Periodic Review Report

April 30, 2023 to April 30, 2024

Former Pizza Hut Site
NYSDEC Site No. V00370-9
2137 Seneca Street
Buffalo, New York

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1.0 Introduction

TRC Environmental Corporation (TRC) has prepared this Periodic Review Report (PRR) to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program (VCP) Site No. V00370-9, located at 2137 Seneca Street, in the City of Buffalo, Erie County, New York (see **Figure 1**). The Site is also known as the Former Pizza Hut, Parcel 2, Seneca Street.

This PRR has been prepared in accordance with the Site Management Plan (SMP) (Ref. 1) and the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (Ref. 2). Additionally, the associated Institutional and Engineering Controls (IC/EC) Certification Form (see **Appendix A**) has been completed for the post-remedial period from **April 30, 2023 to April 30, 2024**.

1.1 Site Location & Description

The Site is located at 2137 Seneca Street (SBL #133.26-7-1.1), an urban area of the City of Buffalo, County of Erie, New York. The Site is an approximately 0.7-acres and bounded by Seneca Street to the northeast and Kingston Place to the northwest. Commercial properties are located adjacent to the Site along Seneca Street (northeast, northwest, and southeast) and residential properties border the rear of the Site along Kingston Place (southwest) (**Figures 1 and 2**).

The Site is currently occupied by an active, single-story commercial building that faces Seneca Street and an asphalt-paved parking lot that covers the remainder of the property around the building. The current building has been used as a Dollar General (discount store) since 2013.

1.2 Site Geology & Hydrogeology

There are four general unconsolidated subsurface geologic units present on Site:

- Fill material, including recent backfill associated with the 2003 excavation,
- A discontinuous sandy zone that constitutes the shallow groundwater zone,
- A confining clay unit, and
- An underlying/deep water-bearing zone within clay-rich and/or sand-rich glacial till materials.

Although these general units can be identified, there is poor correlation between boreholes of soils above the confining clay (upper 15 to 30 feet below ground surface, fbgs) because of the complex history of Site development.

Two zones of saturation are present within the unconsolidated sediments: a shallow zone in the discontinuous sandy zone and a deep zone within the clay-rich glacial till deposits. There is an inconsistent shallow zone groundwater flow direction due to a hydraulic ridge observed along Kingston Place that may be artificially recharged from underground trenches and sewer lines, however generally, shallow groundwater does appear to flow towards the northwest and northeast away from Seneca Street and Kingston Place. Deep groundwater elevations do not indicate a consistent groundwater flow direction (Ref. 1).

1.3 Site Background

Historical use of the Site included residential dwellings, a pharmacy, a retail tire establishment, automotive service building, offices, a dry-cleaning establishment, and former restaurants (i.e., Pizza Hut and Wendy's) (Ref. 3). According to historic business listings (Ref. 3), buildings facing Seneca Street included the dry-cleaning establishment at 2141 Seneca Street (northeast corner of the property) from the 1950s until construction of the former Pizza Hut/Wendy's building in 1982. Dry cleaning chemicals (namely tetrachloroethene or PCE) were presumably released to the environment from the dry-cleaning establishment resulting in impacted soil and groundwater.

1.4 Investigation & Ownership History

A Phase II Environmental Site Investigation (ESI), performed by the Fourth River Company of Pittsburgh, Pennsylvania (FRC) between June and August 1999, first identified the presence of Tetrachloroethene (PCE) on-site. Franchise Finance Corporation of America (FFCA – merged with GE Capital Franchise Finance Corporation (GEFF) in 2001), a former Owner, and the NYSDEC enrolled into the New York's Voluntary Clean-up Program (VCP) in 2000 as the then-noted Volunteer, and the site was assigned the VCP number V00370-9. The current Site Owners since at least 2015 are Richard and Margaret Wieczorek (As Part Owners), and the site is operated as a Dollar General commercial-retail store.

Several investigations and sampling events were conducted between 1999 and 2002 before remedial action for the soil was conducted in 2003 and for the groundwater in April 2004 and November 2009. A summary of remedial actions performed at the Site are included in Section 1.6. A listing of significant reports whose findings provided the basis of understanding of the status of environmental conditions at the Site used to prepare the SMP are presented below:

- Phase I Environmental Site Assessment (ESA): Cazenovia and Seneca Streets, Buffalo, Erie County, New York; The Fourth River Company (FRC); FRC Project Number 1219; June 22, 1999 (copy available at the Region 9 NYSDEC office in Buffalo, New York).
- Phase II Environmental Site Assessment: Walnut Capital Partners, Seneca Street at Kingston Place, Buffalo New York; FRC Project Number 1219, August 25, 1999 (copy available at the Region 9 NYSDEC office in Buffalo, New York).
- Final Site Investigation Report and Feasibility Study (SI/FS): Parcel 2, Seneca Street, Buffalo, New York, CRA, March 31, 2003 (copy available at the Region 9 NYSDEC office in Buffalo, New York).
- Remedial Action Report (RA Report): Parcel 2, Seneca Street, Buffalo, New York, Voluntary Cleanup Agreement: V-00370-0, GEFF Property Number: 4936-0611; CRA, July 2005 (copy available at the Region 9 NYSDEC office in Buffalo, New York).
- Current Status Report – September 2006, URS Corporation, dated October 11, 2006 (copy available at the Region 9 NYSDEC office in Buffalo, New York).
- Remedial Action Selection Report (RAS Report), URS Corporation, June 22, 2007 (copy available at the Region 9 NYSDEC office in Buffalo, New York).
- September 2007 Injection and Progress Monitoring Report, Parcel 2 - Seneca Street, Buffalo, New York, Voluntary Cleanup Agreement: V-00370-0URS Corporation, August 29, 2008(copy available at the Region 9 NYSDEC office in Buffalo, New York).

- September 2008 Injection and Progress Monitoring Report, URS Corporation, April 24, 2009 (copy available at the Region 9 NYSDEC office in Buffalo, New York).
- Site Status Summary – May 2010; Pizza Hut, Parcel 2, Seneca Street, Buffalo, New York; URS Corporation, May 25, 2010(copy available at the Region 9 NYSDEC office in Buffalo, New York).

1.5 Constituents of Primary Concern

Constituents of Primary Concern, or COPCs, at the Site include a subset of volatile organic compounds (VOCs) called chlorinated volatile organic compounds (cVOCs), and a subset of semi-VOCs (SVOCs) called polycyclic aromatic hydrocarbons (PAHs). Specifically, cVOCs tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-12DCE), and vinyl chloride (VC) as well as PAHs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and dibenz(a,h)anthracene were identified in the SMP. CPOCs by media include:

- Soil: cVOCs and PAHs
- Groundwater: cVOCs
- Soil Vapor: cVOCs

1.6 Site Remediation Overview

The Site has undergone several remediation activities between 2003 and 2009 with the approval of NYSDEC. Remedial Action (RA) work was completed from October thru December 2003 and included the removal and off-site disposal of VOC- and SVOC-impacted soil (northeast quadrant of Site) and construction of a groundwater remediation system. The following is a summary of the RAs performed at the Site:

- Over 1,800-tons (285 tons were hazardous waste and 1,524 tons were non-hazardous) of PCE- and PAH-contaminated soil/fill exceeding NYSDEC Technical Administrative Guidance Memorandum (TAGM) #4046 Standards, Criteria, and Guidelines (SCGs) was excavated from the northern portion of the Site to the extent practicable and transported off-site for disposal. The excavation(s) advanced vertically to the top of the water table (approximately 10 fbgs) and horizontally to the property boundary or structures whose integrity would be compromised.
- Construction and maintenance of a soil cover system consisting of vegetative soil or asphalt pavement overlying limestone aggregate backfill to prevent human exposure to remaining contaminated soil/fill remaining at depths below 6 feet under the Site.
- Execution and recording of the Declaration of Covenants and Restrictions (Declaration) to restrict land use and prevent future risks of exposure, if any, to any residual contamination remaining at the Site (see Section 1.7).
- Installation of an in-situ groundwater treatment system in the northern portion of the Site comprising a series of injection wells and injection gallery piping connected to service boxes through a network of shallow subsurface feeding lines. Potassium permanganate (1% KMnO4) was injected into overburden groundwater with the highest PCE concentration, or the northeast quadrant of the Site. Four In-Situ Chemical Oxidation (ISCO) applications to the shallow and deep groundwater under gravity flow conditions

were performed between April 2004 and May 2005. Groundwater monitoring was conducted prior to beginning treatment and between events which indicated that elevated concentrations of PCE were still present within the shallow groundwater zone and little to no residual ISCO material remained in the subsurface.

- A June 2007 Remedial Action Selection (RAS) Report concluded that *the ISCO treatment efforts, although helpful in reducing contaminant concentrations, had not been sufficiently effective*, so three applications of both abiotic and biotic reductive dehalogenation remediation amendments within the shallow groundwater in the northern corner of the Site were performed between September 2007 and November 2009. These full-scale events included the injection of zero-valent iron (ZVI) and either Hydrogen-releasing Compound (HRC)® or EHC® after pathway development within the subsurface using pneumatic and limited hydraulic fracturing.
- In May 2011, development, and implementation of a SMP (Ref. 1) for long-term management of Remaining Contamination as required by the Declaration, which included Institutional Controls (ICs) and Engineering Controls (ECs); monitoring, operation, and maintenance (if needed); and reporting.
- In March 2012, completion of a Construction Closeout Report (CCR) (Ref. 4), on behalf of 2137 Seneca, LLC (former Owner), to summarize the post-remedial redevelopment activities at the Site. Post remedial activities included the following:
- Demolition of former restaurant building, with off-site disposal and/or recycling of waste streams. Approximately 726-tons of excess overburden soil/fill was excavated and transported off-site for disposal, including 627-tons at WM – Chaffee Landfill in Chaffee, New York, and 99-tons at Modern Landfill in Model City, New York
- Decommissioning of thirty-six (36) former monitoring wells and piezometers, in accordance with NYSDEC CP-43 guidelines.
- Installation of a passive sub-slab vapor depressurization system within the commercial building (i.e., Dollar General).
- Placement and compaction of clean backfill material. Approximately 965.5-tons of approved backfill material was placed on-Site including, approximately 877.5 tons of 2” ROC from Buffalo Crushed Stone Wehrle, and approximately 88-tons of 2-inch recycled material from Buffalo Recycled Aggregate, LLC; and,
- Construction of a 9,100-square foot commercial building, parking areas, and landscaping.

1.7 Remaining Contamination

Based on the analytical data collected and remediation activities completed to-date, cVOC- and PAH-contaminant concentrations have been significantly reduced; however since May 2011, remaining contamination remains in the subsurface media (i.e., soil, groundwater, and soil vapor), albeit at residual concentrations, below the cover system of the Site (Ref. 1). A brief discussion of remaining contamination by environmental media is presented in the following sections.

1.7.1 Soil

Residual PAH-contaminants in soil are considered large molecules that do not easily move either in groundwater or in soil vapor. They, therefore, do not present their risks to users of the property until they are disturbed (and therefore, can be transported as dust or otherwise contacted by hand, etc.). According to the NYSDEC and by law, PAH-contaminated material is considered

"soil" unless and until it is disturbed. If disturbed (excavated) or otherwise "managed" in accordance with the SMP, the material then becomes "waste" and as such, would be required to be properly characterized as either solid or hazardous waste, and properly dispose of in a NYSDEC-permitted facility.

1.7.2 Groundwater

Groundwater contaminant data since January 2006 confirm that the application of abiotic and biotic reductive dehalogenation remediation technologies has been very successful in reducing the on-Site PCE concentration breakdown products cis-1,2-DCE and VC, respectively (Ref. 1). The cVOC contaminant mass in on-Site shallow groundwater is reportedly dominated by the third-order breakdown product VC, indicating that reductive dehalogenation pathway of PCE is nearly completed.

1.7.3 Soil Vapor

Sub-slab vapor PCE concentrations compared to concurrent indoor air sample results at two of three indoor air sample locations collected in November 2003 indicated a "*No Further Action*" using Soil Vapor/Indoor Air Matrix B. However, at one indoor air/sub-slab vapor location, the reported PCE concentration of sub-slab vapor compared to the indoor air result suggested further "*Monitoring*". Considering this assessment and according to the SMP, *the data collected to-date suggests that mitigation measures (i.e., Sub-slab Depressurization (SSD) system installation) are not necessary under the NYSDOH guidelines.* However, due to remaining residual cVOC-contamination still present in on-site groundwater, installation of an SSD system in future improvements to mitigate potential VOC vapor intrusion concerns should be evaluated.

2.0 Site Management Plan

An SMP was prepared for the Site and approved by the Department in May 2011 (Ref. 1). Key components of the SMP are described below.

2.1 Institutional & Engineering Control (IC/EC) Plan

Since remaining contaminated soil and groundwater exists beneath the site, Institutional Controls and Engineering Controls (IC/ECs) are required to protect human health and the environment. The Institutional and Engineering Control Plan within the SMP describes the procedures for the implementation and management of all IC/ECs at the Site.

2.1.1 Institutional Controls (ICs)

The Site has a series of required Institutional Controls (ICs) in the form of site restrictions to: (1) implement, maintain, and monitor EC systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and (3) limit the use and development of the Site to commercial (or industrial) uses only. Adherence to the following ICs is required by the Environmental Easement, including:

- Compliance with the Declaration of Covenants and Restrictions and the SMP by the Volunteer and the Volunteer's successors and assigns.
- All ECs (if installed) must be operated and maintained as specified in the SMP.
- Groundwater monitoring will be performed on a limited schedule as defined in the SMP.
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP.

Land-use restrictions that apply to the Controlled Property are:

- The property may only be used for commercial (and industrial) use provided that the long-term IC/ECs included in the SMP are employed.
- The property may not be used for a higher level of use, (such as unrestricted land use or restricted residential land use) without groundwater monitoring and vapor intrusion documentation demonstrating that the attenuated contaminant levels are acceptable for the requested level of use. Should NYSDEC grant approval of the requested change in level of use, the Declaration will require amendment to reflect the change in use.
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP.
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use.
- The potential for vapor intrusion must be evaluated for the re-occupation of the current building and any new buildings developed on property.
- Vegetable gardens and farming on the property are prohibited.
- The current site owner (i.e., Volunteer) or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and (2) nothing has occurred that impairs

the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC by an expert that the NYSDEC finds acceptable.

2.1.2 Engineering Controls (ECs)

Engineering Controls (ECs) are defined as any physical barrier or method employed to actively or passively contain, stabilize, or monitor contamination, restrict the movement of contamination to ensure the long-term effectiveness of a remedial program, or eliminate potential exposure pathways to contamination. Engineering controls include, but are not limited to, pavement, caps, covers, subsurface barriers, vapor barriers, slurry walls, building ventilation systems, fences, access controls, provision of alternative water supplies via connection to an existing public water supply, adding treatment technologies to such water supplies, and installing filtration devices on private water supplies. There are two ECs identified for the Site, including a cover system and a soil vapor intrusion (SVI) system.

2.1.2.1 Cover System

The soil cover system is a permanent, passive control that includes clean soil cover/cap in landscaped areas, asphalt covered/paved parking (including 6-feet of clean backfill in the northern portion of the Site), and throughways, and concrete covered sidewalks that are integrated into the current use of the property. The current cover system is expected to remain in-place in perpetuity with routine maintenance (i.e., landscaping maintenance, asphalt pavement sealing and repair, municipal inspection of sidewalks and associated repair) expected with Site use.

The cover system monitoring will be conducted annually and will involve a visual walk-over inspection of the Site. Additional inspections will be required following additional future development of the property that involves removal and replacement of any section of the pavement, including excavations, as necessary. Unscheduled inspections may take place when a suspected failure in the cover system has been reported or an emergency occurs that is deemed likely to affect the operation of the system.

The visual inspection will involve an evaluation of the integrity of the following features on-Site:

- The sidewalk along Kingston Place and Seneca Street.
- The landscaped area between the northwestern edge of the parking lot and the sidewalk along Kingston Place.
- The asphalt pavement parking lot surrounding the current building.
- The landscaped area in front (northeast) of the current building.

A complete list of components to be checked is provided in the Site-Wide Inspection Form Inspection Checklist, presented in **Appendix B**.

2.1.2.2 Subslab Vapor Depressurization System

In late 2011 as a requirement of the SMP, and as agreed by the NYSDOH, a passive subslab vapor depressurization system (SSDS) was installed under the existing commercial building slab (currently Dollar General). Perforated pipe was installed below the new building slab, which extended vertically along the interior western wall, penetrating the roof structure, and terminating

via two (2) passive exterior roof fans. Both SSDS roof vent pipes can be observed within the current commercial building as well as from the exterior ground surface, at the northwest and southwest building corners. Details of the system are presented on **Figure 2**.

In July 2021 and based on remaining residual cVOC impacts in the northern portion of the Site coupled with the apparent groundwater flow direction to the south/southwest toward the occupied on-site building, the NYSDEC requested that a work plan be submitted to assess potential soil vapor intrusion at the Site. An SVI Work Plan (Ref. 7) was submitted in December 2021 and accepted by the Department in February 2022. SVI assessment activities were performed during the previous monitoring period (April 30, 2021 to April 30, 2022). Conclusions/recommendations of the SVI assessment are provided below:

- The building inventory did not identify any observable chlorinated organic chemicals being stored or used at the Site.
- Only carbon tetrachloride exceeded the NYSDOH Matrix A threshold potentially requiring a *MITGATE* action. However, the detected concentration in outdoor air, the ubiquitous presence of carbon tetrachloride along with an inactivated SSDS, and the commercial end-use of the Site suggest that this slightly elevated concentration is not an indoor air concern, and no further action is necessary.
- Several Freon-, cleaning-, and petroleum-based VOCs were detected in indoor air samples that can be attributed to building HVAC activities, routine cleaners identified during the building inventory and reportedly used at the Site, and the transient nature of numerous customers throughout the day.
- It was recommended that the SSDS remain passive with continued annual inspections to ensure the roof vents remain intact, unobstructed, and open to discharge via roof-mounted vents.

2.2 Groundwater Monitoring System

Initially, the groundwater monitoring system consisted of five shallow wells, identified as MW-2, MW-4, MW-11, MW-13, and PZ-A, and one deep well, identified as MW-4A (see **Figure 2**). In a 2021 PRR acceptance letter dated July 29, 2021, the NYSDEC approved cessation of groundwater monitoring and decommissioning of wells MW-2 and MW-4A. Additionally in a letter dated August 13, 2021, the Department approved cessation of groundwater monitoring at well MW-11 until the total cVOC concentration in well PZ-A falls below 1 ppm; at which time well MW-11 will be sampled annually until all wells are decommissioned. On April 4, 2022 and with NYSDCE-approval, wells MW-2 and MW-4A were decommissioned in general accordance with NYSDEC Commissioners Policy 43 (CP-43: *Groundwater Monitoring Well Decommissioning*).
Going forward, groundwater progress monitoring will continue annually at wells MW-4, MW-13, and PZ-A <u>until each of the following is achieved</u>:

- The reported cumulative cVOC concentration (i.e., summation of PCE and its breakdown products TCE, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride) in each of the selected wells is less than the NYSDEC-required concentration of 1,000 micrograms per liter (ug/L) or part per billion (ppb).
- No statistical evidence of an upward trend.

- Residual remediation compounds previously injected (i.e., volatile fatty acids) have been functionally exhausted. [The last groundwater amendment injection events were performed between September 2007 and November 2009 and included the injection of zero valent iron (ZVI) and either Hydrogen-Releasing Compound (HRC)® or EHC® in-situ chemical reduction (ISCR) Reagent (controlled-release carbon) at 13 locations to provide a long-term source of remediation compounds.]
- Confirmation sampling for three more groundwater monitoring events (four quarters total) to confirm that the monitoring results report a cumulative cVOC concentration less than 1,000 ug/L (ppb) in each on-Site well.

Once achieved, the Owner will notify NYSDEC requesting to discontinue groundwater monitoring, and upon NYSDEC approval, may initiate the decommissioning of the monitoring wells. The Owner will not initiate decommissioning activities without NYSDEC notification and approval. Well decommissioning will be performed in accordance with current NYSDEC guidance (i.e., CP-43: *Groundwater Monitoring Well Decommissioning Policy*) (Ref. 5).

3.0 Annual Inspection, Monitoring, & Certification

The Annual Inspection and Certification Program outlines requirements for certifying and attesting that the IC/ECs employed on the Site are unchanged from the original design and/or previous certification. The Annual Certification includes a Site inspection, completion of the NYSDEC-provided IC/EC Certification Form, and completion of the Site-Wide and Cover System Inspection Forms. The Site inspection is intended to verify that the IC/ECs:

- Are in place and effective.
- Are performing as designed.
- That nothing has occurred that would impair the ability of the controls to protect the public health and environment.
- That nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls.
- Access is available to the Site to evaluate continued maintenance of such controls.

The completed Site Management Periodic Review Report Notice – IC/EC Form is included in **Appendix A**, the *Site-Wide and Cover System Inspection Forms* are included in **Appendix B**, and a photographic log of the April 2024 Site inspection is included in **Appendix C**.

3.1 Annual Site Inspection

A post-remedial Site inspection involving a walk-over of the Site covered by this PRR was conducted by Bryan C. Hann, P.G. of TRC on April 18, 2024 to visually observe and document the use of the Site for commercial and/or industrial use, confirm absence of Site groundwater use, inspect the cover system integrity, and verify conformance with other requirements under the SMP. Mr. Hann is a licensed and registered NY State Professional Geologist and meets the requirements of a Qualified Environmental Professional (QEP) per 6NYCRR Part 375.12.

At the time of the inspection, the Site was being used as a commercial business (Dollar General), with asphalt surface parking, concrete sidewalks, and exterior landscaped island areas. No observable indication of intrusive activities was noted or observed during the Site inspection. The existing commercial operations utilize the local municipal water supply, and no observable use of groundwater was noted during the Site inspection. Only minor cracking in the sidewalk along Kingston Place (0.25-inches or less) was identified during the April 2024 Site inspection. The concrete floor within the Dollar General, parking lot, building walkways, and access roads all appeared to be intact (i.e., no cracking) and performing as designed. The site inspection completed during the current reporting period indicates that the controls are in-place and functioning as intended in accordance with the SMP.

3.2 Site Vapor Intrusion Monitoring

Since the SSDS installed beneath the existing on-site commercial building (Dollar General) is passive (i.e., openly vents to the atmosphere with no fans), there is no active monitoring of the system with regards to air sampling, chemical analysis, pressure measurement, etc. As such, both vertical vent pipes, at least the visible portions within the interior of the building as well as both roof penetrations visible from the outside ground surface, were visually inspected during the April 2024 Site inspection. Both roof vent pipes, interior and exterior portions that could be readily observed, appeared to be intact and operating as designed during the current monitoring period site inspection. The passive SSDS piping layout is shown on **Figure 2**.

3.3 Groundwater Progress Monitoring

As a requirement of the SMP to assess the performance of the remedy, groundwater progress monitoring of shallow downgradient wells MW-4, MW-13, and PZ-A are to be performed annually (until such time as the NYSDEC agrees that monitoring can be terminated, see Section 2.2). Monitoring well locations are shown on **Figure 2**.

On April 18, 2024, TRC personnel purged and sampled each of the three wells via low-flow methodology using a peristaltic pump in general accordance with the SMP and submitted the groundwater samples to Alpha Analytical, Inc. (now Pace Analytical Services) for Target Compound List (TCL) VOC (Method 8260) analysis. Additionally, field parameters pH, conductivity, temperature, turbidity, dissolved oxygen, and oxidation-reduction potential as well as depth to groundwater measurements were obtained and recorded. One trip blank was also submitted to Alpha/Pace for TCL VOC analysis. Static groundwater elevations are summarized in **Table 1** and a summary of the April 2024 groundwater monitoring field and laboratory data are presented in **Table 2**. **Appendix D** includes the groundwater field forms and **Appendix E** includes the groundwater analytical data package. Collected purge water was processed through a portable carbon vessel which allowed the water to slowly discharge to the ground surface. Representative photographs are presented in **Appendix C**.

3.3.1 Groundwater Flow & Well Integrity

Depth to water measurements and calculated groundwater elevations measured from the three on-site wells are summarized in **Table 1**. A shallow groundwater isopotential map, presented as **Figure 3**, was prepared using data from the April 18, 2024 groundwater elevations. The groundwater flow, as depicted on **Figure 3**, indicates shallow groundwater flow is radial across the site with a south/southwesterly direction generally toward Cazenovia Creek located ±760 feet west. This flow direction, albeit reasonable considering the proximity of the Site to Cazenovia Creek, is being influenced locally by underground utilities (i.e., water, sewer, electric), and is somewhat different than historical data which indicated a more pronounced northerly flow direction. The lack of additional shallow groundwater elevation data used to create historical isopotential maps may be the cause of this discrepancy.

Each of the three monitoring wells were checked for integrity of their concrete surface seals, J-plugs, and steel road boxes; each well was in good condition.

3.3.2 Analytical Results

Field and laboratory analytical results of the April 2024 groundwater monitoring event are summarized in **Table 2**. Groundwater samples from well MW-4 and piezometer PZ-A were analyzed at a dilution factor of 10 and 5, respectively, and flagged with a “D”; dilution is commonly performed by the laboratory, especially for VOCs, in a concerted effort to protect their highly sensitive analyzing instruments from possible damage and/or costly downtime for cleaning and recalibration caused by potentially high concentration-containing samples. Because Alpha/Pace has performed the laboratory analysis for this Site for many years, historical concentrations for these two locations were used to make this determination.

Total cVOC concentrations (a summation of PCE and its breakdown products TCE, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride) are also presented on **Table 2**. Initial examination of **Table 2** reveals individual exceedances of the respective Class GA Ambient Water Quality Standards (AWQSs) for cis-1,2-DCE and vinyl chloride at all three wells MW-4, MW-11, and PZ-A. Total cVOC concentrations for well MW-13 were well below the NYSDEC-required

concentration of 1,000 ug/L (ppb); however, wells MW-4 and PZ-A both reported total cVOC concentrations of 1,922 ug/L and 1,151 ug/L, respectively. Since March 2007 and as shown in **Appendix F**, the 2023 groundwater monitoring results continue to indicate significant breakdown of parent cVOCs trichloroethene and tetrachloroethene to concentrations at or well below their respective AWQSs compared to pre-Interim Remedial Measure (IRM) concentrations (October 2000 to March 2007). As a result of this reductive dechlorination, cVOC daughter compound concentrations, specifically cis-1,2-DCE and vinyl chloride, increased initially and have since stabilized over time to a lower concentration.

To further illustrate the effectiveness of the IRMs, total cVOC concentration versus time plots were prepared from pre-IRM results (October 2000 to September 2002) through the current monitoring period (April 2024). The plots (and tabulated data) presented in **Appendix F**, represent nearly 24 years of groundwater data which visually demonstrate the near-complete removal of cVOCs in groundwater and that cVOC concentrations in downgradient well MW-13 have consistently been reported below the NYSDEC-required concentration of 1,000 ug/L for four or more monitoring events with statistical evidence of a downward and/or stabilizing trend. Plotted data for well MW-4 indicates a continued statistically downward trend toward the NYSDEC-required concentration. Plotted data for well PZ-A indicates a similar statistically downward concentration trend albeit with total cVOC concentrations periodically above, and below, the NYSDEC-required limit. This dramatic improvement to groundwater quality is expected to continue and remain permanent.

The next annual groundwater event is tentatively scheduled for April/May 2025.

3.3.3 NYSDEC EQuIS Deliverables

TRC is preparing to submit the analytical data in Electronic Data Deliverable (EDD) format for the current groundwater monitoring event to the NYSDEC on behalf of the Owner to satisfy the NYSDEC EQuIS submittal requirement. As of the submission date of this PRR, TRC has not received any feedback regarding this submittal. An official NYSDEC-confirmation that the submittals were successfully uploaded, and the data is available for use within the NYSDEC system, is anticipated.

3.4 Intrusive Activities

An Excavation Work Plan (EWP) is included in the NYSDEC-approved SMP for the Site. The EWP provides guidelines for the management of soil/fill material, groundwater, stormwater, community air, odor, dust, and other nuisances (i.e., noise) during any future intrusive activities. Specifically, any intrusive work that will penetrate the cover or cap, or encounter or disturb the remaining contamination at the Site, including any modifications or repairs to the existing cover system and/or building foundation, must be performed in compliance with the EWP as well as the Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the Site by the remedial contractor performing the excavation activities (or appropriate representative). Any intrusive construction work will be performed in compliance with the SMP, EWP, HASP, and CAMP, and will be described in the annual periodic review reports (PRRs) submitted under the SMP.

During the current April 2024 site inspection, the area where the landscape bushes were located along Kingston Place and Seneca Street (between the sidewalk and asphalt parking lot) appeared to be roughly graded. Photographs of the April 2024 site inspection are presented in **Appendix**

C. No other intrusive activities were performed (or observed) during the current reporting period (April 30, 2023 to April 30, 2024).

4.0 Conclusions & Recommendations

Conclusions for this reporting period are as follows:

- At the time of the Site inspection, the Site was fully compliant with all IC/EC requirements and the SMP. Only minor cracking in the sidewalk along Kingston Place (0.25-inches or less). No other issues related to the final cover were observed/identified during the current reporting period. The Site owner and TRC's QEP have certified that the IC/ECs are compliant (see **Appendix A** and Section 5.0, respectively).
- Groundwater monitoring results indicate nearly 100% removal of previously identified parent cVOC impacts (i.e., TCE and PCE) to groundwater. Recommendations for the groundwater monitoring program are presented below.

Recommendations for the next reporting period are as follows:

- **Continue sampling monitoring well MW-4 and piezometer PZ-A on an annual basis.** Total cVOC concentration versus time plots of wells MW-4 and PZ-A indicate that groundwater quality has not quite achieved the NYSDEC-required limit of 1,000 ug/L (see **Appendix F**). Albeit slightly above the required NYSDEC limit, the reported total cVOC concentrations for well MW-4 have exhibited a statistically significant downward trend since March 2007, whereas the total cVOC concentrations at well PZ-A have fluctuated periodically above and below the NYSDEC-required limit with no discernable trend (either upward or downward). Unless and until a downward trend consistently below the regulatory concentration is demonstrated (i.e., 1,000 ug/L), annual groundwater monitoring of wells MW-4 and PZ-A will need to continue.
- **Continue sampling monitoring well MW-13 on an annual basis.** Although monitoring well MW-13 has consistently reported total cVOC concentrations well below the NYSDEC-required concentration of 1,000 ug/L for **sixteen** consecutive monitoring events (since June 2008) indicating significant improvement to groundwater quality, individual cVOCs cis-12-DCE and VC concentrations continue to be reported at residual concentrations slightly above (and occasionally below) their respective AWQSs (see **Appendix F**). Unless and until a downward trend consistently below the regulatory concentration is demonstrated for these two compounds, annual groundwater monitoring of well MW-13 will need to continue.
- **Continue Annual Site Inspections & Reporting.** Annual Site inspections are performed to verify the IC/ECs employed at the Site are unchanged (i.e., the final cover and passive SSDS) from the original design and/or previous certifications and therefore should continue.

5.0 Signature of Environmental Professional

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR 312.10. I have the specific qualifications based on education, training, and experience to undertake this Periodic Review Report (PRR) of the property identified as Former Pizza Hut (VCP #V00370-9), 2137 Seneca Street, Buffalo, New York for the current Owner, Richard and Margaret Wieczorek (Owners).

Bryan C. Hann, PG (NY)
Senior Geologist / Project Manager

6.0 Declaration / Limitation

TRC Environmental Corporation personnel conducted the annual site inspection of the Former Pizza Hut (VCP #V00370-9), 2137 Seneca Street Site located in Buffalo, New York, according to generally accepted practices. This report has been prepared for the exclusive use of and has complied with the scope of work provided to the owners, Mr. and Mrs. Richard and Margaret Wieczorek. The contents of this report are limited to information available at the time of the Site inspection. The findings herein may be relied upon only at the discretion of Mr. and Mrs. Richard and Margaret Wieczorek. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission from TRC Environmental Corporation.

7.0 References

1. URS Corporation. *Site Management Plan* for Pizza Hut, Parcel 2, Seneca Street, Buffalo, Erie County, New York. Prepared for GE Capital Franchise Finance Corporation. May 25, 2011.
2. New York State Department of Environmental Conservation. *DER-10; Technical Guidance for Site Investigation and Remediation*. May 2010.
3. Conestoga-Rovers & Associates. *Final Site Investigation Report and Feasibility Study (SI/FS)* for Parcel 2 – Seneca Street, Buffalo, New York. Prepared for Hodgson Russ LLP. March 2003
4. TurnKey Environmental Restoration, LLC. *Construction Closeout Report* for 2137 Seneca Street Site for 2137 Seneca, LLC. March 2012.
5. New York State Department of Environmental Conservation. Commissioner's Policy CP-43: Groundwater Monitoring Well Decommissioning Policy. November 3, 2009.
6. New York State Department of Health. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006 and May 2017.
7. Benchmark Civil/Environmental Engineering & Geology, PLLC. *Soil Vapor Intrusion Work Plan*, 2137 Seneca Street Site (Former Pizza Hut), NYSDEC Site No. V00370-9. December 22, 2021.

TABLES

TABLE 1

SUMMARY OF GROUNDWATER ELEVATIONS

Periodic Review Report - April 30, 2023 to April 30, 2024
2137 Seneca Street Site
Site No. V-00370-9
Buffalo, New York

Well No.	Date	Top of Riser Elevation [2] (fmsl)	SWL (fbTOR)	GWE (fmsl)
Shallow Wells				
MW-4	04/18/2024	589.47	6.20	583.27
MW-11	04/18/2024	589.48	NM	NM
MW-13	04/18/2024	589.77	6.38	583.39
PZ-A	04/18/2024	589.86	6.68	583.18

Notes:
1. Ground surface elevation per the Site Management Plan (URS, May 2011).
2. Top of riser (TOR) elevation.
3. SWL = static water level.
4. GWE = groundwater elevation.
5. NM = not measured

TABLE 2

SUMMARY OF FIELD & LABORATORY GROUNDWATER RESULTS

Periodic Review Report - April 30, 2023 to April 30, 2024
2137 Seneca Street Site
Site No. V-00370-9
Buffalo, New York

Parameter [1]	CasNum	NY-AWQS [2]	Units	Monitoring Location, Sample Date, Lab Data Package No.		
				MW-4 04/18/2024 L2421308 - 01 Qual	MW-13 04/18/2024 L2421308 - 02 Qual	PZ-A 04/18/2024 L2421308 - 03 Qual
Field Measurements						
Field pH	NA	**6.5 - 8.5**	S.U	6.83	6.50	6.78
Temperature	NA	-	DEG C	10.8	11.3	10.5
Specific Conductance	NA	-	umhos/cm	3.487	1.058	3.913
Turbidity	NA	-	NTU	114.26	225.37	24.3
Dissolved Oxygen	NA	-	mg/L	6.07	5.03	5.01
Redox Potential	NA	-	mV	-46.5	5.2	-46.7
Appearance & Odor	NA	-	visual/olfactory	*sl. turbid brown/metallic*	*sl. turbid brown/none*	*sl. turbid grey/none*
Volatile Organics by GC/MS						
1,1-Dichloroethane	75-34-3	**5**	ug/L	25 U	1.3 J	25 U
1,1-Dichloroethene	75-35-4	**5**	ug/L	2 J	0.5 U	1.0 DJ
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	1300 D	14	710 D
Methyl tert butyl ether	1634-04-4	**10**	ug/L	25 U	2.1 J	25 U
Trichloroethene	79-01-6	**5**	ug/L	5 U	0.52 J	5 U
Vinyl chloride	75-01-4	**2**	ug/L	620 D	4.7	440 D
Total cVOCs	***NA***	***NA***	***ug/L***	***1922***	***20.52***	***1151.0***

Notes:

1. Only those organic compounds (VOCs) detected above the laboratory reporting limit for at least one sample location are presented in this table; all others were reported as non-detect (ND or U).
2. Chlorinated volatile organic compounds (cVOCs) are highlighted in blue.
3. NYS Ambient Water Quality Class GA Groundwater Quality Standards/Guidance Values; NYSDEC June 1998 Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1
4. Due to a meter malfunction, these field parameters were not measured.

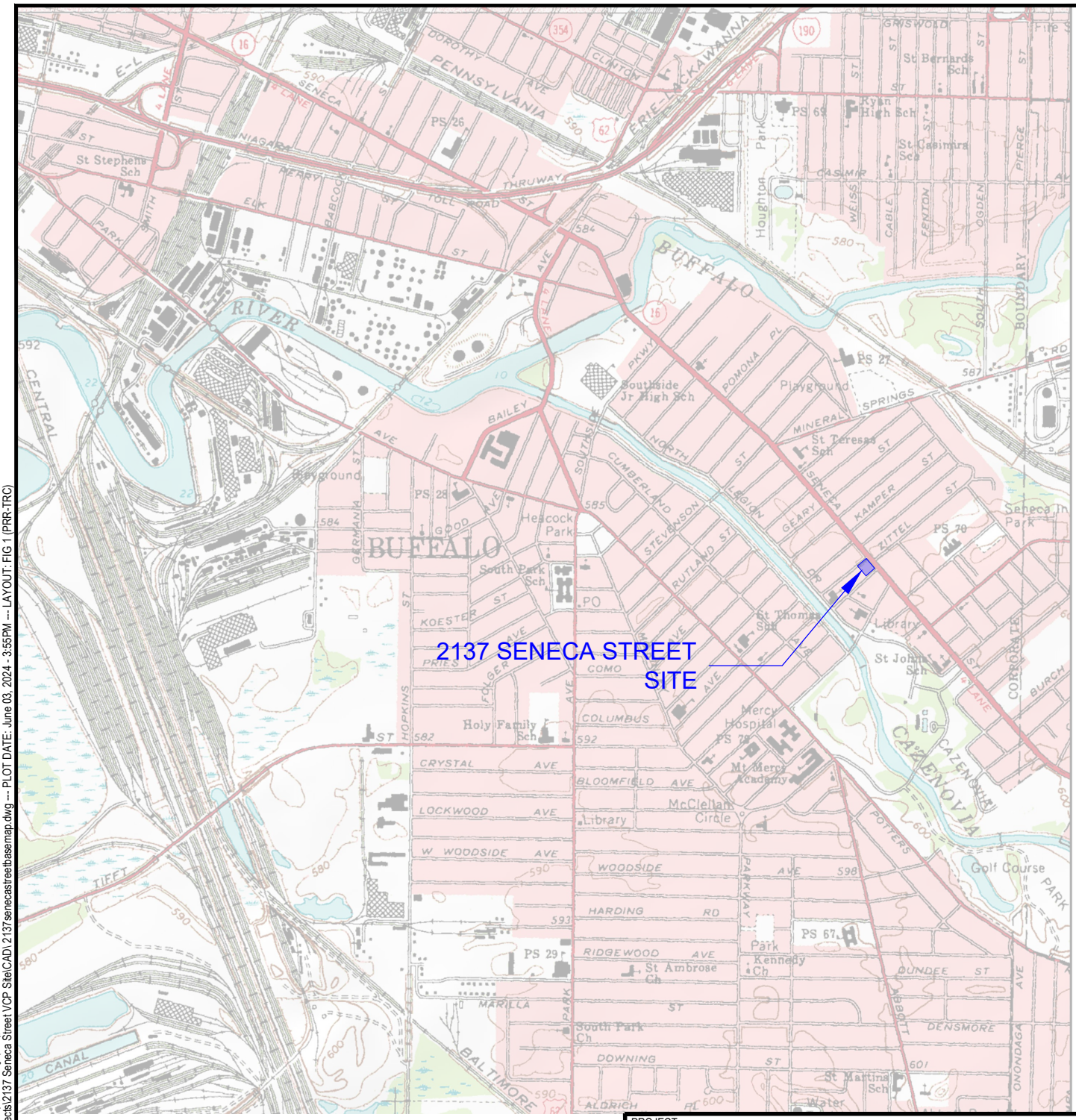
Qualifier Key:

D = Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrationsof the analyte.
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

Color Code:

= concentration exceeds the NYSDEC Class GA AWQS/GV.

FIGURES



PROJECT:

PERIODIC REVIEW REPORT
2137 SENECA STREET SITE (V00370-9)
BUFFALO, NEW YORK

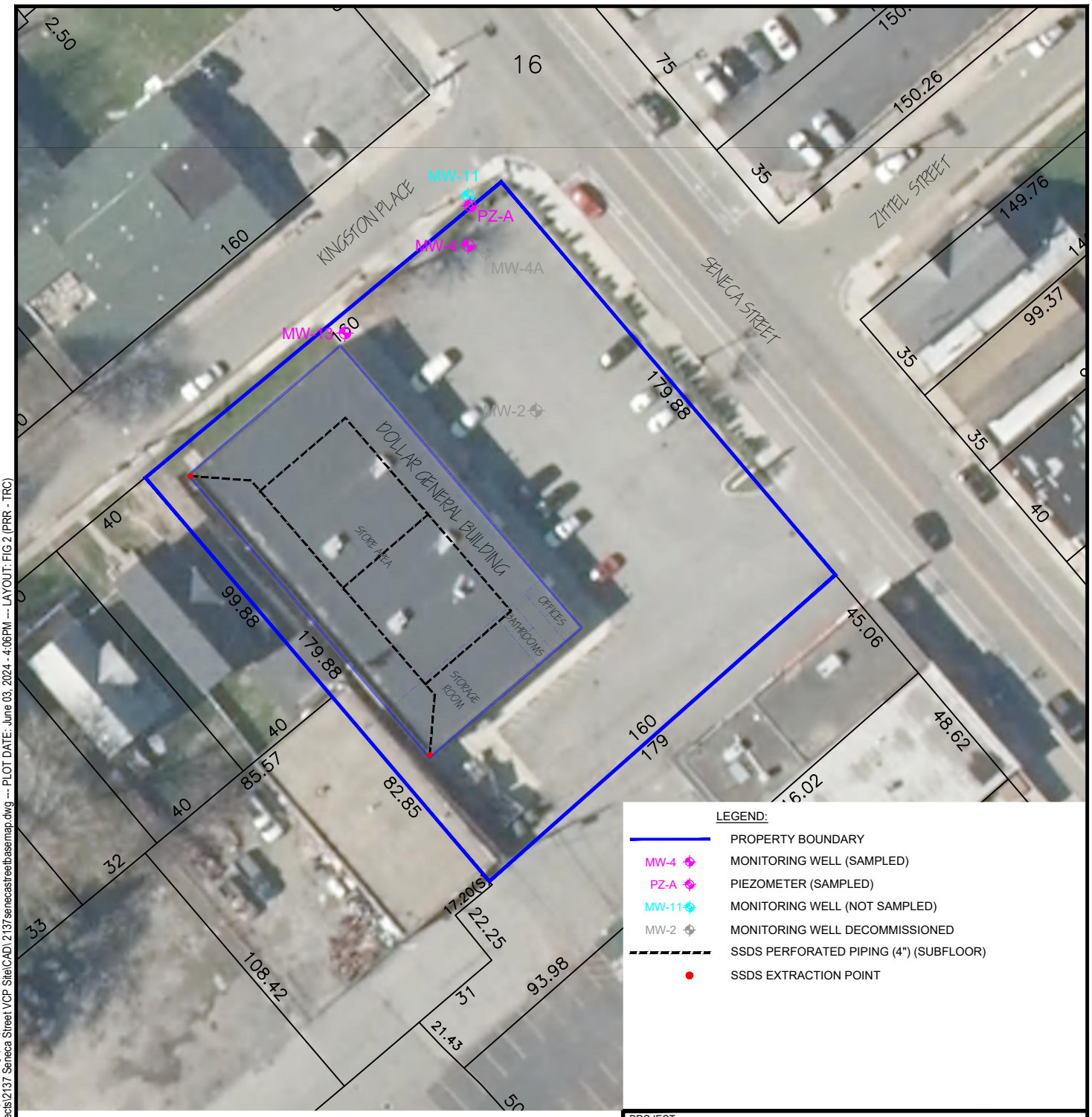
TITLE:

SITE LOCATION & VICINITY MAP

DRAWN BY:	BCH	PROJ NO.:	596074
CHECKED BY:	BCH		
APPROVED BY:	BCH		**FIGURE 1**
DATE:	JUNE 2024		

TRC
1090 Union Road
Suite 280
West Seneca, NY 14224
Phone: 716.289.2409
www.trccompanies.com

FILE NO.: 2137senecastreetbasemap.dwg



N

50' 0' 50' 100'

SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

PROJECT:

PERIODIC REVIEW REPORT
2137 SENECA STREET SITE (V00370-9)
BUFFALO, NEW YORK

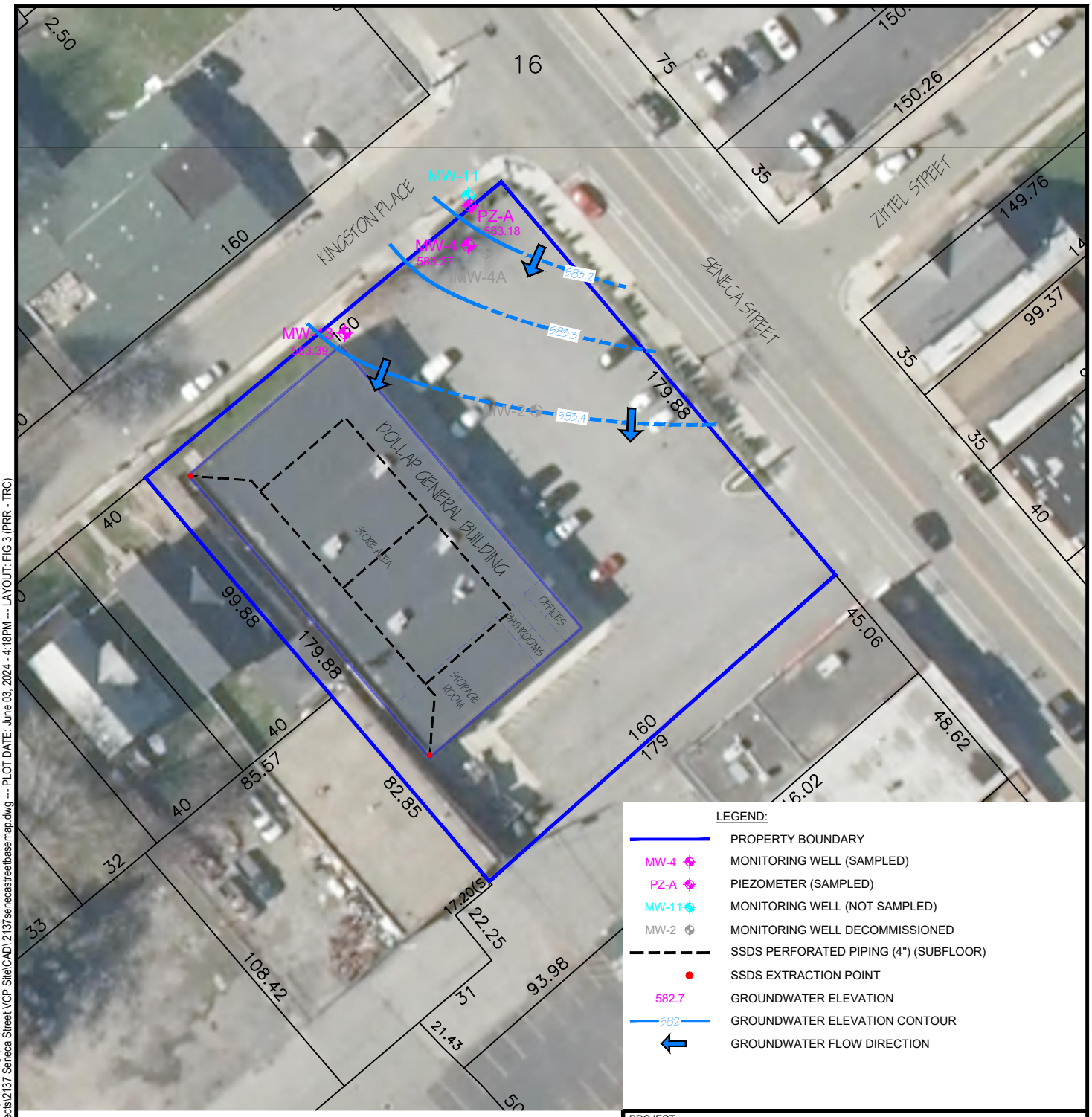
TITLE:

SITE PLAN

DRAWN BY:	BCH	PROJ NO.:	596074
CHECKED BY:	BCH		
APPROVED BY:	BCH		**FIGURE 2**
DATE:	JUNE 2024		

TRC
1090 Union Road
Suite 280
West Seneca, NY 14224
Phone: 716.289.2409
www.trccompanies.com

FILE NO.: 2137senecastreetbasemap.dwg



LEGEND:

- PROPERTY BOUNDARY
- MW-4 — MONITORING WELL (SAMPLED)
- PZ-A — PIEZOMETER (SAMPLED)
- MW-11 — MONITORING WELL (NOT SAMPLED)
- MW-2 — MONITORING WELL DECOMMISSIONED
- SSDS PERFORATED PIPING (4") (SUBFLOOR)
- SSDS EXTRACTION POINT
- 582.7 — GROUNDWATER ELEVATION
- 582 — GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION

N

50' 0' 50' 100'

SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

PROJECT:

PERIODIC REVIEW REPORT
2137 SENECA STREET SITE (V00370-9)
BUFFALO, NEW YORK

TITLE:

SHALLOW GROUNDWATER ISOPOTENTIAL MAP - 04/18/2024

DRAWN BY:	BCH	PROJ NO.:	596074
CHECKED BY:	BCH		
APPROVED BY:	BCH		**FIGURE 3**
DATE:	JUNE 2024		

TRC
1090 Union Road
Suite 280
West Seneca, NY 14224
Phone: 716.289.2409
www.trccompanies.com

FILE NO.: 2137senecastreetbasemap.dwg

Appendix A

IC / EC Certification Form

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **V00370**

Site Name Former Pizza Hut

Site Address: 2137 Seneca Street Zip Code: 14210
City/Town: Buffalo
County: Erie
Site Acreage: 0.660

Reporting Period: April 30, 2023 to April 30, 2024

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	X	☐
7. Are all ICs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. V00370 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
133.26-07-1.1	Richard and Margaret Wieczorek	Monitoring Plan Ground Water Use Restriction Landuse Restriction Site Management Plan

The Declaration of Covenants and Restrictions prohibits the site from being used for anything other than industrial or commercial purposes, excluding day care, child care and medical care uses.The use of the groundwater underlying the site is also prohibit without proper treatment.

The Site Management Plan includes provisions for continued groundwater monitoring, inspection of the existing site cover, disposition of excavated soils and evaluating the potential for intrusive soil vapors if a building on site is occupied or another building constructed in its place.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
133.26-07-1.1	Cover System Vapor Mitigation

Passive SSDS

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. V00370

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Richard M. Wieczorek (print name) at 2137 Seneca Street, Buffalo, NY (print business address),

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Richard M. Wieczorek
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

6/7/2024
Date

EC CERTIFICATIONS

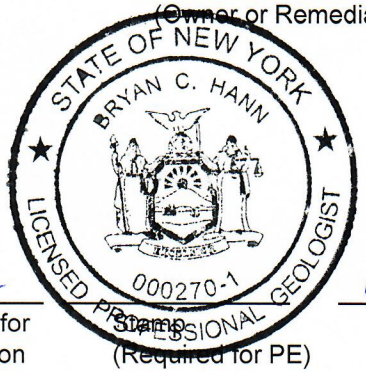
Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Bryan C. Hann, P.G. (NY) at 1090 Union Road, Suite 280, West Seneca, NY 14224,
print name print business address

am certifying as a Qualified Environmental Professional for the Richard & Margaret Wieczorek
(Owner or Remedial Party)



Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

6/3/2024
Date

Appendix B

Site-Wide & Cover System Inspection Forms

INSPECTION FORM
COVER SYSTEM

Inspector's Name Bryan Hann

Date and Time of Inspection 4/18/2024

Date of Last Inspection 5/10/2023

Purpose for Inspection: Annual/Periodic: X
Post-excavation or surface repair: NO
After significant weather events: NO
Observed damage requiring inspection / Other: NO

INSPECTION CHECKLIST

1. **Vegetative cover along Kingston Place**
Walk the length of the vegetative cover.

		Comments
• Are there any bare spots in the vegetation cover?	__ Yes X No	
• Are there any signs of damaged or diseased vegetation?	__ Yes X No	
• Are there any signs of excessive erosion?	__ Yes X No	
• Is there new root exposure or new woody plants established?	__ Yes X No	
• Are there any signs of burrowing animals?	__ Yes X No	
• Any other Observations?	none	

2. **Sidewalk along Kingston Place and Seneca Street, walkways around building, Asphalt pavement associated with parking lot and access way to road**
Walk the length of the sidewalks.

		Comments
• Are there any cracks greater than ½-inch apart?	__ Yes X No	
• Are there any signs of raised pavement associated with plant roots or subsurface subsidence?	__ Yes X No	
• Are there any signs of extensive deterioration of pavement?	__ Yes X No	
• Any other Observations?	none	

3. Remedial Action Required

4. Inspector's Signature

RETURN COMPLETED FORM TO PROPERTY OWNER REPRESENTATIVE

SITE-WIDE INSPECTION FORM

Inspector's Name Bryan Hann

Date and Time of Inspection 4/18/2024

Date of Last Inspection 5/10/2023

Purpose for Inspection: Annual/Periodic: X
Changes to Site Use: NO
Property Owner Transfer: NO
Changes in Site Condition / Other: NO

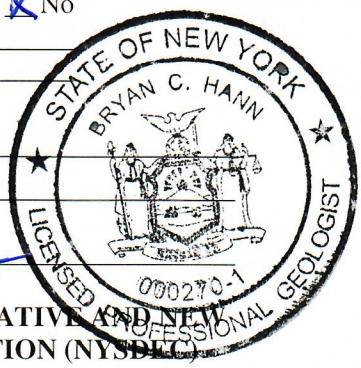
SITE OWNERSHIP AND USE

1. **Site Owner:** Richard Wieczorek New Owner since last inspection? __ Yes X No
2. **Name of Establishment:** Dollar General (retail store)
3. **Current Site Use:** X Commercial __ Industrial __ Unoccupied __ Other: _____
4. Are there any tenants residing on Site? __ Yes* X No
5. Does the Site Use include a day care, child care, or medical Care facility? __ Yes* X No
6. Does the Site Use include a vegetable garden? __ Yes* X No
7. Does the Site utilize on Site groundwater for irrigation, potable use, or other use? __ Yes* X No
8. Has the soil cover been compromised such that contamination has been encountered? __ Yes* X No

" * ": Any conditions associated with an asterisk require review of the VCA and Declaration of Covenants and Restrictions (Appendix A and B of the SMP) and potential notification to NYSDEC to verify that this use is currently appropriate for the Site.

MEDIA MONITORING STATUS

1. **Has a soil cover inspection been conducted since the last site-wide inspection?** __ Yes X No
   Inspection Date: _____ (Please attach copy(s) of inspection form)
2. **Has groundwater monitoring performed since the past inspection?** __ Yes X No
   Monitoring Dates: _____ _____ _____ _____
3. Remedial Action Required none
4. Inspector's Signature Bryan C Hann



RETURN COMPLETED FORM TO PROPERTY OWNER REPRESENTATIVE AND NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Appendix C

Photographic Log

SITE PHOTOGRAPHS

Photo 1:

Photo 2:

Photo 3:

Photo 4:

Photo 1. Exterior, looking south at front of Dollar General.

Photo 2. Exterior, looking northeast, well MW-4 at center.

Photo 3. Exterior, looking southwest at wells MW-11 (left) and PZ-A (right).

Photo 4. Exterior, looking south along front of Dollar General, well MW-13 at center in sidewalk.

SITE PHOTOGRAPHS

Photo 5:

Photo 6:

Photo 7:

Photo 8:

Photo 5. Exterior, looking south, notice rooftop ASD vent pipe

Photo 6. Exterior, looking northeast, Dollar General at right, Kingston Place at left.

Photo 7. Exterior, looking southeast along Seneca Street.

Photo 8. Exterior, looking southwest at dumpster area.

SITE PHOTOGRAPHS

Photo 9:

Photo 10:

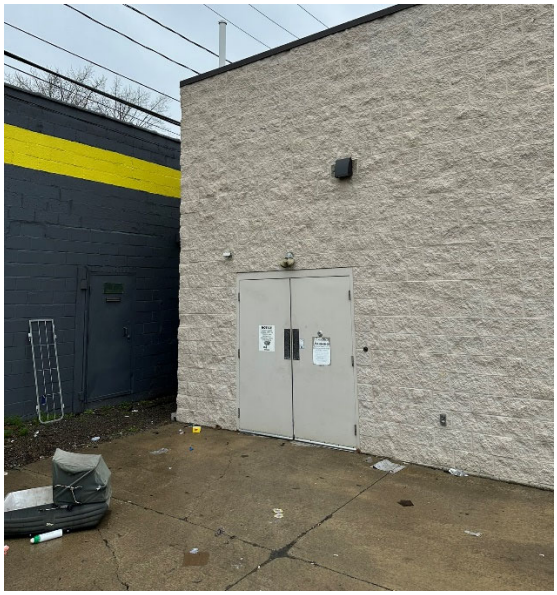


Photo 11:

Photo 12:

Photo 9. Exterior, looking southwest behind dumpster, notice removed landscape shrubs

Photo 10. Exterior, looking southwest, notice rooftop ASD vent pipe (upper center of photo).

Photo 11. Exterior, looking northwest at parking lot.

Photo 12. Exterior, looking west at Dollar General and parking lot.

SITE PHOTOGRAPHS

Photo 13:

Photo 14:

Photo 15:

Photo 16:

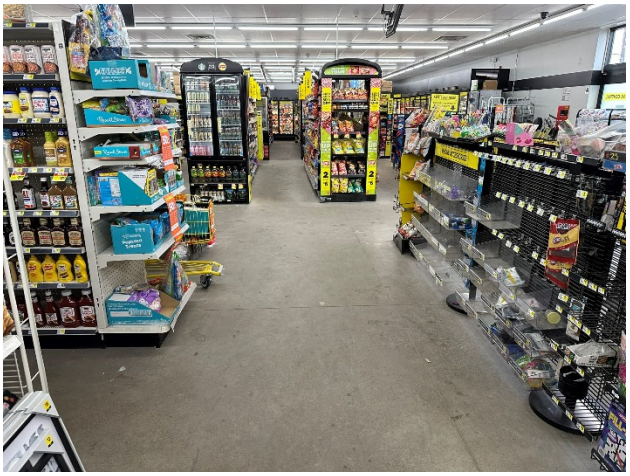


Photo 13. Exterior, parking lot entrance, looking northeast,

Photo 14. Exterior, looking southeast down Seneca Street, notice vegetation where trees were removed

Photo 15. Exterior, looking southwest down Kingston Place, notice vegetation where trees were removed

Photo 16. Interior, looking down aisle, notice intact concrete floor.

SITE PHOTOGRAPHS

Photo 17:

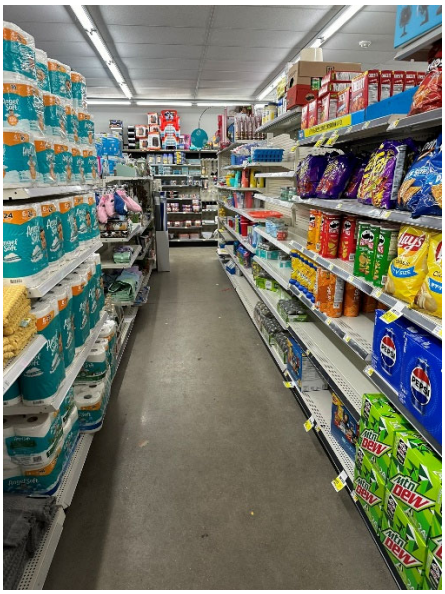


Photo 18:

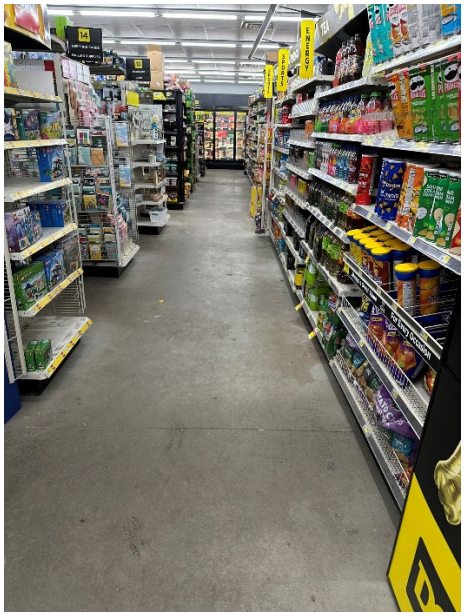


Photo 19:

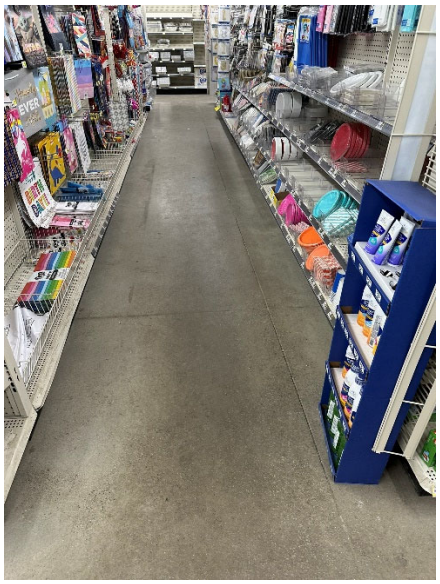


Photo 20:

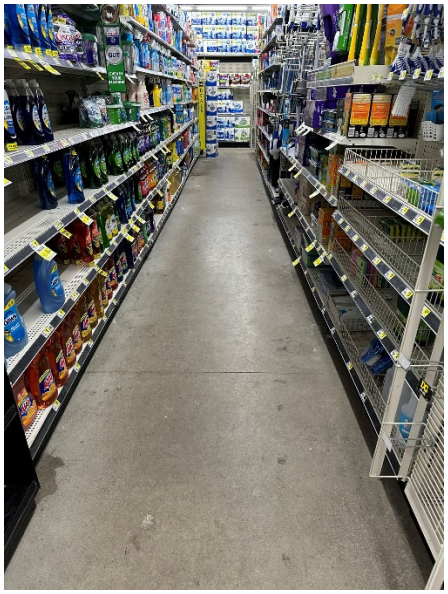


Photo 17. Interior, looking down aisle, notice intact concrete floor.

Photo 18. Interior, looking down aisle, notice intact concrete floor.

Photo 19. Interior, looking down aisle, notice intact concrete floor.

Photo 20. Interior, looking down aisle, notice intact concrete floor.

SITE PHOTOGRAPHS

Photo 21:

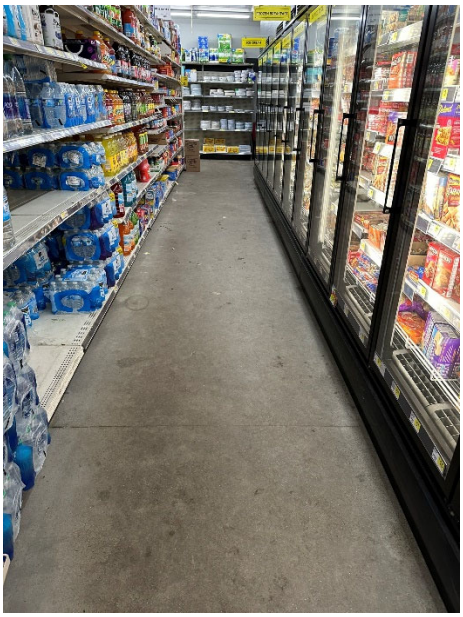


Photo 22:

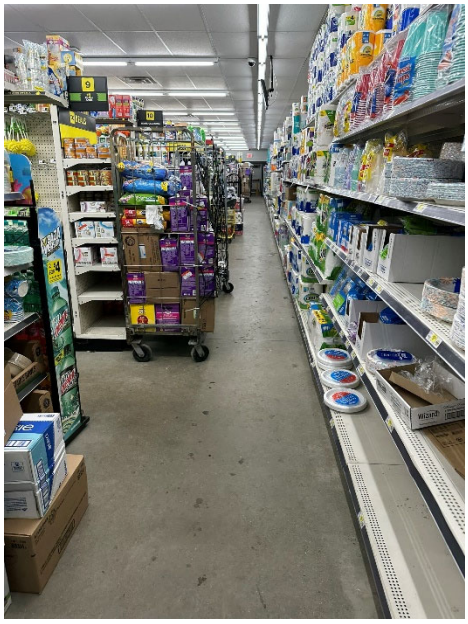


Photo 23:

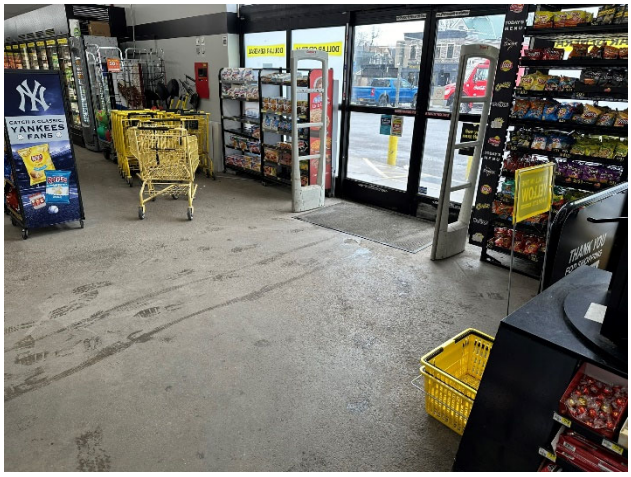


Photo 24:

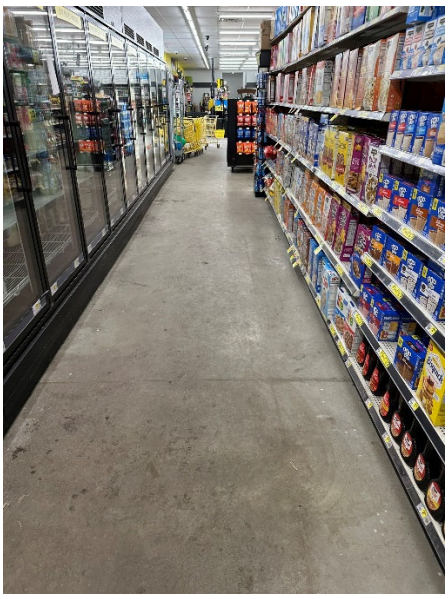


Photo 21. Interior, looking down aisle, notice intact concrete floor.

Photo 22. Interior, looking down aisle, notice intact concrete floor.

Photo 23. Interior, store entrance, notice intact concrete floor.

Photo 24. Interior, looking down aisle, notice intact concrete floor.

Appendix D

Groundwater Field Forms

GROUNDWATER FIELD FORM

Project Name: 2137 Seneca Street - Annual GWM
Location: 2137 Seneca Street Site
Project No.: 596074
Date: 4/18
Field Team: CPL BCH

Well No. MW-2

Diameter (inches): 2
Product Depth (fbTOR):
Water Column (ft):
DTW (static) (fbTOR):
One Well Volume (gal):
Total Depth (fbTOR): 17.08
Total Volume Purged (gal):
Sample Date / Time:
DTW when sampled:
Purpose: ☐ Development ☐ Sample ☑ Purge & Sample
Purge Method:

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0	Initial								
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
	S1									
	S2									

Decommissioned 04/04/2022

Well No. MW-4

Diameter (inches): 2
Product Depth (fbTOR): 0
Water Column (ft): 10.81
DTW (static) (fbTOR): 6.20
One Well Volume (gal): 1.76
Total Depth (fbTOR): 16.90 17.01
Total Volume Purged (gal):
Sample Date / Time: 4/18
DTW when sampled:
Purpose: ☐ Development ☐ Sample ☑ Purge & Sample
Purge Method:

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
9.56	0	Initial	0.1	6.66	10.7	3385	336.25	5.21	-28.8	Sdds. dark
10.00	1	6.34	0.2	6.88	10.8	1.897	201.25	5.31	-54.1	"
10.04	2	6.35	0.3	6.86	10.9	3.497	138.27	5.23	-61.4	"
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
10:11	S1	6.38	0.4	6.83	10.8	3.487	114.26	6.07	-46.5	metallic odor
	S2									

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY: BCH

GROUNDWATER FIELD FORM

Project Name: 2137 Seneca Street - Annual GWM Date:

Location: 2137 Seneca Street Site Project No.: 596074 Field Team:

Well No. MW-4A			Diameter (inches): 2			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: ☐ Development ☐ Sample ☑ Purge & Sample			
Total Depth (fbTOR): 26.73			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0 Initial								
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
	S1								
	S2								

Decommissioned 04/04/2022

Well No. MW-11			Diameter (inches): 2			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: ☐ Development ☐ Sample ☑ Purge & Sample			
Total Depth (fbTOR): 16.90			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0 Initial								
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
	S1								
	S2								

No Longer Sampled per NYSDEC approval August 2021

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY: BCH

GROUNDWATER FIELD FORM

Project Name: 2137 Seneca Street - Annual GWM
Location: 2137 Seneca Street Site
Project No.: 596074
Date: 4/18/2024
Field Team: CRC BCH

Well No. MW-13
Diameter (inches): 2
Sample Date / Time: 4/18/2024
Product Depth (fbTOR): NA
Water Column (ft): 10.60
DTW when sampled:
DTW (static) (fbTOR): 6.38 CRC
One Well Volume (gal): 1.73
Purpose: ☐ Development ☐ Sample ☑ Purge & Sample
16.98 — Total Depth (fbTOR): 17.03 ~~16.98~~
Total Volume Purged (gal):
Purge Method:

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
9:26	0	Initial	0.1	6.4	11.7	1.07	4068	4.33	21.7	Sed., brown
9:30	1	6.35	0.2	6.49	11.5	1.08	946.07	4.64	11.4	"
9:34	2	6.34	0.3	6.5	11.5	1.084	296.51	5.17	15.0	"
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
9:40	S1	6.39	0.4	6.5	11.3	1.058	225.37	5.03	5.2	Clear, no odors
	S2									

Well No. PZ-A
Diameter (inches): 1
Sample Date / Time: 4/18
Product Depth (fbTOR): N/A
Water Column (ft):
DTW when sampled:
DTW (static) (fbTOR): 6.68
One Well Volume (gal):
Purpose: ☐ Development ☐ Sample ☑ Purge & Sample
Total Depth (fbTOR): 14.78 14.75
Total Volume Purged (gal):
Purge Method:

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
CRC ~~9:56~~	~~0~~	~~Initial~~	~~0.1~~	~~6.66~~	~~10.7~~	~~3.385~~	~~330.25~~	~~5.21~~	~~-25.6~~	
10:25	1	Initial	0.1	6.91	10.3	3.070	265.65	5.25	-54.4	no odor,
10:27	2	~~6.85~~	0.2	6.79	10.5	3.808	120.72	5.07	-48.8	"
10:31	3	6.85	0.3	6.78	10.6	3.899	24.30	4.82	-49.1	"
CRC ~~10:30~~	~~4~~	~~6.85~~								
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
10:30	S1	6.85	0.4	6.78	10.5	3.913	9.69	5.01	-46.7	"
	S2									

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY: BCH

Eco-Rental Solutions

Calibration Certificate

rev 8/9/11

Work Order No.: SE-130040
Date of Service: 04/17/24
Order Time: 10:41:22 AM

Unit Under Test: YSI ProDSS, 4m Cable

Asset No.: FA05374 Technician: Haley Steinbruckner
Serial No: 22E104210/22D105077

Initials: HB

TEST	Specification	Result
Standard Calibration	Pass/Fail	pass

TEST STANDARDS USED:

DESCRIPTION	LOT NO./EXPIRATION DATE	QUANTITY
7.00 mS Conductivity Standard Solution	Lot No. 3GL0530 Exp. 12/2024	1
pH 10.00 Standard Solution	Lot No. 3GL0168 Exp. 12/2025	1
pH 4.00 Standard Solution	Lot No. 3GE1074 Exp. 05/2025	1
pH 7.00 Standard Solution	Lot No. 2GK014 Exp. 11/2024	1
ORP Standard Solution	Lot No. 23D100185 Exp. 04/11/2028	1
Turbidity Free Water	Lot No. 2GK873 Exp. 11/2024	1
100 NTU AMCO Turbidity Standard	Lot No. 22420023 Exp. 05/2024	1
Air Saturated Water		1

TEST EQUIPMENT USED:

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

Test Equipment and standards are traceable to National standards.

Appendix E

Laboratory Analytical Data Summary Package

ANALYTICAL REPORT

Lab Number:	L2421308
Client:	TRC 1090 Union Road Suite 280 West Seneca, NY 14224
ATTN:	Bryan Hann
Phone:	(716) 870-1165
Project Name:	2137 SENECA STREET
Project Number:	596074
Report Date:	04/25/24

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 2137 SENECA STREET
Project Number: 596074

Lab Number: L2421308
Report Date: 04/25/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2421308-01	MW-4	WATER	2137 SENECA STREET, BUFFALO, NY	04/18/24 10:11	04/18/24
L2421308-02	MW-13	WATER	2137 SENECA STREET, BUFFALO, NY	04/18/24 09:40	04/18/24
L2421308-03	PZ-A	WATER	2137 SENECA STREET, BUFFALO, NY	04/18/24 10:30	04/18/24
L2421308-04	TRIP BLANK	WATER	2137 SENECA STREET, BUFFALO, NY	04/18/24 00:00	04/18/24

Project Name:	2137 SENECA STREET	**Lab Number:**	L2421308
Project Number:	596074	**Report Date:**	04/25/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	2137 SENECA STREET	**Lab Number:**	L2421308
Project Number:	596074	**Report Date:**	04/25/24

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 04/25/24

ORGANICS

VOLATILES

Project Name: 2137 SENECA STREET
Project Number: 596074
Lab Number: L2421308
Report Date: 04/25/24

SAMPLE RESULTS

Lab ID: L2421308-01 D
Client ID: MW-4
Sample Location: 2137 SENECA STREET, BUFFALO, NY

Date Collected: 04/18/24 10:11
Date Received: 04/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/23/24 19:18
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	620		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	2.0	J	ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

Project Name: 2137 SENECA STREET
Project Number: 596074
Lab Number: L2421308
Report Date: 04/25/24

SAMPLE RESULTS

Lab ID: L2421308-01 D
Client ID: MW-4
Sample Location: 2137 SENECA STREET, BUFFALO, NY
Date Collected: 04/18/24 10:11
Date Received: 04/18/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	1.7	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	1300		ug/l	25	7.0	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	ND		ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
Methyl Acetate	ND		ug/l	20	2.3	10
Cyclohexane	ND		ug/l	100	2.7	10
1,4-Dioxane	ND		ug/l	2500	610	10
Freon-113	ND		ug/l	25	7.0	10
Methyl cyclohexane	ND		ug/l	100	4.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	112		70-130

Project Name: 2137 SENECA STREET
Project Number: 596074
Lab Number: L2421308
Report Date: 04/25/24

SAMPLE RESULTS

Lab ID: L2421308-02
Client ID: MW-13
Sample Location: 2137 SENECA STREET, BUFFALO, NY

Date Collected: 04/18/24 09:40
Date Received: 04/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/23/24 18:27
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	1.3	J	ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	4.7		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.52		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 2137 SENECA STREET **Lab Number:** L2421308

Project Number: 596074 **Report Date:** 04/25/24

SAMPLE RESULTS

Lab ID: L2421308-02 Date Collected: 04/18/24 09:40

Client ID: MW-13 Date Received: 04/18/24

Sample Location: 2137 SENECA STREET, BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	2.1	J	ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	14		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	113		70-130

Project Name: 2137 SENECA STREET
Project Number: 596074
Lab Number: L2421308
Report Date: 04/25/24

SAMPLE RESULTS

Lab ID: L2421308-03 D
Client ID: PZ-A
Sample Location: 2137 SENECA STREET, BUFFALO, NY

Date Collected: 04/18/24 10:30
Date Received: 04/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/23/24 18:52
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	12	3.5	5
1,1-Dichloroethane	ND		ug/l	12	3.5	5
Chloroform	ND		ug/l	12	3.5	5
Carbon tetrachloride	ND		ug/l	2.5	0.67	5
1,2-Dichloropropane	ND		ug/l	5.0	0.68	5
Dibromochloromethane	ND		ug/l	2.5	0.74	5
1,1,2-Trichloroethane	ND		ug/l	7.5	2.5	5
Tetrachloroethene	ND		ug/l	2.5	0.90	5
Chlorobenzene	ND		ug/l	12	3.5	5
Trichlorofluoromethane	ND		ug/l	12	3.5	5
1,2-Dichloroethane	ND		ug/l	2.5	0.66	5
1,1,1-Trichloroethane	ND		ug/l	12	3.5	5
Bromodichloromethane	ND		ug/l	2.5	0.96	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	0.82	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	0.72	5
Bromoform	ND		ug/l	10	3.2	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	0.84	5
Benzene	ND		ug/l	2.5	0.80	5
Toluene	ND		ug/l	12	3.5	5
Ethylbenzene	ND		ug/l	12	3.5	5
Chloromethane	ND		ug/l	12	3.5	5
Bromomethane	ND		ug/l	12	3.5	5
Vinyl chloride	440		ug/l	5.0	0.36	5
Chloroethane	ND		ug/l	12	3.5	5
1,1-Dichloroethene	0.96	J	ug/l	2.5	0.84	5
trans-1,2-Dichloroethene	ND		ug/l	12	3.5	5
Trichloroethene	ND		ug/l	2.5	0.88	5
1,2-Dichlorobenzene	ND		ug/l	12	3.5	5

Project Name: 2137 SENECA STREET **Lab Number:** L2421308

Project Number: 596074 **Report Date:** 04/25/24

SAMPLE RESULTS

Lab ID: L2421308-03 D Date Collected: 04/18/24 10:30

Client ID: PZ-A Date Received: 04/18/24

Sample Location: 2137 SENECA STREET, BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	12	3.5	5
1,4-Dichlorobenzene	ND		ug/l	12	3.5	5
Methyl tert butyl ether	ND		ug/l	12	0.83	5
p/m-Xylene	ND		ug/l	12	3.5	5
o-Xylene	ND		ug/l	12	3.5	5
cis-1,2-Dichloroethene	710		ug/l	12	3.5	5
Styrene	ND		ug/l	12	3.5	5
Dichlorodifluoromethane	ND		ug/l	25	5.0	5
Acetone	ND		ug/l	25	7.3	5
Carbon disulfide	ND		ug/l	25	5.0	5
2-Butanone	ND		ug/l	25	9.7	5
4-Methyl-2-pentanone	ND		ug/l	25	5.0	5
2-Hexanone	ND		ug/l	25	5.0	5
Bromochloromethane	ND		ug/l	12	3.5	5
1,2-Dibromoethane	ND		ug/l	10	3.2	5
1,2-Dibromo-3-chloropropane	ND		ug/l	12	3.5	5
Isopropylbenzene	ND		ug/l	12	3.5	5
1,2,3-Trichlorobenzene	ND		ug/l	12	3.5	5
1,2,4-Trichlorobenzene	ND		ug/l	12	3.5	5
Methyl Acetate	ND		ug/l	10	1.2	5
Cyclohexane	ND		ug/l	50	1.4	5
1,4-Dioxane	ND		ug/l	1200	300	5
Freon-113	ND		ug/l	12	3.5	5
Methyl cyclohexane	ND		ug/l	50	2.0	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	112		70-130

Project Name: 2137 SENECA STREET
Project Number: 596074
Lab Number: L2421308
Report Date: 04/25/24

SAMPLE RESULTS

Lab ID: L2421308-04
Client ID: TRIP BLANK
Sample Location: 2137 SENECA STREET, BUFFALO, NY

Date Collected: 04/18/24 00:00
Date Received: 04/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/23/24 18:02
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 2137 SENECA STREET
Project Number: 596074
Lab Number: L2421308
Report Date: 04/25/24

SAMPLE RESULTS

Lab ID: L2421308-04
Client ID: TRIP BLANK
Sample Location: 2137 SENECA STREET, BUFFALO, NY
Date Collected: 04/18/24 00:00
Date Received: 04/18/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	115		70-130

Project Name: 2137 SENECA STREET **Lab Number:** L2421308

Project Number: 596074 **Report Date:** 04/25/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/23/24 10:24
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1912873-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: 2137 SENECA STREET **Lab Number:** L2421308

Project Number: 596074 **Report Date:** 04/25/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/23/24 10:24
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1912873-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.17
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: 2137 SENECA STREET **Lab Number:** L2421308

Project Number: 596074 **Report Date:** 04/25/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/23/24 10:24
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1912873-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 2137 SENECA STREET
Project Number: 596074
Lab Number: L2421308
Report Date: 04/25/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1912873-3 WG1912873-4								
Methylene chloride	98		100		70-130	2		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	98		97		63-130	1		20
1,1,2-Trichloroethane	99		100		70-130	1		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	98		96		62-150	2		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	99		99		70-130	0		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	90		88		54-136	2		20
1,1,2,2-Tetrachloroethane	98		98		67-130	0		20
Benzene	110		110		70-130	0		20
Toluene	110		100		70-130	10		20
Ethylbenzene	110		100		70-130	10		20
Chloromethane	87		88		64-130	1		20
Bromomethane	68		70		39-139	3		20
Vinyl chloride	91		93		55-140	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 2137 SENECA STREET

Project Number: 596074

Lab Number: L2421308

Report Date: 04/25/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1912873-3 WG1912873-4								
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	93		96		61-145	3		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	97		96		70-130	1		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	97		100		63-130	3		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	85		82		58-148	4		20
Carbon disulfide	96		95		51-130	1		20
2-Butanone	90		83		63-138	8		20
4-Methyl-2-pentanone	77		83		59-130	8		20
2-Hexanone	78		78		57-130	0		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	90		90		41-144	0		20
Isopropylbenzene	110		100		70-130	10		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 2137 SENECA STREET

Project Number: 596074

Lab Number: L2421308

Report Date: 04/25/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1912873-3 WG1912873-4								
1,2,4-Trichlorobenzene	100		100		70-130	0		20
Methyl Acetate	86		96		70-130	11		20
Cyclohexane	120		120		70-130	0		20
1,4-Dioxane	84		84		56-162	0		20
Freon-113	98		100		70-130	2		20
Methyl cyclohexane	110		110		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		103		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	101		99		70-130
Dibromofluoromethane	97		99		70-130

Project Name: 2137 SENECA STREET
Project Number: 596074

Lab Number: L2421308
Report Date: 04/25/24

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2421308-01A	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260-R2(14)
L2421308-01B	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260-R2(14)
L2421308-01C	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260-R2(14)
L2421308-02A	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260-R2(14)
L2421308-02B	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260-R2(14)
L2421308-02C	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260-R2(14)
L2421308-03A	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260-R2(14)
L2421308-03B	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260-R2(14)
L2421308-03C	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260-R2(14)
L2421308-04A	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260-R2(14)
L2421308-04B	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name:	2137 SENECA STREET	**Lab Number:**	L2421308
Project Number:	596074	**Report Date:**	04/25/24

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	2137 SENECA STREET	**Lab Number:**	L2421308
Project Number:	596074	**Report Date:**	04/25/24

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	2137 SENECA STREET	**Lab Number:**	L2421308
Project Number:	596074	**Report Date:**	04/25/24

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	2137 SENECA STREET	**Lab Number:**	L2421308
Project Number:	596074	**Report Date:**	04/25/24

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 4/18/24

ALPHA Job #: L2421308

Client Information
Client: TRC
Address: 1090 Union Road
West Seneca, NY
Phone: 716-870-1165
Fax:
Email: bhann@TRCCOMPANIES.com

Project Information
Project Name: 2137 Seneca Street
Project Location: 2137 Seneca Street, Buffalo, NY
Project # 596074
(Use Project name as Project #)
Project Manager: Bryan Hann
ALPHAQuote #:

Turn-Around Time
Standard
Rush (only if pre approved)
Due Date:
# of Days:

Deliverables
ASP-A
ASP-B
EQuIS (1 File)
EQuIS (4 File)
Other

Regulatory Requirement
NY TOGS
NY Part 375
AWQ Standards
NY CP-51
NY Restricted Use
Other
NY Unrestricted Use
NYC Sewer Discharge

Billing Information
Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
NJ
NY
Other:

These samples have been previously analyzed by Alpha

Other project specific requirements/comments:
Standard reporting with EQuIS deliverable

Please specify Metals or TAL.

ANALYSIS
TCL VOCs 8260

Sample Filtration
Done
Lab to do
Preservation
Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs 8260	Total Bottle	Sample Specific Comments
21308-01	MW-4	4/18/24	10:11	Water	LPL	3		
02	MW-13	4/18/24	9:40	Water	LPL	3		
03	PZ-A	4/18/24	10:30	Water	LPL	3		
04	Trip Blank	4/18/24	—	Water	—	2		

Container Type: A
Preservative: B

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Jake Cappellen	4/18/24 12:15	Jocelyn Foley (AAL)	4/18/24 12:15
Jocelyn Foley (AAL)	4/18/24 12:15		4/19/24 0040

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Appendix F

Concentration vs. Time Plots

APPENDIX F

PRE- POST-INJECTION GROUNDWATER ANALYTICAL SUMMARY
MW-4

Periodic Review Report
2137 Seneca Street Site (V00370-9)
Buffalo, New York

Parameter [1]	CasNum	NY-AWQS	Units	Monitoring Location, Sample Date												
				MW-4												
				Pre-Injection					Post-Injection							
				10/05/2000 Qual	09/24/2001 Qual	11/28/2001 Qual	06/19/2002 Qual	09/25/2002 Qual	04/05/2004 Qual	06/16/2004 Qual	10/15/2004 Qual	01/11/2005 Qual	05/26/2005 Qual	01/12/2006 Qual	06/07/2006 Qual	03/20/2007 Qual
Volatile Organics by GC/MS - Westborough Lab																
1,1-Dichloroethane	75-34-3	**5**	ug/L	500 U	5 U	150 U	75 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U
1,1-Dichloroethene	75-35-4	**5**	ug/L	500 U	5 U	150 U	75 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	250 J	3.8 J	100 J	120	220 J	240 J	1800	690	1200	330 J	540 D	360 D	2200
Tetrachloroethene	127-18-4	**5**	ug/L	17000 J	41	5800	2200	19000	13000	6000	19000	7100	9700	12000 D	7600 D	13000 D
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L	500 U	5 U	150 U	75 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U
Trichloroethene	79-01-6	**5**	ug/L	940	6.5	360	330	1300	830	3700	2400	2800	1700	2800 D	3000 D	3800
Vinyl chloride	75-01-4	**2**	ug/L	500 U	10 U	300 U	150 U	500 U	2.1 J	750 U	1000 U	250 U	500 U	8.2	6.4 J	100 U
Total cVOCs	***NA***	***NA***	***ug/L***	***18190***	***51.3***	***6260***	***2650***	***20520***	***14072.1***	***11500***	***22090***	***11100***	***11730***	***15348.2***	***10966.4***	***19000***

APPENDIX F

PRE- POST-INJECTION GROUNDWATER ANALYTICAL SUMMARY
MW-4

Periodic Review Report
2137 Seneca Street Site (V00370-9)
Buffalo, New York

Parameter [1]	CasNum	NY-AWQS	Units	Monitoring Location, Sample Date												
				MW-4												
				Post-Injection												
				12/05/2007 Qual	06/30/2008 Qual	03/17/2009 Qual	06/23/2009 Qual	02/11/2010 Qual	06/23/2010 Qual	04/26/2013 Qual	11/15/2013 Qual	07/31/2014 Qual	05/03/2016 Qual	12/23/2016 Qual	02/08/2018 Qual	01/16/2019 Qual
Volatile Organics by GC/MS - Westborough Lab																
1,1-Dichloroethane	75-34-3	**5**	ug/L	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	50 U	12 U	25 U	20 U	12 U	10 U	10 U
1,1-Dichloroethene	75-35-4	**5**	ug/L	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	50 U	9.2 J	25 U	20 U	12 U	10 U	10 U
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	2400 D	910 D	13000 D	3500 D	940 D	3500 D	4100	4300	4600	3300	2100	1500	2300
Tetrachloroethene	127-18-4	**5**	ug/L	1 U	0.47 J	1.4	0.51 J	1.4	2.2	50 U	12 U	25 U	20 U	12 U	10 U	10 U
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	250 U	62 U	120 U	100 U	62 U	50 U	50 U
Trichloroethene	79-01-6	**5**	ug/L	0.5 J	1.4 J	4.5	0.85 J	0.99 J	1.9	50 U	12	12 J	20 U	12 U	10 U	10 U
Vinyl chloride	75-01-4	**2**	ug/L	1400 D	780 D	3300 D	1700 D	1000 D	2800 D	1300	1900	1500	1500	1300	730	1400
Total cVOCs	***NA***	***NA***	***ug/L***	***3800.5***	***1691.87***	***16305.9***	***5201.36***	***1942.39***	***6304.1***	***5400***	***6221.2***	***6112***	***4800***	***3400***	***2230***	***3700***

APPENDIX F

PRE- POST-INJECTION GROUNDWATER ANALYTICAL SUMMARY
MW-4

Periodic Review Report
2137 Seneca Street Site (V00370-9)
Buffalo, New York

Parameter [1]	CasNum	NY-AWQS	Units	Monitoring Location, Sample Date												
				MW-4												
				Post-Injection												
				01/14/2020	03/11/2021	04/08/2022	05/10/2023	04/18/2024	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
				Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
Volatile Organics by GC/MS - Westborough Lab																
1,1-Dichloroethane	75-34-3	**5**	ug/L	10 U	5 U	5 U	25 U	25 U								
1,1-Dichloroethene	75-35-4	**5**	ug/L	10 U	5 U	5 U	2.8 DJ	2 DJ								
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	1900	840	980 D	1700 DJ	1300 DJ								
Tetrachloroethene	127-18-4	**5**	ug/L	10 U	5 U	5 U	5 U	5 U								
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L	50 U	25 U	25 U	25 U	25 U								
Trichloroethene	79-01-6	**5**	ug/L	10 U	5 U	5 U	5 U	5 U								
Vinyl chloride	75-01-4	**2**	ug/L	1400	510	410 D	940 D	620 D								
Total cVOCs	***NA***	***NA***	***ug/L***	***3300***	***1350***	***1390***	***2642.8***	***1922***								

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. NYS Ambient Water Quality Class GA Groundwater Quality Standards/Guidance Values; NYSDEC June 1998 Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1

Qualifier Key:

J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
UJ = The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.

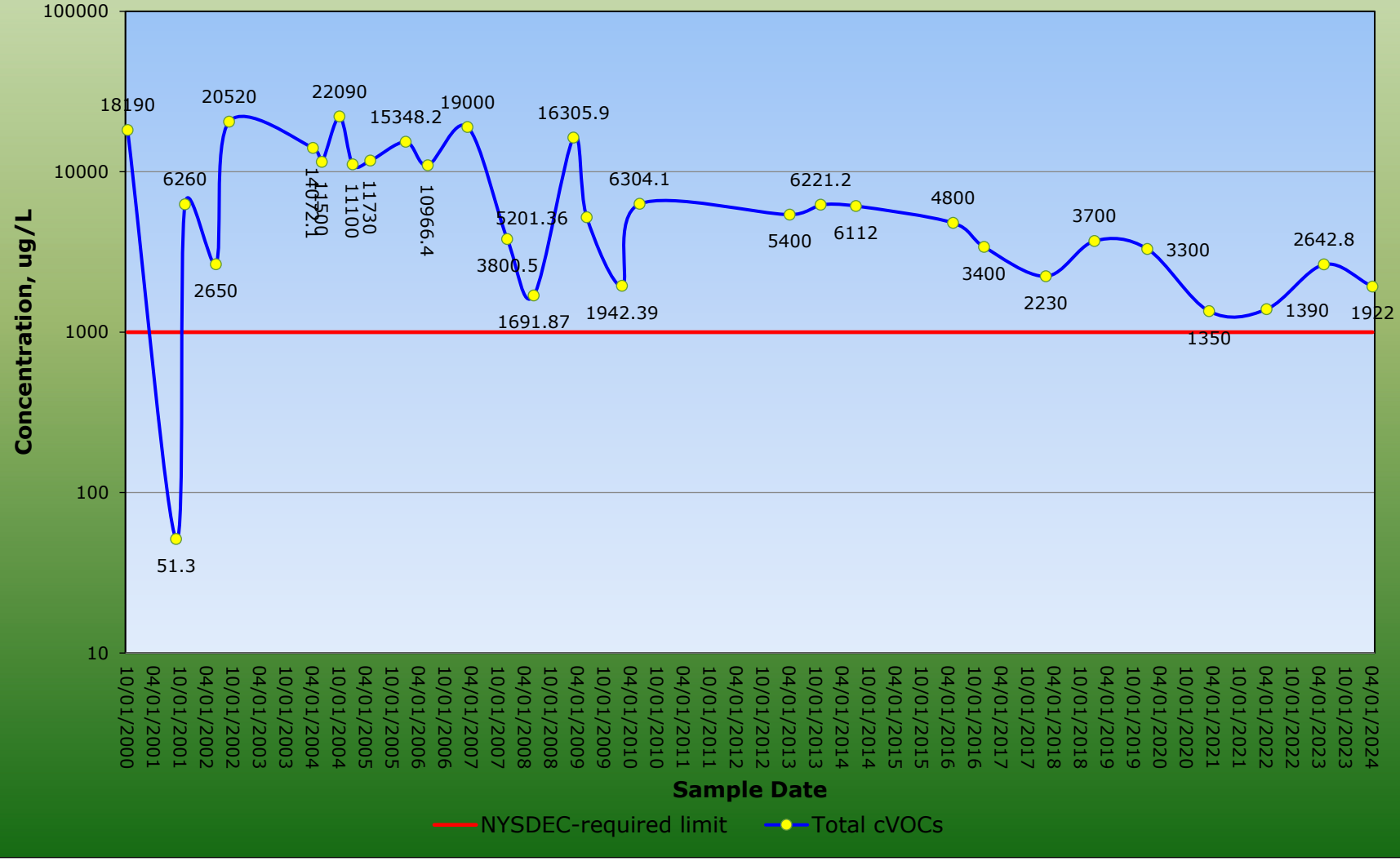
Color Code:

= chlorinated VOCs (cVOCs) are highlighted in BLUE
= concentration exceeds the NYSDEC Class GA AWQS/GV.

APPENDIX F

TOTAL cVOC CONCENTRATION vs. TIME
MW-4

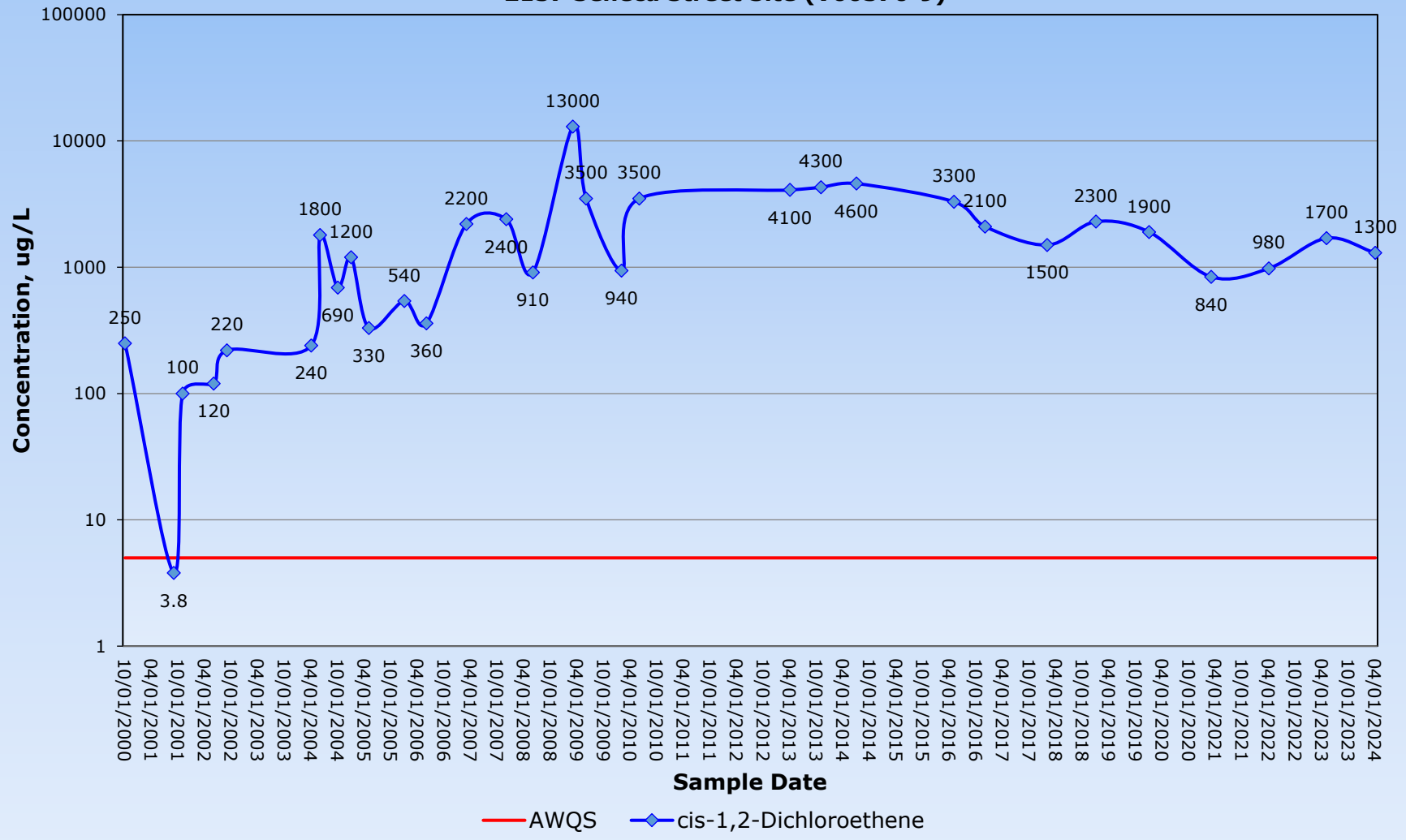
Periodic Review Report
2137 Seneca Street Site (V00370-9)



APPENDIX F

cis-1,2-DICHLOROETHENE CONCENTRATION vs. TIME
MW-4

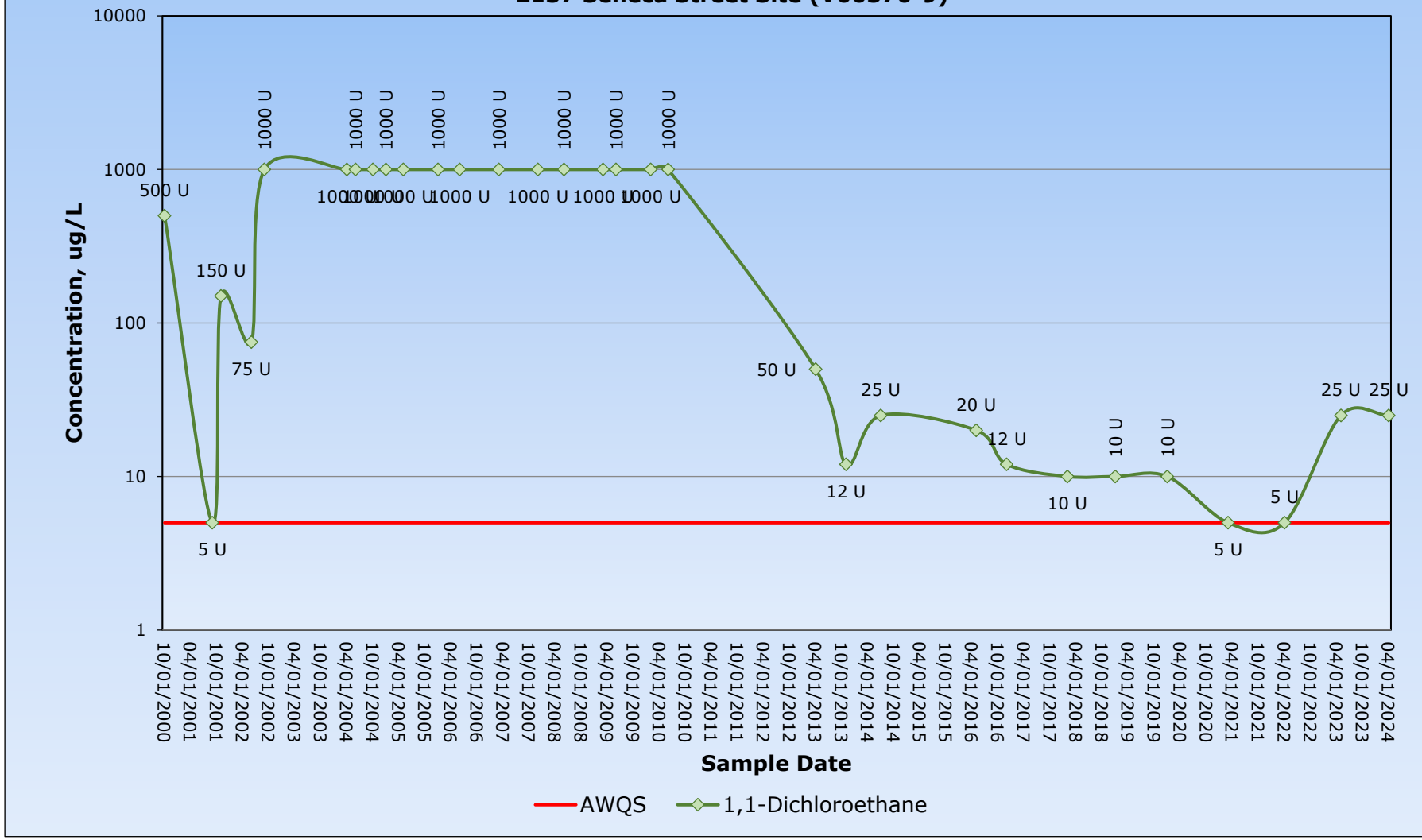
Periodic Review Report
2137 Seneca Street Site (V00370-9)



APPENDIX F

1,1-DICHLOROETHANE CONCENTRATION vs. TIME
MW-4

Periodic Review Report
2137 Seneca Street Site (V00370-9)

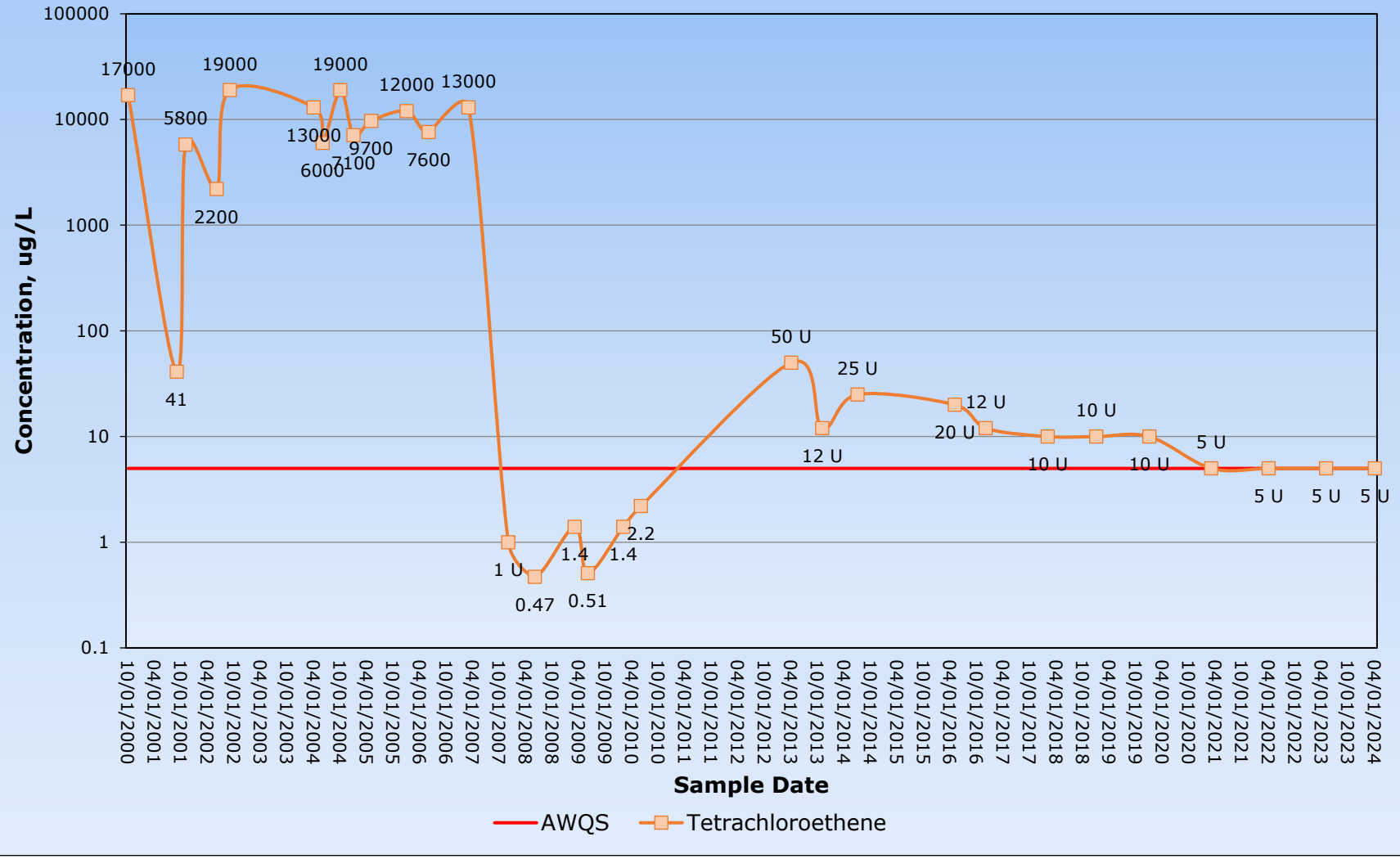


U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

APPENDIX F

TETRACHLOROETHENE (PCE) CONCENTRATION vs. TIME
MW-4

Periodic Review Report
2137 Seneca Street Site (V00370-9)

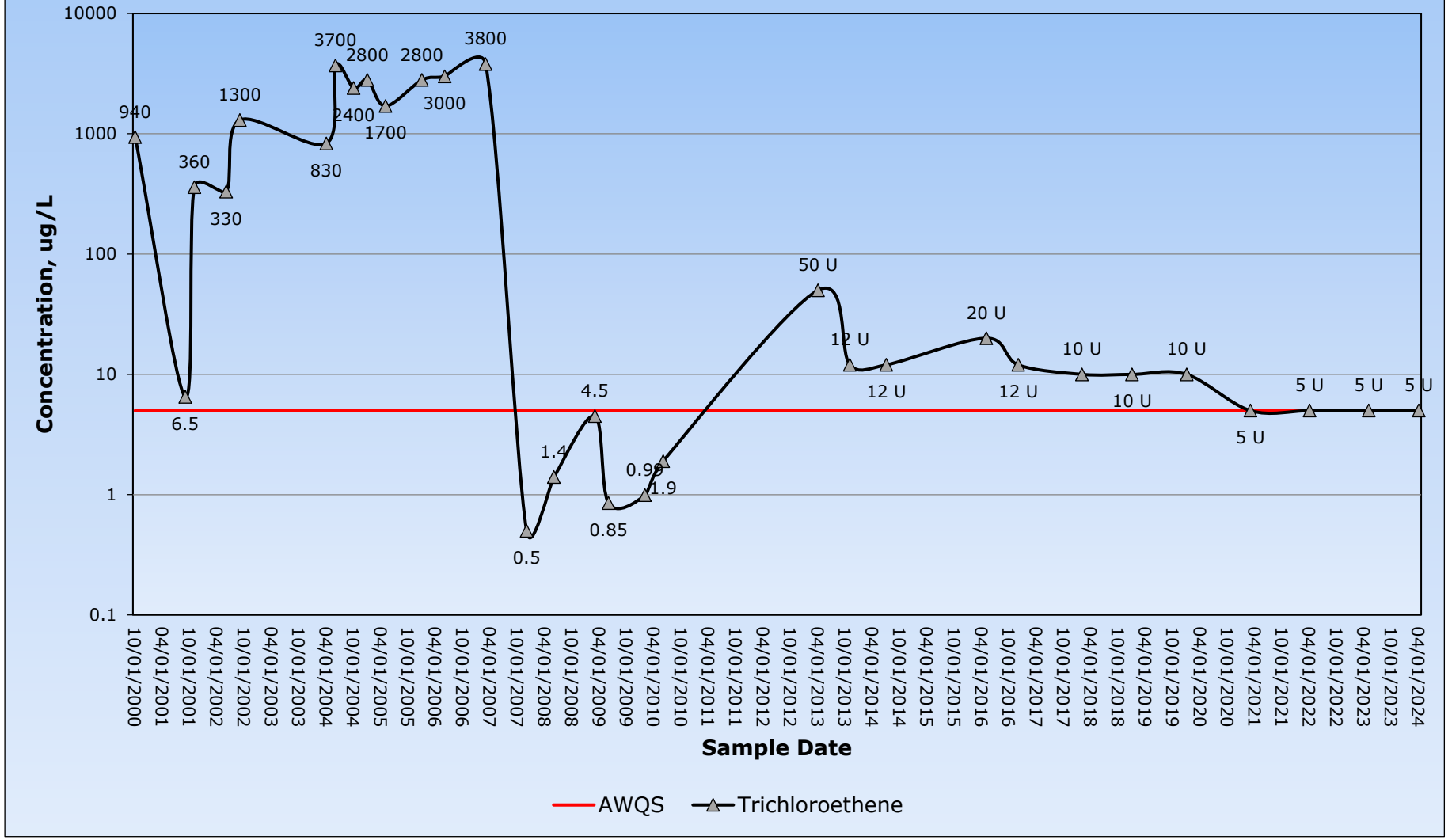


U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

APPENDIX F

TRICHLOROETHENE (TCE) CONCENTRATION vs. TIME
MW-4

Periodic Review Report
2137 Seneca Street Site (V00370-9)

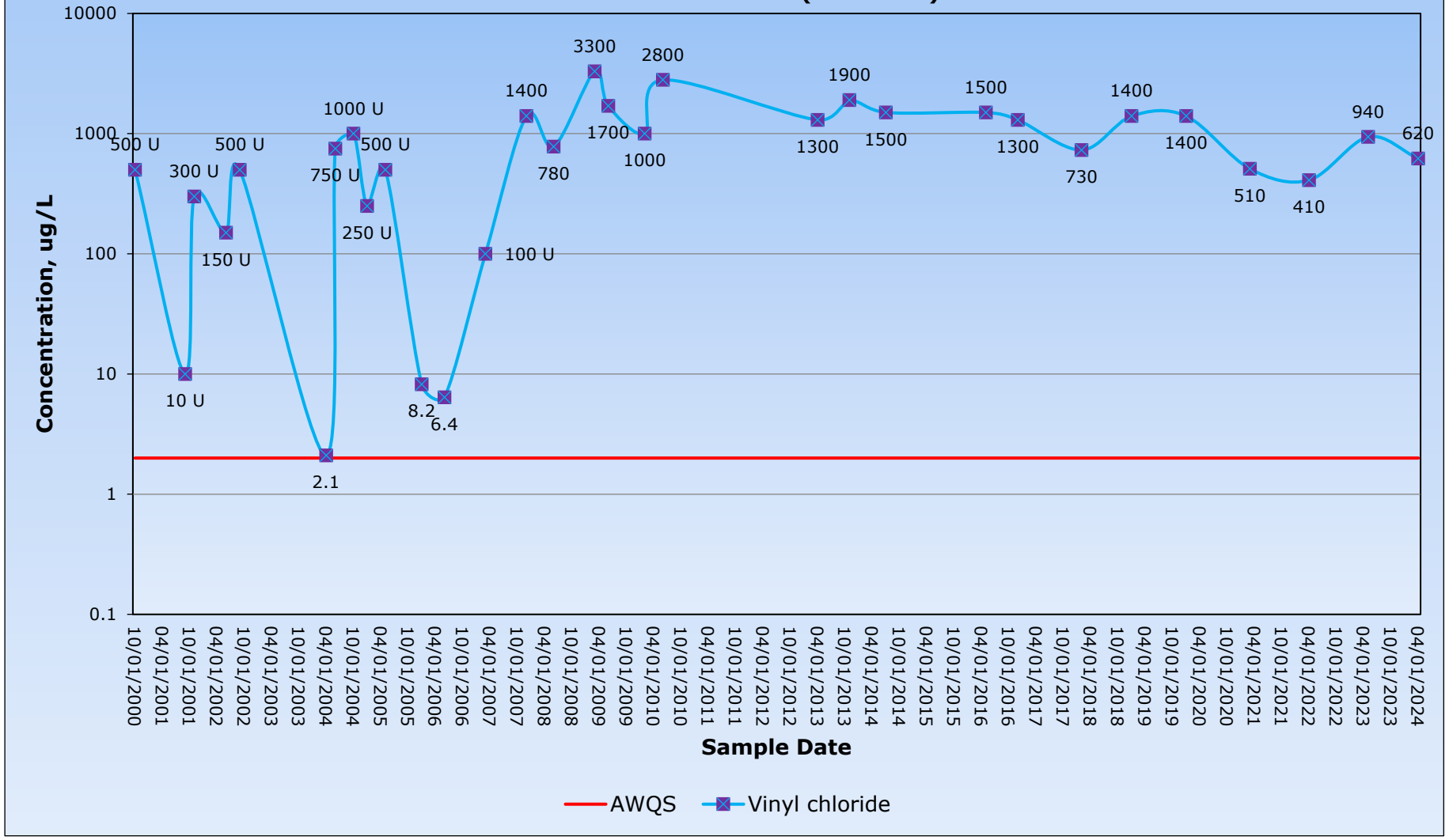


U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

APPENDIX F

VINYL CHLORIDE (VC) CONCENTRATION vs. TIME
MW-4

Periodic Review Report
2137 Seneca Street Site (V00370-9)



U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

APPENDIX F

PRE- POST-INJECTION GROUNDWATER ANALYTICAL SUMMARY
MW-13

Periodic Review Report
2137 Seneca Street Site (V00370-9)
Buffalo, New York

Parameter [1]	CasNum	NY-AWQS	Units	Monitoring Location, Sample Date												
				MW-13												
				Pre-Injection					Post-Injection							
				10/04/2000 Qual	09/21/2001 Qual	11/28/2001 Qual	06/19/2002 Qual	09/25/2002 Qual	04/05/2004 Qual	06/15/2004 Qual	10/13/2004 Qual	01/10/2005 Qual	05/25/2005 Qual	01/12/2006 Qual	06/07/2006 Qual	03/20/2007 Qual
Volatile Organics by GC/MS - Westborough Lab																
1,1-Dichloroethane	75-34-3	**5**	ug/L						5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	75-35-4	**5**	ug/L						5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L						6.3 J	5.3	5.9	3.9	17 J	17 D	23 D	28
Tetrachloroethene	127-18-4	**5**	ug/L						190	250	270	130	560	470 D	790 D	1200 D
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L						5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	79-01-6	**5**	ug/L						16	15	14	9.6	44	39 D	48 D	66
Vinyl chloride	75-01-4	**2**	ug/L						10 J	20 U	12 U	5 U	50 U	1	1 J	8 U
Total cVOCs	***NA***	***NA***	***ug/L***						***222.3***	***270.3***	***289.9***	***143.5***	***621***	***527***	***862***	***1294***

APPENDIX F

PRE- POST-INJECTION GROUNDWATER ANALYTICAL SUMMARY
MW-13

Periodic Review Report
2137 Seneca Street Site (V00370-9)
Buffalo, New York

Parameter [1]	CasNum	NY-AWQS	Units	Monitoring Location, Sample Date												
				MW-13												
				Post-Injection												
				12/05/2007 Qual	06/30/2008 Qual	03/17/2009 Qual	06/23/2009 Qual	02/11/2010 Qual	06/24/2010 Qual	04/26/2013 Qual	11/15/2013 Qual	07/31/2014 Qual	05/03/2016 Qual	02/08/2018 Qual	01/16/2019 Qual	01/14/2020 Qual
Volatile Organics by GC/MS - Westborough Lab																
1,1-Dichloroethane	75-34-3	**5**	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	75-35-4	**5**	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	1000 D	18 D	31 D	2.3 D	19 D	5.5 D	80	2.6	16	12	7.8	9	13
Tetrachloroethene	127-18-4	**5**	ug/L	10 U	1 J	1	1 J	1	1	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trichloroethene	79-01-6	**5**	ug/L	10 J	4.7 J	1	1 J	1 J	1	1.4 U	0.5	0.52 J	0.54 U	0.43 U	0.3 U	0.39 U
Vinyl chloride	75-01-4	**2**	ug/L	330 D	20 D	7 D	2 D	29 D	8.8 D	45	1.4	16	8.4	4.7	7.5	4.8
Total cVOCs	***NA***	***NA***	***ug/L***	***1340***	***43.7***	***40***	***6.3***	***50***	***16.3***	***125***	***4.5***	***32.52***	***20.4***	***12.5***	***16.5***	***17.8***

APPENDIX F

PRE- POST-INJECTION GROUNDWATER ANALYTICAL SUMMARY
MW-13

Periodic Review Report
2137 Seneca Street Site (V00370-9)
Buffalo, New York

Parameter [1]	CasNum	NY-AWQS	Units	Monitoring Location, Sample Date												
				MW-13												
				Post-Injection												
				03/11/2021 Qual	04/08/2022 Qual	05/10/2023 Qual	04/18/2024 Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual
Volatile Organics by GC/MS - Westborough Lab																
1,1-Dichloroethane	75-34-3	**5**	ug/L	0.5 U	0.87 J	1.5 J	1.3 J									
1,1-Dichloroethene	75-35-4	**5**	ug/L	0.5 U	0.5 U	0.5 U	0.5 U									
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	15	10	16	14									
Tetrachloroethene	127-18-4	**5**	ug/L	0.5 U	0.5 U	0.5 U	0.5 U									
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L	2.5 U	2.5 U	2.5 U	2.5 U									
Trichloroethene	79-01-6	**5**	ug/L	0.47 J	0.32 J	0.43 J	0.52									
Vinyl chloride	75-01-4	**2**	ug/L	1.5	5	5.9	4.7									
Total cVOCs	***NA***	***NA***	***ug/L***	***16.97***	***16.19***	***23.83***	***20.52***									

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. NYS Ambient Water Quality Class GA Groundwater Quality Standards/Guidance Values; NYSDEC June 1998 Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1

Qualifier Key:

J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
UJ = The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.

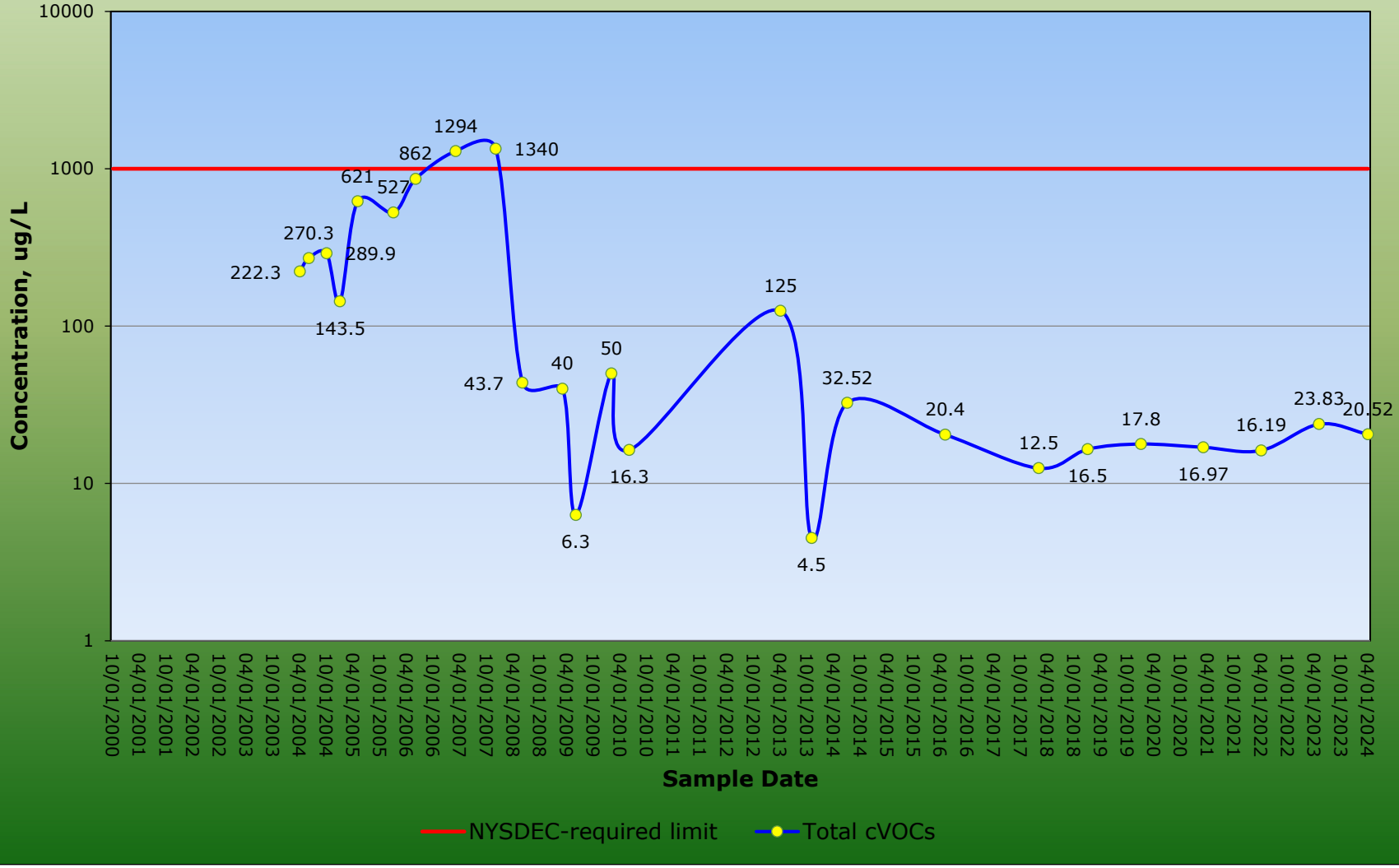
Color Code:

= chlorinated VOCs (cVOCs) are highlighted in BLUE
= concentration exceeds the NYSDEC Class GA AWQS/GV.
= no data from this event.

APPENDIX F

TOTAL cVOC CONCENTRATION vs. TIME
MW-13

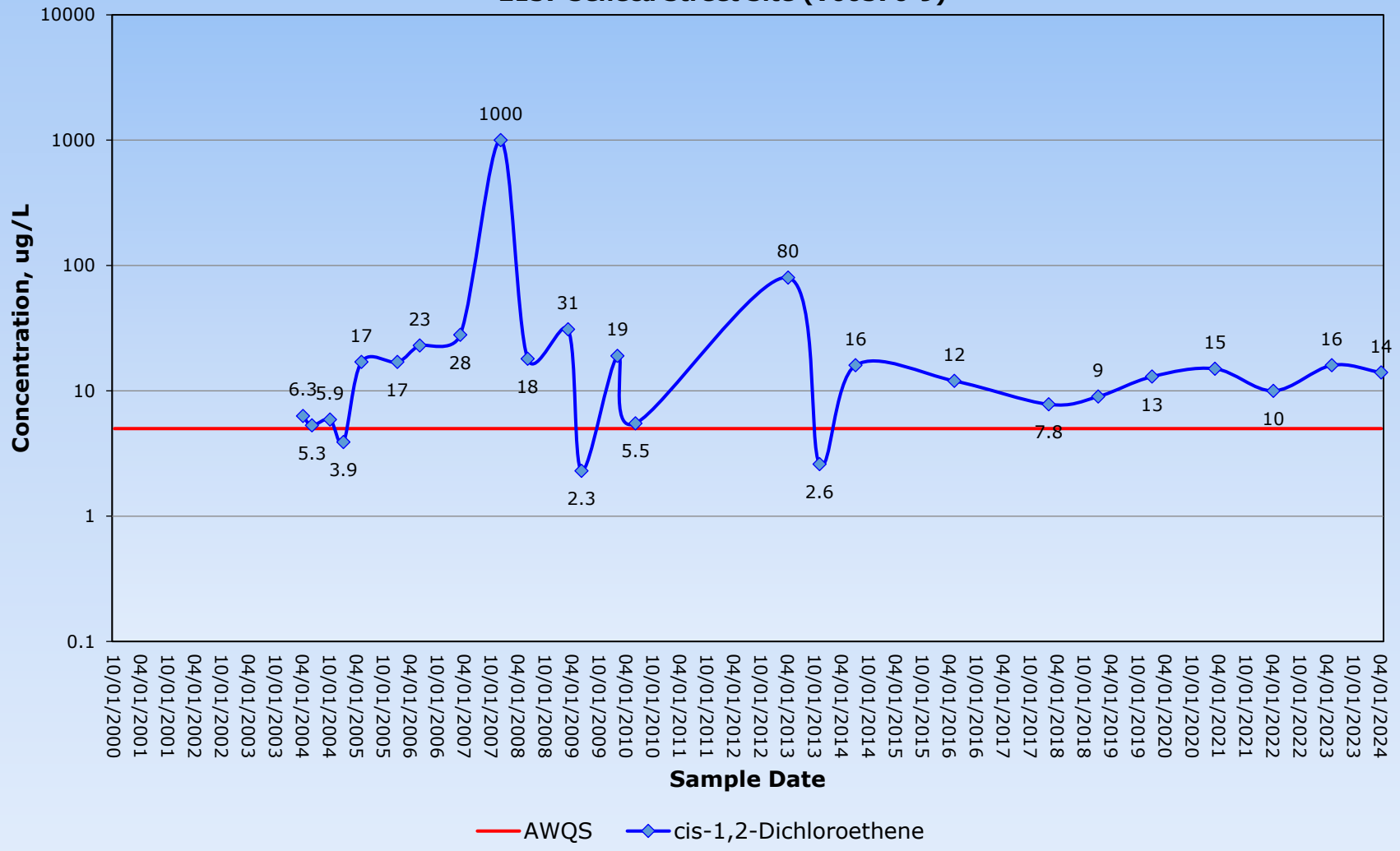
Periodic Review Report
2137 Seneca Street Site (V00370-9)



APPENDIX F

cis-1,2-DICHLOROETHENE CONCENTRATION vs. TIME
MW-13

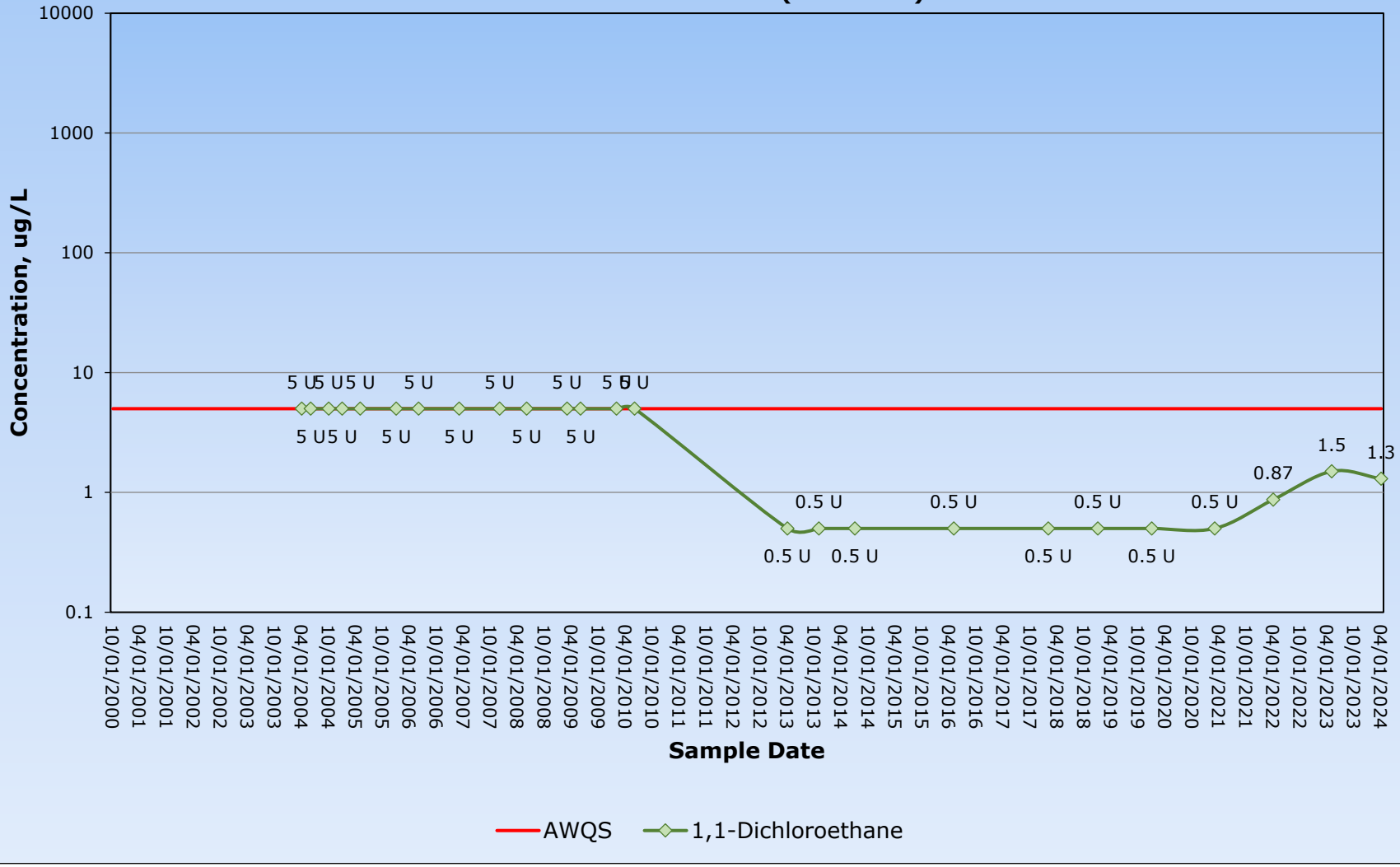
Periodic Review Report
2137 Seneca Street Site (V00370-9)



APPENDIX F

1,1-DICHLOROETHANE CONCENTRATION vs. TIME
MW-13

Periodic Review Report
2137 Seneca Street Site (V00370-9)

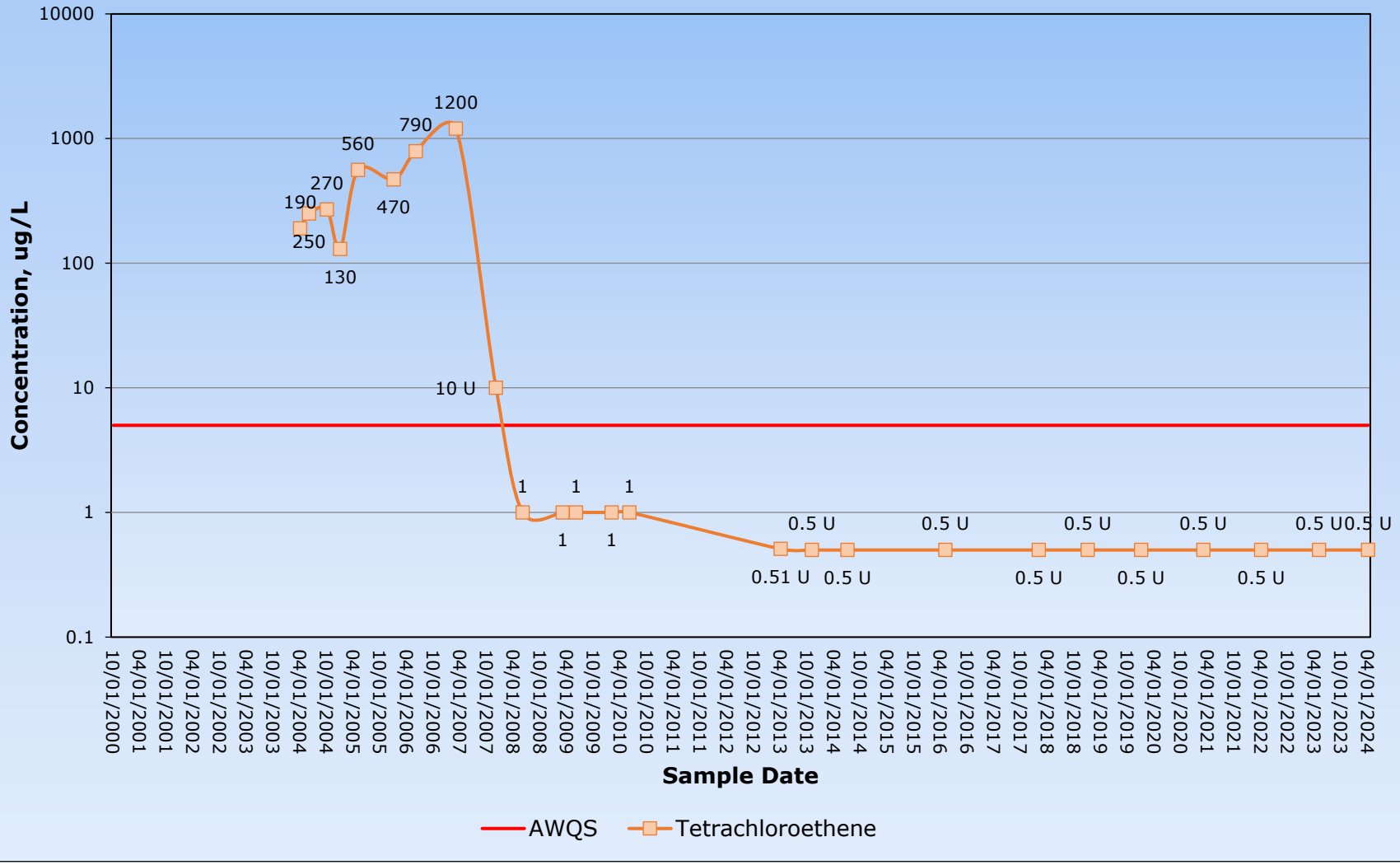


U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

APPENDIX F

TETRACHLOROETHENE (PCE) CONCENTRATION vs. TIME
MW-13

Periodic Review Report
2137 Seneca Street Site (V00370-9)

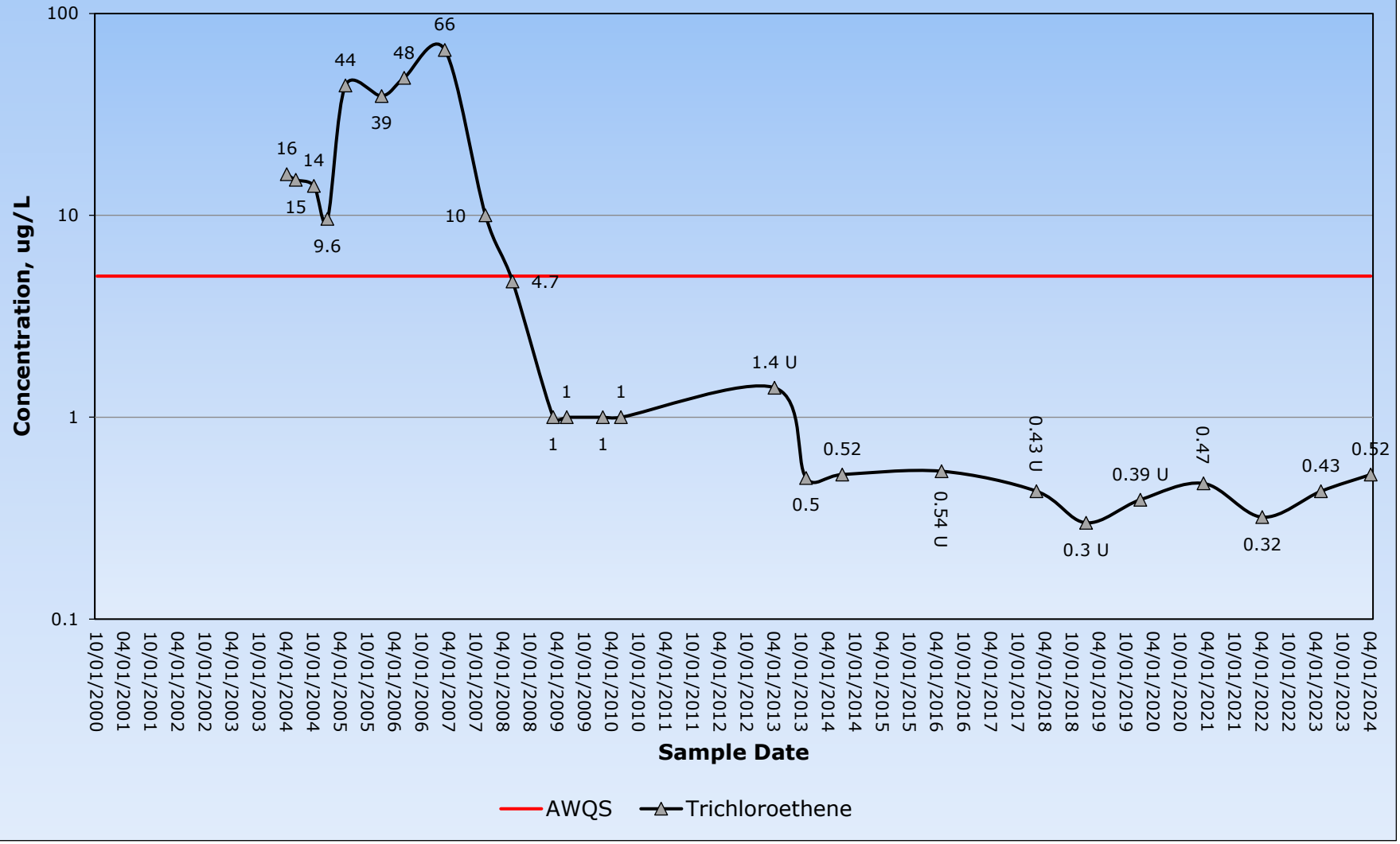


U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

APPENDIX F

TRICHLOROETHENE (TCE) CONCENTRATION vs. TIME
MW-13

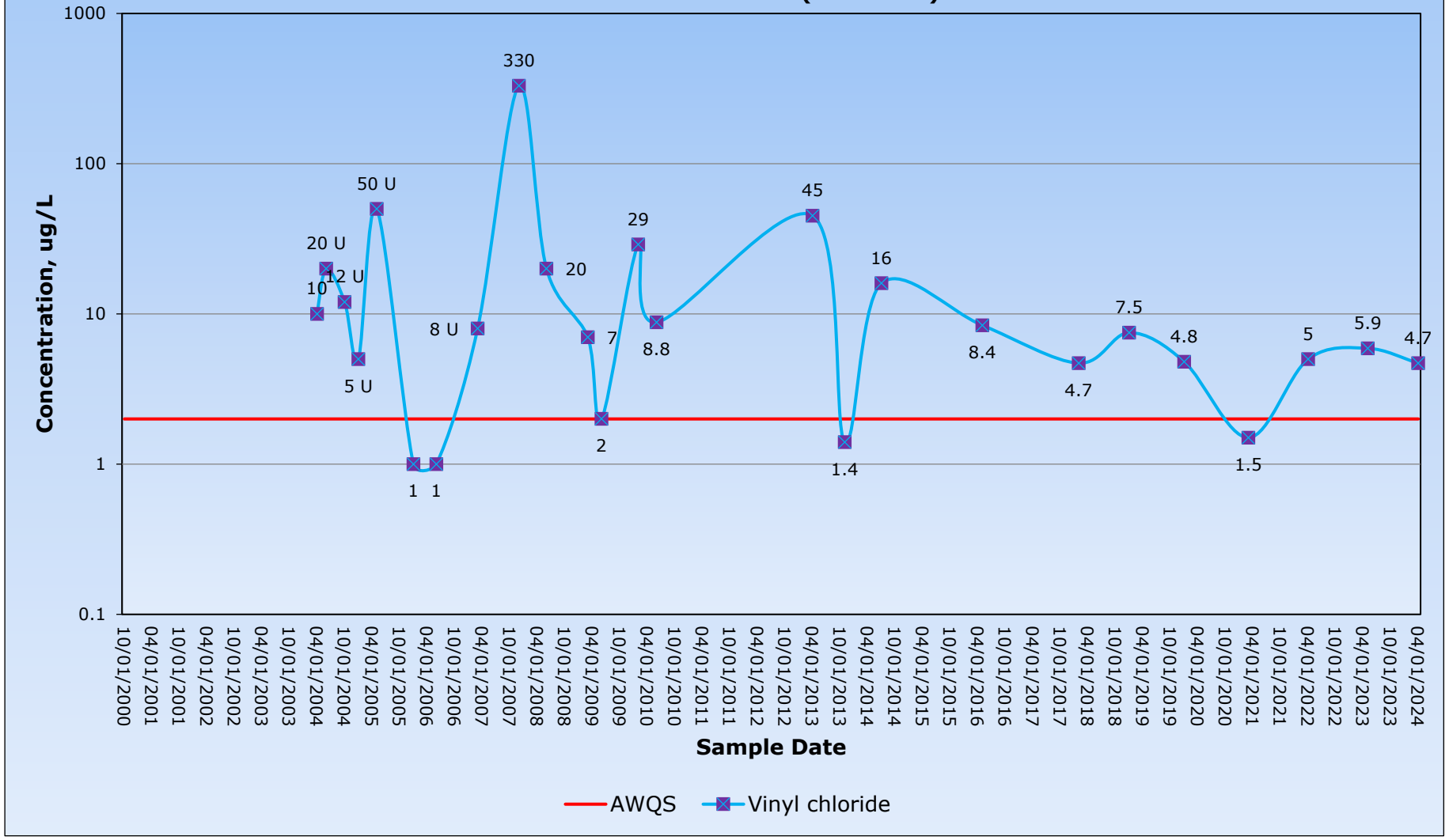
Periodic Review Report
2137 Seneca Street Site (V00370-9)



APPENDIX F

VINYL CHLORIDE (VC) CONCENTRATION vs. TIME
MW-13

Periodic Review Report
2137 Seneca Street Site (V00370-9)



U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

APPENDIX F

PRE- POST-INJECTION GROUNDWATER ANALYTICAL SUMMARY
PZ-A

Periodic Review Report
2137 Seneca Street Site (V00370-9)
Buffalo, New York

Parameter [1]	CasNum	NY-AWQS	Units	Monitoring Location, Sample Date												
				PZ-A												
				Pre-Injection					Post-Injection							
				10/04/2000 Qual	09/21/2001 Qual	11/28/2001 Qual	06/19/2002 Qual	09/25/2002 Qual	04/05/2004 Qual	06/15/2004 Qual	10/13/2004 Qual	01/10/2005 Qual	05/25/2005 Qual	01/12/2006 Qual	06/07/2006 Qual	03/20/2007 Qual
Volatile Organics by GC/MS - Westborough Lab																
1,1-Dichloroethane	75-34-3	**5**	ug/L												10 U	
1,1-Dichloroethene	75-35-4	**5**	ug/L												10 U	
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L												210 D	
Tetrachloroethene	127-18-4	**5**	ug/L												1500 D	
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L												50 U	
Trichloroethene	79-01-6	**5**	ug/L												240 D	
Vinyl chloride	75-01-4	**2**	ug/L												0.96 J	
Total cVOCs	***NA***	***NA***	***ug/L***												***1950.96***	

APPENDIX F

PRE- POST-INJECTION GROUNDWATER ANALYTICAL SUMMARY
PZ-A

Periodic Review Report
2137 Seneca Street Site (V00370-9)
Buffalo, New York

Parameter [1]	CasNum	NY-AWQS	Units	Monitoring Location, Sample Date												
				PZ-A												
				Post-Injection												
				12/05/2007 Qual	06/30/2008 Qual	03/17/2009 Qual	06/23/2009 Qual	02/11/2010 Qual	06/24/2010 Qual	04/26/2013 Qual	11/15/2013 Qual	07/31/2014 Qual	05/03/2016 Qual	02/08/2018 Qual	01/16/2019 Qual	01/14/2020 Qual
Volatile Organics by GC/MS - Westborough Lab																
1,1-Dichloroethane	75-34-3	**5**	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	0.5 U	20 U	3.6 U	10 U	1.8 U	2.5 U	10 U
1,1-Dichloroethene	75-35-4	**5**	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	0.5 U	20 J	3.6 U	10 U	1.8 U	2.5 U	10 U
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	4200 D	1400 D	420 D	150 D	43 D	65 D	1.2	2900	2800	1800	1300	1800	1800
Tetrachloroethene	127-18-4	**5**	ug/L	5.9 U	15 J	10	1 J	1	1	0.5 U	20 U	12 U	10 U	5 U	5 U	10 U
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L	50 U	50 U	50 U	50 U	50 U	50 U	2.5 U	100 U	62 U	50 U	25 U	25 U	50 U
Trichloroethene	79-01-6	**5**	ug/L	10 J	7.6 J	10	0.77 J	0.88 J	0.76	0.5 U	20	12 J	10 U	5 U	5 U	10 U
Vinyl chloride	75-01-4	**2**	ug/L	3000 D	770 D	690 D	200 D	93 D	150 D	1.7	2900	1500	1200	750	1400	1300
Total cVOCs	***NA***	***NA***	***ug/L***	***7210***	***2192.6***	***1130***	***351.77***	***137.88***	***216.76***	***2.9***	***5840***	***4312***	***3000***	***2050***	***3200***	***3100***

APPENDIX F

PRE- POST-INJECTION GROUNDWATER ANALYTICAL SUMMARY
PZ-A

Periodic Review Report
2137 Seneca Street Site (V00370-9)
Buffalo, New York

Parameter [1]	CasNum	NY-AWQS	Units	Monitoring Location, Sample Date												
				PZ-A												
				Post-Injection												
				03/11/2021 Qual	04/08/2022 Qual	05/10/2023 Qual	04/18/2024 Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual	TBD Qual
Volatile Organics by GC/MS - Westborough Lab																
1,1-Dichloroethane	75-34-3	**5**	ug/L	0.48 U	12 U	25 U	12 U									
1,1-Dichloroethene	75-35-4	**5**	ug/L	0.48 U	1 J	2.5 DJ	0.96 DJ									
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	78	730 D	1600 D	710 D									
Tetrachloroethene	127-18-4	**5**	ug/L	0.5 U	2.5 U	5 U	2.5 U									
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L	2.5 U	12 U	25 U	12 U									
Trichloroethene	79-01-6	**5**	ug/L	0.31 U	2.5 U	5 U	2.5 U									
Vinyl chloride	75-01-4	**2**	ug/L	70	400 D	940 D	440 D									
Total cVOCs	***NA***	***NA***	***ug/L***	***148***	***1131***	***2542.5***	***1150.96***									

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. NYS Ambient Water Quality Class GA Groundwater Quality Standards/Guidance Values; NYSDEC June 1998 Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1

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APPENDIX F

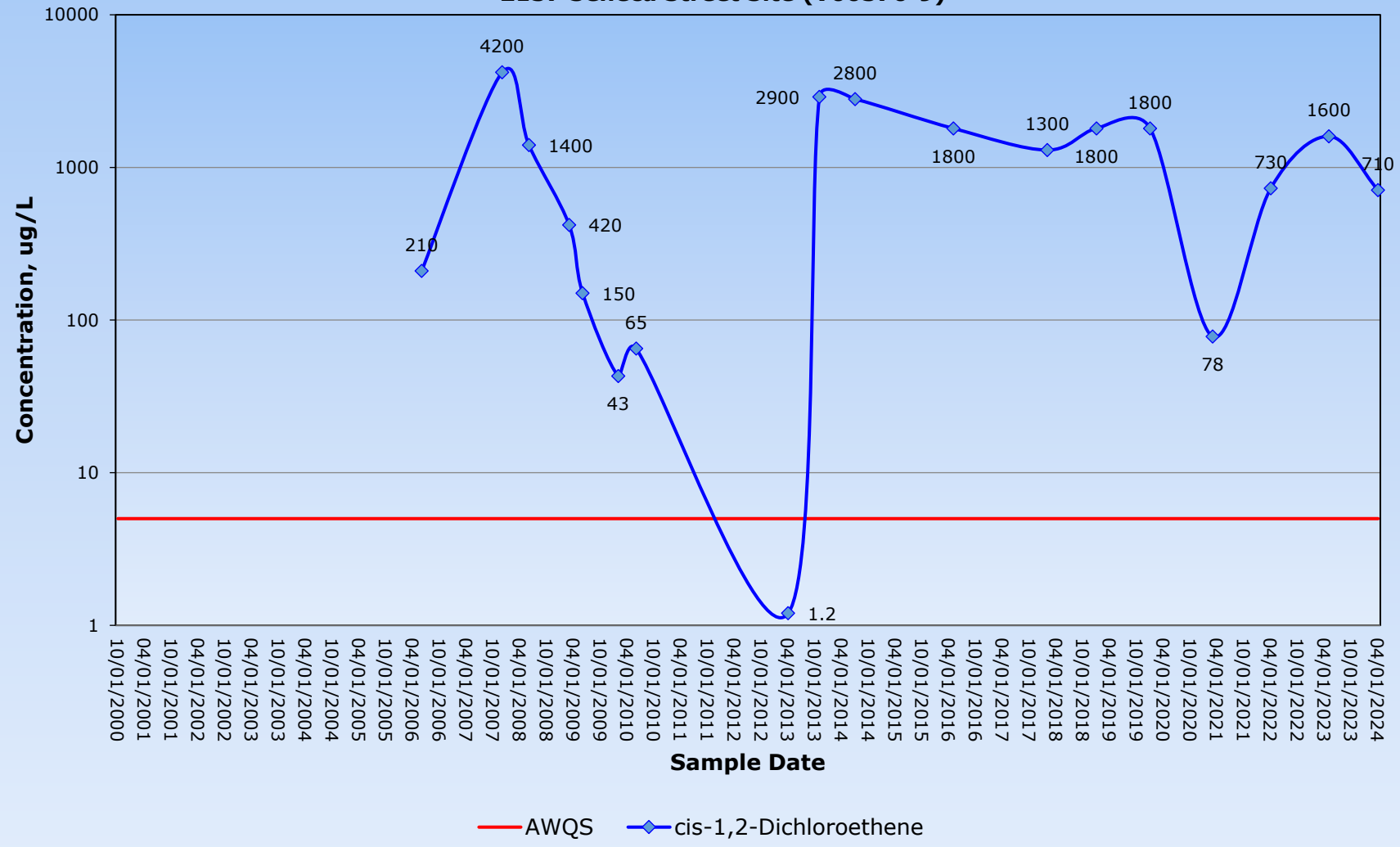
TOTAL cVOC CONCENTRATION vs. TIME
PZ-A

Periodic Review Report
2137 Seneca Street Site (V00370-9)

APPENDIX F

cis-1,2-DICHLOROETHENE CONCENTRATION vs. TIME
PZ-A

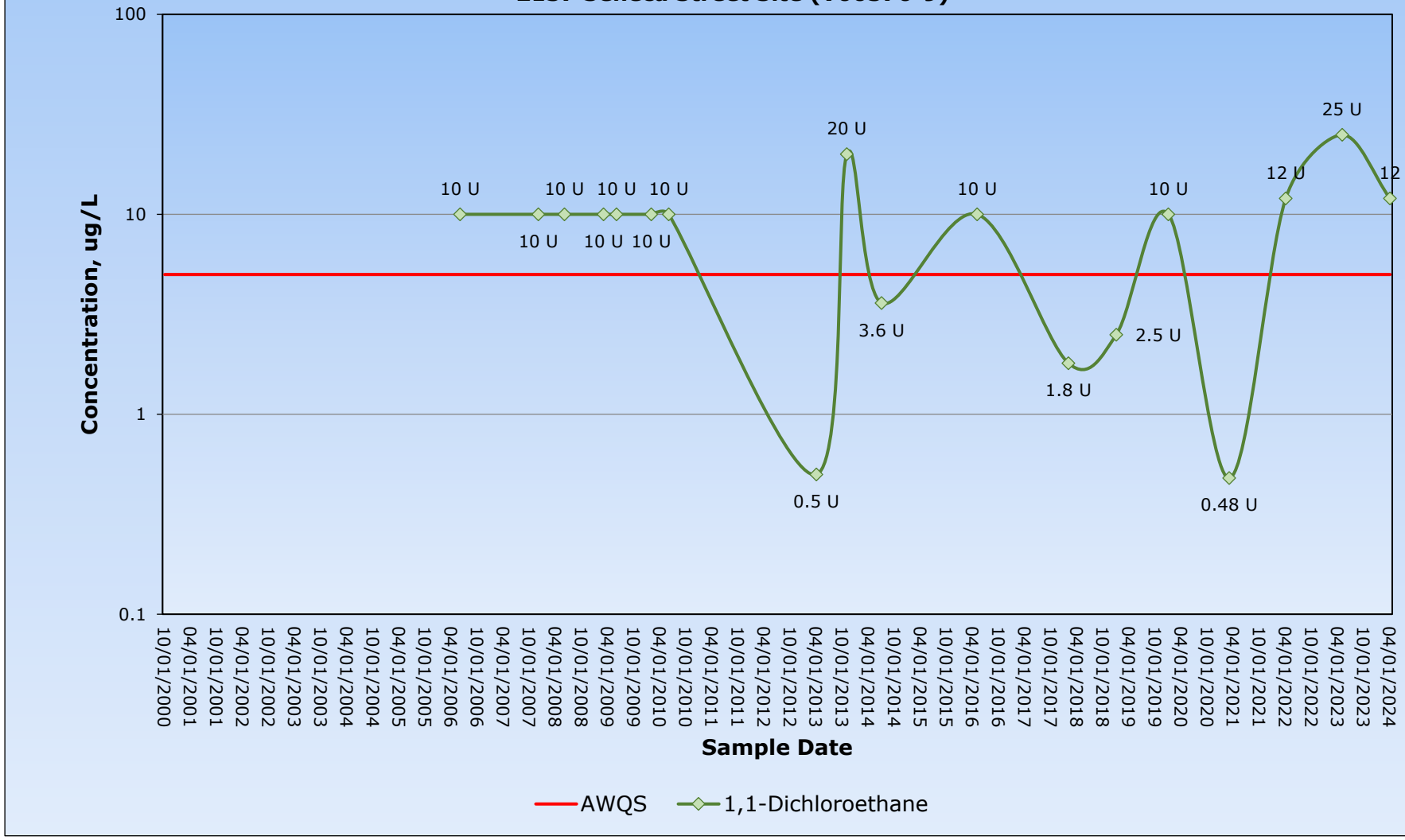
Periodic Review Report
2137 Seneca Street Site (V00370-9)



APPENDIX F

1,1-DICHLOROETHANE CONCENTRATION vs. TIME
PZ-A

Periodic Review Report
2137 Seneca Street Site (V00370-9)

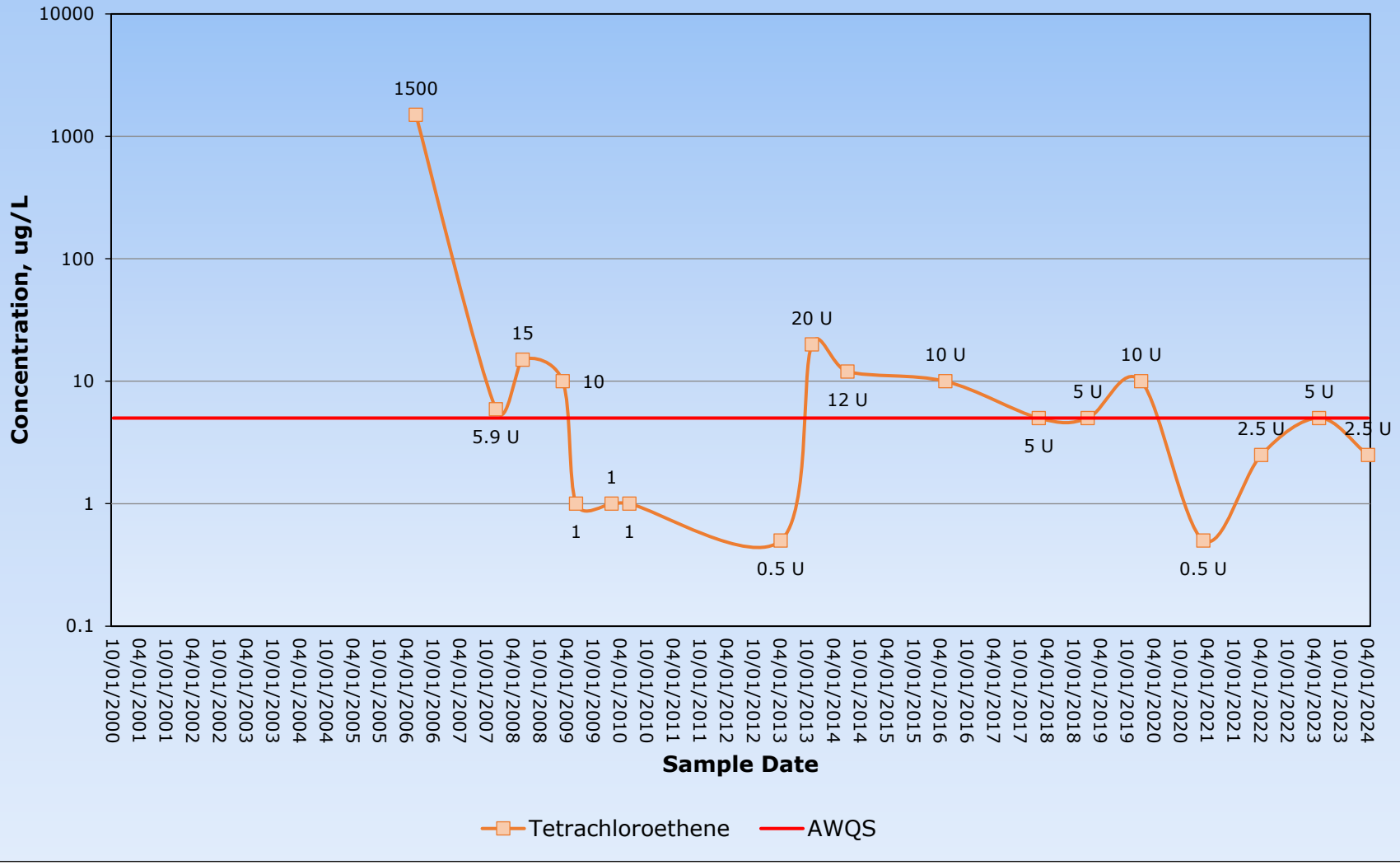


U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

APPENDIX F

TETRACHLOROETHENE (PCE) CONCENTRATION vs. TIME
PZ-A

Periodic Review Report
2137 Seneca Street Site (V00370-9)

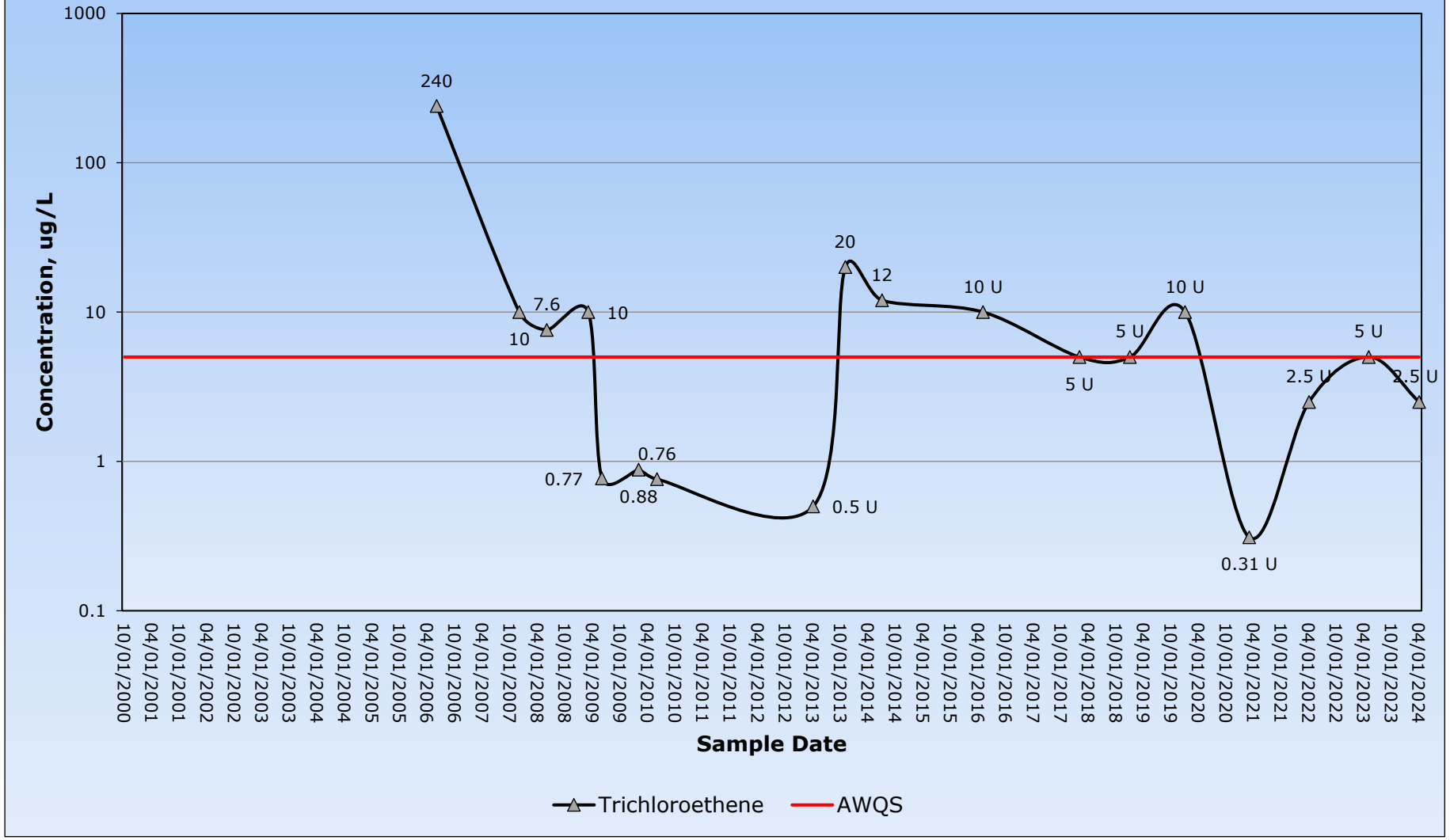


U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

APPENDIX F

TRICHLOROETHENE (TCE) CONCENTRATION vs. TIME
PZ-A

Periodic Review Report
2137 Seneca Street Site (V00370-9)



U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

APPENDIX F

VINYL CHLORIDE (VC) CONCENTRATION vs. TIME
PZ-A

Periodic Review Report
2137 Seneca Street Site (V00370-9)