 UJ
Carbon Disulfide	60	µg/L		< 1.9 U	< 0.95 U	< 0.95 U	< 2.5 UJ
Chloroform	7	µg/L		< 3.4 U	< 1.7 U	< 1.7 U	< 2.5 UJ
Cis-1,2-Dichloroethylene	5	µg/L		**200**	**92**	**140**	**89 J**
Ethylbenzene	5	µg/L		< 7.4 U	< 3.7 U	< 3.7 U	NA
Methyl Ethyl Ketone (2-Butanone)	50	µg/L		< 13 U	< 6.6 U	< 6.6 U	NA
Tetrachloroethylene (PCE)	5	µg/L		**280**	**320 J**	**220**	**250 J**
Trans-1,2-Dichloroethene	5	µg/L		< 9 U	< 4.5 U	< 4.5 U	0.71 J
Trichloroethylene (TCE)	5	µg/L		**51**	**57**	**59**	**45 J**
Vinyl Chloride	2	µg/L		< 9 U	< 4.5 U	< 4.5 U	< 2.5 UJ

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 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden				
			Location ID	MW-19S				
			Sample Name	828103-MW19S1017	828103-MW19S010	828103-MW19S010	828103-MW19S010	828103-MW-19S-09252023
			Parent Sample					
			Sample Date	5/23/2017	11/30/2018	7/17/2020	5/24/2022	9/25/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**				
1,1,1-Trichloroethane (TCA)	5	µg/L	< 41 U	< 3.3 U	< 3.3 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 19 U	< 1.5 U	< 1.5 U	< 10 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 15 U	< 1.2 U	< 1.2 U	< 10 UJ	< 0.59 U
Acetone	50	µg/L	< 150 U	< 12 U	< 12 U	NA	< 3.1 U
Benzene	1	µg/L	< 21 U	< 1.6 U	< 1.6 U	NA	< 0.43 U
Bromodichloromethane	50	µg/L	< 20 U	< 1.6 U	< 1.6 U	< 10 UJ	< 0.45 U
Carbon Disulfide	60	µg/L	< 9.5 U	< 0.76 U	< 0.76 U	< 10 UJ	< 1.8 U
Chloroform	7	µg/L	< 17 U	< 1.4 U	< 1.4 U	< 10 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	**2000**	**240**	**1300**	**1400 J**	**1030**
Ethylbenzene	5	µg/L	< 37 U	< 3 U	< 3.0 U	NA	< 0.6 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 66 U	< 5.3 U	< 5.3 U	NA	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L	< 18 U	**34**	**110**	**400 J**	**360**
Trans-1,2-Dichloroethene	5	µg/L	< 45 U	< 3.6 U	**8.9**	**13 J**	**14.8**
Trichloroethylene (TCE)	5	µg/L	< 23 U	**35**	**120**	**110 J**	**112**
Vinyl Chloride	2	µg/L	**510**	**81**	**28**	**3.5 J**	**23.3**

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.
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 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden				
			Location ID	MW-20S				
			Sample Name	828103-MW20S1017	828103-MW20S010	828103-MW20S010	828103-MW20S010	828103-MW-20S-09252023
			Parent Sample					
			Sample Date	5/25/2017	11/29/2018	7/17/2020	5/24/2022	9/25/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**				
1,1,1-Trichloroethane (TCA)	5	µg/L	< 410 U	< 330 U	< 66 U	NA	< 54 U
1,1-Dichloroethane	5	µg/L	< 190 U	< 150 U	< 30 U	< 100 UJ	< 57 U
1,1-Dichloroethene	5	µg/L	< 150 U	< 120 U	< 23 U	< 100 UJ	< 59 U
Acetone	50	µg/L	< 1500 U	< 1200 U	< 240 U	NA	< 310 U
Benzene	1	µg/L	< 210 U	< 160 U	< 33 U	NA	< 43 U
Bromodichloromethane	50	µg/L	< 200 U	< 160 U	< 31 U	33 J	< 45 U
Carbon Disulfide	60	µg/L	< 95 U	< 76 U	< 15 U	< 100 UJ	< 180 U
Chloroform	7	µg/L	< 170 U	< 140 U	< 27 U	90 J	< 50 U
Cis-1,2-Dichloroethylene	5	µg/L	< 410 U	< 320 U	< 65 U	< 100 UJ	**54.2 J**
Ethylbenzene	5	µg/L	< 370 U	< 300 U	< 59 U	NA	< 60 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 660 U	< 530 U	< 110 U	NA	< 270 U
Tetrachloroethylene (PCE)	5	µg/L	**15000**	**17000**	**4200**	**17000 J**	**37100**
Trans-1,2-Dichloroethene	5	µg/L	< 450 U	< 360 U	< 72 U	< 100 UJ	< 54 U
Trichloroethylene (TCE)	5	µg/L	**450 J**	**450**	**84**	**210 J**	**592**
Vinyl Chloride	2	µg/L	< 450 U	< 360 U	< 72 U	< 100 UJ	< 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 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden				
			Location ID	MW-21S				
			Sample Name	828103-MW21S1017	828103-MW21S010	828103-MW21S010	828103-MW21S010	828103-MW-21S-09272023
			Parent Sample					
			Sample Date	5/23/2017	11/29/2018	7/16/2020	5/24/2022	9/27/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**				
1,1,1-Trichloroethane (TCA)	5	µg/L	< 16 U	< 16 U	< 6.6 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 7.6 U	< 7.6 U	< 3.0 U	< 10 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 5.8 U	< 5.8 U	< 2.3 U	< 10 UJ	< 0.59 U
Acetone	50	µg/L	< 60 U	< 60 U	< 24 U	NA	< 3.1 U
Benzene	1	µg/L	< 8.2 U	< 8.2 U	< 3.3 U	NA	0.52
Bromodichloromethane	50	µg/L	< 7.8 U	< 7.8 U	< 3.1 U	< 10 UJ	< 0.45 U
Carbon Disulfide	60	µg/L	< 3.8 U	< 3.8 U	< 1.5 U	< 10 UJ	< 1.8 U
Chloroform	7	µg/L	< 6.8 U	< 6.8 U	< 2.7 U	< 10 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	**160**	**41**	**10**	**6.1 J**	< 0.51 U
Ethylbenzene	5	µg/L	< 15 U	< 15 U	< 5.9 U	NA	0.67 J
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 26 U	< 26 U	< 11 U	NA	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L	< 7.2 U	< 7.2 U	< 2.9 U	**6.2 J**	0.95 J
Trans-1,2-Dichloroethene	5	µg/L	< 18 U	< 18 U	< 7.2 U	3 J	2.4
Trichloroethylene (TCE)	5	µg/L	< 9.2 U	< 9.2 U	< 3.7 U	**7.7 J**	1.2
Vinyl Chloride	2	µg/L	< 18 U	**59**	< 7.2 U	< 10 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.
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 3-4. Historical VOCs in Groundwater

			Sample Depth	Overburden						
			Location ID	PZ-22S			PZ-24S			
			Sample Name	828103-PZ22S010	828103-PZ22S010	828103-PZ-22S-09262023	828103-PZ24S010	828103-PZ24S010	828103-PZ-24S010	828103-PZ-24S-09262023
			Parent Sample							
			Sample Date	11/30/2018	7/15/2020	9/26/2023	11/30/2018	7/14/2020	5/25/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**		**VOC Method SW8260**			**VOC Method SW8260**			
1,1,1-Trichloroethane (TCA)	5	µg/L		< 0.82 U	< 0.82 U	< 0.54 U	< 3.3 U	< 0.82 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L		< 0.38 U	< 0.38 U	< 0.57 U	< 1.5 U	< 0.38 U	< 1 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L		< 0.29 U	< 0.29 U	< 0.59 U	< 1.2 U	< 0.29 U	< 1 UJ	< 0.59 U
Acetone	50	µg/L		< 3 U	< 3.0 U	< 3.1 U	20 J	< 3.0 U	NA	< 3.1 U
Benzene	1	µg/L		< 0.41 U	< 0.41 U	< 0.43 U	< 1.6 U	< 0.41 U	NA	< 0.43 U
Bromodichloromethane	50	µg/L		< 0.39 U	< 0.39 U	< 0.45 U	< 1.6 U	< 0.39 U	< 1 UJ	< 0.45 U
Carbon Disulfide	60	µg/L		< 0.19 U	< 0.19 U	< 1.8 U	< 0.76 U	< 0.19 U	< 1 UJ	< 1.8 U
Chloroform	7	µg/L		1.9	< 0.34 U	< 0.5 U	< 1.4 U	< 0.34 U	< 1 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L		< 0.81 U	< 0.81 U	< 0.51 U	< 3.2 U	< 0.81 U	< 1 UJ	< 0.51 U
Ethylbenzene	5	µg/L		< 0.74 U	< 0.74 U	< 0.6 U	< 3 U	< 0.74 U	NA	< 0.6 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L		< 1.3 U	< 1.3 U	< 2.7 U	< 5.3 U	< 1.3 U	NA	< 2.7 U
Tetrachloroethylene (PCE)	5	µg/L		< 0.36 U	< 0.36 U	< 0.56 U	< 1.4 U	< 0.36 U	< 1 UJ	< 0.56 U
Trans-1,2-Dichloroethene	5	µg/L		< 0.9 U	< 0.90 U	< 0.54 U	< 3.6 U	< 0.90 U	< 1 UJ	< 0.54 U
Trichloroethylene (TCE)	5	µg/L		< 0.46 U	< 0.46 U	< 0.53 U	< 1.8 U	< 0.46 U	< 1 UJ	< 0.53 U
Vinyl Chloride	2	µg/L		< 0.9 U	< 0.90 U	< 0.52 U	< 3.6 U	< 0.90 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.
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 3-4. Historical VOCs in Groundwater

		Sample Depth	Overburden/Bedrock Interface						
		Location ID	MW-04						
		Sample Name	828103-MW0401809	828103-MW041717	828103-MW04020	828103-MW040020	828103-MW04020	828103-MW-04-09262023	828103-DUP-02-09262023
		Parent Sample							828103-MW-04_20230926
		Sample Date	5/25/2009	5/23/2017	11/27/2018	7/15/2020	5/26/2022	9/26/2023	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**							
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.4 U	< 0.82 U	< 0.82 U	< 0.82 U	NA	< 0.54 U	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.36 U	< 0.38 U	< 0.38 U	< 0.38 U	< 1 UJ	< 0.57 U	< 0.57 U
Acetone	50	µg/L	< 2.8 U	< 3 U	< 3 U	< 3.0 U	NA	< 3.1 U	< 3.1 U
Benzene	1	µg/L	< 0.32 U	< 0.41 U	< 0.41 U	< 0.41 U	NA	< 0.43 U	< 0.43 U
Cis-1,2-Dichloroethylene	5	µg/L	< 0.35 U	< 0.81 U	< 0.81 U	< 0.81 U	< 1 UJ	< 0.51 U	< 0.51 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	NA	< 2.7 U	< 2.7 U
Methylene Chloride	5	µg/L	0.52 J	< 0.44 U	< 0.44 U	< 0.44 U	NA	< 1 U	< 1 U
Tert-Butyl Methyl Ether	10	µg/L	1.3	0.35 J	0.39 J	0.22 J	0.22 J	< 0.51 U	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	< 0.27 U	< 0.36 U	< 0.36 U	< 0.36 U	< 1 UJ	< 0.56 U	< 0.56 U
Trans-1,2-Dichloroethene	5	µg/L	< 0.41 U	< 0.9 U	< 0.9 U	< 0.90 U	< 1 UJ	< 0.54 U	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	< 0.28 U	< 0.46 U	< 0.46 U	< 0.46 U	< 1 UJ	< 0.53 U	< 0.53 U
Vinyl Chloride	2	µg/L	< 0.34 U	< 0.9 U	< 0.9 U	< 0.90 U	< 1 UJ	< 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 3-4. Historical VOCs in Groundwater

		Sample Depth	Overburden/Bedrock Interface					
		Location ID	MW-05					
		Sample Name	828103-MW0501809	828103-MW051717	828103-MW05020	828103-MW050020	828103-MW05020	828103-MW-05-09262023
		Parent Sample						
		Sample Date	5/25/2009	5/24/2017	11/28/2018	7/14/2020	5/26/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**						
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.4 U	< 0.82 U	< 0.82 U	< 0.82 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.36 U	< 0.38 U	< 0.38 U	< 0.38 U	< 1 UJ	< 0.57 U
Acetone	50	µg/L	< 2.8 U	< 3 U	< 3 U	< 3.0 U	NA	< 3.1 U
Benzene	1	µg/L	< 0.32 U	< 0.41 U	< 0.41 U	< 0.41 U	NA	< 0.43 U
Cis-1,2-Dichloroethylene	5	µg/L	< 0.35 U	< 0.81 U	< 0.81 U	< 0.81 U	< 1 UJ	< 0.51 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	NA	< 2.7 U
Methylene Chloride	5	µg/L	< 0.41 U	< 0.44 U	< 0.44 U	< 0.44 U	NA	< 1 U
Tert-Butyl Methyl Ether	10	µg/L	< 0.35 U	< 0.16 U	< 0.16 U	< 0.16 U	< 1 UJ	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	< 0.27 UJ	0.4 J	< 0.36 U	< 0.36 U	< 1 UJ	< 0.56 U
Trans-1,2-Dichloroethene	5	µg/L	< 0.41 U	< 0.9 U	< 0.9 U	< 0.90 U	< 1 UJ	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	4.6	< 0.46 U	< 0.46 U	< 0.46 U	< 1 UJ	< 0.53 U
Vinyl Chloride	2	µg/L	< 0.34 U	< 0.9 U	< 0.9 U	< 0.90 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.
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 3-4. Historical VOCs in Groundwater

		Sample Depth	Overburden/Bedrock Interface						
		Location ID	MW-06						
		Sample Name	828103-MW0601609	828103-MW06016	828103-MW061317	828103-MW06018	828103-MW06018	828103-MW06018	828103-MW-06-09262023
		Parent Sample							
		Sample Date	5/25/2009	7/10/2012	5/24/2017	11/28/2018	7/14/2020	5/25/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**							
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.4 U	0.47 J	< 0.82 U	< 0.82 U	< 0.82 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.36 U	1	< 0.38 U	< 0.38 U	< 0.38 U	< 1 U	< 0.57 U
Acetone	50	µg/L	< 2.8 U	< 0.98 UJ	< 3 U	< 3 U	< 3.0 U	NA	< 3.1 U
Benzene	1	µg/L	< 0.32 U	0.69 J	< 0.41 U	< 0.41 U	< 0.41 U	NA	< 0.43 U
Cis-1,2-Dichloroethylene	5	µg/L	**13**	**38**	2.5	2.7	**12**	0.76 J	**7.2**
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 0.51 UJ	< 1.3 U	< 1.3 U	< 1.3 U	NA	< 2.7 U
Methylene Chloride	5	µg/L	< 0.41 U	< 0.22 U	< 0.44 U	< 0.44 U	< 0.44 U	NA	< 1 U
Tert-Butyl Methyl Ether	10	µg/L	< 0.35 U	< 0.2 U	< 0.16 U	< 0.16 U	< 0.16 U	< 1 U	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	< 0.27 U	**11**	1.3	2.4	2.5	< 1 U	< 0.56 U
Trans-1,2-Dichloroethene	5	µg/L	< 0.41 U	0.86 J	< 0.9 U	< 0.9 U	< 0.90 U	< 1 U	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	4.6	**15**	1.3	1.6	**5.1**	0.57 J	3.8
Vinyl Chloride	2	µg/L	0.59 J	**4**	< 0.9 U	< 0.9 U	0.95 J	< 1 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 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock Interface					
		Location ID	GWE-1	GWE-2				
		Sample Name	828103-GWE01019	828103-GWE02022	828103-GWE2021	828103-GWE2021	828103-GWE2021	828103-GWE-2-09262023
		Parent Sample						
		Sample Date	7/10/2012	7/10/2012	2/13/2019	7/16/2020	5/26/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**						
1,1,1-Trichloroethane (TCA)	5	µg/L	4.3 J	< 0.23 U	< 3.3 U	< 3.3 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	**20**	2	4.8	4.8	**5.3 J**	**5.8**
1,1-Dichloroethene	5	µg/L	**14**	1.2	< 1.2 U	2 J	0.94 J	1.3
Acetone	50	µg/L	< 9.8 U	2.5 J	< 12 U	< 12 U	NA	< 3.1 U
Benzene	1	µg/L	< 2.1 U	< 0.21 U	< 1.6 U	< 1.6 U	NA	< 0.43 U
Chloroethane	5	µg/L	< 3.1 U	< 0.31 U	< 1.3 U	< 1.3 U	NA	< 0.73 U
Chloroform	7	µg/L	< 2.2 U	< 0.22 U	< 1.4 U	< 1.4 U	< 1 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	**1300**	**100**	**130**	**97**	**84 J**	**96.9**
Dichlorodifluoromethane	5	µg/L	< 5.7 U	< 0.56 U	< 2.7 U	< 2.7 U	NA	< 0.56 U
Ethylbenzene	5	µg/L	< 2 U	< 0.2 U	< 3 U	< 3.0 U	NA	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L	< 2 U	< 0.2 U	< 3.2 U	< 3.2 U	NA	< 0.65 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 5.1 U	< 0.51 UJ	< 5.3 U	< 5.3 U	NA	< 2.7 U
Methylene Chloride	5	µg/L	< 2.2 U	< 0.22 U	< 1.8 U	< 1.8 U	NA	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 2 U	< 0.2 U	NA	NA	NA	< 0.59 U
Tert-Butyl Methyl Ether	10	µg/L	< 2 U	0.2 J	< 0.64 U	< 0.64 U	< 1 UJ	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	**1900**	**160**	**91**	**110**	**45 J**	**74.8**
Toluene	5	µg/L	< 2 U	< 0.2 U	< 2 U	< 2.0 U	NA	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L	**8.8 J**	0.97 J	< 3.6 U	< 3.6 U	1.1 J	**6.4**
Trichloroethylene (TCE)	5	µg/L	**970**	**83**	**52**	**60**	**29 J**	**50.7**
Vinyl Chloride	2	µg/L	**110**	**6.1**	< 3.6 U	< 3.6 U	< 1 UJ	0.55 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 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock Interface					
		Location ID	MW-01A	MW-03A				
		Sample Name	828103-MW01A00709	828103-MW03A2217	828103-MW03A015	828103-MW03A015	828103-MW03A015	828103-MW-03A-09252023
		Parent Sample						
		Sample Date	5/26/2009	5/25/2017	11/29/2018	7/16/2020	5/25/2022	9/25/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**						
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.4 UJ	< 1.6 U	< 3.3 U	< 3.3 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.36 U	< 0.76 U	< 1.5 U	< 1.5 U	< 5 U	1
1,1-Dichloroethene	5	µg/L	< 0.47 U	< 0.58 U	< 1.2 U	< 1.2 U	3.8 J	4
Acetone	50	µg/L	< 2.8 U	< 6 U	< 12 U	< 12 U	NA	< 3.1 U
Benzene	1	µg/L	< 0.32 U	< 0.82 U	< 1.6 U	< 1.6 U	NA	< 0.43 U
Chloroethane	5	µg/L	< 0.66 U	< 0.64 U	< 1.3 U	< 1.3 U	NA	< 0.73 U
Chloroform	7	µg/L	< 0.34 U	< 0.68 U	< 1.4 U	< 1.4 U	< 5 U	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	**310 D**	**55**	**160**	**310**	**750**	**877**
Dichlorodifluoromethane	5	µg/L	< 0.55 U	< 1.4 U	< 2.7 U	< 2.7 U	NA	< 0.56 U
Ethylbenzene	5	µg/L	< 0.53 U	< 1.5 U	< 3 U	< 3.0 U	NA	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L	< 0.45 U	< 1.6 U	< 3.2 U	< 3.2 U	NA	< 0.65 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 2.6 U	< 5.3 U	< 5.3 U	NA	< 2.7 U
Methylene Chloride	5	µg/L	< 0.41 U	< 0.88 U	< 1.8 U	< 1.8 U	NA	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 0.43 U	NA	NA	NA	NA	< 0.59 U
Tert-Butyl Methyl Ether	10	µg/L	< 0.35 U	< 0.32 U	< 0.64 U	< 0.64 U	< 5 U	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	**44 D**	< 0.72 U	**8.4**	**24**	**880**	**704 J**
Toluene	5	µg/L	< 0.37 U	< 1 U	< 2 U	< 2.0 U	NA	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L	2.3	< 1.8 U	< 3.6 U	< 3.6 U	**6.3**	**5.3**
Trichloroethylene (TCE)	5	µg/L	67 D	< 0.92 U	**15**	**19**	**420**	**350**
Vinyl Chloride	2	µg/L	**5.4 J**	**30**	**170**	**360**	**380**	**305**

Notes:

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

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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 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock Interface					
		Location ID	MW-08K					
		Sample Name	828103-MW08K01709	828103-MW08K1417	828103-MW08K017	828103-MW08K	828103-MW08K017	828103-MW-08K-09252023
		Parent Sample						
		Sample Date	5/26/2009	5/24/2017	11/27/2018	7/15/2020	5/26/2022	9/25/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**						
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.4 U	< 0.82 U	< 0.82 U	< 0.82 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.36 U	< 0.38 U	< 0.38 U	< 0.38 U	< 1 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 0.47 U	< 0.29 U	< 0.29 U	< 0.29 U	< 1 UJ	< 0.59 U
Acetone	50	µg/L	< 2.8 U	< 3 U	< 3 U	< 3.0 U	NA	< 3.1 U
Benzene	1	µg/L	< 0.32 U	< 0.41 U	< 0.41 U	< 0.41 U	NA	< 0.43 U
Chloroethane	5	µg/L	< 0.66 U	< 0.32 U	< 0.32 U	< 0.32 U	NA	< 0.73 U
Chloroform	7	µg/L	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 1 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	< 0.35 U	< 0.81 U	< 0.81 U	< 0.81 U	< 1 UJ	< 0.51 U
Dichlorodifluoromethane	5	µg/L	< 0.55 U	< 0.68 UJ	< 0.68 UJ	< 0.68 U	NA	< 0.56 U
Ethylbenzene	5	µg/L	< 0.53 U	< 0.74 U	< 0.74 U	< 0.74 U	NA	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L	< 0.45 U	< 0.79 U	< 0.79 U	< 0.79 U	NA	< 0.65 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	NA	< 2.7 U
Methylene Chloride	5	µg/L	< 0.41 U	< 0.44 U	< 0.44 U	< 0.44 U	NA	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 0.43 U	NA	NA	NA	NA	< 0.59 U
Tert-Butyl Methyl Ether	10	µg/L	< 0.35 U	< 0.16 U	< 0.16 U	< 0.16 U	< 1 UJ	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	< 0.27 U	< 0.36 U	< 0.36 U	< 0.36 U	0.22 J	< 0.56 UJ
Toluene	5	µg/L	< 0.37 U	< 0.51 U	< 0.51 U	< 0.51 U	NA	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L	< 0.41 U	< 0.9 U	< 0.9 U	< 0.90 U	< 1 UJ	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	< 0.28 U	< 0.46 U	< 0.46 U	< 0.46 U	< 1 UJ	< 0.53 U
Vinyl Chloride	2	µg/L	< 0.34 U	< 0.9 U	< 0.9 U	< 0.90 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.
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 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock Interface							
		Location ID	MW-09K							
		Sample Name	828103-MW09K01809	828103-MW09K1817	828103-MW09K018	828103-MW09K018D	828103-MW09K018	828103-MW09K018	828103-MW09K018D	828103-MW-09K-09262023
		Parent Sample				828103-MW09K018_11_28_2018			828103-MW09K018_20220526	
		Sample Date	5/25/2009	5/24/2017	11/28/2018	11/28/2018	7/15/2020	5/26/2022	5/26/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**								
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.4 U	< 0.82 U	< 0.82 U	< 0.82 U	< 0.82 U	NA	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.36 U	0.81 J	< 0.38 U	< 0.38 U	< 0.38 U	1.6 J	1.4 J	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 0.47 U	0.33 J	< 0.29 U	< 0.29 U	< 0.29 U	0.52 J	0.58 J	< 0.59 U
Acetone	50	µg/L	< 2.8 U	< 3 U	< 3 U	< 3 U	< 3.0 U	NA	NA	< 3.1 U
Benzene	1	µg/L	< 0.32 U	< 0.41 U	< 0.41 U	< 0.41 U	< 0.41 U	NA	NA	< 0.43 U
Chloroethane	5	µg/L	< 0.66 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	NA	NA	< 0.73 U
Chloroform	7	µg/L	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 2 UJ	< 2 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	< 0.35 U	**80**	**24**	**25**	**44**	**260 J**	**270 J**	**91.4**
Dichlorodifluoromethane	5	µg/L	< 0.55 U	< 0.68 UJ	< 0.68 UJ	< 0.68 UJ	< 0.68 U	NA	NA	< 0.56 U
Ethylbenzene	5	µg/L	< 0.53 U	< 0.74 U	< 0.74 U	< 0.74 U	< 0.74 U	NA	NA	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L	< 0.45 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	NA	NA	< 0.65 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	NA	NA	< 2.7 U
Methylene Chloride	5	µg/L	< 0.41 U	< 0.44 U	< 0.44 U	< 0.44 U	< 0.44 U	NA	NA	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 0.43 U	NA	NA	NA	NA	NA	NA	< 0.59 U
Tert-Butyl Methyl Ether	10	µg/L	< 0.35 U	0.23 J	< 0.16 U	< 0.16 U	< 0.16 U	< 2 UJ	< 2 UJ	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	< 0.27 UJ	**26**	**10**	**11**	**14**	**69 J**	**69 J**	**27**
Toluene	5	µg/L	< 0.37 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	NA	NA	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L	< 0.41 U	< 0.9 U	< 0.9 U	< 0.9 U	< 0.90 U	3.2 J	1.9 J	0.88 J
Trichloroethylene (TCE)	5	µg/L	1.9	**22**	**11**	**11**	**15**	**56 J**	**57 J**	**21.8**
Vinyl Chloride	2	µg/L	< 0.34 U	**12**	1.4	1.5	4.1	**46 J**	**46 J**	**10.3**

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.
NA = Not analyzed.
NSL = No screening level available.
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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 3-4. Historical VOCs in Groundwater

			Sample Depth	Bedrock Interface						
			Location ID	MW-10K						
			Sample Name	828103-MW10K01809	828103-MW10K018	828103-MW10K1717	828103-MW10K018	828103-MW10K018	828103-MW10K018	828103-MW-10K-09262023
			Parent Sample							
			Sample Date	5/26/2009	7/11/2012	5/24/2017	11/28/2018	7/15/2020	5/25/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**								
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.4 U	< 1.2 U	< 16 U	< 8.2 U	< 8.2 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	3.9	4.1 J	< 7.6 U	< 3.8 U	**5.8 J**	2.2 J	1.7
1,1-Dichloroethene	5	µg/L	< 0.47 U	2 J	< 5.8 U	4.2 J	< 2.9 U	< 5 U	1.9
Acetone	50	µg/L	< 2.8 U	< 4.9 UJ	< 60 U	< 30 U	< 30 U	NA	< 3.1 U
Benzene	1	µg/L	0.61 J	< 1.1 U	< 8.2 U	< 4.1 U	< 4.1 U	NA	< 0.43 U
Chloroethane	5	µg/L	< 0.66 U	< 1.6 U	< 6.4 U	< 3.2 U	< 3.2 U	NA	< 0.73 UJ
Chloroform	7	µg/L	< 0.34 U	< 1.1 U	< 6.8 U	< 3.4 U	< 3.4 U	< 5 U	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	**100 D**	**190**	**150**	**740**	**260**	**100**	**163**
Dichlorodifluoromethane	5	µg/L	< 0.55 U	< 2.9 U	< 14 UJ	< 6.8 UJ	< 6.8 U	NA	< 0.56 U
Ethylbenzene	5	µg/L	< 0.53 U	< 1 U	< 15 U	< 7.4 U	< 7.4 U	NA	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L	< 0.45 U	< 1 U	< 16 U	< 7.9 U	< 7.9 U	NA	< 0.65 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 2.6 UJ	< 26 U	< 13 U	< 13 U	NA	< 2.7 U
Methylene Chloride	5	µg/L	< 0.41 U	< 1.1 U	< 8.8 U	< 4.4 U	< 4.4 U	NA	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 0.43 U	< 1 U	NA	NA	NA	NA	< 0.59 U
Tert-Butyl Methyl Ether	10	µg/L	< 0.35 U	< 1 U	< 3.2 U	< 1.6 U	< 1.6 U	< 5 U	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	**39**	**77**	< 7.2 U	4.5 J	**67**	4.5 J	< 0.56 U
Toluene	5	µg/L	< 0.37 U	< 1 U	< 10 U	< 5.1 U	< 5.1 U	NA	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L	1.6	2 J	< 18 U	< 9 U	< 9.0 U	< 5 U	2
Trichloroethylene (TCE)	5	µg/L	**410 D**	**490**	**920**	**270**	**490**	**580**	**496**
Vinyl Chloride	2	µg/L	**5.8**	**4.8 J**	< 18 U	< 9 U	< 9.0 U	< 5 U	0.64 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 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock Interface							
		Location ID	MW-12K							
		Sample Name	828103-MW12K01609	828103-MW12K01609D	828103-MW12K1717	828103-MW12K018	828103-MW12K018	828103-MW12K018	828103-MW-12K-09262023	828103-MW-12K-20240924
		Parent Sample		828103-MW12K01609_05_26_2009						
		Sample Date	5/26/2009	5/26/2009	5/23/2017	11/27/2018	7/14/2020	5/26/2022	9/26/2023	9/24/2024
Analyte	**NYSDEC AWQS[1]**	**Unit**								
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.4 U	< 0.4 U	< 0.82 U	< 0.82 U	< 0.82 U	NA	< 0.54 U	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.36 U	< 0.36 U	< 0.38 U	< 0.38 U	< 0.38 U	< 1 UJ	< 0.57 U	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 0.47 U	< 0.47 U	< 0.29 U	< 0.29 U	< 0.29 U	< 1 UJ	< 0.59 U	< 0.59 U
Acetone	50	µg/L	< 2.8 U	< 2.8 U	< 3 U	< 3 U	< 3.0 U	NA	< 3.1 U	**139**
Benzene	1	µg/L	< 0.32 U	< 0.32 U	< 0.41 U	< 0.41 U	< 0.41 U	NA	< 0.43 U	< 0.43 U
Chloroethane	5	µg/L	< 0.66 U	< 0.66 U	< 0.32 U	< 0.32 U	< 0.32 U	NA	< 0.73 U	< 0.73 U
Chloroform	7	µg/L	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 1 UJ	< 0.5 U	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	< 0.35 U	< 0.35 U	< 0.81 U	< 0.81 U	< 0.81 U	< 1 UJ	< 0.51 U	< 0.51 U
Dichlorodifluoromethane	5	µg/L	< 0.55 U	< 0.55 U	< 0.68 UJ	< 0.68 UJ	< 0.68 U	NA	< 0.56 U	< 0.56 U
Ethylbenzene	5	µg/L	< 0.53 U	< 0.53 U	< 0.74 U	< 0.74 U	< 0.74 U	NA	< 0.6 U	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L	< 0.45 U	< 0.45 U	< 0.79 U	< 0.79 U	< 0.79 U	NA	< 0.65 U	< 0.65 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	NA	< 2.7 U	3.6 J
Methylene Chloride	5	µg/L	< 0.41 U	< 0.41 U	< 0.44 U	< 0.44 U	< 0.44 U	NA	< 1 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 0.43 U	< 0.43 U	NA	NA	NA	NA	< 0.59 U	< 0.59 U
Tert-Butyl Methyl Ether	10	µg/L	< 0.35 U	< 0.35 U	< 0.16 U	< 0.16 U	< 0.16 U	< 1 UJ	< 0.51 U	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	< 0.27 UJ	< 0.27 UJ	< 0.36 U	< 0.36 U	< 0.36 U	< 1 UJ	< 0.56 U	< 0.56 U
Toluene	5	µg/L	< 0.37 U	< 0.37 U	< 0.51 U	< 0.51 U	< 0.51 U	NA	< 0.49 U	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L	< 0.41 U	< 0.41 U	< 0.9 U	< 0.9 U	< 0.90 U	< 1 UJ	< 0.54 U	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	**8.2**	**6.9**	**5.5**	**5.5**	4.2	3.6 J	**5.1**	**6.3**
Vinyl Chloride	2	µg/L	< 0.34 U	< 0.34 U	< 0.9 U	< 0.9 U	< 0.90 U	< 1 UJ	< 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
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U = Analyte not detected.
VOC = Volatile organic compounds

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

Table 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock Interface								
		Location ID	MW-13K								
		Sample Name	828103-MW13K01609	828103-MW13K016	828103-MW13K1917	828103-MW13K1917D	828103-MW13K018	828103-MW13K018	828103-MW13K018	828103-MW-13K-09252023	828103-DUP-01-09252023
		Parent Sample				828103-MW13K1917_05_25_2017					828103-MW-13K-20230925
		Sample Date	5/26/2009	7/9/2012	5/25/2017	5/25/2017	11/28/2018	7/14/2020	5/24/2022	9/25/2023	9/25/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**									
1,1,1-Trichloroethane (TCA)	5	µg/L	**59 J**	**71 J**	< 330 U	< 330 U	< 100 U	< 100 U	NA	< 2.7 U	< 2.7 U
1,1-Dichloroethane	5	µg/L	**47 J**	**34 J**	< 150 U	< 150 U	< 48 U	< 48 U	< 10 UJ	4.2 J	3.5 J
1,1-Dichloroethene	5	µg/L	**38 J**	< 29 U	< 120 U	< 120 U	< 36 U	< 36 U	3 J	**6.9**	**5**
Acetone	50	µg/L	< 2.8 U	< 98 U	< 1200 U	< 1200 U	< 380 U	< 380 U	NA	< 15 U	< 15 U
Benzene	1	µg/L	< 0.32 U	< 21 U	< 160 U	< 160 U	< 51 U	< 51 U	NA	< 2.1 U	< 2.1 U
Chloroethane	5	µg/L	< 0.66 U	< 31 U	< 130 U	< 130 U	< 40 U	< 40 U	NA	< 3.6 U	< 3.6 U
Chloroform	7	µg/L	< 0.34 U	**63 J**	< 140 U	< 140 U	< 43 U	< 43 U	< 10 UJ	< 2.5 U	< 2.5 U
Cis-1,2-Dichloroethylene	5	µg/L	**1100 D**	**3000**	**3100**	**3300**	**2800**	**3100**	**1500 J**	**2170**	**1730**
Dichlorodifluoromethane	5	µg/L	2.6 J	< 57 U	< 270 UJ	< 270 UJ	< 85 UJ	< 85 U	NA	< 2.8 U	< 2.8 U
Ethylbenzene	5	µg/L	**7 J**	< 20 U	< 300 U	< 300 U	< 93 U	< 93 U	NA	< 3 U	< 3 U
Isopropylbenzene (Cumene)	5	µg/L	4 J	< 20 U	< 320 U	< 320 U	< 99 U	< 99 U	NA	< 3.2 U	< 3.2 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 51 U	< 530 U	< 530 U	< 170 U	< 170 U	NA	< 14 U	< 14 U
Methylene Chloride	5	µg/L	< 0.41 U	< 22 U	< 180 U	< 180 U	< 55 U	< 55 U	NA	< 5 U	< 5 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	**13 J**	< 20 U	NA	NA	NA	NA	NA	< 3 U	< 3 U
Tert-Butyl Methyl Ether	10	µg/L	< 0.35 U	< 20 U	< 64 U	< 64 U	< 20 U	< 20 U	< 10 UJ	< 2.5 U	< 2.5 U
Tetrachloroethylene (PCE)	5	µg/L	**5800 D**	**18000**	**10000**	**12000**	**7500**	**4300**	**1400 J**	**1350**	**1290 J**
Toluene	5	µg/L	2 J	< 20 U	< 200 U	< 200 U	< 64 U	< 64 U	NA	< 2.5 U	< 2.5 U
Trans-1,2-Dichloroethene	5	µg/L	**25 J**	< 20 U	< 360 U	< 360 U	< 110 U	< 110 U	**11 J**	**14.9**	**11.7**
Trichloroethylene (TCE)	5	µg/L	**1300 D**	**3200**	**2200**	**2400**	**2200**	**1500**	**560 J**	**556**	**451**
Vinyl Chloride	2	µg/L	**69 D**	**390**	**360 J**	< 360 U	**230**	**410**	**290 J**	**539**	**356**

Notes:

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

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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 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock Interface							
		Location ID	MW-14KA							
		Sample Name	828103-MW14KA2217	828103-MW14KA022	828103-MW14KA022D	828103-MW14KA022	828103-MW14KA022D	828103-MW14KA022	828103-MW14KA022D	828103-MW-14KA-09252023
		Parent Sample			828103-MW14KA022_11_29_2018		828103-MW14KA022_07_17_2020		828103-MW14KA022_20220525	
		Sample Date	5/23/2017	11/29/2018	11/29/2018	7/17/2020	7/17/2020	5/25/2022	5/25/2022	9/25/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**								
1,1,1-Trichloroethane (TCA)	5	µg/L	< 330 U	< 100 U	< 100 U	< 100 U	< 100 U	NA	NA	< 5.4 U
1,1-Dichloroethane	5	µg/L	< 150 U	< 48 U	< 48 U	< 48 U	< 48 U	< 25 U	< 25 U	< 5.7 U
1,1-Dichloroethene	5	µg/L	< 120 U	< 36 U	< 36 U	< 36 U	< 36 U	< 25 U	< 25 U	**8.9 J**
Acetone	50	µg/L	< 1200 U	< 380 U	< 380 U	< 380 U	< 380 U	NA	NA	< 31 U
Benzene	1	µg/L	< 160 U	< 51 U	< 51 U	< 51 U	< 51 U	NA	NA	< 4.3 U
Chloroethane	5	µg/L	< 130 U	< 40 U	< 40 U	< 40 U	< 40 U	NA	NA	< 7.3 U
Chloroform	7	µg/L	< 140 U	< 43 U	< 43 U	< 43 U	< 43 U	< 25 U	**8 J**	< 5 U
Cis-1,2-Dichloroethylene	5	µg/L	**8600**	**5600**	**5400**	**3300**	**3200**	**2800**	**3400**	**2800**
Dichlorodifluoromethane	5	µg/L	< 270 UJ	< 85 U	< 85 U	< 85 U	< 85 U	NA	NA	< 5.6 U
Ethylbenzene	5	µg/L	< 300 U	< 93 U	< 93 U	< 93 U	< 93 U	NA	NA	< 6 U
Isopropylbenzene (Cumene)	5	µg/L	< 320 U	< 99 U	< 99 U	< 99 U	< 99 U	NA	NA	< 6.5 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 530 U	< 170 U	< 170 U	< 170 U	< 170 U	NA	NA	< 27 U
Methylene Chloride	5	µg/L	< 180 U	< 55 U	< 55 U	< 55 U	< 55 U	NA	NA	< 10 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	NA	NA	NA	NA	NA	NA	NA	< 5.9 U
Tert-Butyl Methyl Ether	10	µg/L	< 64 U	< 20 U	< 20 U	< 20 U	< 20 U	< 25 U	< 25 U	< 5.1 U
Tetrachloroethylene (PCE)	5	µg/L	**2500**	**3500**	**3400**	**1700**	**1600**	**1300**	**1600**	**1600 J**
Toluene	5	µg/L	< 200 U	< 64 U	< 64 U	< 64 U	< 64 U	NA	NA	< 4.9 U
Trans-1,2-Dichloroethene	5	µg/L	< 360 U	< 110 U	< 110 U	< 110 U	< 110 U	**18 J**	**20 J**	**13.5**
Trichloroethylene (TCE)	5	µg/L	**8900**	**6200**	**5800**	**3700**	**3900**	**2300**	**3300**	**3170**
Vinyl Chloride	2	µg/L	< 360 U	**200**	**190**	**110 J**	**110 J**	**180**	**200**	**130**

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

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J = Concentration is estimated.
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NSL = No screening level available.
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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 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock Interface				
		Location ID	MW-15K				
		Sample Name	828103-MW15K2317	828103-MW15K022	828103-MW15K022	828103-MW15K022	828103-MW-15K-09252023
		Parent Sample					
		Sample Date	5/22/2017	11/28/2018	7/15/2020	5/24/2022	9/25/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**					
1,1,1-Trichloroethane (TCA)	5	µg/L	< 16 U	< 16 U	< 16 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	**13 J**	**11 J**	**12 J**	**5.6 J**	**8.7**
1,1-Dichloroethene	5	µg/L	**13 J**	**11 J**	**11 J**	**6 J**	**11.9**
Acetone	50	µg/L	< 60 U	< 60 UJ	< 60 U	NA	< 3.1 U
Benzene	1	µg/L	< 8.2 U	< 8.2 U	< 8.2 U	NA	0.59
Chloroethane	5	µg/L	< 6.4 U	< 6.4 U	< 6.4 U	NA	< 0.73 UJ
Chloroform	7	µg/L	< 6.8 U	< 6.8 U	< 6.8 U	< 2.5 UJ	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	**390**	**270**	**280**	**190 J**	**231**
Dichlorodifluoromethane	5	µg/L	< 14 UJ	< 14 U	< 14 U	NA	< 0.56 U
Ethylbenzene	5	µg/L	< 15 U	< 15 U	< 15 U	NA	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L	< 16 U	< 16 U	< 16 U	NA	< 0.65 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 26 U	< 26 U	< 26 U	NA	< 2.7 U
Methylene Chloride	5	µg/L	< 8.8 U	< 8.8 U	< 8.8 U	NA	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	NA	NA	NA	NA	< 0.59 U
Tert-Butyl Methyl Ether	10	µg/L	< 3.2 U	< 3.2 U	< 3.2 U	< 2.5 UJ	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	**900 J**	**990 J**	**930**	**220 J**	**404**
Toluene	5	µg/L	< 10 U	< 10 U	< 10 U	NA	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L	< 18 U	< 18 U	< 18 U	1.6 J	1.6
Trichloroethylene (TCE)	5	µg/L	**280**	**390**	**420**	**130 J**	**255**
Vinyl Chloride	2	µg/L	**85**	**21**	**19 J**	**17 J**	**12.9**

Notes:

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

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µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
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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 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock Interface							
		Location ID	MW-16K					MW-22K		
		Sample Name	828103-MW16K2317	828103-MW16K022	828103-MW16K022	828103-MW16K022	828103-MW-16K-09272023	828103-MW22K028	828103-MW22K028	828103-MW-22K-09262023
		Parent Sample								
		Sample Date	5/23/2017	11/29/2018	7/16/2020	5/24/2022	9/27/2023	11/30/2018	7/15/2020	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**								
1,1,1-Trichloroethane (TCA)	5	µg/L	< 16 U	< 16 U	< 16 U	NA	< 0.54 U	< 0.82 U	< 0.82 U	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 7.6 U	< 7.6 U	< 7.6 U	< 2.5 UJ	< 0.57 U	< 0.38 U	< 0.38 U	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 5.8 U	< 5.8 U	< 5.8 U	0.6 J	1	< 0.29 U	0.3 J	< 0.59 U
Acetone	50	µg/L	< 60 U	< 60 U	< 60 U	NA	< 3.1 U	< 3 U	< 3.0 U	< 3.1 U
Benzene	1	µg/L	< 8.2 U	< 8.2 U	< 8.2 U	NA	< 0.43 U	< 0.41 U	< 0.41 U	< 0.43 U
Chloroethane	5	µg/L	< 6.4 U	< 6.4 U	< 6.4 U	NA	< 0.73 U	< 0.32 U	< 0.32 U	< 0.73 U
Chloroform	7	µg/L	< 6.8 U	< 6.8 U	< 6.8 U	< 2.5 UJ	< 0.5 U	< 0.34 U	< 0.34 U	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	**890**	**710**	**420**	**310 J**	**320**	**27**	**97**	**18.6**
Dichlorodifluoromethane	5	µg/L	< 14 U	< 14 U	< 14 U	NA	< 0.56 U	< 0.68 U	< 0.68 U	< 0.56 U
Ethylbenzene	5	µg/L	< 15 U	< 15 U	< 15 U	NA	< 0.6 U	< 0.74 U	< 0.74 U	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L	< 16 U	< 16 U	< 16 U	NA	< 0.65 U	< 0.79 U	< 0.79 U	< 0.65 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 26 U	< 26 U	< 26 U	NA	< 2.7 U	< 1.3 U	< 1.3 U	< 2.7 U
Methylene Chloride	5	µg/L	14 J	< 8.8 U	< 8.8 U	NA	< 1 U	< 0.44 U	< 0.44 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	NA	NA	NA	NA	< 0.59 U	NA	NA	< 0.59 U
Tert-Butyl Methyl Ether	10	µg/L	< 3.2 U	< 3.2 U	< 3.2 U	< 2.5 UJ	< 0.51 U	< 0.16 U	< 0.16 U	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	**120**	**330**	**300**	**140 J**	**189**	3.8	13	2.4
Toluene	5	µg/L	< 10 U	< 10 U	< 10 U	NA	< 0.49 U	< 0.51 U	< 0.51 U	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L	< 18 U	< 18 U	< 18 U	1.8 J	2.9	< 0.9 U	< 0.90 U	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	**380**	**660**	**380**	**170 J**	**236**	**8.3**	**21**	3.8
Vinyl Chloride	2	µg/L	**58**	**33**	< 18 U	**12 J**	**8.8**	**2.3**	**5.4**	0.77 J

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

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U = Analyte not detected.
VOC = Volatile organic compounds

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

Table 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock Interface							
		Location ID	MW-23K				MW-24K			
		Sample Name	828103-MW23K025	828103-MW23K025	828103-MW23K025	828103-MW-23K-09262023	828103-MW24K025	828103-MW24K025	828103-MW24K025	828103-MW-24K-09262023
		Parent Sample								
		Sample Date	11/30/2018	7/14/2020	5/25/2022	9/26/2023	11/30/2018	7/14/2020	5/25/2022	9/26/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**								
1,1,1-Trichloroethane (TCA)	5	µg/L	< 0.82 U	< 0.82 U	NA	< 0.54 U	< 1.6 U	< 0.82 U	NA	< 0.54 U
1,1-Dichloroethane	5	µg/L	< 0.38 U	< 0.38 U	< 1 U	< 0.57 U	< 0.76 U	< 0.38 U	< 1 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 0.29 U	< 0.29 U	< 1 U	< 0.59 U	< 0.58 U	< 0.29 U	< 1 UJ	< 0.59 U
Acetone	50	µg/L	< 3 U	< 3.0 U	NA	< 3.1 U	42	< 3.0 U	NA	< 3.1 U
Benzene	1	µg/L	< 0.41 U	< 0.41 U	NA	< 0.43 U	< 0.82 U	< 0.41 U	NA	< 0.43 U
Chloroethane	5	µg/L	< 0.32 U	< 0.32 U	NA	< 0.73 U	< 0.64 U	< 0.32 U	NA	< 0.73 U
Chloroform	7	µg/L	< 0.34 U	< 0.34 U	< 1 U	< 0.5 U	< 0.68 U	< 0.34 U	0.27 J	< 0.5 U
Cis-1,2-Dichloroethylene	5	µg/L	< 0.81 U	< 0.81 U	< 1 U	< 0.51 U	< 1.6 U	< 0.81 U	< 1 UJ	< 0.51 U
Dichlorodifluoromethane	5	µg/L	< 0.68 U	< 0.68 U	NA	< 0.56 U	< 1.4 U	< 0.68 U	NA	< 0.56 U
Ethylbenzene	5	µg/L	< 0.74 U	< 0.74 U	NA	< 0.6 U	< 1.5 U	< 0.74 U	NA	< 0.6 U
Isopropylbenzene (Cumene)	5	µg/L	< 0.79 U	< 0.79 U	NA	< 0.65 U	< 1.6 U	< 0.79 U	NA	< 0.65 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1.3 U	< 1.3 U	NA	< 2.7 U	3.8 J	< 1.3 U	NA	< 2.7 U
Methylene Chloride	5	µg/L	< 0.44 U	< 0.44 U	NA	< 1 U	1.2 J	< 0.44 U	NA	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	NA	NA	NA	< 0.59 U	NA	NA	NA	< 0.59 U
Tert-Butyl Methyl Ether	10	µg/L	< 0.16 U	< 0.16 U	0.26 J	< 0.51 U	< 0.32 U	< 0.16 U	< 1 UJ	< 0.51 U
Tetrachloroethylene (PCE)	5	µg/L	< 0.36 U	< 0.36 U	< 1 U	< 0.56 U	< 0.72 U	< 0.36 U	< 1 UJ	< 0.56 U
Toluene	5	µg/L	< 0.51 U	< 0.51 U	NA	< 0.49 U	< 1 U	< 0.51 U	NA	< 0.49 U
Trans-1,2-Dichloroethene	5	µg/L	< 0.9 U	< 0.90 U	< 1 U	< 0.54 U	< 1.8 U	< 0.90 U	< 1 UJ	< 0.54 U
Trichloroethylene (TCE)	5	µg/L	< 0.46 U	< 0.46 U	< 1 U	< 0.53 U	< 0.92 U	< 0.46 U	< 1 UJ	< 0.53 U
Vinyl Chloride	2	µg/L	< 0.9 U	< 0.90 U	< 1 U	< 0.52 U	< 1.8 U	< 0.90 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.
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 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock				
		Location ID	MW-03CA				
		Sample Name	828103-MW03CA2817	828103-MW03CA030	828103-MW03CA030	828103-MW03CA030	828103-MW-03CA-09252023
		Parent Sample					
		Sample Date	5/25/2017	11/29/2018	7/16/2020	5/25/2022	9/25/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**	**VOC Method SW8260**				
1,4-Dioxane (P-Dioxane)	0.35	µg/L	0.21 J	NA	NA	NA	NA
1,1-Dichloroethane	5	µg/L	< 38 U	< 7.6 U	< 1.9 U	< 1 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 29 U	< 5.8 U	< 1.5 U	< 1 UJ	0.6 J
2-Hexanone	50	µg/L	< 120 U	< 25 U	< 6.2 U	NA	< 3.1 U
Cis-1,2-Dichloroethylene	5	µg/L	**5600**	**920 J**	**260**	**28 J**	< 0.47 U
Tetrachloroethylene (PCE)	5	µg/L	**1200**	**1200 J**	**8.2**	**34 J**	**130**
Trichloroethylene (TCE)	5	µg/L	**1800**	**470**	**11**	**19 J**	**57.9**
Vinyl Chloride	2	µg/L	**460**	**100**	**30**	**2.6 J**	**6.9**

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 3-4. Historical VOCs in Groundwater

		Sample Depth	Bedrock			
		Location ID	MW-03D			
		Sample Name	828103-MW03D50	828103-MW03D50	828103-MW03D050	828103-MW-03D-09272023
		Parent Sample				
		Sample Date	11/29/2018	7/16/2020	5/25/2022	9/27/2023
Analyte	**NYSDEC AWQS[1]**	**Unit**	**VOC Method SW8260**			
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	NA	NA	NA
1,1-Dichloroethane	5	µg/L	< 1.9 U	< 0.38 U	< 10 UJ	< 0.57 U
1,1-Dichloroethene	5	µg/L	< 1.5 U	< 0.29 U	< 10 UJ	< 0.59 U
2-Hexanone	50	µg/L	< 6.2 U	< 1.2 U	NA	< 3.1 U
Cis-1,2-Dichloroethylene	5	µg/L	**320**	**12**	**6 J**	< 0.47 U
Tetrachloroethylene (PCE)	5	µg/L	**93**	**6.5**	4.5 J	1.4
Trichloroethylene (TCE)	5	µg/L	**73**	**14**	**7.2 J**	**6.2**
Vinyl Chloride	2	µg/L	**20**	**4.4**	< 10 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.
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 3-5. Analytical Parameters and Weightings for Preliminary Screening for Anaerobic Biodegradation Processes

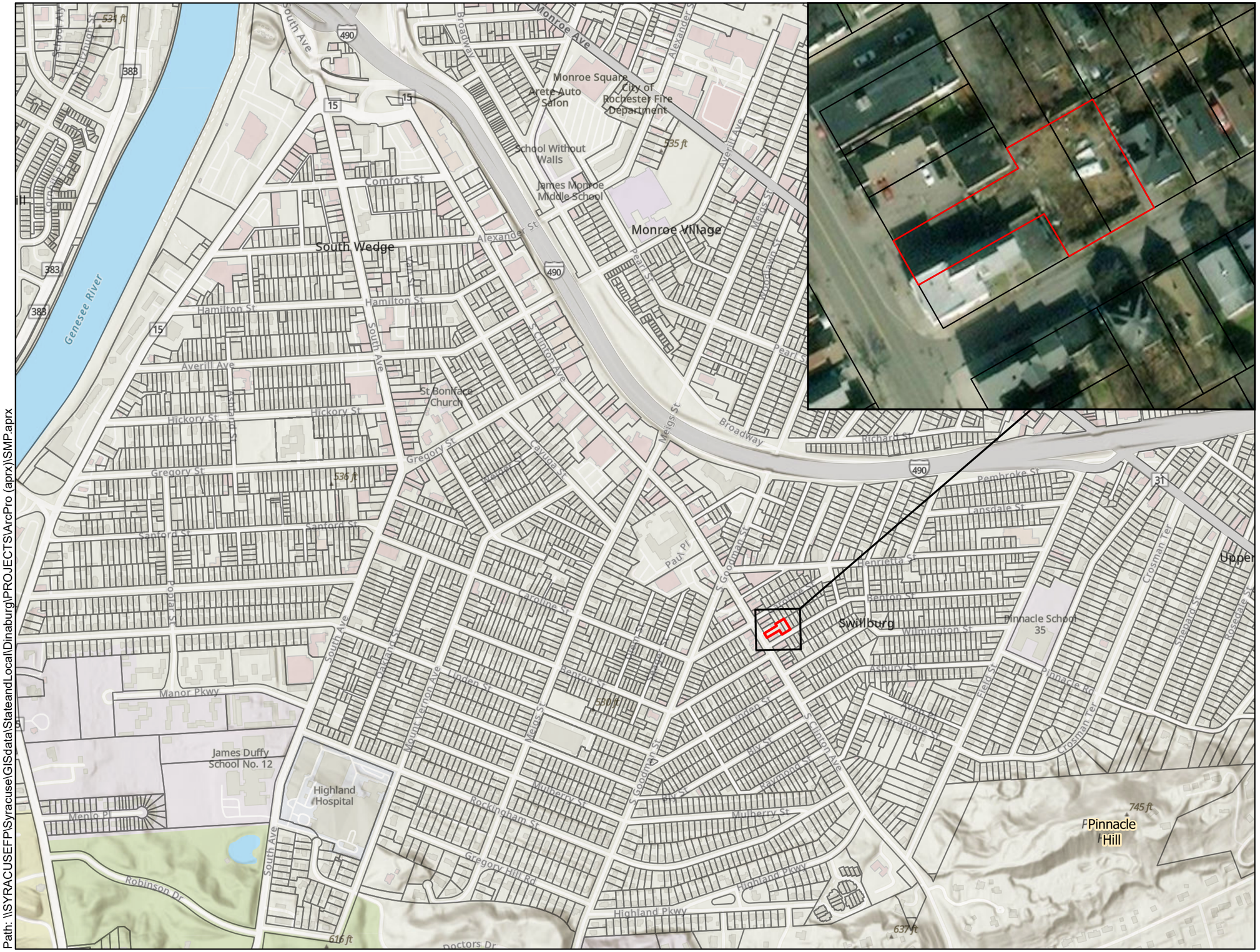
Analysis	Concentration in Most Contaminated Zone	Interpretation	Value	MW-03A	MW-03CA	MW-08K	MW-13K	MW-14KA	MW-19S	MW-20S
Oxygen	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	3	0	0	0	3	0	0	0
Oxygen	> 5 mg/L	Not tolerated; however VC may be oxidized aerobically	-3	0	0	0	0	0	0	0
Nitrate	<1 mg/L	At higher concentrations may compete with reductive pathways	2	2	2	0	2	2	0	2
Iron II	> 1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)- reducing conditions	3	3	3	0	3	0	3	0
Sulfate	< 20 mg/L	At higher concentrations may compete with reductive pathway	2	0	0	0	0	0	0	0
Sulfide	> 1 mg/L	Reductive pathway possible	3	0	0	0	0	0	0	0
Methane	<0.5 mg/L	VC oxidizes	0	0	0	0	0	0	0	0
	> 0.5 mg/L	Ultimate reductive daughter product, VC Accumulates	3	0	0	0	0	0	0	0
Oxidation Reduction Potential (ORP) againsts Ag/ AgCl	< 50 millivolts (mV)	Reductive pathway possible	1	1	1	1	1	1	1	1
	<-100 mV	Reductive pathway likely	2	2	2	0	2	2	0	0
pH*	5 < pH < 9	Optimal range for reductive pathway	0	0	0	0	0	0	0	0
	5 > pH > 9	Outside optimal range for reductive pathway	-2	0	0	0	0	0	0	0
TOC	>20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	2	0	0	0	0	0	0	0
Temperature	> 20 C	At T >20°C biochemical process is accelerated	1	0	0	0	0	0	0	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	1	0	0	0	0	0	1	0
Alkalnity	>2x background	Results from interaction between CO2 and aquifer minerals	1	0	0	0	0	0	0	0
Chloride	>2x background	Daughter product of organic chlorine	2	0	0	0	2	0	0	0
Hydrogen	> 1 nM	Reductive pathway possible, VC may accumulate	3	NA	NA	NA	NA	NA	NA	NA
Hydrogen	< 1 nM	VC oxidized	0	NA	NA	NA	NA	NA	NA	NA
Volatile Fatty Acids	> 0.1 mg/L	Intermediates resulting from biodegradation of more complex compounds; carbon and energy source	2	NA	NA	NA	NA	NA	NA	NA
BTEX	> 0.1 mg/L	Carbon and energy source; drives dechlorination	2	0	0	0	0	0	0	0
Tetrachloroethene	---	Material released	0	0	0	0	0	0	0	0
Trichloroethene	---	Material released	0	0	0	0	0	0	0	0
		Daughter products of PCE	2	0	0	0	0	0	0	0
DCE	---	Material released	0	0	0	0	0	0	0	0
		Daughter products of TCE if cis is > 80% of total DCE it is likely a daughter product of 1,1-DCE can be chemical reaction product of TCE	2	2	2	0	2	2	2	2
VC	---	Material released	0	0	0	0	0	0	0	0
		Daughter products of DCE	2	2	2	0	2	2	2	0
1,1,1-Trichloroethane	---	Material released	0	0	0	0	0	0	0	0
DCA	---	Daughter product of TCE under reducing conditions	2	2	0	0	2	2	0	0
Carbon Tetrachloride	---	Material released	0	0	0	0	0	0	0	0
Chloroethane*	---	Daughter product of DCA or VC under reducing conditions	2	0	0	0	0	0	0	0
Ethene	>0.01 mg/L	Daughter product of VC	2	2	0	0	2	0	0	0
Ethane	>0.1 mg/L	Daughter product of ethene	3	0	0	0	0	0	0	0
Chloroform	---	Material released	0	0	0	0	0	0	0	0
		Daughter product of Carbon Tetrachloride	2	0	0	0	0	0	0	0
Dichloromethane	---	Material released	0	0	0	0	0	0	0	0
		Daughter product of Chloroform	2	0	0	0	0	0	0	0

Table 3-5. Analytical Parameters and Weightings for Preliminary Screening for Anaerobic Biodegradation Processes

Analysis	Concentration in Most Contaminated Zone	Interpretation	Value	MW-03A	MW-03CA	MW-08K	MW-13K	MW-14KA	MW-19S	MW-20S
			Total Score	16	12	1	21	11	9	5
			Inadequate evidence for anaerobic biodegradation (0-5)			X				X
			Limited evidence for anaerobic biodegradation (6-14)		X			X	X	
			Adequate evidence for anaerobic biodegradation (15-20)	X						
			Strong evidence for anaerobic biodegradation (>20)				X			

Notes:
--- = Not applicable
ºC = Degrees Celsius
BTEX = Benzene, toluene, ethylbenzene, and xylenes
DCA = Dichloroethane
DCE = Dichloroethene
mg/L = Milligram(s) per liter
mV = Millivolt(s)
nM = Nanomolar
PCE = Tetrachloroethene
TCE = Trichloroethene
TOC = Total organic carbon
VC = Vinyl chloride

Figures



Legend

- Site Boundary
- Tax Parcel Boundary

Map Date: 10/10/2024
Projection: NAD 1983 State Plane
New York West FIPS 3103 (US Feet)

0 500 1,000
Feet

N

NEW YORK STATE Department of Environmental Conservation

Figure 1-1
Site Location
Dinaburg Distributing, Inc. (828103)
Rochester, New York

Path: \\SYRACUSEFP\Syracuse\GIS\data\State\and\Local\Dinaburg\PROJECTS\ArcPro (aprx)\SMP.aprx

Legend

- Site Boundary
- ERH Treatment Area
- Overburden Monitoring Well
- Overburden/Bedrock Interface Monitoring Well
- Bedrock Monitoring Well

Note:
1. ERH = Electrical resistance heating

Map Date: 10/10/2024
Projection: NAD 1983 State Plane
New York West FIPS 3103 (US Feet)

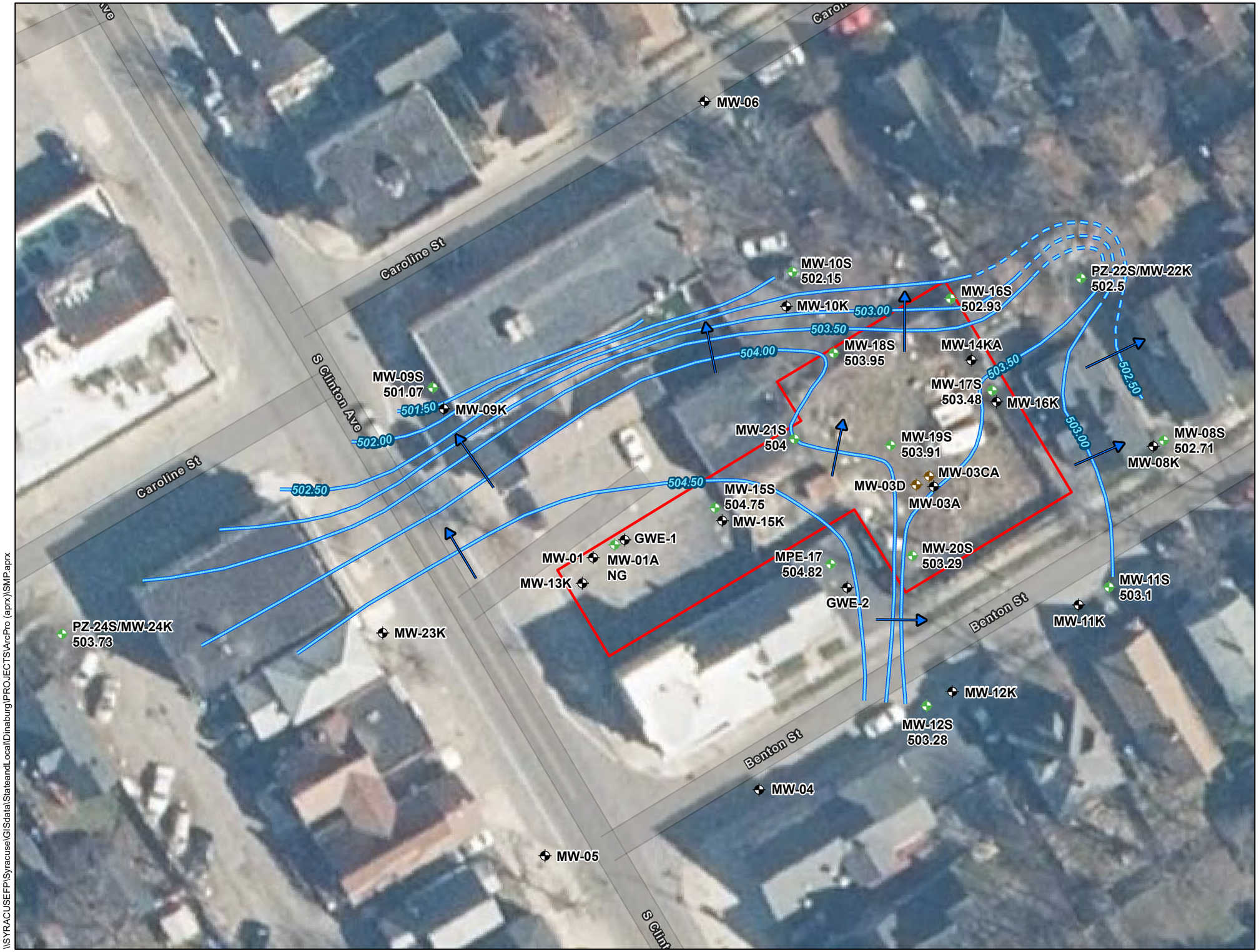
0 25 50
Feet

N

NEW YORK STATE Department of Environmental Conservation

Figure 1-2
Site Layout
Dinaburg Distributing, Inc. (828103)
Rochester, New York

Path: \\SYRACUSEFP\Syracuse\GISdata\StateandLocal\Dinaburg\PROJECTS\ArcPro (aprx)\SMP.aprx



Legend

- Site Boundary
- Groundwater Potentiometric Contour
- (Dashed where Inferred)
- Groundwater Flow Direction
- Overburden Monitoring Well
- Overburden/Bedrock Interface Monitoring Well
- Bedrock Monitoring Well

Notes:
1. NG = Well Not Gauged
2. Interpreted groundwater contours based on data collection 25-27 September 2023.
3. Groundwater elevations are shown in feet above mean sea level (ft. amsl).

Map Date: 10/10/2024
Projection: NAD 1983 State Plane
New York West FIPS 3103 (US Feet)

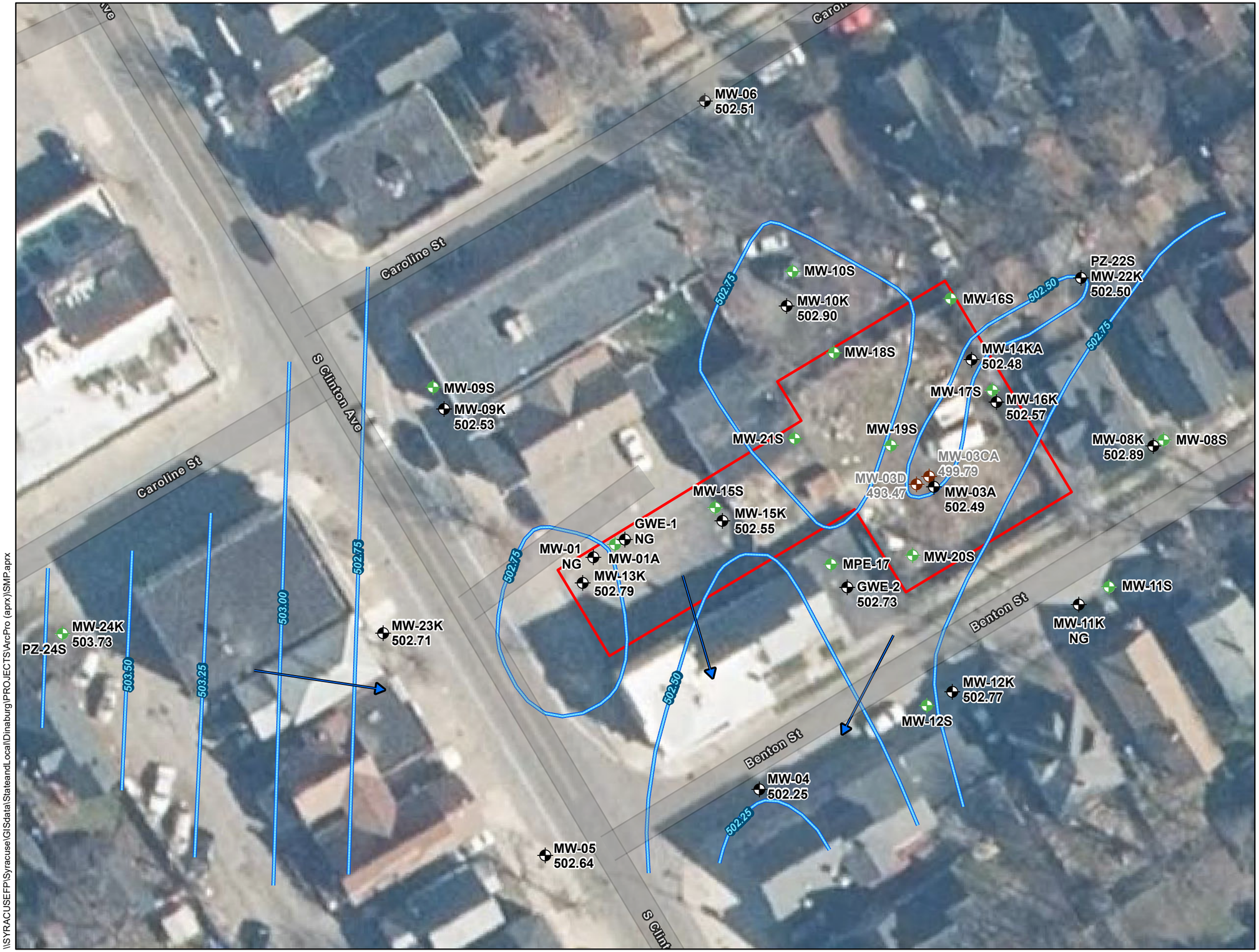
0 25 50
Feet

N

NEW YORK STATE Department of Environmental Conservation

Figure 2-1
Overburden Groundwater Elevation Contours (September 2023)
Dinaburg Distributing, Inc. (828103)
Rochester, New York

\\SYRACUSEFP\Syracuse\GISdata\StateandLocal\Dinaburg\PROJECTS\ArcPro (aprx)\SMP.aprx



Legend

- Site Boundary
- Groundwater Potentiometric Contour
- (Dashed where Inferred)
- Groundwater Flow Direction
- Overburden Monitoring Well
- Overburden/Bedrock Interface Monitoring Well
- Bedrock Monitoring Well

Notes:
1. NG = Well Not Gauged
2. Interpreted groundwater contours based on data collection 25-27 September 2023.
3. Groundwater elevations are shown in feet above mean sea level (ft. amsl).
4. Values shaded grey were not included in contouring.

Map Date: 10/10/2024
Projection: NAD 1983 State Plane
New York West FIPS 3103 (US Feet)

0 25 50
Feet

N

NEW YORK STATE Department of Environmental Conservation

Figure 2-2
Overburden/Bedrock Interface and Bedrock Ground Elevation Contours (September 2023)
Dinaburg Distributing, Inc. (828103)
Rochester, New York

\\SYRACUSEFP\Syracuse\GISdata\StateandLocal\Dinaburg\PROJECTS\ArcPro (aprx)\SMP.aprx

Analyte	NYSDEC AWQS
1,1-DCA	5
1,1-DCE	5
Cis-1,2-DCE	5
PCE	5
Trans-1,2-DCE	5
TCE	5
Vinyl Chloride	2

MW-10S	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	10.4
PCE	3
Trans-1,2-DCE	ND
TCE	12.5
Vinyl Chloride	ND

MW-18S	
9/27/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	99.3
PCE	172
Trans-1,2-DCE	0.74 J
TCE	53.2
Vinyl Chloride	ND

MW-16S	
9/27/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	26.8
PCE	24.5
Trans-1,2-DCE	ND
TCE	199
Vinyl Chloride	ND

MW-17S	
9/27/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	1.9
PCE	114
Trans-1,2-DCE	ND
TCE	118
Vinyl Chloride	ND

MW-21S	
9/27/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	0.95 J
Trans-1,2-DCE	2.4
TCE	1.2
Vinyl Chloride	ND

MW-15S	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	2.5
PCE	150
Trans-1,2-DCE	ND
TCE	83.3
Vinyl Chloride	ND

PZ-22S	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	ND
Vinyl Chloride	ND

MW-09S	
9/25/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	ND
Vinyl Chloride	ND

MW-08S	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	ND
Vinyl Chloride	ND

PZ-24S	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	ND
Vinyl Chloride	ND

MPE-17	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	15.8
Trans-1,2-DCE	ND
TCE	0.7 J
Vinyl Chloride	ND

MW-11S	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	ND
Vinyl Chloride	ND

MW-19S	
9/25/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	1030
PCE	360
Trans-1,2-DCE	14.8
TCE	112
Vinyl Chloride	23.3

MW-12S	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	ND
Vinyl Chloride	ND

MW-20S	
9/25/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	54.2 J
PCE	37100
Trans-1,2-DCE	ND
TCE	592
Vinyl Chloride	ND

MW-06 MW-10K MW-14KA MW-16K MW-22K MW-09K MW-15K MW-03CA MW-03A MW-03D MW-08K MW-01A NS GWE-1 MW-01 MW-13K GWE-2 MW-24K MW-23K MW-11K MW-12K MW-04 MW-05

S Clinton Ave
Benton St
Caroline St
Beaufort St

Legend

- Site Boundary
- Overburden Monitoring Well
- Overburden/Bedrock Interface Monitoring Well
- Bedrock Monitoring Well

Notes:
AWQS = Ambient Water Quality Standards
DCA = Dichloroethane
DCE = Dichloroethene/Dichloroethylene
J= Concentration is estimated.
ND = Not detected
NS = Not Sampled
NYSDEC = New York State Department of Environmental Conservation
PCE = Tetrachloroethylene
TCE = Trichloroethylene
VOC(s) = Volatile Organic Compound(s)
Concentrations are reported in µg/L (micrograms per liter).
Shaded values are above NYSDEC AWQS.

Map Date: 10/10/2024
Projection: NAD 1983 State Plane New York West FIPS 3103 (US Feet)

0 25 50
Feet
N

NEW YORK STATE Department of Environmental Conservation

Figure 3-1
VOC Analytical Results in Overburden Groundwater (September 2023)
Dinaburg Distributing, Inc. (828103)
Rochester, New York

\\SYRACUSEFP\Syracuse\GIS\data\StateandLocal\Dinaburg\PROJECTS\ArcPro (aprx)\SMP.aprx

Analyte	NYSDEC AWQS
1,1-DCA	5
1,1-DCE	5
Cis-1,2-DCE	5
PCE	5
Trans-1,2-DCE	5
TCE	5
Vinyl Chloride	2

MW-06	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	7.2
PCE	ND
Trans-1,2-DCE	ND
TCE	3.8
Vinyl Chloride	ND

MW-03D	
9/27/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	3.8
PCE	1.4
Trans-1,2-DCE	ND
TCE	6.2
Vinyl Chloride	ND

MW-14KA	
9/25/2023	
1,1-DCA	ND
1,1-DCE	8.9 J
Cis-1,2-DCE	2800
PCE	1600
Trans-1,2-DCE	13.5
TCE	3170
Vinyl Chloride	130

MW-22K	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	18.6
PCE	2.4
Trans-1,2-DCE	ND
TCE	3.8
Vinyl Chloride	0.77 J

MW-09K	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	91.4
PCE	27
Trans-1,2-DCE	0.88 J
TCE	21.8
Vinyl Chloride	10.3

MW-10K	
9/26/2023	
1,1-DCA	1.7
1,1-DCE	1.9
Cis-1,2-DCE	163
PCE	ND
Trans-1,2-DCE	2
TCE	496
Vinyl Chloride	0.64 J

MW-15K	
9/25/2023	
1,1-DCA	8.7
1,1-DCE	11.9
Cis-1,2-DCE	231
PCE	404
Trans-1,2-DCE	1.6
TCE	255
Vinyl Chloride	12.9

MW-16K	
9/27/2023	
1,1-DCA	ND
1,1-DCE	1
Cis-1,2-DCE	320
PCE	189
Trans-1,2-DCE	2.9
TCE	236
Vinyl Chloride	8.8

MW-13K	
9/25/2023	
1,1-DCA	4.2 J
1,1-DCE	6.9
Cis-1,2-DCE	2170
PCE	1350
Trans-1,2-DCE	14.9
TCE	556
Vinyl Chloride	539

MW-08K	
9/25/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	ND
Vinyl Chloride	ND

MW-24K	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	ND
Vinyl Chloride	ND

MW-23K	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	ND
Vinyl Chloride	ND

MW-03CA	
9/25/2023	
1,1-DCA	ND
1,1-DCE	0.6 J
Cis-1,2-DCE	89.4
PCE	130
Trans-1,2-DCE	ND
TCE	57.9
Vinyl Chloride	6.9

MW-05	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	ND
Vinyl Chloride	ND

MW-04	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	ND
Vinyl Chloride	ND

GWE-2	
9/26/2023	
1,1-DCA	5.8
1,1-DCE	1.3
Cis-1,2-DCE	96.9
PCE	74.8
Trans-1,2-DCE	6.4
TCE	50.7
Vinyl Chloride	0.55 J

MW-12K	
9/26/2023	
1,1-DCA	ND
1,1-DCE	ND
Cis-1,2-DCE	ND
PCE	ND
Trans-1,2-DCE	ND
TCE	5.1
Vinyl Chloride	ND

MW-03A	
9/25/2023	
1,1-DCA	1
1,1-DCE	4
Cis-1,2-DCE	877
PCE	704
Trans-1,2-DCE	5.3
TCE	350
Vinyl Chloride	305

MW-10S
MW-16S
PZ-22S
MW-09S
MW-18S
MW-17S
MW-21S
MW-19S
MW-08S
MW-15S
GWE-1
NS
MW-01
NS
MW-01A
MPE-17
MW-20S
MW-11S
MW-11K
NS
PZ-24S
MW-12S
S Clinton Ave
Caroline St
Benton St
Benton St
Benton St
Beaufort S

Legend

- Site Boundary
- Overburden Monitoring Well
- Overburden/Bedrock Interface Monitoring Well
- Bedrock Monitoring Well

Notes:
AWQS = Ambient Water Quality Standards
DCA = Dichloroethane
DCE = Dichloroethene/Dichloroethylene
J= Concentration is estimated.
ND = Not detected
NS = Not Sampled
NYSDEC = New York State Department of Environmental Conservation
PCE = Tetrachloroethylene
TCE = Trichloroethylene
VOC(s) = Volatile Organic Compound(s)
Concentrations are reported in µg/L (micrograms per liter).
Shaded values are above NYSDEC AWQS.

Map Date: 10/10/2024
Projection: NAD 1983 State Plane
New York West FIPS 3103 (US Feet)

0 25 50
Feet
N

NEW YORK STATE Department of Environmental Conservation

Figure 3-2
VOC Analytical Results in Overburden/Bedrock Interface and Bedrock Groundwater (September 2023)
Dinaburg Distributing, Inc. (828103)
Rochester, New York

\\SYRACUSEFP\Syracuse\GIS\data\StateandLocal\Dinaburg\PROJECTS\ArcPro (aprx)\SMP.aprx

Appendix A

Daily Field Reports

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No. D009806
DEC PM – J.Stefansky
Engineer PM – J.Oliver
Engineer Insp. – N.Peck

Site Location: 1012 South Clinton Ave, Rochester 14620

Weather Conditions

General Description	Partly Cloudy	AM		PM
Temperature	36F	AM		PM
Wind	N/A	AM		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

Site is gated with combo lock #8103. Onsite property covered in abandoned trailers, vehicles, garbage, and debris. Lots of slips, trips, fall hazards and potential puncture hazards (needles, sharp glass). Would recommend cleaning up property with roll off and towing onsite equipment before EA performs any work onsite.

Summary of Work Performed	Arrived at site:	3PM	Departed Site:	330PM

Joshua Oliver, Nicole Peck, and Noah Robinson, (EA), onsite at (3PM) met up with Jasmine Stefansky and Payson Long (NYSDEC) met onsite at Site 828103. Onsite property covered in abandoned trailers, vehicles, garbage, and debris. Lots of slips, trips, fall hazards and potential puncture hazards (needles, sharp glass). Would recommend cleaning up property with roll off and towing onsite equipment before EA performs any work onsite. EA and NYSDEC found all applicable monitoring wells for the Site including offsite monitoring wells. Many wells were in disrepair and will need to be repaired during the next groundwater gauging event (missing/stripped bolts, missing j-plugs, covers missing, surface completions broken/cracked beyond use). Unable to get plastic cap off of MW-09 and will need to fully be replaced with functional surface completion.

NYSDEC and EA left Site around 330PM

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
Joshua Oliver	EA	Project Manager	0.5
Noah Robinson	EA	Scientist	0.5
Nicole Peck	EA	Engineer	0.5
Jasmine Stefansky	NYSDEC	Project Manager	0.5
Payson Long	NYSDEC	Project Manager	0.5

Equipment Description	Contractor/Vendor	Quantity	Used

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

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

Visitors to Site

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

Site Representatives

Name	Representing
No property owners onsite	

Project Schedule Comments

None.

Issues Pending

- Lots of hazards onsite. Will need to address prior to next sampling event.

Interaction with Public, Property Owners, Media, etc.

None.

Include (insert) figures with markups showing location of work and job progress

Site Photographs (Descriptions Below)

Photo 1: MW-15 S and MW-15K

Photo 2: locked gate to fenced in yard with multiple wells

Photo 3: Looking northeast

Photo 4: Looking north

Photo 5: Looking northeast

Photo 6: Looking southwest

Photo 7: MW-19S

Photo 8: MW-20S

Photo 9: MW-03CA

Photo 10: MW-03A

Photo 11: MW-16K and MW-17S

Photo 12: MW-14KA

Photo 13: MW-16S

Photo 14: MW-18S

Photo 15: MW-13K

Photo 16: MW-04

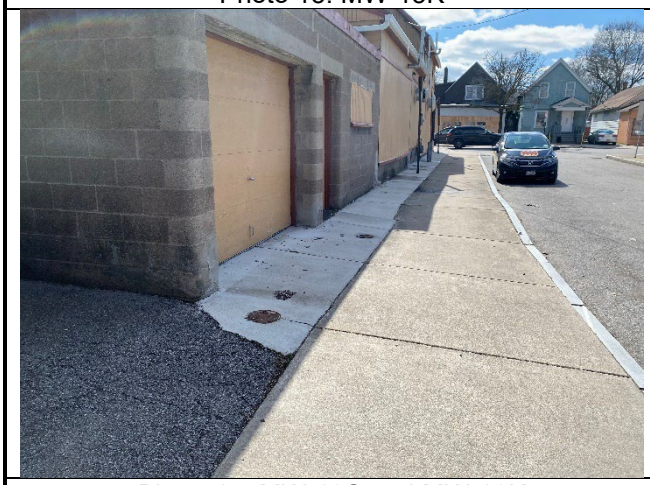


Photo 17: MW-12S and MW-12K

Photo 18: MW-11K and MW-11S

Photo 19: MW-08K and MW-08S

Photo 20: MW-09K and MW-09S

Photo 21: MW-05

Photo 22: MW-10K

Photo 23: MW-10S

WELL MONITORING TABLE:

Well ID	DTW	DTB	Notes

Site Inspector(s): Josh Oliver, Nicole Peck, and Noah Robinson	**Date: 3/30/23**

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

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: 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:			

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: 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: N/A			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No. D009806
DEC PM – J.Stefansky
Engineer PM – J.Oliver

Site Location: 1012 South Clinton Ave, Rochester 14620

Weather Conditions				
General Description	Rain	AM		PM
Temperature	70F	AM		PM
Wind	N/A	AM		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

Site is gated with combo lock #8103, however, gate ring is snapped off, currently non-operational. Onsite property covered in abandoned trailers, vehicles, garbage, and debris. Lots of slips, trips, fall hazards and potential puncture hazards (needles, sharp glass). Would recommend cleaning up property with roll off and towing onsite equipment before EA performs any work onsite.

Summary of Work Performed	Arrived at site:	1030AM	Departed Site:	1100AM

Joshua Oliver, and Philomena Coles-Carruthers, (EA), onsite at (1030AM) at Site 828103. Onsite property covered in abandoned trailers, vehicles, garbage, and debris. Lots of slips, trips, fall hazards and potential puncture hazards (needles, sharp glass). Would recommend cleaning up property with roll off and towing onsite equipment before EA performs any work onsite. Many wells were in disrepair and will need to be repaired during the next groundwater gauging event (missing/stripped bolts, missing j-plugs, covers missing, surface completions broken/cracked beyond use). Unable to get plastic cap off of MW-09 and will need to fully be replaced with functional surface completion.

EA knocked on doors for offsite monitoring wells, but no answer on all attempts. Will mail hardcopies to POs prior to GWS event.

EA left Site around 1100AM

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
Joshua Oliver	EA	Project Manager	0.5
Philomena Coles-Carruthers	EA	Scientist	0.5

Equipment Description	Contractor/Vendor	Quantity	Used

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

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

Visitors to Site

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

Site Representatives

Name	Representing
No property owners onsite	

Project Schedule Comments

None.

Issues Pending

- Lots of hazards onsite. Will need to address prior to next sampling event.

Interaction with Public, Property Owners, Media, etc.

None.

Include (insert) figures with markups showing location of work and job progress

Site Photographs (Descriptions Below)

Photo 1: Looking Northeast

Photo 2: Looking East

Photo 3: Looking Southeast

Photo 4: Looking south

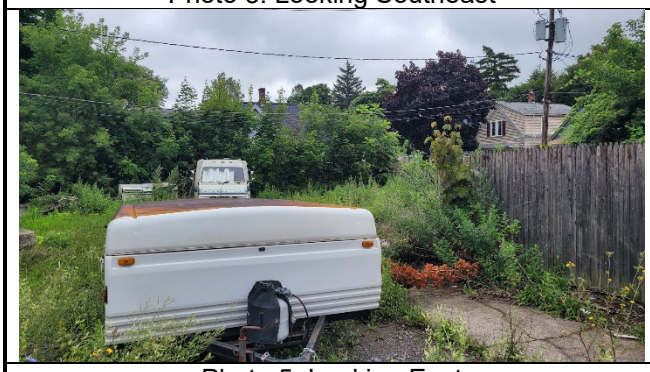


Photo 5: Looking East

WELL MONITORING TABLE:

Well ID	DTW	DTB	Notes

Site Inspector(s): Josh Oliver, Philomena Coles-Carruthers	**Date: 7/27/23**

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

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: 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:			

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: 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: N/A			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No. D009806
DEC PM – J.Stefansky
Engineer PM – J.Oliver

Site Location: 1012 South Clinton Ave, Rochester 14620

Weather Conditions				
General Description	Sunny	AM		PM
Temperature	75F	AM		PM
Wind	Calm	AM		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

Onsite property has debris and dumpster for taking away debris. Some slips, trips, fall hazards and potential puncture hazards (needles, sharp glass).

Summary of Work Performed	Arrived at site:	0745	Departed Site:	0945

(0745) EA onsite (C. Badman, L. Backman-Lowe). (0750) Tailgate health and safety meeting covering topics such as traffic, slips, trips and falls, and hydration. (0755) Begin search for wells, conducting site inspection. (0935) Property owner/manager onsite, asks EA to remove concrete blocks, EA shows property owner well locations. (0945) EA offsite.

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
Cody Badman	EA	Scientist	2
Lincoln Backman-Lowe	EA	Scientist	2

Equipment Description	Contractor/Vendor	Quantity	Used

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

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

Visitors to Site

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

Site Representatives	
Name	**Representing**
Property owner onsite	

Project Schedule Comments

Well maintenance, repair and redevelopment set for the week of September 11th.

A groundwater sampling event is due to take place the week of September 25th.

Issues Pending

None

Interaction with Public, Property Owners, Media, etc.

Property owner onsite, shown well locations of onsite wells.

Include (insert) figures with markups showing location of work and job progress

Site Photographs (Descriptions Below)

	
Concrete blocks site owner requested EA move offsite.	Additional photo of concrete blocks facing South.

Onsite debris facing East

Onsite debris facing East

Onsite debris facing entrance

Entrance with gate open

WELL MONITORING TABLE:

Well ID	DTW	DTB	Notes

Site Inspector(s): Cody Badman, Lincoln Backman-Lowe	**Date: 08/31/2023**

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

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: 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:			

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: 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: N/A			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No. D009806

DEC PM – J.Stefansky

Engineer PM – J.Oliver

Site Location: 1012 South Clinton Ave, Rochester 14620

Weather Conditions				
General Description	Sunny	AM	Sunny	PM
Temperature	62F	AM	70F	PM
Wind	Calm	AM	Calm	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

Some slips, trips, fall hazards and potential puncture hazards (needles, sharp glass).

Summary of Work Performed	Arrived at site:	0745	Departed Site:	1515

(0745) EA onsite (C. Badman and A. Stoogenke). (0750) Tailgate Health and Safety meeting, topics included slips, trips and falls, potential puncture hazards. (0755) Begin well repair and maintenance. (0800) Lock added to MW-15S. (0805) Lock added to MW-15K. (0810) Locks added to MW-21S and MW-16S. (0815) Lock and J-plug replaced on MW-18S. (0820) Lock, J-plug and bolts replaced on MW-19S; lock added to MW-14KA. (0825) Wells MW-17S, MW-3D, MW-16K need lock, will replace when additional locks are obtained. (0830) Replaced two bolts on MW-03CA, one bolt on MW-20S and all bolts on MW-03A. MW-03CA, MW-20S and MW-03A need locks, and will replace when additional locks are obtained. (0835) Replaced J-plug on MW-13K, needs lock and will replace when additional locks are obtained. (0840) MW-09K needs lock, will replace when additional locks are obtained. (0845) Added J-plug and bolts to MW-06, needs lock. (0855) Replaced J-plug on MW-10S, flush J-plug is too tall to keep well covering sealed, needs lock. (0900) Begin removing old well cap of MW-10K. (0905) Searched for MW-24K, could not locate. (0910) Need larger gauged bolts for MW-05. (0915) Replaced J-plug on MW-4, needs lock and larger bolts. (0920) MW-12S needs lock. (0925) Replaced J-plug and bolts on MW-12K, needs lock. (0930) MW-11K and MW-11S need bolts and locks. (0935) MW-8S needs bolts and J-plug, MW-8K needs bolts. (0940) MW-22K, PZ-22 needs locks, will replace when additional locks are obtained. (1000) Return to MW-10K to continue to replace well cap. (1020) Well cap installed on MW-10K. (1030) Called M. Wright (EA) to discuss well repair needs, plan for redevelopment. (1045) Begin development on MW-19S. (1050) Stop purge on MW-19S, well dry after purging ~ 1 gallon. (1100) Start purge at MW-8K. (1105) Stopped purge at MW-8K, well dry after purging ~4 gallons. (1110) Spoke with homeowner regarding presence onsite, location of MW-22K in driveway. (1125) Start purge on MW-8K again, water clear after purging ~7 total gallons. (1130) Start purge at MW-22K. (1140) Purge stopped after purging ~26 gallons. Water to be dumped in drums and purge restarted. (1150) Purge restarted at MW-22K. (1205) Purge stopped after purging an additional ~32 gallons. Water to be dumped in drums and purge restarted. (1212) Purge restarted at MW-22K. (1225) Purge stopped after purging an additional ~32 gallons. Water to be dumped in drums and purge restarted. (1238) Purge restarted at MW-22K. (1245) Stopped purge on MW-22K, water clear after purging ~103 gallons. (1300) Set up on MW-11K, sediment encountered at ~2 feet of depth. Pump unable to be placed down well. (1310) Start purge at MW-18S. (1312) Purge stopped, well dry after purging ~2 gallons. (1320) Purge restarted, well dry after purging ~1 gallon. (1350) Purge restarted, well dry after purging ~1 gallon. (1410) Purge restarted, well dry after purging ~1 gallon (5 gallons total). (1430) Start purge on MW-19S. (1450) Stopped purge on MW-19S, ~3 gallons removed. (1500) EA packing up. (1515) EA offsite.

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
Cody Badman	EA	Scientist	7.5
Alex Stoogenke	EA	Scientist	7.5

Equipment Description	Contractor/Vendor	Quantity	Used
Whale Pump	EA	1	Yes

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

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

Visitors to Site

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

Site Representatives

Name	Representing

Project Schedule Comments

Well maintenance, repair, and redevelopment to continue the week of September 11th.

A groundwater sampling event is due to take place the week of September 25th.

Issues Pending

None

Interaction with Public, Property Owners, Media, etc.

Spoke with homeowner regarding presence onsite, location of MW-22K in driveway.

Include (insert) figures with markups showing location of work and job progress

Site Photographs (Descriptions Below)	
	
Plastic cap on MW-9S	MW-10S not flush with J-plug

	
Removal of destroyed MW-10K well cap	Newly installed MW-10K well cap
	
Set up on MW-8K	Set up on MW-22K

MW-11K showing depth at which Whale Pump could not descend further.

Picture of MW-11K showing sediment obstruction at ~2 feet.

WELL MONITORING TABLE

Well ID	DTW	DTB	Notes

Site Inspector(s): Cody Badman, Alex Stoogenke

Date: 09/11/2023

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

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: 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:			

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: 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: N/A			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No. D009806
DEC PM – J.Stefansky
Engineer PM – J.Oliver

Site Location: 1012 South Clinton Ave, Rochester 14620

Weather Conditions				
General Description	Overcast	AM	Sunny	PM
Temperature	61F	AM	70F	PM
Wind	Calm	AM	Calm	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

Some slips, trips, traffic, fall hazards and potential puncture hazards (needles, sharp glass).

Summary of Work Performed	Arrived at site:	0830	Departed Site:	1245

(0830) C. Badman and A. Stoogenke (EA) on site. (0835) Tailgate safety meeting is held with topics such as slips, trips and falls, traffic, and puncture hazards. (0840) EA attempts to open MW-09S. (0845) EA opens MW-09S to find the PVC broken and needing a J-plug and lock. (0850) EA searches for missing wells with a metal detector and finds potential location of MW-01. (0925) EA calls property owner regarding the lock on his gate. (0930) EA begins cutting PVC on MW-9S. (0935) EA finishes cutting PVC on MW-09S and installs a J-plug. (0945) EA cuts PVC on MW-08S. (1000) EA attempts to clear the sediment in MW-11K. (1005) EA replaces bolts for the following wells: MW-08S, MW-08K, MW-11K, MW-11S. (1105) EA cuts PVC on MW-10S. (1140) EA finishes cutting PVC on MW-10S, bolts are added. (1150) EA returns to MW-11K to remove more sediment. (1210) EA discovers MW-11K PVC is collapsed ~3.5 feet from the top of the riser. (1230) EA replaces bolts on the following wells: MW-04, MW-03A, MW-03CA, MW-05, MW-20S. (1245) EA offsite.

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
Cody Badman	EA	Scientist	4.25
Alex Stoogenke	EA	Scientist	4.25

Equipment Description	Contractor/Vendor	Quantity	Used
Whale Pump	EA	1	Yes
Various hand tools	EA	-	Yes

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

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

Visitors to Site

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

Site Representatives	
Name	**Representing**

Project Schedule Comments

Well maintenance, repair, and redevelopment to continue the week of September 11th.

A groundwater sampling event is due to take place the week of September 25th.

Issues Pending

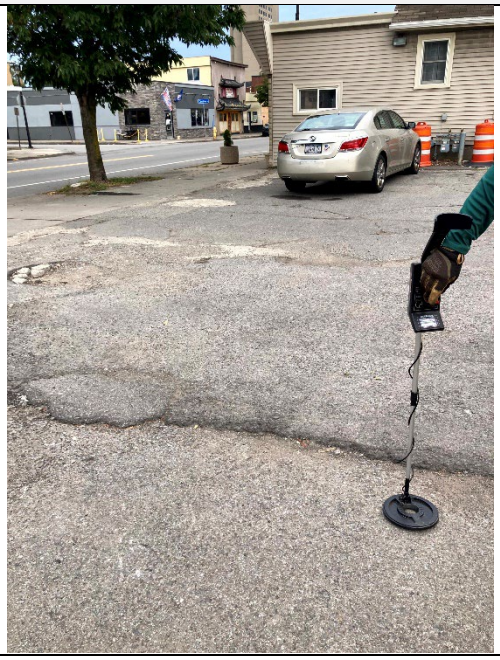
None

Interaction with Public, Property Owners, Media, etc.

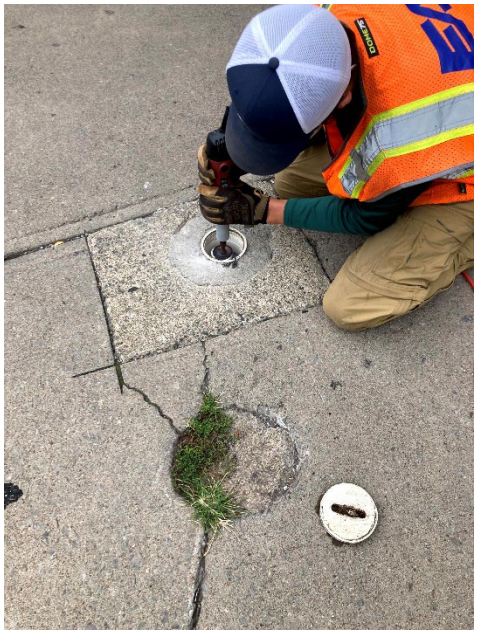
C. Badman conversed with property owner about the gate lock.

Site Photographs (Descriptions Below)

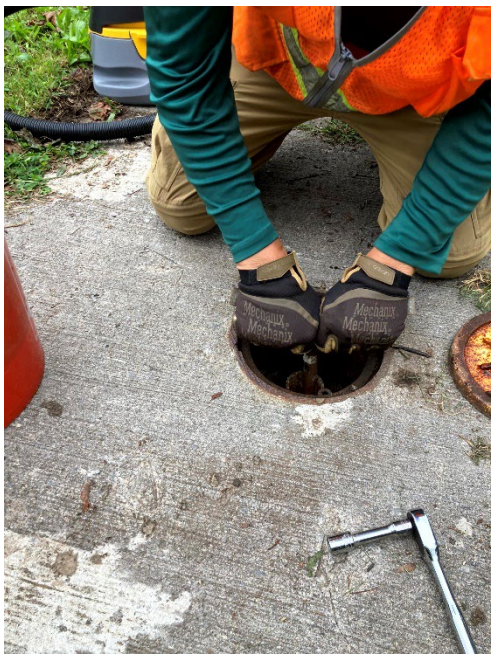
MW-9S with cap off



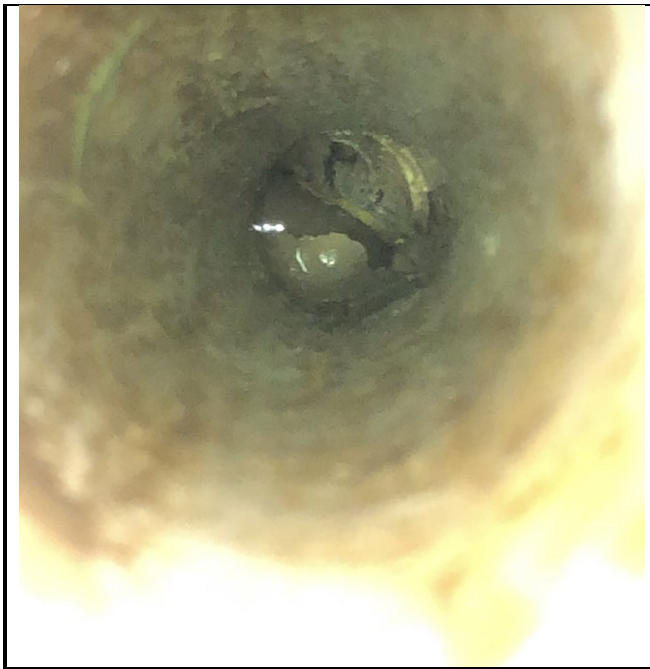
Approximate location of what we believe is MW-01



Shortening PVC riser on MW-9S



Attempting to remove sediment from MW-11K



Down-hole view of MW- 11K after removing sediment revealing broken PVC at ~3.5 ft

J-plug installed on MW-10S after shortening PVC

WELL MONITORING TABLE

Well ID	DTW	DTB	Notes

Site Inspector(s): Cody Badman, Alex Stoogenke

Date: 09/12/2023

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

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: 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:			

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: 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: N/A			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No. D009806
DEC PM – J.Stefansky
Engineer PM – J.Oliver

Site Location: 1012 South Clinton Ave, Rochester 14620

Weather Conditions				
General Description	Overcast	AM	Overcast	PM
Temperature	60F	AM	70F	PM
Wind	Calm	AM	Calm	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

Some slips, trips, fall hazards and potential puncture hazards (needles, sharp glass).

Summary of Work Performed	Arrived at site:	0800	Departed Site:	1230

(0800) EA onsite (C.Badman, A. Stoogenke). (0805) Tailgate Health and Safety Meeting covering topics of traffic, slips, trips, and falls. (0815) Search for MW-24K. (0830) Search for MW-01, MW-01A and GWE-1. (0835) Marked locations where wells are believed to be present. (0855) Begin redevelopment of MW-9S, water is light brown. (0910) Stopped purge on MW-9S, well dry after purging ~6 gallons. (0915) Restarted purge on MW-9S. (0940) Stopped purge after pumping ~8 gallons total. (1050) J. Oliver (EA) onsite. (1100) Site owner onsite, shown lock on gate and given code. (1105) Site owner offsite. (1115) Search for MW-24K. (1120) Located MW-24K and PZ-24S (nested wells). (1135) NYSDEC (J. Stefansky) onsite. (1200) NYSDEC offsite, EA obtains access agreement from property on 358 Benton Street. (1210) J. Oliver (EA) offsite. (1215) Start redevelopment of MW-24K, water is dark brown. (1220) Purge stopped after purging ~8 gallons, water is clear. (1230) Dumping IDW into drums. EA offsite.

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
Cody Badman	EA	Scientist	4.5
Alex Stoogenke	EA	Scientist	4.5

Equipment Description	Contractor/Vendor	Quantity	Used
Whale Pump	EA	1	Yes
Various Hand Tools	EA	-	Yes

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

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

Visitors to Site

Name	Representing	Entered Exclusion/CRZ Zone	
J. **Stefansky**	**NYSDEC**	**Yes**	**No X**
J. Oliver	**EA**	**Yes**	**No X**

Site Representatives	
Name	**Representing**
Site Owner	

Project Schedule Comments

Well maintenance, repair, and redevelopment to continue the week of September 11th.

A groundwater sampling event is due to take place the week of September 25th.

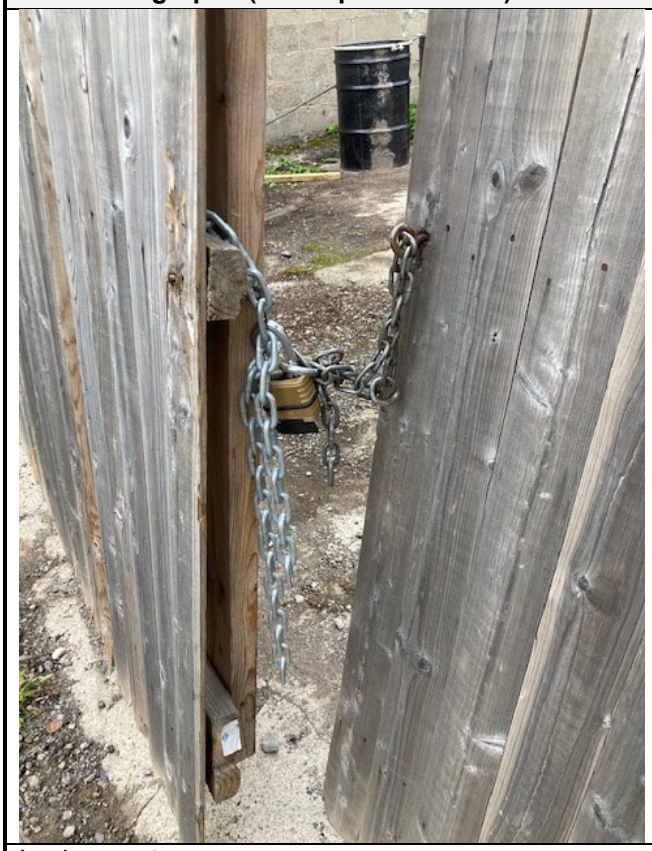
Issues Pending

None

Interaction with Public, Property Owners, Media, etc.

Spoke with property owner, showed property owner lock and combination that is on the gate.
Spoke with homeowner of 358 Benton Street regarding access agreement.

Site Photographs (Descriptions Below)



Lock on gate

Possible locations of MW-01, MW-01A, GWE-1

Turbid water being purged from MW-9S

MW-24K location

WELL MONITORING TABLE

Well ID	DTW	DTB	Notes

Site Inspector(s): Cody Badman, Alex Stoogenke	**Date: 09/13/2023**

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

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: 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:			

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: 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: N/A			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No. D009806
DEC PM – J.Stefansky
Engineer PM – J.Oliver

Site Location: 1012 South Clinton Ave, Rochester 14620

Weather Conditions				
General Description	Partly cloudy	AM	--	PM
Temperature	56 F	AM	--	PM
Wind	Calm	AM	--	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

Some slips, trips, fall hazards and potential puncture hazards (needles, sharp glass).

Summary of Work Performed	Arrived at site:	0800	Departed Site:	0915

(0800) C. Badman and A. Stoogenke (EA) on site. A tailgate Health and Safety meeting is held. (0805) EA begins rethreading well seats that are not broken. (0810) MW-19S is found to have 1 broken bolt seat, MW-03A has 2, MW-15K has 2 and MW-15S has 1. (0815) EA rethreads 2 bolt seats on MW-13K. (0820) EA rethreads 3 bolt seats on MW-9K. (0830) EA rethreads 1 bolt seat on MW-06 and finds 1 broken. (0835) EA rethreads 1 bolt seat on MW-10S. (0840) EA rethreads 2 bolt seats on MW-05, finds 1 broken. (0850) EA rethreads one bolt seat on MW-04. (0855) EA finds 1 broken bolt seat on MW-11K. 1 bolt seat is rethreaded on MW-11S and 1 bolt seat is broken. (0900) EA rethreads 2 bolt seats on MW-8K. (0905) EA rethreads 1 bolt seat on MW-8S, 1 bolt seat is broken. (0915) EA offsite.

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
Cody Badman	EA	Scientist	1.25
Alex Stoogenke	EA	Scientist	1.25

Equipment Description	Contractor/Vendor	Quantity	Used
Whale Pump	EA	1	No
Various Hand Tools	EA	-	Yes

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

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

Visitors to Site

Name	Representing	Entered Exclusion/CRZ Zone	
J. **Stefansky**	**NYSDEC**	**Yes**	**No X**
J. Oliver	**EA**	**Yes**	**No X**

Site Representatives	
Name	**Representing**
Site Owner	

Project Schedule Comments

A groundwater sampling event is due to take place the week of September 25th. Remaining repairs will be rolled into the GW sampling event.

Issues Pending

None

Interaction with Public, Property Owners, Media, etc.

None

Site Photographs (Descriptions Below)

MW-06: Attempting to rethread a broken bolt seat

MW-10S: Successfully rethreaded bolt seat.

WELL MONITORING TABLE

Well ID	DTW	DTB	Notes

Site Inspector(s): Cody Badman, Alex Stoogenke

Date: 09/14/2023

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

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: 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:			

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: 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: N/A			

* BART – Best Available Retrofit Technology

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No. D009806
DEC PM – J.Stefansky
Engineer PM – J.Oliver

Site Location: 1012 South Clinton Ave, Rochester 14620

Weather Conditions				
General Description	Sunny	AM	Cloudy	PM
Temperature	60F	AM	69F	PM
Wind	Calm	AM	Calm	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

Onsite property has debris. Some slips, trips, fall hazards and potential puncture hazards (needles, sharp glass).

Summary of Work Performed	Arrived at site:	0755	Departed Site:	1655

(0755) EA onsite (C. Badman, A. Stoogenke, M. Wright). (0800) Tailgate Health and Safety Meeting covering topics of traffic, hydration, potential puncture hazards, slips, trips, and falls. Calibrate Horibas and PIDs. (0815) Begin synoptic gauging event. (0935) End synoptic gauging event. (0936) Start purge MW-03CA. (0950) Start purge MW-13K. (1006) Sample 828103-MW-03CA-09252023 for VOCs and MNA parameters, MS/MSD taken. (1041) Sample 828103-MW-13K-09252023 for VOCs and MNA parameters. 828103-DUP-01-09252023 taken. (1126) Start purge MW-20S. (1145) Start purge MW-03A. (1153) Sample 828103-MW-20S-09252023 for VOCs and MNA parameters. (1221) Sample 828103-MW-03A-09252023 for VOCs and MNA parameters. (1236) Start purge MW-19S. (1240) Deployed Bio-Trap in MW-20S. (1250) Deployed Bio-Trap in MW-03CA. (1300) Deployed Bio-Trap in MW-13K. (1303) Sample 828103-MW-19S-09252023 for VOCs and MNA parameters. (1307) Start purge MW-8K. (1342) Start purge MW-14KA. (1418) Sample 828103-MW-14KA-09252023 for VOCs and MNA parameters. (1445) Sample 828103-MW-08K-09252023 for VOCs and MNA parameters. (1515) M. Wright offsite. (1550) Start purge MW-15S. (1612) Start purge MW-15K. (1617) Sample 828103-MW-15S-09252023 for VOCs. (1639) Sample 828103-MW-15K-09252023 for VOCs. (1655) EA offsite.

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
Cody Badman	EA	Scientist	9
Alex Stoogenke	EA	Scientist	9
Mike Wright	EA	Geologist	7.5

Equipment Description	Contractor/Vendor	Quantity	Used
Heron Water Level Meter	Pine Environmental	2	Yes
Horiba U-52	Pine Environmental	2	Yes
PID	Pine Environmental	2	Yes
Peristaltic Pump	Pine Environmental	2	Yes

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

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

Visitors to Site

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

Site Representatives

Name	Representing

Project Schedule Comments

Groundwater sampling event to continue the week of September 25th.

Issues Pending

None

Interaction with Public, Property Owners, Media, etc.

None

Site Photographs (Descriptions Below)

Set up on MW-19S

Set up on MW-14KA

Set up on MW-08K

WELL MONITORING TABLE:

Well ID	DTW	DTB	Notes

Site Inspector(s): Cody Badman **Date: 09/25/2023**

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

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: 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:			

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: 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: N/A			

* BART – Best Available Retrofit Technology

DAILY INSPECTION REPORT
(Dinaburg), Site No. 828103

Date: 09/26/2023

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No. D009806

DEC PM – J.Stefansky

Engineer PM – J.Oliver

Site Location: 1012 South Clinton Ave, Rochester 14620

Weather Conditions				
General Description	Cloudy	AM	Partial cloud	PM
Temperature	60F	AM	70F	PM
Wind	Calm	AM	Calm	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

Onsite property has debris. Some slips, trips, fall hazards and potential puncture hazards (needles, sharp glass).

Summary of Work Performed	Arrived at site:	0700	Departed Site:	1630

(0700) EA on site (C. Badman, A. Stoogenke). (0750) EA calibrates Horibas. (0710) A tailgate safety meeting is held about traffic safety, slips, trips and falls. (0730) Begin purging MW-10K. (0806) Start purge PZ-24S. (0811) Sample 828103-MW-10K-09262023 is taken. (0830) Start purge MW-10S, PZ-24S is dry and is left to recharge. (0833) Start purge MW-24K. (0857) Sample 828103-MW10S-09262023 is taken for VOCs. (0903) Sample 828103-MW24K-09262023 is taken for VOCs. (0916) Start purge MW-06. (0918) Start purge MW-23K. (0945) Sample 828103-MW-23K-09262023 is taken for VOCs. (0949) Sample 828103-MW-06 is taken for VOCs. (1000) Start purge MW-05. (1030) Sample 828103-MW-05-09262023. (1033) Start purge MW-09S. (1051) Start purge MW-04. (1100) Sample 828103-MW-09S-09262023 is taken for VOCs, MS+MSD is taken. (1121) Sample 828103-MW-04-09262023 and 828103-DUP-02-09262023 are taken for VOCs. (1122) Start purge MW-09K. (1144) Start purge MW-12S. (1155) Sample 828103-MW09K is taken for VOCs. (1200) Sample 828103-PZ-24S-09262023 is taken for VOCs. (1211) Sample 828103-MW-12S-09262023 is taken for VOCs. (1222) Start purge MW-11S. (1225) Start purge MW-12K. (1252) Sample 828103-MW-12K-09262023 is taken for VOCs. (1257) Sample 828103-MWMW-11S-09262023 is taken for VOCs. (1314) Start purge MW-08S. (1317) Start purge GWE-2. (1341) Sample 828103-MW-08S-09262023 is taken for VOCs. (1347) Sample 828103-GWE-2-09262023 is taken for VOCs. (1400) Start purge MPE-17. (1405) Start purge MW-22K. (1427) Sample 828103-MPE-17-09262023 is taken for VOCs. (1444) Sample 828103-MW-22K-09262023 is taken for VOCs. (1458) Start purge PZ-22S. (1532) PZ-22S is dry and is left to recharge. (1606) Sample 828103-PZ-22S-09262023 is taken for VOCs. (1630) EA offsite.

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
Cody Badman	EA	Scientist	9.5
Alex Stoogenke	EA	Scientist	9.5

Equipment Description	Contractor/Vendor	Quantity	Used
Heron Water Level Meter	Pine Environmental	2	Yes
Horiba U-52	Pine Environmental	2	Yes
Peristaltic Pump	Pine Environmental/ Eco Rental Solutions	2	Yes

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

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

Visitors to Site

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

Site Representatives

Name	Representing

Project Schedule Comments

Groundwater sampling event to continue the week of September 25th.

Issues Pending

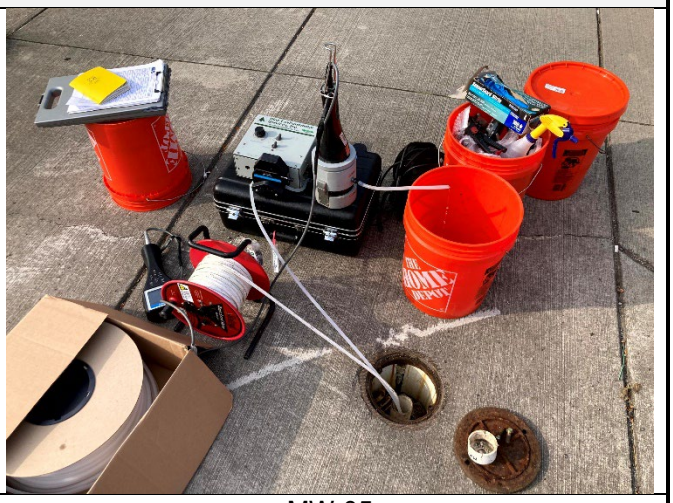
None

Interaction with Public, Property Owners, Media, etc.

None

Site Photographs (Descriptions Below)

MW-10S



MW-05

MW-24K

MW-04

MW-12K

MW-12S

WELL MONITORING TABLE:

Well ID	DTW	DTB	Notes

Site Inspector(s): Alex Stoogenke	**Date: 09/26/2023**

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

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: 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:			

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: 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: N/A			

* BART – Best Available Retrofit Technology

DAILY INSPECTION REPORT
(Dinaburg), Site No. 828103

Date: 09/27/2023

NYSDEC
Division of Environmental Remediation

NEW YORK STATE | Department of Environmental Conservation

Contract No. D009806
DEC PM – J.Stefansky
Engineer PM – J.Oliver

Site Location: 1012 South Clinton Ave, Rochester 14620

Weather Conditions				
General Description	Cloudy	AM	Partial cloud	PM
Temperature	53F	AM	60F	PM
Wind	Calm	AM	Calm	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

Onsite property has debris. Some slips, trips, fall hazards and potential puncture hazards (needles, sharp glass).

Summary of Work Performed	Arrived at site:	0655	Departed Site:	1035

(0655) EA onsite (C. Badman, A. Stoogenke). (0700) Tailgate Heath and Safety meeting covering topics of traffic, slips, trips, and falls, puncture hazards. (0701) Calibrate Horibas. (0714) Start purge MW-21S. (0721) Start purge MW-03D. (0741) Sample 828103-MW-21S-09272023 for VOCs. (0748) Sample 828103-MW-03D-09272023 for VOCs. (0755) Added lock to MW-03D. (0800) Start purge MW-18S. (0805) Start purge MW-16K. (0830) Sample 828103-MW-18S-09272023 for VOCs. (0832) Sample 828103-MW-16K-09272023 for VOCs. (0840) Added lock to MW-16K. (0848) Start purge MW-17S. (0850) Start purge MW-16S. (0915) Sample 828103-MW-17S-09272023 for VOCs. (0925) Added lock to MW-17S. (0944) Sample 828103-MW-16S-09272023 for VOCs. (1000) Deconning equipment. (1015) Attempt to fix cracks in MW-10K concrete pad with concrete sealant. (1035) EA offsite.

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
Cody Badman	EA	Scientist	3.75
Alex Stoogenke	EA	Scientist	3.75

Equipment Description	Contractor/Vendor	Quantity	Used
Heron Water Level Meter	Pine Environmental	2	Yes
Horiba U-52	Pine Environmental	2	Yes
Peristaltic Pump	Pine Environmental/ Eco Rental Solutions	2	Yes

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

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

Visitors to Site

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

Site Representatives

Name	Representing

Project Schedule Comments

Bio-Traps to be picked up near the end of October.

Issues Pending

None

Interaction with Public, Property Owners, Media, etc.

None

Site Photographs (Descriptions Below)	
	
MW-16K	MW-17S
	
MW-10K with added sealant	

WELL MONITORING TABLE:

Well ID	DTW	DTB	Notes

Site Inspector(s): Cody Badman	**Date: 09/27/2023**

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

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: 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:			

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: 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: N/A			

* BART – Best Available Retrofit Technology

Appendix B

Inspection Forms

Site Inspection Checklist

Site Name (Number): Dinaburg (828103) Date/Time: 8/30/23

Site Address (nearest cross street): 1012 South Clinton Ave. Rochester, NY 14620

Weather: 36F Partly Cloudy	Personnel:	MR WP JO Joshua

Site property description (.e.g, buildings, fencing, gates, etc)

Building(s): Several	Stories: 1-2	In Use/Active: Active	
Bldg material:		Area Use (R/C/I): (R/C)	
Fenced (Y/N) (material): Y Wood		Gate(s): 1	Lock(s): Yes 8103

Nearest adjacent buildings (and descriptions):
Residential & Commercial Convenience Stores

Site Surface Hydrology

Surface water drainage/Impoundments: NA	Creeks/Streams: NA
Ponds/Water front N/A	

Site Features

Asphalt/Concrete (%) : 100	Condition: Acceptable
Slope/Direction (steep/flat,hilly, etc.) flat	
Vegetation (grassy/trees/shrubs; overgrown, etc.) None	
Overhead Utilities (electric/data/phone): electric	
Subsurface Utilities and Locations: Unknown	
Monitoring Wells (see attached checklist).	

Notes/Other Observations:

Several wells in right of way on sidewalk

Site Sketch

See attached map

Appendix C

Field Forms

naburg (828103) 08/31/2023

Weather: 75°F, Sunny
Personnel: C. Badman, L. Backman-Love
Objective: Site Inspection
EA onsite
Tailgate H+S meeting covering traffic, slips, trips + falls, hydration
Begin search for wells, conduct site inspection
Property owner/manager onsite shown well locations, asked EA to remove concrete blocks.
EA offsite.

08/31/2023
Cody Badman

Pinsburg (828103) 09/11/23

Weather: 62°F Sunny
Personnel: C Badman / A. Stoegerte
Objective: well repair/maintenance
well redevelopment

0745 EA onsite
0750 Tailgate H+S meeting topics include slips trips + falls, Sharps
0755 Begin well repair + Maintenance
0800 Lock added to MW-15S
0805 Lock added to MW-15K 16S
0810 locks added to MW-21S, MW-18S
0815 Lock + J-plug replaced on MW-18S
0820 Lock + J-plug + bolts replaced on MW-19S
Locks added to MW-14SA
0825 MW-17S needs lock, will replace duly supply
MW-3D " "
MW-16K " "
0830 MW-03CA needs lock, replaced 2 bolts
MW-20S needs lock replaced 1 bolt
MW-03A needs lock, bolts added
0835 MW-13K replaced J-plug, needs cover 2 well seats + lock
0840 MW-09K, needs lock
0845 MW-06 added J-plug, needs lock, added bolts, needs one seat
0855 MW-10S, needs lock, replaced bolts & J-plug

bury (828103) 09/11/23

Flush J-plug too tall to keep well Cap flush

MW-10K begin removing old well ~~cap~~ Cap ~~cap~~ ~~epoxy~~

Searched for MW-24, could not locate

~~Replaced~~ need bolts on MW-05 (bigger gauge)

Replaced J-plug MW-04, needs lock, bigger bolts (DB)

MW-12S ~~replaced J-plug~~ needs lock

MW-12K replaced J-plug - needs lock replaced bolts

MW-11K - needs lock + bolt

MW-11S - needs bolt + lock

MW-8S - needs bolts needs new Cap, seal

MW-8K - needs bolts

MW-24K - needs locks

Return to MW-10K to keep trying to replace well ~~cap~~ Cap

Well Cap installed on MW-10K Concrete may need to be resealed

Called M. Wright (EA) discussed well repair needs, plan for redevelopment

Begin development on MW-19S - very turbid

Stop purge on MW-19S, well dry after purging ~ 1 gallon

(Dunbury 828103) 09/11/23

1100 Start purge at MW-8K, water dirty

1105 Stop purge at MW-8K, well dry after purging ~ 4 gallons

1110 Spoke with homeowner regarding presence onsite.

1125 Start purge on MW-8K again, water clear after purging 7 total gallons

1130 Start purge at MW-22K, water turbid

1140 Purge stopped after purging ~ 26 gallons Water to be dumped in drums and purge restarted

1150 Purge restarted at MW-22K.

1205 Purge stopped after purging additional 32 gallons. Water to be dumped in drums and purge restarted

1212 Purge restarted at MW-22K

1225 Purge stopped after purging additional 32 gallons. Water to be dumped in drums and purge restarted

1238 Purge restarted at MW-22K

1245 Stop purge on MW-22K, water clear after purging ~ 103 gallons

1300 Set up on MW-11K, sediment encountered at ~ 2ft. Pump ~~stopped~~ to ft.

...burg (28103) 09/11/23

Start purge at MW-18S, water turbid
Purge stopped, well dry after purging ~2 gallons
Purge restarted, well dry after purging additional ~1 gallon
Purge restarted well dry after purging ~1 gallon
Purge restarted, well dry after purging ~5 gallons total (1 additional)
Start purge on MW-19S
Stopped purge on MW-19S
~3 gallons removed
EA packing up
EA offsite

09/11/2023
Cody Bash

Dinwiddie (28103) 9/12/23 7

Weather: 61°F, overcast
Personnel: C. Badman, A. Stoogenke
Objective: Search for wells, well repair

0830	EA onsite
0835	Tailgate H + S Meeting, topics included Slips, trips + falls, heat, puncture hazards.
0840	Attempt to open MW-9S
0845	MW-9S successfully opened, PVC well is broken on top, no J-plug no lock
0850	- Begin Searching for missing wells
0925	- Called property owner regarding locked gate
0930	Begin cutting PVC on MW-9S
0935	Finish cutting PVC, installed J-plug, needs lock
0945	Cut PVC on MW-8S,
1000	Attempt to clear obstruction in MW-11S
1005	Added bolts to MW-8S, MW-8S MW-11S, MW-11S
1105	Cut PVC on MW-10S
1140	Finish cutting PVC on MW-10S, added bolts
1150	Return to MW-11S to try and free Sediment

Rain

Well MW-11S discovered to be collapsed ~ 3.5 feet

Added bolts to MW-4, MW-03A, MW-03CA, MW-05, MW-20S

EA offsite

09/12/2023

Cody Bolton

Olmsburg (82813) 9/13/2023

Weather: 60°F, overcast

Personnel: C. Bodnar, A. Stoegerbe

Objective: Locate wells, well redevelopment

0800 EA onsite

0805 Tailgate H+S meeting covering topics of traffic, slips, trips & falls

0815 Search for MW-24S

0830 Search for MW-01, MW-01A, GWE-1

0835 Marked locations where wells are believed to be present.

0845 Noted that all seals are broken on MW-9S

0855 Begin redevelopment of MW-9S, water light brown

0910 Stopped purge on MW-9S after purging ~ 6 gallons well dry

0915 Restarted purge on MW-9S

0940 Stopped purge after pumping ~8 gallons total

1050 J. Oliver (EA) onsite

1115 Search for MW-24IS

1120 Located MW-24S, PZ-24S

1135 NYSDEC Jasmine, Jeff onsite

1200 NYSDEC offsite delivered access agreement to 558 Berten St.

1210 J. Oliver (EA) offsite

1215 Start redevelopment of MW-24IS water very dirty

Rite in the Rain

aburg (828103) 9/13/23

Purge stopped after purging ~ 8 gallons
Water clear
Dump IDW into drums
EA offsite

Cody Nash
09/13/23

Dillsburg (828103) 9/14/23 11

Weather: 53°F, Partly Cloudy
Personel: C. Bachman, A. Stoltzfus
Objective: Rethread wells

0800 EA onsite, Tailgate H+S Meeting
0805 Begin rethreading wells that eyelets are not broken.
0810 MW-19S 1 broken eyelet, MW-03A 2 broken eyelets, MW-15K 2 broken eyelets MW-15S 1 broken eyelet
0815 Rethread 2 eyelets on MW-13S
0820 Rethread 3 eyelets on MW-9K
0830 Rethread 1 eyelet, 1 broken on MW-06
0835 Rethread 1 eyelet on MW-10S
0840 Rethread 2 eyelets on MW-05
0850 Rethread 1 eyelet on MW-04
0855 MW-11K 1 broken eyelet, Rethreaded 1 eyelet on MW-11S, 1 broken eyelet
0900 Rethread 2 eyelets on MW-8K
0905 Rethread 1 eyelet on MW-8S, 1 eyelet broken.
0915 EA offsite

Cody Nash
09/14/23

Rite in the Rain.

Dibalog (828103) 9/25/23

0755 EA onsite (C. Barker, A. Stegeke, M. Wirth)
0800 Tailgate H+S meeting covering topics at trailer, hydration, sun
0815 Calibrate Horibas + PIDs
0835 Start synoptic gauging
0935 End synoptic gauging
0936 Start purge MW-03CA
0950 Start purge MW-13K
1006 Sample MW-03CA for VOCs + MNA parameters ID: 828103-MW-03CA-09252023, MS/MSD
1041 Sample 828103-MW-13K-09252023 for VOCs + MNA parameters
828103-DUP-01-09252023 taken for VOCs + MNA parameters
1126 Start purge MW-20S
1145 Start purge MW-03A
1153 Sample 828103-MW-20S-09252023 for VOCs + MNA parameters
1221 Sample 828103-MW-03A-09252023 for VOCs + MNA parameters
1236 Start purge MW-19S
1240 Deployed bio-trap in MW-20S
1250 Deployed bio-trap in MW-03CA
1300 Deployed bio-trap in MW-13K

Dibalog (828103) 9/25/2023

1303 Sample 828103-MW-19S-09252023 for VOCs + MNA parameters
1307 Start purge MW-8K
1342 Start purge MW-14KA
1418 Sample 828103-MW-14KA-09252023 for VOCs + MNA parameters
1445 Sample 828103-MW-08K-09252023 for VOCs + MNA parameters
1515 Mobilize onsite
1550 Start purge MW-15S
1612 Start purge MW-15K
1617 Sample 828103-MW-15S-09252023 for VOCs
1639 Sample 828103-MW-15K-09252023 for VOCs
1655 EA offsite

Cindy Barker
09/25/2023

Rite in the R

Dhmburg (828103) 9/26/23

0700 EA onsite (C. Boelman, A. Stoegsike)
0705 Calibrate Horiba
0710 Tailgate Health + Safety meeting Candy topics of traffic, Slips, trips, and falls
0730 Start purge MW-10K
0806 Start purge PZ-24S
0811 Sample 828103-MW-10K-09262023 for VOCs
0830 Start purge MW-10S, PZ-24S dry will let recharge, then sample
0833 Start purge MW-24K
0857 Sample 828103-MW-10S-09262023 for VOCs
0903 Sample 828103-MW-24K-09262023 for VOCs
0916 Start Purge MW-06
0918 Start purge MW-23K
0945 Sample 828103-MW-23K-09262023 for VOCs
0949 Sample 828103-MW-06-09262023 for VOCs
1000 Start purge MW-05
1030 Sample 828103-MW-05-09262023 for VOCs
1033 Start purge MW-09S
1051 Start purge MW-04

1106 Sample 828103-MW-09S-09262023 for VOCs, MS + MSD taken
1121 Sample 828103-MW-04-09262023 for VOCs, Sample 828103-DUP-02-09262023 for VOCs
1122 Start purge MW-09K
1144 Start purge MW-12S
1155 Sample 828103-MW-09K-09262023 for VOCs
1200 Sample 828103-PZ-24S-09262023 for VOCs
1211 Sample 828103-MW-12S-09262023 for VOCs
1222 Start purge MW-11S
1225 Start purge MW-12K
1252 Sample 828103-MW-12K-09262023 for VOCs
1257 Sample 828103-MW-11S-09262023 for VOCs
1314 Start purge MW-08S
1317 Start purge GWE-2
1341 Sample 828103-MW-08S-09262023 for VOCs
1347 Sample 828103-GWE-2-09262023 for VOCs
1400 Start purge MPE-17

Dhabury (828103) 09/26/23

1405	Start purge MW-22K
1427	Sample 828103-MPE-17-09262023 for VOCs
1444	Sample 828103-MW-22K-09262023 for VOCs
1458	Start purge PZ-22S
1532	PZ-22S dry, will let recharge then sample
1606	Sample 828103-PZ-22S-09262023 for VOCs
1630	EA offsite

Carly Eder
09/26/2023

Dhabury (828103) 9/27/23

0655	EA onsite (Cbadura, A. Steagenke)
0700	Tailgate H+S meeting Cover topics of trailer slips, trips + falls, puncture hazards, CA
0701	Calibrate Horiba
0714	Start purge MW-21S
0721	Start purge MW-03D
0741	Sample 828103-MW-21S-09272023 for VOCs
0748	Sample 828103-MW-03D-09272023 for VOCs
0755	Added lock to MW-03D
0800	Start purge MW-18S
0805	Start purge MW-16K
0830	Sample 828103-MW-18S-09272023 for VOCs
0832	Sample 828103-MW-16K-09272023 for VOCs
0840	Added lock to MW-16K
0848	Start purge MW-17S
0850	Start purge MW-16S
0915	Sample 828103-MW-17S-09272023 for VOCs
0925	Added lock to MW-17S
0944	Sample 828103-MW-16S-09272023 for VOCs

Plumbing (827963) 9/27/23

1000 Decanning equipment

1015 Attempted to fix cracks in MW-10K Concrete pad with Concrete Sealant

1035 EA offsite

Cody Lehman

09/27/23

Cody Lehman

09/27/23

FIELD CALIBRATION FORM
Horiba U-52
pH, CONDUCTIVITY, AND TURBIDITY

CALIBRATION	
DATE:	09/25/2023
TIME:	0800
METER ID:	46003

pH CALIBRATION

pH STANDARD	INITIAL READING	FINAL READING
4.0	4.93	3.98

CONDUCTIVITY CALIBARATION

CONDUCTIVITY STANDARD	STANDARD READING	FINAL READING
4.49	5.31	4.51

TURBIDITY CALIBRATION

STANDARD	INITIAL READING	FINAL READING
0 NTU	0.0	0.1

COMMENTS

SIGNATURE

Cody Bahr

FIELD CALIBRATION FORM
Horiba U-52
pH, CONDUCTIVITY, AND TURBIDITY

CALIBRATION
DATE: 09/25/2023
TIME: 0800
METER ID: 21078

pH CALIBRATION

pH STANDARD	INITIAL READING	FINAL READING
4.0	5.10	3.96

CONDUCTIVITY CALIBARATION

CONDUCTIVITY STANDARD	STANDARD READING	FINAL READING
4.49	4.86	4.58

TURBIDITY CALIBRATION

STANDARD	INITIAL READING	FINAL READING
0 NTU	0	0

COMMENTS

SIGNATURE

Alex Stauffer

FIELD CALIBRATION FORM
Horiba U-52
pH, CONDUCTIVITY, AND TURBIDITY

CALIBRATION
DATE: 09/26/2023
TIME: 0700
METER ID: 21078

pH CALIBRATION

pH STANDARD	INITIAL READING	FINAL READING
4.0	5.38	3.99

CONDUCTIVITY CALIBARATION

CONDUCTIVITY STANDARD	STANDARD READING	FINAL READING
4.49	4.93	4.54

TURBIDITY CALIBRATION

STANDARD	INITIAL READING	FINAL READING
0 NTU	0	0.3

COMMENTS

SIGNATURE

Alex Stiffler

FIELD CALIBRATION FORM
Horiba U-52
pH, CONDUCTIVITY, AND TURBIDITY

CALIBRATION
DATE: 09/26/2023
TIME: 0702
METER ID: 46003

pH CALIBRATION

pH STANDARD	INITIAL READING	FINAL READING
4.0	4.95	3.95

CONDUCTIVITY CALIBARATION

CONDUCTIVITY STANDARD	STANDARD READING	FINAL READING
4.49	4.80	4.55

TURBIDITY CALIBRATION

STANDARD	INITIAL READING	FINAL READING
0 NTU	5.5	0.0

COMMENTS

SIGNATURE

FIELD CALIBRATION FORM
Horiba U-52
pH, CONDUCTIVITY, AND TURBIDITY

CALIBRATION
DATE: 09/27/2023
TIME: 0700
METER ID: 21078

pH CALIBRATION

pH STANDARD	INITIAL READING	FINAL READING
4.0	6.00	3.96

CONDUCTIVITY CALIBARATION

CONDUCTIVITY STANDARD	STANDARD READING	FINAL READING
4.49	5.19	4.56

TURBIDITY CALIBRATION

STANDARD	INITIAL READING	FINAL READING
0 NTU	14	0.6

COMMENTS

SIGNATURE

Cody Bahn

FIELD CALIBRATION FORM
Horiba U-52
pH, CONDUCTIVITY, AND TURBIDITY

CALIBRATION	
DATE:	9/27/23
TIME:	0700
METER ID:	46003

pH CALIBRATION

pH STANDARD	INITIAL READING	FINAL READING
4.0	4.49	3.94

CONDUCTIVITY CALIBARATION

CONDUCTIVITY STANDARD	STANDARD READING	FINAL READING
4.49	5.16	4.58

TURBIDITY CALIBRATION

STANDARD	INITIAL READING	FINAL READING
0 NTU	18.3	0.0

COMMENTS

SIGNATURE

FIELD CALIBRATION FORM

Site Name: Dilabury 42089

INSTRUMENT: RKI GX-6000	INSTRUMENT ID No: [redacted]
OPERATOR: CDB	WEATHER: Sunny 58°F
SPAN GAS TYPE: 100 ppm Isobutylene	DATE: 09/25/2023
CALIBRATION NOTES:	
Zero: 0.0 ppm	
Span: 99.8 ppm	
COMMENTS: None	
SIGNATURE: [signature]	DATE: 09/25/2023

FIELD CALIBRATION FORM

Site Name: Dinabury

INSTRUMENT: REI 6X-6000	INSTRUMENT ID No: 42217
OPERATOR: A. Stoegenke	WEATHER: Sunny, 65°F
SPAN GAS TYPE: Isobutylene 100ppm	DATE: 09/25/2023
CALIBRATION NOTES:	
Zero = 0.0 ppm	
Span = 98.7 ppm	
COMMENTS: None	
SIGNATURE: [signature]	DATE: 09/25/2023

MONITORING WELL GAUGING LOG
Inspector(s): C. Badman, A. Stoogenke
Weather Conditions: Sunny 60°F

Site Name: Dinaburg
Date/Time: 09/25/23 0815

Well ID	PID Reading (ppm)	DTW (ft. below TOC)	DTB (ft. below TOC)	Well Condition / Notes
MW-06	0.0	8.03	19.32	
MW-10S	0.0	8.10	18.21	
MW-10K	4.8	8.59	21.45	
MW-09S	0.0	8.80	14.77	
MW-09K	1.8	9.48	23.46	
MW-13K	0.6	9.34	20.26	
MW-15S	8.0	7.77	14.90	
MW-15K	25.5	10.19	25.00	
MW-21S	1.5	8.44	15.00	
MW-18S	3.3	8.79	14.96	
MW-16S	0.5	9.55	15.25	
MW-14KA	5.4	9.30	24.10	
MW-17S	0.8	8.11	14.97	
MW-16K	10.2	9.26	25.01	
MW-20S	12.9	9.38	15.00	
MW-03D	1.4	18.37	51.68	
MW-03A	0.6	9.63	24.36	
MW-19S	63.4	8.63	14.98	
PZ-24S	1.6	8.35	14.22	
MW-24K	0.5	8.33	27.87	
MW-23K	2.8	8.98	30.17	

MONITORING WELL GAUGING LOG

Inspector(s): C. Badman, A. Stoogenke

Weather Conditions: Sunny, 60°F

Site Name: Dihaburg

Date/Time: 09/25/2025 0815

Well ID	PID Reading (ppm)	DTW (ft. below TOC)	DTB (ft. below TOC)	Well Condition / Notes
MW-05	1.5	9.85	22.62	
MW-04	1.7	9.76	22.87	
MW-12S	1.5	8.25	13.25	
MW-12K	1.5	8.90	18.65	
MW-11S	1.5	8.26	13.50	
MW-08S	1.2	7.56	9.99	
MW-08K	1.2	8.35	18.73	
PZ-22S	0.0	7.83	13.48	
MW-22K	0.5	8.98	28.30	
MPE-17	2.0	7.15	13.17	
GWE-2	4.6	9.21	22.19	
MW-03CA	0.6	11.99	28.75	

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-03A	EA Personnel: A. Stoogenke	Client: NYSDEC (828103)
Location: Dinaburg	Well Condition: Good	Weather: Sunny 60°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0900	Well Diameter (in): 2

Purge Date: 09/25/2023	Purge Time: 1145
Purge Method: low flow Peri pump	Field Technician: A. Stoogenke

Well Volume

A. Well Depth (ft): 24.36	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft.
B. Depth to Water (ft): 9.63	E. Well Volume (gal) C*D: 2.40	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 14.73	F. Three Well Volumes (gal) (E3): 7.2	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1145	14.97	7.17	-163	0.620	296	1.07	9.72	0.2	–
1148	14.79	7.15	-173	0.650	260	0.98	9.72	0.2	0.6
1151	14.50	7.22	-186	0.641	254	0.52	9.75	0.2	1.2
1154	14.63	7.34	-198	0.685	228	0.55	9.75	0.2	1.8
1157	14.18	7.13	-173	0.852	201	1.35	9.75	0.2	2.4
1200	14.04	7.13	-172	0.342	175	1.25	9.72	0.2	3.0
1203	13.99	7.02	-171	0.898	154	0.61	9.72	0.2	3.6
1206	14.02	7.06	-176	0.931	120	0.45	9.72	0.2	4.2
1209	14.17	7.07	-178	0.957	98.8	0.40	9.72	0.2	4.8
1212	14.32	7.09	-180	0.980	79.7	0.39	9.72	0.2	5.4
1215	14.41	7.09	-182	1.05	33.7	0.52	9.72	0.2	6.0
1218	14.08	7.10	-182	1.04	34.9	0.56	9.72	0.2	6.6
1221	13.96	7.10	-182	1.07	33.6	0.52	9.72	0.2	7.2

Total Quantity of Water Removed (gal): NA	NA 1.40	Sampling Time:	1221
Samplers:	A. Stoogenke	Split Sample With:	–
Sampling Date:	09/25/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-03CA	EA Personnel: CB, AS	Client: NYSDEC (828103)
Location: On Site	Well Condition: Good	Weather: Sunny 60's
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0930	Well Diameter (in): 2

Purge Date: 09/25/2023	Purge Time: 0936
Purge Method: Low Flow Peri Pump	Field Technician: C. Bradman

Well Volume

A. Well Depth (ft): 29.75	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -1 Ft.
B. Depth to Water (ft): 11.99	E. Well Volume (gal) C*D): 2.89	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 17.76	F. Three Well Volumes (gal) (E3): 8.67	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0936	18.05	6.17	-232	0.407	183	3.34	12.75	0.2	—
0939	17.19	6.63	-264	0.451	125	1.63	12.95	0.2	0.6
0942	17.54	6.74	-262	0.555	107	1.28	12.95	0.2	1.2
0945	18.15	6.79	-247	0.930	97.5	1.09	12.95	0.2	1.8
0948	17.24	6.83	-240	1.14	91.0	1.25	12.95	0.2	2.4
0951	16.72	6.84	-235	1.25	79.1	1.07	12.95	0.2	3.0
0954	16.70	6.87	-232	1.28	74.2	0.90	12.95	0.2	3.6
0957	16.66	6.88	-230	1.30	61.0	0.87	12.95	0.2	4.2
1000	16.69	6.88	-229	1.30	48.7	0.85	12.95	0.2	4.8
1003	16.72	6.88	-226	1.31	47.1	0.84	12.95	0.2	5.4
1006	16.74	6.88	-225	1.32	46.9	0.83	12.95	0.2	6.0

Total Quantity of Water Removed (gal): 1.584
Samplers: CB, AS
Sampling Date: 09/25/2023

Sampling Time: 1006
Split Sample With: MS/MSD
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-03D	EA Personnel: CB, AS	Client: NYSDEC (828103)
Location: Onsite	Well Condition: Good	Weather: Sunny, 48°F
Sounding Method: Heron WLM	Gauge Date: 09/25/23	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0906	Well Diameter (in): 2

Purge Date: 09/27/2023	Purge Time: 0721
Purge Method: Low flow peri pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 51.68	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.75 ft.
B. Depth to Water (ft): 18.37	E. Well Volume (gal) C*D: 5.43	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 33.31	F. Three Well Volumes (gal) E3: 16.29	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0721	10.49	5.86	-81	3.06	0.0	4.76	19.35	0.2	—
0724	10.54	6.55	-352	5.13	0.0	7.70	19.89	0.2	0.6
0727	10.64	6.33	-378	5.44	0.0	10.60	20.30	0.2	1.2
0730	10.86	6.38	-404	5.59	0.0	10.70	20.63	0.2	1.8
0733	10.87	6.40	-414	5.63	0.0	11.09	20.98	0.2	2.4
0736	11.14	6.43	-418	5.54	0.0	11.39	21.22	0.2	3.0
0739	10.91	6.45	-423	5.49	0.0	11.48	21.49	0.2	3.6
0742	11.02	6.48	-427	5.41	0.0	11.29	21.85	0.2	4.2
0745	10.88	6.50	-430	5.40	0.0	11.17	22.15	0.2	4.8
0748	10.89	6.52	-433	5.43	0.0	11.10	22.31	0.2	5.4

Total Quantity of Water Removed (gal):	1.425G	Sampling Time:	0748
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/27/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS: Sulphur odor

EA Engineering, P.C.
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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-04	EA Personnel: CB, AS	Client: NYSDEC 828103
Location: Sidewalk on Barton St.	Well Condition: Good	Weather: Cloudy, 61°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0840	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 1051
Purge Method: Low flow Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 22.87	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft.
B. Depth to Water (ft): 9.76	E. Well Volume (gal) C*D: 2.157	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 13.11	F. Three Well Volumes (gal) (E3): 6.411	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1051	15.14	7.06	60	1.07	102	1.31	10.13	0.2	—
1054	14.91	6.97	53	1.06	105	0.58	10.19	0.2	0.6
1057	14.82	6.96	43	1.06	123	0.39	10.25	0.2	1.2
1100	14.69	6.96	32	1.06	127	0.41	10.35	0.2	1.8
1103	14.63	7.00	14	1.06	121	0.34	10.42	0.2	2.4
1106	14.58	6.99	-9	1.06	98.3	0.31	10.50	0.2	3.0
1109	14.59	6.97	-29	1.06	74.4	0.32	10.57	0.2	3.6
1112	14.55	6.95	-55	1.06	48.4	0.30	10.61	0.2	4.2
1115	14.55	6.96	-70	1.06	35.9	0.27	10.61	0.2	4.8
1118	14.55	6.95	-76	1.06	33.7	0.26	10.61	0.2	5.4
1121	14.52	6.95	-77	1.06	33.8	0.26	10.61	0.2	6.0

Total Quantity of Water Removed (gal):	1.584	Sampling Time:	1121
Samplers:	CB, AS	Split Sample With:	DUP
Sampling Date:	09/26/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-05	EA Personnel: CB, AS	Client: NYSDEC 818103
Location: Sidewalk across street	Well Condition: Good	Weather: Cloudy, 60°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0835	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 1000
Purge Method: Low flow peri pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 22.62	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft.
B. Depth to Water (ft): 9.85	E. Well Volume (gal) C*D: 2.08	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 12.77	F. Three Well Volumes (gal) (E3): 6.24	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1000	14.11	7.18	-59	1.72	58.4	1.82	9.95	0.2	—
1003	14.28	7.13	-59	1.68	35.4	1.34	9.95	0.2	0.6
1006	14.39	7.11	-56	1.62	29.8	0.96	9.95	0.2	1.2
1009	14.67	7.13	-38	1.54	11.9	1.10	9.95	0.2	1.8
1012	14.74	7.14	-14	1.47	4.6	1.16	9.95	0.2	2.4
1015	14.59	7.06	-14	1.46	0.7	1.04	9.95	0.2	3.0
1018	14.46	7.04	-21	1.41	0.0	0.53	9.95	0.2	3.6
1021	14.46	7.04	-25	1.38	0.0	0.41	9.95	0.2	4.2
1024	14.45	7.04	-26	1.36	0.0	0.36	9.95	0.2	4.8
1027	14.44	7.04	-25	1.35	0.0	0.37	9.95	0.2	5.4
1030	14.45	7.04	-25	1.34	0.0	0.36	9.95	0.2	6.0

Total Quantity of Water Removed (gal):	1.584	Sampling Time:	1030
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/26/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-06	EA Personnel: A. Stoegenke	Client: NYSDEC (828103)
Location: Dimaberg	Well Condition: Good	Weather: 60°F, cloudy
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0820	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 0916
Purge Method: Low flow	Field Technician: A. Stoegenke

Well Volume

A. Well Depth (ft): 19.32	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft
B. Depth to Water (ft): 8.03	E. Well Volume (gal) C*D): 1.84	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 11.29	F. Three Well Volumes (gal) (E3): 5.52	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0918	16.49	5.67	-135	1.09	39.6	5.33	8.61	0.2	—
0921	16.54	6.64	-142	1.10	16.1	1.73	8.61	0.2	0.6
0924	16.67	5.63	-155	1.09	12.1	1.24	8.61	0.2	1.2
0927	16.63	6.62	-185	1.10	16.0	1.06	8.61	0.2	1.8
0931	16.64	6.62	-204	1.11	9.5	0.88	8.61	0.2	2.4
0934	16.66	6.62	-209	1.12	6.5	0.82	8.61	0.2	3.0
0937	16.68	6.62	-212	1.12	5.5	0.80	8.61	0.2	3.6
0940	16.71	6.62	-213	1.12	3.3	0.77	8.61	0.2	4.2
0943	16.76	6.63	-215	1.13	2.8	0.75	8.61	0.2	4.8
0946	16.78	6.63	-215	1.13	2.7	0.74	8.61	0.2	5.4
0949	16.79	6.63	-215	1.13	2.7	0.74	8.61	0.2	6.0

Total Quantity of Water Removed (gal): (C) 6.0
Samplers: A. Stoegenke
Sampling Date: 09/26/2023
Sampling Time: 0949
Split Sample With: —
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-08S	EA Personnel: A. Stoegenke	Client: NYSDEC (828103)
Location: Dinaburg	Well Condition: Good	Weather: 65°F, partial cloud
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0855	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 1314
Purge Method: Low Flow	Field Technician: A. Stoegenke

Well Volume

A. Well Depth (ft): 9.99	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft.
B. Depth to Water (ft): 7.56	E. Well Volume (gal) C*D: 0.396	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 2.43	F. Three Well Volumes (gal) (E3): 1.188	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1314	21.03	6.76	5	1.22	31.8	2.55	7.83	0.2	-
1317	21.07	6.66	7	1.22	15.1	1.94	7.85	0.2	0.6
1320	21.15	6.63	7	1.22	15.7	1.96	7.88	0.2	1.2
1323	21.25	6.62	9	1.22	14.9	1.80	7.94	0.2	1.8
1326	21.34	6.62	9	1.22	14.0	1.44	7.97	0.2	2.4
1329	21.47	6.63	10	1.24	12.6	1.18	8.00	0.2	3.0
1332	21.54	6.63	10	1.24	11.7	1.10	8.04	0.2	3.6
1335	21.58	6.63	10	1.25	10.7	1.16	8.09	0.2	4.2
1338	21.62	6.63	11	1.25	10.1	1.08	8.11	0.2	4.8
1341	21.67	6.64	12	1.25	10.0	1.07	8.13	0.2	5.4

Total Quantity of Water Removed ~~(gal)~~: (L)	5.4	Sampling Time:	1341
Samplers:	A. Stoegenke	Split Sample With:	-
Sampling Date:	09/26/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-08K	EA Personnel: A. Stoogenke	Client: NYSDEC 828103
Location: Dunkirk	Well Condition: Fair	Weather: 65°F, overcast
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0859	Well Diameter (in): 2

Purge Date: 09/25/2023	Purge Time: 1307
Purge Method: low flow	Field Technician: A. Stoogenke

Well Volume

A. Well Depth (ft): 18.73	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.5 ft
B. Depth to Water (ft): 8.35	E. Well Volume (gal) C*D: 1.69	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 10.38	F. Three Well Volumes (gal) (E3): 5.07	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1307	17.83	6.98	2	1.12	173	1.46	9.35	0.2	-
1310	17.34	6.90	-2	1.12	142	1.00	9.89	0.2	0.6
1313	17.36	6.91	-8	1.12	123	0.80	10.08	0.2	1.2
1316	17.36	6.91	-10	1.12	117	0.74	10.15	0.2	1.8
1319	17.42	6.92	-10	1.13	112	0.74	10.23	0.2	2.4
1322	17.31	6.90	-10	1.13	109	0.70	10.25	0.2	3.0
1325	17.23	6.87	-9	1.13	104	0.67	10.40	0.2	3.6
1328	17.04	6.92	-11	1.13	102	0.76	10.34	0.2	4.2
1331	16.92	6.88	-9	1.13	96.4	0.70	10.48	0.2	4.8
1334	16.92	6.88	-8	1.13	93.4	0.61	10.51	0.2	5.4
1337	16.92	6.87	-9	1.14	93.3	1.29	10.53	0.2	6.0
~~1340~~ AS	~~16.72~~								
~~1343~~									
~~1346~~									
~~1349~~									
1351	16.74	6.85	-31	1.12	221	0.93	10.34	0.2	6.6
1354	16.34	7.09	-47	1.14	207	0.74	10.53	0.2	7.2

Stop to clean Horiba

Total Quantity of Water Removed (gal):	4.59	Sampling Time:	1445
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/25/23	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-08K contd.	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

Purge Date:	Purge Time:
Purge Method:	Field Technician:

see page 1

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1357	16.53	7.09	-40	1.15	201	0.97	11.05	0.2	7.8
1400	16.71	7.09	-34	1.15	192	1.00	11.13	0.2	8.4
1403	16.65	7.08	-32	1.15	183	0.85	11.13	0.2	9.0
1406	16.51	7.03	-29	1.15	150	2.05	11.16	0.2	9.6
1409	16.61	7.08	-26	1.16	139	0.73	11.13	0.2	10.2
1412	16.63	7.03	-20	1.16	140	0.51	11.13	0.2	10.8
1415	16.68	7.02	-19	1.16	136	0.55	11.13	0.2	11.4
1418	16.59	7.03	-18	1.16	105	0.54	11.13	0.2	12.0
1421	16.63	7.04	-17	1.16	112	0.52	11.13	0.2	12.6
1424	16.66	7.05	-17	1.16	106	0.55	11.13	0.2	13.2
1427	16.68	7.02	-14	1.16	96.4	0.50	11.13	0.2	13.8
1430	16.93	6.88	-5	1.16	66.3	0.55	11.13	0.2	14.4
1433	16.34	6.98	-9	1.15	66.7	0.58	11.13	0.2	15.0
1436	16.32	7.05	-12	1.15	73.3	0.56	11.13	0.2	15.6
1439	16.34	7.07	-14	1.15	69.9	1.05	11.13	0.2	16.2
1442	16.33	7.07	-13	1.15	69.2	1.02	11.13	0.2	16.8
1445	16.33	7.07	-13	1.15	69.7	0.98	11.13	0.2	17.4

Total Quantity of Water Removed (gal):		Sampling Time:	1445
Samplers:		Split Sample With:	
Sampling Date:		Sample Type:	

see page 1

COMMENTS AND OBSERVATIONS: Sample taken @ >50 turbidity

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-09S	EA Personnel: A. Stoogenke	Client: NYSDEC (828103)
Location: Dunsburg	Well Condition: Good	Weather: 60°F, cloudy
Sounding Method: Heron WL-M	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0830	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 1033
Purge Method: Low flow	Field Technician: A. Stoogenke

Well Volume

A. Well Depth (ft): 14.77	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft
B. Depth to Water (ft): 8.80	E. Well Volume (gal) C*D: 0.973	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 5.97	F. Three Well Volumes (gal) (E3): 2.919	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1033	19.41	6.97	-53	3.16	17.3	4.14	9.02	0.2	-
1036	19.47	7.08	-45	3.17	11.1	3.47	9.07	0.2	0.6
1039	19.53	7.13	-40	3.20	6.4	3.15	9.09	0.2	1.2
1042	19.64	7.15	-36	3.22	4.4	3.05	9.12	0.2	1.8
1045	19.79	7.17	-34	3.21	4.7	3.04	9.26	0.2	2.4
1048	19.98	7.19	-32	3.16	2.7	3.00	9.28	0.2	3.0
1051	20.12	7.21	-30	3.09	1.6	2.95	9.41	0.2	3.6
1054	20.18	7.22	-27	3.01	1.2	2.80	9.47	0.2	4.2
1057	20.22	7.22	-26	3.00	1.2	2.77	9.53	0.2	4.8
1100	20.36	7.21	-25	3.00	1.1	2.65	9.60	0.2	5.4

Total Quantity of Water Removed (gal): (L) 5.4
Samplers: A. Stoogenke
Sampling Date: 09/26/2023

Sampling Time: 1100
Split Sample With: MS/MSD
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-09K	EA Personnel: A. Stoogenke	Client: NYSDEC (828103)
Location: Dinaburg	Well Condition: Good	Weather: 65°F, partial cloud
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0833	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 1122
Purge Method: Low Flow	Field Technician: A. Stoogenke

Well Volume

A. Well Depth (ft): 23.46	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25ft.
B. Depth to Water (ft): 9.48	E. Well Volume (gal) C*D: 2.278	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 13.98	F. Three Well Volumes (gal) (E3): 6.834	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1122	19.39	6.93	-214	2.15	800+	2.58	9.59	0.2	-
1125	19.33	6.81	-209	2.12	337	1.22	9.53	0.2	0.6
1128	19.33	6.85	-186	2.10	138	2.68	9.55	0.2	1.2
1131	19.65	6.74	-193	2.09	121	1.23	9.56	0.2	1.8
1134	19.85	6.70	-197	2.07	77.5	0.92	9.56	0.2	2.4
1137	20.04	6.68	-197	2.05	63.7	0.79	9.56	0.2	3.0
1140	20.27	6.67	-197	2.03	53.6	0.72	9.56	0.2	3.6
1143	20.51	6.66	-199	1.99	52.3	0.69	9.56	0.2	4.2
1146	20.71	6.66	-197	1.96	43.5	0.65	9.56	0.2	4.8
1149	20.86	6.65	-196	1.93	41.4	0.62	9.56	0.2	5.4
1152	20.91	6.65	-197	1.90	43.5	0.61	9.56	0.2	6.0
1155	21.04	6.64	-196	1.88	40.9	0.61	9.56	0.2	6.6

Total Quantity of Water Removed (gal): (L)	6.6	Sampling Time:	1155
Samplers:	A. Stoogenke	Split Sample With:	-
Sampling Date:	09/26/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-105	EA Personnel: A. Stoegerke	Client: NYSDEC (828103)
Location: Dinaburg	Well Condition: Good	Weather: 60°F, cloudy
Sounding Method: Heron WiM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0825	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 0830
Purge Method: Low Flow	Field Technician: A. Stoegerke

Well Volume

A. Well Depth (ft): 18.21	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25ft.
B. Depth to Water (ft): 8.10	E. Well Volume (gal) C*D: 1.648	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 10.11	F. Three Well Volumes (gal) (E3): 4.944	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0830	16.59	6.70	-189	0.851	56.8	2.52	8.33	0.2	-
0833	16.61	6.47	-192	0.836	25.1	1.31	8.42	0.2	0.6
0836	16.56	6.41	-194	0.811	17.5	0.90	8.50	0.2	1.2
0839	16.58	6.39	-196	0.806	17.9	0.84	8.55	0.2	1.8
0842	16.60	6.37	-199	0.798	14.5	0.82	8.62	0.2	2.4
0845	16.64	6.36	-199	0.792	14.0	0.81	8.70	0.2	3.0
0848	16.70	6.35	-197	0.787	13.7	0.83	8.75	0.2	3.6
0851	16.76	6.35	-196	0.787	9.7	0.82	8.85	0.2	4.2
0854	16.82	6.35	-195	0.787	9.3	0.81	8.90	0.2	4.8
0857	16.85	6.35	-195	0.788	9.2	0.81	8.92	0.2	5.4

Total Quantity of Water Removed (gal): (1) 5.4
Samplers: A. Stoegerke
Sampling Date: 09/26/2023

Sampling Time: 0857
Split Sample With: -
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-10K	EA Personnel: A. Stoegmilch	Client: NYSDEC (828103)
Location: Pinebrug	Well Condition: Fair	Weather: 60°F, Cloudy
Sounding Method: Heron Wlm	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0827	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 0730
Purge Method: Low Flow	Field Technician: A. Stoegmilch

Well Volume

A. Well Depth (ft): 21.45	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft
B. Depth to Water (ft): 8.59	E. Well Volume (gal) C*D: 2.096	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 12.86	F. Three Well Volumes (gal) (E3): 6.288	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0732	16.03	5.67	-133	1.46	81.8	1.81	10.76	0.2	—
0735	16.23	6.06	-138	1.42	77.1	1.10	10.76	0.2	0.6
0738	16.23	6.03	-137	1.42	79.0	1.04	10.76	0.2	1.2
0741	16.26	6.04	-138	1.41	82.5	0.96	10.76	0.2	1.8
0744	16.33	6.08	-142	1.41	73.3	0.88	11.24	0.2	2.4
0747	16.31	6.09	-143	1.41	67.0	0.83	11.76	0.2	3.0
0750	16.36	6.16	-136	1.41	68.5	1.48	12.19	0.2	3.6
0753	16.39	6.15	-136	1.40	66.9	1.48	12.19	0.2	4.2
0756	16.41	6.15	-136	1.40	56.3	0.90	12.41	0.2	4.8
0759	16.39	6.16	-136	1.37	46.3	0.88	12.49	0.2	5.4
0802	16.38	6.17	-135	1.36	39.4	0.79	12.49	0.2	6.0
0805	16.38	6.18	-132	1.35	35.1	0.76	12.90	0.2	6.6
0808	16.41	6.19	-131	1.34	34.8	0.80	12.90	0.2	7.2
0811	16.41	6.19	-130	1.34	33.5	0.80	12.90	0.2	7.8

Total Quantity of Water Removed ~~(gal)~~ (L): 7.8
Samplers: A. Stoegmilch
Sampling Date: 09/26/2023
Sampling Time: 0811
Split Sample With: —
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-115	EA Personnel: A. Stoegenke	Client: NYSDEC (828103)
Location: Dunaburg	Well Condition: Fair	Weather: 65°F, partial clouds
Sounding Method: Heron WL M	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0852	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 1222
Purge Method: low flow	Field Technician: A. Stoegenke

Well Volume

A. Well Depth (ft): 13.50	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft.
B. Depth to Water (ft): 8.26	E. Well Volume (gal) C*D: 0.854	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 5.24	F. Three Well Volumes (gal) (E3): 2.56	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1224	21.15	6.72	-59	1.32	151	2.40	8.82	0.2	—
1227	21.36	6.51	-59	1.31	62.4	1.33	8.92	0.2	0.5
1230	20.86	6.45	-43	1.32	30.1	1.15	9.12	0.2	1.2
1233	20.67	6.44	-30	1.32	26.5	1.14	9.15	0.2	1.8
1236	20.41	6.43	-18	1.32	25.7	1.13	9.31	0.2	2.4
1239	20.28	6.42	-10	1.33	22.3	1.15	9.40	0.2	3.0
1242	20.18	6.42	-3	1.33	25.1	1.18	9.48	0.2	3.6
1245	20.14	6.42	1	1.33	23.5	1.18	9.54	0.2	4.2
1248	20.11	6.41	5	1.33	20.5	1.25	9.62	0.2	4.8
1251	20.09	6.41	7	1.33	18.0	1.42	9.71	0.2	5.4
1254	20.00	6.40	8	1.35	18.5	1.29	9.78	0.2	6.0
1257	19.87	6.40	8	1.34	18.3	1.28	9.88	0.2	6.6

Total Quantity of Water Removed (gal): (L) 6.6
Samplers: A. Stoegenke
Sampling Date: 09/26/2023

Sampling Time: 1257
Split Sample With: —
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-12S	EA Personnel: CB, AS	Client: NYSDEC 828103
Location: CB Manhole on sidewalk on Berkeley St.	Well Condition: Good	Weather: Cloudy, 64°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0845	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 1144
Purge Method: Low flow Peri Pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 13.25	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.5ft
B. Depth to Water (ft): 8.25	E. Well Volume (gal) C*D: 0.815	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 5.00	F. Three Well Volumes (gal) (E3): 2.445	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1144	15.74	7.09	37	1.01	67.0	1.25	8.85	0.2	—
1147	15.86	6.95	22	1.01	43.8	1.77	8.93	0.2	0.6
1150	15.95	6.96	18	1.01	34.9	0.83	9.04	0.2	1.2
1153	16.09	7.00	15	1.01	37.7	0.59	9.21	0.2	1.8
1156	16.19	7.02	15	1.02	26.0	0.78	9.39	0.2	2.4
1159	16.23	7.00	17	1.03	17.5	1.61	9.61	0.2	3.0
1202	16.27	6.99	16	1.04	9.9	0.83	9.80	0.2	3.6
1205	16.28	6.99	14	1.03	0.0	0.75	9.91	0.2	4.2
1208	16.28	6.99	13	1.02	0.0	0.74	9.94	0.2	4.8
1211	16.27	6.98	15	1.01	0.0	0.73	9.98	0.2	5.4

Total Quantity of Water Removed (gal):	1.425G	Sampling Time:	1211
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/26/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-12K	EA Personnel: CB, AS	Client: NYSDEC 828103
Location: Sidewalk on Barker St.	Well Condition: Good	Weather: Cloudy, 65°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0846	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 1225
Purge Method: Low flow peri pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 18.65	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.5 ft.
B. Depth to Water (ft): 8.90	E. Well Volume (gal) C*D: 1.589	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 9.75	F. Three Well Volumes (gal) (E3): 4.767	Pump Intake Depth: mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1225	16.56	6.89	82	0.922	97.9	1.30	10.05	0.2	—
1228	16.37	6.91	77	0.921	87.0	0.72	10.42	0.2	0.6
1231	16.26	6.91	71	0.917	76.6	0.49	10.69	0.2	1.2
1234	16.20	6.91	68	0.912	71.2	0.44	10.87	0.2	1.8
1237	16.17	6.91	62	0.909	68.1	0.39	10.98	0.2	2.4
1240	16.15	6.90	59	0.904	64.3	0.30	11.07	0.2	3.0
1243	16.13	6.91	55	0.903	62.0	0.27	11.13	0.2	3.6
1246	16.13	6.91	53	0.905	35.8	0.26	11.13	0.2	4.2
1249	16.12	6.91	51	0.907	34.2	0.26	11.13	0.2	4.8
1252	16.12	6.91	50	0.909	35.0	0.25	11.13	0.2	5.4

Total Quantity of Water Removed (gal):	1.4256	Sampling Time:	1252
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/26/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-13K	EA Personnel: A. Stoogenke	Client: NYSDEC 828103
Location: Dinaburg	Well Condition: Fair	Weather: 65°F, Sunny
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0810	Well Diameter (in): 2

Purge Date: 09/25/2023	Purge Time: 0950
Purge Method: Low Flow	Field Technician: A. Stoogenke

Well Volume

A. Well Depth (ft): 20.26	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft.
B. Depth to Water (ft): 9.34	E. Well Volume (gal) C*D: 1.78	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 10.92	F. Three Well Volumes (gal) (E3): 5.34	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0950	17.22	6.31	-18	0.234	107	1.29	9.80	0.2	-
0953	17.29	6.56	-83	0.300	80.4	0.81	9.80	0.2	0.6
0956	17.19	6.55	-123	0.439	67.3	0.67	9.84	0.2	1.2
0959	17.08	6.99	-168	0.755	67.7	0.69	9.80	0.2	1.8
1002	17.02	7.03	-179	0.959	93.2	0.71	9.80	0.2	2.4
1005	16.87	7.03	-189	1.14	69.2	0.66	9.80	0.2	3.0
1008	16.82	7.02	-192	1.22	72.9	0.67	9.80	0.2	3.6
1011	16.73	6.96	-178	1.44	73.2	0.94	9.80	0.2	4.2
1014	16.65	6.96	-180	1.45	70.7	0.84	9.80	0.2	4.8
1017	16.64	6.97	-183	1.50	66.4	0.66	9.80	0.2	5.4
1020	16.61	6.96	-183	1.52	64.7	0.53	9.80	0.2	6.0
1023	16.60	6.96	-183	1.54	62.5	0.53	9.80	0.2	6.6
1026	16.58	7.00	-185	1.56	61.5	0.49	9.80	0.2	7.2
1029	16.57	6.99	-184	1.56	59.7	0.47	9.80	0.2	7.8
1032	16.56	6.99	-184	1.57	58.0	0.47	9.80	0.2	8.4
1035	16.56	6.99	-184	1.56	57.7	0.46	9.80	0.2	9.0
1038	16.56	6.98	-183	1.56	56.8	0.50	9.80	0.2	9.6

Total Quantity of Water Removed (gal):		Sampling Time:	1041
Samplers:		Split Sample With:	
Sampling Date:		Sample Type:	

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-13K contd.	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

See page 1

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1041	16.59	6.99	-183	1.56	55.7	0.44	9.80	0.2	10.2

Total Quantity of Water Removed ~~(gal)~~: 2.69
Samplers: A. Stoogenke
Sampling Date: 09/25/2023

Sampling Time: 1041
Split Sample With: Dup
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-14KA	EA Personnel: CB, AS	Client: NYSDEC (828103)
Location: Onsite	Well Condition: Good	Weather: Cloudy, 69°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0825	Well Diameter (in): 2

Purge Date: 09/25/2023	Purge Time: 1342
Purge Method: Low flow Peri pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 24.10	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25ft.
B. Depth to Water (ft): 9.30	E. Well Volume (gal) C*D): 2.41	Pump Type: Peristal HL Pump
C. Liquid Depth (ft) (A-B): 14.80	F. Three Well Volumes (gal) (E3): 7.23	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1342	21.73	7.24	-205	0.527	13.5	7.29	9.85	0.2	—
1345	20.59	7.47	-235	0.557	5.5	1.00	9.85	0.2	0.6
1348	19.86	7.50	-250	0.544	0.0	0.79	9.85	0.2	1.2
1351	19.50	7.48	-255	0.552	0.0	0.76	9.85	0.2	1.8
1354	18.82	7.37	-258	0.614	0.0	0.70	9.85	0.2	2.4
1357	18.09	7.26	-230	0.698	0.0	0.68	9.85	0.2	3.0
1400	18.00	7.17	-220	0.788	0.0	0.65	9.85	0.2	3.6
1403	17.65	7.08	-211	0.922	0.0	0.66	9.85	0.2	4.2
1406	17.70	7.05	-207	0.981	0.0	0.64	9.85	0.2	4.8
1409	17.91	7.01	-205	1.02	0.0	0.66	9.85	0.2	5.4
1412	17.93	7.00	-202	1.06	0.0	0.65	9.85	0.2	6.0
1415	17.91	6.99	-201	1.07	0.0	0.64	9.85	0.2	6.6
1418	17.84	6.98	-201	1.07	0.0	0.64	9.85	0.2	7.2

Total Quantity of Water Removed (gal):	1.90	Sampling Time:	1418
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/25/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-15S	EA Personnel: CB, AS	Client: NYSDEC 828103
Location: Dinaburg	Well Condition: Good	Weather: 65°F, Raining
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0830	Well Diameter (in): 2

Purge Date: 09/25/2023	Purge Time: 1550
Purge Method: low Flow	Field Technician: A. Stoogenke

Well Volume

A. Well Depth (ft): 14.90	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft.
B. Depth to Water (ft): 7.77	E. Well Volume (gal) C*D): 1.16	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 7.13	F. Three Well Volumes (gal) (E3): 3.48	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1550	18.63	7.04	84	0.987	31.5	1.08	8.03	0.2	-
1553	18.74	7.06	77	0.984	23.3	0.90	8.03	0.2	0.6
1556	18.98	7.04	63	0.984	12.6	0.70	8.22	0.2	1.2
1559	19.04	7.04	58	0.983	11.7	0.64	8.22	0.2	1.8
1602	19.06	7.04	51	0.982	11.6	0.61	8.50	0.2	2.4
1605	19.05	7.03	45	0.981	10.6	0.63	8.64	0.2	3.0
1608	19.05	7.03	44	0.980	10.6	0.64	8.66	0.2	3.6
1611	19.08	7.04	39	0.979	10.4	0.68	8.75	0.2	4.2
1614	19.14	7.04	37	0.979	9.8	0.67	8.83	0.2	4.8
1617	19.17	7.03	36	0.979	9.7	0.64	8.90	0.2	5.4

Total Quantity of Water Removed (gal): (0.00) 0.00 1.43
Samplers: A-Stoogenke
Sampling Date: 09/25/2023
Sampling Time: 1617
Split Sample With: -
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-15R	EA Personnel: CB, AS	Client: NYSDEC (828105)
Location: Parking lot by gate	Well Condition: Good	Weather: Cloudy 69°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0835	Well Diameter (in): 2

Purge Date: 09/25/2023	Purge Time: 1612
Purge Method: Low flow peri pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 25.00	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft
B. Depth to Water (ft): 10.19	E. Well Volume (gal) C*D: 2.414	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 14.81	F. Three Well Volumes (gal) (E3): 7.242	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1612	19.86	7.99	-80	0.973	78.5	3.55	10.50	0.2	—
1615	18.59	7.62	-150	0.965	69.1	1.89	10.50	0.2	0.6
1618	18.75	7.29	-139	1.19	60.4	1.25	10.50	0.2	1.2
1621	18.72	7.08	-155	1.20	56.5	1.04	10.50	0.2	1.8
1624	18.72	6.97	-176	1.27	35.1	1.00	10.50	0.2	2.4
1627	18.68	6.95	-178	1.29	15.9	0.75	10.50	0.2	3.0
1630	18.44	6.94	-179	1.30	15.7	0.74	10.50	0.2	3.6
1633	18.50	6.92	-183	1.33	0.0	0.71	10.50	0.2	4.2
1636	18.26	6.91	-184	1.33	0.0	0.69	10.50	0.2	4.8
1639	18.31	6.91	-185	1.33	0.0	0.69	10.50	0.2	5.4
								"	"

Total Quantity of Water Removed (gal):	1.926	Sampling Time:	1639
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/25/23	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-16S	EA Personnel: A. Stoogenke	Client: NYSDEC 8/28/23
Location: Dunsburg	Well Condition: Good	Weather: 60°F, Partial cloud
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0910	Well Diameter (in): 2

Purge Date: 09/27/2023	Purge Time: 0850
Purge Method: low flow	Field Technician: A. Stoogenke

Well Volume

A. Well Depth (ft): 15.25	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25
B. Depth to Water (ft): 9.55	E. Well Volume (gal) C*D): 0.9291	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 5.7	F. Three Well Volumes (gal) (E3): 2.787	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0850	15.89	6.55	-12	0.910	14.3	1.85	10.21	0.2	-
0853	15.91	6.43	9	0.910	10.3	1.07	10.72	0.2	0.6
0855	15.89	6.40	8	0.912	7.6	0.84	10.99	0.2	1.2
0859	15.88	6.39	8	0.912	8.4	0.80	11.19	0.2	1.8
0902	15.87	6.39	8	0.913	8.0	0.78	11.41	0.2	2.4
0905	15.84	6.38	7	0.913	6.0	0.77	11.63	0.2	3.0
0908	15.83	6.38	7	0.913	4.4	0.78	11.88	0.2	3.6
0911	15.82	6.38	6	0.913	4.3	0.76	12.05	0.2	4.2
0914	15.80	6.37	0	0.913	3.7	0.77	12.29	0.2	4.8
0917	15.78	6.38	-26	0.913	3.0	0.77	12.58	0.2	5.4
0920	15.77	6.38	-45	0.913	0.0	0.77	12.79	0.2	6.0
0923	15.76	6.38	-78	0.913	0	0.76	13.00	0.2	6.6
0926	15.75	6.38	-87	0.912	0	0.77	13.28	0.2	7.2
0929	15.76	6.39	-81	0.912	0	0.84	13.54	0.2	7.8
0932	15.75	6.38	-93	0.912	0	0.82	13.91	0.2	8.4
0935	15.74	6.38	-82	0.911	0	0.86	14.15	0.2	9.0
0938	15.76	6.38	-78	0.911	0	0.92	14.36	0.2	9.6

Total Quantity of Water Removed (gal): (L) 10.8		Sampling Time: 0944	
Samplers: A. Stoogenke		Split Sample With: —	
Sampling Date: 09/27/2023		Sample Type: Grab	

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-165 contd.	EA Personnel:	Client: NYSDEC
Location:	Well Condition:	Weather:
Sounding Method:	Gauge Date:	Measurement Ref:
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):

Same as Page 1

Purge Date:	Purge Time:
Purge Method:	Field Technician:

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft):	E. Well Volume (gal) C*D):	Pump Type:
C. Liquid Depth (ft) (A-B):	F. Three Well Volumes (gal) (E3):	Pump Intake Depth:

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0941	15.76	6.37	-75	0.911	0	1.01	14.44	0.2	10.2
0944	15.78	6.35	-81	0.911	0	1.01	14.63	0.2	10.8

Total Quantity of Water Removed (gal): _____
Samplers: _____
Sampling Date: _____

Sampling Time: 0944
Split Sample With: _____
Sample Type: _____

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-16K	EA Personnel: CB, AS	Client: NYSDEC (828103)
Location: Onsite	Well Condition: Good	Weather: Sunny, 50°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0910	Well Diameter (in): 2

Purge Date: 09/27/2023	Purge Time: 0805
Purge Method: Low flow peri pump	Field Technician: C. Boedman

Well Volume

A. Well Depth (ft): 25.01	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.5 ft.
B. Depth to Water (ft): 9.26	E. Well Volume (gal) C*D): 2.57	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 15.75	F. Three Well Volumes (gal) (E3): 7.71	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0805	12.05	7.53	-318	1.22	47.0	13.98	9.30	0.2	—
0808	12.11	7.07	-325	1.43	31.1	4.98	9.35	0.2	0.6
0811	11.95	6.95	-333	1.52	17.7	4.53	9.35	0.2	1.2
0814	11.84	6.90	-343	1.60	15.0	3.82	9.35	0.2	1.8
0817	11.78	6.89	-349	1.63	9.5	3.61	9.35	0.2	2.4
0820	11.72	6.90	-352	1.66	7.8	3.51	9.35	0.2	3.0
0823	11.67	6.89	-355	1.66	5.3	3.39	9.35	0.2	3.6
0826	11.68	6.88	-356	1.67	0.0	3.37	9.35	0.2	4.2
0829	11.77	6.88	-357	1.67	0.0	3.27	9.35	0.2	4.8
0832	11.83	6.88	-357	1.66	0.0	3.25	9.35	0.2	5.4

Total Quantity of Water Removed (gal):	1.4756	Sampling Time:	0832
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/27/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-17S	EA Personnel: CB, AS	Client: NYSDEC (B28103)
Location: Onsite	Well Condition: Good	Weather: Sunny 53°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0912	Well Diameter (in): 2

Purge Date: 09/27/2023	Purge Time: 0848
Purge Method: Low flow Peri pump	Field Technician: C. Beelman

Well Volume

A. Well Depth (ft): 14.97	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.5 ft.
B. Depth to Water (ft): 8.11	E. Well Volume (gal) C*D): 1.118	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 6.86	F. Three Well Volumes (gal) (E3): 3.354	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0848	12.46	7.23	-296	0.971	177	10.27	8.49	0.2	—
0851	12.61	7.00	-296	0.962	135	8.59	8.68	0.2	0.6
0854	13.11	6.90	-299	0.943	48.7	7.10	9.02	0.2	1.2
0857	13.20	6.89	-300	0.939	22.1	6.38	9.29	0.2	1.8
0900	13.22	6.88	-300	0.939	11.6	6.15	9.39	0.2	2.4
0903	13.30	6.88	-307	0.938	4.1	5.38	9.68	0.2	3.0
0906	13.31	6.88	-309	0.937	0.0	4.81	9.87	0.2	3.6
0909	13.36	6.88	-310	0.935	0.0	4.39	10.10	0.2	4.2
0912	13.41	6.88	-313	0.935	0.0	4.19	10.30	0.2	4.8
0915	13.42	6.90	-313	0.938	0.0	4.28	10.41	0.2	5.4

Total Quantity of Water Removed (gal):	1.4256	Sampling Time:	0915
Samplers:	CB/AS	Split Sample With:	N/A
Sampling Date:	09/27/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-185	EA Personnel: A. Stoogenke	Client: NYSDEC (828103)
Location: Dinaburg	Well Condition: Good	Weather: 55°F, partial clouds
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0905	Well Diameter (in): 2

Purge Date: 09/27/2023	Purge Time: 0800
Purge Method: low flow	Field Technician: A. Stoogenke

Well Volume

A. Well Depth (ft): 14.96	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft
B. Depth to Water (ft): 8.79	E. Well Volume (gal) C*D: 1.00	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 6.17	F. Three Well Volumes (gal) (E3): 3.00	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0800	15.34	6.53	-54	0.946	22.1	2.79	9.53	0.2	-
0803	15.40	6.39	-40	0.946	15.3	2.16	9.64	0.2	0.6
0806	15.39	6.32	-24	0.946	13.6	1.92	9.77	0.2	1.2
0809	15.51	6.30	-11	0.943	10.5	2.70	9.94	0.2	1.8
0812	15.57	6.32	1	0.941	6.3	1.69	10.11	0.2	2.4
0815	15.61	6.33	5	0.941	4.6	1.60	10.20	0.2	3.0
0818	15.57	6.32	10	0.941	3.1	1.65	10.34	0.2	3.6
0821	15.72	6.32	13	0.942	2.2	1.70	10.43	0.2	4.2
0824	15.80	6.32	17	0.940	0	1.76	10.56	0.2	4.8
0827	15.89	6.31	20	0.939	0	1.80	10.68	0.2	5.4
0830	15.93	6.32	22	0.939	0	1.80	10.72	0.2	6.0

Total Quantity of Water Removed ~~(gal)~~: (L) 6.0
Samplers: A. Stoogenke
Sampling Date: 09/27/2023

Sampling Time: 0830
Split Sample With: -
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-19S	EA Personnel: CB, AS	Client: NYSDEC (828103)
Location: Onsite	Well Condition: Good	Weather: Cloudy, 68°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0845	Well Diameter (in): 2

Purge Date: 09/25/2023	Purge Time: 1236
Purge Method: Low Flow Peri Pump	Field Technician: C. Bachman

Well Volume

A. Well Depth (ft): 14.98	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 Ft.
B. Depth to Water (ft): 8.63	E. Well Volume (gal) C*D): 1.035	Pump Type: Rentahire Pump
C. Liquid Depth (ft) (A-B): 6.35	F. Three Well Volumes (gal) (E3): 3.105	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1236	18.90	6.95	-36	0.971	179	2.71	9.18	0.2	—
1239	18.81	6.69	-46	0.976	170	1.54	9.45	0.2	0.6
1242	18.92	6.65	-38	0.970	152	1.36	9.75	0.2	1.2
1245	18.80	6.64	-34	0.972	126	1.27	10.05	0.2	1.8
1248	19.33	6.64	-21	0.958	108	1.20	10.25	0.2	2.4
1251	19.55	6.64	-24	0.959	76.1	1.19	10.55	0.2	3.0
1254	18.86	6.64	-22	0.968	52.6	1.16	10.90	0.2	3.6
1257	19.28	6.64	-19	0.954	47.1	1.14	11.10	0.2	4.2
1300	19.21	6.64	-16	0.958	46.8	1.09	11.55	0.2	4.8
1303	19.26	6.64	-17	0.956	45.1	1.08	11.80	0.2	5.4

Total Quantity of Water Removed (gal):	1.426	Sampling Time:	1303
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/25/2023	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-20S	EA Personnel: CB, AS	Client: NYSDEC (828103)
Location: Onsite	Well Condition: Good	Weather: Sunny, 68°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0847	Well Diameter (in): 2

Purge Date: 09/25/2023	Purge Time: 1126
Purge Method: Low Flow Peri Pump	Field Technician: C. Bodman

Well Volume

A. Well Depth (ft): 15.00	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: ground -0.25 ft
B. Depth to Water (ft): 9.38	E. Well Volume (gal) C*D: 0.916	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 5.62	F. Three Well Volumes (gal) (E3): 2.75	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1126	18.69	6.95	-13	1.21	6.6	1.53	9.72	0.2	—
1129	18.44	6.90	-15	1.22	0.0	1.07	10.02	0.2	0.6
1132	18.61	6.88	-18	1.21	0.0	1.02	10.19	0.2	1.2
1135	18.74	6.87	-18	1.21	0.0	1.00	10.28	0.2	1.8
1138	18.92	6.87	-17	1.20	0.0	0.95	10.38	0.2	2.4
1141	18.71	6.86	-16	1.21	0.0	1.01	10.46	0.2	3.0
1144	18.76	6.86	-15	1.20	0.0	0.99	10.60	0.2	3.6
1147	18.77	6.86	-15	1.18	0.0	0.92	10.60	0.2	4.2
1150	18.76	6.85	-15	1.18	0.0	0.92	10.60	0.2	4.8
1153	18.75	6.85	-15	1.19	0.0	0.91	10.60	0.2	5.4

Total Quantity of Water Removed (gal):	1.426	Sampling Time:	1153
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/25/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-215	EA Personnel: A. Stoegenke	Client: NYSDEC (828103)
Location: Dinaburg	Well Condition: Good	Weather: 55°F, partial clouds
Sounding Method: Heron w/m	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0900	Well Diameter (in): 2

Purge Date: 09/27/2023	Purge Time: 0714
Purge Method: Low flow	Field Technician: A. Stoegenke

Well Volume

A. Well Depth (ft): 15.00	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25ft.
B. Depth to Water (ft): 8.44	E. Well Volume (gal) C*D: 1.07	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 6.56	F. Three Well Volumes (gal) (E3): 3.21	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0714	13.54	5.27	-58	1.02	29.2	2.49	8.87	0.2	-
0717	14.15	5.67	-106	0.982	26.7	1.49	8.98	0.2	0.6
0720	14.89	5.85	-176	0.968	11.4	1.08	9.25	0.2	1.2
0723	14.96	5.87	-171	0.967	8.0	1.06	9.30	0.2	1.8
0726	15.05	5.90	-137	0.967	5.8	0.97	9.44	0.2	2.4
0729	15.14	5.93	-179	0.969	1.0	0.93	9.47	0.2	3.0
0732	15.20	5.95	-195	0.968	0.3	0.90	9.68	0.2	3.6
0735	15.26	5.98	-205	0.969	0	0.86	9.83	0.2	4.2
0738	15.32	5.96	-210	0.968	0	0.89	9.95	0.2	4.8
0741	15.36	6.03	-210	0.967	0	0.87	10.04	0.2	5.4

Total Quantity of Water Removed ~~(gal)~~ (L): 5.4
Samplers: A. Stoegenke
Sampling Date: 09/27/2023

Sampling Time: 0741
Split Sample With: -
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: PZ-22S	EA Personnel: A. Stoegenke	Client: NYSDEC (828103)
Location: Dinaburg	Well Condition: Good	Weather: 70°F, Sunny
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0905	Well Diameter (in): 1

Purge Date: 09/26/2023	Purge Time: ~~0901~~ 1458
Purge Method: low flow	Field Technician: A. Stoegenke

Well Volume

A. Well Depth (ft): 13.48	D. Well Volume (ft): 0.041	Depth/Height of Top of PVC: -0.25 ft.
B. Depth to Water (ft): 7.83	E. Well Volume (gal) C*D: 0.232	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 5.65	F. Three Well Volumes (gal) (E3): 0.696	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1503	18.88	6.74	13	1.17	528	1.93	-	0.2	-
1505	18.73	6.48	9	1.19	419	1.18	-	0.2	0.6
1508	19.01	6.43	10	1.19	259	0.86	-	0.2	1.2
1511	19.03	6.43	12	1.19	201	0.83	-	0.2	1.8
1514	19.05	6.42	15	1.19	221	0.91	-	0.2	2.4
1517	18.73	6.41	23	1.17	490	1.31	-	0.2	3.0
1520	18.13	6.58	26	1.14	800+	0.83	-	0.2	3.6
1523	17.41	6.43	28	1.16	800+	0.83	-	0.2	4.2
1526	18.17	6.42	31	1.14	800+	1.22	-	0.2	4.8
1529	18.14	6.41	31	1.14	800+	1.04	-	0.2	5.4
Dry - 1532	18.28	6.41	32	1.15	800+	0.83	-	0.2	6.0
Dry - 1555									

Total Quantity of Water Removed (gal): (L) 6.0
Samplers: A. Stoegenke
Sampling Date: 09/26/2023
Sampling Time: 1606
Split Sample With: -
Sample Type: Grab

COMMENTS AND OBSERVATIONS:
Dry @ 1533. Start @ 1555, went dry immediately, let recharge & then sampled

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-22K	EA Personnel: A. Stoogenke	Client: NYSDEC (828103)
Location: Dunaburg	Well Condition: Good	Weather: 70°F, Sunny
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 0908	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 1405
Purge Method: low flow	Field Technician: A. Stoogenke

Well Volume

A. Well Depth (ft): 28.30	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft
B. Depth to Water (ft): 8.98	E. Well Volume (gal) C*D: 3.149	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 19.32	F. Three Well Volumes (gal) (E3): 9.447	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1405	21.59	7.00	-4	0.882	24.0	2.66	9.08	0.2	-
1408	21.17	6.86	-31	0.871	21.1	0.88	9.08	0.2	0.6
1411	20.86	6.82	-71	0.874	20.6	0.72	9.10	0.2	1.2
1414	20.49	6.79	-121	0.875	21.2	0.55	9.10	0.2	1.8
1417	20.29	6.76	-131	0.875	22.3	0.61	9.10	0.2	2.4
1420	20.02	6.74	-152	0.875	23.3	0.58	9.10	0.2	3.0
1423	19.89	6.72	-161	0.876	23.3	0.55	9.10	0.2	3.6
1426	19.75	6.71	-164	0.878	21.7	0.55	9.10	0.2	4.0
1429	19.69	6.71	-165	0.879	20.5	0.55	9.10	0.2	4.6
1432	19.61	6.70	-165	0.881	16.3	0.53	9.10	0.2	5.2
1435	19.49	6.69	-165	0.884	17.6	0.52	9.10	0.2	5.8
1438	19.42	6.68	-165	0.885	15.8	0.54	9.10	0.2	6.4
1441	19.40	6.68	-165	0.886	15.9	0.53	9.10	0.2	7.0
1444	19.37	6.68	-165	0.887	16.0	0.53	9.10	0.2	7.6

Total Quantity of Water Removed (gal): (L) 7.6
Samplers: A. Stoogenke
Sampling Date: 09/26/2023
Sampling Time: 1444
Split Sample With: -
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-23K	EA Personnel: CB, AS	Client: NYSDEC (828103)
Location: Sidewalk across street	Well Condition: Good	Weather: Cloudy, 57°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0853	Well Diameter (in): 4 2

Purge Date: 09/26/2023	Purge Time: 0918
Purge Method: Low flow Red pump	Field Technician: C. Bachman

Well Volume

A. Well Depth (ft): 30.17	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -1.44
B. Depth to Water (ft): 8.98	E. Well Volume (gal) C*D: 3.45	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 21.19	F. Three Well Volumes (gal) (E3): 10.35	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0918	13.28	7.06	13	1.30	782	2.08	9.05	0.2	—
0921	13.41	6.91	-111	1.29	224	1.21	9.05	0.2	0.6
0924	13.51	6.91	-127	1.28	133	1.21	9.05	0.2	1.2
0927	13.57	6.89	-132	1.28	71.7	0.78	9.05	0.2	1.8
0930	13.65	6.90	-135	1.28	9.0	0.62	9.05	0.2	2.4
0933	13.64	6.90	-135	1.28	8.4	0.59	9.05	0.2	3.0
0936	13.66	6.93	-138	1.28	3.8	0.57	9.05	0.2	3.6
0939	13.69	6.92	-139	1.28	1.0	0.47	9.05	0.2	4.2
0942	13.74	6.92	-140	1.28	0.0	0.46	9.05	0.2	4.8
0945	13.76	6.92	-140	1.27	0.0	0.47	9.05	0.2	5.4

Total Quantity of Water Removed (gal):	1.925	Sampling Time:	0945
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/26/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-24K	EA Personnel: CB, AS	Client: NYSDEC (828108)
Location: Across street in parking lot	Well Condition: Good	Weather: Cloudy 55°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOTC
Stick Up/Down (ft): Flush	Gauge Time: 0825	Well Diameter (in): 2

Purge Date: 09/26/2023	Purge Time: 0833
Purge Method: Low flow peri pump	Field Technician: C. Balman

Well Volume

A. Well Depth (ft): 27.87	D. Well Volume (ft): 0.163	Depth/Height of Top of PVC: -0.25 ft
B. Depth to Water (ft): 8.33	E. Well Volume (gal) C*D: 3.185	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 19.54	F. Three Well Volumes (gal) (E3): 9.555	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0835	13.07	6.97	-28	1.24	114	1.86	9.40	0.2	—
0836	13.04	6.81	-33	1.24	94.1	3.07	9.40	0.2	0.6
0839	13.02	6.85	-31	1.24	80.2	1.59	9.40	0.2	1.2
0842	13.01	6.85	-26	1.24	71.6	1.42	9.40	0.2	1.8
0845	13.01	6.85	-23	1.24	67.0	1.48	9.40	0.2	2.4
0848	13.02	6.86	-19	1.24	61.8	1.45	9.40	0.2	3.0
0851	13.02	6.87	-16	1.24	57.4	1.35	9.40	0.2	3.6
0854	13.04	6.89	-12	1.25	53.2	1.25	9.40	0.2	4.2
0857	13.06	6.89	-10	1.25	49.1	1.24	9.40	0.2	4.8
0900	13.08	6.89	-8	1.25	48.8	1.26	9.40	0.2	5.4
0903	13.10	6.90	-6	1.25	48.1	1.25	9.40	0.2	6.0

Total Quantity of Water Removed (gal):	1.584	Sampling Time:	0905
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/26/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: PZ-24S	EA Personnel: CB, AS	Client: NYSDEC (878103)
Location: Across Street in Partly lot	Well Condition: Good	Weather: Cloudy, 58°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0824	Well Diameter (in): 1

Purge Date: 09/26/2023	Purge Time: 0806
Purge Method: Low flow Peri pump	Field Technician: C. Badman

Well Volume

A. Well Depth (ft): 14.22	D. Well Volume (ft): 0.041	Depth/Height of Top of PVC: -0.25 ft
B. Depth to Water (ft): 8.35	E. Well Volume (gal) C*D): 0.24	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 5.87	F. Three Well Volumes (gal) (E3): 0.72	Pump Intake Depth: Mid-screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0806	12.39	5.74	97	1.33	353	3.63	—	0.2	—
0809	12.52	6.07	-24	1.31	435	2.50	—	0.2	0.6
0812	12.75	6.54	-80	1.33	476	2.22	—	0.2	1.2
0815	12.91	6.72	-96	1.33	252	2.11	—	0.2	1.8
0818	12.94	6.81	-97	1.33	134	2.09	—	0.2	2.4
0821	12.97	6.83	-100	1.34	94.5	2.07	—	0.2	3.0
0824	12.95	6.84	-102	1.34	49.1	2.05	—	0.2	3.6
0827	12.96	6.85	-103	1.34	46.3	2.01	—	0.2	4.2
0830	12.96	6.85	-105	1.34	45.9	1.96	—	0.2	4.8
~	Well	Dry	~	~	~	~	~	~	~

Total Quantity of Water Removed (gal):	1.267	Sampling Time:	1200
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/26/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS: WLM too large to take DTW measurements while purging, well dry @ 0830. Will recharge and sample

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MPE-17	EA Personnel: CB, AS	Client: NYSDEC (828103)
Location: Parkway off of Besten St	Well Condition: Good	Weather: Sunny 67°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0913	Well Diameter (in): 4

Purge Date: 09/26/2023	Purge Time: 1400
Purge Method: Low flow peri pump	Field Technician: C. Bodary

Well Volume

A. Well Depth (ft): 13.17	D. Well Volume (ft): 0.653	Depth/Height of Top of PVC: -0.5ft
B. Depth to Water (ft): 7.15	E. Well Volume (gal) C*D: 3.93	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 6.02	F. Three Well Volumes (gal) (E3): 11.79	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1400	17.61	7.07	41	0.638	1000+	1.75	7.50	0.2	—
1405	17.08	6.99	42	0.634	1000+	1.51	7.60	0.2	0.6
1406	16.97	7.01	44	0.614	1000+	1.56	7.85	0.2	1.2
1409	17.09	6.97	50	0.602	153	1.51	8.03	0.2	1.8
1412	17.11	6.96	53	0.598	56.1	1.49	8.15	0.2	2.4
1415	17.16	6.96	56	0.595	26.7	1.51	8.30	0.2	3.0
1418	17.22	6.95	60	0.593	19.1	1.67	8.45	0.2	3.6
1421	17.30	6.94	64	0.592	15.5	1.60	8.55	0.2	4.2
1424	17.34	6.93	68	0.593	14.9	1.61	8.59	0.2	4.8
1427	17.39	6.92	70	0.595	14.7	1.62	8.64	0.2	5.4

Total Quantity of Water Removed (gal):	1.4256	Sampling Time:	1427
Samplers:	CB	Split Sample With:	N/A
Sampling Date:	09/26/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

EA Engineering, P.C.
EA Science and Technology

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: GWE-2	EA Personnel: CB, AS	Client: NYSDEC 828103
Location: Driveway off of Berten St	Well Condition: Good	Weather: Sunny 67°F
Sounding Method: Heron WLM	Gauge Date: 09/25/2023	Measurement Ref: TOIC
Stick Up/Down (ft): Flush	Gauge Time: 0915	Well Diameter (in): 4

Purge Date: 09/26/2023	Purge Time: 1317
Purge Method: Low Flow Peri pump	Field Technician: C. Bachman

Well Volume

A. Well Depth (ft): 22.19	D. Well Volume (ft): 0.653	Depth/Height of Top of PVC: -0.5 Ft.
B. Depth to Water (ft): 9.21	E. Well Volume (gal) C*D): 8.476	Pump Type: Peristaltic pump
C. Liquid Depth (ft) (A-B): 12.98	F. Three Well Volumes (gal) (E3): 25.428	Pump Intake Depth: Mid-Screen

Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1317	16.64	7.15	95	1.64	141	3.34	9.45	0.2	—
1320	16.34	7.10	95	1.64	125	2.83	9.57	0.2	0.6
1323	16.24	7.11	89	1.65	104	2.10	9.83	0.2	1.2
1326	16.22	7.13	85	1.65	93.1	2.11	10.01	0.2	1.8
1329	16.24	7.13	82	1.65	86.6	2.24	10.14	0.2	2.4
1332	16.16	7.11	80	1.65	80.6	2.15	10.33	0.2	3.0
1335	16.18	7.07	77	1.65	76.3	2.04	10.51	0.2	3.6
1338	16.10	7.10	73	1.66	61.0	2.10	10.55	0.2	4.2
1341	16.14	7.10	69	1.66	48.2	1.94	10.58	0.2	4.8
1344	16.11	7.07	68	1.66	47.4	1.89	10.58	0.2	5.4
1347	16.19	7.06	67	1.66	46.8	1.87	10.58	0.2	6.0

Total Quantity of Water Removed (gal):	1.584	Sampling Time:	1347
Samplers:	CB, AS	Split Sample With:	N/A
Sampling Date:	09/26/2023	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

Appendix D

Laboratory Analysis Report

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EA Engineering

NYSDEC SMP-D Site- Dinaburg, Rochester, NY

SGS Job Number: JD77326X

Sampling Date: 10/26/23

Report to:

EA Engineering
269 West Jefferson Street
Syracuse, NY 13202
nrobinson@eaest.com; joliver@eaest.com;
kcassidy@eaest.com; kkatzer@eaest.com
ATTN: Noah Robinson

Total number of pages in report: 23

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

David Chastain
General Manager

Client Service contact: Kelly Ramos 732-329-0200
Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

Sections: 1 2 3

Table of Contents

-1-

SGS North America Inc.

Sample Summary

EA Engineering

Job No: JD77326X

NYSDEC SMP-D Site- Dinaburg, Rochester, NY

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD77326-1	10/26/23	10:10		10/27/23	AQ	Ground Water	828103-MW-13K-10262023
JD77326-2	10/26/23	10:30		10/27/23	AQ	Ground Water	828103-MW-03CA-10262023
JD77326-3	10/26/23	10:40		10/27/23	AQ	Ground Water	828103-MW-20S-10262023

Subcontract Lab Data

Report of Analysis

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SITE LOGIC Report

QuantArray®-Chlor Study

Contact:	Kelly Ramos	Phone:	732-329-0200
Address:	SGS Accutest 2235 US Highway 130 Fresh Ponds Corporate Village Dayton, NJ 08810	Email:	kelly.ramos@sgs.com

MI Identifier: 086UJ Report Date: 11/07/2023

Project: NYSDEC SMP-D Site-Dihaburg, Rochester, NY, EAENYES97277
Comments:

The QuantArray®-Chlor Approach

Quantification *Dehalococcoides*, the only known bacterial group capable of complete reductive dechlorination of PCE and TCE to ethene, has become an indispensable component of assessment, remedy selection, and performance monitoring at sites impacted by chlorinated solvents. While undeniably a key group of halorespiring bacteria, *Dehalococcoides* are not the only bacteria of interest in the subsurface because reductive dechlorination is not the only potential biodegradation pathway operative at contaminated sites, and chlorinated ethenes are not always the primary contaminants of concern. The QuantArray®-Chlor not only includes a variety of halorespiring bacteria (*Dehalococcoides*, *Dehalobacter*, *Dehalogenimonas*, etc.) to assess the potential for reductive dechlorination of chloroethenes, chloroethanes, chlorobenzenes, chlorophenols, and chloroform, but also provides quantification of functional genes involved in aerobic (co)metabolic pathways for biodegradation of chlorinated solvents and even competing biological processes. Thus, the QuantArray®-Chlor will give site managers the ability to simultaneously yet economically evaluate the potential for biodegradation of a spectrum of common chlorinated contaminants through a multitude of anaerobic and aerobic (co)metabolic pathways to give a much more clear and comprehensive view of contaminant biodegradation.

The QuantArray®-Chlor is used to quantify specific microorganisms and functional genes to evaluate the following:

Anaerobic Reductive Dechlorination	Quantification of important halorespiring bacteria (e.g. *Dehalococcoides*, *Dehalobacter*, *Dehalogenimonas*, *Desulfitobacterium* spp.) and key functional genes (e.g. vinyl chloride reductases, TCE reductase, chloroform reductase) responsible for reductive dechlorination of a broad spectrum of chlorinated solvents.
Aerobic Cometabolism	Several different types of bacteria including methanotrophs and some toluene/phenol utilizing bacteria can co-oxidize TCE, DCE, and vinyl chloride. The QuantArray®-Chlor quantifies functional genes like soluble methane monooxygenase encoding enzymes capable of co-oxidation of chlorinated ethenes.
Aerobic (Co)metabolism of Vinyl Chloride	Ethene oxidizing bacteria are capable of cometabolism of vinyl chloride. In some cases, ethenotrophs can also utilize vinyl chloride as a growth supporting substrate. The QuantArray®-Chlor targets key functional genes in ethene metabolism.

How do QuantArrays work?

The QuantArray®-Chlor in many respects is a hybrid technology combining the highly parallel detection of microarrays with the accurate and precise quantification provided by qPCR into a single platform. The key to highly parallel qPCR reactions is the nanoliter fluidics platform for low volume, solution phase qPCR reactions.

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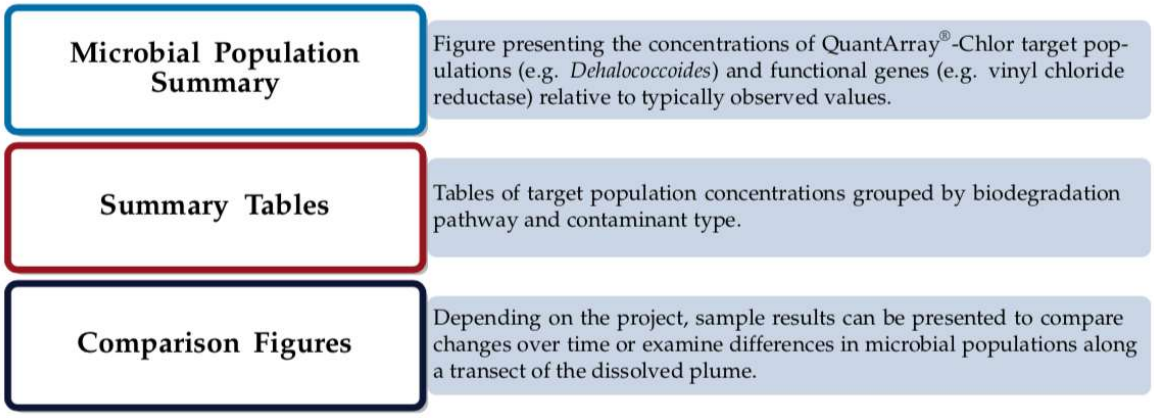
How are QuantArray® results reported?

One of the primary advantages of the QuantArray®-Chlor is the simultaneous quantification of a broad spectrum of different microorganisms and key functional genes involved in a variety of pathways for hydrocarbon biodegradation. However, highly parallel quantification combined with various metabolic and cometabolic capabilities of different target organisms can complicate data presentation. Therefore, in addition to Summary Tables, QuantArray®-Chlor results will be presented as Microbial Population Summary and Comparison Figures to aid in the data interpretation and subsequent evaluation of site management activities.

Types of Tables and Figures:



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Results

Table 1: Summary of the QuantArray®-Chlor results obtained for samples 828103-MW-13K-102623, 828103-MW-03CA-102623, and 828103-MW-20S-102623

Sample Name Sample Date	828103-MW-13K-102623 2023-10-26	828103-MW-03CA-102623 2023-10-26	828103-MW-20S-102623 2023-10-26
Reductive Dechlorination	cells/bead	cells/bead	cells/bead
Dehalococcoides (DHC)	**7.64E+03**	**2.51E+03**	<2.50E+01
tceA Reductase (TCE)	**4.98E+02**	**4.43E+01**	<2.50E+01
BAV1 Vinyl Chloride Reductase (BVC)	**1.19E+02**	**5.84E+01**	<2.50E+01
Vinyl Chloride Reductase (VCR)	**8.92E+01**	**6.79E+02**	<2.50E+01
Dehalobacter spp. (DHBt)	**8.61E+04**	**3.52E+04**	<2.50E+02
Dehalobacter DCM (DCM)	<2.50E+02	<2.50E+02	<2.50E+02
Dehalogenimonas spp. (DHG)	**1.57E+03**	**1.88E+04**	<2.50E+02
cerA Reductase (CER)	<2.50E+02	<2.50E+02	<2.50E+02
trans-1,2-DCE Reductase (TDR)	<2.50E+02	<2.50E+02	<2.50E+02
Desulfitobacterium spp. (DSB)	**1.64E+04**	**3.82E+04**	<2.50E+02
Dehalobium chlorocoercia (DECO)	**2.56E+04**	**8.16E+03**	**2.00E+03**
Desulfuromonas spp. (DSM)	<2.50E+02	<2.50E+02	**6.88E+01 (J)**
PCE Reductase (PCE-1)	<2.50E+02	<2.50E+02	<2.50E+02
PCE Reductase (PCE-2)	**4.01E+04**	**5.39E+03**	<2.50E+02
Chloroform Reductase (CFR)	<2.50E+02	<2.50E+02	<2.50E+02
1,1 DCA Reductase (DCA)	<2.50E+02	<2.50E+02	<2.50E+02
1,2 DCA Reductase (DCAR)	<2.50E+02	<2.50E+02	<2.50E+02
Aerobic (Co)Metabolic			
Soluble Methane Monooxygenase (SMMO)	<2.50E+02	<2.50E+02	<2.50E+02
Toluene Dioxygenase (TOD)	<2.50E+02	<2.50E+02	<2.50E+02
Phenol Hydroxylase (PHE)	**1.48E+05**	**2.85E+04**	**1.27E+05**
Trichlorobenzene Dioxygenase (TCBO)	<2.50E+02	<2.50E+02	<2.50E+02
Toluene Monooxygenase 2 (RDEG)	**1.44E+05**	**2.93E+04**	**1.55E+05**
Toluene Monooxygenase (RMO)	<2.50E+02	**1.35E+03**	<2.50E+02
Ethene Monooxygenase (EtnC)	**3.50E+03**	**2.47E+03**	<2.50E+02
Epoxyalkane Transferase (EtnE)	**5.44E+03**	<2.50E+02	**1.23E+04**
Dichloromethane Dehalogenase (DCMA)	<2.50E+02	<2.50E+02	<2.50E+02
Other			
Total Eubacteria (EBAC)	**4.55E+08**	**4.85E+06**	**3.43E+07**
Sulfate Reducing Bacteria (APS)	**2.99E+05**	**4.09E+05**	**1.52E+05**
Methanogens (MGN)	**1.21E+02 (J)**	**3.84E+03**	**1.28E+01 (J)**

Legend:

NA = Not Analyzed
NS = Not Sampled
J = Estimated Gene Copies Below PQL but Above LQL
I = Inhibited
< = Result Not Detected

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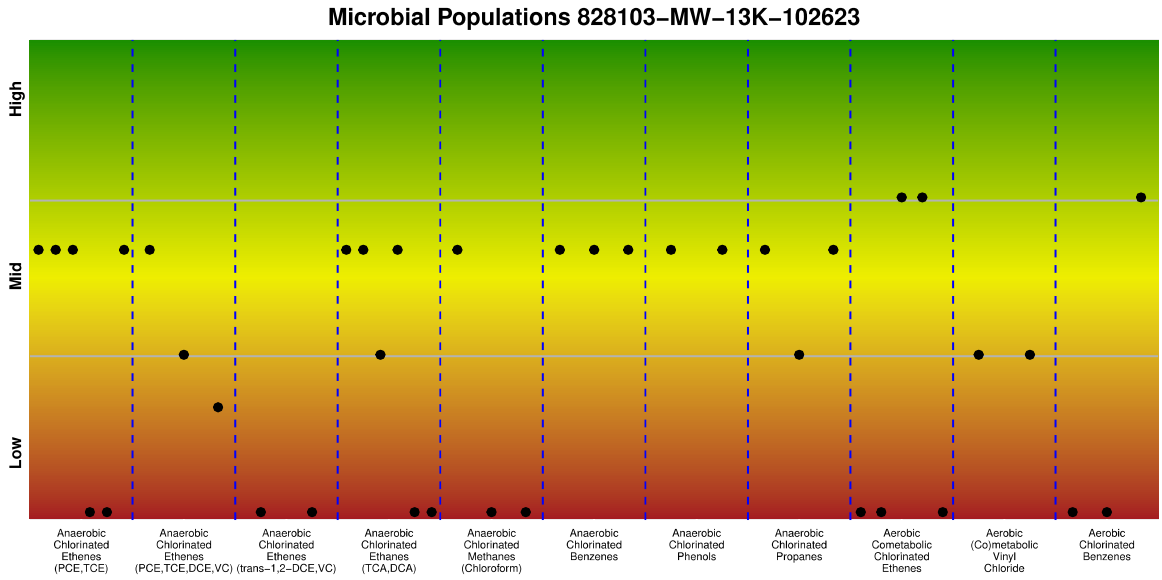

Figure 1: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants.

Anaerobic - Reductive Dechlorination or Dichloroelimination		Aerobic - (Co)metabolism	
Chlorinated Ethenes (PCE, TCE)	DHC, DHBt, DSB, DSM, PCE-1, PCE-2	Chlorinated Ethenes (TCE,DCE,VC)	sMMO, TOD, PHE, RDEG, RMO
Chlorinated Ethenes (PCE, TCE, DCE, VC)	DHC, BVC, VCR	(Co)metabolic Vinyl Chloride	etnC, etnE
Chlorinated Ethenes (trans-1,2-DCE, VC)	TDR, CER	Chlorinated Benzenes	TOD, TCBO, PHE
Chlorinated Ethanes (TCA and 1,2-DCA)	DHC, DHBt, DHG, DSB[1], DCA, DCAR		
Chlorinated Methanes (Chloroform)	DHBt, DCM, CFR		
Chlorinated Benzenes	DHC, DHBt[2], DECO		
Chlorinated Phenols	DHC, DSB		
Chlorinated Propanes	DHC, DHG, DSB[1]		

[1] *Desulfitobacterium dichloroeliminans* DCA1. [2] Implicated in reductive dechlorination of dichlorobenzene and potentially chlorobenzene.

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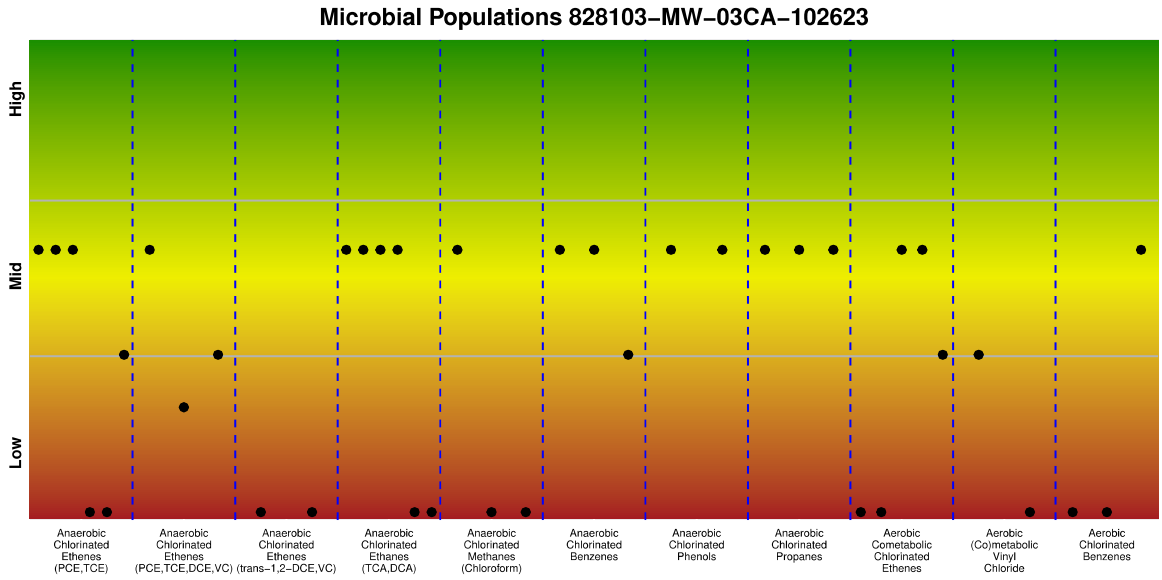

Figure 2: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants.

Anaerobic - Reductive Dechlorination or Dichloroelimination		Aerobic - (Co)metabolism	
Chlorinated Ethenes (PCE, TCE)	DHC, DHBt, DSB, DSM, PCE-1, PCE-2	Chlorinated Ethenes (TCE,DCE,VC)	sMMO, TOD, PHE, RDEG, RMO
Chlorinated Ethenes (PCE, TCE, DCE, VC)	DHC, BVC, VCR	(Co)metabolic Vinyl Chloride	etnC, etnE
Chlorinated Ethenes (trans-1,2-DCE, VC)	TDR, CER	Chlorinated Benzenes	TOD, TCBO, PHE
Chlorinated Ethanes (TCA and 1,2-DCA)	DHC, DHBt, DHG, DSB[1], DCA, DCAR		
Chlorinated Methanes (Chloroform)	DHBt, DCM, CFR		
Chlorinated Benzenes	DHC, DHBt[2], DECO		
Chlorinated Phenols	DHC, DSB		
Chlorinated Propanes	DHC, DHG, DSB[1]		

[1] *Desulfitobacterium dichloroeliminans* DCA1. [2] Implicated in reductive dechlorination of dichlorobenzene and potentially chlorobenzene.

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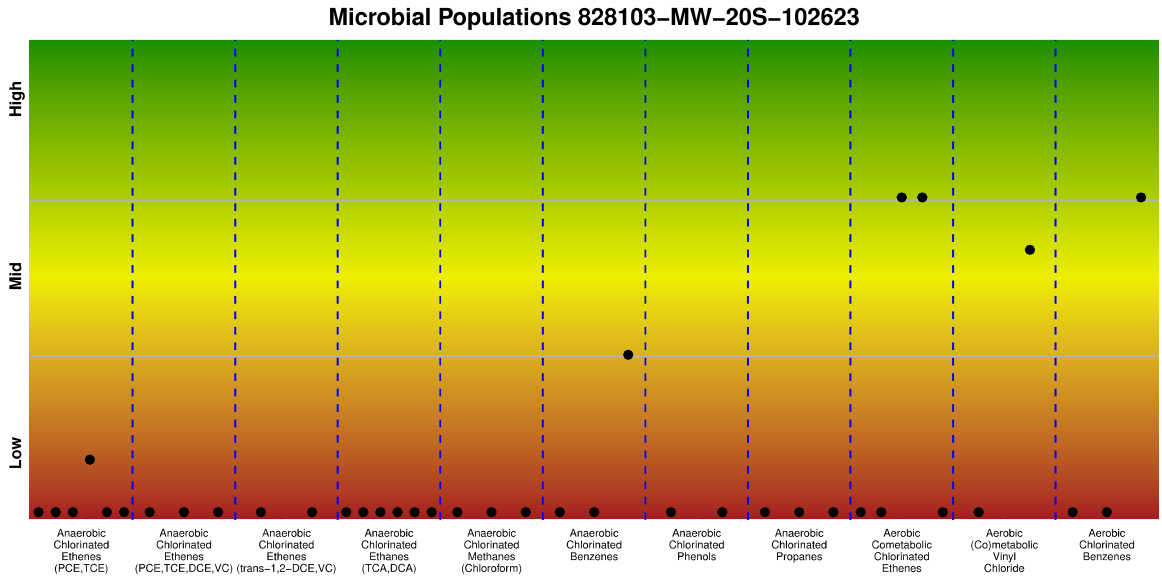

Figure 3: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants.

Anaerobic - Reductive Dechlorination or Dichloroelimination		Aerobic - (Co)metabolism	
Chlorinated Ethenes (PCE, TCE)	DHC, DHBt, DSB, DSM, PCE-1, PCE-2	Chlorinated Ethenes (TCE,DCE,VC)	sMMO, TOD, PHE, RDEG, RMO
Chlorinated Ethenes (PCE, TCE, DCE, VC)	DHC, BVC, VCR	(Co)metabolic Vinyl Chloride	etnC, etnE
Chlorinated Ethenes (trans-1,2-DCE, VC)	TDR, CER	Chlorinated Benzenes	TOD, TCBO, PHE
Chlorinated Ethanes (TCA and 1,2-DCA)	DHC, DHBt, DHG, DSB[1], DCA, DCAR		
Chlorinated Methanes (Chloroform)	DHBt, DCM, CFR		
Chlorinated Benzenes	DHC, DHBt[2], DECO		
Chlorinated Phenols	DHC, DSB		
Chlorinated Propanes	DHC, DHG, DSB[1]		

[1] *Desulfitobacterium dichloroeliminans* DCA1. [2] Implicated in reductive dechlorination of dichlorobenzene and potentially chlorobenzene.

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Table 2: Summary of the QuantArray®-Chlor results for reductive dechlorination for samples 828103-MW-13K-102623, 828103-MW-03CA-102623, and 828103-MW-20S-102623

Sample Name Sample Date	828103-MW-13K-102623 2023-10-26	828103-MW-03CA-102623 2023-10-26	828103-MW-20S-102623 2023-10-26
Reductive Dechlorination	cells/bead	cells/bead	cells/bead
Dehalococcoides (DHC)	**7.64E+03**	**2.51E+03**	<2.50E+01
tceA Reductase (TCE)	**4.98E+02**	**4.43E+01**	<2.50E+01
BAV1 Vinyl Chloride Reductase (BVC)	**1.19E+02**	**5.84E+01**	<2.50E+01
Vinyl Chloride Reductase (VCR)	**8.92E+01**	**6.79E+02**	<2.50E+01
Dehalobacter spp. (DHBt)	**8.61E+04**	**3.52E+04**	<2.50E+02
Dehalobacter DCM (DCM)	<2.50E+02	<2.50E+02	<2.50E+02
Dehalogenimonas spp. (DHG)	**1.57E+03**	**1.88E+04**	<2.50E+02
Desulfitobacterium spp. (DSB)	**1.64E+04**	**3.82E+04**	<2.50E+02
Dehalobium chlorocoercia (DECO)	**2.56E+04**	**8.16E+03**	**2.00E+03**
Desulfuromonas spp. (DSM)	<2.50E+02	<2.50E+02	**6.88E+01 (J)**

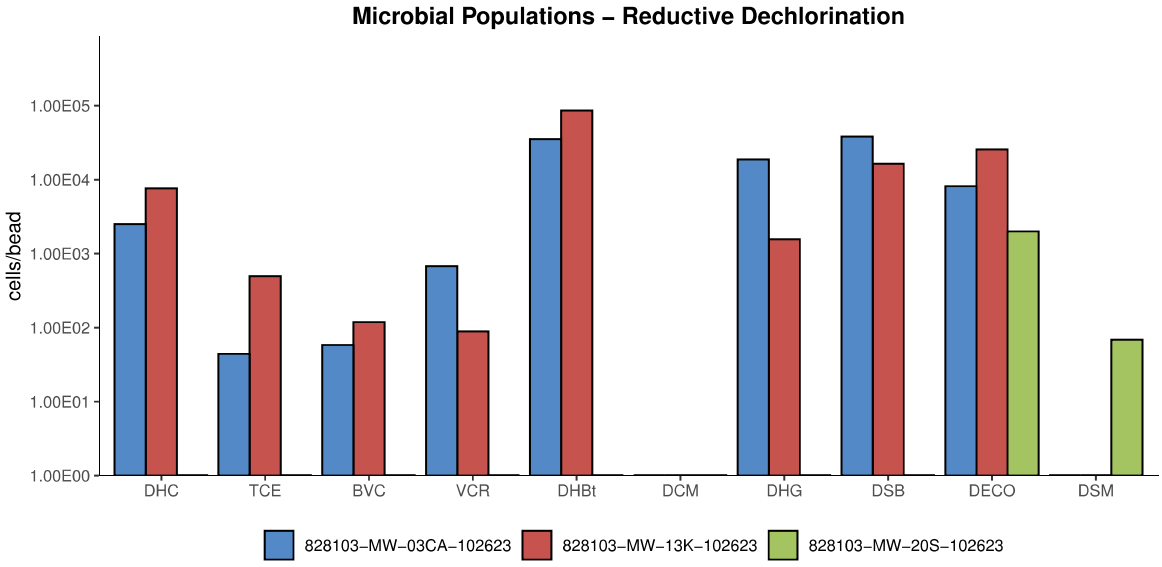

Figure 4: Comparison - microbial populations involved in reductive dechlorination

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Table 3: Summary of the QuantArray®-Chlor results for reductive dechlorination for samples 828103-MW-13K-102623, 828103-MW-03CA-102623, and 828103-MW-20S-102623

Sample Name Sample Date	828103-MW-13K-102623 2023-10-26	828103-MW-03CA-102623 2023-10-26	828103-MW-20S-102623 2023-10-26
Reductive Dechlorination	cells/bead	cells/bead	cells/bead
cerA Reductase (CER)	<2.50E+02	<2.50E+02	<2.50E+02
trans-1,2-DCE Reductase (TDR)	<2.50E+02	<2.50E+02	<2.50E+02
PCE Reductase (PCE-1)	<2.50E+02	<2.50E+02	<2.50E+02
PCE Reductase (PCE-2)	**4.01E+04**	**5.39E+03**	<2.50E+02
Chloroform Reductase (CFR)	<2.50E+02	<2.50E+02	<2.50E+02
1,1 DCA Reductase (DCA)	<2.50E+02	<2.50E+02	<2.50E+02
1,2 DCA Reductase (DCAR)	<2.50E+02	<2.50E+02	<2.50E+02

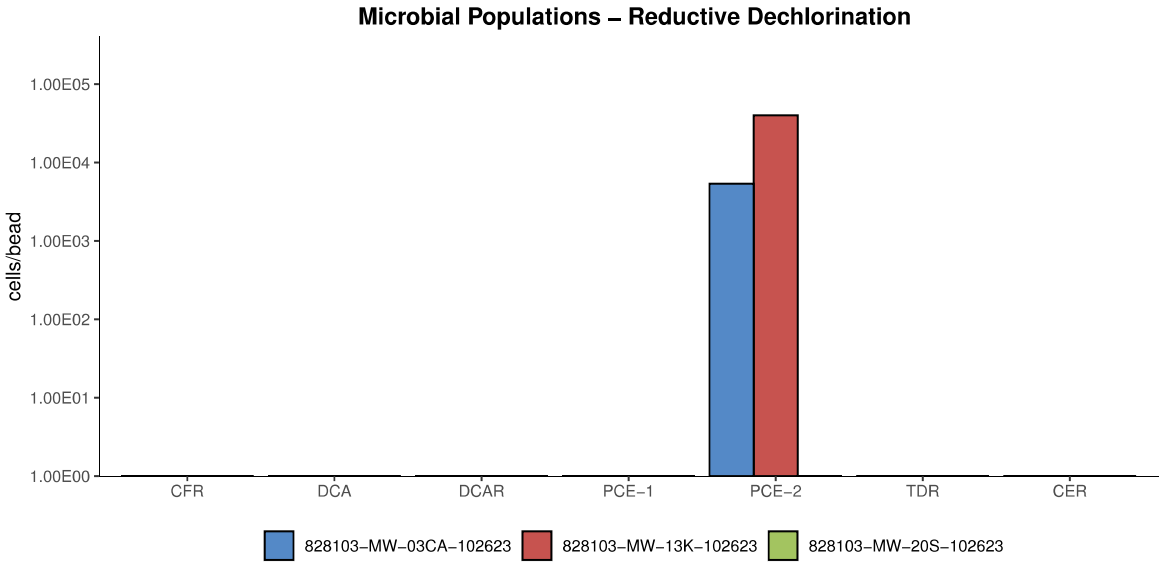

Figure 5: Comparison - microbial populations involved in reductive dechlorination

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Table 4: Summary of the QuantArray®-Chlor results for microorganisms responsible for aerobic (co)metabolism for samples 828103-MW-13K-102623, 828103-MW-03CA-102623, and 828103-MW-20S-102623

Sample Name Sample Date	828103-MW-13K-102623 2023-10-26	828103-MW-03CA-102623 2023-10-26	828103-MW-20S-102623 2023-10-26
Aerobic (Co)Metabolic	cells/bead	cells/bead	cells/bead
Soluble Methane Monooxygenase (SMMO)	<2.50E+02	<2.50E+02	<2.50E+02
Toluene Dioxygenase (TOD)	<2.50E+02	<2.50E+02	<2.50E+02
Phenol Hydroxylase (PHE)	**1.48E+05**	**2.85E+04**	**1.27E+05**
Trichlorobenzene Dioxygenase (TCBO)	<2.50E+02	<2.50E+02	<2.50E+02
Toluene Monooxygenase 2 (RDEG)	**1.44E+05**	**2.93E+04**	**1.55E+05**
Toluene Monooxygenase (RMO)	<2.50E+02	**1.35E+03**	<2.50E+02
Ethene Monooxygenase (EtnC)	**3.50E+03**	**2.47E+03**	<2.50E+02
Epoxyalkane Transferase (EtnE)	**5.44E+03**	<2.50E+02	**1.23E+04**
Dichloromethane Dehalogenase (DCMA)	<2.50E+02	<2.50E+02	<2.50E+02

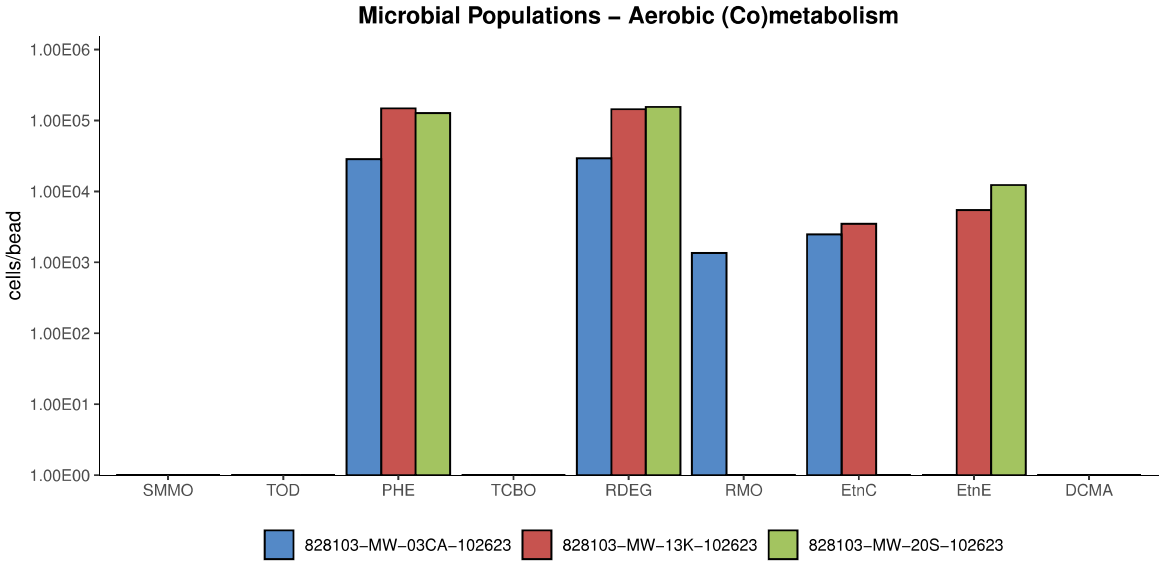

Figure 6: Comparison - microbial populations invloved in aerobic (co)metabolism.

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Table 5: Summary of the QuantArray®-Chlor results for total bacteria and other populations for samples 828103-MW-13K-102623, 828103-MW-03CA-102623, and 828103-MW-20S-102623

Sample Name Sample Date	828103-MW-13K-102623 2023-10-26	828103-MW-03CA-102623 2023-10-26	828103-MW-20S-102623 2023-10-26
Other	cells/bead	cells/bead	cells/bead
Total Eubacteria (EBAC)	**4.55E+08**	**4.85E+06**	**3.43E+07**
Sulfate Reducing Bacteria (APS)	**2.99E+05**	**4.09E+05**	**1.52E+05**
Methanogens (MGN)	**1.21E+02 (J)**	**3.84E+03**	**1.28E+01 (J)**

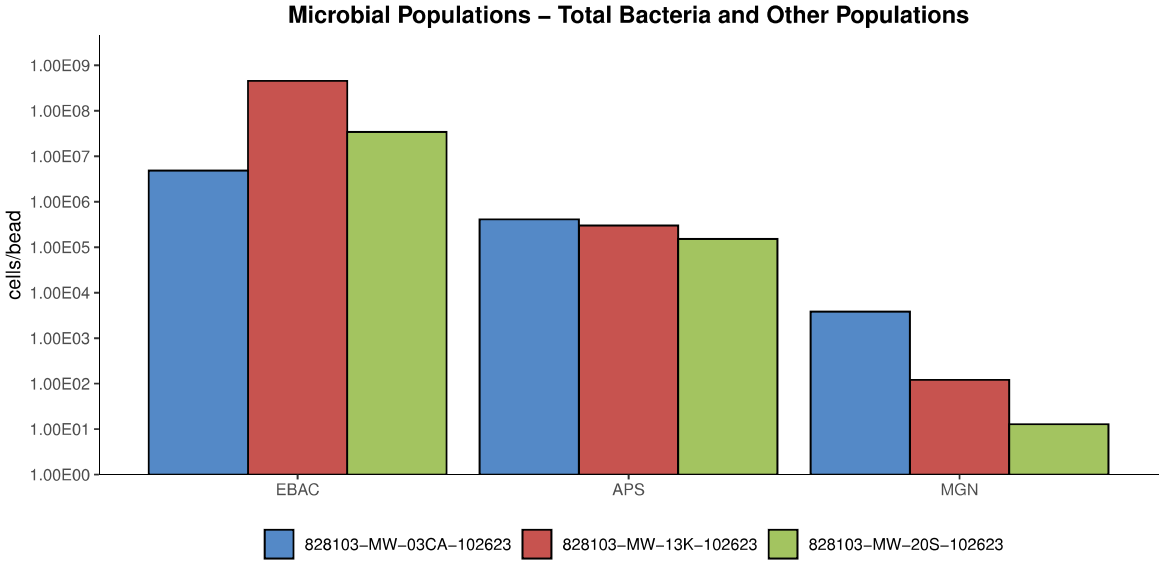

Figure 7: Comparison - microbial populations.

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Interpretation

The overall purpose of the QuantArray®-Chlor is to give site managers the ability to simultaneously yet economically evaluate the potential for biodegradation of a spectrum of common chlorinated contaminants through a multitude of anaerobic and aerobic (co)metabolic pathways in order to provide a clearer and more comprehensive view of contaminant biodegradation. The following discussion describes the interpretation of results in general terms and is meant to serve as a guide.

Reductive Dechlorination - Chlorinated Ethenes: While a number of bacterial cultures including *Dehalococcoides*, *Dehalobacter*, *Desulfitobacterium*, *Desulfuromonas* spp. capable, of utilizing PCE and TCE as growth-supporting electron acceptors have been isolated [1–5], *Dehalococcoides* may be the most important because they are the only bacterial group that has been isolated to date which is capable of complete reductive dechlorination of PCE to ethene [6]. In fact, the presence of *Dehalococcoides* has been associated with complete reductive dechlorination to ethene at sites across North America and Europe Hendrickson and Lu have proposed using a *Dehalococcoides* concentration of 1 x 10^4 cells/mL as a screening criterion to identify sites where biological reductive dechlorination is predicted to proceed at "generally useful" rates [7,8].

At chlorinated ethene sites, any "stall" leading to the accumulation of daughter products, especially vinyl chloride, would be a substantial concern. While *Dehalococcoides* concentrations greater than 1 x 10^4 cells/mL correspond to ethene production and useful rates of dechlorination, the range of chlorinated ethenes degraded varies by strain within the *Dehalococcoides* genus [6,9] and the presence of co-contaminants and competitors can have complex impacts on the halorespiring microbial community [10–15]. Therefore, QuantArray®-Chlor also provides quantification of a suite of reductive dehalogenase genes (PCE, TCE, BVC, VCR, CER, and TDR) to more definitively confirm the potential for reductive dechlorination of all chlorinated ethene compounds including vinyl chloride.

Perhaps most importantly, QuantArray®-Chlor quantifies TCE reductase (TCE) and both known vinyl chloride reductase genes (BVC, VCR) from *Dehalococcoides* to conclusively evaluate the potential for complete reductive dechlorination of chlorinated ethenes to non-toxic ethene [16–18]. In addition, the analysis also includes quantification of reductive dehalogenase genes from *Dehalogenimonas* spp. capable of reductive dechlorination of chlorinated ethenes. More specifically, these are the trans-1,2-DCE dehalogenase gene (TDR) from strain WBC-2 [19] and the vinyl chloride reductase gene (CER) from GP, the only known organisms other than *Dehalococcoides* capable of vinyl chloride reduction [20]. Finally, PCE reductase genes responsible for sequential reductive dechlorination of PCE to *cis*-DCE by *Sulfurospirillum* and *Geobacter* spp. are also quantified. In mixed cultures, evidence increasingly suggests that partial dechlorinators like *Sulfurospirillum}* and *Geobacter* may be responsible for the majority of reductive dechlorination of PCE to TCE and *cis*-DCE while *Dehalococcoides* functions more as *cis*-DCE and vinyl chloride reducing specialists [10,21].

Reductive Dechlorination - Chlorinated Ethanes: Under anaerobic conditions, chlorinated ethanes are susceptible to reductive dechlorination by several groups of halorespiring bacteria including *Dehalobacter*, *Dehalogenimonas*, and *Dehalococcoides*. While the reported range of chlorinated ethanes utilized varies by genus, species, and sometimes at the strain level, several general observations can be made regarding biodegradation pathways and daughter product formation. *Dehalobacter* spp. have been isolated that are capable of sequential reductive dechlorination of 1,1,1-TCA through 1,1-DCA to chloroethane [13]. Biodegradation of 1,1,2-TCA by several halorespiring bacteria including *Dehalobacter* and *Dehalogenimonas* spp. proceeds via dichloroelimination producing vinyl chloride [22–24]. Similarly, 1,2-DCA biodegradation by *Dehalobacter*, *Dehalogenimonas*, and *Dehalococcoides* occurs via dichloroelimination producing ethene. While not utilized by many *Desulfitobacterium* isolates, at least one strain, *Desulfitobacterium dichloroeliminans* strain DCA1, is also capable of dichloroelimination of 1,2-DCA [25]. The 1,2-dichloroethane reductive dehalogenase gene (DCAR) from members of *Desulfitobacterium* and *Dehalobacter* is known to dechlorinate 1,2-DCA to ethene, while the 1,1-dichloroethane reductive dehalogenase (DCA) targets the gene responsible for 1,1-DCA dechlorination in some strains of *Dehalobacter*. In addition to chloroform, chloroform reductase (CFR) has also been shown to be responsible for reductive dechlorination of 1,1,1-TCA [26].

Reductive Dechlorination - Chlorinated Methanes: Chloroform is a common co-contaminant at chlorinated solvent sites and can inhibit reductive dechlorination of chlorinated ethenes. Grostern et al. demonstrated that a *Dehalobacter* population was capable of reductive dechlorination of chloroform to produce dichloromethane [27]. The *cfrA* gene encodes the reductase which catalyzes this initial step in chloroform biodegradation [26]. Justicia-Leon et al. have since shown that dichloromethane can support growth of a distinct group of *Dehalobacter* strains via fermentation [28]. The *Dehalobacter* DCM assay targets the 16S rRNA gene of these strains.

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Reductive Dechlorination - Chlorinated Benzenes: Chlorinated benzenes are an important class of industrial solvents and chemical intermediates in the production of drugs, dyes, herbicides, and insecticides. The physical-chemical properties of chlorinated benzenes as well as susceptibility to biodegradation are functions of their degree of chlorination and the positions of chlorine substituents. Under anaerobic conditions, reductive dechlorination of higher chlorinated benzenes including hexachlorobenzene (HCB), pentachlorobenzene (PeCB), tetrachlorobenzene (TeCB) isomers, and trichlorobenzene (TCB) isomers has been well documented [29], although biodegradation of individual compounds and isomers varies between isolates. For example, *Dehalococcoides* strain CBDB1 reductively dechlorinats HCB, PeCB, all three TeCB isomers, 1,2,3-TCB, and 1,2,4-TCB [9]. *Dehalobium chlorocoercia* DF-1 has been shown to be capable of reductive dechlorination of HCB, PeCB, and 1,2,3,5-TeCB [31]. The dichlorobenzene (DCB) isomers and chlorobenzene (CB) were considered relatively recalcitrant under anaerobic conditions. However, new evidence has demonstrated reductive dechlorination of DCBs to CB and CB to benzene [32] with corresponding increases in concentrations of *Dehalobacter* spp. [33].

Reductive Dechlorination - Chlorinated Phenols: Pentachlorophenol (PCP) was one of the most widely used biocides in the U.S. and despite residential use restrictions, is still extensively used industrially as a wood preservative. Along with PCP, the tetrachlorophenol and trichlorophenol isomers were also used as fungicides in wood preserving formulations. 2,4-Dichlorophenol and 2,4,5-TCP were used as chemical intermediates in herbicide production (e.g. 2,4-D) and chlorophenols are known byproducts of chlorine bleaching in the pulp and paper industry. While the range of compounds utilized varies by strain, some *Dehalococcoides* isolates are capable of reductive dechlorination of PCP and other chlorinated phenols. For example, *Dehalococcoides* strain CBDB1 is capable of utilizing PCP, all three tetrach lorophenol (TeCP) congeners, all six trichlorophenol (TCP) congeners, and 2,3-dichlorophenol (2,3-DCP). PCP dechlorination by strain CBDB1 produces a mixture of 3,5-DCP, 3,4-DCP, 2,4-DCP, 3-CP, and 4-CP [34]. In the same study, however, *Dehalococcoides* strain 195 dechlorinated a more narrow spectrum of chlorophenols which included 2,3-DCP, 2,3,4-TCP, and 2,3,6-TCP, but no other TCPs or PCP. Similar to *Dehaloc occoides*, some species and strains of *Desulfitobacterium* are capable of utilizing PCP and other chlorinated phenols. *Desulfitobacterium hafniense* PCP-1 is capable of reductive dechlorination of PCP to 3-CP [35]. However, the ability to biodegrade PCP is not universal among *Desulfitobacterium* isolates. *Desulf itobacterium* sp. strain PCE1 and *D. chlororespirans* strain Co23, for example, can utilize some TCP and DCP isomers, but not PCP for growth [2,36].

Reductive Dechlorination - Chlorinated Propanes: *Dehalogenimonas* is a recently described bacterial genus of the phylum Chloroflexi which also includes the well-known chloroethene-respiring *Dehalococcoides* [23]. The *Dehalogenimonas* isolates characterized to date are also halorespiring bacteria, but utilize a rather unique range of chlorinated compounds as electron acceptors including chlorinated propanes (1,2,3-TCP and 1,2-DCP) and a variety of other vicinally chlorinated alkanes including 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, and 1,2-dichloroethane [23]

Aerobic - Chlorinated Ethene Cometabolism: Under aerobic conditions, several different types of bacteria including methane-oxidizing bacteria (methanotrophs), and many benzene, toluene, ethylbenzene, xylene, and (BTEX)-utilizing bacteria can cometabolize or co-oxidize TCE, DCE, and vinyl chloride [37]. In general, cometabolism of chlorinated ethenes is mediated by monooxygenase enzymes with "relaxed' specificity that oxidize a primary (growth supporting) substrate (*e.g.* methane) and co-oxidize the chlorinated compound (*e.g.* TCE). QuantArray®-Chlor provides quantification of a suite of genes encoding oxygenase enzymes capable of co-oxidation of chlorinated ethenes including soluble methane monooxygenase (sMMO). Soluble methane monooxygenases co-oxidize a broad range of chlorinated compounds [38–41] including TCE, *cis*-DCE, and vinyl chloride. Furthermore, soluble methane monooxygenases are generally believed to support greater rates of aerobic cometabolism [40]. QuantArray®-Chlor also quantifies aromatic oxygenase genes encoding ring hydroxylating toluene monooxygenase genes (RMO, RDEG), toluene dioxygenase (TOD) and phenol hydroxylases (PHE) capable of TCE co-oxidation [42–46]. TCE or a degradation product has been shown to induce expression of toluene monooxygenases in some laboratory studies [43,47] raising the possibility of TCE cometabolism with an alternative (non-aromatic) growth substrate. Moreover, while a number of additional factors must be considered, recent research under ESTCP Project 201584 has shown positive correlations between concentrations of monooxygenase genes (soluble methane monooxygenase, ring hydroxylating monooxygenases, and phenol hydroxylase) and the rate of TCE degradation [48].

Aerobic - Chlorinated Ethane Cometabolism: While less widely studied than cometabolism of chlorinated ethenes, some chlorinated ethanes are also susceptible to co-oxidation. As mentioned previously, soluble methane monooxygenases (sMMO) exhibit very relaxed specificity. In laboratory studies, sMMO has been shown to co-oxidize a number of chlorinated ethanes including 1,1,1-TCA and 1,2-DCA [38,40].

Aerobic - Vinyl Chloride Cometabolism: Beginning in the early 1990s, numerous microcosm studies demonstrated

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aerobic oxidation of vinyl chloride under MNA conditions without the addition of exogenous primary substrates. Since then, strains of *Mycobacterium*, *Nocardioides*, *Pseudomonas*, *Ochrobactrum*, and *Ralstonia* species have been isolated which are capable of aerobic growth on both ethene and vinyl chloride (see Mattes et al. [49] for a review). The initial steps in the pathway are the monooxygenase (*etn*ABCD) catalyzed conversion of ethene and vinyl chloride to their respective epoxyalkanes (epoxyethane and chlorooxirane), followed by epoxyalkane:CoM transferase (*etn*E) mediated conjugation and breaking of the epoxide [50].

Aerobic - Chlorinated Benzenes: In general, chlorobenzenes with four or less chlorine groups are susceptible to aerobic biodegradation and can serve as growth-supporting substrates. Toluene dioxygenase (TOD) has a relatively relaxed substrate specificity and mediates the incorporation of both atoms of oxygen into the aromatic ring of benzene and substituted benzenes (toluene and chlorobenzene). Comparison of TOD levels in background and source zone samples from a CB-impacted site suggested that CBs promoted growth of TOD-containing bacteria [51]. In addition, aerobic biodegradation of some trichlorobenzene and even tetrachlorobenzene isomers is initiated by a group of related trichlorobenzene dioxygenase genes (TCBO). Finally, phenol hydroxylases catalyze the continued oxidation and in some cases, the initial oxidation of a variety of monoaromatic compounds. In an independent study, significant increases in numbers of bacteria containing PHE genes corresponded to increases in biodegradation of DCB isomers [51].

Aerobic - Chlorinated Methanes: Many aerobic methylotrophic bacteria, belonging to diverse genera (*Hyphomicrobium*, *Methylobacterium*, *Methylophilus*, *Pseudomonas*, *Paracoccus*, and *Alibacter*) have been isolated which are capable of utilizing dichloromethane (DCM) as a growth substrate. The DCM metabolic pathway in methylotrophic bacteria is initiated by a dichloromethane dehalogenase (DCMA) gene. DCMA is responsible for aerobic biodegradation of dichloromethane by methylotrophs by first producing formaldehyde which is then further oxidized [52].

As discussed in previous sections, soluble methane monooxygenase (sMMO) exhibits relaxed specificity and co-oxidizes a broad spectrum of chlorinated hydrocarbons. In addition to chlorinated ethenes, sMMO has been shown to co-oxidize chloroform in laboratory studies [38,41].

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Web: www.microbe.com

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

JD77326

REPORT TO:
Name: Kelly Ramos
Company: SGS
Address: 2235 US-130 Dayton, NJ 08810
email: Kelly.Ramos@SGS.Com
Phone: 609-664-8613
Fax:

INVOICE TO: (For invoices paid by a third party it is imperative that all information be provided)
Name: Kelly Ramos
Company: SGS
Address: 2235 US-130 Dayton, NJ 08810
email: Kelly.Ramos@sgs.com
Phone: 609-664-8613
Fax:

microbialinsights
10515 Research Dr
Knoxville, TN 37932
865-573-8188
www.microbe.com

Project Manager: Kelly Ramos
Project Name: NYSDEC SMP-D Site - Dimbleby, Rochester NY
Project No.: EAENYES97277

Purchase Order No.
Subcontract No.
MI Quote No. Q2023912.0003

Please Check One:
☐ More samples to follow
☒ No Additional Samples

Report Type: ☒ Standard (default) ☐ Microbial Insights Level III raw data (15% surcharge) ☐ Microbial Insights Level IV (25% surcharge) ☐ Comprehensive Interpretive (15%) ☐ Historical Interpretive (35%)
EDD type: ☒ Microbial Insights Standard (default) ☐ All other available EDDs (5% surcharge) Specify EDD Type:

Please contact us with any questions about the analyses or filling out the COC at (865) 573-8188 (9:00 am to 5:00 pm EST, M-F). After hours email: customerservice@microbe.com

Sample Information						Analyses				CENSUS: Please select the target organism/gene																							
MI ID (Laboratory Use Only)	Sample Name	Date Sampled	Time Sampled	Matrix	Total Number of Containers	PLFA	NGS	QuantArray Chlor	QuantArray Petro	DHC (Dehalococcoides)	DHC Functional genes (bvc, tce, vcr)	DHBt (Dehalobacter)	DHG (Dehalogenimonas)	DSM (Desulfuromonas)	DSB (Desulfitobacterium)	EBAC (Total)	SRB (Sulfate Reducing Bacteria-APS)	MGN (Methanogens)	MOB (Methanotrophs)	SMMO	DNF (Denitrifiers-nirS and nirK)	AMO (ammonia oxidizing bacteria)	PMT (MTBE aerobic)	RMO (Toluene Monooxygenase)	RDEG (Toluene Monooxygenase)	PHE (Phenol Hydroxylase)	NAH (Naphthalene aerobic)	BSSA (Toluene/Xylene-Anaerobic)	add. qPCR	RNA	Expression Option*	Other:	Other:	Other:
086005 1	SGS103-MW-13S-[illegible]	10/26/23	1016	BioTrap	1			X																									
2	SGS103-MW-03CA-[illegible]	10/26/23	1030	BioTrap	1			X																									
3	SGS103-MW-20S-[illegible]	10/26/23	1040	BioTrap	1			X																									

Relinquished by: Cody Bahnsen Date 10/26/2023 16:00 Received by: Date 10/27/23

It is vital that chain of custody is filled out correctly & that all relative information is provided.
Failure to provide sufficient and/or correct information regarding reporting, invoicing & analyses requested information may result in delays for which MI will not be liable.

JD77326X: Chain of Custody
Page 1 of 1

Appendix E

Data Usability Summary Report

DATA VALIDATION REPORT

NYSDEC Dinaburg

SDGs: JD73479 and JD73837

Chemical Analyses Performed by:

SGS Dayton, NJ

Prepared by

ENVIRONMENTAL DATA SERVICES, LTD.

Prepared for

EA Engineering, Science and Technology, Inc.

January 5, 2024

5 Brilliant Avenue, Pittsburgh, PA 15215
412.408.3288 I www.eds-pa.com

ENVIRONMENTAL DATA SERVICES, LTD.

DATA USABILITY SUMMARY REPORT FOR VOLATILES

PROJECT: NYSDEC SMP-D Dinaburg

CLIENT: EA Engineering, Science, and Technology, Inc.

LABORATORY: SGS Dayton, NJ

SAMPLE DELIVERY GROUPS: JD73479

SAMPLE DATES: 09/25/2023

The above sample delivery group (SDG) consist of the following samples:

Client Sample ID	Laboratory Sample ID
828103-MW-03CA-20230925	JD73479-1
828103-MW-13K-20230925	JD73479-2
828103-DUP-01-20230925	JD73479-3
828103-MW-20S-20230925	JD73479-4
828103-MW-03A-20230925	JD73479-5
828103-MW-19S-20230925	JD73479-6
828103-MW-14KA-20230925	JD73479-7
828103-MW-08K-20230925	JD73479-8
TB_	JD73479-9

The samples described above were analyzed via USEPA SW-846 8260D to determine the concentrations of low/medium volatile organic analytes (VOAs).

Project specific quality assurance (QA) objectives, as well as the USEPA Region II SOP, Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B & 8260C, SOP NO. HW-24 Revision 4, September 2014 have been considered during validation of this data and its usability.

Table 1 provides a summary of major and minor data quality issues identified for this data set. All data are acceptable except those results which have been qualified with “R,” rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

Per USEPA Region 2 Validation Guidance, “All data users should note two facts. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables even as a last resort. The second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.”

1. **HOLDING TIME/SAMPLE HANDLING**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Proper sample handling and preservation also play a role in the chemical stability of analytes in the sample matrix. If samples are not collected and stored using proper containers and/or preservatives, data may not be valid.

The samples in this sample delivery group (SDG) were received by the laboratory within the proper temperature range as specified in the validation guidance.

The samples in this SDG were prepared and analyzed within the holding time specified in the validation guidelines.

2. **BLANK CONTAMINATION**

Quality assurance blanks include method, storage, trip, field, or rinse blanks. Blanks are prepared to identify any contamination, which may have been introduced into the samples during preparation and analysis or field activity. Method and storage blanks measure laboratory contamination. Trip blanks measure cross contamination during shipment. Field and rinse blanks measure cross contamination during field operations.

Method Blanks

Method blanks were prepared and analyzed in association with the samples in these SDGs at the specified frequency. Upon examination of method blank data, no analyte was positively identified at a concentration equal to or above the method detection limit (MDL) in any associated method blank.

Storage Blanks

No storage blanks were submitted in association with this SDG.

Trip Blanks

Sample TB was submitted as a trip blank in association with this SDG. No problems were found for this criterion.

Field Blanks

No sample was submitted as a field blank in association with this SDG.

3. **MASS SPECTROMETER TUNING**

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances.

The tuning standard for volatiles is bromofluorobenzene (BFB).

All tunes associated with this SDG were fully compliant.

4. **CALIBRATION**

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative results. The initial calibration curve demonstrates that the instrument is capable of giving acceptable performance at the beginning of an analytical sequence. The continuing calibration verifies that the instrument is continuing to provide satisfactory daily performance. Additionally, a continuing calibration is analyzed at the end of each 12-hour analytical sequence, denoted as a "closing" calibration verification, and ascertains acceptable performance at the conclusion of the analytical sequence.

Response Factor

The relative response factor (RRF) measures the instruments responses to specific chemical compounds. The RRFs for the VOA target compound list (TCL) compounds must be greater than the RRFs listed in Region II validation guidelines. A value less than the respective criteria indicates serious detection and quantitation problems. If the mean RRF of the initial calibration or the continuing calibration RRF is below the specified limit for any analyte, those analytes detected in environmental samples will be qualified as estimated. All non-detects for those analytes will be rejected.

The RRF values in all initial and continuing calibrations were found to be acceptable in all cases.

Percent Relative Standard Deviation and Percent Deviation

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate stability of a specific compound over the calibration range. Percent deviation (%D) compares the response factor of the continuing calibration with the mean response factor of the initial calibration. Therefore, %D is a measure of the instrument's daily performance.

The following QC criteria have been applied for this project:

The %RSD of initial calibration must be ≤20%.

A %RSD value outside initial calibration limit indicates the potential for quantitation errors. For this reason, all positive results are qualified as estimated and non-detect results are qualified using professional judgement.

The %D for opening continuing calibration must be ≤30%

A value outside these limits indicates the potential for detection and quantitation errors. For these reasons, all positive results are qualified as "J," estimated, and non-detects are qualified with "UJ."

All initial calibration and continuing calibration %RSD and %D values were within defined QC criteria with the following exceptions.

The observed %D for tetrachloroethylene in the ICV associated with the samples listed below was outside of the acceptance criteria. The results reported for the impacted analyte in the associated samples have been qualified "J" or "UJ" as appropriate on this basis.

828103-DUP-01-20230925	*828103-MW-08K-20230925*
828103-MW-03A-20230925	*828103-MW-14KA-20230925*

The observed %D for bromomethane in one CCV associated with samples 828103-MW-03CA-20230925, 828103-MW-19S-20230925, and TB was outside of the acceptance criteria. The results reported for the impacted analyte in the associated samples have been qualified "UJ" on this basis.

Please note, the laboratory did not perform closing continuing calibration verifications. Therefore, those criteria were not evaluated during validation. No qualification was applied on this basis.

5. **INTERNAL STANDARDS PERFORMANCE**

Internal standard performance criteria are meant to ensure that the gas chromatography/mass spectrometry (GC/MS) sensitivity and response are stable during every experimental run.

The internal standard area count must not vary by more than a factor of two from the associated continuing calibration standard. The retention time of the internal standard must not vary by more than +/- 30 seconds from the associated continuing calibration standard. The area count must be within -50% to +200% range of the associated standard. If area count is >200%, non-detected results are not qualified while positive results associated with the non-compliant internal standard are qualified "J," estimated. However, when an observed area count is <50%, positive results associated with the non-compliant are qualified "J," estimated, while non-detected results are rejected.

Internal standard area counts are within acceptance criteria for all samples.

6. **SURROGATES**

All samples are spiked with surrogate compounds prior to sample preparation and analyses to evaluate overall laboratory performance and efficiency of the analytical technique. The observed recovery must be within laboratory limits as outlined in the project specific validation guidance.

The reported sample analyses had observed surrogate recoveries within the established acceptance limits in all cases.

7. COMPOUND IDENTIFICATION

Volatile

The project target analyte compounds are identified on the GC/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit, the sample peak must be within ±0.06 RRT units of the standard compound and have ion spectra which has a ratio of the primary and secondary ion intensities within 20% of that in the standard compound. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

All samples were evaluated, and all identification criteria were met. Therefore, no analytes were qualified for compound identification.

Volatile Tentatively Identified Compounds

Tentatively Identified Compounds (TICs) were reported by the laboratory and reviewed for quality assurance. For all TIC results where there is presumptive evidence of a match, being greater than or equal to 85% match, the results are qualified "NJ," tentatively identified. If the non-target compound is reported as an unknown, the result is qualified "J," estimated. Likewise, if it is determined that the identification of a TIC is unacceptable, the tentative identification of the compound is changed to "unknown" and the result is qualified "J," estimated.

Volatile TICs were not reported.

8. **MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

The matrix spike and matrix spike duplicate (MS/MSD) are generated to determine the precision and accuracy of the analytical procedure in a given sample matrix.

Sample 828103-MW-03CA-20230925 was submitted for MS/MSD pair evaluation in association with this SDG. Upon evaluation all precision and accuracy indicators were acceptable.

9. **LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE**

The Laboratory Control Sample (LCS) is spiked with the same analytes at the same concentrations as the matrix spike. The LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

LCS/LCS duplicate (LCSD) evaluations were processed at the proper frequency. Upon evaluation all accuracy and precision criteria were acceptable.

10. **REPORTING**

No dilutions, re-extractions, or other re-analyses were performed other than those necessary to bring positive instrument signals within the linear range.

11. OTHER QUALITY CONTROL DATA OUT OF SPECIFICATION

None.

12. FIELD DUPLICATE

Field duplicates are two (or more) field samples collected at the same time in the same location. Each of the samples represents the same population and is carried through all steps of the sampling and analytical procedures in an identical manner. Field duplicate results are used to assess precision of the total method, including sampling, analysis, and site heterogeneity.

Samples 828103-DUP-01-09252023 and 828103-MW-13K-20230925 were analyzed as a field duplicate pair in association with these SDGs. Adequate field precision was demonstrated.

13. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Overall, the laboratory data generated met the project goals and quality control criteria, with the exceptions identified in this report and as summarized in Table 1.

Table 1
Review Elements Summary

	Were acceptance criteria met?		
	Yes	No	
Volatiles		**Major**	**Minor**
Holding Time	x		
Method Blanks	x		
Storage Blanks	NA		
Trip Blanks	x		
Field Blanks	NA		
Mass Spectrometer Tuning	x		
Calibration Response Factor	x		
Calibration Percent Relative Standard Deviation and Percent Difference	x		
Internal Standards	x		
Surrogates	x		
Compound Identification - Volatile	x		
Tentatively Identified Compounds - Volatile	NA		
Matrix Spike/Matrix Spike Duplicate	x		
Laboratory Control Sample/Laboratory Control Sample Duplicate	x		
Other Quality Control Data out of Specification	x		
Field Duplicate	x		

Major= Major data quality issue identified resulting in rejection of data.
Minor= Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.
NA = Not applicable

Table 2
Data Validation Qualifiers

Data Qualifier	Definition
U	The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.

ENVIRONMENTAL DATA SERVICES, LTD.

DATA USABILITY SUMMARY REPORT FOR VOLATILES

PROJECT: NYSDEC SMP-D Dinaburg

CLIENT: EA Engineering, Science, and Technology, Inc.

LABORATORY: SGS Dayton, NJ

SAMPLE DELIVERY GROUPS: JD73837

SAMPLE DATES: 09/26/2023 – 9/27/2023

The above sample delivery group (SDG) consist of the following samples:

Client Sample ID	Laboratory Sample ID
828103-MW-15S-20230925	JD73837-1
828103-MW-15K-20230925	JD73837-2
828103-MW-10K-20230926	JD73837-3
828103-MW-10S-20230926	JD73837-4
828103-MW-24K-20230926	JD73837-5
828103-MW-23K-20230926	JD73837-6
828103-MW-06-20230926	JD73837-7
828103-MW-05-20230926	JD73837-8
828103-MW-09S-20230926	JD73837-9
828103-MW-04-20230926	JD73837-10
828103-DUP-02-20230926	JD73837-11
828103-MW-09K-20230926	JD73837-12
828103-PZ-24S-20230926	JD73837-13
828103-MW-12S-20230926	JD73837-14
828103-MW-12K-20230926	JD73837-15
828103-MW-11S-20230926	JD73837-16
828103-MW-08S-20230926	JD73837-17
828103-GWE-2-20230926	JD73837-18
828103-MPE-17-20230926	JD73837-19
828103-MW-22K-20230926	JD73837-20
828103-PZ-22S-20230926	JD73837-21
828103-MW-21S-20230927	JD73837-22
828103-MW-03D-20230927	JD73837-23
828103-MW-18S-20230927	JD73837-24
828103-MW-16K-20230927	JD73837-25
828103-MW-17S-20230927	JD73837-26
828103-MW-16S-20230927	JD73837-27
TB_	JD73837-28

The samples described above were analyzed via USEPA SW-846 8260D to determine the concentrations of low/medium volatile organic analytes (VOAs).

Project specific quality assurance (QA) objectives, as well as the USEPA Region II SOP, Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B & 8260C, SOP NO. HW-24 Revision 4, September 2014 have been considered during validation of this data and its usability.

Table 1 provides a summary of major and minor data quality issues identified for this data set. All data are acceptable except those results which have been qualified with “R,” rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

Per USEPA Region 2 Validation Guidance, “All data users should note two facts. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables even as a last resort. The second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.”

1. **HOLDING TIME/SAMPLE HANDLING**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Proper sample handling and preservation also play a role in the chemical stability of analytes in the sample matrix. If samples are not collected and stored using proper containers and/or preservatives, data may not be valid.

The samples in this sample delivery group (SDG) were received by the laboratory within the proper temperature range as specified in the validation guidance.

The samples in this SDG were prepared and analyzed within the holding time specified in the validation guidelines.

2. **BLANK CONTAMINATION**

Quality assurance blanks include method, storage, trip, field, or rinse blanks. Blanks are prepared to identify any contamination, which may have been introduced into the samples during preparation and analysis or field activity. Method and storage blanks measure laboratory contamination. Trip blanks measure cross contamination during shipment. Field and rinse blanks measure cross contamination during field operations.

Method Blanks

Method blanks were prepared and analyzed in association with the samples in these SDGs at the specified frequency. Upon examination of method blank data, no analyte was positively identified at a concentration equal to or above the method detection limit (MDL) in any associated method blank.

Storage Blanks

No storage blanks were submitted in association with this SDG.

Trip Blanks

Sample TB was submitted as a trip blank in association with this SDG. No problems were found for this criterion.

Field Blanks

No sample was submitted as a field blank in association with this SDG.

3. **MASS SPECTROMETER TUNING**

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances.

The tuning standard for volatiles is bromofluorobenzene (BFB).

All tunes associated with this SDG were fully compliant.

4. **CALIBRATION**

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative results. The initial calibration curve demonstrates that the instrument is capable of giving acceptable performance at the beginning of an analytical sequence. The continuing calibration verifies that the instrument is continuing to provide satisfactory daily performance. Additionally, a continuing calibration is analyzed at the end of each 12-hour analytical sequence, denoted as a "closing" calibration verification, and ascertains acceptable performance at the conclusion of the analytical sequence.

Response Factor

The relative response factor (RRF) measures the instruments responses to specific chemical compounds. The RRFs for the VOA target compound list (TCL) compounds must be greater than the RRFs listed in Region II validation guidelines. A value less than the respective criteria indicates serious detection and quantitation problems. If the mean RRF of the initial calibration or the continuing calibration RRF is below the specified limit for any analyte, those analytes detected in environmental samples will be qualified as estimated. All non-detects for those analytes will be rejected.

The RRF values in all initial and continuing calibrations were found to be acceptable in all cases.

Percent Relative Standard Deviation and Percent Deviation

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate stability of a specific compound over the calibration range. Percent deviation (%D) compares the response factor of the continuing calibration with the mean response factor of the initial calibration. Therefore, %D is a measure of the instrument's daily performance.

The following QC criteria have been applied for this project:

The %RSD of initial calibration must be ≤20%.

A %RSD value outside initial calibration limit indicates the potential for quantitation errors. For this reason, all positive results are qualified as estimated and non-detect results are qualified using professional judgement.

The %D for opening continuing calibration must be ≤30%

A value outside these limits indicates the potential for detection and quantitation errors. For these reasons, all positive results are qualified as "J," estimated, and non-detects are qualified with "UJ."

All initial calibration and continuing calibration %RSD and %D values were within defined QC criteria with the following exceptions.

The observed %Ds for chloromethane in the ICVs associated with the samples listed below were outside of the acceptance criteria. The results reported for the impacted analyte in the associated samples have been qualified "UJ" on this basis.

828103-GWE-2-20230926	*828103-MW-21S-20230927*
828103-MW-17S-20230927	*828103-MW-03D-20230927*
828103-MW-16K-20230927	

The observed %D for chloroethane in a CCV associated with samples 828103-MW-15S-20230925, 828103-MW-15K-20230925, and 828103-MW-10K-20230926 was outside of the acceptance criteria. The results reported for the impacted analyte in the associated samples have been qualified "UJ" on this basis.

Please note, the laboratory did not perform closing continuing calibration verifications. Therefore, those criteria were not evaluated during validation. No qualification was applied on this basis.

5. **INTERNAL STANDARDS PERFORMANCE**

Internal standard performance criteria are meant to ensure that the gas chromatography/mass spectrometry (GC/MS) sensitivity and response are stable during every experimental run.

The internal standard area count must not vary by more than a factor of two from the associated continuing calibration standard. The retention time of the internal standard must not vary by more than +/- 30 seconds from the associated continuing calibration standard. The area count must be within -50% to +200% range of the associated standard. If area count is >200%, non-detected results are not qualified while positive results associated with the non-compliant internal standard are qualified "J," estimated. However, when an observed area count is <50%, positive results associated with the non-compliant are qualified "J," estimated, while non-detected results are rejected.

Internal standard area counts are within acceptance criteria for all samples.

6. **SURROGATES**

All samples are spiked with surrogate compounds prior to sample preparation and analyses to evaluate overall laboratory performance and efficiency of the analytical technique. The observed recovery must be within laboratory limits as outlined in the project specific validation guidance.

The reported sample analyses had observed surrogate recoveries within the established acceptance limits in all cases.

7. COMPOUND IDENTIFICATION

Volatile

The project target analyte compounds are identified on the GC/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit, the sample peak must be within ±0.06 RRT units of the standard compound and have ion spectra which has a ratio of the primary and secondary ion intensities within 20% of that in the standard compound. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

All samples were evaluated, and all identification criteria were met. Therefore, no analytes were qualified for compound identification.

Volatile Tentatively Identified Compounds

Tentatively Identified Compounds (TICs) were reported by the laboratory and reviewed for quality assurance. For all TIC results where there is presumptive evidence of a match, being greater than or equal to 85% match, the results are qualified "NJ," tentatively identified. If the non-target compound is reported as an unknown, the result is qualified "J," estimated. Likewise, if it is determined that the identification of a TIC is unacceptable, the tentative identification of the compound is changed to "unknown" and the result is qualified "J," estimated.

Volatile TICs were not reported.

8. **MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

The matrix spike and matrix spike duplicate (MS/MSD) are generated to determine the precision and accuracy of the analytical procedure in a given sample matrix.

Sample 828103-MW-09S-20230926 was submitted for MS/MSD pair evaluation in association with this SDG. Upon evaluation precision and accuracy indicators were acceptable or did not result in a need to qualify sample results.

Sample 828103-MW-15K-20230925 was submitted for MS/MSD pair evaluation in association with this SDG. Upon evaluation precision and accuracy indicators were acceptable.

9. **LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE**

The Laboratory Control Sample (LCS) is spiked with the same analytes at the same concentrations as the matrix spike. The LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

LCS/LCS duplicate (LCSD) evaluations were processed at the proper frequency. Upon evaluation all accuracy and precision criteria were acceptable or did not result in a need to qualify sample results.

10. **REPORTING**

No dilutions, re-extractions, or other re-analyses were performed other than those necessary to bring positive instrument signals within the linear range.

11. OTHER QUALITY CONTROL DATA OUT OF SPECIFICATION

None.

12. FIELD DUPLICATE

Field duplicates are two (or more) field samples collected at the same time in the same location. Each of the samples represents the same population and is carried through all steps of the sampling and analytical procedures in an identical manner. Field duplicate results are used to assess precision of the total method, including sampling, analysis, and site heterogeneity.

Samples 828103-MW-04-20230926 and 828103-DUP-02-20230926 were analyzed as a field duplicate pair in association with these SDGs. Adequate field precision was demonstrated.

13. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Overall, the laboratory data generated met the project goals and quality control criteria, with the exceptions identified in this report and as summarized in Table 1.

Table 1
Review Elements Summary

	Were acceptance criteria met?		
	Yes	No	
Volatiles		**Major**	**Minor**
Holding Time	x		
Method Blanks	x		
Storage Blanks	NA		
Trip Blanks	x		
Field Blanks	NA		
Mass Spectrometer Tuning	x		
Calibration Response Factor	x		
Calibration Percent Relative Standard Deviation and Percent Difference			x
Internal Standards	x		
Surrogates	x		
Compound Identification - Volatile	x		
Tentatively Identified Compounds - Volatile	NA		
Matrix Spike/Matrix Spike Duplicate	x		
Laboratory Control Sample/Laboratory Control Sample Duplicate	x		
Other Quality Control Data out of Specification	x		
Field Duplicate	x		

Major= Major data quality issue identified resulting in rejection of data.
Minor= Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.
NA = Not applicable

Table 2
Data Validation Qualifiers

Data Qualifier	Definition
U	The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.

Appendix F

Mann Kendall Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	21-May-24	Job ID:	828103
Facility Name:	Dinaburg Distributing	Constituent:	PCE
Conducted By:	H. Bedell	Concentration Units:	µg/L

Sampling Point ID:	GWE-02	MPE-17	MW-03A	MW-03CA	MW-06	MW-09K	MW-10K
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	01-May-09					1	1	39
2	01-Jul-12	160	9			11		77
3	01-May-17			1	1200	1.3	26	1
4	01-Nov-18			8.4	1200	2.4	10	4.5
5	01-Feb-19	91	7.9					
6	01-May-22	45	7.2	880	34	1	69	4.5
7	01-Sep-23	74.8	15.8	704	130	1	27	1
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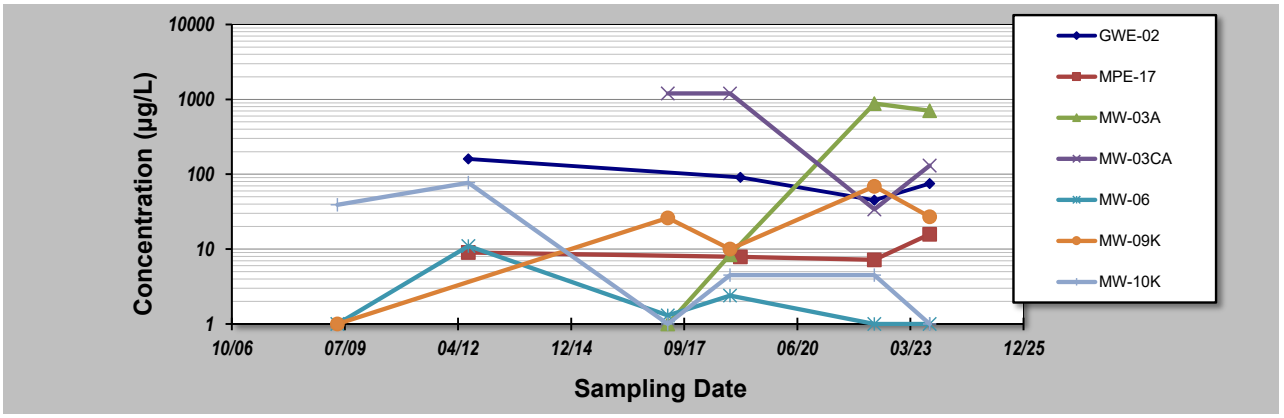
Coefficient of Variation:		0.53	0.40	1.16	1.01	1.35	0.98	1.46
Mann-Kendall Statistic (S):		-4	0	4	-3	-4	6	-7
Confidence Factor:		83.3%	37.5%	83.3%	72.9%	70.3%	88.3%	86.4%
Concentration Trend:		Stable	Stable	No Trend	No Trend	No Trend	No Trend	No Trend



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.
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.

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Conducted By:	H. Bedell	Concentration Units:	µg/L

Sampling Point ID:	MW-10S	MW-13K	MW-14KA	MW-15K	MW-15S	MW-16K	MW-16S
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	01-May-09		5800					
2	01-Jul-12		18000					
3	01-May-17	50	10000	2500	900	240	120	6.7
4	01-Nov-18	24	7500	3500	990	100	330	34
5	01-Feb-19							
6	01-May-22	8.8	1400	1300	220	100	140	19
7	01-Sep-23	3	1350	1600	404	150	189	24.5
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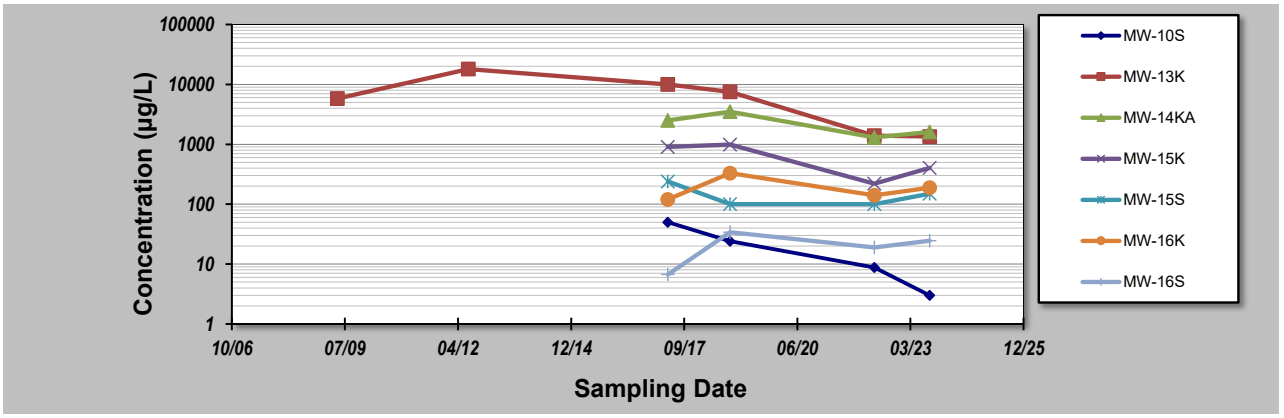
Coefficient of Variation:		0.98	0.85	0.45	0.60	0.45	0.49	0.54
Mann-Kendall Statistic (S):		-6	-9	-2	-2	-1	2	2
Confidence Factor:		95.8%	93.2%	62.5%	62.5%	50.0%	62.5%	62.5%
Concentration Trend:		Decreasing	Prob. Decreasing	Stable	Stable	Stable	No Trend	No Trend



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Conducted By:	H. Bedell	Concentration Units:	µg/L

Sampling Point ID:	MW-17S	MW-18S	MW-20S				
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	01-May-09							
2	01-Jul-12							
3	01-May-17	130	280	15000				
4	01-Nov-18	32	320	17000				
5	01-Feb-19							
6	01-May-22	33	250	17000				
7	01-Sep-23	114	172	37100				
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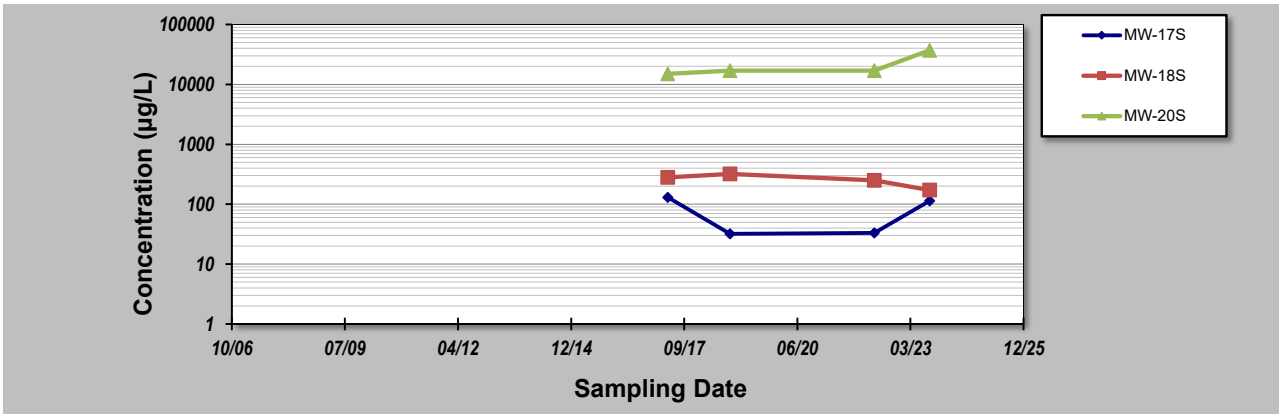
Coefficient of Variation:		0.67	0.25	0.48				
Mann-Kendall Statistic (S):		0	-4	5				
Confidence Factor:		37.5%	83.3%	89.6%				
Concentration Trend:		Stable	Stable	No Trend				



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GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	21-May-24	Job ID:	828103
Facility Name:	Dinaburg Distributing	Constituent:	TCE
Conducted By:	H. Bedell	Concentration Units:	µg/L

Sampling Point ID:	GWE-02	MPE-17	MW-03A	MW-03CA	MW-06	MW-09K	MW-10K
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	01-May-09					4.6	1.9	410
2	01-Jul-12	83	3.9			15		490
3	01-May-17			1	1800	1.3	22	920
4	01-Nov-18			15	470	1.6	11	270
5	01-Feb-19	52	0.49					
6	01-May-22	29	0.28	420	19	0.57	56	580
7	01-Sep-23	50.7	0.7	350	57.9	3.8	21.8	496
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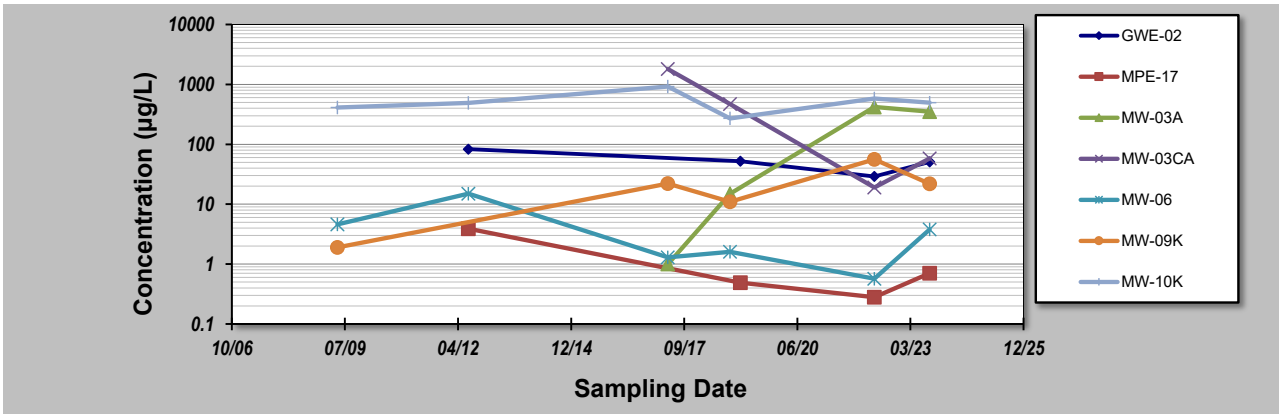
Coefficient of Variation:		0.41	1.28	1.12	1.42	1.20	0.91	0.41
Mann-Kendall Statistic (S):		-4	-2	4	-4	-5	4	3
Confidence Factor:		83.3%	62.5%	83.3%	83.3%	76.5%	75.8%	64.0%
Concentration Trend:		Stable	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend



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Facility Name:	Dinaburg Distributing	Constituent:	TCE
Conducted By:	H. Bedell	Concentration Units:	µg/L

Sampling Point ID:	MW-10S	MW-12K	MW-13K	MW-14KA	MW-15K	MW-15S	MW-16K
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	01-May-09		8.2	1300				
2	01-Jul-12		1	3200				
3	01-May-17	49	5.5	2200	8900	280	100	380
4	01-Nov-18	19	5.5	2200	6200	390	52	660
5	01-Feb-19							
6	01-May-22	13	3.6	560	2300	130	45	170
7	01-Sep-23	12.5	5.1	556	3170	255	83.3	236
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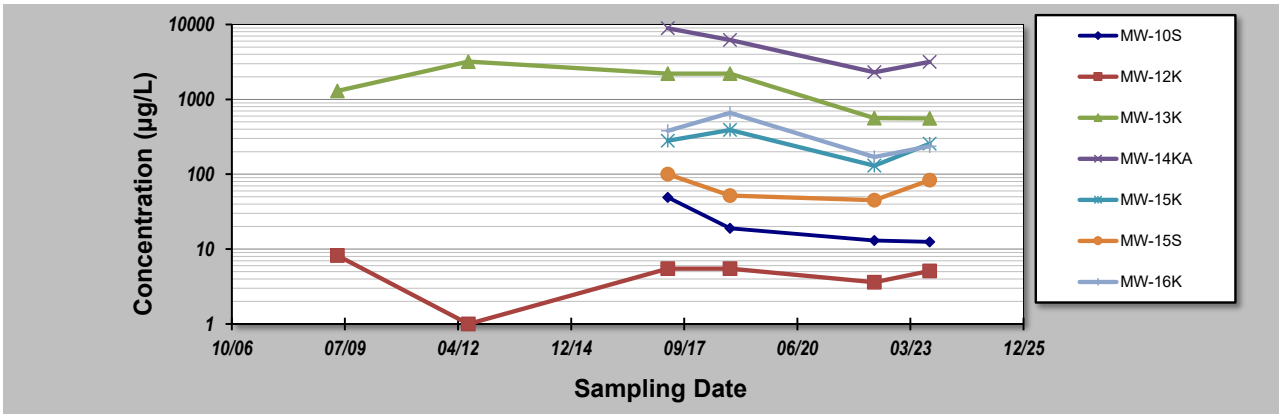
Coefficient of Variation:		0.74	0.50	0.63	0.59	0.40	0.37	0.60
Mann-Kendall Statistic (S):		-6	-4	-8	-4	-2	-2	-2
Confidence Factor:		95.8%	70.3%	89.8%	83.3%	62.5%	62.5%	62.5%
Concentration Trend:		Decreasing	Stable	Stable	Stable	Stable	Stable	Stable



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Facility Name:	Dinaburg Distributing	Constituent:	TCE
Conducted By:	H. Bedell	Concentration Units:	µg/L

Sampling Point ID:	MW-16S	MW-17S	MW-18S	MW-20S			
Sampling Event	**Sampling Date**	**TCE CONCENTRATION (µg/L)**						
1	01-May-09							
2	01-Jul-12							
3	01-May-17	33	110	51	450			
4	01-Nov-18	350	18	57	450			
5	01-Feb-19							
6	01-May-22	160	13	45	210			
7	01-Sep-23	199	118	53.2	592			
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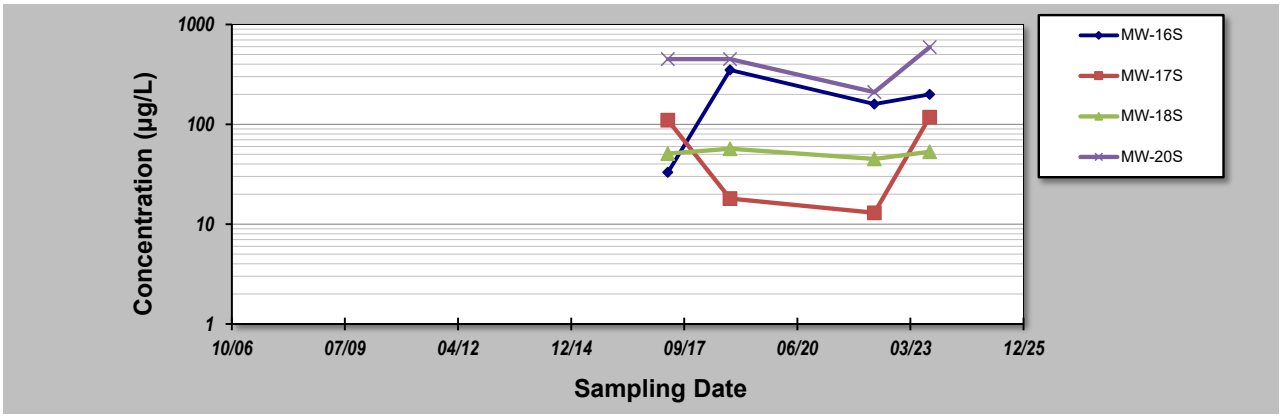
Coefficient of Variation:		0.70	0.88	0.10	0.37			
Mann-Kendall Statistic (S):		2	0	0	1			
Confidence Factor:		62.5%	37.5%	37.5%	50.0%			
Concentration Trend:		No Trend	Stable	Stable	No Trend			



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Evaluation Date:	21-May-24	Job ID:	828103
Facility Name:	Dinaburg Distributing	Constituent:	DCE
Conducted By:	H. Bedell	Concentration Units:	µg/L

Sampling Point ID:	GWE-02	MW-03A	MW-03CA	MW-06	MW-09K	MW-10K	MW-10S
Sampling Event	Sampling Date	DCE CONCENTRATION (µg/L)						
1	01-May-09				13	1	100	
2	01-Jul-12	100			38		190	
3	01-May-17		55	5600	2.5	80	150	5.6
4	01-Nov-18		160	920	2.7	24	740	1.3
5	01-Feb-19	130						
6	01-May-22	84	750	28	0.76	260	100	1.1
7	01-Sep-23	96.9	877	89.4	7.2	91.4	163	10.4
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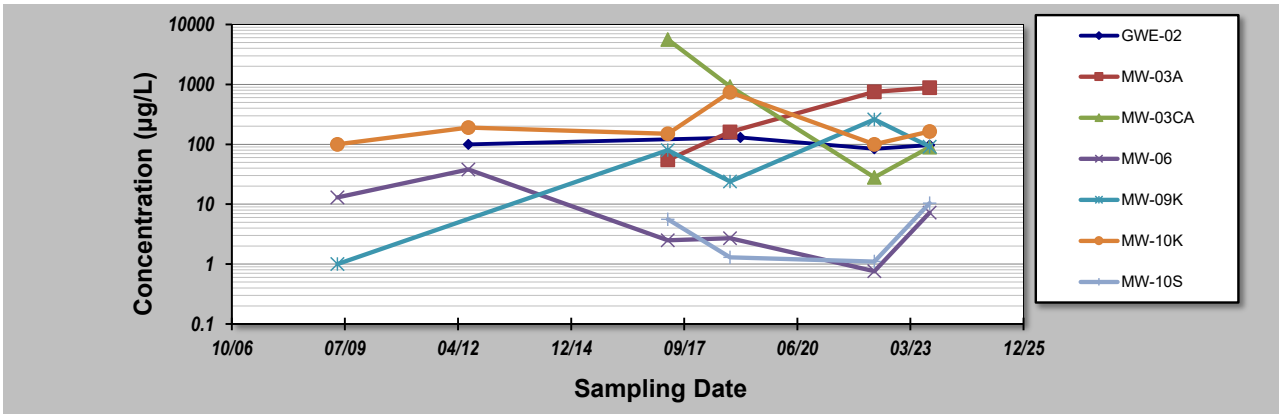
Coefficient of Variation:		0.19	0.90	1.60	1.32	1.11	1.03	0.95
Mann-Kendall Statistic (S):		-2	6	-4	-5	6	2	0
Confidence Factor:		62.5%	95.8%	83.3%	76.5%	88.3%	57.0%	37.5%
Concentration Trend:		Stable	Increasing	No Trend	No Trend	No Trend	No Trend	Stable



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Conducted By:	H. Bedell	Concentration Units:	µg/L

Sampling Point ID:	MW-13K	MW-14KA	MW-15K	MW-15S	MW-16K	MW-16S	MW-18S
Sampling Event	Sampling Date	DCE CONCENTRATION (µg/L)						
1	01-May-09	1100						
2	01-Jul-12	3000						
3	01-May-17	3100	8600	390	13	890	1.6	200
4	01-Nov-18	2800	5600	270	19	710	10	92
5	01-Feb-19							
6	01-May-22	1500	2800	190	2.5	310	4	89
7	01-Sep-23	2170	2800	231	2.5	320	26.8	99.3
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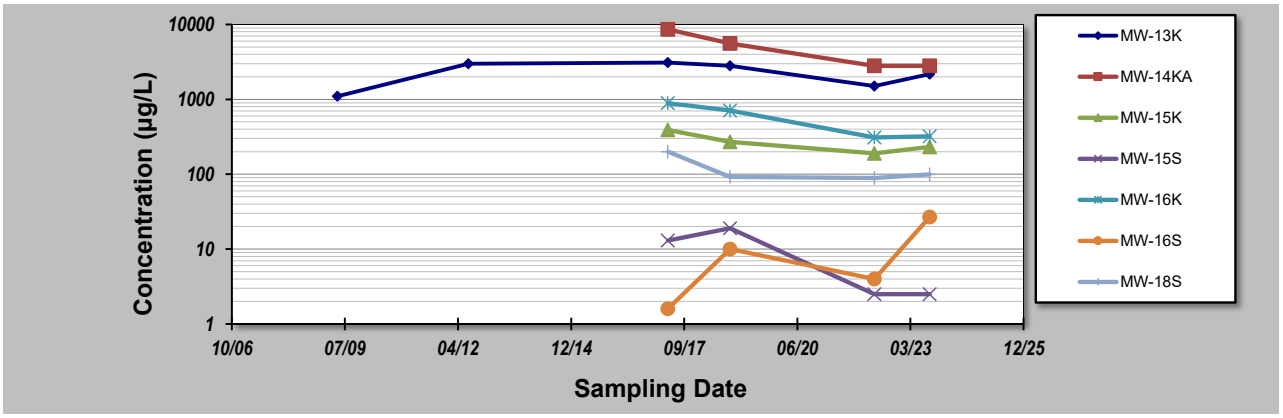
20								
Coefficient of Variation:		0.37	0.56	0.32	0.88	0.52	1.07	0.45
Mann-Kendall Statistic (S):		-1	-5	-4	-3	-4	4	-2
Confidence Factor:		50.0%	89.6%	83.3%	72.9%	83.3%	83.3%	62.5%
Concentration Trend:		Stable	Stable	Stable	Stable	Stable	No Trend	Stable



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Facility Name:	Dinaburg Distributing	Constituent:	DCE
Conducted By:	H. Bedell	Concentration Units:	µg/L

Sampling Point ID:	MW-19S	MW-21S					
Sampling Event	Sampling Date	DCE CONCENTRATION (µg/L)						
1	01-May-09							
2	01-Jul-12							
3	01-May-17	2000	160					
4	01-Nov-18	240	41					
5	01-Feb-19							
6	01-May-22	1400	6.1					
7	01-Sep-23	1030	1					
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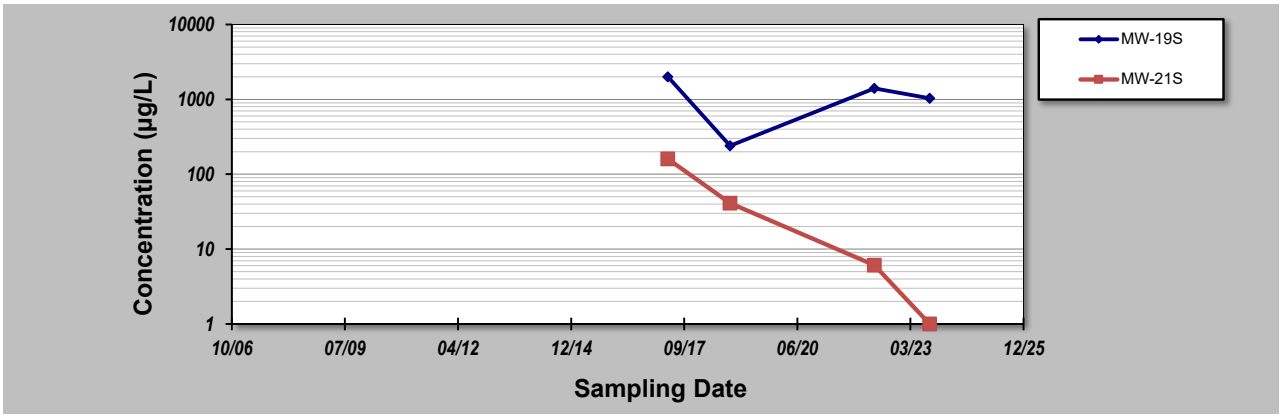
20								
Coefficient of Variation:		0.63	1.43					
Mann-Kendall Statistic (S):		-2	-6					
Confidence Factor:		62.5%	95.8%					
Concentration Trend:		Stable	Decreasing					



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