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Periodic Review Report

April 30, 2021 to April 30, 2022

VCP Site No. V00370-9
2137 Seneca Street
Buffalo, New York

Prepared For:

Richard and Margaret Wieczorek (As Part Owners)
Shalimar, Florida

Date: June 2022

Project No.: B0607-021-001

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PERIODIC REVIEW REPORT
FORMER PIZZA HUT
(April 30, 2021 to April 30, 2022)

NYSDEC SITE NO. V00370-9
2137 SENECA STREET
BUFFALO, NEW YORK

June 2022 B0607-021-001

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
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List of Acronyms

ACMs	*Asbestos Containing Materials*
AIRS	*Aromatic Information Retrieval System*
ASD	*Active Subslab Depressurization*
AST	*Aboveground Storage Tank*
ASTM	*American Society for Testing and Materials*
BCA	*Brownfield Cleanup Agreement*
BCP	*Brownfield Cleanup Program*
BER	*Business Environmental Risk*
BTEX	*Benzene, toluene, ethylbenzene, and xylenes*
C/D	*Construction and Demolition*
CAMP	*Community Air Monitoring Plan*
CBS	*Chemical Bulk Storage*
CERCLA	*Comprehensive Environmental Response, Compensation, and Liability Act*
CERCLIS	*Comprehensive Environmental Response, Compensation, and Liability Information System*
CESQG	*Conditionally Exempt Small Quantity Generator*
CFR	*Code of Federal regulation*
CO2	*Carbon Dioxide*
COC	*Certificate of Completion*
CORRACTS	*Corrective Action*
CP	*Commissioner Policy*
CPG	*Certified Professional Geologist*
CREC	*Controlled Recognized Environmental Condition*
cVOC	*Chlorinated Volatile Organic Compound*
DER	*Division of Environmental Remediation*
DNAPL	*Dense Non-Aqueous Phase Liquid*
EC	*Engineering Control*
ECHO	*Enforcement and Compliance History Information*
ECL	*Environmental Conservation Law*
EDR	*Environmental Data Resources, Inc.*
ELAP	*Environmental Laboratory Approval Program*
ERNS	*Emergency Response & Notification System*
ESA	*Environmental Site Assessment*
ETPH	*Extractable Total Petroleum Hydrocarbons*
FBGS	*Feet below ground surface*
FIFRA	*Federal Insecticide, Fungicide, & Rodenticide Act*
FINDS	*Facility Index System/Facility Registry System*
FOIA	*Freedom of Information Act*
FOIL	*Freedom of Information Letter*
FOP	*Field Operating Procedure*
FTTS	*FIFRA/TSCA Tracking System*
FWS	*Fish and Wildlife Service*
GIS	*Geographic Information Systems*
HASP	*Health and Safety Plan*
HREC	*Historical Recognized Environmental Condition*
HSWDS	*Hazardous Waste Disposal Site*
HVAC	*Heating Ventilation and Air Conditioning*
IC	*Institutional Control*
ICIS	*Integrated Compliance Information System*
IRM	*Interim Remedial Measure*
LBP	*Lead-Based Paint*
LNAPL	*Light Non-Aqueous Phase Liquid*
LQG	*Large Quantity Generator*
LTANK	*Leaking Tank*
LUST	*Leaking Underground Storage Tank*
MOSF	*Major Oil Storage Facility*
MSDS	*Material Safety Data Sheets*
MTBE	*Methyl Tertiary Butyl Ether*
NA	*Not Available/Applicable*
NPDES	*National Pollutant Discharge Elimination System*
NPL	*National Priorities List*
NRCS	*Natural Resource Conservation Service*
NYCRR	*New York Codes, Rules, and Regulations*
NYSDEC	*New York State Department of Environmental Conservation*
NYSDOH	*New York State Department of Health*
NYSDOL	*New York State Department of Labor*
O&M	*Operations and Maintenance*
OM&M	*Operation, Maintenance, and Monitoring*
OPRA	*Open Public Records Act*
OSHA	*Occupational Safety and Health Administration*
PAH	*Polycyclic aromatic hydrocarbons*
PBS	*Petroleum Bulk Storage*
PCBs	*Polychlorinated Biphenyls*
pCi/L	*picocuries per Liter*
PE	*Professional Engineer*
PERC	*Tetrachloroethylene (perchloroethylene)*
PG	*Professional Geologist*
PID	*photoionization detector*
PPB	*parts per billion*
PPM	*parts per million*
PRP	*Potentially Responsible Party*
PRR	*Periodic Review Report*
PVEC	*Potential Vapor Encroachment Condition*
PVEC	*Potential Vapor Encroachment Condition*
QA/QC	*Quality Assurance/Quality Control*

List of Acronyms

QAPP	*Quality Assurance Project Plan*
RAO	*Remedial Action Objective*
RAWP	*Remedial Action Work Plan*
RCRA	*Resource Conservation and Recovery Act*
RSO	*Remedial System Optimization*
SAC	*State Assistance Contract*
SACM	*Suspect Asbestos Containing Material*
SCG	*Standards, Criteria, and Guidelines*
SCO	*Soil Cleanup Objective*
SEMS	*Superfund Enterprise Management System (FKA CERCLIS)*
SFMP	*Soil Fill Management Plan*
SHPO	*State Historic Preservation Office/Officer*
SHWS	*State Hazardous Waste Site*
SMP	*Site Management Plan*
SOP	*Standard Operating Procedure*
SOW	*Statement of Work*
SPCC	*Spill Prevention Control and Countermeasure*
SPDES	*State Pollution Discharge Elimination System*
SQG	*Small Quantity Generator*
SSD	*Sub-slab Depressurization*
SVE	*Soil Vapor Extraction*
SVI	*Soil Vapor Intrusion*
SVOC	*Semi volatile Organic Compound*
SWF/LF	*Solid Waste Facility/Landfill*
SWRCY	*Registered Recycling Facility List*
TAL	*Target Analyte List*
TCE	*Trichloroethylene*
TCL	*Target Compound List*
TCLP	*Toxicity Characteristic Leachate Procedure*
TRIS	*Toxic Chemical Release Inventory System*
TSCA	*Toxic Substance Control Act*
TSDF	*Treatment, Storage and Disposal Facility*
USDA	*United States Department of Agriculture*
USEPA	*United States Environmental Protection Agency*
USGS	*United States Geological Survey*
UST	*Underground Storage Tank*
VCP	*Voluntary Cleanup Program*
VEC	*Vapor Encroachment Condition*
VOC	*Volatile Organic Compound*

1.0 INTRODUCTION

Benchmark Civil/Environmental Engineering & Geology, PLLC (Benchmark) 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, 2021 to April 30, 2022**.

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 Avenue (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 is built for use 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 as of 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 performed during the current monitoring period as well as SVI assessment findings are presented in Section 3.2.

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. Road boxes for remaining wells MW-2 and MW-13 also required replacement during the current certifying period. Well repairs and decommissioning are discussed in Section 3.0.

Going forward, groundwater progress monitoring will continue annually at wells MW-4, MW-13, and PZ-A until each of the following is achieved:

- 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 the well 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 2022 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 Benchmark on April 8, 2022 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. Other than well decommissioning activities described in Section 3.4, no observable indication of intrusive activities was noted 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) and seasonal road salt/piled snow damage to landscape bushes along both Kingston Place and Seneca Street were identified during the April 2022 Site inspection. The parking lot, building walkways, and access roads all appeared to intact 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 2022 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.

3.2.1 Air Sampling & Analysis

In accordance with a NYSDEC-request and -approved SVI Assessment Work Plan (Ref. 7), Benchmark performed SVI assessment activities at the Site during the current reporting period to assess the effectiveness of the on-site passive SSDS. On March 18, 2022, Benchmark personnel capped the two roof vents with 4-inch J-plugs and on April 8, 2022, Benchmark personnel concurrently collected two indoor air samples and one outdoor air sample. Indoor air sample IA-1 was collected within the storage area of the building and indoor air sample IA-2 from the center of the general retail area. Outdoor air sample OA-1 was

collected upwind of the on-site building. Each air sample was collected via 2.7-liter evacuated Summa canister fitted with an 8-hour regulator. The valves on each canister were opened for the required 8-hour collection period. Final vacuum gauge readings of each canister were within the recommended vacuum range of -5 to -10 inches of mercury. Following sample collection, Benchmark personnel closed and capped each canister valve. The air samples were then transported, under chain-of-custody command, to Alpha Analytical, Inc. located in Tonawanda, New York, for analysis of Target Compound List (TCL) volatile organic compounds (VOCs) (Method TO-15) in accordance with USEPA SW-846 methodology. Air sample locations are shown on Figure 2. A photographic log of the April 2022 SVI Assessment is included in Appendix C.

3.2.2 Analytical Results

The analytical data summary report is presented in Appendix D. SVI assessment laboratory data are tabulated and summarized in Table 1. To facilitate data review, Table 1 presents the results in micrograms per cubic meter (ug/m^3) in lieu of parts per billion by volume (ppbv) relative to the eight cVOCs currently addressed under NYSDOH Guidance. To evaluate the potential risk posed by VOCs detected in indoor air, each reported concentration was compared to the following criteria in Table 1:

1. NYSDOH guidance criteria - 90th percentile concentrations identified in the *Summary of Indoor and Outdoor Levels of Volatile Organic Compounds from Fuel Oil Heated Homes in NYS, 1997 – 2003*, revised date November 14, 2005.
2. NYSDEC DAR-1, *Guidelines for the Evaluation and Control of ambient Air Contaminants Under Part 212*, August 10, 2016. Specifically, the Annual Guideline Concentrations (AGC) for toxic air contaminants from process emission sources in New York State. DAR-1 Guidelines establish an AGC to quantitatively assess a contaminant's potential to impact public health and the environment.
3. American Conference of Governmental Industrial Hygienists (ACGIH), 2017 Threshold Limit Values (TLVs). The TLV of a chemical substance is a level to which it is believed a worker can be exposed day after day for a working lifetime without adverse effects.
4. Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL). The PEL is a legal limit in the United States for exposure of an employee to a chemical substance or physical agent.

The outdoor ambient air sample results (OA-1) are also included in Table 1 to provide background data.

3.2.3 Data Usability

In accordance with our SVI Work Plan, the laboratory analytical data was independently assessed and as required, submitted for independent review. Ms. Judy Harry of Data Validation Services (DVS) located in North Creek, New York performed the data usability summary assessment of the soil and groundwater samples collected during this investigation. The validation involved a review of the summary form information and sample raw data, and a limited review of associated QC raw data. Specifically, the following items were reviewed:

- Data Completeness
- Case Narrative
- Custody Documentation
- Canister Pressures
- Holding Times
- Internal Standard Recoveries
- Method Blanks
- Laboratory and Blind Field Duplicates
- Laboratory Control Samples (LCSs)
- Instrumental Tunes
- Calibration Standards
- Method Compliance
- Clean Canister Certification
- Sample Result Verification

Data evaluation was performed by DVS using the most current methods and quality control criteria from the USEPA's Contract Laboratory Program (CLP) *National Functional Guidelines for Organic Data Review* (Ref. 11) and *National Functional Guidelines for Inorganic Data Review (Ref. 12)*, guidance from the USEPA Region 2 SOP HW-31, with consideration for the requirements of the analytical methodology, as well as professional judgment. Appendix E includes the Data Usability Summary Report (DUSR) that was prepared in accordance with

Appendix 2B of NYSDEC's DER-10 guidance. Those items listed above that demonstrated deficiencies are discussed in detail in the DUSR.

In summary, sample processing was primarily conducted in compliance with, and adherence to, protocol requirements. Sample results are usable either as reported, or with minor qualification. In general, data completeness and representativeness are acceptable, and sample accuracy and precision are good. None of the analytical results were edited or qualified per the DUSR. Appendix D includes the analytical data package for this assessment.

3.2.4 SVI Assessment Findings

Based on a review of the analytical results presented in Table 1, the following observations of indoor air quality when the passive SSDS was rendered inoperable (i.e., roof top vents capped) include:

- Of the eight NYSDOH-regulated cVOCs, the following were detected:
  - 1,1-Dichloroethene (1,1-DCE) at IA-1 and IA-2.
  - Carbon Tetrachloride (CT) at IA-1, IA-2, and OA-1.
  - Methylene Chloride (MC) at IA-1.
  - Tetrachloroethene (PCE) at IA-1 and IA-2.
  - Trichloroethene (TCE) at IA-1 and IA-2.
- Indoor air sample results were compared to their respective NYSDOH Matrices (A, B, or C) depending on the cVOC detected. Three Matrix A cVOCs (1,1-dichloroethene, carbon tetrachloride, and TCE) and two Matrix B cVOCs (methylene chloride and PCE) were detected, with no Matrix C cVOCs (vinyl chloride) detected.
- Air conditioning (e.g., Freon-based compounds) and general cleaning-based constituents (e.g., acetone and alcohols) were detected at both indoor air sample locations IA-1 and IA-2 as well as outdoor air sample OA-1. Petroleum-based compounds (i.e., benzene and trimethylbenzenes) were only detected in the indoor air samples.
- VOC concentrations for both indoor air samples IA-1 and IA-2 were below regulatory guidance criteria for all analyzed compounds except the following, which were detected at concentrations above the identified guidance criteria.

- Reported concentrations were above both the NYSDOH Indoor Air 90th Percentile and DAR-1 AGC for the following compounds:
  - 1,2-Dichloroethane at both IA-1 and IA-2
  - 1,4-Dichlorobenzene at both IA-1 and IA-2
  - 4-Methyl-2-Pentanone (MIBK) at both IA-1 and IA-2
  - Carbon tetrachloride at both IA-1 and IA-2
  - PCE at only IA-1

- Reported concentrations were only above the NYSDOH Indoor Air 90th Percentile for the following compounds:
  - Acetone at both IA-1 and IA-2
  - Chloroform only at IA-1
  - Ethanol at both IA-1 and IA-2
  - Styrene at both IA-1 and IA-2
  - PCE only at IA-1

- Reported concentrations were only above the NYSDOH DAR-1 AGC for the following compounds:
  - 1,2,4-Timethlybenzene at both IA-1 and IA-2
  - Benzene at both IA-1 and IA-2
  - TCE only at IA-1

Although subslab vapor samples were not collected as part of this assessment, a conservative assumption requiring *MITIGATION* per Matrix A would include a subslab vapor concentration of 6 to 60 ug/m^3 and a concurrent indoor air sample concentration of 1 ug/m^3 and above. Similarly, *MITIGATION* per Matrix B would include a subslab vapor concentration of 100 to < 1,000 ug/m^3 and a concurrent indoor air sample concentration of 10 ug/m^3 and above. As presented in Table 1, indoor air sample results for detected Matrix A and Matrix B cVOCs were all well below their respective indoor air *MITIGATION* limits with one exception, carbon tetrachloride per Matrix A, which was reported at a concentration slightly above the 1 ug/m^3 threshold for both indoor air samples (2.59 ug/m^3 at IA-1 and 2.05 ug/m^3 at IA-2). It should be noted that carbon tetrachloride is a common air contaminant in urban settings and as such, was also detected in the outdoor air sample OA-1 at a concentration of 0.566 ug/m^3. Additionally, the passive SSDS was capped prior to sample collection which contributed to this elevated concentration.

Based on the results of the SVA at the Site, Benchmark offers the following conclusions/recommendations:

- 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.
- Benchmark recommends the SSDS remain passive with continued annual inspections to ensure the roof vents remain intact, unobstructed, and open to discharge via roof-mounted vents.

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 8, 2022, Benchmark 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. 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 for TCL VOC analysis. Static groundwater elevations are summarized in Table 2 and a summary of the April 2022 groundwater monitoring field and laboratory data are presented in Table 3. Appendix F includes the field forms (Appendix F1) and analytical data package (Appendix

F2). 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 2. A shallow groundwater isopotential map, presented as Figure 3, was prepared using data from the April 8, 2022 groundwater elevations. The groundwater flow, as depicted on Figure 3, indicates shallow groundwater flow is radial across the site with a 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. Lack of additional shallow groundwater 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 2022 groundwater monitoring event are summarized in Table 3. 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. Initial examination of Table 3 reveals individual exceedances of 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 was 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 1,390 ug/L and 1,131 ug/L, respectively. Since 2000 and as shown in Appendix G, the 2022 groundwater monitoring results indicate significant breakdown of parent cVOCs trichloroethene and tetrachloroethene to concentrations at or well below their respective Class GA Ambient Water Quality Standards (AWQSs) compared to pre-IRM concentrations. 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 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 2022). The plots (and tabulated data) presented in Appendix G, represent nearly 22 years of groundwater data which visually demonstrate the near-complete removal of cVOCs in groundwater and that cVOC concentrations in well MW-13 has 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 trend. Plotted data for well MW-4 indicates a statistical downward trend toward the NYSDEC-required concentration. Plotted data for well PZ-A indicates a similar downward concentration trend albeit with total cVOC concentrations periodically above and mostly 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 2023.

3.3.3 NYSDEC EQuIS Deliverables

On April 20, 2022, Benchmark submitted 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. To date, Benchmark 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.

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*). To avoid unnecessary damage to the existing asphalt cover, the bottom of each well was breached with a string of weighted drill rods and grouted in place. Upon grout return at the surface and allowing sufficient time for settlement, each abandoned well was topped with grout, the road-box removed, and the remaining anulus filled with a concrete surface completion. The well decommissioning records for each monitoring well are presented in Appendix H. Photographs of well decommissioning activities are presented in Appendix C. With the exception of road box replacement at wells MW-4 and MW-13, no other intrusive activities were performed during the current reporting period (April 30, 2021 to April 30, 2022).

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) and seasonal road salt/piled snow damage to landscape bushes along both Kingston Place and Seneca Street were identified. Except for decommissioning of wells MW-2 and MW-4A and road box replacement at wells MW-4 and MW-13, no other intrusive activities were performed during the reporting period. The Site owner and Benchmark's QEP have certified that the IC/ECs are compliant (see Section 5.0 and Appendix A).

- 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.

- Indoor air sample results indicate that when the passive SSDS is rendered inoperable (i.e., roof top vents capped), cVOC impacts to indoor air quality can occur.

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 G). Albeit slightly above the required limit, the reported total cVOC concentrations for well MW-4 have exhibited a statistically significant downward trend, whereas the total cVOC concentrations at well PZ-A fluctuate 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, annual groundwater monitoring of wells MW-4 and PZ-A will need to continue.

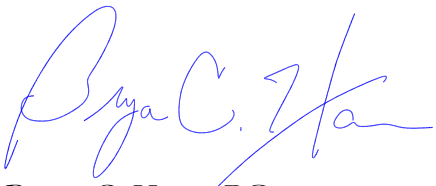
- **Continue sampling monitoring well MW-13 on an annual basis.** Although monitoring well MW-13 has consistently reported total cVOC concentrations well below the NYSDEC-required concentration of 1,000 ug/L for fourteen

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 G). 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 to verify the IC/ECs employed at the Site are unchanged, especially the passive SSDS, from the original design and/or previous certifications and should therefore 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 (As Part Owners).



Bryan C. Hann, PG
Senior Project Manager

6.0 DECLARATION/LIMITATION

Benchmark Civil/Environmental Engineering & Geology, PLLC 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 Benchmark Civil/Environmental Engineering & Geology, PLLC.

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

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CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC

TABLE 1

SUMMARY OF LABORATORY INDOOR & OUTDOOR AIR RESULTS

Periodic Review Report - April 30, 2021 to April 30, 2022
2137 Seneca Street Site
Site No. V-00370-9
Buffalo, New York

Parameter [1]	CasNum	Units	NYSDOH Indoor 90th Percentile Comparison [2]	DAR-1 AGC [3]	ACGIH 2017 TLV [4]	OSHA PEL [5]	Sample ID, Sample Date, Lab ID			NYSDOH Matrix	Indoor Air Concentration (ug/m3)	Subslab Concentration (ug/m3)	Action
							IA-1 L2138527-01 7/16/2021	IA-2 L2169706-01 12/16/2021	OA-1 L2138527-02 7/16/2021				
TO-15 Volatile Organic Compounds (VOCs)													
1,1-Dichloroethene	75-35-4	ug/m3	0.25	NV	NV	NV	0.167	0.119	0.079 U	A	>= 1	6 to <60	MITIGATE
1,2,4-Trimethylbenzene	95-63-6	ug/m3	9.5	6	NV	NV	7.23	6.69	0.983 U				
1,2-Dichloroethane	107-06-2	ug/m3	0.25	0.038	10,000	2,000	2.59	2.15	0.809 U				
1,3,5-Trimethylbenzene	108-67-8	ug/m3	3.6	6	NV	NV	1.81	1.66	0.983 U				
1,4-Dichlorobenzene	106-46-7	ug/m3	1.3	0.09	10,000	110,000	4.26	4.03	1.2 U				
2-Butanone (Methyl Ethyl Ketone, MEK)	78-93-3	ug/m3	16	5,000	200,000	590,000	4.6	3.51	1.47 U				
4-Ethyltoluene	622-96-8	ug/m3	NV	NV	NV	NV	1.51	1.51	0.983 U				
4-Methyl-2-pentanone (Methyl Isobutyl Ketone, MIBK)	108-10-1	ug/m3	2.2	2.2	20,000	410,000	4.96	3.1	2.05 U				
Acetone	67-64-1	ug/m3	110	30,000	250,000	2,400,000	196	165	7.22				
Benzene	71-43-2	ug/m3	15	0.13	500	10,000	0.716	0.706	0.639 U				
Carbon tetrachloride	56-23-5	ug/m3	0.8	0.17	5,000	10,000	2.59	2.05	0.566	A	>= 1	6 to <60	MITIGATE
Chloroform	67-66-3	ug/m3	1.4	14.7	10,000	240,000	1.81	1.39	0.977 U				
Chloromethane (Methyl Chloride)	74-87-3	ug/m3	3.3	90	50,000	100,000	2.68	2.31	1.22				
Dichlorodifluoromethane (Freon 12)	75-71-8	ug/m3	15	100	1,000,000	4,950,000	2.6	2.28	2.46				
Ethanol (Ethyl Alcohol)	64-17-5	ug/m3	1,400	45,000	1,000,000	1,900,000	2300 D	2300 D	10.9				
Ethyl Acetate	141-78-6	ug/m3	NV	3,400	400	1,400,000	8.47	7.39	1.8 U				
Ethylbenzene	100-41-4	ug/m3	7.3	1,000	20,000	435,000	2.45	2.17	0.869 U				
Heptane (n-Heptane)	142-82-5	ug/m3	19	3,900	400,000	2,000,000	0.988	0.889	0.82 U				
Isopropanol (Isopropyl Alcohol)	67-63-0	ug/m3	NV	7,000	200,000	980,000	39.8	33.4	1.23 U				
Methylene chloride (Dichloromethane)	75-09-2	ug/m3	22	60	50	25,000	1.76	1.74 U	1.74 U	B	>= 10	100 to <1000	MITIGATE
n-Hexane	110-54-3	ug/m3	18	700	50,000	50,000	2.15	1.92	0.705 U				
o-Xylene	95-47-6	ug/m3	7.6	100	100,000	100,000	5.13	4.65	0.869 U				
p/m-Xylene	179601-23-1	ug/m3	12	100	100,000	100,000	7.21	6.6	1.74 U				
Styrene	100-42-5	ug/m3	1.3	1,000	20,000	100,000	3.52	2.96	0.852 U				
Tertiary butyl Alcohol	75-65-0	ug/m3	NV	720	100,000	300,000	5.67	4.24	1.52 U				
Tetrachloroethene	127-18-4	ug/m3	2.9	3.8	25,000	25,000	4.32	3.57	0.136 U	B	>= 10	100 to <1000	MITIGATE
Tetrahydrofuran	109-99-9	ug/m3	3.3	NA	NA	NA	1.47 U	1.75	1.47 U				
Toluene	108-88-3	ug/m3	58	5,000	20,000	10,000	16.5	14.7	0.754 U				
Trichloroethene	79-01-6	ug/m3	0.5	0.2	10,000	25,000	0.231	0.15	0.107 U	A	>= 1	6 to <60	MITIGATE
Trichlorofluoromethane (Freon 11)	75-69-4	ug/m3	17	5,000	1,000,000	5,600,000	1.26	1.25	1.17				

Notes:
1. Only those parameters detected above the method detection limit, at a minimum of one location, are presented in this table.
2. NYSDOH Guidance Criteria - Indoor Air 90th percentile concentrations presented in "Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes" published by the NYSDOH and revised November 14, 2005; updated December 2006.
3. NYSDEC Division of Air Resources (DAR) Annual Guideline Concentrations (AGC) for toxic air contaminants emitted from process emission sources in NYS.
4. American Conference of Governmental Industrial Hygienists, 2017 Threshold Limit Values.
5. Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL).
6. Outdoor Ambient sample results included on this table to provide background data.

Definitions:
D = Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrationsof the analyte.
U = compound concentration below reporting limit.
NV = no value

Color Code:
blue = one of eight compounds regulated by the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006 / June 2007 / May 2017).
= concentration exceeds the NYSDOH Summary of Indoor Levels of VOC for Fuel Oil Heated Homes - 90th percentile (2005).
= concentration exceeds the DAR-1 AGC.
= concentration exceeds the NYSDOH Summary of Indoor Levels of VOC for Fuel Oil Heated Homes - 90th percentile (2005) and DAR-1 AGC.

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TABLE 2

SUMMARY OF GROUNDWATER ELEVATIONS

Periodic Review Report - April 30, 2021 to April 30, 2022
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	04/08/2022	589.47	6.65	582.82
MW-11	04/08/2022	589.48	NM	NM
MW-13	04/08/2022	589.77	6.81	582.96
PZ-A	04/08/2022	589.86	7.04	582.82

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

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TABLE 3

SUMMARY OF FIELD & LABORATORY GROUNDWATER RESULTS

Annual Groundwater Monitoring Event
2137 Seneca Street Site
Buffalo, New York

Parameter [1]	CasNum	NY-AWQS [2]	Units	Monitoring Location, Sample Date, Lab Data Package No.		
				MW-4 04/08/2022 L2218570-01 Qual	MW-13 04/08/2022 L2218570-02 Qual	PZ-A 04/08/2022 L2218570-03 Qual
Field Measurements						
Field pH	NA	**6.5 - 8.5**	S.U	7.11	6.66	6.91
Temperature	NA	-	DEG C	10.9	10.6	11.1
Specific Conductance	NA	-	umhos/cm	3827	1592	3877
Turbidity	NA	-	NTU	107	538	84.5
Dissolved Oxygen	NA	-	mg/L	4.90	3.24	3.03
Redox Potential	NA	-	mV	-116	2	-97
Appearance & Odor	NA	-	visual/olfactory	*sl. turbid, none*	*turbid, none*	*sl. turbid, none*
Volatile Organics by GC/MS						
1,1-Dichloroethane	75-34-3	**5**	ug/L	25 U	0.87 J	12 U
1,1-Dichloroethene	75-35-4	**5**	ug/L	5 U	0.5 U	1.0 DJ
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	980 D	10	730 D
Methyl tert butyl ether	1634-04-4	**10**	ug/L	25 U	1.6 J	12 U
Trichloroethene	79-01-6	**5**	ug/L	5 U	0.32 J	2.5 U
Vinyl chloride	75-01-4	**2**	ug/L	410 D	5.0	400 D
Total cVOCs	***NA***	***NA***	***ug/L***	***1390***	***16.19***	***1131.0***

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

Qualifier Key:

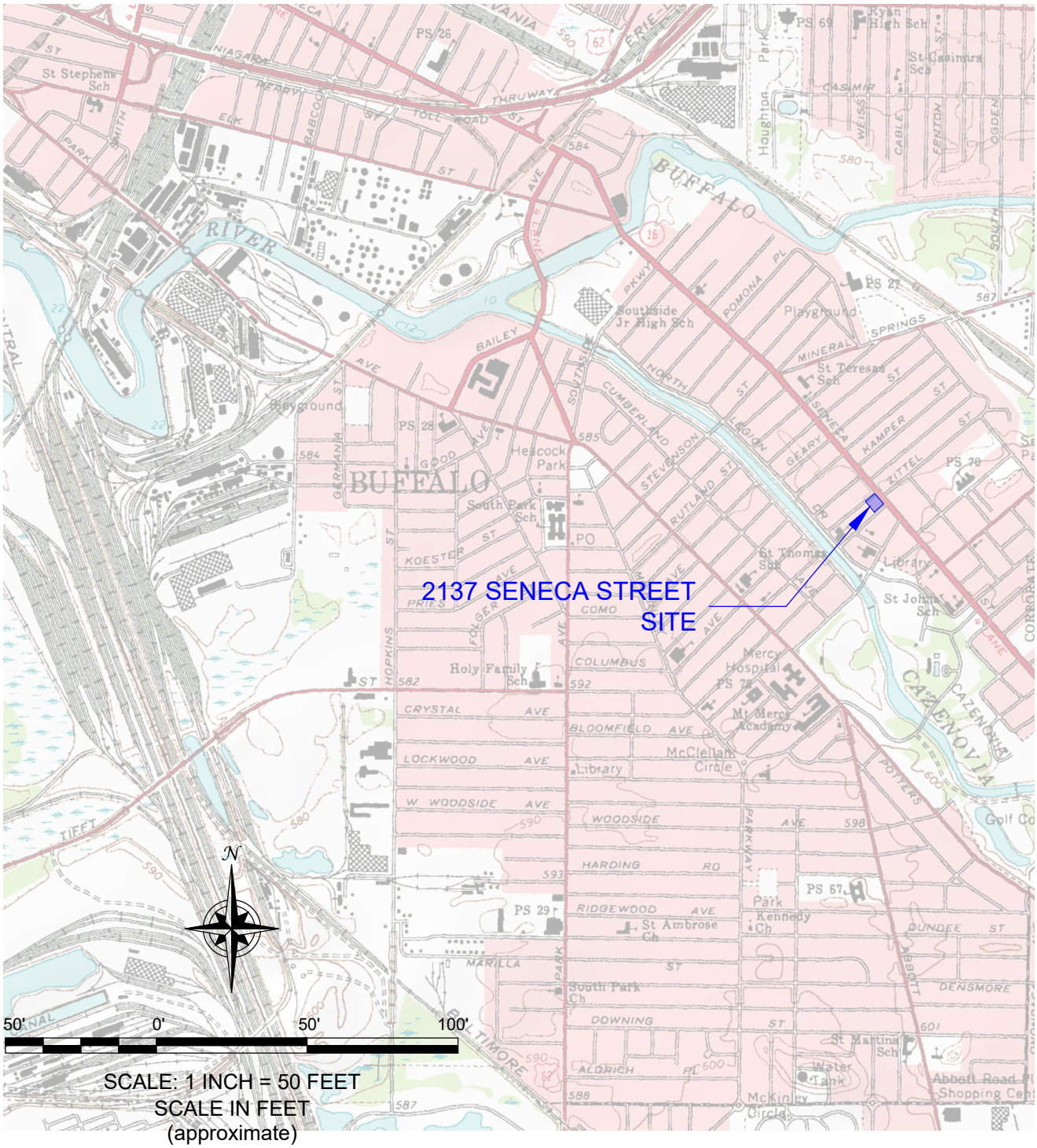
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

Color Code:

= concentration exceeds the NYSDEC Class GA AWQS/GV.

FIGURES

FIGURE 1



BENCHMARK
CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: B0607-021-001

DATE: APRIL 2022

DRAFTED BY: BCH

SITE LOCATION & VICINITY MAP

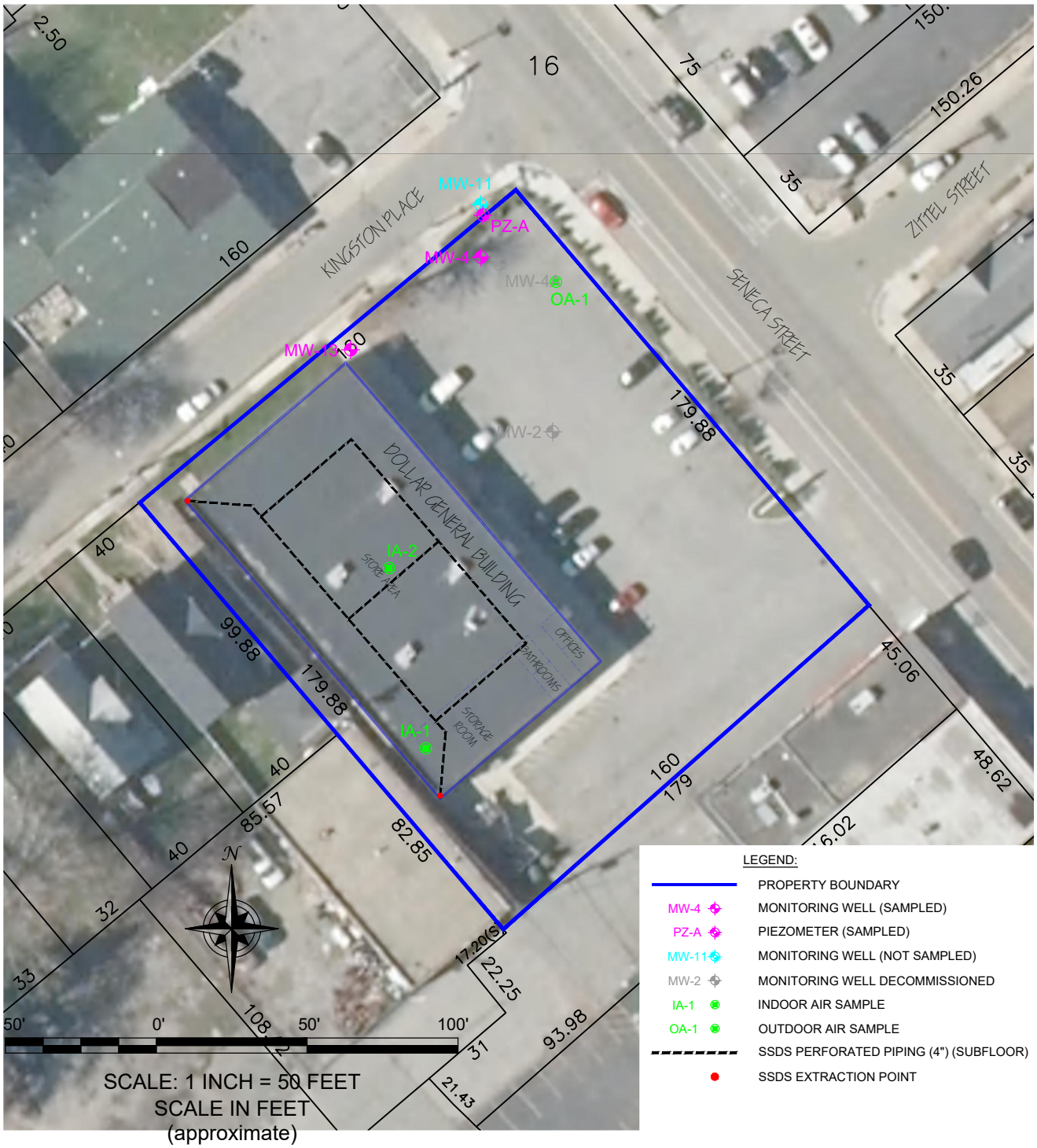
PERIODIC REVIEW REPORT

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

PREPARED FOR

RICHARD & MARGARET WIECZOREK (OWNERS)

FIGURE 2



BENCHMARK
CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: B0607-021-001

DATE: APRIL 2022

DRAFTED BY: BCH

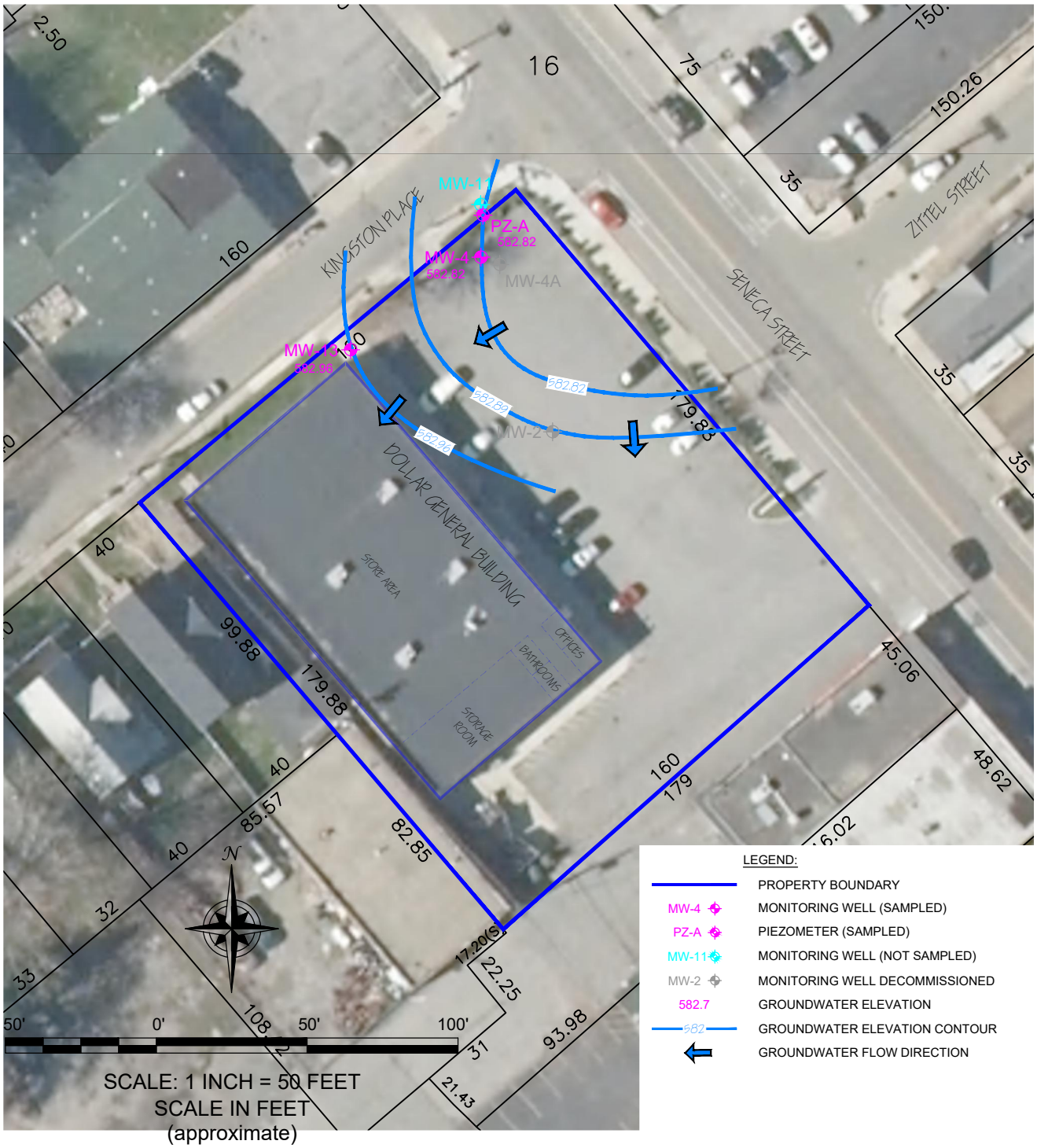
SITE PLAN

PERIODIC REVIEW REPORT

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

PREPARED FOR

RICHARD & MARGARET WIECZOREK (OWNERS)



BENCHMARK
CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: B0607-021-001

DATE: APRIL 2022

DRAFTED BY: BCH

SHALLOW GROUNDWATER ISOPOTENTIAL MAP - APRIL 8, 2022

PERIODIC REVIEW REPORT

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

PREPARED FOR
RICHARD & MARGARET WIECZOREK (OWNERS)

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, 2021 to April 30, 2022

	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 at 2137 Seneca St, Buffalo, N.Y. 14210,
print name print business address

am certifying as Owners Richard M. & Margaret A. Wieczorek (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

06/07/2022
Date

EC CERTIFICATIONS

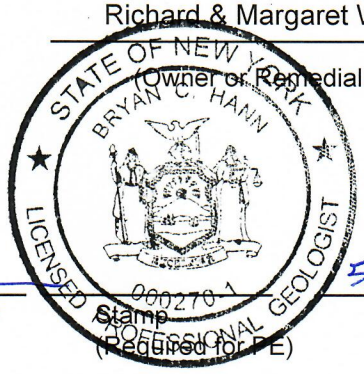
Box 7

Professional Engineer 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, PG (print name) at 2558 Hamburg Turnpike, Suite 300, Buffalo, NY 14218 (print business address),

am certifying as a Professional Engineer, Professional Geologist (PG), or Qualified Environmental Professional (QEP), for the Richard & Margaret Wieczorek (Owner or Remedial Party)



Bryan C Hann — 5/1/2022

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification — Stamp (Required for PE) — Date

APPENDIX B

SITE-WIDE INSPECTION FORM

2022

SITE-WIDE INSPECTION FORM

Inspector's Name: Bryan Hamm (BM)

Date and Time of Inspection: 4/8/2022

Date of Last Inspection: 3/11/2021

Purpose for Inspection: Annual/Periodic: Annual
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?** X Yes __ No
   Inspection Date: 4/8/2022 (Please attach copy(s) of inspection form)
2. **Has groundwater monitoring performed since the past inspection?** X Yes __ No
   Monitoring Dates: 4/8/2022
3. Remedial Action Required None
4. Inspector's Signature Bryan C Hamm

STATE OF NEW YORK BRYAN C. HAMM PROFESSIONAL GEOLOGIST

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

INSPECTION FORM
COVER SYSTEM

Inspector's Name Bryan Hann (BCH)

Date and Time of Inspection 4/8/2022

Date of Last Inspection 3/11/2021

Purpose for Inspection: Annual/Periodic: Annual

Post-excavation or surface repair: ~~none~~ NA

After significant weather events: NA

Observed damage requiring inspection / Other: NA

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 none

4. Inspector's Signature Bryan C Hann

STATE OF NEW YORK BRYAN C. HANN 000270-1 LICENSED PROFESSIONAL GEOLOGIST

RETURN COMPLETED FORM TO PROPERTY OWNER REPRESENTATIVE

APPENDIX C

PHOTOGRAPHIC LOG

SITE PHOTOGRAPHS

Photo 1:

Photo 2:

Photo 3:

Photo 4:

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

Photo 2. Exterior, looking northwest toward Kingston Place, wells MW-4 and MW-4A in center

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

Photo 4. Exterior, looking southeast 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 (right side of building)

Photo 6. Exterior, looking southeast along Seneca Street

Photo 7. Exterior, looking southwest at dumpster area

Photo 8. Exterior, looking southeast along front of Dollar General

SITE PHOTOGRAPHS

Photo 9:

Photo 10:

Photo 11:

Photo 12:

Photo 9. Exterior, looking southwest at garbage bins, notice rooftop ASD vent pipe (upper center of photo)

Photo 10. Exterior, looking northeast at Seneca Street

Photo 11. Exterior, looking north at Seneca Street

Photo 12. Exterior, looking west at garbage bins, notice rooftop ASD vent pipe (upper center of photo)

SITE PHOTOGRAPHS

Photo 13:

Photo 14:

Photo 15:

Photo 16:

Photo 13. Exterior, looking west at northwest roof vent with cap

Photo 14. Exterior, looking west at northwest roof vent with J-plug

Photo 15. Exterior, looking southwest at southwest roof vent with cap

Photo 16. Exterior, looking southwest at southwest roof vent with J-plug

SITE PHOTOGRAPHS

Photo 17:

Photo 18:

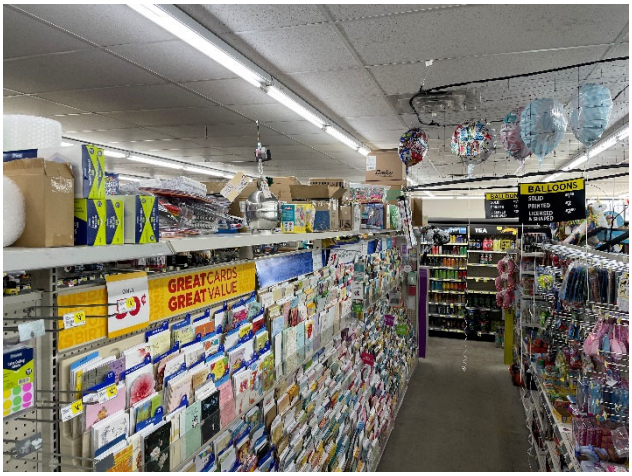


Photo 19:

Photo 20:

Photo 17. Exterior, looking northeast showing location of outdoor air sample OA-1

Photo 18. Interior, showing location of indoor air sample IA-2 (center of store)

Photo 19. Interior, showing location of indoor air sample IA-1 (storeroom)

Photo 20. Exterior, looking northwest toward Kingston Place showing road box repair at well MW-13

SITE PHOTOGRAPHS

Photo 21:

Photo 22:

Photo 23:

Photo 24:

Photo 21. Exterior, looking northwest toward Kingston Place showing road box surface completion at well MW-13

Photo 22. Exterior, looking north toward Kingston Place showing road box repair at well MW-4

Photo 23. Exterior, showing road box surface completion at well MW-4

Photo 24. Exterior, looking northeast toward Seneca Street showing road box completion at well MW-4 (left) and decommissioned well MW-4A (right)

SITE PHOTOGRAPHS

Photo 25:

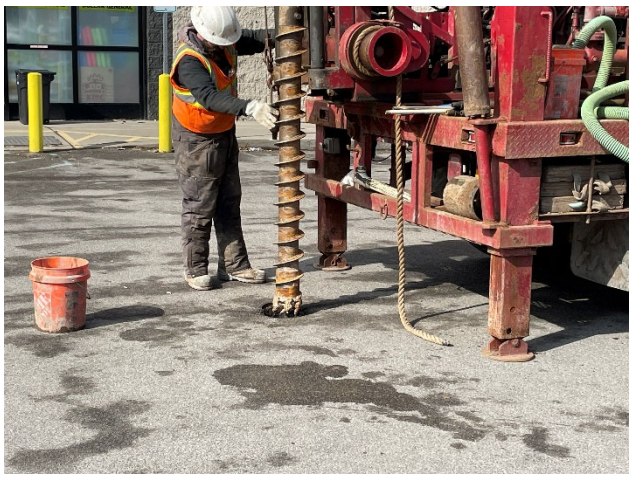


Photo 26:

Photo 27:

Photo 28:

Photo 25. Exterior, looking southwest showing road box removal prior to well decommissioning at well MW-2

Photo 26. Exterior, looking southwest showing road box removal prior to well decommissioning at well MW-2

Photo 27. Exterior, looking northwest showing grouting at well MW-2

Photo 28. Exterior, showing surface completion at decommissioned well MW-2

APPENDIX D

AIR ANALYTICAL DATA PACKAGE

ANALYTICAL REPORT

Lab Number:	L2218569
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Bryan Hann
Phone:	(716) 856-0599
Project Name:	2137 SENECA ST. SITE
Project Number:	B0607-021-001
Report Date:	04/22/22

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001

Lab Number: L2218569
Report Date: 04/22/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2218569-01	IA-1	AIR	BUFFALO, NY	04/08/22 16:22	04/08/22
L2218569-02	IA-2	AIR	BUFFALO, NY	04/08/22 16:25	04/08/22
L2218569-03	OA-1	AIR	BUFFALO, NY	04/08/22 16:30	04/08/22

Project Name:	2137 SENECA ST. SITE	**Lab Number:**	L2218569
Project Number:	B0607-021-001	**Report Date:**	04/22/22

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 ST. SITE **Lab Number:** L2218569
Project Number: B0607-021-001 **Report Date:** 04/22/22

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on April 6, 2022. The canister certification results are provided as an addendum.

-01D: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

-02D: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

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: Jennifer Jerome

Title: Technical Director/Representative Date: 04/22/22

AIR

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-01
Client ID: IA-1
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:22
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/21/22 21:52
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.526	0.200	--	2.60	0.989	--		1
Chloromethane	1.30	0.200	--	2.68	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	987	5.00	--	1860	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	82.4	1.00	--	196	2.38	--		1
Trichlorofluoromethane	0.225	0.200	--	1.26	1.12	--		1
Isopropanol	16.2	0.500	--	39.8	1.23	--		1
Tertiary butyl Alcohol	1.87	0.500	--	5.67	1.52	--		1
Methylene chloride	0.508	0.500	--	1.76	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.56	0.500	--	4.60	1.47	--		1
Ethyl Acetate	2.35	0.500	--	8.47	1.80	--		1
Chloroform	0.370	0.200	--	1.81	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-01
Client ID: IA-1
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:22
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	0.641	0.200	--	2.59	0.809	--		1
n-Hexane	0.610	0.200	--	2.15	0.705	--		1
Benzene	0.224	0.200	--	0.716	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.241	0.200	--	0.988	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.21	0.500	--	4.96	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	4.38	0.200	--	16.5	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.564	0.200	--	2.45	0.869	--		1
p/m-Xylene	1.66	0.400	--	7.21	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.826	0.200	--	3.52	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.18	0.200	--	5.13	0.869	--		1
4-Ethyltoluene	0.307	0.200	--	1.51	0.983	--		1
1,3,5-Trimethylbenzene	0.368	0.200	--	1.81	0.983	--		1

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-01
Client ID: IA-1
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:22
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	1.47	0.200	--	7.23	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	0.709	0.200	--	4.26	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	99		60-140

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-01
Client ID: IA-1
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:22
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/21/22 21:52
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	0.042	0.020	--	0.167	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.411	0.020	--	2.59	0.126	--		1
Trichloroethene	0.043	0.020	--	0.231	0.107	--		1
Tetrachloroethene	0.637	0.020	--	4.32	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	91		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	100		60-140

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-01 D
Client ID: IA-1
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:22
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/22/22 08:52
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	1220	16.7	--	2300	31.5	--		3.333

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	85		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	92		60-140

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-02
Client ID: IA-2
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:25
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/21/22 22:32
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.462	0.200	--	2.28	0.989	--		1
Chloromethane	1.12	0.200	--	2.31	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	955	5.00	--	1800	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	69.5	1.00	--	165	2.38	--		1
Trichlorofluoromethane	0.223	0.200	--	1.25	1.12	--		1
Isopropanol	13.6	0.500	--	33.4	1.23	--		1
Tertiary butyl Alcohol	1.40	0.500	--	4.24	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.19	0.500	--	3.51	1.47	--		1
Ethyl Acetate	2.05	0.500	--	7.39	1.80	--		1
Chloroform	0.285	0.200	--	1.39	0.977	--		1
Tetrahydrofuran	0.592	0.500	--	1.75	1.47	--		1

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-02
Client ID: IA-2
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:25
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	0.531	0.200	--	2.15	0.809	--		1
n-Hexane	0.545	0.200	--	1.92	0.705	--		1
Benzene	0.221	0.200	--	0.706	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.217	0.200	--	0.889	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.756	0.500	--	3.10	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	3.89	0.200	--	14.7	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.499	0.200	--	2.17	0.869	--		1
p/m-Xylene	1.52	0.400	--	6.60	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.695	0.200	--	2.96	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.07	0.200	--	4.65	0.869	--		1
4-Ethyltoluene	0.307	0.200	--	1.51	0.983	--		1
1,3,5-Trimethylbenzene	0.337	0.200	--	1.66	0.983	--		1

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-02
Client ID: IA-2
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:25
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	1.36	0.200	--	6.69	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	0.671	0.200	--	4.03	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	101		60-140

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-02
Client ID: IA-2
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:25
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/21/22 22:32
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	0.030	0.020	--	0.119	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.326	0.020	--	2.05	0.126	--		1
Trichloroethene	0.028	0.020	--	0.150	0.107	--		1
Tetrachloroethene	0.526	0.020	--	3.57	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	92		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	102		60-140

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-02 D
Client ID: IA-2
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:25
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/22/22 09:28
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	1220	16.7	--	2300	31.5	--		3.333

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	85		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	92		60-140

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-03
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:30
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/21/22 19:51
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.497	0.200	--	2.46	0.989	--		1
Chloromethane	0.593	0.200	--	1.22	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	5.79	5.00	--	10.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.04	1.00	--	7.22	2.38	--		1
Trichlorofluoromethane	0.208	0.200	--	1.17	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-03
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:30
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-03
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:30
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	89		60-140

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

SAMPLE RESULTS

Lab ID: L2218569-03
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 04/08/22 16:30
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/21/22 19:51
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.090	0.020	--	0.566	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	86		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	90		60-140

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/21/22 17:08

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1629757-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/21/22 17:08

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1629757-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/21/22 17:08

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1629757-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001
Lab Number: L2218569
Report Date: 04/22/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/21/22 17:47

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-03 Batch: WG1629758-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001

Lab Number: L2218569
Report Date: 04/22/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1629757-3								
Dichlorodifluoromethane	78		-		70-130	-		
Chloromethane	78		-		70-130	-		
Freon-114	78		-		70-130	-		
Vinyl chloride	75		-		70-130	-		
1,3-Butadiene	86		-		70-130	-		
Bromomethane	72		-		70-130	-		
Chloroethane	78		-		70-130	-		
Ethanol	126		-		40-160	-		
Vinyl bromide	88		-		70-130	-		
Acetone	105		-		40-160	-		
Trichlorofluoromethane	85		-		70-130	-		
Isopropanol	98		-		40-160	-		
1,1-Dichloroethene	85		-		70-130	-		
Tertiary butyl Alcohol	89		-		70-130	-		
Methylene chloride	90		-		70-130	-		
3-Chloropropene	110		-		70-130	-		
Carbon disulfide	119		-		70-130	-		
Freon-113	93		-		70-130	-		
trans-1,2-Dichloroethene	81		-		70-130	-		
1,1-Dichloroethane	82		-		70-130	-		
Methyl tert butyl ether	85		-		70-130	-		
2-Butanone	92		-		70-130	-		
cis-1,2-Dichloroethene	76		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001

Lab Number: L2218569
Report Date: 04/22/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1629757-3								
Ethyl Acetate	90		-		70-130	-		
Chloroform	85		-		70-130	-		
Tetrahydrofuran	85		-		70-130	-		
1,2-Dichloroethane	80		-		70-130	-		
n-Hexane	101		-		70-130	-		
1,1,1-Trichloroethane	95		-		70-130	-		
Benzene	88		-		70-130	-		
Carbon tetrachloride	100		-		70-130	-		
Cyclohexane	99		-		70-130	-		
1,2-Dichloropropane	90		-		70-130	-		
Bromodichloromethane	112		-		70-130	-		
1,4-Dioxane	97		-		70-130	-		
Trichloroethene	88		-		70-130	-		
2,2,4-Trimethylpentane	104		-		70-130	-		
Heptane	107		-		70-130	-		
cis-1,3-Dichloropropene	98		-		70-130	-		
4-Methyl-2-pentanone	108		-		70-130	-		
trans-1,3-Dichloropropene	84		-		70-130	-		
1,1,2-Trichloroethane	91		-		70-130	-		
Toluene	79		-		70-130	-		
2-Hexanone	101		-		70-130	-		
Dibromochloromethane	107		-		70-130	-		
1,2-Dibromoethane	89		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001

Lab Number: L2218569
Report Date: 04/22/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1629757-3								
Tetrachloroethene	86		-		70-130	-		
Chlorobenzene	88		-		70-130	-		
Ethylbenzene	84		-		70-130	-		
p/m-Xylene	86		-		70-130	-		
Bromoform	110		-		70-130	-		
Styrene	85		-		70-130	-		
1,1,2,2-Tetrachloroethane	94		-		70-130	-		
o-Xylene	89		-		70-130	-		
4-Ethyltoluene	95		-		70-130	-		
1,3,5-Trimethylbenzene	88		-		70-130	-		
1,2,4-Trimethylbenzene	94		-		70-130	-		
Benzyl chloride	108		-		70-130	-		
1,3-Dichlorobenzene	89		-		70-130	-		
1,4-Dichlorobenzene	88		-		70-130	-		
1,2-Dichlorobenzene	86		-		70-130	-		
1,2,4-Trichlorobenzene	80		-		70-130	-		
Hexachlorobutadiene	80		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001

Lab Number: L2218569
Report Date: 04/22/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-03 Batch: WG1629758-3								
Vinyl chloride	75		-		70-130	-		25
1,1-Dichloroethene	81		-		70-130	-		25
cis-1,2-Dichloroethene	70		-		70-130	-		25
1,1,1-Trichloroethane	90		-		70-130	-		25
Carbon tetrachloride	93		-		70-130	-		25
Trichloroethene	82		-		70-130	-		25
Tetrachloroethene	80		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001

Lab Number: L2218569
Report Date: 04/22/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1629757-5 QC Sample: L2218569-02 Client ID: IA-2						
Dichlorodifluoromethane	0.462	0.478	ppbV	3		25
Chloromethane	1.12	1.13	ppbV	1		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	955E	949E	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	69.5	70.5	ppbV	1		25
Trichlorofluoromethane	0.223	0.223	ppbV	0		25
Isopropanol	13.6	13.6	ppbV	0		25
Tertiary butyl Alcohol	1.40	1.60	ppbV	13		25
Methylene chloride	ND	0.537	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	1.19	1.20	ppbV	1		25
Ethyl Acetate	2.05	2.09	ppbV	2		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001

Lab Number: L2218569
Report Date: 04/22/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1629757-5 QC Sample: L2218569-02 Client ID: IA-2						
Chloroform	0.285	0.282	ppbV	1		25
Tetrahydrofuran	0.592	0.560	ppbV	6		25
1,2-Dichloroethane	0.531	0.555	ppbV	4		25
n-Hexane	0.545	0.535	ppbV	2		25
Benzene	0.221	0.222	ppbV	0		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	0.217	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	0.756	0.739	ppbV	2		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	3.89	3.88	ppbV	0		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	0.499	0.513	ppbV	3		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001

Lab Number: L2218569
Report Date: 04/22/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1629757-5 QC Sample: L2218569-02 Client ID: IA-2						
p/m-Xylene	1.52	1.56	ppbV	3		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	0.695	0.702	ppbV	1		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	1.07	1.08	ppbV	1		25
4-Ethyltoluene	0.307	0.323	ppbV	5		25
1,3,5-Trimethylbenzene	0.337	0.341	ppbV	1		25
1,2,4-Trimethylbenzene	1.36	1.40	ppbV	3		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	0.671	0.697	ppbV	4		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1629757-5 QC Sample: L2218569-02 Client ID: IA-2						
Ethanol	1220	1180	ppbV	3		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001

Lab Number: L2218569
Report Date: 04/22/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1629758-5 QC Sample: L2218569-02 Client ID: IA-2						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	0.030	0.034	ppbV	13		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.326	0.332	ppbV	2		25
Trichloroethene	0.028	0.033	ppbV	16		25
Tetrachloroethene	0.526	0.542	ppbV	3		25

Project Name: 2137 SENECA ST. SITE

Lab Number: L2218569

Project Number: B0607-021-001

Report Date: 04/22/22

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2218569-01	IA-1	01890	Flow 5	04/06/22	383394		-	-	-	Pass	4.5	4.6	2
L2218569-01	IA-1	2204	2.7L Can	04/06/22	383394	L2216557-01	Pass	-29.2	-7.2	-	-	-	-
L2218569-02	IA-2	01705	Flow 5	04/06/22	383394		-	-	-	Pass	4.5	4.1	9
L2218569-02	IA-2	359	2.7L Can	04/06/22	383394	L2216557-01	Pass	-29.1	-7.3	-	-	-	-
L2218569-03	OA-1	0832	Flow 5	04/06/22	383394		-	-	-	Pass	4.5	4.2	7
L2218569-03	OA-1	449	2.7L Can	04/06/22	383394	L2216557-01	Pass	-29.3	-4.5	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2216557
Report Date: 04/22/22

Air Canister Certification Results

Lab ID: L2216557-01
Client ID: CAN 2861 SHELF 1
Sample Location:

Date Collected: 03/30/22 18:00
Date Received: 03/31/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/31/22 17:25
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	5.65	5.00	--	7.40	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2216557
Report Date: 04/22/22

Air Canister Certification Results

Lab ID: L2216557-01
Client ID: CAN 2861 SHELF 1
Sample Location:

Date Collected: 03/30/22 18:00
Date Received: 03/31/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2216557
Report Date: 04/22/22

Air Canister Certification Results

Lab ID: L2216557-01
Client ID: CAN 2861 SHELF 1
Sample Location:

Date Collected: 03/30/22 18:00
Date Received: 03/31/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2216557
Report Date: 04/22/22

Air Canister Certification Results

Lab ID: L2216557-01
Client ID: CAN 2861 SHELF 1
Sample Location:

Date Collected: 03/30/22 18:00
Date Received: 03/31/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
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Report Date: 04/22/22

Air Canister Certification Results

Lab ID: L2216557-01
Client ID: CAN 2861 SHELF 1
Sample Location:

Date Collected: 03/30/22 18:00
Date Received: 03/31/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2216557
Report Date: 04/22/22

Air Canister Certification Results

Lab ID: L2216557-01
Client ID: CAN 2861 SHELF 1
Sample Location:

Date Collected: 03/30/22 18:00
Date Received: 03/31/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/31/22 17:25
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2216557
Report Date: 04/22/22

Air Canister Certification Results

Lab ID: L2216557-01
Client ID: CAN 2861 SHELF 1
Sample Location:

Date Collected: 03/30/22 18:00
Date Received: 03/31/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2216557
Report Date: 04/22/22

Air Canister Certification Results

Lab ID: L2216557-01
Client ID: CAN 2861 SHELF 1
Sample Location:

Date Collected: 03/30/22 18:00
Date Received: 03/31/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	92		60-140

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001

Lab Number: L2218569
Report Date: 04/22/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2218569-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2218569-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2218569-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	2137 SENECA ST. SITE	**Lab Number:**	L2218569
Project Number:	B0607-021-001	**Report Date:**	04/22/22

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: Data Usability Report

Project Name:	2137 SENECA ST. SITE	**Lab Number:**	L2218569
Project Number:	B0607-021-001	**Report Date:**	04/22/22

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.

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'.

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.

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.)

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. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

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

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report

Project Name:	2137 SENECA ST. SITE	**Lab Number:**	L2218569
Project Number:	B0607-021-001	**Report Date:**	04/22/22

Data Qualifiers

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.)

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

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 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
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.
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 332: Perchlorate; **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), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, 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.

AIR ANALYSIS

PAGE 1 OF 1

ALPHA ANALYTICAL — CHAIN OF CUSTODY

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

Date Rec'd in Lab: 4/9/22

ALPHA Job #: L2218569

Client Information

Client: Benchmark
Address: 2558 Hamburg Turnpike, Ste 300
Buffalo, NY 14218
Phone: 716.856.0599
Fax:
Email: bhann@bm-tk.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 2137 Seneca St. Site
Project Location: Buffalo, NY
Project #: B0607-021-001
Project Manager: Bryan Hann
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

ANALYSIS

TO-15 | TO-15 SIM | APH (Solvent Non-petroleum HCs ☐) | Fixed Gases | Sulfides & Mercaptans by TO-15

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
18569-01	IA-1	4/8/22	8:22	16:22	-27.23	-4.65	AA	BCH	2.7	2204	01890	X					
02	IA-2	↓	8:25	16:25	-29.44	-6.64	↓	↓	↓	359	01705	X					
03	OA-1	↓	830	16:30	-29.54	-3.78	↓	↓	↓	449	0832	X					

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
Bryan C Hann	4/8/22 16:35	[illegible]	4/8/22 1635
Joseph C. Reynolds	4/9/22 0142	Joseph C. Reynolds	4/9/22 0049 / 4/9/22 0142

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

APPENDIX E

DATA USABILITY SUMMARY REPORT (DUSR)

Data Validation Services

120 Cobble Creek Rd PO Box 208
North Creek, NY 12853
Phone (518) 251-4429
harry@frontiernet.net

May 14, 2022

Bryan Hann
Benchmark Environmental Engineering & Science, PLLC
2558 Hamburg Turnpike
Buffalo, NY 14218

RE: Data Usability Summary Report (DUSR)
Validation of the 2137 Seneca Street Analytical Laboratory Data
Alpha Analytical SDG L2218569

Dear Mr. Hann:

Review has been completed for the data package generated by Alpha Analytical, Inc. that pertains to air samples collected 04/08/22 at the 2137 Seneca Street site. Three 2.7 L summa canisters were analyzed for volatile analytes by USEPA method TO-15 (full scan and Selective Ion Monitoring).

Data validation was performed with guidance from the USEPA Region 2 SOP HW-31, with consideration for the requirements of the analytical methodology. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation
* Canister Pressures
* Holding Times
* Internal Standard Recoveries
* Method Blanks
* Laboratory and Blind Field Duplicates
* Laboratory Control Samples (LCSs)
* Instrumental Tunes
* Calibration Standards
* Method Compliance
* Clean Canister Certification
* Sample Result Verification

Those items showing deficiencies are discussed in the following sections of this report. All others were found to be acceptable as outlined in the above-mentioned validation procedure, and as applicable for the methodology. Unless noted specifically in the following text, reported results are substantiated by the raw data, and generated in compliance with project requirements.

In summary, sample processing was primarily conducted in compliance with, and adherence to, protocol requirements. Results for samples are usable wither as reported, or with minor qualification.

The client and laboratory identifications are attached to this text. Also included is the client EQuIS EDD with recommended validation qualifiers applied.

Volatiles in Air by EPA TO-15

A laboratory duplicate evaluation was performed on IA-2, and shows acceptable correlations.

Holding times and instrument tunes meet requirements. Laboratory Control Samples show compliant recoveries. Blanks show no contamination.

Initial and continuing calibration standard responses were within validation guidelines, with all response factors (RRFs) above 0.05 and linearity within the 30%RSD limit. The continuing calibration responses are below 30%D.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Judy Harry

Att: Validation Data Qualifier Definitions
Sample Identifications
Qualified EDD

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

Sample Summaries

Project Name: 2137 SENECA ST. SITE
Project Number: B0607-021-001

Lab Number: L2218569
Report Date: 04/22/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2218569-01	IA-1	AIR	BUFFALO, NY	04/08/22 16:22	04/08/22
L2218569-02	IA-2	AIR	BUFFALO, NY	04/08/22 16:25	04/08/22
L2218569-03	OA-1	AIR	BUFFALO, NY	04/08/22 16:30	04/08/22

APPENDIX F

ANNUAL GROUNDWATER MONITORING INFORMATION

APPENDIX F1

GROUNDWATER FIELD FORMS

BENCHMARK
CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC

GROUNDWATER FIELD FORM

Project Name: 2137 Seneca Street - Annual GWM Date: 4/8/2022
Location: 2137 Seneca Street Site Project No.: B0607-021-0(Field Team: BCH

Well No. MW-2			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): 17.08			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-4			Diameter (inches): 2 steel			Sample Date / Time: 4/8/2022			
Product Depth (fbTOR): NA			Water Column (ft): 10.25			DTW when sampled:			
DTW (static) (fbTOR): 6.65			One Well Volume (gal): 1.7			Purpose: ☐ Development ☐ Sample ☑ Purge & Sample			
Total Depth (fbTOR): 16.90			Total Volume Purged (gal):			Purge Method: Peristaltic pump			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1003	0 Initial	0.0	7.52	10.0	3955	260	3.14	-135	turbid, orange, none
1005	1 6.75	0.1	7.28	10.2	3893	204	3.54	-124	" " "
1007	2 6.75	0.15	7.16	10.3	3847	132	4.75	-117	sl turbid, " "
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
1010	S1 6.75	0.20	7.11	10.9	3827	107	4.90	-116	sl. turbid, none
	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

BENCHMARK
CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC

GROUNDWATER FIELD FORM

Project Name: 2137 Seneca Street - Annual GWM Date: 4/8/2022
Location: 2137 Seneca Street Site Project No.: B0607-021-0(Field Team: BCH

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

BENCHMARK
CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC

GROUNDWATER FIELD FORM

Project Name: 2137 Seneca Street - Annual GWM Date: 4/8/2022
Location: 2137 Seneca Street Site Project No.: B0607-021-0(Field Team: BCH

Well No. MW-13

Diameter (inches): 2 SS
Product Depth (fbTOR): NA
Water Column (ft): 10.22
DTW (static) (fbTOR): 6.81
One Well Volume (gal): 1.67
Total Depth (fbTOR): 17.03
Total Volume Purged (gal):
Sample Date / Time: 4/8/2022
DTW when sampled:
Purpose: ☐ Development ☐ Sample ☑ Purge & Sample
Purge Method: Peristaltic Pump

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
939	0	Initial	0.0	6.48	10.2	1685	831	4.33	80	turbid, orange, none
943	1	6.81	0.25	6.15	10.6	2158	474	4.73	101	" "
946	2	6.81	0.3	6.62	10.8	1608	279	4.40	21	" "
948	3	6.81	0.35	6.68	10.7	1513	252	4.50	10	" "
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
950	S1	6.81	0.45	6.66	10.6	1592	538	3.24	2	turbid, orange, none
	S2									

Well No. PZ-A

Diameter (inches): 1 PVC
Product Depth (fbTOR): NA
Water Column (ft): 7.74
DTW (static) (fbTOR): 7.04
One Well Volume (gal): 0.3
Total Depth (fbTOR): 14.78
Total Volume Purged (gal):
Sample Date / Time: 4/8/2022
DTW when sampled:
Purpose: ☐ Development ☐ Sample ☑ Purge & Sample
Purge Method: Peristaltic Pump

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1018	0	Initial	0.0	6.94	10.5	3354	71000	4.68	-85	grey, none
1025	1	7.28	0.05	6.90	11.0	3845	71.7	4.64	-94	" "
1030	2	7.28	0.10	6.90	11.2	4018	124	4.29	-98	" "
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
1032	S1	7.28	0.12	6.91	11.1	3877	84.5	3.03	-97	sl. turbid, none
	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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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: 508-822-9288

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

ALPHA Job #

Client Information

Client: Benchmark
Address: 2558 Hamburg Turnpike Ste 300, Buffalo, NY 14218
Phone: 716-856-0599
Fax:
Email: bhaun@bm-tk.com

Project Information

Project Name: 2137 Seneca Street Site
Project Location: 2137 Seneca Street, Buffalo, NY
Project # B0607-021-001
(Use Project name as Project #) ☐
Project Manager: Bryan Haun
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☒ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

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

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:

EDD deliverable

Please specify Metals or TAL.

ANALYSIS

TCL VOCs (8260)

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

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs (8260)	Sample Specific Comments
	MW-4	4/8/22	1010	GW	BCH	3	
	MW-13	"	950	"	"	3	
	PZ-A	"	1032	"	"	3	
	Trip Blank	"	1200	"	"	2	

Container Type
Preservative

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
Bryan C Haun	4/8/22 16:35	[illegible]	4/9/22 1035

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 F2

GROUNDWATER ANALYTICAL DATA PACKAGE

ANALYTICAL REPORT

Lab Number:	L2218570
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Bryan Hann
Phone:	(716) 856-0599
Project Name:	2137 SENECA STREET SITE
Project Number:	B0607-021-001
Report Date:	04/15/22

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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 SITE
Project Number: B0607-021-001

Lab Number: L2218570
Report Date: 04/15/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2218570-01	MW-4	WATER	2137 SENECA STREET, BUFFALO, NY	04/08/22 10:10	04/08/22
L2218570-02	MW-13	WATER	2137 SENECA STREET, BUFFALO, NY	04/08/22 09:50	04/08/22
L2218570-03	PZ-A	WATER	2137 SENECA STREET, BUFFALO, NY	04/08/22 10:32	04/08/22
L2218570-04	TRIP BLANK	WATER	2137 SENECA STREET, BUFFALO, NY	04/08/22 00:00	04/08/22

Project Name:	2137 SENECA STREET SITE	**Lab Number:**	L2218570
Project Number:	B0607-021-001	**Report Date:**	04/15/22

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 SITE	**Lab Number:**	L2218570
Project Number:	B0607-021-001	**Report Date:**	04/15/22

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: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 04/15/22

ORGANICS

VOLATILES

Project Name: 2137 SENECA STREET SITE **Lab Number:** L2218570

Project Number: B0607-021-001 **Report Date:** 04/15/22

SAMPLE RESULTS

Lab ID: L2218570-01 D
Client ID: MW-4
Sample Location: 2137 SENECA STREET, BUFFALO, NY

Date Collected: 04/08/22 10:10
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/13/22 13:31
Analyst: LAC

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	410		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		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 SITE **Lab Number:** L2218570

Project Number: B0607-021-001 **Report Date:** 04/15/22

SAMPLE RESULTS

Lab ID: L2218570-01 D Date Collected: 04/08/22 10:10

Client ID: MW-4 Date Received: 04/08/22

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	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	980		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	100		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	99		70-130

Project Name: 2137 SENECA STREET SITE
Project Number: B0607-021-001
Lab Number: L2218570
Report Date: 04/15/22

SAMPLE RESULTS

Lab ID: L2218570-02
Client ID: MW-13
Sample Location: 2137 SENECA STREET, BUFFALO, NY
Date Collected: 04/08/22 09:50
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/13/22 14:18
Analyst: LAC

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	0.87	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	5.0		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	0.32	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 2137 SENECA STREET SITE **Lab Number:** L2218570

Project Number: B0607-021-001 **Report Date:** 04/15/22

SAMPLE RESULTS

Lab ID: L2218570-02 Date Collected: 04/08/22 09:50

Client ID: MW-13 Date Received: 04/08/22

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	1.6	J	ug/l	2.5	0.70	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	10		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	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	99		70-130

Project Name: 2137 SENECA STREET SITE
Project Number: B0607-021-001
Lab Number: L2218570
Report Date: 04/15/22

SAMPLE RESULTS

Lab ID: L2218570-03 D
Client ID: PZ-A
Sample Location: 2137 SENECA STREET, BUFFALO, NY

Date Collected: 04/08/22 10:32
Date Received: 04/08/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/13/22 13:55
Analyst: LAC

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	400		ug/l	5.0	0.36	5
Chloroethane	ND		ug/l	12	3.5	5
1,1-Dichloroethene	1.0	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 SITE **Lab Number:** L2218570

Project Number: B0607-021-001 **Report Date:** 04/15/22

SAMPLE RESULTS

Lab ID: L2218570-03 D Date Collected: 04/08/22 10:32

Client ID: PZ-A Date Received: 04/08/22

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	3.5	5
p/m-Xylene	ND		ug/l	12	3.5	5
o-Xylene	ND		ug/l	12	3.5	5
cis-1,2-Dichloroethene	730		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	101		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	99		70-130

Project Name: 2137 SENECA STREET SITE **Lab Number:** L2218570

Project Number: B0607-021-001 **Report Date:** 04/15/22

SAMPLE RESULTS

Lab ID: L2218570-04 Date Collected: 04/08/22 00:00
Client ID: TRIP BLANK Date Received: 04/08/22
Sample Location: 2137 SENECA STREET, BUFFALO, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/13/22 14:42
Analyst: LAC

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 SITE **Lab Number:** L2218570

Project Number: B0607-021-001 **Report Date:** 04/15/22

SAMPLE RESULTS

Lab ID: L2218570-04 Date Collected: 04/08/22 00:00

Client ID: TRIP BLANK Date Received: 04/08/22

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	ND		ug/l	2.5	0.70	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	101		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

Project Name: 2137 SENECA STREET SITE
Project Number: B0607-021-001
Lab Number: L2218570
Report Date: 04/15/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/13/22 09:59
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1627047-5					
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 SITE
Project Number: B0607-021-001
Lab Number: L2218570
Report Date: 04/15/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/13/22 09:59
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1627047-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
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 SITE
Project Number: B0607-021-001
Lab Number: L2218570
Report Date: 04/15/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/13/22 09:59
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1627047-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 2137 SENECA STREET SITE
Project Number: B0607-021-001

Lab Number: L2218570
Report Date: 04/15/22

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: WG1627047-3 WG1627047-4								
Methylene chloride	91		89		70-130	2		20
1,1-Dichloroethane	97		94		70-130	3		20
Chloroform	94		91		70-130	3		20
Carbon tetrachloride	96		93		63-132	3		20
1,2-Dichloropropane	94		93		70-130	1		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	100		98		70-130	2		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	95		90		62-150	5		20
1,2-Dichloroethane	95		93		70-130	2		20
1,1,1-Trichloroethane	97		95		67-130	2		20
Bromodichloromethane	93		93		67-130	0		20
trans-1,3-Dichloropropene	99		97		70-130	2		20
cis-1,3-Dichloropropene	94		93		70-130	1		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	98		100		67-130	2		20
Benzene	96		94		70-130	2		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		99		70-130	1		20
Chloromethane	92		89		64-130	3		20
Bromomethane	62		64		39-139	3		20
Vinyl chloride	73		71		55-140	3		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 2137 SENECA STREET SITE
Project Number: B0607-021-001

Lab Number: L2218570
Report Date: 04/15/22

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: WG1627047-3 WG1627047-4								
Chloroethane	75		71		55-138	5		20
1,1-Dichloroethene	94		91		61-145	3		20
trans-1,2-Dichloroethene	96		93		70-130	3		20
Trichloroethene	95		91		70-130	4		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	110		100		70-130	10		20
1,4-Dichlorobenzene	110		100		70-130	10		20
Methyl tert butyl ether	91		92		63-130	1		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	105		100		70-130	5		20
cis-1,2-Dichloroethene	96		94		70-130	2		20
Styrene	105		100		70-130	5		20
Dichlorodifluoromethane	93		90		36-147	3		20
Acetone	83		73		58-148	13		20
Carbon disulfide	93		88		51-130	6		20
2-Butanone	80		79		63-138	1		20
4-Methyl-2-pentanone	95		93		59-130	2		20
2-Hexanone	90		91		57-130	1		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	100		98		70-130	2		20
1,2-Dibromo-3-chloropropane	99		100		41-144	1		20
Isopropylbenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	100		110		70-130	10		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 2137 SENECA STREET SITE
Project Number: B0607-021-001
Lab Number: L2218570
Report Date: 04/15/22

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: WG1627047-3 WG1627047-4								
1,2,4-Trichlorobenzene	110		100		70-130	10		20
Methyl Acetate	90		88		70-130	2		20
Cyclohexane	94		91		70-130	3		20
1,4-Dioxane	88		90		56-162	2		20
Freon-113	94		90		70-130	4		20
Methyl cyclohexane	94		91		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		98		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	98		100		70-130

Project Name: 2137 SENECA STREET SITE
Project Number: B0607-021-001

Lab Number: L2218570
Report Date: 04/15/22

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(*)
L2218570-01A	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260-R2(14)
L2218570-01B	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260-R2(14)
L2218570-01C	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260-R2(14)
L2218570-02A	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260-R2(14)
L2218570-02B	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260-R2(14)
L2218570-02C	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260-R2(14)
L2218570-03A	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260-R2(14)
L2218570-03B	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260-R2(14)
L2218570-03C	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260-R2(14)
L2218570-04A	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260-R2(14)
L2218570-04B	Vial HCl preserved	A	NA		4.0	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name:	2137 SENECA STREET SITE	**Lab Number:**	L2218570
Project Number:	B0607-021-001	**Report Date:**	04/15/22

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 SITE	**Lab Number:**	L2218570
Project Number:	B0607-021-001	**Report Date:**	04/15/22

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.

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'.

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.

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.)

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 Identified Compounds (TICs).

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	2137 SENECA STREET SITE	**Lab Number:**	L2218570
Project Number:	B0607-021-001	**Report Date:**	04/15/22

Data Qualifiers

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.)

Report Format: DU Report with 'J' Qualifiers

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 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
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.
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 332: Perchlorate; **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), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, 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.

ALPHA ANALYTICAL

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

NEW YORK CHAIN OF CUSTODY

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: 4/9/22

ALPHA Job #: L2218570

Client Information
Client: Benchmark
Address: 2558 Hamburg Turnpike Ste 300, Buffalo, NY 14218
Phone: 716-856-0599
Fax:
Email: bhann@bm-tk.com

Project Information
Project Name: 2137 Seneca Street Site
Project Location: 2137 Seneca Street, Buffalo, NY
Project #: B0607-021-001
(Use Project name as Project #) ☐
Project Manager: Bryan Hann
ALPHAQuote #:

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

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

Billing Information
☐ Same as Client Info
PO #

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

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:
EDD deliverable

Please specify Metals or TAL.

ANALYSIS
TCL VOCs (8260)

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

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs (8260)	Sample Specific Comments
18570 1	MW-4	4/8/22	1010	GW	BCH	3	
2	MW-13		950			3	
3	PZ-A		1032			3	
4	Trip Blank		1200			2	

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

Container Type
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
Bryan C. Hann	4/8/22 16:35	MC	4/8/22 1655
			4/9/22 0020

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 G

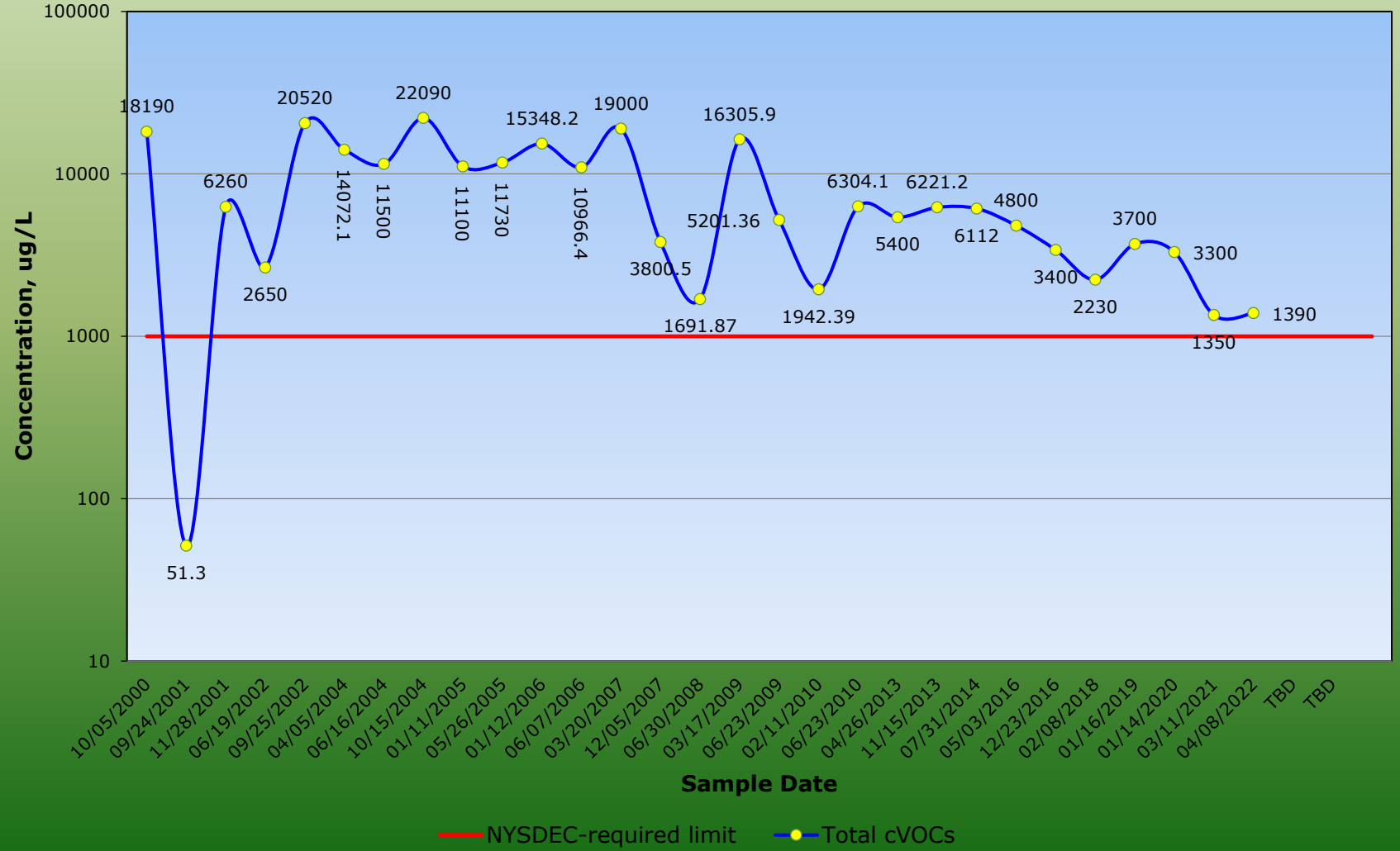
CONCENTRATION VS. TIME PLOTS

BENCHMARK
CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC

APPENDIX G

TOTAL cVOC CONCENTRATION vs. TIME
MW-4

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



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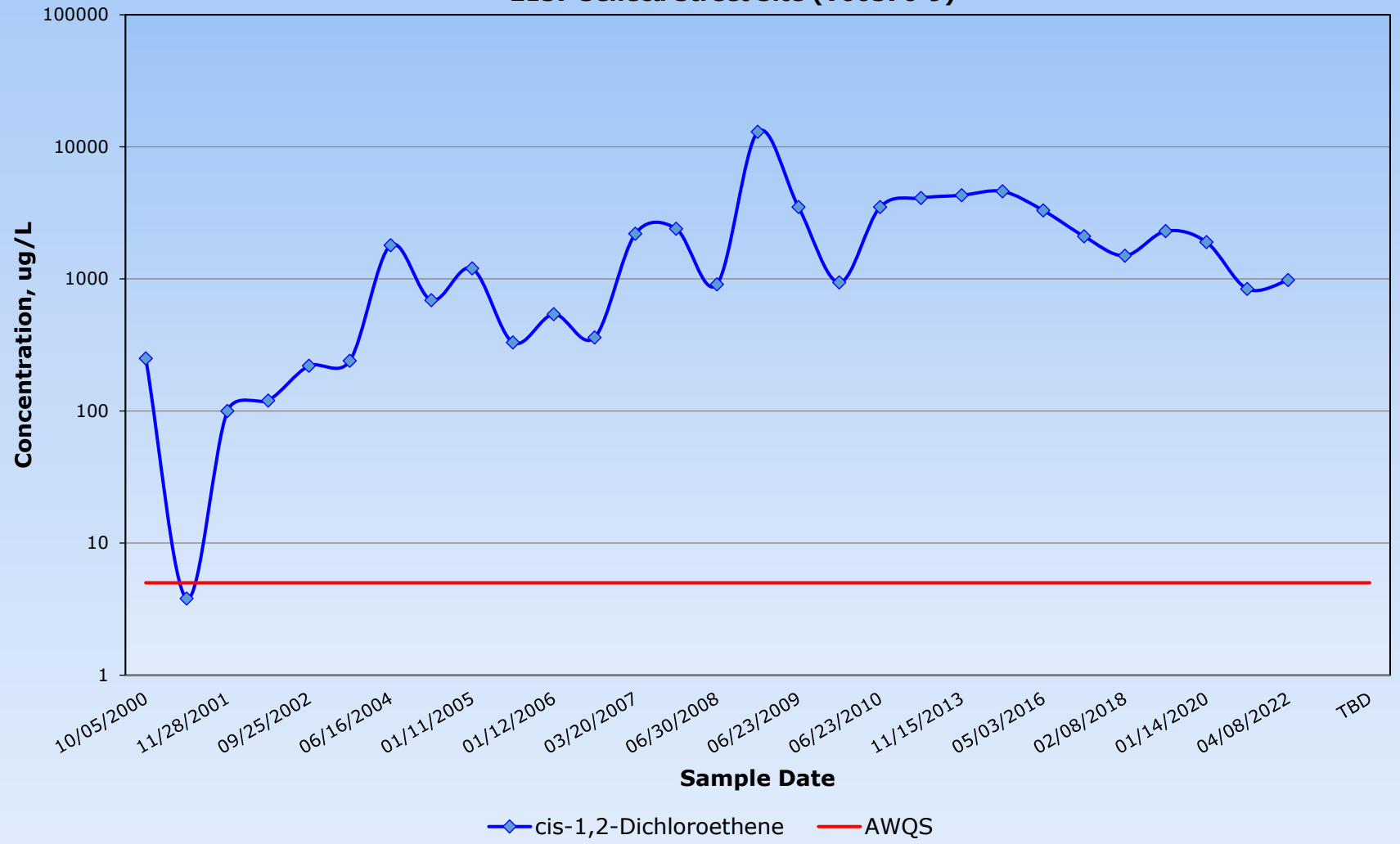
APPENDIX G

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

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



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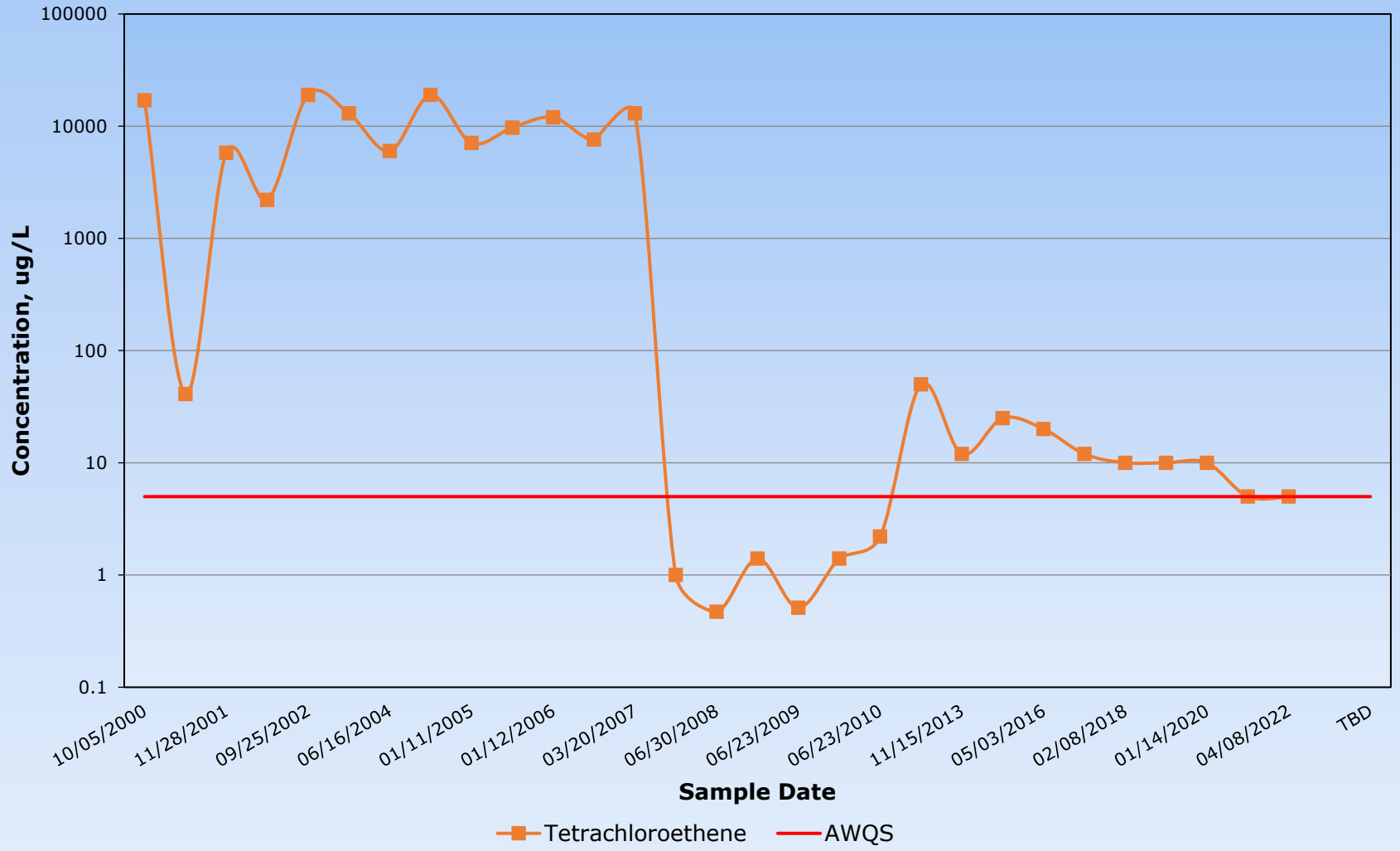
APPENDIX G

TETRACHLOROETHENE (PCE) CONCENTRATION vs. TIME
MW-4

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



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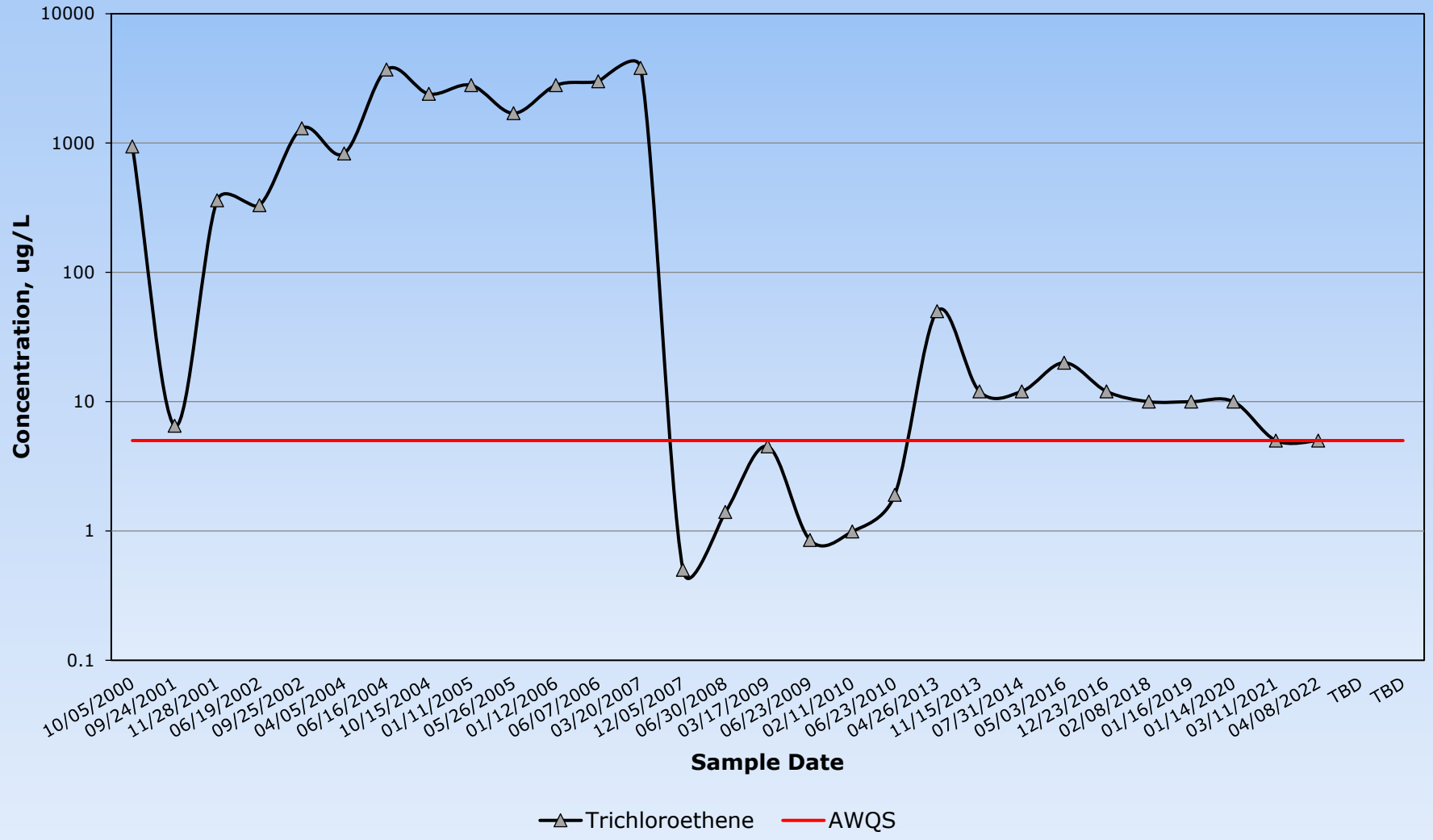
APPENDIX G

TRICHLOROETHENE (TCE) CONCENTRATION vs. TIME
MW-4

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



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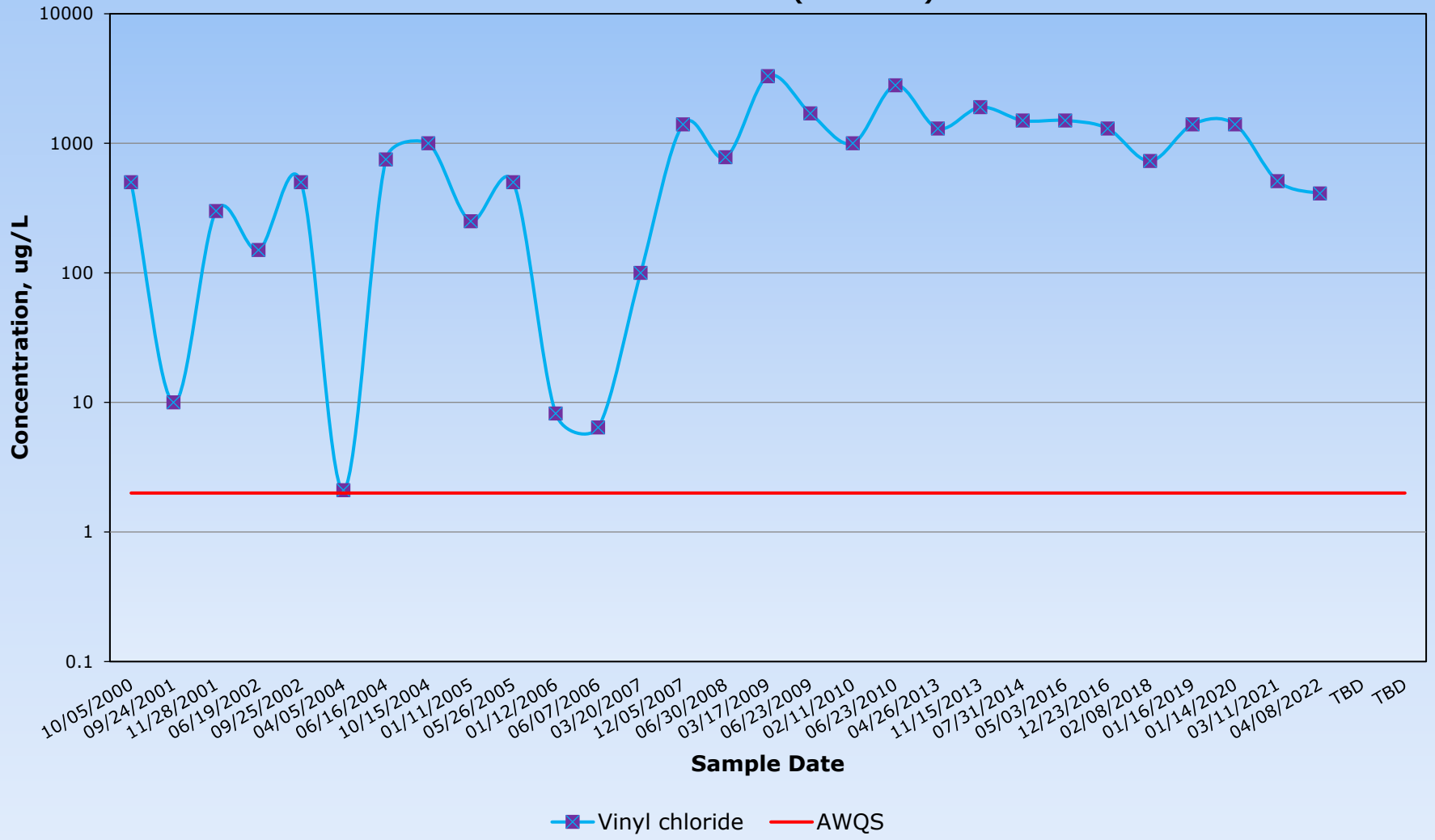
APPENDIX G

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

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



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APPENDIX G

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																
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
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
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***

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																
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
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
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 G

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 Qual	03/11/2021 Qual	04/08/2022 Qual	TBD 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																
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	1900	840	980 D										
1,1-Dichloroethene	75-35-4	**5**	ug/L	10 U	5 U	5 U										
Tetrachloroethene	127-18-4	**5**	ug/L	10 U	5 U	5 U										
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L	50 U	25 U	25 U										
Trichloroethene	79-01-6	**5**	ug/L	10 U	5 U	5 U										
Vinyl chloride	75-01-4	**2**	ug/L	1400	510	410 D										
Total cVOCs	***NA***	***NA***	***ug/L***	***3300***	***1350***	***1390***										

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.

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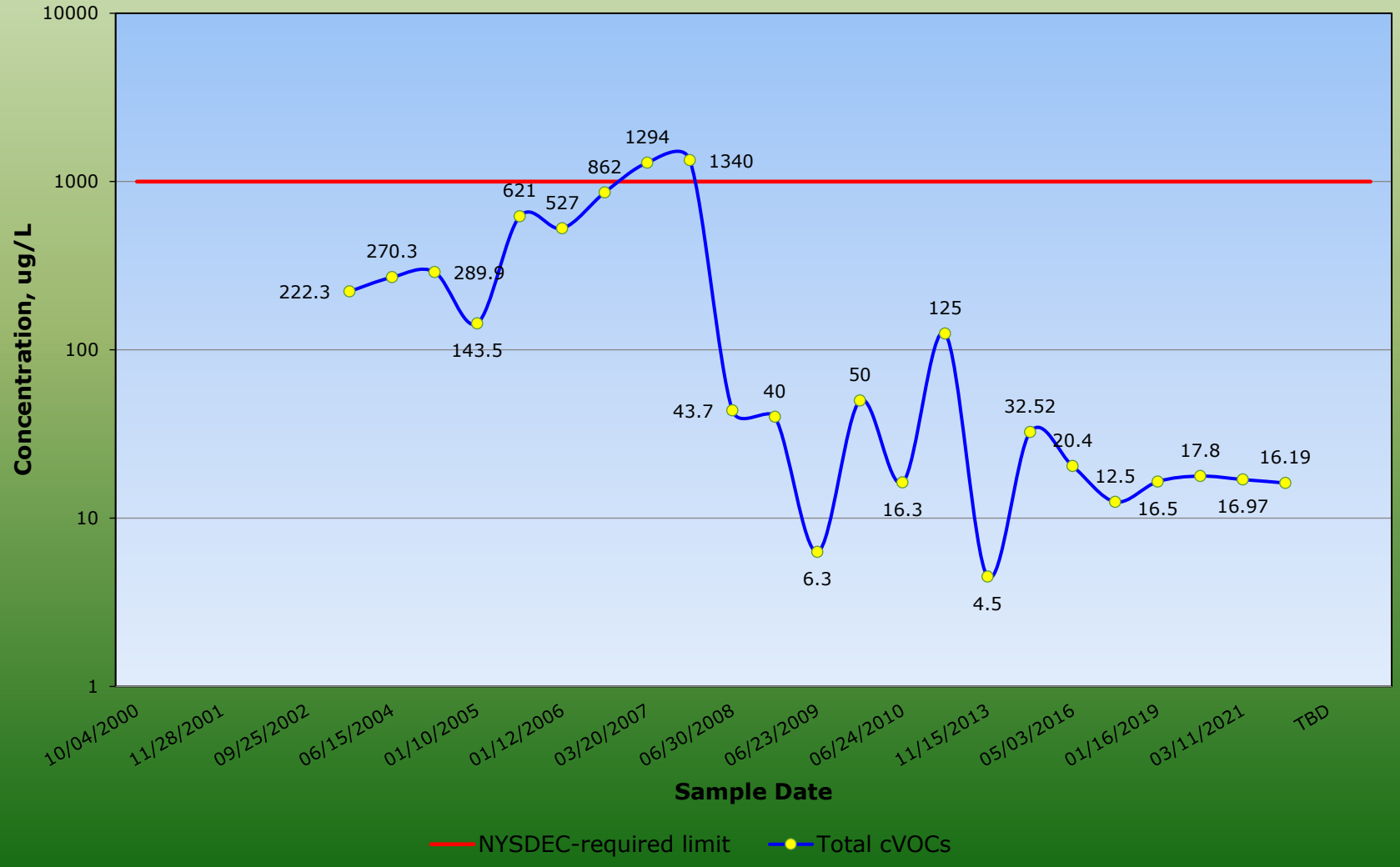
APPENDIX G

TOTAL cVOC CONCENTRATION vs. TIME
MW-13

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



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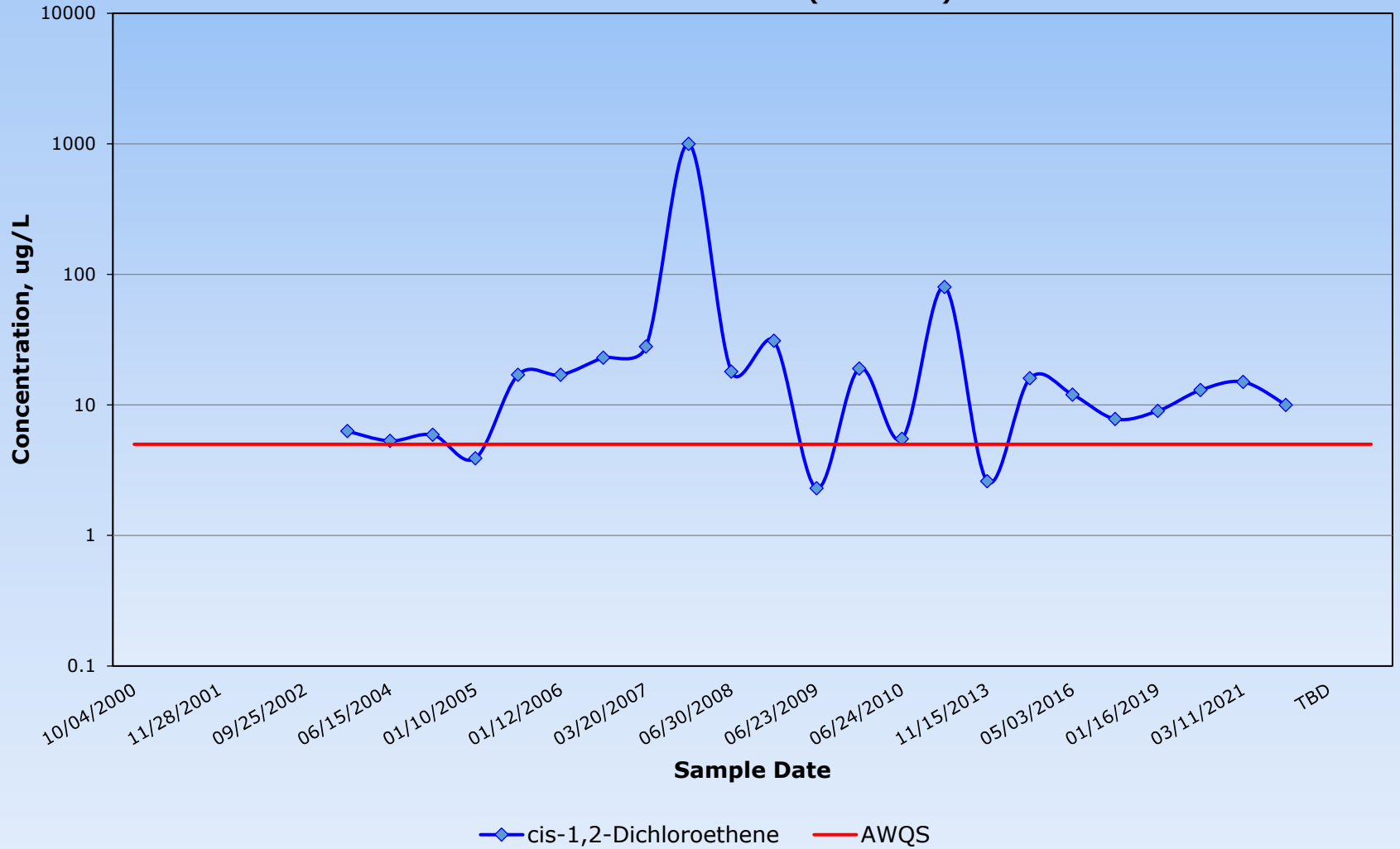
APPENDIX G

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

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



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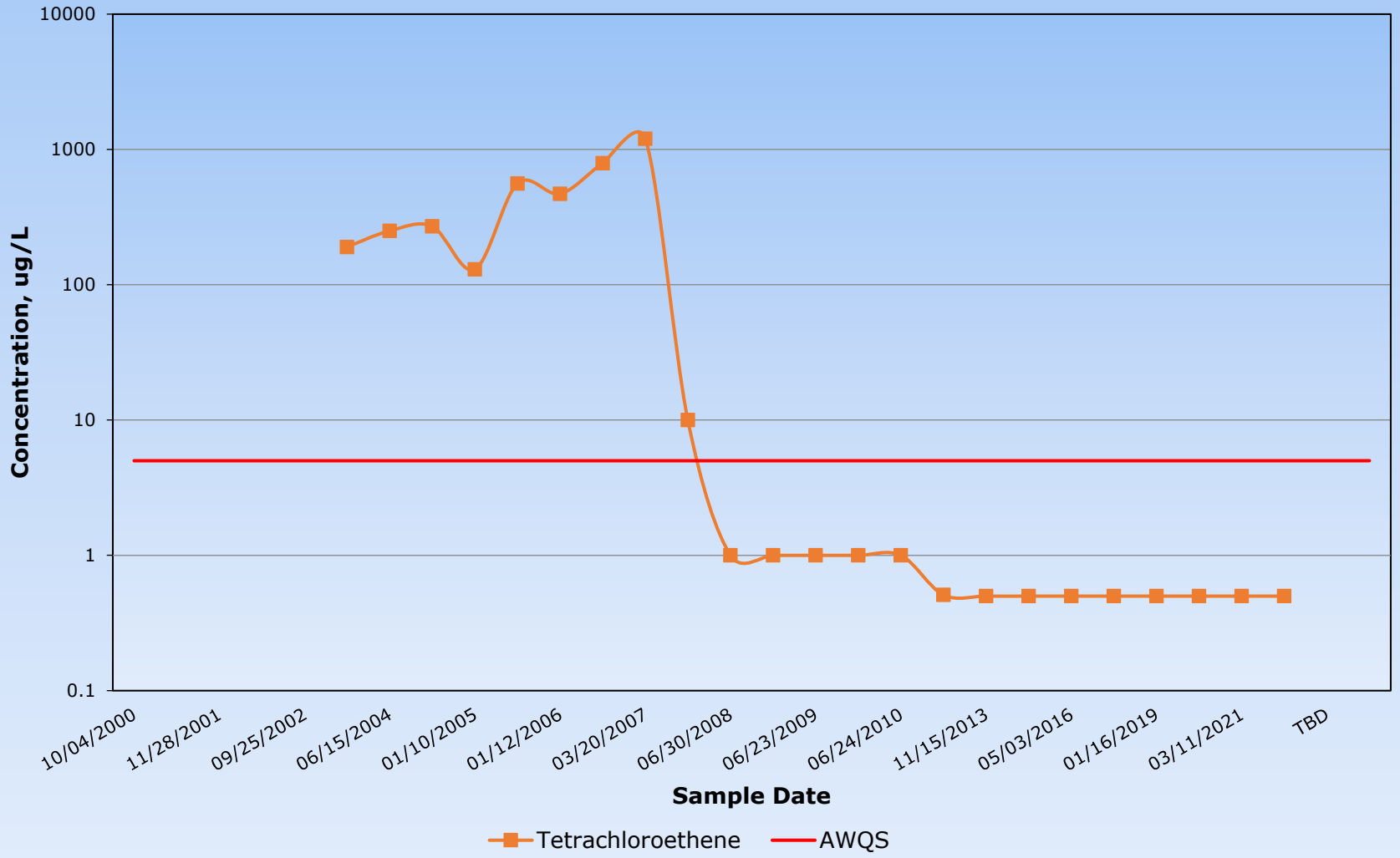
APPENDIX G

TETRACHLOROETHENE (PCE) CONCENTRATION vs. TIME
MW-13

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



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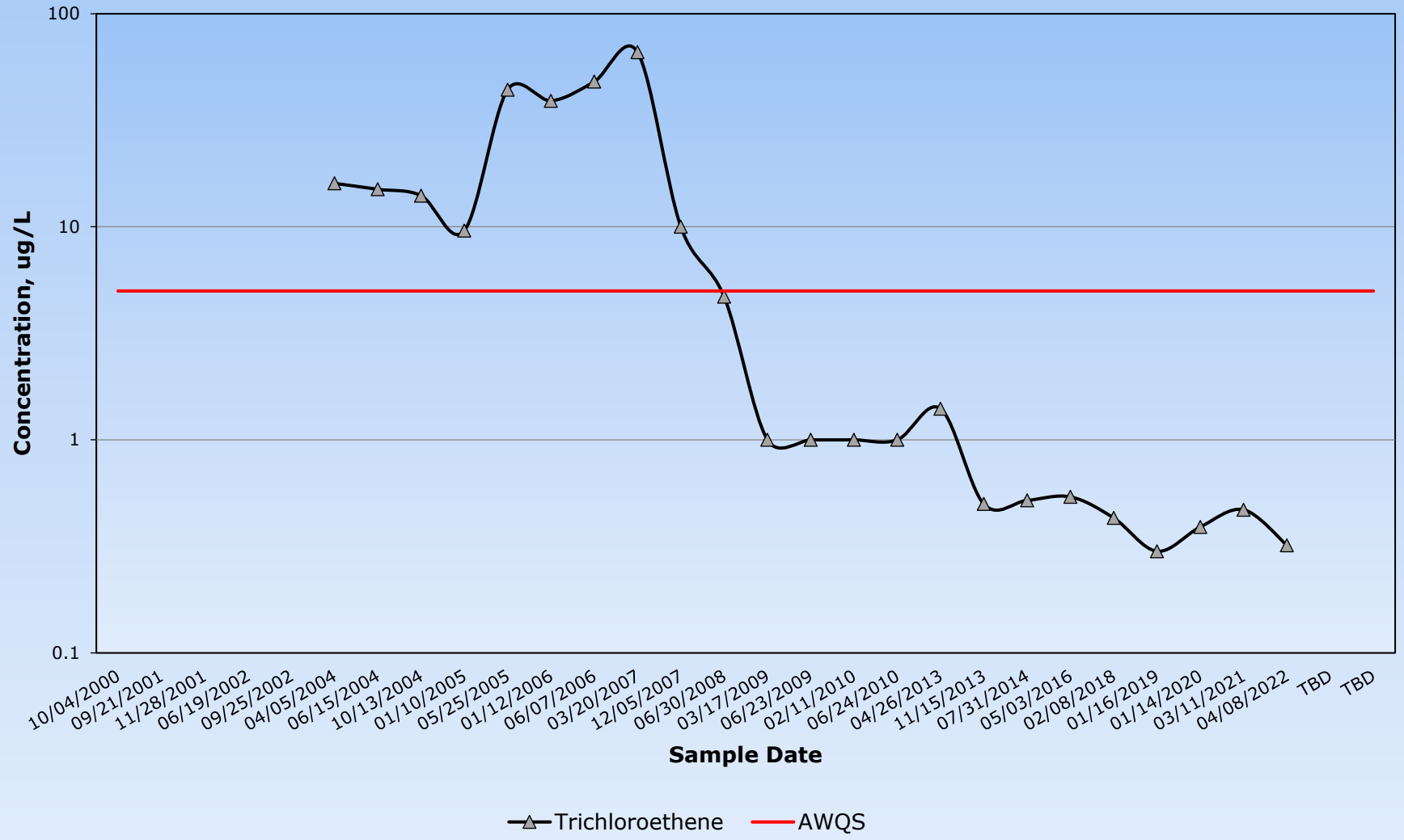
APPENDIX G

TRICHLOROETHENE (TCE) CONCENTRATION vs. TIME
MW-13

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



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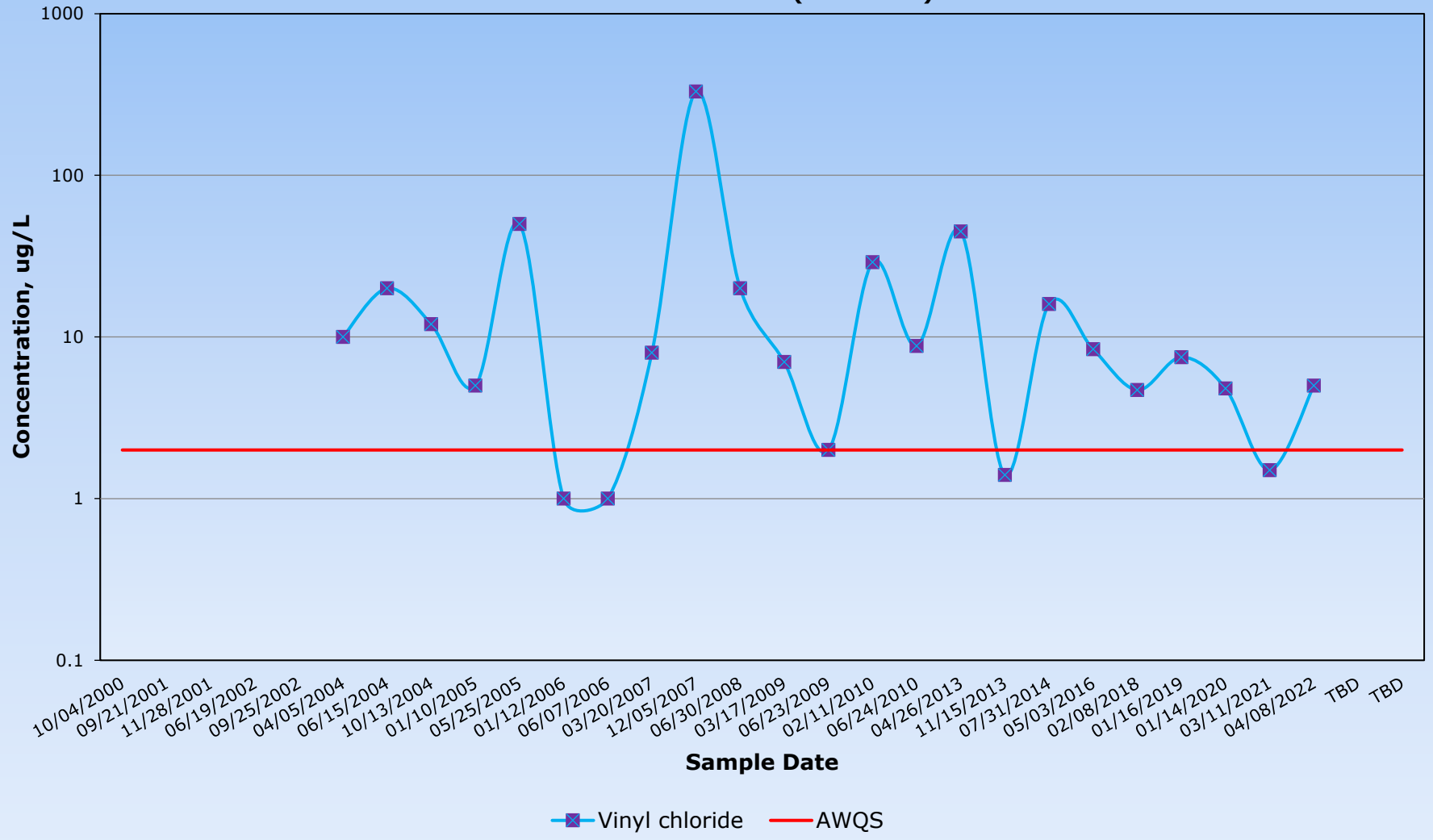
APPENDIX G

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

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



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APPENDIX G

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																
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
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
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 G

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																
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
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
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 G

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	TBD Qual	TBD 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																
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	15	10											
1,1-Dichloroethane	75-34-3	**5**	ug/L	0.5 U	0.87 J											
1,1-Dichloroethene	75-35-4	**5**	ug/L	0.5 U	0.5 U											
Tetrachloroethene	127-18-4	**5**	ug/L	0.5 U	0.5 U											
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L	2.5 U	2.5 U											
Trichloroethene	79-01-6	**5**	ug/L	0.47 J	0.32 J											
Vinyl chloride	75-01-4	**2**	ug/L	1.5	5											
Total cVOCs	***NA***	***NA***	***ug/L***	***16.97***	***16.19***											

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.

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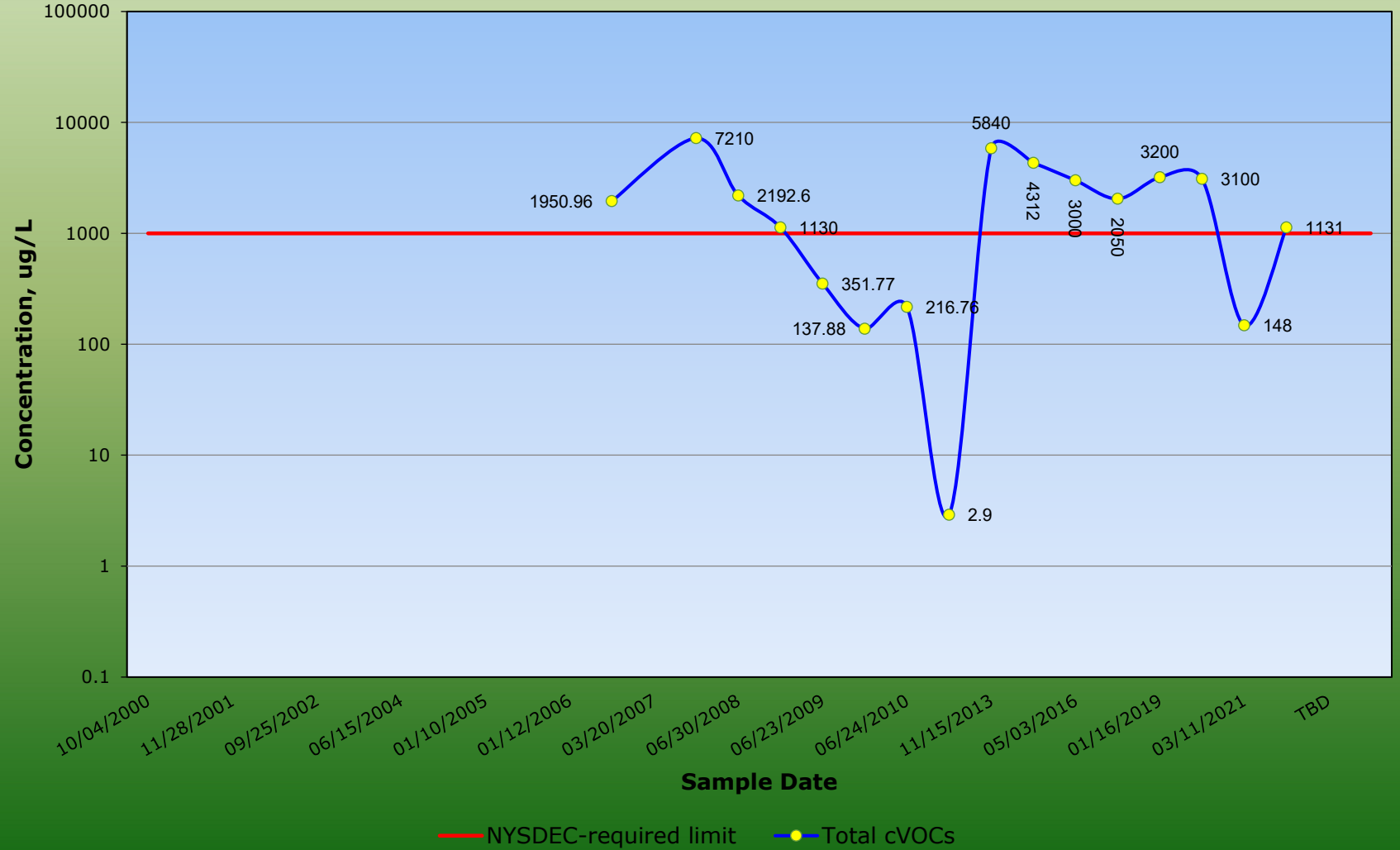
APPENDIX G

TOTAL cVOC CONCENTRATION vs. TIME
PZ-A

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



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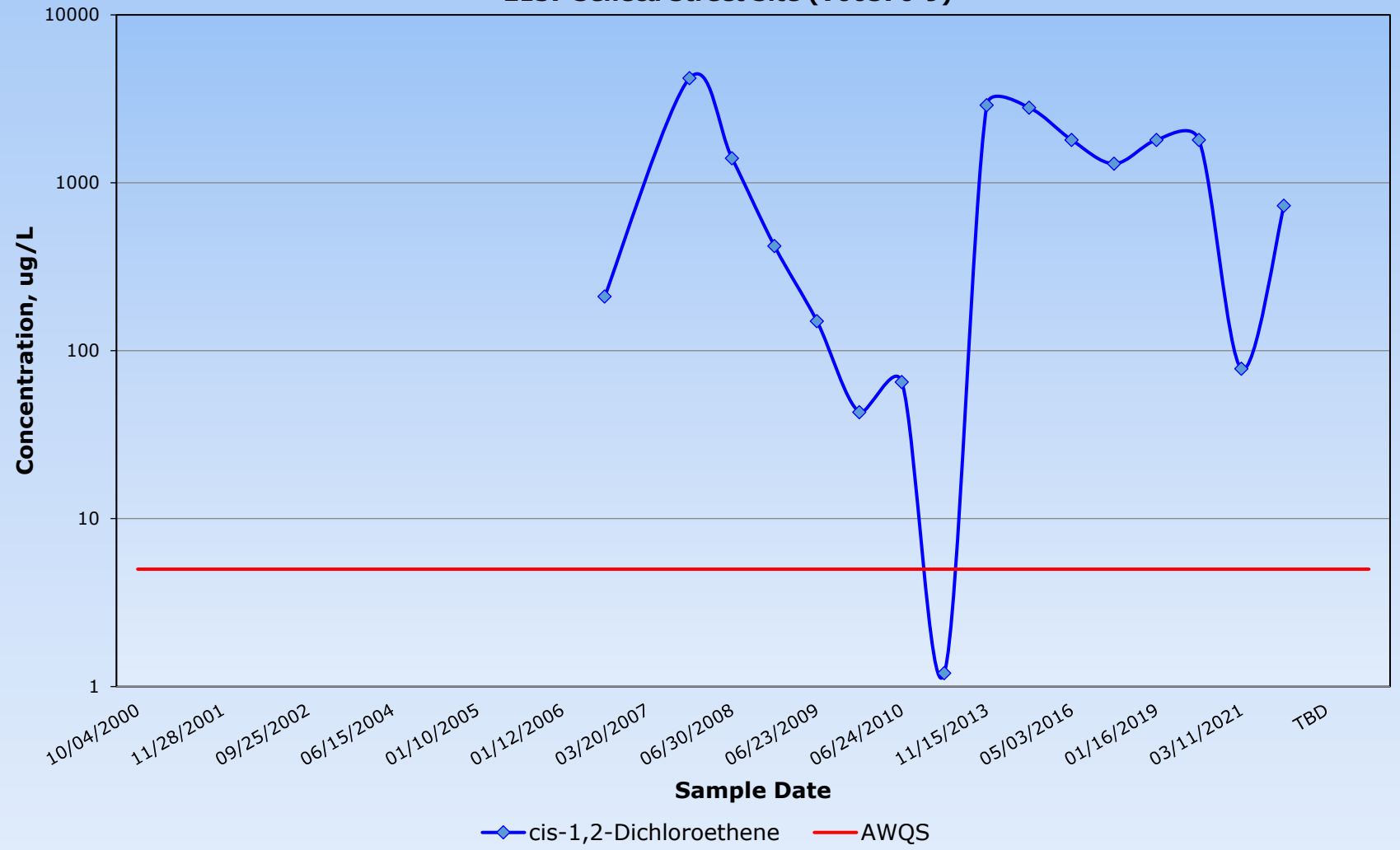
APPENDIX G

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

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



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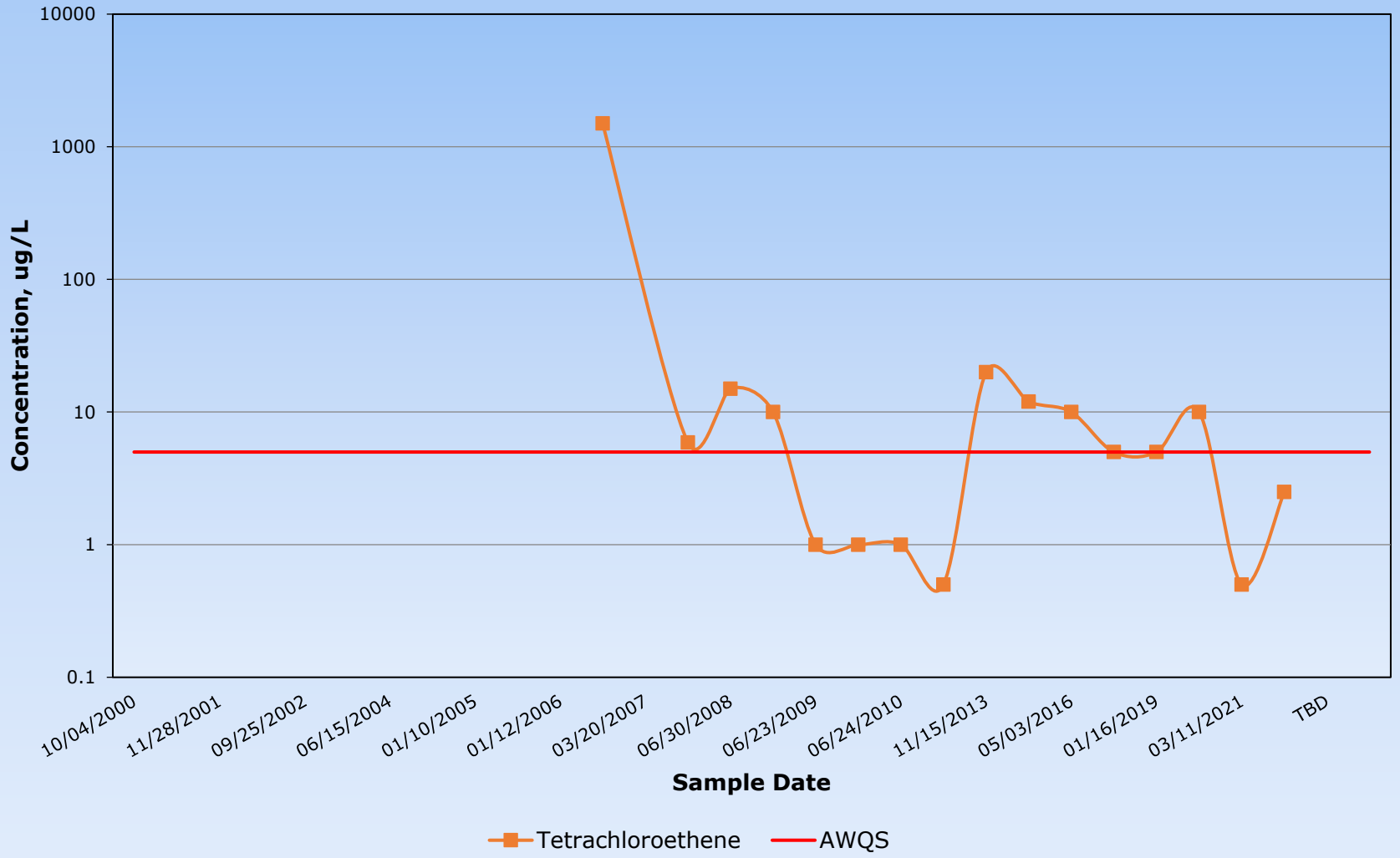
APPENDIX G

TETRACHLOROETHENE (PCE) CONCENTRATION vs. TIME
PZ-A

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



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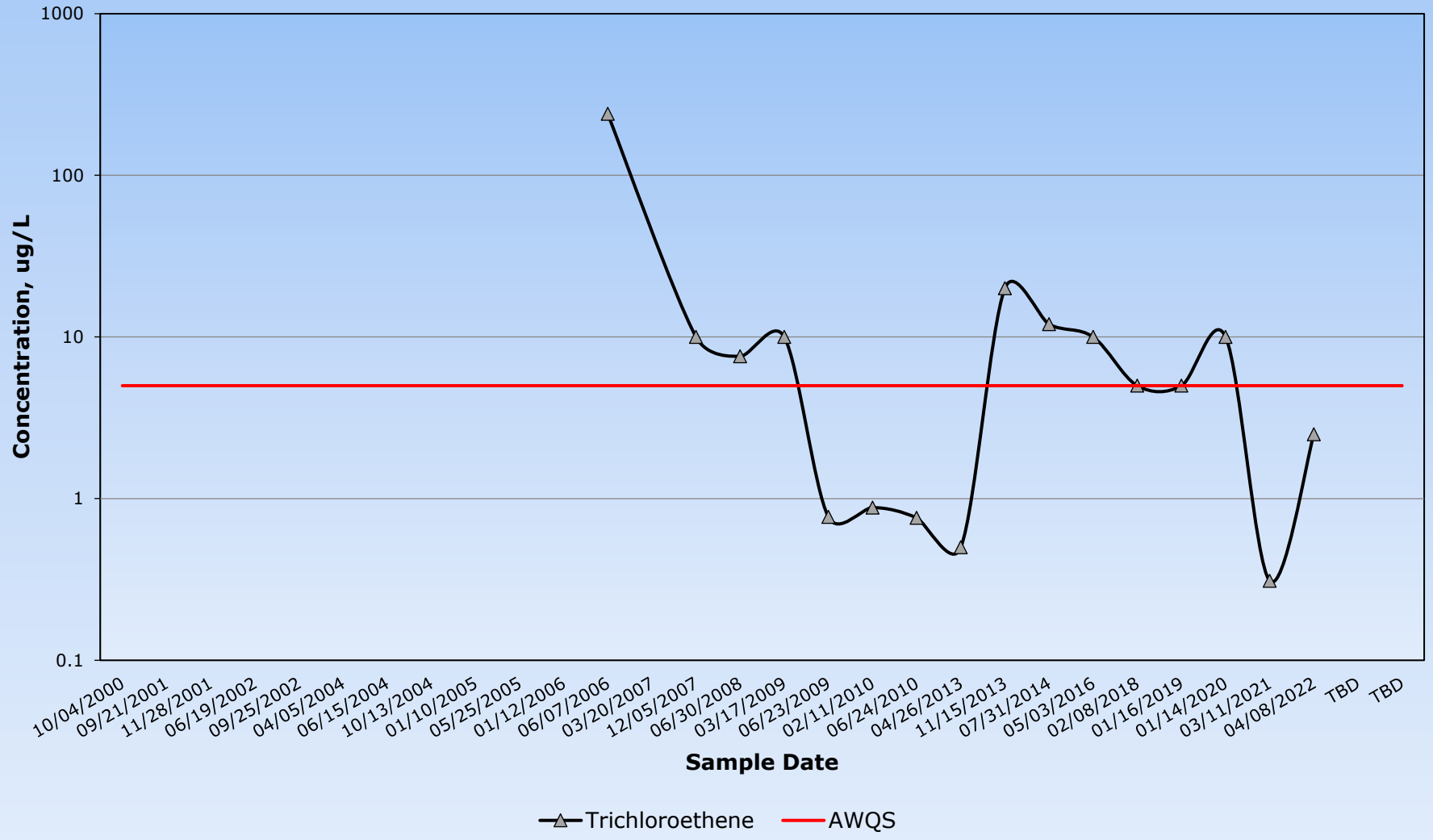
APPENDIX G

TRICHLOROETHENE (TCE) CONCENTRATION vs. TIME
PZ-A

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



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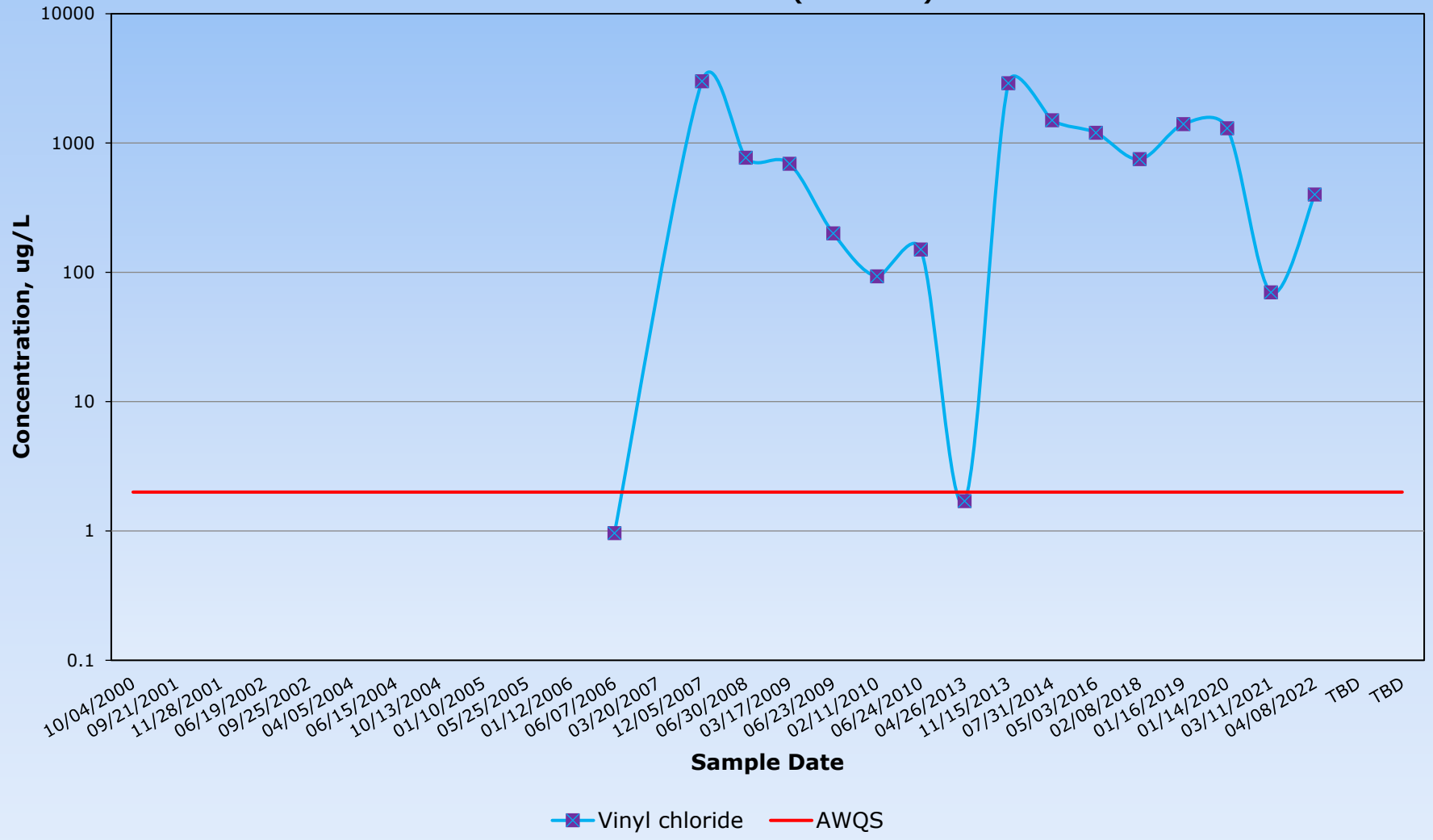
APPENDIX G

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

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



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APPENDIX G

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												
				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																
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L												210 D	
1,1-Dichloroethene	75-35-4	**5**	ug/L												10 U	
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 G

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												
				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																
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
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
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 G

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												
				PZ-A												
				Post-Injection												
				03/11/2021 Qual	04/08/2022 Qual	TBD Qual	TBD 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																
cis-1,2-Dichloroethene	156-59-2	**5**	ug/L	78	730 D											
1,1-Dichloroethene	75-35-4	**5**	ug/L	0.48 U	1 J											
Tetrachloroethene	127-18-4	**5**	ug/L	0.5 U	2.5 U											
trans-1,2-Dichloroethene	156-60-5	**5**	ug/L	2.5 U	12 U											
Trichloroethene	79-01-6	**5**	ug/L	0.31 U	2.5 U											
Vinyl chloride	75-01-4	**2**	ug/L	70	400 D											
Total cVOCs	***NA***	***NA***	***ug/L***	***148***	***1131***											

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 H

WELL DECOMMISSIONING RECORDS

WELL DECOMMISSIONING RECORD
NYSDEC NPL Sites

EARTH DIMENSIONS, INC.
1091 Jamison Road • Elma, NY 14059

Site Name: Seneca St Parcel #2	Well I.D. MW-2
Site Location: 2137 Seneca St	Driller: Andrew Kempisty
Drilling Co: Earth Dimensions INC	Inspector: Bryan Hann PG
	Date: 4-4-22

DECOMMISSIONING DATA
(fill in all that apply)

OVERDRILLING

Interval drilled	
Drilling Method(s)	
Borehole Dia. (in)	
Temporary Casing Installed? (y/n)	NA
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	

CASING PULLING

Method employed	
Casing retrieved (feet)	NA
Casing type/dia. (in)	

Casing perforating

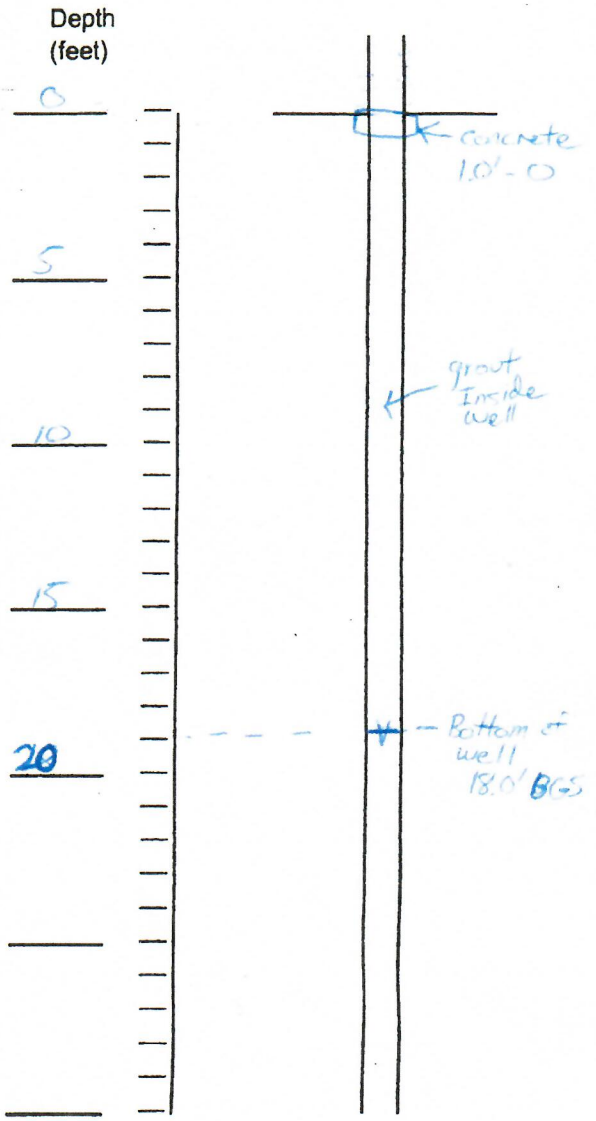
Equipment used	
Number of perforations/foot	NA
Size of perforations	
Interval perforated	

GROUTING

Interval grouted (FBLS)	18.0 - 0
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	14 gallons
Quantity of cement used (lbs.)	188 lbs
Cement type	Portland Type II
Quantity of bentonite used (lbs.)	10 lbs
Quantity of calcium chloride used (lbs.)	0
Volume of grout prepared (gal.)	26 gallons
Volume of grout used (gal.)	2.88 gallons

COMMENTS: Put hole through bottom of well plug with AWJ rods. Tremmie grouted from 18' to 0'. Removed rondbox. Finished with concrete from 1.0' - 0.

WELL SCHEMATIC*



* Sketch in all relevant decommissioning data including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor

Dept Representative

STATE OF NEW YORK
BRYAN C. HANN
LICENSED PROFESSIONAL GEOLOGIST
000270-1

Form_WellDecommissioningRecord.xls

WELL DECOMMISSIONING RECORD
NYSDEC NPL Sites

EARTH DIMENSIONS, INC.
1091 Jamison Road • Elma, NY 14059

Site Name: Seneca St Parcel #2	Well I.D. MW-4a
Site Location: 2137 Seneca St	Driller: Andrew Kempisty
Drilling Co: Earth Dimensions INC	Inspector: Bryan Hann PG
	Date: 4-4-22

DECOMMISSIONING DATA
(fill in all that apply)

OVERDRILLING

Interval drilled	NA
Drilling Method(s)	
Borehole Dia. (in)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	

CASING PULLING

Method employed	NA
Casing retrieved (feet)	
Casing type/dia. (in)	

Casing perforating

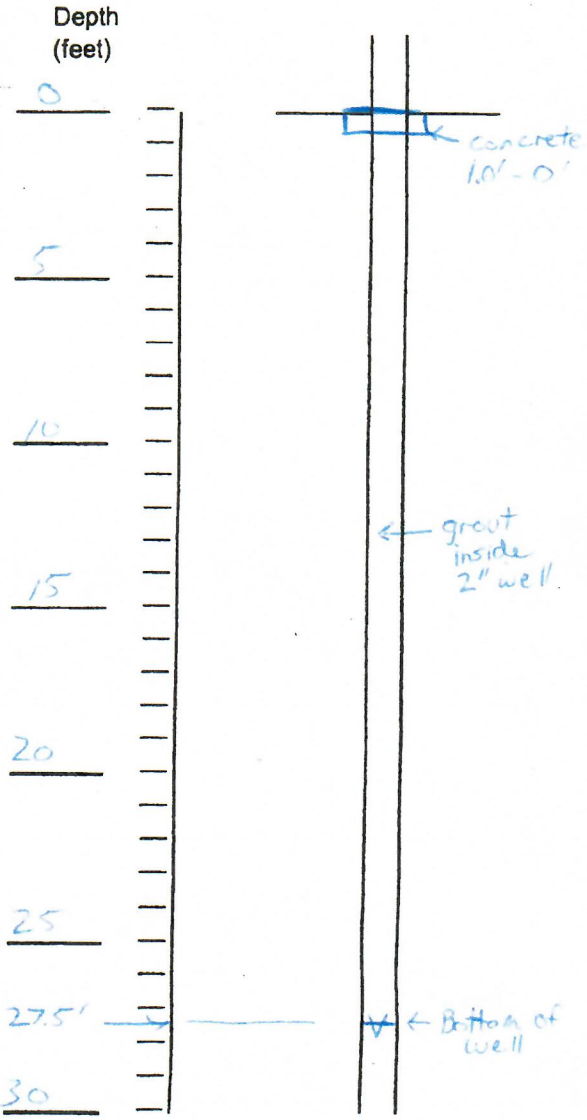
Equipment used	NA
Number of perforations/foot	
Size of perforations	
Interval perforated	

GROUTING

Interval grouted (FBLS)	27.5 - 0
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	14 gallons
Quantity of cement used (lbs.)	94 lbs
Cement type	Portland Type I
Quantity of bentonite used (lbs.)	10 lbs
Quantity of calcium chloride used (lbs.)	0
Volume of grout prepared (gal.)	26 gallons
Volume of grout used (gal.)	4.4 gallons

COMMENTS: Put hole through bottom plug with AWJ rods. Tremmie grouted to 1 ft BGS. Removed roadbox. Finished with concrete from 1' BGS to 0

WELL SCHEMATIC*



* Sketch in all relevant decommissioning data including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor

Dept Representative

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NEW YORK
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000270-1

Form_WellDecommissioningRecord.xls