

## **Division of Environmental Remediation**

# Site Characterization Scope of Work

Fedders Auto Components Buffalo, Erie County, New York Site Number 915024

September 2025

New York State Department of Environmental Conservation Region 9 700 Delaware Avenue Buffalo, New York 14209

## TABLE OF CONTENTS

SECTION		
1.0	OBJECTIVES	1
2.0	SITE HISTORY AND BACKGROUND	2
2.1	SITE DESCRIPTION	
2.2	SITE FEATURES	
2.3	Site History	
2.4	Remedial History	
2.5	SITE CONTAMINATION	
2.5		
2.5	//	
2.5		
2.5		
2.6	SITE GEOLOGY AND HYDROGEOLOGY	8
3.0	SCOPE OF WORK	q
3.0	SCOI E OF WORK	······································
3.1	Initial Site Survey	10
3.2	Soil Boring Program	
3.2		
3.2	<u> </u>	
3.2		
3.2	. , , , , , , , , , , , , , , , , , , ,	
3.3	OVERBURDEN MONITORING WELLS	
3.3	3.1 Well Construction	15
3.3	3.2 Completion of the Overburden Monitoring Well Program	
3.3	3.3 Geologic Logging and Well Construction Diagrams	
3.3		
3.3		
3.4	DECONTAMINATION AND INVESTIGATION-DERIVED WASTE	19
3.5	NAPL ASSESSMENT, SAMPLING AND ANALYSIS	20
3.6	WATER LEVEL MEASUREMENTS	20
3.7	FINAL SITE SURVEY AND MAPPING	21
3.8	Health & Safety	22
3.9	DATA USABILITY SUMMARY REPORTS (DUSRS)	
3.10	EQuIS	23
3.11	REPORT PREPARATION	23

## LIST OF FIGURES (Following Text)

	(I onlowing Text)			
Figure 2-1 Figure 2-2 Figure 2-3 Figure 2-4 Figure 2-5 Figure 2-6 Figure 2-7 Figure 2-8 Figure 2-9 Figure 3-1 Figure 3-2 Figure 3-3	Site Location Map Site Plan of the Fedders Auto Components Site Surface Soil/Fill Sample Location Map Subsurface Soil Sample Location Map Sub-Slab Soil Vapor Sample Location Map Groundwater Sample Location Map Subsurface Soil Sample Depths & Total Chlorinated VOC Concentrations Sub-Slab Soil Vapor Sample Results: TCE Groundwater Contours Map Proposed Soil Boring Location Map Historic Extent of Scajaquada Creek, 1856 & 1894 Proposed Monitoring Well Location Map			
LIST OF TABLES				
(Following Figures)				
Table 2-1	Summary of Subsurface Fill & Soil VOC Analytical Results from the 1990 Phase II Investigation			
Table 2-2	Summary of Subsurface Fill & Soil VOC Analytical Results from the BCP Remedial Investigation			
Table 2-3	Summary of Subsurface Fill & Soil VOC Analytical Results from the Bike Path Soil Borings			
Table 2-4	Summary of Overburden Groundwater VOC Analytical Results			
Table 2-5	Stratigraphic Summary of Soil Borings and Test Pits Completed at the Fedders Automotive Components Site			
Table 3-1	Proposed Soil Boring Coordinates			
Table 3-2	Summary of the Laboratory Analytical Program			
Table 3-3	Existing Monitoring Well Construction Summary			
	LIST OF APPENDICES			

Appendix A	Generic Health and Safety Plan
Appendix B	NYSDOH Community Air Monitoring Plan
Appendix C	Soil Boring & Test Pit Logs
Appendix D	Monitoring Well Construction Diagrams

## 1.0 OBJECTIVES

During a 2019/2020 Remedial Investigation (RI) completed at the 57-71 Tonawanda Street Brownfield Cleanup Program (BCP) Site (Site No. C915024), chlorinated volatile organic compounds (VOCs) were detected in soil, groundwater, and sub-slab soil vapor at the site. The New York State Department of Environmental Conservation (NYSDEC) has determined that the site presents a significant threat to public health and the environment. Due to the potential for these contaminants to migrate off-site, the NYSDEC has assigned this off-site area site number C915024A and called it the 57-71 Tonawanda Street Off-Site Area.

Subsequent to the significant threat determination, the BCP applicant submitted an amendment to remove the 57 Tonawanda Street parcel from the BCP Site. This change was accepted by the NYSDEC in March 2022. As a result, the 57 Tonawanda Street parcel, a portion of the Fedders Auto Components Class 3 Site (Site No. 915024), will not be remediated under the Brownfield Cleanup Program as originally planned. In addition, it is not clear that the 57 Tonawanda Street parcel rises to the level of a significant threat.

The NYSDEC is preparing to complete a Site Characterization (SC) at the Fedders Auto Components Site. The overall objective of the SC is to obtain data sufficient to re-evaluate the Class 3 NYSDEC Registry designation for the site. The specific objectives of the SC are to:

- Further evaluate the extent of chlorinated volatile organic compound (VOC) contamination in subsurface soil & fill at the site;
- Further evaluate the extent of chlorinated VOC contamination in groundwater at the site:
- Determine how far coal tar (non-aqueous phase liquid or NAPL) from the Iroquois Gas/Westwood Pharmaceuticals Riparian Site (Site No. 915141B) has migrated onto the site.

The specific responsibilities of the NYSDEC and its Standby Investigation and Remediation (I&R) Contractor are given in Section 3.0 of this Scope of Work. The NYSDEC is the lead agency for this investigation.

#### 2.0 SITE HISTORY AND BACKGROUND

## 2.1 Site Description

The Fedders Auto Components Site is listed as a Class 3 site in NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites (Registry) as site no. 915024. The site consists of two adjacent parcels at the northeast corner of West Avenue and Tonawanda Street in the Black Rock section of the City of Buffalo (Figure 2-1). The 57 Tonawanda Street property is 1.07 acres in size, while the 71 Tonawanda Street property is 1.76 acres in size (Figure 2-2). In the Registry, the site address is listed at 57 Tonawanda Street.

The site is bordered by a bike path and Scajaquada Creek to the east; West Avenue and the 31 Tonawanda Street BCP Site (Site No. C915299) to the south; Tonawanda Street and the 68 Tonawanda Street BCP Site (Site No. C915316) to the west; and the former Pratt & Lambert Inc. inactive hazardous waste disposal site (Site No. 915251) to the north. The New York State Thruway and the Black Rock Canal are located about 0.25 miles southwest of the site.

#### 2.2 Site Features

The 57 Tonawanda Street property contains an approximately 10,230 square foot 2-story building, while the 71 Tonawanda Street property contains an approximately 115,000 square foot 2- to 4-story building (Figure 2-2). The 57 Tonawanda Street building functioned as the offices for the complex and was more recently renovated to accommodate planned student workspaces/housing that never occurred. The 71 Tonawanda Street building is vacant and deteriorated. A portion of the roof is caved in at the southern end and a portion of the northern end was destroyed by fire sometime after 2008.

A large parking lot extends from the buildings to almost the eastern site boundary. This parking lot is the location of the Class 3 Fedders Auto Components inactive hazardous waste disposal site.

## 2.3 Site History

In 1907 the Fedders Manufacturing Works was located at 55-59 Tonawanda Street. Available information indicates that the initial plant was a 3-story building located at 55 Tonawanda Street. A major building expansion took place in 1910. By 1914 the company was known as the Fedders Manufacturing Co., Inc., with another major expansion occurring in 1915. A 1916 Sanborn map also shows the company at 31 Tonawanda Street, but it is uncertain when use of that property began.

Prior to being added to the Fedders complex, residential and small storefront properties were located on the 55 to 71 Tonawanda Street properties. The Hall & Son Fire Brick factory complex was located on the eastern portion of these properties, and operated from about 1866 to the early 1940s. This plant had large storage sheds for bricks, a flue house and numerous kilns. Between 1936 and 1942, the buildings and kilns were demolished and the demolition material used as on-site fill, possibly along with other imported fill, to raise the elevation of this formerly low-lying area.

Initially, Fedders made milk cans, kerosene tanks for the Standard Oil Co., and bread pans for the National Biscuit Co. Later, Fedders converted the plant to make radiators for automobiles. During World War I the company also made radiators for airplanes and manufactured appliances for heating and electrical refrigeration. During World War II, Fedders received contracts to make links and clips for machine-gun belts and rifle bullets. In the late 1940s through the 1960s, Fedders made room air conditioners and electric water coolers, heaters, radiators, radiator cores, home radiators, convectors, hot-water boilers and women's handbag frames, as well as heat-transfer equipment, including convectors, condensers, evaporators, and dehumidifiers.

In 1974, the Erie County Department of Environmental Quality, Air Pollution Control Division, instructed Fedders to implement some means of fugitive dust control for their parking lot. The company subsequently spread approximately 165 gallons of waste oil per year on the parking lot from 1974 to 1976. Conflicting reports indicated that the practice continued until 1981. Although Fedders officials stated that the oils used for dust control were light lubrication oils and hydraulic fluids, it is thought that the oils may have contained PCBs and solvents. In 1981, the parking lot was covered with gravel, therefore, dust control efforts were no longer necessary.

By 1990 the company was sold to FEDCO who manufactured automobile heating equipment. Manufacturing operations at the facility ceased in June 2005 and the property was sold to Black Rock Trade Center, Inc. later that year.

The Fedders Manufacturing Company had a history of using various chemicals, oils, solvents and other materials in their manufacturing processes. Processes at the property included metal stamping, soldering, brazing, welding, painting, acid washing and degreasing. Industrial wastes were reported to include solder dross, degreasing still bottoms including trichloroethene (TCE) and tetrachloroethene (PCE), and petroleum-based lubricating fluids.

#### 2.4 Remedial History

In 1985 the NYSDEC completed a Phase I Investigation at the Fedders Auto Components inactive hazardous waste disposal site. This was followed by the completion of a Site Investigation by the FEDCO Automotive Components Co. in 1989, and a Phase II Investigation by the NYSDEC in 1990. These investigations documented the presence of volatile organic compounds (primarily chlorinated VOCs) in groundwater and semi-volatile organic compounds (primarily polycyclic aromatic hydrocarbons or PAHs) and select metals (arsenic, cadmium, chromium, lead, manganese and mercury) in soils at the site.

Based upon the results of the previous investigations, the current owner of the 71 Tonawanda Street parcel applied to the NYSDEC's Brownfield Cleanup Program (BCP) in October 2017. The 57 & 71 Tonawanda Street properties were accepted into the BCP in December 2017, and the site was assigned number C915024 by the NYSDEC.

The BCP Remedial Investigation field activities were completed between December 2019 and March 2020 with the completion of soil borings, test pits, and monitoring wells, and the collection of soil, groundwater, and sub-slab soil vapor samples for chemical analysis. The Remedial Investigation report was approved in June 2020. A Decision Document for 57-71 Tonawanda Street BCP Site was issued by the NYSDEC on June 11, 2020.

In September 2020, the NYSDEC installed three (3) wells along the bike path east of the site as part of the Remedial Investigation completed at the 31 Tonawanda Street Off-Site Area.

During the BCP Remedial Investigation, Erie County foreclosed on the 57 Tonawanda Street Parcel and sold it at auction. As a result, the remedy described in the June 2020 Decision Document could not be implemented. To keep the redevelopment project moving forward, the BCP applicant submitted a BCP amendment, and the site boundary was modified in March 2022 to include just the 71 Tonawanda Street property. A Decision Document for the 71 Tonawanda Street BCP Site was issued by the NYSDEC on February 16, 2023. As of September 2025, remediation of the 71 Tonawanda Street BCP Site has not started due to the increased cost of the project.

#### 2.5 Site Contamination

During the Site Investigation completed in 1989, the Phase II Investigation completed in 1990, the BCP Remedial Investigation completed in 2019 and 2020, and the NYSDEC Remedial Investigation completed at the 31 Tonawanda Street Off-Site Area in 2020, samples for analysis were collected from surface soil/fill (Figure 2-3), subsurface soil/fill (Figure 2-4), sub-slab soil vapor (Figure 2-5), and groundwater (Figure 2-6). Surface soil/fill (0-6 inch depth), subsurface fill (1-18 feet depth), subsurface soil (2-27 feet depth), and groundwater were analyzed for semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and metals. Subsurface fill, subsurface soil, and groundwater were also analyzed for VOCs, as were the sub-slab soil vapor samples. These investigations determined that chlorinated VOCs [trichloroethene (TCE), trichloroethane (TCA), cis-1,2-dichloroethene (DCE), dichloroethane (DCA), vinyl chloride (VC)], acetone, 1,4-dioxane, select metals and polycyclic aromatic hydrocarbons (PAHs) were the primary contaminants of concern at the site.

Because the main focus of the Proposed Site Characterization is to further evaluate chlorinated VOC contamination in subsurface soils and groundwater at the site, the summary of results presented in the subsections below will focus on those contaminants. For a detailed summary of the BCP Remedial Investigation field activities and the overall results of that investigation, please refer to the May 2020 Remedial Investigation/Remedial Alternatives Analysis (RI/RAA) Report prepared by the BE3 Corporation.

#### 2.5.1 Surface Soil/Fill

Five (5) surface soil/fill samples were collected from the site during the BCP Remedial Investigation (Figure 2-3). These samples, however, were not analyzed for volatile organic compounds.

#### 2.5.2 Subsurface Soil/Fill

Nine (9) fill and six (6) subsurface soil samples were collected from the Fedders Auto Components Site during the 1990 Phase II Investigation, while thirteen (13) fill and eleven (11) subsurface soil samples were collected during the 2019/2020 BCP Remedial Investigation (Figure 2-4). Two (2) subsurface soil samples were collected from the site during the 2020 NYSDEC Remedial Investigation completed at the 31 Tonawanda Street Off-Site Area with one (1) fill sample collected along the bike path north of the site (Figure 2-4). The VOC results from these samples are provided in Table 2-1 (Phase II Investigation), Table 2-2 (BCP RI), and Table 2-3 (NYSDEC RI).

Benzene (1 sample), ethylbenzene (1 sample), toluene (1 sample), trichloroethene (3 samples), vinyl chloride (1 sample), and xylenes (1 sample) were the only VOCs detected that exceeded the NYSDEC Part 375 Restricted Residential SCOs (Tables 2-1 thru 2-3). Numerous VOCs, however, exceeded the Protection of Groundwater SCOs. These exceedances include: 1,1,1-trichloroethane (3 samples), 1,1-dichloroethane (3 samples), cis-1,2-dichloroethene (3 samples), trans-1,2-dichloroethene (1 sample), benzene (2 samples), ethylbenzene (2 samples), methylene chloride (1 sample), toluene (1 sample), trichloroethene (12 samples), vinyl chloride (3 samples), and xylenes (2 samples) (Tables 2-1 thru 2-3).

When detected, the concentrations of total chlorinated VOCs ranged from 2.85 to 1,980,000 parts per billion (ppb) with the most elevated detections identified beneath the 71 Tonawanda Street building at the western portion of the site (Tables 2-1 thru 2-3). Total chlorinated VOCs concentrations and sample depths are summarized on Figure 2-7.

#### 2.5.3 Groundwater

Two (2) groundwater samples were collected from the Fedders Auto Components Site

during the 1989 Site Investigation, three (3) groundwater samples were collected during the 1990 Phase II Investigation, five (5) groundwater samples were collected during the 2019/2020 BCP Remedial Investigation, and three (3) groundwater samples were collected during the 2020 NYSDEC Remedial Investigation completed at the 31 Tonawanda Street Off-Site Area (Figure 2-6). The results from these samples are provided in Table 2-4.

Contaminants that exceeded the NYSDEC groundwater standards or guidance values included: 1,1,1-trichloroethane (6 samples), 1,1-dichloroethane (6 samples), 1,1-dichloroethene (1 sample), cis-1,2-dichloroethene (1 samples), trans-1,2-dichloroethene (1 sample), total-1,2-dichloroethene (3 samples), acetone (3 samples), benzene (4 samples), ethylbenzene (4 samples), isopropylbenzene (1 sample), methylene chloride (3 samples), styrene (1 sample), toluene (2 samples), trichloroethene (7 samples), vinyl chloride (3 samples), and xylenes (3 samples) (Table 2-4).

The most significant impact to groundwater from chlorinated VOCs was documented at monitoring well MW-4 along Tonawanda Street with TCE detected at a concentration of 7,370 ppb (Table 2-4).

## 2.5.4 Sub-Slab Soil Vapor and Indoor Air

Six (6) sub-slab soil vapor samples were collected below the on-site building slab during the BCP Remedial Investigation (Figure 2-5). VOCs detected in these samples (with the number of samples and highest concentrations) include the following:

- acetone (6 samples; 110 micrograms per cubic meter (ug/m3));
- TCE (6 samples; 19,000 ug/m3);
- TCA (3 samples; 25 ug/m3);
- DCA (1 sample; 1.3 ug/m3); and
- cis-1,2-DCE (3 samples; 38 ug/m3).

The sub-slab soil vapor sample results for TCE are summarized on Figure 2-8.

Indoor air samples were not collected as the roof is partially collapsed, most of the windows in the buildings are missing, and the buildings aren't heated.

## 2.6 Site Geology and Hydrogeology

Fill material exists throughout the site at thicknesses ranging from 0.5 feet behind the 71 Tonawanda Street building to 16.63 feet at the eastern site boundary (Table 2-5). The fill material consists mainly of grey gravel with some silt and concrete along Tonawanda Street and black sand, cinders, brick, ash, slag, gravel, and reworked silty clay under the parking lot. River deposits (alluvium), consisting of gray gravelly sand and gray sandy silty clay, directly underlie the fill material in the east-central portion of the site. The alluvium deposit was encountered at depths ranging from 3.5 to 16.8 feet, and ranged in thickness from 4.0 to 14.1 feet (Table 2-5).

Native reddish-brown clay or silty clay directly underlies the fill material in the western portion of the site and the alluvium deposit in the east-central portion of the site. This deposit was encountered at depths ranging from 0.83 to 22.1 feet (Table 2-5). The reddish-brown silty clay deposit was not completely penetrated during any investigation completed at the Fedders Auto Components Site so its thickness at the site is unknown. Along Tonawanda Street, however, it is known that the thickness of this deposit is > 28.0 feet (Table 2-5).

Bedrock was not encountered at the site; however, at the nearby Iroquois Gas/Westwood Pharmaceutical Site (Site No. 915141), depth to bedrock ranges from 72.3 to 89.2 feet below ground surface (bgs).

Depth to groundwater at the Fedders Auto Components Site ranged from 1.7 to 4.1 feet. Overburden groundwater flow is to the southeast toward Scajaquada Creek (Figure 2-9).

#### 3.0 SCOPE OF WORK

To meet the Site Characterization objectives discussed in Section 1.0, the following activities will be completed during the Site Characterization at the Fedders Auto Components Site: (1) the completion of an initial survey to stake the locations of the proposed soil borings; (2) the completion of soil borings at the site to further characterize subsurface stratigraphy, facilitate sample collection, and to evaluate the presence of NAPL in the subsurface environment; (3) the collection of fill and subsurface soil samples for chemical analysis; (4) the installation of overburden monitoring wells throughout the site to evaluate deeper water-bearing zones; (5) the collection of groundwater samples for chemical analysis; (6) an assessment of the monitoring wells for the presence of NAPL; (7) the collection of NAPL samples for chemical analysis; (8) the completion of periodic well gauging for purposes of generating hydrographs and groundwater contour maps; (9) the completion of a site survey; (10) the completion of Data Usability Summary Reports (DUSRs); (11) the preparation of electronic data deliverable (EDD) files for upload to EQuIS; and (12) the preparation of a Site Characterization Report.

The NYSDEC will task a Standby I&R Contractor to complete the following activities as part of the Site Characterization. These activities are listed in the general order in which they should be completed:

- Subcontract with a surveyor licensed in the State of New York to complete an initial survey to stake the locations of the proposed soil borings;
- Provide and mobilize to the site a direct-push drill rig capable of turning augers to complete a series of soil borings at the Fedders Auto Components Site and to install 2-inch diameter overburden monitoring wells;
- Provide a qualified geologist to log the borings, complete stratigraphic logs, and complete well construction diagrams during the soil boring and well installation activities;
- Provide a technician during the soil boring and well installation activities to collect subsurface soil and fill samples, complete the appropriate paperwork, and transport the samples and paperwork to a NYSDEC contract lab for analysis;
- Provide a technician and appropriate equipment to develop, purge and sample the newly installed and existing monitoring wells at the site. The technician will also complete the appropriate paperwork, and transport the samples and paperwork to a NYSDEC contract lab for analysis;

- Subcontract with a surveyor licensed in the State of New York to survey the locations of all soil borings completed during the Site Characterization, all monitoring wells at the site (new and existing), and building corners at the rear of the building;
- Subcontract with a company that is qualified to complete a Data Usability Summary Report (DUSR) to determine if the analytical data meets the criteria for data quality and use; and
- Prepare the electronic data deliverable (EDD) files for upload to EQuIS.

Specific details of the work to be completed during the Site Characterization, including those activities to be conducted by the Standby I&R Contractor, are described in the following subsections.

## 3.1 Initial Site Survey

A surveyor licensed in the State of New York will complete an initial survey to stake the locations of the proposed soil borings, which are shown on Figure 3-1. Coordinates for these borings (NY State Plane Coordinate System, Zone NY W-3103) are provided in Table 3-1. This task is required for two reasons: (1) the soil boring locations from the BCP Remedial Investigation may no longer be observable in the field and the proposed NYSDEC Site Characterization builds off of that investigation; and (2) the property boundary with the adjacent 71 Tonawanda Street BCP Site runs through the parking lot behind the building and is not discernible in the field.

Additional survey requirements are discussed in Section 3.7.

## 3.2 Soil Boring Program

Two (2) objectives of the Site Characterization are to: (1) further evaluate the extent of chlorinated VOC contamination in subsurface soil & fill at the Fedders Auto Components Site; and (2) determine how far coal tar (NAPL) has migrated onto the site. Coal tar from the former Iroquois Gas/Westwood Pharmaceuticals Site is known to be present in the former creek channel, and has been detected in monitoring well MW-100 (Figure 3-3). Maps from 1856 and 1894 show that the historic extent of the former creek channel extended across a large portion of the Fedders Auto Components Site (Figure 3-2), thereby suggesting that coal tar could be present throughout the eastern portion of the site.

To further evaluate the extent of chlorinated VOC contamination in subsurface soil & fill at the site, sixteen (16) soil borings will be completed as shown on Figure 3-1. These borings will also be useful for defining the extent of the former creek channel and for determining how far coal tar has migrated onto the site.

Each soil boring (Figure 3-1) will be advanced to a depth of 30 feet or at least 4 feet into the underlying reddish-brown silty clay deposit, whichever is deeper, for the purpose of geologic logging, the collection of fill & subsurface soil samples for chemical analysis and to evaluate the presence of NAPL in the subsurface environment. The exception being borings that encounter NAPL; these borings will stop at the top of the underlying reddish-brown silty clay deposit.

Soil cores will be screened for organic vapors using a PID with an 11.7 eV bulb supplied by the Standby I&R Contractor. Sample intervals and analyses are described in Section 3.2.2.

The Drilling Subcontractor will be responsible for identifying and avoiding all overhead and underground utilities in the areas where the soil borings will be completed.

#### 3.2.1 Drilling Methods

Direct-push drilling is the most cost and time effective method of completing the soil boring program described above. For the Site Characterization, a direct-push vehicle capable of turning augers will be required. A track mounted direct-push vehicle would be most effective but other types of direct-push vehicles could be used.

## 3.2.2 Fill & Soil Sample Collection and Analysis

Continuous soil cores will be collected with dedicated acetate liners using a Geoprobe Dual Tube Sampling System, or equivalent. As described on the Geoprobe website: "Dual tube sampling uses two sets of probe rods to collect continuous soil cores while also performing casing in drilling. One set of probe rods is driven into the ground as an outer casing. These probe rods receive the driving force from the hammer and provide a sealed hole from which soil samples may be recovered without the threat of cross contamination. The second, smaller set of probe rods are placed inside the outer casing. The smaller rods hold a sample liner in place as the outer casing is driven one sampling interval. The small probe rods are then retracted to

retrieve the filled liner." For the Site Characterization, 5-foot long acetate liners are required as the sample collection program (see below) is based on 5-foot long samples. The Drilling Subcontractor will be responsible for opening the acetate liners.

At each soil boring location (Figure 3-1), analytical samples will be collected from the following intervals (based on the use of 5-foot long acetate liners):

- 5.0' 6.0' depth;
- 10.0' 11.0' depth;
- 15.0' 16.0' depth;
- 20.0' 21.0' depth;
- 25.0' 26.0' depth; and
- 29.0' 30.0' depth.

Based upon visual and/or monitoring evidence (i.e., staining, elevated PID readings, chlorinated solvent odors, or the presence of NAPL), and at the direction of the NYSDEC field representative, additional analytical samples and/or soil borings may be collected/completed to help delineate the areal extent of chlorinated VOC contamination and NAPL at the site. Upon retrieval, each soil interval will be described for: percent recovery, soil type, color, moisture content, texture, grain size and shape, consistency, evidence of staining or other chemically related impacts, and any other relevant observations.

Samples will be collected by the Standby I&R Contractor in consultation with the NYSDEC field representative and placed into laboratory supplied, pre-cleaned sample jars. Please note that all samples for VOC analyses should be discrete, non-homogenized grab samples. The jars will be labeled with a unique sample identification code using the soil boring numbers shown on Figure 3-1 and the sample depth (e.g., SB-VOC-01-Z01-02). The Standby I&R Contractor will be responsible for obtaining the appropriate sample bottles from the lab and making sure the numbers and types are correct prior to implementing field work.

Following sample collection, the Standby I&R Contractor will be responsible for completing the chain of custody, packing the coolers with the sample bottles and ice (or other

similar coolant), sealing the coolers with tape and custody seals, and shipping the coolers to the laboratory for analysis. A courier service can also be utilized for cooler pickup and delivery.

All soil/fill samples will be analyzed for Target Compound List (TCL) volatile organic compounds via United State Environmental Protection Agency (USEPA) method 8260C or newer. Soil/fill samples showing evidence of NAPL will also be analyzed for TCL semi-volatile organic compounds via USEPA method 8270D or newer, cyanide via USEPA method 9013A or newer, and ammonia via USEPA method 350.1 or newer. The laboratory analytical program for the subsurface soil & fill samples is summarized in Table 3-2, along with the QA/QC requirements. All invoices from the lab will be completed in accordance with its Standby Contract with the NYSDEC.

#### 3.2.3 Completion of the Soil Boring Program

Upon completion of each soil boring, the Drilling Subcontractor will backfill the boring with bentonite pellets or chips to within 4 inches (4") of the ground surface. The remainder of each boring will be backfilled with asphalt patch (soil borings completed in the asphalt parking lot) or clean soil (soil borings completed in areas not paved). Asphalt patch will also be used to backfill soil borings that were completed during the BCP Remedial Investigation.

Each soil boring will be staked or otherwise marked for future surveying (see Section 3.7 below).

To the extent possible, the site will be restored to conditions similar to those encountered prior to the start of the investigation.

#### 3.2.4 Geologic Logging

All geologic logging will be completed by a qualified geologist employed by the Standby I&R Contractor. The geologist should have a minimum of 5-years' experience logging soil cores. At the completion of the Site Characterization field activities, the Standby I&R Contractor will computer generate these logs and provide both the field logs and computer-generated logs to the NYSDEC in electronic format (i.e., Adobe PDF).

## 3.3 Overburden Monitoring Wells

Five (5) overburden monitoring wells were installed at the 57-71 Tonawanda Street BCP Site during the BCP Remedial Investigation, while three (3) wells were installed along the bike path east of the site as part of the Remedial Investigation completed for the 31 Tonawanda Street Off-Site Area (Figure 3-3). Historically, two (2) wells were installed during the 1989 FEDCO Site Investigation (exact locations unknown), while three (3) wells were installed during the 1990 NYSDEC Phase II Investigation (Figure 2-6). The five (5) historical wells have been destroyed or paved over.

The BCP Remedial Investigation wells monitor fill, gravel, sand, and the reddish-brown silty clay deposit (Table 3-3). This table shows that wells in the parking lot are only installed to depths of 15.0 feet, while the two (2) wells along Tonawanda Street are installed to depths of 30 feet. The 2020 NYSDEC wells monitor fill and/or alluvial deposits and are installed to depths ranging from 23.6 to 28.6 feet (Table 3-3).

One of the objectives of the Site Characterization is to further evaluate the extent of chlorinated VOC contamination in groundwater at the site. To accomplish this objective, five (5) soil borings completed during the Soil Boring Program will be converted into overburden monitoring wells at the approximate locations shown on Figure 3-3. The monitoring wells to be installed are distributed as follows:

- A deeper overburden well (MW-1D) adjacent to BCP well MW-1 to assess downgradient groundwater contamination. This well will be installed in soil boring SB-VOC-01;
- A deeper overburden well (MW-2D) adjacent to BCP well MW-2 to assess downgradient groundwater contamination. This well will be installed in soil boring SB-VOC-02;
- A deeper overburden well (MW-3D) adjacent to BCP well MW-3 to assess groundwater contamination in the center of the parking lot. This well will be installed in soil boring SB-VOC-03;
- An overburden well (MW-6D) in the parking lot near the building to assess groundwater contamination associated with contaminated soils under the building. This well will be installed in soil boring SB-VOC-06; and
- An overburden well (MW-7D) along Tonawanda Street between BCP wells MW-4 and

MW-5 to assess whether groundwater contamination in well MW-4 extends this far north. This well will be installed in soil boring SB-VOC-07.

Monitoring wells MW-1D, MW-2D, and MW-3D will be screened at the base of the alluvial deposit with the NAPL sump (see Section 3.3.1) installed into the underlying reddish-brown silty clay. However, if the contact between the alluvial deposit and the underlying reddish-brown silty clay is at depths similar to the BCP monitoring wells, the wells at those locations will be installed in the reddish-brown silty clay to monitor that deposit.

The reddish-brown silty clay deposit is expected to be shallow (< 5 feet depth; Table 2-5) at the monitoring well MW-6D and MW-7D locations. These wells will be installed to depths similar to BCP monitoring wells MW-4 and MW-5 (Table 3-3) but with shorter screen lengths (see Section 3.3.1). The exception will be if visual and/or monitoring evidence of contamination (i.e., staining, elevated PID readings, chlorinated solvent odors, or the presence of NAPL) is encountered at shallower depths.

If NAPL is encountered in any soil boring not to be completed as a well, up to three (3) additional monitoring wells will be installed to facilitate the collection of NAPL samples for chemical analysis. The borings to be converted into monitoring wells will be determined in the field by the NYSDEC field representative.

The Drilling Contractor will be responsible for identifying and avoiding all overhead and underground utility lines in the areas where monitoring wells are to be installed.

#### 3.3.1 Well Construction

Following the completion of each well boring (Figure 3-3), the wells will be completed by advancing 4¼-inch diameter augers (or other appropriate size) using a direct-push vehicle capable of turning augers. Monitoring wells will be constructed using 2-inch diameter flush-threaded Schedule 40 polyvinyl chloride (PVC) riser pipe and screen (0.02-inch sized slot openings or 20-slot). Each well will be constructed with a 2-foot long NAPL collection sump (riser pipe) with a threaded bottom plug, a 10-foot long screen unless a thinner, more permeable deposit is encountered (e.g., a sand or gravel lens), and riser pipe to ground surface. Final determination of the screen lengths will be made in the field by the NYSDEC field representative

based on the subsurface geology at each well location.

For monitoring wells MW-1D, MW-2D, and MW-3D, the 2-foot long NAPL collection sump will extend into the reddish-brown silty clay deposit below the well screen. The annular space surrounding the sump (all wells) will be sealed with bentonite prior to installation of an appropriately graded silica sand filter pack around the well screen. The filter pack will extend to approximately 2 feet above the screen.

Bentonite chips or pellets will be placed above the filter pack and brought to within 2 feet of the ground surface. The wells will be completed with protective road boxes placed into filter pack sand to promote drainage, and surrounded by cement or concrete pads. The bentonite will be hydrated prior to adding the road box and filter sand.

#### 3.3.2 Completion of the Overburden Monitoring Well Program

To the extent possible, each well location will be restored to conditions similar to those encountered prior to the start of the investigation.

### 3.3.3 Geologic Logging and Well Construction Diagrams

All geologic logging will be completed by a qualified geologist employed by the Standby I&R Contractor. The geologist should have a minimum of 5-years' experience logging soil cores. The geologist will also be responsible for completing well construction diagrams. At the completion of the Site Characterization field activities, the Standby I&R Contractor will computer generate these logs and diagrams and provide both the field logs and computer-generated logs to the NYSDEC in electronic format (i.e., Adobe PDF).

#### 3.3.4 Well Development

All monitoring wells (new & existing) will be developed/redeveloped using an appropriate method (e.g., bailing, pumping, mechanical surging). Wells that contain NAPL, however, will not be developed in an effort to keep the riser pipe clean of this material.

During development the purged water will be monitored for pH, temperature,

conductivity, ORP or Eh, dissolved oxygen (DO), and turbidity. These data will be recorded on Well Development Logs. Water levels will be measured prior to and at the conclusion of development. During well development, stability will be established as three consecutive readings as outlined below:

- pH (± 0.1 pH units);
- temperature (± 3% of measurement);
- turbidity (< 50 NTU or ± 10% of measurement);
- DO (± 10% of measurement);
- ORP (± 10mV); and
- specific conductance (± 3% of measurement).

If stability is not achieved, development will be considered complete and cease after the total volume removed exceeds three times the volume used in constructing the well (e.g., water used to hydrate the bentonite) plus 5 standing well volumes.

Well development activities will be completed by the Standby I&R Contractor. At the completion of the Site Characterization field activities, the Standby I&R Contractor will computer generate the Well Development Logs and provide both the field logs and computer-generated logs to the NYSDEC in electronic format (i.e., Adobe PDF).

#### 3.3.5 Groundwater Sample Collection and Analysis

Groundwater samples will be collected from all new and existing monitoring wells to evaluate groundwater impacts related to the site. The existing wells are shown on Figure 3-3, while the construction details for these wells are provided in Table 3-2. Prior to sample collection, groundwater will be purged from each well using the low flow purging method with dedicated tubing. Flow rates should be less than 500 milliliters per minute (mL/min), and a generally consistent water level should be maintained. The wells will be purged of at least three (3) well volumes, with the purged water monitored for pH, temperature, conductivity, ORP or Eh, dissolved oxygen (DO), and turbidity. These data will be recorded on Well Purge and Sampling Logs. Low-flow purging will be considered complete when field parameters stabilize

(see Section 3.3.4).

During purging, all efforts should be made to prevent NAPL, if present, from becoming entrained with the purged water.

Upon stabilization of field parameters, groundwater samples will be collected with a flow rate between 100 and 250 ml/min. If the turbidity is greater than 50 NTU after purging, the well will be sampled for all parameters except metals, which will be collected within 24 hours after the completion of purging to allow suspended sediment in the well to settle out.

The groundwater samples will be collected by the Standby I&R Contractor using the low-flow sampling method with dedicated tubing and placed directly into laboratory supplied, precleaned sample jars. The jars will be labeled with a unique sample identification code using the well numbers shown on Figure 3-3 (e.g., MW-6D). The Standby I&R Contractor will be responsible for obtaining the appropriate sample bottles from the lab and making sure the numbers and types are correct prior to implementing field work.

Following sample collection, the Standby I&R Contractor will be responsible for completing the chain of custody, packing the coolers with the sample bottles and ice (or other similar coolant), sealing the coolers with tape and custody seals, and shipping the coolers to the laboratory for analysis. A courier service can also be utilized for cooler pickup and delivery.

All purging and sampling activities will be completed by the Standby I&R Contractor using the low-flow purging method. At the completion of the Site Characterization field activities, the Standby I&R Contractor will computer generate the Well Purge and Sampling Logs and provide both the field logs and computer-generated logs to the NYSDEC in electronic format (i.e., Adobe PDF).

All groundwater samples will be analyzed for TCL volatile organic compounds via USEPA method 8260C or newer, TCL semi-volatile organic compounds via USEPA method 8270D or newer, cyanide via USEPA method 9012A or newer, and ammonia via USEPA method 350.1 or newer. The laboratory analytical program for the groundwater samples is summarized in Table 3-2, along with the QA/QC requirements. All invoices from the lab will be completed in accordance with its Standby Contract with the NYSDEC.

#### 3.4 Decontamination and Investigation-Derived Waste

The direct-push vehicle and sampling equipment will be decontaminated prior to arriving at the site. Reusable sampling equipment (e.g., the sampling tubes) will be decontaminated between samples using an appropriate detergent and 5-gallon buckets. Augers will be decontaminated between well locations using a steam cleaner. Construction of a temporary decon pad or a portable decon pad large enough to hold a pallet and capable of containing decon water and soil spoils will be required.

All excess soil from the borings and soil cuttings removed from the augers will be containerized in 55-gallon drums. Decontamination and well development water will be containerized in 55-gallon steel drums separate from the soil cutting drums for later off-site disposal at a permitted disposal approved facility. Soils and personal protective equipment (PPE) that show evidence of contamination (e.g., elevated PID readings, sheens, product, odors, etc.) will be containerized in 55-gallon drums separate from soils lacking evidence of contamination. The Drilling Subcontractor will supply the drums.

All development and purge water will be containerized in 55-gallon drums for later off-site disposal at a NYSDEC approved facility. Development and purge water that shows evidence of contamination (e.g., elevated PID readings, sheens, product, odors, etc.) will be containerized in 55-gallon drums separate from development and purge water lacking evidence of contamination.

All containerized materials will be clearly marked to indicate the contents of the drums, the date of collection, and the source of the material. All drums will be staged on pallets covered with plastic sheeting at a location predetermined by the NYSDEC and the site property owner. These drums will subsequently be sampled, characterized, and properly disposed of at an off-site permitted disposal facility.

Other investigation-derived wastes (e.g., disposable sampling equipment, used PPE without visible signs of contamination, non-sampling equipment, empty bentonite and Portland cement bags, and other garbage generated during field activities) will be bagged and disposed of as municipal waste.

## 3.5 NAPL Assessment, Sampling and Analysis

The monitoring wells installed during the NYSDEC Site Characterization are designed to act as collection points for NAPL. Following the collection of groundwater samples as described in Section 3.3.5, if sufficient NAPL is present in a given well a sample will be collected for chemical analysis using the low flow sampling pump and dedicated tubing used for groundwater sampling by lowering the tubing into the NAPL. Otherwise, the wells will be gauged periodically for the presence of NAPL using a dual phase interphase probe or weighted string. The use of bailers should be avoided in an effort to keep the riser pipe clean of this material. When a sufficient amount of NAPL is detected in a given well, a sample will be collected for chemical analysis.

The NAPL samples will be collected by the Standby I&R Contractor using low-flow sampling equipment with dedicated tubing and placed directly into laboratory supplied, precleaned sample jars. The jars will be labeled with a unique sample identification code using the well numbers shown on Figure 3-3 (e.g., MW-6D-NAPL). The Standby I&R Contractor will be responsible for obtaining the appropriate sample bottles from the lab and making sure the numbers and types are correct prior to implementing field work.

Following sample collection, the Standby I&R Contractor will be responsible for completing the chain of custody, packing the coolers with the sample bottles and ice (or other similar coolant), sealing the coolers with tape and custody seals, and shipping the coolers to the laboratory for analysis. A courier service can also be utilized for cooler pickup and delivery.

All NAPL samples will be analyzed for TCL volatile organic compounds via USEPA method 8260C or newer, TCL semi-volatile organic compounds via USEPA method 8270D or newer, cyanide via USEPA method 9012A or newer, TCLP via USEPA method EPA SW 1311 or newer, and Ignitability via USEPA method EPA SW 1010A or newer. The laboratory analytical program for the NAPL samples is summarized in Table 3-2.

#### 3.6 Water Level Measurements

To evaluate the hydrogeology of the Fedders Auto Components Site, the Standby I&R Contractor will periodically measure water levels in the new & existing monitoring wells at the site. The water level data obtained during the Site Characterization will be utilized to construct

hydrographs and groundwater contour maps for the shallow and deep overburden wells.

### 3.7 Final Site Survey and Mapping

A surveyor licensed in the State of New York will be retained by the Standby I&R Contractor to complete a final survey of the site after all Site Characterization field activities are complete. The survey should include the following:

- Horizontal locations and ground surface elevations of all soil borings completed during the Site Characterization;
- Horizontal locations and ground surface elevations of all soil borings completed during the BCP Remedial Investigation to the extent they can still be identified in the field;
- Horizontal locations and vertical elevations of all monitoring wells installed at the Fedders Auto Components Site. This includes wells installed during the BCP Remedial Investigation, the bike path wells installed during the NYSDEC Remedial Investigation at the 31 Tonawanda Street Off-Site Area, and the NYSDEC Site Characterization. Elevations will include ground surface and the inner PVC riser of each well; and
- Horizontal locations of the building corners at the rear of the building along with ground surface elevation at those locations.

Vertical control should be established to the nearest ±0.1 foot for all ground surface elevations, while monitoring well riser elevations should be reported to the nearest ±0.01 foot. Elevations should be determined relative to the North American Vertical Datum of 1988 (NAVD 88 or newer), with reference made to an existing monument in the vicinity of the site. Horizontal coordinates should be surveyed to the NY State Plane Coordinate System, Zone NY W-3103 (in feet), North American Datum (NAD) of 1983 (or newer) to an accuracy of ±0.5 foot or better. For purposes of EQuIS uploads, latitude and longitude should also be recorded by the3 surveyor.

At the completion of all surveying activities, the surveyor will provide the survey data in Excel format to the NYSDEC and the Standby I&R Contractor. The survey data should include, but not be limited to, point numbers, northings, eastings, elevations (ft. amsl), point descriptions, latitudes (decimal degree), and longitudes (decimal degree).

#### 3.8 Health & Safety

It is anticipated that all field work can be performed in Level D personal protective equipment with Level C backup. All field work will be conducted in accordance with the Standby I&R Contractor's Corporate Health & Safety Plan. The Standby I&R Contractor and its subcontractors will provide appropriate personal protective equipment (PPE) suitable for working in and around contaminated liquids, wastes and soils.

All field personnel will be informed of the location of the hospital listed in the Generic Health and Safety Plan included as Appendix A and be made aware of the list of emergency contacts contained therein. Field supervisory personnel will become thoroughly familiar with the route to the hospital.

The Standby I&R Contractor will be responsible for clearly delineating the work area to prevent unauthorized access. During all intrusive activities, continuous air monitoring will be conducted for organic vapors by the Standby I&R Contractor to determine the necessity to upgrade personal protective equipment. The contractor will also comply with the NYSDOH Community Air Monitoring Plan (CAMP) during all intrusive activities. The CAMP is included as Appendix B.

## 3.9 Data Usability Summary Reports (DUSRs)

Data Usability Summary Reports (DUSRs) will be prepared for all analytical results by an Environmental Scientist having a bachelor's degree in a relevant natural or physical science or field of engineering and also having experience in environmental sampling, analysis and data review. The DUSRs provide a thorough evaluation of analytical data without the costly and time-consuming process of third-party data validation. The primary objective of the DUSRs is to determine if the analytical data meets the criteria for data quality and use. The Standby I&R Contractor will retain an individual (or firm) qualified to complete a DUSR. The NYSDEC will provide the DUSR Subcontractor with the necessary analytical data.

DUSRs are developed by reviewing and evaluating the analytical data packages. During this review the following questions must be asked and answered:

- Is the data package complete as defined under the requirements for the NYSDEC ASP Category B or USEPA CLP deliverables?
- Have all holding times been met?
- Do all QC data: blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?
- Have all data been generated using established and agreed upon analytical protocols?
- Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?
- Have the correct data qualifiers been used?

Any Quality Control exceedances must be numerically specified in the DUSRs with the corresponding QC summary sheet from the data package attached to the DUSRs. All data that would be rejected by the EPA Region 2 Data Validation Guidelines must also be rejected in the DUSRs.

Once the data packages have been reviewed and the above questions asked and answered the DUSRs proceed to describe the samples and the analytical parameters. Data deficiencies, analytical protocol deviations and quality control problems are identified and their effect on the data will be discussed. The DUSRs will also include recommendations on resampling/reanalysis. All data qualifications must be documented following the NYSDEC ASP (2005 revision or newer) guidelines.

## 3.10 **EQuIS**

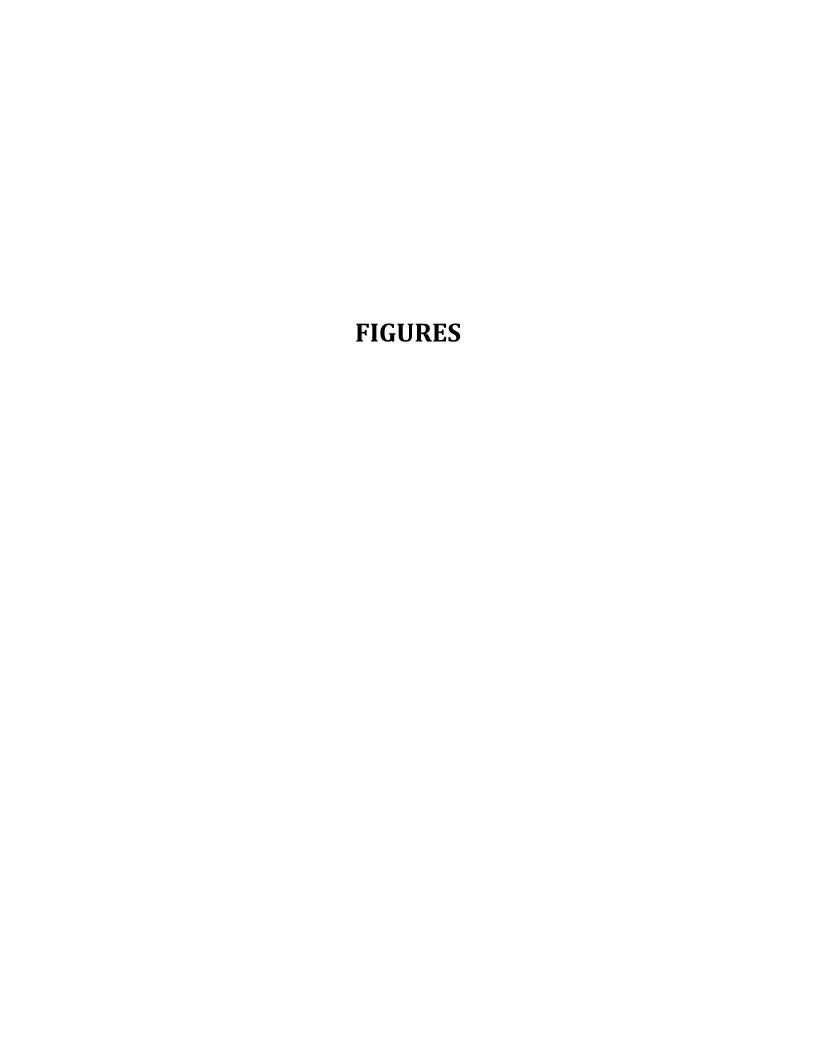
Once the DUSRs are complete the Standby I&R Contractor will prepare the electronic data deliverable (EDD) files supplied by the lab as qualified by the data validator during the DUSR process for upload to the NYSDEC's Environmental Information Management System (EIMS). The EIMS currently uses the database software application EQuIS<sup>TM</sup> from EarthSoft® Inc.

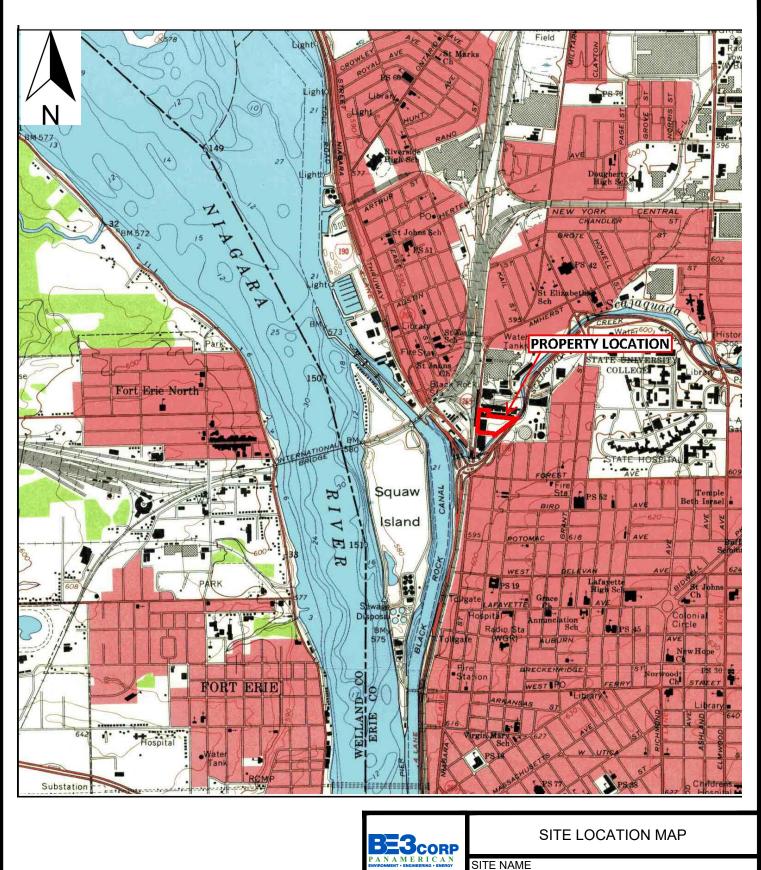
## 3.11 Report Preparation

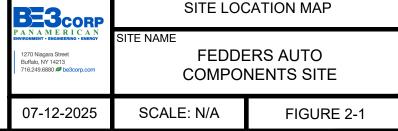
Following the completion of all Site Characterization activities, NYSDEC personnel with help from the Standby I&R Contractor will prepare a Site Characterization Report that details the

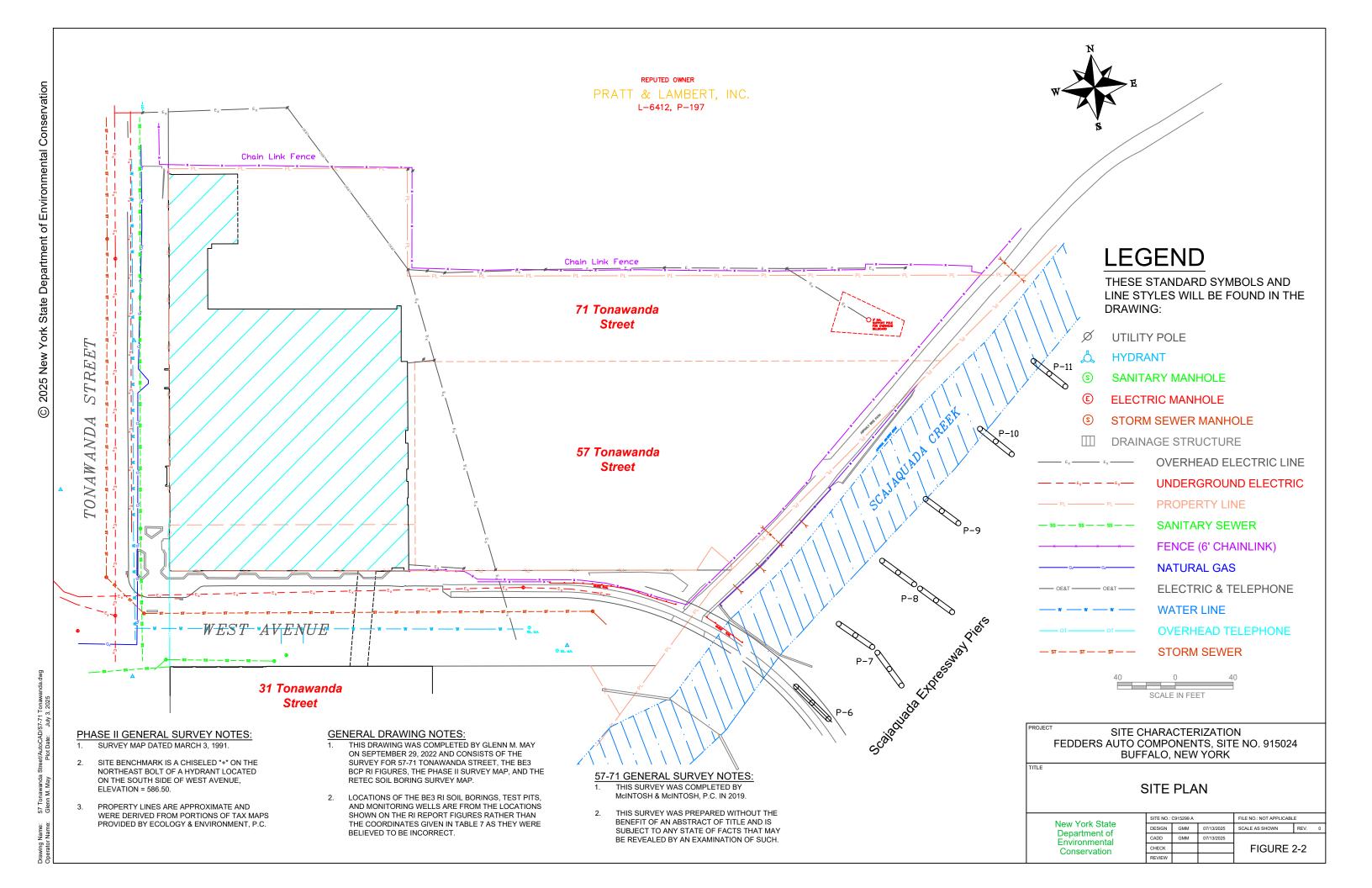
results of the investigation. The report will include, at a minimum, the following:

- Executive Summary and Introductory sections;
- A Site Description and History section that describes the salient features of the Fedders Auto Components Site, and presents a summary of the remedial history of the properties;
- Study Objectives and Scope of Work sections that describes the objectives of the Site Characterization and the activities that were completed during the investigation;
- A Geology and Hydrogeology section that describes the regional and site geology and hydrogeology;
- An Investigation Results section that describes the findings of the Site Characterization, including general observations and a summary of the analytical results obtained from various environmental media;
- A Discussion and Recommendation section that summarizes the findings of the Site Characterization as they relate to the investigation objectives, and discusses recommendations for future activities regarding the site;
- A References section that contains a list of references utilized or cited in the report;
- Figures and tables; and
- Appendices that include, but are not limited to, soil boring logs, well construction diagrams, field sampling logs, well development logs, raw analytical data (i.e., lab reports), DUSRs, and survey data.

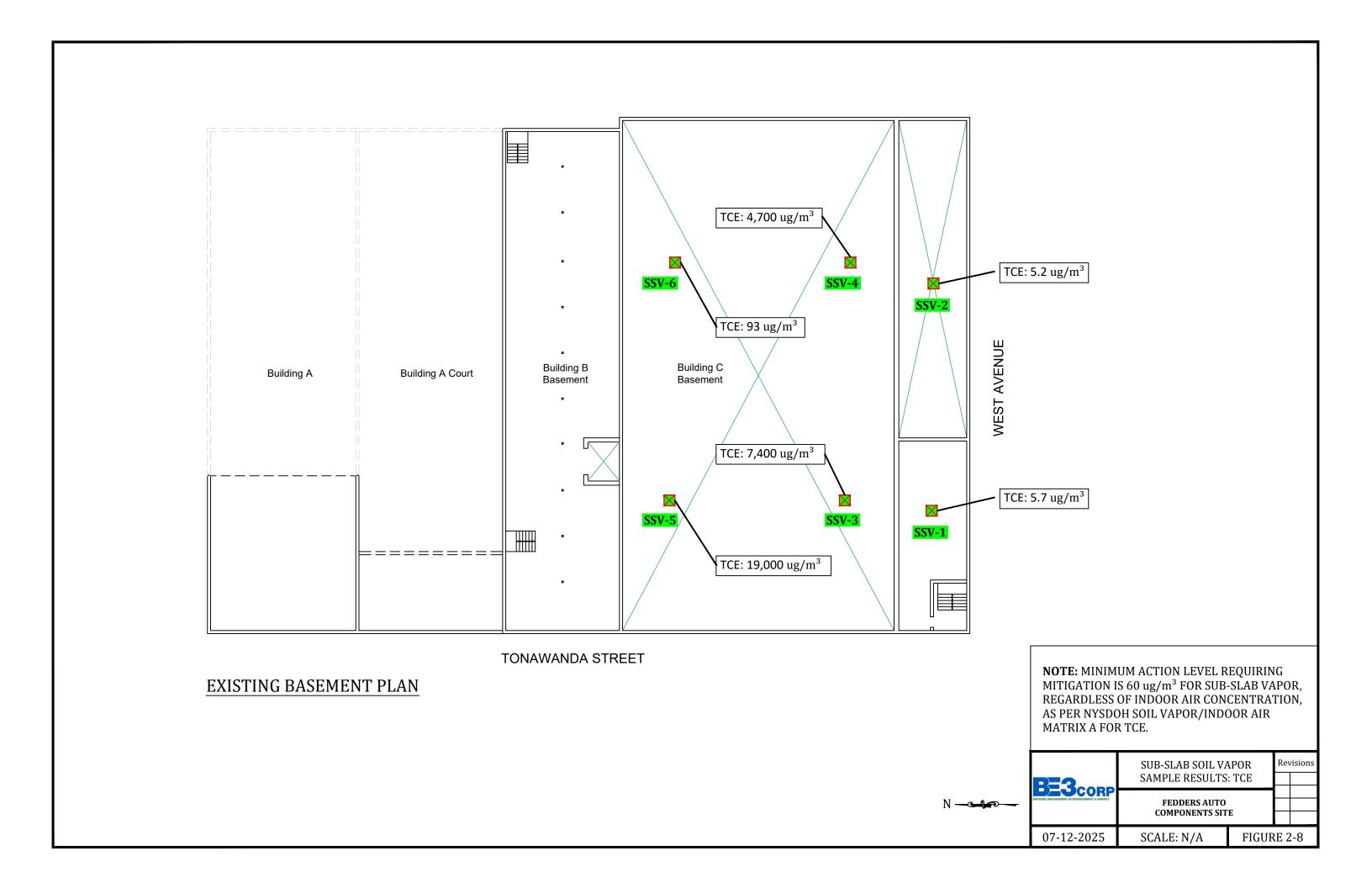


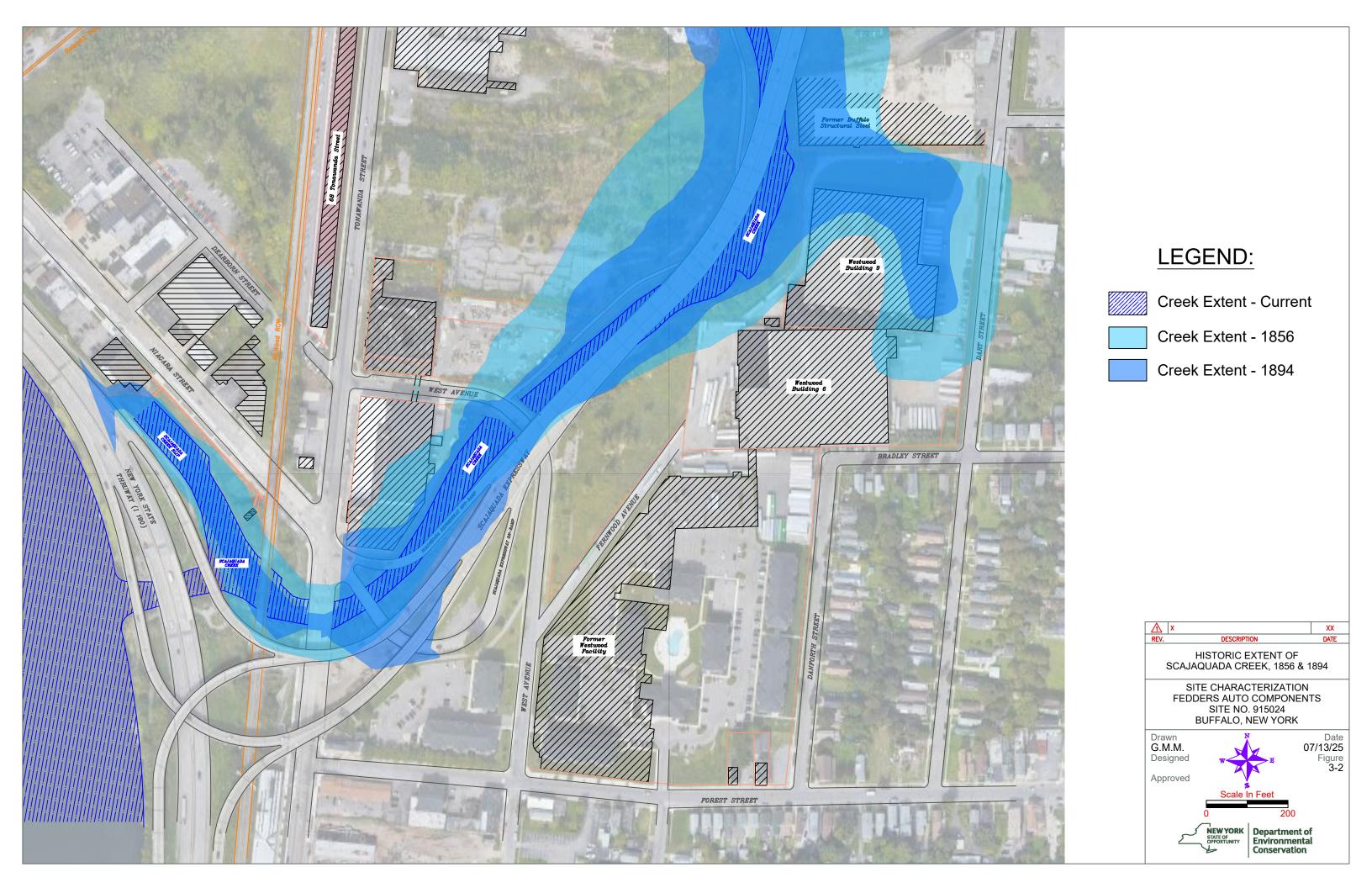


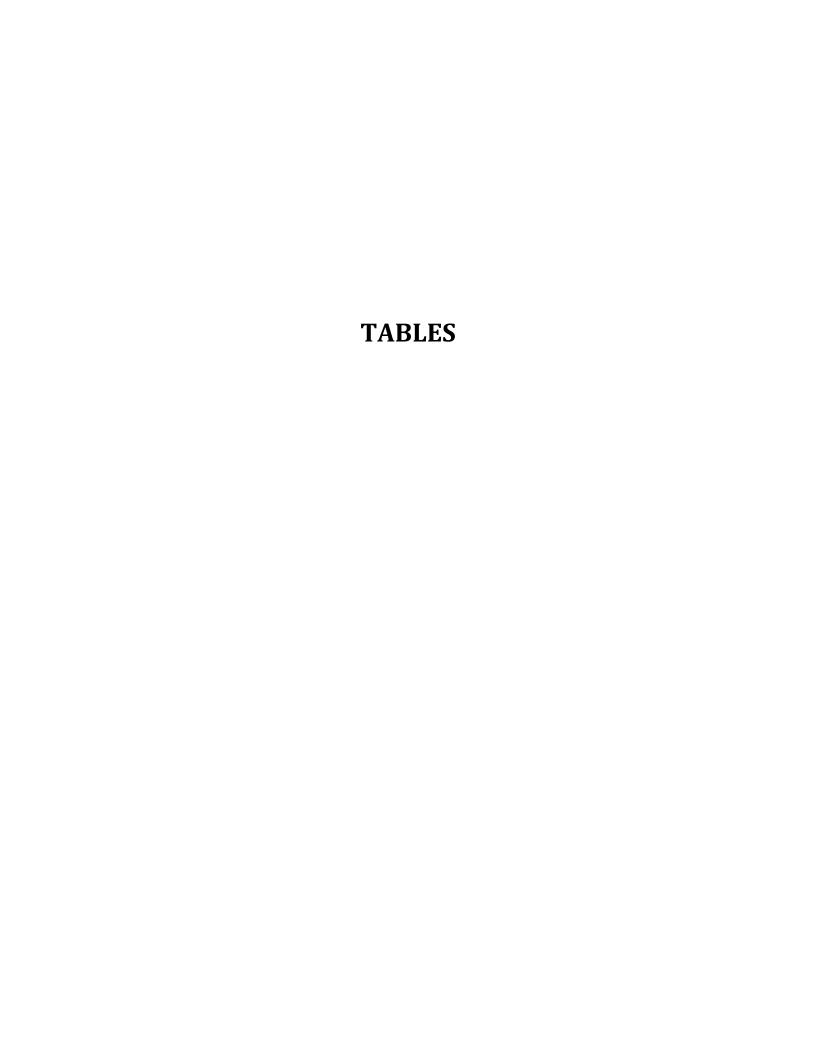




Conservation







#### Table 2-1A

### Summary of Subsurface Fill & Soil VOC Analytical Results from the 1990 Phase II Investigation Proposed NYSDEC Site Characterization



Department of Environmental Conservation

Fedders Automotive Components Site, Site No. 915024 Buffalo, New York

Sample Number Boring Number Sample Type Depth (ft) Sample Date	NYSDEC Part 375 Unrestricted SCOs ●	NYSDEC Restricted Residential SCOs ●	NYSDEC Part 375 Commercial SCOs •	Part 375 Groundwater Protection SCOs ●	SB-1A GW-1 Fill 0.0 - 2.0 09/26/90	SB-1B GW-1 Fill 2.0 - 4.0 09/26/90	SB-1C GW-1 RBSC * 4.0 - 6.0 09/26/90	SB-1D GW-1 RBSC * 6.0 - 8.0 09/26/90	SB-2A GW-2 Fill 0.0 - 2.0 09/26/90
	1r			nic Compounds (μg		1	1		
1,1,1-Trichloroethane	680.0	100,000	500,000	680.0	2.0				2,800 J
1,1,2-Trichloroethane	NS	NS	NS	NS					3.0 J
1,1,2,2-Tetrachloroethane	NS	35,000 **	NS	600.0					
1,1-Dichloroethane	270.0	26,000	240,000	270.0					700 J
1,1-Dichloroethene	330.0	100,000	500,000	330.0					9.0
1,2-Dichloroethane	20.0	3,100	30,000	20.0					7.0
cis-1,2-Dichloroethene	250.0	100,000	500,000	250.0					
trans-1,2-Dichloroethene	190.0	100,000	500,000	190.0					
1,2-Dichloroethene (Total)	NS	NS	NS	NS					
Benzene	60.0	4,800	44,000	60.0					
Carbon Disulfide	NS	100,000 **	NS	2,700					
Chloroethane	NS	NS	NS	NS					
Ethylbenzene	1,000	41,000	390,000	1,000		3.0			36.0
Methyl ethyl ketone (2-Butanone)	120.0	100,000	500,000	120.0					
Styrene	NS	NS	NS	NS					
Tetrachloroethene	1,300	19,000	150,000	1,300					
Toluene	700.0	100,000	500,000	700.0					
Trichloroethene	470.0	21,000	200,000	470.0	14.0	19.0			8.0
Vinyl chloride	20.0	900.0	13,000	20.0					
Xylene (Total)	260.0	100,000	500,000	1,600		8.0			720.0
Total Chlorinated VOCs	NS	NS	NS	NS	16.0	19.0	0.0	0.0	3,527

- = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted & Residential Soil Cleanup Objectives, NYSDEC, 2006.
- \* = Reddish brown silty clay.
- \*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010. µg/kg = micrograms per kilogram or parts per billion.
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- NS = No standard given in 6 NYCRR Part 375 or Commissioner Policy CP-51.

#### Table 2-1A

## Summary of Subsurface Fill & Soil VOC Analytical Results from the 1990 Phase II Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



#### Notes (continued):

Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.

Purple shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential soil cleanup objectives. Purple shaded values also exceed the 6 NYCRR Part 375 protection of groundwater soil cleanup objectives.

Green shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential or protection of groundwater soil cleanup objectives.

Yellow shaded values exceed the 6 NYCRR Part 375 restricted residential soil cleanup objectives but not the commercial soil cleanup objectives.

Orange shaded values exceed the 6 NYCRR Part 375 commercial soil cleanup objectives.

Red shaded values exceed the CP-51 residential soil cleanup objectives.

Table checked by GMM on July 7, 2025.

### Table 2-1B Summary of Subsurface Fill & Soil VOC Analytical Results from the 1990 Phase II Investigation Proposed NYSDEC Site Characterization Fodders Automative Company Site Site No. 815024



Department of Environmental Conservation

Fedders Automotive Components Site, Site No. 915024 Buffalo, New York

Sample Number Boring Number Sample Type Depth (ft) Sample Date	NYSDEC Part 375 Unrestricted SCOs ●	NYSDEC Restricted Residential SCOs •	NYSDEC Part 375 Commercial SCOs •	Part 375 Groundwater Protection SCOs • nic Compounds (με	SB-2B GW-2 Fill 2.0 - 4.0 09/26/90	SB-2C GW-2 Fill 4.0 - 6.0 09/26/90	SB-3A GW-3 Fill 0.0 - 2.0 09/25/90	SB-3B GW-3 Fill 2.0 - 4.0 09/25/90	SB-3C GW-3 Fill 4.0 - 6.0 09/25/90
4.4.4 Triable readbase	500.0	100.000			_	1.500.1	ı	1	l
1,1,1-Trichloroethane	680.0	100,000	500,000	680.0	1,700 J	1,600 J			
1,1,2-Trichloroethane	NS	NS	NS NS	NS COO.O.	4.0 J				
1,1,2,2-Tetrachloroethane	NS 270.0	35,000 **	NS 240,000	600.0	040.1	4.400.1			
1,1-Dichloroethane	270.0	26,000	240,000	270.0	810 J	1,100 J			
1,1-Dichloroethene	330.0	100,000	500,000	330.0	16.0	16.0 J			
1,2-Dichloroethane	20.0	3,100	30,000	20.0		7.0 J			
cis-1,2-Dichloroethene	250.0	100,000	500,000	250.0					
trans-1,2-Dichloroethene	190.0	100,000	500,000	190.0					
1,2-Dichloroethene (Total)	NS	NS	NS	NS	150.0				
Benzene	60.0	4,800	44,000	60.0					
Carbon Disulfide	NS	100,000 **	NS	2,700					
Chloroethane	NS	NS	NS	NS	54.0				
Ethylbenzene	1,000	41,000	390,000	1,000	38.0	40.0			
Methyl ethyl ketone (2-Butanone)	120.0	100,000	500,000	120.0					
Styrene	NS	NS	NS	NS					
Tetrachloroethene	1,300	19,000	150,000	1,300					
Toluene	700.0	100,000	500,000	700.0	2.0 J		15.0 J		2.0 J
Trichloroethene	470.0	21,000	200,000	470.0	630 J	10.0 J	11.0 J	6.0	
Vinyl chloride	20.0	900.0	13,000	20.0	8.0 J				
Xylene (Total)	260.0	100,000	500,000	1,600	500 J	220.0	3.0 J		
Total Chlorinated VOCs	NS	NS	NS	NS	3,372 J	2,733 J	11.0 J	6.0	0.0

- = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted & Residential Soil Cleanup Objectives, NYSDEC, 2006.
- \*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010. µg/kg = micrograms per kilogram or parts per billion.
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- NS = No standard given in 6 NYCRR Part 375 or Commissioner Policy CP-51.
- Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.

#### Table 2-1B

## Summary of Subsurface Fill & Soil VOC Analytical Results from the 1990 Phase II Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



#### Notes (continued):

Purple shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential soil cleanup objectives. Purple shaded values also exceed the 6 NYCRR Part 375 protection of groundwater soil cleanup objectives.

Green shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential or protection of groundwater soil cleanup objectives.

Yellow shaded values exceed the 6 NYCRR Part 375 restricted residential soil cleanup objectives but not the commercial soil cleanup objectives.

Orange shaded values exceed the 6 NYCRR Part 375 commercial soil cleanup objectives.

Red shaded values exceed the CP-51 residential soil cleanup objectives.

Table checked by GMM on July 7, 2025.

## Table 2-1C Summary of Subsurface Fill & Soil VOC Analytical Results from the 1990 Phase II Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024



Department of Environmental Conservation

		Feda	ers Automotive Co Buffa	alo, New York	te No. 915024
nple Number ring Number	NYSDEC	NYSDEC	NYSDEC	Part 375	SB-3D GW-3

Sample Number					SB-3D	SB-4A	SB-4B	SB-4C	SB-4D
Boring Number	NYSDEC	NYSDEC	NYSDEC	Part 375	GW-3	B-1	B-1	B-1	B-1
Sample Type	Part 375	Restricted	Part 375	Groundwater	RBSC *	Fill	RBSC *	RBSC *	RBSC *
Depth (ft) Sample Date	Unrestricted SCOs ●	Residential SCOs ●	Commercial SCOs ●	Protection SCOs ●	11.0 - 13.0 09/25/90	0.0 - 2.0 09/25/90	2.0 - 4.0 09/25/90	4.0 - 6.0 09/25/90	6.0 - 8.0 09/25/90
Sample Date	3005	3COS •		nic Compounds (με		03/23/30	03/23/30	09/23/90	03/23/30
1,1,1-Trichloroethane	680.0	100,000	500,000	680.0					2.0 J
1,1,2-Trichloroethane	NS	NS	NS	NS					
1,1,2,2-Tetrachloroethane	NS	35,000 **	NS	600.0					
1,1-Dichloroethane	270.0	26,000	240,000	270.0					
1,1-Dichloroethene	330.0	100,000	500,000	330.0					
1,2-Dichloroethane	20.0	3,100	30,000	20.0					
cis-1,2-Dichloroethene	250.0	100,000	500,000	250.0					
trans-1,2-Dichloroethene	190.0	100,000	500,000	190.0					
1,2-Dichloroethene (Total)	NS	NS	NS	NS		5.0 J	10.0	40.0	120.0
Benzene	60.0	4,800	44,000	60.0					
Carbon Disulfide	NS	100,000 **	NS	2,700					
Chloroethane	NS	NS	NS	NS					
Ethylbenzene	1,000	41,000	390,000	1,000					
Methyl ethyl ketone (2-Butanone)	120.0	100,000	500,000	120.0					
Styrene	NS	NS	NS	NS					
Tetrachloroethene	1,300	19,000	150,000	1,300					
Toluene	700.0	100,000	500,000	700.0					
Trichloroethene	470.0	21,000	200,000	470.0		80.0	81.0	220.0	590 J
Vinyl chloride	20.0	900.0	13,000	20.0					
Xylene (Total)	260.0	100,000	500,000	1,600					
Total Chlorinated VOCs	NS	NS	NS	NS	0.0	85.0 J	91.0	260.0	712 J

- = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted & Residential Soil Cleanup Objectives, NYSDEC, 2006.
- \* = Reddish brown silty clay.
- \*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010. µg/kg = micrograms per kilogram or parts per billion.
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- NS = No standard given in 6 NYCRR Part 375 or Commissioner Policy CP-51.

#### Table 2-1C

## Summary of Subsurface Fill & Soil VOC Analytical Results from the 1990 Phase II Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



#### Notes (continued):

Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.

Purple shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential soil cleanup objectives. Purple shaded values also exceed the 6 NYCRR Part 375 protection of groundwater soil cleanup objectives.

Green shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential or protection of groundwater soil cleanup objectives.

**Yellow shaded values exceed the 6 NYCRR Part 375 restricted residential soil cleanup objectives but not the commercial soil cleanup objectives.** 

Orange shaded values exceed the 6 NYCRR Part 375 commercial soil cleanup objectives.

Red shaded values exceed the CP-51 residential soil cleanup objectives.

Table checked by GMM on July 7, 2025.

### Table 2-2A Summary of Subsurface Fill & Soil VOC Analytical Results from the BCP Remedial Investigation Proposed NYSDEC Site Characterization Fodders Automotive Components Site Site No. 915024



Department of Environmental Conservation

#### Fedders Automotive Components Site, Site No. 915024 Buffalo, New York

Boring Number Sample Type Depth (ft) Sample Date	Part 375 Unrestricted SCOs ●	NYSDEC Restricted Residential SCOs •	NYSDEC Part 375 Commercial SCOs ●	Part 375 Groundwater Protection SCOs ●	BH-01 Fill 1.0 - 4.0 12/17/19	BH-01 RB Clay * 6.0 - 8.0 12/17/19	BH-02 Fill 1.0 - 2.0 12/18/19	BH-03 Fill 1.0 - 4.0 12/18/19	BH-04 Fill 1.0 - 3.0 12/17/19
			Volatile Orgar	nic Compounds (μg	g/kg)				
1,1,1-Trichloroethane	680.0	100,000	500,000	680.0					
1,1,2-Trichloroethane	NS	NS	NS	NS					
1,1,2,2-Tetrachloroethane	NS	35,000 **	NS	600.0					
1,1-Dichloroethane	270.0	26,000	240,000	270.0					
1,1-Dichloroethene	330.0	100,000	500,000	330.0					
1,2-Dichloroethane	20.0	3,100	30,000	20.0					
cis-1,2-Dichloroethene	250.0	100,000	500,000	250.0		22.4	66,100	37.9 J	8,390
trans-1,2-Dichloroethene	190.0	100,000	500,000	190.0	83.5	31.4		43.0	153 J
1,2-Dichloroethene (Total)	NS	NS	NS	NS					
Acetone	50.0	100,000	500,000	50.0					
Benzene	60.0	4,800	44,000	60.0					
Carbon Disulfide	NS	100,000 **	NS	2,700					
Chloroethane	NS	NS	NS	NS					
Ethylbenzene	1,000	41,000	390,000	1,000					
Methyl ethyl ketone (2-Butanone)	120.0	100,000	500,000	120.0					
Methylene chloride	50.0	100,000	500,000	50.0					
Styrene	NS	NS	NS	NS					
Tetrachloroethene	1,300	19,000	150,000	1,300					
Toluene	700.0	100,000	500,000	700.0					
Trichloroethene	470.0	21,000	200,000	470.0	10.0	8.24	189,000	77.0	1,360
1,2,4-Trimethylbenzene	3,600	52,000	190,000	3,600					
1,3,5-Trimethylbenzene	8,400	52,000	190,000	8,400					
Vinyl chloride	20.0	900.0	13,000	20.0			2,120 J		355.0
m,p-Xylene	NS	NS	NS	NS					
o-Xylene	NS	NS	NS	NS					
Xylene (Total)	260.0	100,000	500,000	1,600					
Total Chlorinated VOCs	NS	NS	NS	NS	93.5	62.04	257,220 J	157.9 J	10,258 J

#### Table 2-2A

### Summary of Subsurface Fill & Soil VOC Analytical Results from the BCP Remedial Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



#### Notes:

- = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted & Residential Soil Cleanup Objectives, NYSDEC, 2006.
- \* = Reddish brown clay.
- \*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

μg/kg = micrograms per kilogram or parts per billion.

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

NS = No standard given in 6 NYCRR Part 375 or Commissioner Policy CP-51.

Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.

Purple shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential soil cleanup objectives. Purple shaded values also exceed the 6 NYCRR Part 375 protection of groundwater soil cleanup objectives.

Green shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential or protection of groundwater soil cleanup objectives.

Yellow shaded values exceed the 6 NYCRR Part 375 restricted residential soil cleanup objectives but not the commercial soil cleanup objectives.

Orange shaded values exceed the 6 NYCRR Part 375 commercial soil cleanup objectives.

Red shaded values exceed the CP-51 residential soil cleanup objectives.

Table checked by GMM on July 8, 2025 and updated with validator's qualifiers.

## Table 2-2B Summary of Subsurface Fill & Soil VOC Analytical Results from the BCP Remedial Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024

**Buffalo, New York** 



Boring Number		NYSDEC	NYSDEC	Part 375	BH-05	BH-06	BH-08	BH-08	BH-10
Sample Type	Part 375	Restricted	Part 375	Groundwater	Fill	Fill	Fill	RB Clay *	Fill
Depth (ft)	Unrestricted	Residential	Commercial	Protection	1.0 - 4.0	1.0 - 4.0	1.0 - 3.0	10.0 - 12.0	1.0 - 2.0
Sample Date	SCOs ●	SCOs ●	SCOs ●	SCOs ●	12/18/19	12/18/19	12/17/19	12/17/19	12/18/19
	1		Volatile Orgai	nic Compounds (μg	(/kg)				
1,1,1-Trichloroethane	680.0	100,000	500,000	680.0					
1,1,2-Trichloroethane	NS	NS	NS	NS					
1,1,2,2-Tetrachloroethane	NS	35,000 **	NS	600.0					
1,1-Dichloroethane	270.0	26,000	240,000	270.0					
1,1-Dichloroethene	330.0	100,000	500,000	330.0					
1,2-Dichloroethane	20.0	3,100	30,000	20.0					
cis-1,2-Dichloroethene	250.0	100,000	500,000	250.0					4,590
trans-1,2-Dichloroethene	190.0	100,000	500,000	190.0	42.9 J	6.76	15.0 (8.0 J)	9.0	443 J
1,2-Dichloroethene (Total)	NS	NS	NS	NS					
Acetone	50.0	100,000	500,000	50.0			15.8 J (46.6 J)	30.5	
Benzene	60.0	4,800	44,000	60.0					
Carbon Disulfide	NS	100,000 **	NS	2,700				2.97 J	
Chloroethane	NS	NS	NS	NS					
Ethylbenzene	1,000	41,000	390,000	1,000					
Methyl ethyl ketone (2-Butanone)	120.0	100,000	500,000	120.0					
Methylene chloride	50.0	100,000	500,000	50.0					
Styrene	NS	NS	NS	NS					
Tetrachloroethene	1,300	19,000	150,000	1,300					
Toluene	700.0	100,000	500,000	700.0					
Trichloroethene	470.0	21,000	200,000	470.0	89.1	3.82 J			8,120
1,2,4-Trimethylbenzene	3,600	52,000	190,000	3,600					
1,3,5-Trimethylbenzene	8,400	52,000	190,000	8,400					
Vinyl chloride	20.0	900.0	13,000	20.0			(22.2 J)		
m,p-Xylene	NS	NS	NS	NS					745 J
o-Xylene	NS	NS	NS	NS					
Xylene (Total)	260.0	100,000	500,000	1,600					745 J
Total Chlorinated VOCs	NS	NS	NS	NS	132.0 J	10.58 J	37.2 J	9.0	13,153 J

#### Table 2-2B

### Summary of Subsurface Fill & Soil VOC Analytical Results from the BCP Remedial Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



#### Notes:

- = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted & Residential Soil Cleanup Objectives, NYSDEC, 2006.
- \* = Reddish brown clay.
- \*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

μg/kg = micrograms per kilogram or parts per billion.

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

NS = No standard given in 6 NYCRR Part 375 or Commissioner Policy CP-51.

Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.

Purple shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential soil cleanup objectives. Purple shaded values also exceed the 6 NYCRR Part 375 protection of groundwater soil cleanup objectives.

Green shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential or protection of groundwater soil cleanup objectives.

Yellow shaded values exceed the 6 NYCRR Part 375 restricted residential soil cleanup objectives but not the commercial soil cleanup objectives.

Orange shaded values exceed the 6 NYCRR Part 375 commercial soil cleanup objectives.

Red shaded values exceed the CP-51 residential soil cleanup objectives.

Table checked by GMM on July 8, 2025 and updated with validator's qualifiers.

## Table 2-2C Summary of Subsurface Fill & Soil VOC Analytical Results from the BCP Remedial Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024

**Buffalo, New York** 



Boring Number Sample Type Depth (ft) Sample Date	Part 375 Unrestricted SCOs ●	NYSDEC Restricted Residential SCOs •	NYSDEC Part 375 Commercial SCOs ●	Part 375 Groundwater Protection SCOs •	BH-11 Fill 1.0 - 4.0 12/19/19	BH-11 RB Clay * 6.0 - 8.0 12/19/19	BH-12 Fill 1.0 - 2.0 12/19/19	BH-13 Fill 1.0 - 2.0 12/18/19	TP-14 RB Clay * 8.0 - 9.0 01/08/20
•			Volatile Organ	nic Compounds (με					<u> </u>
1,1,1-Trichloroethane	680.0	100,000	500,000	680.0					
1,1,2-Trichloroethane	NS	NS	NS	NS					
1,1,2,2-Tetrachloroethane	NS	35,000 **	NS	600.0					
1,1-Dichloroethane	270.0	26,000	240,000	270.0					
1,1-Dichloroethene	330.0	100,000	500,000	330.0					
1,2-Dichloroethane	20.0	3,100	30,000	20.0					
cis-1,2-Dichloroethene	250.0	100,000	500,000	250.0				4.48 J	
trans-1,2-Dichloroethene	190.0	100,000	500,000	190.0	5.39			10.1	3.22 J
1,2-Dichloroethene (Total)	NS	NS	NS	NS					
Acetone	50.0	100,000	500,000	50.0	15.1 J			22.4 J	
Benzene	60.0	4,800	44,000	60.0					
Carbon Disulfide	NS	100,000 **	NS	2,700	2.32 J				
Chloroethane	NS	NS	NS	NS					
Ethylbenzene	1,000	41,000	390,000	1,000			582 J		
Methyl ethyl ketone (2-Butanone)	120.0	100,000	500,000	120.0					
Methylene chloride	50.0	100,000	500,000	50.0					
Styrene	NS	NS	NS	NS					
Tetrachloroethene	1,300	19,000	150,000	1,300					
Toluene	700.0	100,000	500,000	700.0					
Trichloroethene	470.0	21,000	200,000	470.0				13.9	
1,2,4-Trimethylbenzene	3,600	52,000	190,000	3,600	3.07 J		125 J		
1,3,5-Trimethylbenzene	8,400	52,000	190,000	8,400					
Vinyl chloride	20.0	900.0	13,000	20.0					
m,p-Xylene	NS	NS	NS	NS	3.18 J		112 J		
o-Xylene	NS	NS	NS	NS					
Xylene (Total)	260.0	100,000	500,000	1,600	3.18 J		112 J		
Total Chlorinated VOCs	NS	NS	NS	NS	5.39	0.0	0.0	28.48 J	3.22 J

#### Table 2-2C

### Summary of Subsurface Fill & Soil VOC Analytical Results from the BCP Remedial Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



#### Notes:

- = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted & Residential Soil Cleanup Objectives, NYSDEC, 2006.
- \* = Reddish brown clay.
- \*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

ug/kg = micrograms per kilogram or parts per billion.

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

NS = No standard given in 6 NYCRR Part 375 or Commissioner Policy CP-51.

Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.

Some gasoline constituents detected in sample BH-12 are not included in this table.

Purple shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential soil cleanup objectives. Purple shaded values also exceed the 6 NYCRR Part 375 protection of groundwater soil cleanup objectives.

Green shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential or protection of groundwater soil cleanup objectives.

Vellow shaded values exceed the 6 NYCRR Part 375 restricted residential soil cleanup objectives but not the commercial soil cleanup objectives.

Orange shaded values exceed the 6 NYCRR Part 375 commercial soil cleanup objectives.

Red shaded values exceed the CP-51 residential soil cleanup objectives.

Table checked by GMM on July 8, 2025 and updated with validator's qualifiers.

### Table 2-2D Summary of Subsurface Fill & Soil VOC Analytical Results from the BCP Remedial Investigation



Department of Environmental Conservation

### Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York

Boring Number Sample Type Depth (ft) Sample Date	Part 375 Unrestricted SCOs ●	NYSDEC Restricted Residential SCOs •	NYSDEC Part 375 Commercial SCOs •	Part 375 Groundwater Protection SCOs ●	TP-16 Fill 1.0 - 3.0 01/08/20	TP-17 RB Clay * 3.0 - 4.0 01/08/20	MW-4 RB Clay * 12.0 - 13.0 01/14/20	SSB-1 Fill 0.0 - 4.0 03/18/20	SSB-2 RB Clay * 6.0 - 8.0 03/18/20
			Volatile Organ	nic Compounds (μg	g/kg)				
1,1,1-Trichloroethane	680.0	100,000	500,000	680.0					
1,1,2-Trichloroethane	NS	NS	NS	NS					
1,1,2,2-Tetrachloroethane	NS	35,000 **	NS	600.0					
1,1-Dichloroethane	270.0	26,000	240,000	270.0					
1,1-Dichloroethene	330.0	100,000	500,000	330.0					
1,2-Dichloroethane	20.0	3,100	30,000	20.0					
cis-1,2-Dichloroethene	250.0	100,000	500,000	250.0					
trans-1,2-Dichloroethene	190.0	100,000	500,000	190.0	2.85 J				
1,2-Dichloroethene (Total)	NS	NS	NS	NS					
Acetone	50.0	100,000	500,000	50.0					
Benzene	60.0	4,800	44,000	60.0					
Carbon Disulfide	NS	100,000 **	NS	2,700					
Chloroethane	NS	NS	NS	NS					
Ethylbenzene	1,000	41,000	390,000	1,000					
Methyl ethyl ketone (2-Butanone)	120.0	100,000	500,000	120.0					
Methylene chloride	50.0	100,000	500,000	50.0					
Styrene	NS	NS	NS	NS					
Tetrachloroethene	1,300	19,000	150,000	1,300					
Toluene	700.0	100,000	500,000	700.0					
Trichloroethene	470.0	21,000	200,000	470.0		38.3	36,100	1,700	798.0
1,2,4-Trimethylbenzene	3,600	52,000	190,000	3,600					
1,3,5-Trimethylbenzene	8,400	52,000	190,000	8,400					
Vinyl chloride	20.0	900.0	13,000	20.0					
m,p-Xylene	NS	NS	NS	NS					
o-Xylene	NS	NS	NS	NS					
Xylene (Total)	260.0	100,000	500,000	1,600					
Total Chlorinated VOCs	NS	NS	NS	NS	2.85 J	38.3	36,100	1,700	798.0

#### Table 2-2D

### Summary of Subsurface Fill & Soil VOC Analytical Results from the BCP Remedial Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



#### Notes:

- = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted & Residential Soil Cleanup Objectives, NYSDEC, 2006.
- \* = Reddish brown silty clay.
- \*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

μg/kg = micrograms per kilogram or parts per billion.

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

NS = No standard given in 6 NYCRR Part 375 or Commissioner Policy CP-51.

Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.

Purple shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential soil cleanup objectives. Purple shaded values also exceed the 6 NYCRR Part 375 protection of groundwater soil cleanup objectives.

Green shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential or protection of groundwater soil cleanup objectives.

Yellow shaded values exceed the 6 NYCRR Part 375 restricted residential soil cleanup objectives but not the commercial soil cleanup objectives.

Orange shaded values exceed the 6 NYCRR Part 375 commercial soil cleanup objectives.

Red shaded values exceed the CP-51 residential soil cleanup objectives.

Table checked by GMM on July 8, 2025 and updated with validator's qualifiers. Samples SSB-1 & SSB-2 are the exception; DUSRs for these samples were not included in the BCP RI Report.

## Table 2-2E Summary of Subsurface Fill & Soil VOC Analytical Results from the BCP Remedial Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024

**Buffalo, New York** 



Boring Number		NYSDEC	NYSDEC	Part 375	SSB-2	SSB-3	SSB-4	SSB-5	
Sample Type	Part 375	Restricted	Part 375	Groundwater	RB Clay *	RB Clay *	RB Clay *	RB Clay *	
Depth (ft) Sample Date	Unrestricted SCOs •	Residential SCOs ●	Commercial SCOs ●	Protection SCOs ●	9.0 - 11.0 03/18/20	10.0 - 11.0 03/19/20	10.0 - 12.0 03/19/20	6.0 - 7.0 03/19/20	
Sample Date	<u>  3005 ¥</u>	3COS •		nic Compounds (μg		03/13/20	03/13/20	03/13/20	
1,1,1-Trichloroethane	680.0	100,000	500,000	680.0	. 0,	I	T	I	
1,1,2-Trichloroethane	NS	NS	NS	NS	88.6 J	237.0			
1,1,2,2-Tetrachloroethane	NS	35,000 **	NS	600.0	33.00				
1,1-Dichloroethane	270.0	26,000	240,000	270.0					
1,1-Dichloroethene	330.0	100,000	500,000	330.0					
1,2-Dichloroethane	20.0	3,100	30,000	20.0					
cis-1,2-Dichloroethene	250.0	100,000	500,000	250.0				43.8 J	
trans-1,2-Dichloroethene	190.0	100,000	500,000	190.0					
1,2-Dichloroethene (Total)	NS	NS	NS	NS					
Acetone	50.0	100,000	500,000	50.0					
Benzene	60.0	4,800	44,000	60.0					
Carbon Disulfide	NS	100,000 **	NS	2,700					
Chloroethane	NS	NS	NS	NS					
Ethylbenzene	1,000	41,000	390,000	1,000					
Methyl ethyl ketone (2-Butanone)	120.0	100,000	500,000	120.0					
Methylene chloride	50.0	100,000	500,000	50.0					
Styrene	NS	NS	NS	NS					
Tetrachloroethene	1,300	19,000	150,000	1,300					
Toluene	700.0	100,000	500,000	700.0					
Trichloroethene	470.0	21,000	200,000	470.0	4,570	4,850	1,980,000	634.0	
1,2,4-Trimethylbenzene	3,600	52,000	190,000	3,600					
1,3,5-Trimethylbenzene	8,400	52,000	190,000	8,400					
Vinyl chloride	20.0	900.0	13,000	20.0					
m,p-Xylene	NS	NS	NS	NS					
o-Xylene	NS	NS	NS	NS					
Xylene (Total)	260.0	100,000	500,000	1,600	_				_
Total Chlorinated VOCs	NS	NS	NS	NS	4658.6 J	5,087	1,980,000	677.8 J	

#### Table 2-2F

### Summary of Subsurface Fill & Soil VOC Analytical Results from the BCP Remedial Investigation Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



#### Notes:

- = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted & Residential Soil Cleanup Objectives, NYSDEC, 2006.
- \* = Reddish brown silty clay.
- \*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

μg/kg = micrograms per kilogram or parts per billion.

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

NS = No standard given in 6 NYCRR Part 375 or Commissioner Policy CP-51.

Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.

Purple shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential soil cleanup objectives. Purple shaded values also exceed the 6 NYCRR Part 375 protection of groundwater soil cleanup objectives.

Green shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential or protection of groundwater soil cleanup objectives.

Yellow shaded values exceed the 6 NYCRR Part 375 restricted residential soil cleanup objectives but not the commercial soil cleanup objectives.

Orange shaded values exceed the 6 NYCRR Part 375 commercial soil cleanup objectives.

Red shaded values exceed the CP-51 residential soil cleanup objectives.

DUSRs for these samples were not included in the BCP RI Report.

Table checked by GMM on July 8, 2025.

#### Table 2-3 Summary of Subsurface Fill & Soil VOC Analytical Results from the Bike Path Soil Borings **Proposed NYSDEC Site Characterization** Fedders Automotive Components Site, Site No. 915024

**Buffalo, New York** 

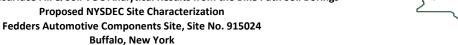


Department of Environmental Conservation

Sample Point Sample Type Depth (ft)	NYSDEC Part 375 Unrestricted	NYSDEC Restricted Residential	NYSDEC Part 375 Commercial	Part 375 Groundwater Protection	SB-100 Silty Clay 26.0' - 27.0'	SB-103 Sand 22.0' - 22.5'	SB-106 Foundry Sand 17.0' - 18.0'
Sample Date	SCOs ●	SCOs ●	SCOs ●	SCOs ●	09/18/20	09/18/20	09/18/20
		Volatile O	rganic Compound	s (μg/kg)			
1,1,1-Trichloroethane	680.0	100,000	500,000	680.0			
1,1,2-Trichloroethane	NS	NS	NS	NS			
1,1,2,2-Tetrachloroethane	NS	35,000 **	NS	600.0			
1,1-Dichloroethane	270.0	26,000	240,000	270.0			
1,1-Dichloroethene	330.0	100,000	500,000	330.0			
1,2-Dichloroethane	20.0	3,100	30,000	20.0			
cis-1,2-Dichloroethene	250.0	100,000	500,000	250.0			
trans-1,2-Dichloroethene	190.0	100,000	500,000	190.0			
1,4-Dioxane	100.0	13,000	130,000	100.0			
Acetone	50.0	100,000	500,000	50.0			
Benzene	60.0	4,800	44,000	60.0	29,000	390 J	
Carbon Disulfide	NS	100,000 **	NS	2,700			
Chloroethane	NS	NS	NS	NS			
Cyclohexane	NS	NS	NS	NS			
Ethylbenzene	1,000	41,000	390,000	1,000	240,000	26,000	
Isopropylbenzene	NS	100,000 **	NS	NS	7,900	2,300	
Methyl ethyl ketone	120.0	100,000	500,000	120.0			
Methylcyclohexane	NS	NS	NS	NS			
Methylene chloride	50.0	100,000	500,000	50.0			3,800 B
Naphthalene (PAH)	12,000	100,000	500,000	12,000			
n-Propylbenzene	3,900	100,000	500,000	3,900			
n-Butylbenzene	NS	NS	NS	NS			
p-Isopropyltoluene	NS	NS	NS	NS			
sec-Butylbenzene	11,000	100,000	500,000	11,000			
Styrene	NS	NS	NS	NS	18,000		
Tetrachloroethene	1,300	19,000	150,000	1,300			
Toluene	700.0	100,000	500,000	700.0	110,000	500 J	

#### Table 2-3

#### Summary of Subsurface Fill & Soil VOC Analytical Results from the Bike Path Soil Borings Proposed NYSDEC Site Characterization





Sample Point Sample Type Depth (ft) Sample Date	NYSDEC Part 375 Unrestricted SCOs ●	NYSDEC Restricted Residential SCOs ● Volatile Org	NYSDEC Part 375 Commercial SCOs ● anic Compounds (	Part 375 Groundwater Protection SCOs ● continued)	SB-100 Silty Clay 26.0' - 27.0' 09/18/20	SB-103 Sand 22.0' - 22.5' 09/18/20	SB-106 Foundry Sand 17.0' - 18.0' 09/18/20
Trichloroethene	470.0	21,000	200,000	470.0			
1,2,4-Trimethylbenzene	3,600	52,000	190,000	3,600			
1,3,5-Trimethylbenzene	8,400	52,000	190,000	8,400			
Vinyl chloride	20.0	900.0	13,000	20.0			
m,p-Xylene	NS	NS	NS	NS			
o-Xylene	NS	NS	NS	NS			
Xylene (Total)	260.0	100,000	500,000	1,600	190,000	18,000	
Total Chlorinated VOCs	NS	NS	NS	NS	0.0	0.0	0.0

- = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted & Residential Soil Cleanup Objectives, NYSDEC, 2006.
- \*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010. μg/kg = micrograms per kilogram or parts per billion.
- B = Analyte detected in the associated blank, as well as in the sample (organics).
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- NS = No standard given in 6 NYCRR Part 375 or Commissioner Policy CP-51.
- Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.
- Blue shaded values exceed the 6 NYCRR Part 375 unrestricted soil cleanup objectives but not the restricted residential soil cleanup objectives.
- Yellow shaded values exceed the 6 NYCRR Part 375 restricted residential soil cleanup objectives but not the commercial soil cleanup objectives.
- Orange shaded values exceed the 6 NYCRR Part 375 commercial soil cleanup objectives.
- Red shaded values exceed the CP-51 residential soil cleanup objectives.

# Table 2-4A Summary of Historic Overburden Groundwater VOC Analytical Results Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



Well Number	NYSDEC	MW1-89	MW2-89	GW-1	GW-2	GW-3
Sample Date	Ground-	08/23/89	08/23/89	10/16/90	10/16/90	10/16/90 4.5 - 14.5
Well Screen Interval (ft bgs) Screened Unit	water Standard •	9.0 - 11.0 Fill	5.7 - 7.7 Fill	4.0 - 9.0 Clay	4.5 - 14.5 Fill	4.5 - 14.5 Fill
Screened Onit		olatile Organic Co		Clay	riii .	FIII
				1	1	1
1,1,1-Trichloroethane	5.0	22.0 (23.0)	22.0	24.0 J	370.0	30.0 J
1,1,2-Trichloroethane	1.0					
1,1,2,2-Tetrachloroethane	5.0					
1,1-Dichloroethane	5.0	41.0 (40.0)	39.0	6.0 J	53.0	7.0 J
1,1-Dichloroethene	5.0		15.0			
1,2-Dichloroethane	0.6					
cis-1,2-Dichloroethene	5.0	NA	NA	8.0 J	340.0	7.0 J
trans-1,2-Dichloroethene	5.0		12.0	8.0 J	340.0	7.03
Acetone	50.0 G				29.0 B	
Benzene	1.0	60.0 (63.0)	76.0			
Carbon Disulfide	NS					
Chloroethane	5.0					
Chloroform	7.0					
Ethylbenzene	5.0	9.1 (11.0)				
Methyl ethyl ketone	50.0 G					
Methylene chloride	5.0			6.0 B	32.0 B	7.0 B
Tetrachloroethene	5.0					
Toluene	5.0					
Trichloroethene	5.0		310.0	19.0 J	640.0	23.0 J
Vinyl chloride	2.0	99.0 (100.0)	350.0			
Xylene (Total)	5.0					

- = NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998, with addenda through 2004.
- B = Analyte detected in the associated blank, as well as in the sample.
- G = Guidance value.
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- NS = No standard or guidance value available.
- ug/L = micrograms per liter or parts per billion.
- Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.
- Yellow shaded values exceed NYSDEC groundwater standards or guidance values.

#### Table 2-4B

#### Summary of Overburden Groundwater VOC Analytical Results from the BCP Remedial Investigation Proposed NYSDEC Site Characterization



Fedders Automotive Components Site, Site No. 915024 Buffalo, New York

Well Number Sample Date Well Screen Interval (ft bgs) Screened Unit	NYSDEC Ground- water Standard •	57-MW-1 01/22/20 5.0 - 15.0 Fill & Clay	57-MW-2 01/22/20 5.0 - 15.0 Clay	57-MW-3 01/22/20 5.0 - 15.0 Clay	57-MW-4 01/23/20 10.0 - 30.0 Clay	57-MW-5 01/23/20 10.0 - 30.0 Clay
	ν	olatile Organic Co	mpounds (ug/L)			
1,1,1-Trichloroethane	5.0	1.0 J	14.7			
1,1,2-Trichloroethane	1.0					
1,1,2,2-Tetrachloroethane	5.0					
1,1-Dichloroethane	5.0		57.0			
1,1-Dichloroethene	5.0					
1,2-Dichlorobenzene	3.0					
1,2-Dichloroethane	0.6					
1,2,4-Trichlorobenzene	5.0					
cis-1,2-Dichloroethene	5.0	2.58	55.4			
trans-1,2-Dichloroethene	5.0					
Acetone	50.0 G	17.4	408.0	157.0	409 J	9.73 J
Benzene	1.0					
Carbon Disulfide	NS					
Chloroethane	5.0					
Chloroform	7.0					
Ethylbenzene	5.0					
Methyl ethyl ketone	50.0 G					
Methylene chloride	5.0					
Tetrachloroethene	5.0					
Toluene	5.0					
Trichloroethene	5.0	13.0	22.5	1.27 J	7,370	1.28 J
Vinyl chloride	2.0		35.3			
Xylene (Total)	5.0					

- = NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998, with addenda through 2004.
- \* = Applies to sum of phenolic compounds.
- B = Analyte detected in the associated blank, as well as in the sample.
- G = Guidance value.
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

#### Table 2-4B

#### Summary of Overburden Groundwater VOC Analytical Results from the BCP Remedial Investigation **Proposed NYSDEC Site Characterization** Fedders Automotive Components Site, Site No. 915024





NS = No standard or guidance value available.

ug/L = micrograms per liter or parts per billion.

Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.

Yellow shaded values exceed NYSDEC groundwater standards or guidance values.

These results have not been validated.



# Table 2-4C Summary of Overburden Groundwater VOC Analytical Results from Bike Path Wells Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



Well Number Sample Date Well Screen Interval (ft bgs) Screened Unit	NYSDEC Ground- water Standard ●	MW-100 11/05/20 13.6 - 28.6 Fill & Sand	MW-103 11/05/20 8.6 - 23.6 Fill & Sand	MW-106 11/05/20 8.6 - 23.6 Fill & Sand
Vo	latile Organic Co	mpounds (ug/L)		
1,1,1-Trichloroethane	5.0			
1,1,2-Trichloroethane	1.0			
1,1,2,2-Tetrachloroethane	5.0			
1,1-Dichloroethane	5.0			
1,1-Dichloroethene	5.0			
1,2-Dichlorobenzene	3.0			
1,2-Dichloroethane	0.6			
1,2,4-Trichlorobenzene	5.0			
cis-1,2-Dichloroethene	5.0			
trans-1,2-Dichloroethene	5.0			
Acetone	50.0 G			
Benzene	1.0	11,000	18.0 J	
Carbon Disulfide	NS			
Chloroethane	5.0			
Chloroform	7.0			
Ethylbenzene	5.0	5,100	170.0	200.0
Isopropylbenzene	5.0			16.0 J
Methyl ethyl ketone	50.0 G			
Methylene chloride	5.0			
Styrene	5.0	220.0		
Tetrachloroethene	5.0			
Toluene	5.0	4,000	10.0 J	
Trichloroethene	5.0			
Vinyl chloride	2.0			
Xylene (Total)	5.0	3,200	110.0	74.0

#### Notes:

• = NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998, with addenda through 2004.

#### Table 2-4C

## Summary of Overburden Groundwater VOC Analytical Results from Bike Path Wells Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York

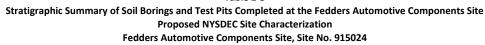


#### Notes (continued):

- B = Analyte detected in the associated blank, as well as in the sample.
- G = Guidance value.
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- NS = No standard or guidance value available.
- ug/L = micrograms per liter or parts per billion.
- Blanks = Contaminant analyzed for but not detected at or above the laboratory detection limit.
- Yellow shaded values exceed NYSDEC groundwater standards or guidance values.

## Table 2-5 Stratigraphic Summary of Soil Borings and Test Pits Completed at the Fedders Automotive Components Site Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York

Boring or	D. I.		State Plane	Ground	Total		llaneous Fill Ir	_		wn Clay or Silt	-		elly Sand and		Nat	tive Reddish B	rown
Test Pit	Date		linates	Surface Elevation	Depth		Slabs & Asph		•	ssibly Rewor			ty Clay (Alluvi		Danish	Silty Clay Surface *	Thisleran
Number	Completed	Easting (x)	Northing (y)	(ft amsl)	(ft bgs)	Depth (ft bgs)	Surface * Elevation	Thickness (ft)	Depth (ft bgs)	Elevation	Thickness (ft)	Depth (ft bgs)	Surface * Elevation	Thickness (ft)	Depth (ft bgs)	Elevation	Thickness (ft)
				(it aiiisi)		(it bgs)		Phase II Invest		Lievation	(11,)	(it bgs)	Lievation	(10)	(it bgs)	Lievation	(11)
	00/05/00	1001100 0000	1057000 2072	500.05	0.0					1	T		T	T	2.0	570.06	6.0
B-1	09/25/90	1064499.8888	1067899.2073	580.86	8.0	0.0	580.86	2.0							2.0	578.86	> 6.0
GW-1	09/26/90	1064530.1320	1068038.0412	581.00	11.0	0.0	581.00	4.0							4.0	577.00	> 7.0
GW-2	09/26/90	1064771.9945	1068003.6534	577.10	14.0	0.0	577.10	12.9				12.9	564.20	> 1.1			
GW-3A	09/25/90	N/A	N/A	NS	15.0	0.0	N/A	4.0	4.0	N/A	9.5	13.5	N/A	> 1.5			
GW-3B	09/25/90	N/A	N/A	NS	8.0	0.0	N/A	> 8.0									
GW-3	09/25/90	1064670.7584	1067915.6807	577.30	14.0	0.0	577.30	12.5				12.5	564.80	> 1.5			
	1998 RETEC Bike Path Investigation																
SB-01	12/12/98	1064706.3811	1067905.2750	579.00	20.0	0.0	579.00	12.0				12.0	567.00	> 8.0			
SB-02	12/12/98	1064722.5720	1067929.7261	579.00	16.0	0.0	579.00	8.0				8.0	571.00	> 8.0			
SB-03	12/12/98	1064748.7884	1067945.8566	579.00	20.0	0.0	579.00	8.0				8.0	571.00	8.0	16.0	563.00	> 4.0
SB-04	12/12/98	1064772.7696	1067975.0637	579.00	16.0	0.0	579.00	8.0				8.0	571.00	> 8.0			
						20	002 Fedco Site	Assessment I	nvestigation								
SB-1	08/08/02	1064446.4728	1068007.5652	582.52	12.0	0.0	582.52	0.67	0.67	581.85	7.33				8.0	574.52	> 4.0
SB-2	08/08/02	1064449.3765	1068012.4672	582.55	8.0	0.0	582.55	0.5	0.5	582.05	6.3				6.8	575.75	> 1.2
SB-3	08/08/02	1064463.5610	1068012.2397	582.36	15.0	0.0	582.36	0.5	0.5	581.86	3.5				4.0	578.36	> 11.0
SB-4	08/08/02	1064462.8945	1068005.8059	582.33	8.0	0.0	582.33	0.5	0.5	581.83	3.5				4.0	578.33	> 4.0
SB-5	08/08/02	1064480.5967	1068003.8866	582.36	23.0	0.0	582.36	0.83							0.83	581.53	> 22.2
SB-6	08/08/02	1064487.3741	1068007.0421	582.36	23.0	0.0	582.36	1.5							1.5	580.86	> 21.5
							2019/2020 BC	P Remedial In	vestigation								
BH-01	12/17/19	1064628.7170	1067883.2798	578.04	12.0	0.0	578.04	5.5	5.5	572.54	> 6.5						
BH-02	12/18/19	1064725.6733	1067956.0556	578.34	12.0	0.0	578.34	7.0	7.0	571.34	> 5.0						
BH-03	12/18/19	1064811.3564	1068035.5053	578.58	12.0	0.0	578.58	4.0	4.0	574.58	> 8.0						
BH-04	12/17/19	1064703.8300	1068009.4551	578.98	20.0	0.0	578.98	3.5	3.5	575.48	6.0	9.5	569.48	6.5	16.0	562.98	> 4.0
BH-05	12/18/19	1064689.7450	1068060.4365	580.09	8.0	0.0	580.09	4.5	4.5	575.59	> 3.5						
BH-06	12/18/19	1064637.2436	1068073.2004	581.42	8.0	0.0	581.42	3.5	3.5	577.92	> 4.5						
BH-07	12/17/19	1064602.2389	1068034.3671	580.52	12.0	0.0	580.52	3.5	3.5	577.02	0.5	4.0	576.52	4.0	8.0	572.52	> 4.0
BH-08	12/18/19	1064602.0713	1067969.3216	579.70	12.0	0.0	579.70	4.0				4.0	575.70	4.0	8.0	571.70	> 4.0
BH-09	12/18/19	1064540.4512	1067953.4555	580.56	8.0	0.0	580.56	3.0							3.0	577.56	> 5.0
BH-10	12/18/19	1064461.1391	1067922.6996	582.09	8.0	0.0	582.09	2.0							2.0	580.09	> 6.0
BH-11	12/18/19	1064451.3078	1068012.5568	582.56	12.0	0.0	582.56	6.0	6.0	576.56	> 6.0						
BH-12	12/19/19	1064487.3361	1067927.4465	581.61	4.0	0.0	581.61	2.0							2.0	579.61	> 2.0
BH-13	12/18/19	1064471.6367	1068092.9856	585.67	8.0	0.0	585.67	4.6							4.6	581.07	> 3.4
TP-14	01/08/20	1064448.7918	1068119.1063	587.51	10.0	0.0	587.51	8.0	8.0	579.51	> 2.0						
TP-15	01/08/20	1064402.0081	1068149.1719	587.88	10.0	0.0	587.88	> 10.0									



**Buffalo, New York** 



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Boring or Test Pit	Date		New York State Plane Coordinates		Total Depth		Miscellaneous Fill Including Concrete Slabs & Asphalt Paving		Brown Clay or Silty Clay (Possibly Reworked)		Gray Gravelly Sand and Gray Sandy Silty Clay (Alluvium)			Native Reddish Brown Silty Clay			
Number	Completed	Easting (x)	Northing (y)	Elevation (ft amsl)	(ft bgs)	Depth (ft bgs)	Surface * Elevation	Thickness (ft)	Depth (ft bgs)	Surface * Elevation	Thickness (ft)	Depth (ft bgs)	Surface * Elevation	Thickness (ft)	Depth (ft bgs)	Surface * Elevation	Thickness (ft)
	2019/2020 BCP Remedial Investigation (continued)																
TP-16	01/08/20	1064359.9565	1068164.9457	587.60	10.0	0.0	587.60	> 10.0									
TP-17	01/08/20	1064334.5017	1068099.5506	587.21	10.0	0.0	587.21	> 10.0									
TP-18	01/08/20	1064398.3751	1068096.2613	587.20	6.0	0.0	587.20	> 6.0									
MW-1	01/13/20	1064624.8444	1067886.9812	578.22	15.0	0.0	578.22	7.0	7.0	571.22	> 8.0						
MW-2	01/13/20	1064773.0547	1068013.3477	578.53	15.0	0.0	578.53	5.0	5.0	573.53	> 10.0						
MW-3	01/13/20	1064613.9569	1067978.2588	579.65	15.0	0.0	579.65	3.5				3.5	576.15	4.5	8.0	571.65	> 7.0
MW-4	01/14/20	1064251.8012	1067973.9167	582.79	30.0	0.0	582.79	2.0							2.0	580.79	> 28.0
MW-5	01/15/20	1064277.7818	1068176.0533	584.80	30.0	0.0	584.80	2.0							2.0	582.80	> 28.0
SSB-1	03/18/20	1064410.8289	1067941.8397	NS/NE	8.0	0.0	N/A	4.0	4.0	N/A	2.0				6.0	N/A	> 2.0
SSB-2	03/18/20	1064354.7816	1067968.8540	NS/NE	11.0	0.0	N/A	1.0	1.0	N/A	3.0				4.0	N/A	> 7.0
SSB-3	03/19/20	1064297.7097	1067953.1947	NS/NE	11.0	0.0	N/A	1.0	1.0	N/A	3.0				4.0	N/A	> 7.0
SSB-4	03/19/20	1064302.7172	1068003.0792	NS/NE	11.0	0.0	N/A	1.0	1.0	N/A	3.0				4.0	N/A	> 7.0
SSB-5	03/19/20	1064415.8364	1067991.7242	NS/NE	11.0	0.0	N/A	4.0							4.0	N/A	> 7.0
	2020 DEC Remedial Investigation of the 31 Tonawanda Street BCP Site Off-Site Area																
SB-100	09/18/20	1064730.9733	1067946.8962	578.82	28.0	0.17	578.65	16.63				16.8	562.02	4.5	21.3	557.52	> 6.7
SB-103	09/18/20	1064847.3382	1068055.9210	578.81	24.0	1.0	577.81	7.0				8.0	570.81	14.1	22.1	556.71	> 1.9
SB-106	09/18/20	1065042.8495	1068182.8885	580.26	24.0	0.33	579.93	8.4				8.7	571.56	11.3	20.0	560.26	> 4.0

#### Notes:

\* = Surface elevations in feet above mean sea level.

amsl = above mean sea level.

bgs = Below ground surface.

N/A = Not Applicable.

NS = Not Surveyed.

NE = Not Estimated. Soil boring was completed within a building. Floor elevations are not available so estimates could not be made.

#### Elevations:

Green shaded elevations were estimated from the TIN lines on the 57-71 Tonawanda Street AutoCAD survey drawing.

Orange shaded elevations are from the NYSDEC Phase II Investigation Report dated February 1992.

Pink shaded elevations are from the NYSDEC survey for the Remedial Investigation of the 31 Tonawanda Street Off-Site Area.

Yellow shaded elevations are listed on the soil boring logs prepared by RETEC in December 1998.

#### Coordinates:

For information concerning the coordinates, please see Appendix J of the 31 Tonaanda Street BCP Off-Site Area Report.

#### Depths:

Orange shaded total depth as given on the soil boring log (4 feet) is inconsistent with the included photo, which shows 2 cores. Therefore, the depth of the reddish-brown silty clay was determined by doubling the depth shown on the log.

# Table 3-1 Proposed Soil Boring Coordinates Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



Proposed	NY State Plane System, Zone		Proposed Boring	Commonts
Boring Number	Northing (y)	Easting (x)	Depth (ft bgs)	Comments
	Highl	915293)		
SB-VOC-1	1067895.1174	1064623.1035	30.0	Well to be installed
SB-VOC-2	1068002.5604	1064768.2481	30.0	Well to be installed
SB-VOC-3	1067977.2651	1064622.2566	30.0	Well to be installed
SB-VOC-4	1067908.5230	1064675.9705	30.0	
SB-VOC-5	1067960.2445	1064677.7463	30.0	
SB-VOC-6	1067967.6860	1064461.9467	30.0	Well to be installed
SB-VOC-7	1068020.2203	1064263.4065	30.0	Well to be installed
SB-VOC-8	1068002.8355	1064704.2070	30.0	
SB-VOC-9	1068012.8896	1064642.0918	30.0	
SB-VOC-10	1068020.4618	1064547.6720	30.0	
SB-VOC-11	1067976.5157	1064546.4805	30.0	
SB-VOC-12	1067950.3712	1064596.9315	30.0	
SB-VOC-13	1067903.3037	1064549.4767	30.0	
SB-VOC-14	1068008.9957	1064462.8945	30.0	
SB-VOC-15	1067923.0367	1064455.1508	30.0	
SB-VOC-16	1067983.1168	1064259.7888	30.0	

#### Notes:

 $\bullet$  = Coordinates were obtained from the AutoCAD drawing of this site.

bgs = Below ground surface.

Table checked by GMM on August 7, 2025.

#### Table 3-2

### Summary of the Laboratory Analytical Program for Subsurface Fill & Soil, Groundwater, and NAPL Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024

**Buffalo, New York** 



Department of Environmental Conservation

Matrix	Parameter	Analytical Method		Field S	amples		QC E	Blanks	Total
			Field <sup>(a)</sup>	Field <sup>(b)</sup>	MS/MSD (c)	Subtotal	Trip	Equipment	
			Samples	Duplicate	(Total)		Blank	Blank	
	TCL VOCs	EPA SW 8260C or newer	96	5	5	106	NA	NA	106
Subsurface Fill	TCL SVOCs	EPA SW 8270D or newer	10	1	1	12	NA	NA	12
& Soil Samples	Total Cyanide	EPA SW 9013A or newer	10	1	1	12	NA	NA	12
	Ammonia	EPA SW 350.1 or newer	10	1	1	12	NA	NA	12
	TCL VOCs	EPA SW 8260C	15	1	1	17	1	1	19
Groundwater	TCL SVOCs	EPA SW 8270D	15	1	1	17	NA	1	18
Samples	Total Cyanide	EPA SW 9012A or newer	15	1	1	17	NA	1	18
	Ammonia	EPA SW 350.1 or newer	15	1	1	17	NA	1	18
	TCL VOCs	EPA SW 8260C or newer	5	1	1	7	1	1	9
	TCL SVOCs	EPA SW 8270D or newer	5	1	1	7	NA	1	8
NAPL Samples	Total Cyanide	EPA SW 9012A or newer	5	1	1	7	NA	1	8
	TCLP (VOCs & SVOCs)	EPA SW 1311 or newer	5	1	1	7	NA	NA	7
	Ignitability	EPA SW 1010A or newer	5	1	1	7	NA	NA	7

- (a) = The number of subsurface fill & soil samples is based on the following: 16 borings with 6 samples collected from each boring.
  - = The number of groundwater samples is based on the following: 7 existing wells, 5 proposed wells, and 3 contingency wells.
  - = The number of NAPL samples is based on the following: 1 existing well, 1 proposed well, and 3 contingency wells.
- (b) = The number of field duplicate samples is based on the following: 1 per 20 samples for VOCs; 1 sample for each of the other analyses.
- (c) = The number of matrix spike/matrix spike duplicate (MS/MSD) samples is based on the following: 1 per 20 samples; 1 sample for each of the other analyses.

# Table 3-3 Existing Monitoring Well Construction Summary Proposed NYSDEC Site Characterization Fedders Automotive Components Site, Site No. 915024 Buffalo, New York



Well Number	New York State Plane Coordinates		Ground Surface	Top of Riser	Total Boring	Sandpack Interval	Sandpack Interval	Well Screen Interval	Well Screen Interval	Monitored Water-Bearing
	Easting (x)	Northing (y)	Elevation	Elevation	Depth	(ft. bgs)	(ft. amsl)	(ft. bgs)	(ft. amsl)	Zone
			(ft. amsl)	(ft. amsl)	(feet)					
57-71 Tonawanda Street (Site No. C915024)										
MW-1	1064624.8444	1067886.9812	578.22	577.70	16.0	4.0 to 15.0	574.22 to 563.22	5.0 to 15.0	573.22 to 563.22	Gravel & Sand
MW-2	1064773.0547	1068013.3477	578.53	578.33	15.0	4.0 to 15.0	574.53 to 563.53	5.0 to 15.0	573.53 to 563.53	Fill & Sand
MW-3	1064613.9569	1067978.2588	579.65	579.15	15.0	4.0 to 15.0	575.65 to 564.65	5.0 to 15.0	574.65 to 564.65	Sand & Silty Clay
MW-4	1064251.8012	1067973.9167	582.79	582.75	30.0	9.0 to 30.0	573.79 to 552.79	10.0 to 30.0	572.79 to 552.79	Silty Clay
MW-5	1064277.7818	1068176.0533	584.80	584.00	30.0	9.0 to 30.0	575.80 to 554.80	10.0 to 30.0	574.80 to 554.80	Silty Clay
				31 Tonawan	da Street Off-	Site (Site No. C91529	9A) - Bike Path			
MW-100	1064730.9733	1067946.8962	578.82	578.56	28.0	12.0 to 29.0	566.82 to 549.82	13.64 to 28.64	565.18 to 550.18	Sand
MW-103	1064847.3382	1068055.9210	578.81	578.37	24.0	7.0 to 24.0	571.81 to 554.81	8.58 to 23.58	570.23 to 555.23	Fill?; Sand
MW-106	1065042.8495	1068182.8885	580.26	579.84	24.0	7.0 to 24.0	573.26 to 556.26	8.63 to 23.63	571.63 to 556.63	(see note 1)

#### Notes:

Horizontal coordinates are relative to the State Plane New York West Zone of the North American Datum (NAD) of 1983.

ft. amsl = feet above mean sea level.

ft. bgs = Feet below ground surface.

(1) = Silty fine sand; sand & gravel.

#### Coordinates:

Blue shaded coordinates are from the Regional Base Map completed by Glenn M. May as coordinates from the BCP RI Report were not correct.

Yellow shaded coordinates were survyed by the DEC in 2020 as part of the 31 Tonawanda Street Off-Site Investigation.

#### **Elevations:**

Gray shaded elevations are from Table 8 (Groundwater Elevations) of the BE3 RI Report dated May 2019.

Pink shaded elevations were estimated from the TIN lines on the 57-71 Tonawanda Street AutoCAD property survey drawing.

Yellow shaded elevations were surveyed by the DEC in 2020 as part of the 31 Tonawanda Street Off-Site Investigation.

### **APPENDIX A**

### GENERIC HEALTH AND SAFETY PLAN FOR THE FEDDERS AUTO COMPONENTS SITE CHARACTERIZATION

This Health and Safety Plan was developed for use by all personnel involved in the Remedial Investigation of the Fedders Automotive Site (915024) located at 57 Tonawanda Street in the City of Buffalo, Erie County, New York. This plan provides only general guidance that should be supplemented by the Standby Spill Contractor's Corporate Health and Safety Plan.

#### General Health and Safety Guidelines

All work should be conducted in accordance with standard health and safety procedures for hazardous waste site work. All Personnel must have the 40-hour HAZWOPER training certification as required by 29 CFR 1910.120, and maintain this training by taking the annual 8-hour Refresher Course. The Standby Spill Contractor will provide, as necessary, appropriate personal protective equipment (PPE) suitable for working in and around contaminated liquids, wastes and soils. The Standby Spill Contractor will supply a photoionization detector (PID) for monitoring organic vapors, when necessary, which will be utilized to determine the necessity to upgrade PPE requirements.

It is anticipated that all field work can be performed in Level D personal protective equipment: steel toe shoes/boots, hard hat and latex gloves. The Standby Spill Contractor will ensure that sufficient personal protective equipment is available for all personnel prior to entering the exclusion zone. All appropriate PPE will be donned, used and removed as described in the 40-hour training course. Air monitoring will be conducted with a PID. An air-purifying respirator must be worn whenever there are sustained organic vapor concentrations of 5 ppm or above in the breathing zone.

#### **Emergency Telephone Numbers**

Following is a list of emergency telephone numbers for use by all personnel involved in the investigation:

Emergency Services 911

Sisters of Charity Hospital (716) 862-1000

National Poison Control Center (800) 222-1222

NYSDEC Region 9: Glenn May (716) 851-7220

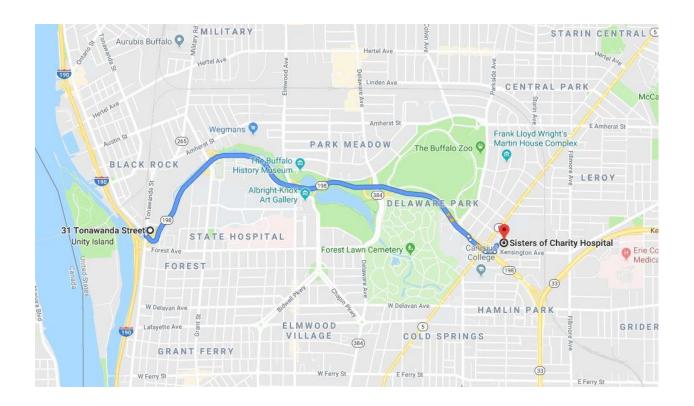
#### Medical Assistance

The primary source of medical assistance during the investigation of the Fedders Automotive Site is the following:

Sisters of Charity Hospital 2157 Main Street Buffalo, New York 14214 Phone: (716) 862-1000

This hospital is located approximately 3.1 miles east of the Site. All personnel should be familiar with the location of this hospital and know how to get there from the Site. Directions to the hospital are given on the following pages.

#### **Driving Directions to Hospital**



- 1. Start out going south on Tonawanda Street toward Niagara Street.
- 2. Turn left to merge onto NY-198 E and travel for 2.8 miles.
- 3. Take the Main Street/NY-5 exit and travel approximately 140 feet.
- 4. Merge onto Humboldt Parkway and travel for 0.1 miles.
- 5. Turn left onto Kensington Avenue and travel for approximately 350 feet.
- 6. Sisters of Charity Hospital, 2157 Main Street, is on the left.

#### **APPENDIX B**

## NEW YORK STATE DEPARTMENT OF HEALTH COMMUNITY AIR MONITORING PLAN

#### **Overview**

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses, and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

#### Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC and NYSDOH staff.

- <u>Continuous monitoring</u> will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells;
- **Periodic monitoring** for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well bailing/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

#### VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

• If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring;

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average;
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shut down; and
- All 15-minute readings must be recorded and available for NYSDEC and NYSDOH review. Instantaneous readings, if any, used for decision purposes should also be recorded.

#### Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedances of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

• If the downwind PM-10 particulate level is 100 micrograms per cubic meter (ug/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 ug/m³ above the upwind level and provided that no visible dust is migrating from the work area;

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 ug/m³ above the upwind level, work must be stopped, and a re-evaluation of activities initiated. Work can resume if dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 ug/m³ of the upwind level and in preventing visible dust migration; and
- All readings must be recorded and available for NYSDEC and NYSDOH review.

### Special Requirements for Work within 20 Feet of Potentially Exposed Individuals or Structures

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Depending upon the nature of contamination. Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed  $150 \text{ ug/m}^3$ , work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to  $150 \text{ ug/m}^3$  or less at the monitoring point.

Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

# APPENDIX C SOIL BORING & TEST PIT LOGS

#### 1989 CRA SITE INVESTIGATION REPORT

**TABLE 2** MONITORING WELL STRATIGRAPHY

Well Description	Depth (BGS)	Material Description
MW1-89	0' - 0.2'	black moist gravelly sand fill
	0.2' - 1.5'	brown dry silty sand fill, with many large stones and some bricks, cinders, concrete rubble, and lumps of silty clay
	1.5' - 6.0'	brown dry clayey silt fill, with some sand, many large stones and some concrete rubble
	6.0' - 10.0'	brown moist clayey silt fill, with some gravel, concrete and asphalt rubble, stones, rocks, and wood fragments
	10.0' - 12.0'	brown moist silty clay fill, with some stones, rocks, gravel, cinders, ash, and wood fragments

Notes:	<ul> <li>static water level</li> </ul>	7.0 ft. BGS*
	<ul> <li>bottom of well</li> </ul>	11.3 ft. BGS
	<ul> <li>top of well</li> </ul>	2.9 ft. AGS**
	<ul> <li>top of sandpack</li> </ul>	7.3 ft. BGS
	<ul> <li>screened interval</li> </ul>	11.0 - 9.0 ft. BGS
	<ul> <li>total well length</li> </ul>	13.9 ft.

BGS - below ground surface AGS - above ground surface

TABLE 2 MONITORING WELL STRATIGRAPHY

Well Description	Depth (BGS)	Material Description
MW2-89	0' - 0.3'	black moist gravelly sand fill
	0.3' - 1.5'	brown dry silty sand fill, with some gravel, some cinders, stones, rocks, concrete rubble, and trace brick material
	1.5' - 6.0'	brown dry gravelly sand fill, with trace silt, some concrete rubble, asphalt rubble, stones and rocks
	6.0' - 9.0'	brown wet sandy silt fill, with some gravel and clay lumps and trace wood fragments
	9.0' - 11.0'	same as above except soil has an iridescent sheen and diesel odor

Notes:	- static water level	6.0 ft. BGS*
	<ul> <li>bottom of well</li> </ul>	8.0 ft. BGS
	<ul> <li>top of well</li> </ul>	2.3 ft. AGS**
	<ul> <li>top of sandpack</li> </ul>	4.0 ft. BGS
	<ul> <li>screened interval</li> </ul>	7.7 - 5.7 ft. BGS
	<ul> <li>total well length</li> </ul>	10.0 ft.

- BGS below ground surface AGS above ground surface

## 1992 NYSDEC PHASE II INVESTIGATION REPORT

DATE	
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STARTED 9-26-90 FINISHED 9-26-90



#### E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG

HOLE NUMBER 4W-1	
SURFACE ELEVATION	
GROUNDWATER	

ROJECT <u>Fedders</u> Auto	LOCATION HW comes a lot.
4912040	10 € 0/ 40.20

screen  4.9'  Sold  18. 14  14.9'  Seal  2.5-3.5'  Seal  2.5-4.5'  Seal  2.5-4.5'  Seal  2.5-4.5'  Seal  2.5-4.5'  Seal  2.5-4.5'  Seal  2.5-4			-		16040		10 € 9, 40,20	
0-0.5' Block gravely sand fill  55 1 1 2  55 1 2 1  56-10  55-0.10' Concerte  1.0-1.3' Block sand fill  0-0.7' Black sandy fill with  quasy appearance to 01-1ive  anoma.  0.7'-1.1' Redok have clay fill  41'  55.4' 18 14  55.4' 2.5-3.5'  19 10  10 10 10 10 10 10 10 10 10 10 10 10 10 1	1		SAMPLE TYPE	ш	SAMPLER 0 6 12	SAMPLE ID	FIELD IDENTIFICATION OF SOILS	NOTES
540088		00	55 55 55 55	3 4 5	5 3 1 1 2 1 2 1 1 2 2 1 1 2 7 14 19 20 15 13	5B-1C	0-0.5' Black gravelly sand fill 0.5-0.65' Red brick. 0.65-1.0' Concrete 1.0-1.3' Black sand fill.  SS#2 2-4' 1.1' Recovery 0-0.7' Black sandy fill with greasy appearance + oil-like asoma. 0.7'-1.1' leddish known clay fill w/ krick.  SS#3 4-6' 0.7' Recovery  All Morst reddish known clay- cavit see any foreign fragments renhans its natural 1?)  SS#4 6-8' 0.8' Recovery  All wet reddish known clay w/ no visible signs of fill material. Clay (as in #3) Clay is highly cohesive & moderately plastic.  SS#5 8-10' 1.4' Recovery  All dry reddish known clay, fight, highly cohesive & moderately plastic.  Spears natural. Water is Sifting on top of this layer.  SS#6 9-11'	OVA > 1000 HNU = 15 PAR MOIST.  OUA = 10 HNU = 3 MOIST.  OVA = 0 HNU = 0 HNU = 0 DRY  OVA

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STARTED 9-26-90

FINISHED 9-26-90

SHEET 1 OF 1

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#### E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG

HOLE NUMBER GW-2
SURFACE ELEVATION
GROUNDWATER DEPTH

PROJECT		Auto.	LOCATION HE comes of lot no	2an_
	YPLEOGO		scajacanda Creek.	
WELL SAMPLE	SAMPLER 0 6 12 12 18	PROFILE SAMPLE ID	FIELD IDENTIFICATION OF SOILS	NOTES
600 00 SS	18 24 1 8 12 2 8 4 2 3 3 3 1 4 2 2 5 1 2 6 11 16	7 വല പേരം	SS#Z Z-4' 1.6' Tecovery  0-1.0' Dank brown sandy fill w/ brick, slag, a write ceramic material, black glass (foundry)  1.0-1.6' Black sandy clay fill, quary in appearance but not in touch.  SS#3 4-6' 0.4' Recovery.  Limited sample volume: will spoon again.  0-0.4' Wet black sandy fill.  2nd time retrieved nothing but water.  SS#4 6-8' 0.4' Recovery.  Appears to be naterial treat was Stuck in bit. Auger cuttings indicate saturated black sandy fill, spoon shows damp sandy clay fill.  SS#5 8-10' Ho recovery.  Try again - 240 spoon in Saturated gravely sand fill.  SS#12 10-12' 1.0' Recovery.  All wood, as in Gw. 3b.  SS#7 1Z-14' 1.0' Recovery  0-0.4' Reddien brown sandy clay.	HNU=10 PPM Both only @ Very end d SPEON. HOIST.  HAL=0 Damp  HNU=0 Saturated.  UVA=10 HNU N/A  OVA=10 HNU =0 HNU =0 HNU =0 HNU =0
			0.4-0.9' wood 0.9-1.0' Black clay w/ wood.	HALL S O
	WELL DIAGRAM SS	WELL DIAGRAM WY SAMPLER  O	WELL DIAGRAM  DIAGRAM  WELL DIAGRAM  DIAGRAM	WELL DIAGRAM DIAGRAM WELL DIAGRAM WELL DIAGRAM WELL DIAGRAM DIAGRAM WELL DIAGRAM DIA

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STARTED 9-25-90 FINISHED 9-25-90 SHEET OF 2



#### E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG

SURFACE ELEVATION GROUNDWATER N/A

	PRO.	ECT_		edders A	) to	LOCATION SE cones & Lot a		
		-		P12040		Scajacanda Crok.		
DEPTH - FT	WELL DIAGRAM	SAMPLE TYPE	SAMPLE NO.	BLOWS ON SAMPLER  0 6 12 12 18		FIELD IDENTIFICATION OF SOILS	NOTES	
			· ·	18 24		<u> </u>	K. J.	
5		55 \$5 \$5	1 2 3	7 8 13 21 5 3 1 3 3 2 1 2	SB-3A SB-3B SB-3C	Black sandy Fill w/ some clay and gravel. Contains knick, glass, slag, greenstone, etc.	OVA = 3ppm HNU=0ppm DRY	
	ABAN DONED	55 55 55	4 5 4	2 3 1 1 2 2 2 3	<del>58-30</del> Rw 58-30	SS#Z Z-4' 2.0' Recovery.  Same fill @ as 0-2'. clay seam 3" thick in middle is part of the Fill	0VA = 0 HMU=0 MOIST.	
25						All clay fill. Must have puoled a store because the top of true spoemment before the top of true spoemment claim. Clay matrix is reddish brown with high cohesian or moderate plashicity. Contains medium + coause sand, coal fragments a small troick fragments. Auger cuttings indicate that remainder is stack paindly fill as above.  SS#4 (e-8 0.2' Recovery.  Same clay fill as #3. Spoon is dry inside - not picting up	Moist.	
40088						All "natural" reddish travor Hoist clay with ruing fine + redium sand. Same clay as seen in B-1.  SS# 4 11-13' 1.1' Recovery  All clay as in #5 but with black greasy Material + organic mater & 0.8'. Also a wood flag.  @ 0.4' and a coal flag. (1/2")  @ 0.6'. Probably natural but where	OVA = 0 HULL = 0 MOISE	

DATE

STARTED 9-25-90



#### E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG

HOLE NUMBER 460-3 Q
SURFACE
ELEVATION \_\_\_\_
GROUNDWATER N/A

PROJECT Fedders Auto LOCATION							
		•		?P12040			***************************************
DEPTH - FT	WELL DIAGRAM	SAMPLE	SAMPLE NO.	BLOWS ON SAMPLER  0 6 12  12 18 24	PROFILE	FIELD IDENTIFICATION OF SOILS	NOTES
	A6			12/18 15/24		SS#7 13-15' 2.0' Recovery.  Natural material.  0-0.5' Readish brown clay as above o.5-1.1' Organic rich clay. Reddon brown w/black rothes. Contains wood + plant fragments & cool.  1.1-1.3' Black peat moss w/ coalified plant fragments.  1.3-20' Organic rich sand. Fine It brown sand w/ rootets and Plant fragments. Also contains numerous (1070) shells (25mm) of apothopods & knachiopods.  Ho water to speak of so w'ill abandon this hole and move towards the chek.	Moist OVA = 0 HNV = 0
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## E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG

HOLE NUMBER GW-36
SURFACE
ELEVATION
GROUNDWATER 51
DEPTH

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1	PROJEC	Τ_		edders Au	lo	LOCATION SE concer of lot rear		
		_	4	26040		Scajaranda Creek.		
<del></del>				T		7		
DIAGRA	SAMPLE		SAMPLE NO.	BLOWS ON SAMPLER 0 6 12 12 18 24	PROFILE	FIELD IDENTIFICATION OF SOILS	NOTES	
		+	-	10 24			14	
ABANDONED	\$\$ \$\$	$\dashv$	1 2_	(e Z 2 4 (e 10 14 15 )		(Augused to 4') Top 0.4' in gravelly sand fill (black) similar to Gw-3a (probably from inside aways bit. Botton 0.9' is reddish brown. Jay wl weas of black sand (ontains ~10 90 redium to coarse sand to 10 90 gravel. Very bottom in wet sand fill.  SS#2 (e-8' 1.4' Tecavery.  A solici case of wet wood. That an odd anoma. (creosote?)  CANT AUGER THROUGH THE WOOD  SO MOVE UP (6' AND TRZY AGAIN.	MOST  DVA = 1 pgm  HHu=0  OJA to 30 ppm  HHuto 30 ppm	
							\ <del> </del>	
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FINISHED 9-24-90
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#### E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG

PROJECT Fedders Auto LOCATION SE corner of Lot near YPGO 40 Scajacanda Creek.			
496040 Scajacanda Creek.	_		
	>cajacanda Creek.		
WELL DIAGRAM WELL DIAGRAM WAY 12 18 24 CI SI Sd Gr	NOTES		
Third try @ Gw-3  Auger to y' then splitspoon.  SS#1 1.2' Recovery. 4-le'  All black sandy fill as we've neen before. Contains linestone quarel, brick, wood, etc.  Wet helaw 5'.  SS#2 1 1  Both Holling to we've neen before. Contains linestone wath neo  Wet helaw 5'.  SS#2 16-8' 1.2' Recovery.  Wet helaw 5'.  SS#2 16-8' 1.2' Recovery.  Will with slag+cole fragments houst clare this think the start of the wet.  SS#3 8-10' 1.8' Recovery  Solunated.  O-5-5' Sandy clayery fill(black)  SAND  O.5-11' Reddish brown thack clay fill with growth shown thack clay fill with growth sond the cokel slag.  Gill meteriae.  SS#4 10-12' 0.16' Recovery but  Sahunated black sandy clay fill ova.  Sahunated black sandy clay fill ova.  Spean is all wet. Will run another spean thry to get ova.	- 1 ppm - 1 ppm - 1 ppm - 2 pp		

DATE	
STARTED_C	1-25-90
FINISHED_G	1-25-90
	1



#### E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG

HOLE NUMBER B-1
SURFACE
ELEVATION
GROUNDWATER
DEPTH

	PRO	JECT.		<u>edders</u> )	tuto	LOCATION Near enhance gate	<u>~</u>	
			'	P12040		West Ave.		•
	(	<del>1</del>	1				7	_
1		l	Ŏ.	BLOWS ON	I .	•		:4
1	WELL DIAGRAM	12,4	ш	SAMPLER		FIELD IDENTIFICATION OF SOILS	NOTES	,
ЕРТН		SAMPLE	귤	0 6 6 12	SAMPLE IP	FIELD IDENTIFICATION OF SOILS	NOTES	F15
E E		တြ		12 18	Cị Sị Sại Gṛ			Actions.
		<u> </u>	S	18 24				T. A.
-		SS	1	36 3	5B-4A	55#1 0-2' 1.0' Recovery		-
_				4 6			HNU= Oppm	5-1-
_	BOREHOLE	SS	2	3 41	SB-4B	6" of black, damp silty sand	(30-40 ppm in	decimal.
_	FILLED			Q 10	_	fill material w/ knick fragments	hole).	-
5-	CUTTING)	55	3	4 6	SB-4C	followed to 1.6' with reddish	OVA - 0	ــــــــــــــــــــــــــــــــــــــ
_	4 POUT	133		11 14		Drown clay fill. Clay is		
_		55	4	12 12	SB-40	moderate to highly collepive with		
_			1	16 20		a moderate Plasticity + contains		-
-						<10% angular black chert fragment	1	
10-						(coarse gravel size) + tan sand		-
-								Ļ
-						lenses as well as mina tericle	,	_ _
_						Fragments.		
-				£		1		بل
-						55#2 2-4' 1.3' Recovery	,	+
_						All reddish known damp	HHU < 1 ppm	-
_								-
_						"natural" clay with black silt	OVA = 0 ppm	-
						mothed turoughout. Also contains		. <b>Ļ</b>
-						45% medium+coance sand	-	-  -
-						throughout.	*	
_						SS#3 4-ce' 1.5' Teconery_		-
						To all i	le constant de la con	E interes
·						Top 0.4' is clay as above mixed	HHU = 40-50pg	
						I will sing - have to tell if it	OVA = 0 ppm	+
						has fallen in from above a not Remaining 1.1' is clay as above.	(water vapor)	<u>Ļ</u>
						Remaining 1.1' is clay as above	(whom ought)	
						( like 2-41). Dry.	i i	ئا:
_								$\vdash$
						55#4 6-8' 1.8' Recovery	HHu = 20-30	
						Same clay as above but dry.	OVA +1 ppm	
	'						(water wayon)	$\vdash$
_						•		1-
								-
	i						ļ -	十
						·		⊢
								् <b>!-</b>
_								-
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							ı	
340088						CLASSIFICATION/BY P.Watk		
						CLASSIFICATION/BY		

## 1998 RETEC ENGINEERING BIKE PATH INVESTIGATION

#### SOIL BORING LOG

	RETEC Er	ngineering, P	P.C.				
PROJECT N	O:	3 - 2111 - 600 (	3 - 3540 - 102 )	DATE: December 12, 1998		Ground Elevation:	~ 579
CLIENT:		National Fuel G	as	GEOLOGIST:	Mark Hofferbert	Depth to Groundwater:	~ 8
SITE:		Scajaquada Cre		EQUIPMENT:	2 inch x 4 foot Direct Push Core Barrel	Groundwater Elevation:	~ 571
LOCATION	: 	West Bank near	West Avenue	OPERATOR:	Maxim Technologies	Creekwater Elevation :	~ 565
DEPTH	SAMPLE	PID	SOIL		SOIL	MONITORING	
BGS	INTERVAL	HEADSPACE	LITHOLOGY		DESCRIPTION	WELL	
(feet)		(ppm)			LOG	CONSTRUCTION	
							:
2				No	o Recovery	N/A	
4			:				
***							
6		6.5	;				
				М	isc. Industrial Fill and Soil		
8			-	1	Gravel, soil, brick and concrete.		
					No Sheen / No Odor. Wet at 8 ' BGS.		•
			•		were bos.		
10		1.2					
and the same of th							
						Appendix A. 1 villabri	
14		3.2		G	ravel and Sand		
					No Sheen / No Odor.		
MANAGEMENT .							
16						- Managadurus - Americana	
Management =							
18		51.8		G	ravel and Sand Thin Lenses of Hydrocarbon NAPL.		
					<b>,</b>		
20							
			PARTITURE ENGINEERING PER	er Er	nd of Boring		
24							
_							
sanar sanon							
26							
Comments:							

#### **SOIL BORING LOG**

PROJECT N		ngineering, P		DATE:	December 12, 1998	Gran	nd Elevation :	~ 579
CLIENT:		National Fuel G		GEOLOGIST:	Mark Hofferbert		to Groundwater :	~ 8
SITE: Scajaquada Creek  LOCATION: West Bank near West Avenue		EQUIPMENT:	2 inch x 4 foot Direct Push Core Barrel		ndwater Elevation:	~ 571		
			OPERATOR:	Maxim Technologies		water Elevation :	~ 565	
				**************************************				
DEPTH	SAMPLE	PID	SOIL		SOIL		MONITORING	
BGS	INTERVAL	HEADSPACE	LITHOLOGY		DESCRIPTION		WELL	
(feet)		(ppm)			LOG		CONSTRUCTION	
		4.2					N7/A	
2		4.2					N/A	
4				М	lisc. Industrial Fill and Soil			
			_		Gravel, soil, brick and concrete.			
					No Sheen / No Odor. Wet at 8 ' BGS.			
6		16.5			werar o BGS.			
			:					
8			A. D. C. Santa and B. M. C. Santa and Santa an					
-								
10		7.2		G	ravel and Sand No Sheen / No Odor.			
					No Sheeli / No Odol.			
12								
14		1000 ÷		G	ravel and Sand			
					Hydrocarbon NAPL.			
16								
				Er (F	nd of Boring Boring Collapsed)			
				(1.	Joining Conapsed)			
18								
20								
22								
24								
26								
Comments:	***************************************					and an extensive supplication of		

#### SOIL BORING LOG

PROJECT NO: 3 - 2111 - 600 (3 - 3540 - 102)		DATE:	December 12, 1998	Ground Elevation :	~ 579		
CLIENT: National Fuel Gas		GEOLOGIST:	Mark Hofferbert	Depth to Groundwater :	~ 8		
SITE:		Scajaquada Cre	ek	EQUIPMENT:	2 inch x 4 foot Direct Push Core Barrel	Groundwater Elevation:	~ 571
LOCATION		West Bank near	West Avenue	OPERATOR:	Maxim Technologies .	Creekwater Elevation:	~ 565
DEPTH	SAMPLE	PID	SOIL		SOIL	MONITORING	<del></del>
BGS		HEADSPACE	LITHOLOGY		DESCRIPTION	WELL	
(feet)		(ppm)			LOG	CONSTRUCTION	
2		6.0				N/A	
				M	isc. Industrial Fill and Soil		
4					Gravel, soil, brick and concrete. No Sheen / No Odor.		
-					Wet at 8 ' BGS.		
6		3.6					
		3.0					
8							
						The Market Contract of the State of the Stat	
<del>turing a training</del>							
10		4.1		G	ravel and Sand		
					No Sheen / No Odor.		
12					+	<del></del>	
14		180		G	ravel and Sand		
					Hydrocarbon NAPL.		
16							
18		215		CI	ay		
and the same of th					Hydrocarbon NAPL.		
20				Ε	d of Boring		
**************************************				Lii	o or soring		
24							
26							

#### **SOIL BORING LOG**

RI	EIECE	gineering, P	.c.				
PROJECT NO: 3 -		3 - 2111 - 600 (3 - 3540 - 102)		DATE:	December 12, 1998	Ground Elevation :	~ 579
CLIENT: SITE:		National Fuel Gas Scajaquada Creek		GEOLOGIST: EQUIPMENT:	Mark Hofferbert	Depth to Groundwater :	~ 8
					2 inch x 4 foot Direct Push Core Barrel	Groundwater Elevation:	~ 571
LOCATION:		West Bank near	West Avenue	OPERATOR:	Maxim Technologies	Creekwater Elevation :	~ 565
DEPTH	SAMPLE	PID	SOIL	V	SOIL	MONITORING	
BGS I	NTERVAL	HEADSPACE	LITHOLOGY		DESCRIPTION	WELL	
(feet)		(ppm)			LOG	CONSTRUCTION	
				:			
<del></del>							
2		5.1				N/A	
_			r			!	
4			nue.	M	isc. Industrial Fill and Soil		
					Gravel, soil, brick and concrete. No Sheen / No Odor.		
					Wet at 8 ' BGS.		
6		4.9					
8							
AAAA 30/4							
10		3.4		Gı	ravel and Sand		
**************					No Sheen / No Odor.		
American v							
12							
		W- V- MANAGEMENT	-				
No. 100. 100							
		80.5		C.	ravel and Sand		
14		80.5		G	Hydrocarbon NAPL.		
					-1,4.00.00.00.1.5.1.0.		
16				En	d of Boring		
				(B	oring Collapsed)		
18							
******							
20							
ton a subsect							
22							
				•			
24							
***************************************							
26							
Comments:							

#### 2002 STEARNS & WHELER ENVIRONMENTAL REVIEW, DATA EVALUATION, AND SITE ASSEMENT REPORT

## TABLE 2 BORING SUMMARY SOIL BORING INVESTIGATION FEDCO, BUFFALO, NEW YORK

I.D.		Ī	1	T	
	BORING	BORING	RECOVERY	FID	DESCRIPTION
SB-1	I.D.	INTERVAL		READING	
16" wet gray very soft sill/CLAY, some fine gravel		(feet)	(inches)	(ppm)	
4-8	SB-1	0-4	24	455	8" blacktop, gravel, brown silt/CLAY
17" med stiff wet brown CLAY, some gravel 11" wet black gravel, some silfclay, petroleum like odor 2" wet med stiff brown CLAY 2" wood 2" word stiff brown CLAY, trace gravel 30				<u> </u>	16" wet grey very soft silt/CLAY, some fine gravel
1" wet black gravel, some silt/clay, petroleum like odor 2" wet med stiff brown CLAY   2" wood   2" wet soft grey silt/CLAY, trace gravel   6" wet soft grey silt/CLAY, some gravel   4" soft to med stiff moist brown CLAY, little gravel   4" soft to med stiff moist brown CLAY, little gravel   4" soft to med stiff moist brown CLAY, little gravel   4" soft to med stiff moist brown CLAY, little gravel   4" soft to med stiff moist brown CLAY   12" stiff moist pink/grey/brown CLAY   12" stiff moist mottled pink/grey/brown CLAY   12" stiff moist mottled pink/grey/brown CLAY   12" stiff moist mottled pink/grey/brown CLAY   1" hard moist mottled pink/grey/brown CLAY   1" stiff moist mottled pink/grey/brown CLAY   1" start mottled pink/grey/brown CLAY   1"		4-8	26	511	14" soft wet grey CLAY, some fine gravel
2" wet med stiff brown CLAY 2" wood			ł		7" med stiff wet brown CLAY, some gravel
2" wood   2" wood   2" wood   2" word   30					1" wet black gravel, some silt/clay, petroleum like odor
SB-2			1		2" wet med stiff brown CLAY
SB-2				l	2" wood
S" wet soft grey sitt/CLAY, some gravel		8-12	30	47	very stiff dry brown CLAY, trace gravel
4-8	SB-2	0-4	12	738	6" brick fragments and gravel
14" soft to med stiff moist brown CLAY, little gravel			<u> </u>	l	6" wet soft grey silt/CLAY, some gravel
4-6" concrete slab		4-8	28	240	14" wet soft grey silt/CLAY, some gravel
44   4200   24"very stiff dry mottled pink/grey/brown CLAY   12" stiff moist pink/grey CLAY   12" stiff moist pink/grey CLAY   12" stiff moist pink/grey CLAY   148   37   very stiff moist mottled pink/grey/brown CLAY   17-11   48   72   hard moist mottled pink/grey/brown CLAY   11-14   46   148   hard moist mottled pink/grey/brown CLAY   at 14.75" wet fine gravel zone   concrete slab   4   3430   soft wet grey CLAY, some gravel   4-8   48   82   moist hard mottled pink/grey/brown CLAY   lenses of wet coarse sand fine gravel at 7 & 8"   2" blacktop   2" blacktop, moist grey/brown CLAY   gravel, glass fragments   38" very stiff - hard mottled pink/grey/brown CLAY   2" blacktop, moist grey/brown CLAY   11-15   48   70   hard dry mottled pink/grey/brown CLAY   45   very stiff moist mottled pink/grey/brown CLAY   at 12" thin seam of black/brown clay and fine gravel   15-19   48   9   24" soft moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff mottled pink/grey/brown CLAY   25" seam of soil   25" very stiff mottled pink/grey/brown CLAY   25" se					14" soft to med stiff moist brown CLAY, little gravel
12" stiff moist pink/grey CLAY   8" med stiff moist grey CLAY, little gravel	SB-3	0-4			4-6" concrete slab
8" med stiff moist grey CLAY, little gravel			44	4200	24"very stiff dry mottled pink/grey/brown CLAY
4-7	ľ			ł	12" stiff moist pink/grey CLAY
7-11					8" med stiff moist grey CLAY, little gravel
11-14	[	4-7	48	37	very stiff moist mottled pink/grey/brown CLAY
at 14.75' wet fine gravel zone		7-11	48	72	hard moist mottled pink/grey/brown CLAY
SB-4		11-14	46	148	hard moist mottled pink/grey/brown CLAY
4 3430 soft wet grey CLAY, some gravel  4-8 48 82 moist hard mottled pink/grey/brown CLAY lenses of wet coarse sand fine gravel at 7 & 8'  8-8 48 48 112 2 blacktop, moist grey/brown CLAY moistening with depth)  4-8 48 48 70 11-15 48 45 very stiff moittled pink/grey/brown CLAY (moistening with depth)  11-15 48 45 very stiff moist mottled pink/grey/brown CLAY at 12' thin seam of black/brown clay and fine gravel  15-19 48 9 24" soft moist mottled pink/grey/brown CLAY  19-23 48 0 soft to med. stiff pink CLAY, little grey mottling  172 10" loose black gravel and silt/clay 30" dry very stiff mottled pink/grey/brown CLAY vertical joints  8-12 38 16 16" dry hard pink CLAY, little mottling  12-16 40 5 very stiff mottled pink/grey/brown CLAY lard mottled pink/grey/brown CLAY lard mottled pink/grey/brown CLAY vertical joints lard mottled pink/grey/brown CLAY little mottling  22" very stiff mottled pink/grey/brown CLAY lard mottled pink/grey/brown CLAY little mottling lard motist brown and grey CLAY little mottling					at 14.75' wet fine gravel zone
4-8 48 82 moist hard mottled pink/grey/brown CLAY lenses of wet coarse sand fine gravel at 7 & 8'  2" blacktop  48 401 2" blacktop, moist grey/brown CLAY, gravel, glass fragments 38" very stiff - hard mottled pink/grey/brown CLAY  4-8 48 112 hard dry mottled pink/grey/brown CLAY  8-11 48 70 hard moist pink mottled grey/brown CLAY (moistening with depth)  11-15 48 45 very stiff moist mottled pink/grey/brown CLAY at 12' thin seam of black/brown clay and fine gravel  15-19 48 9 24" soft moist mottled pink/grey/brown CLAY  25" seam of soil 24" very stiff moist mottled pink/grey/brown CLAY  19-23 48 0 soft to med. stiff pink CLAY, little grey mottling  BB-6 0-4 172 10" loose black gravel and silt/clay 30" dry very stiff brown CLAY some pink/grey mottling  4-8 48 26 dry hard mottled pink/grey/brown CLAY vertical joints  8-12 38 16 16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY  12-16 40 5 very stiff mottled pink/grey/brown CLAY 12-16 40 5 very stiff mottled pink/grey/brown CLAY 16-20 30 0.4 hard moist brown and grey CLAY little mottling	SB-4	0-4			concrete slab
lenses of wet coarse sand fine gravel at 7 & 8'  2" blacktop  48 401 2" blacktop, moist grey/brown CLAY, gravel, glass fragments 38" very stiff - hard mottled pink/grey/brown CLAY  4-8 48 112 hard dry mottled pink/grey/brown CLAY  8-11 48 70 hard moist pink mottled grey/brown CLAY (moistening with depth)  11-15 48 45 very stiff moist mottled pink/grey/brown CLAY at 12' thin seam of black/brown clay and fine gravel  15-19 48 9 24" soft moist mottled pink/grey/brown CLAY .25" seam of soil 24" very stiff moist mottled pink/grey/brown CLAY  19-23 48 0 soft to med. stiff pink CLAY, little grey mottling  BB-6 0-4 172 10" loose black gravel and silt/clay 30" dry very stiff brown CLAY some pink/grey mottling  4-8 48 26 dry hard mottled pink/grey/brown CLAY vertical joints  8-12 38 16 16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY  12-16 40 5 very stiff mottled pink/grey/brown CLAY 12-16 40 5 very stiff mottled pink/grey/brown CLAY 16-20 30 0.4 hard moist brown and grey CLAY little mottling			4	3430	soft wet grey CLAY, some gravel
2" blacktop   2" blacktop   2" blacktop   2" blacktop, moist grey/brown CLAY, gravel, glass fragments   38" very stiff - hard mottled pink/grey/brown CLAY   hard dry mottled pink/grey/brown CLAY   hard moist pink mottled grey/brown CLAY   hard moist pink mottled grey/brown CLAY (moistening with depth)   very stiff moist mottled pink/grey/brown CLAY   at 12' thin seam of black/brown clay and fine gravel   15-19   48   9   24" soft moist mottled pink/grey/brown CLAY   25" seam of soil   24" very stiff moist mottled pink/grey/brown CLAY   soft to med. stiff pink CLAY, little grey mottling   blacktop   10" loose black gravel and silt/clay   30" dry very stiff brown CLAY some pink/grey mottling   4-8   48   26   dry hard mottled pink/grey/brown CLAY vertical joints   16" dry hard pink CLAY, little mottling   22" very stiff mottled pink/grey/brown CLAY   12-16   40   5   very stiff mottled pink/grey/brown CLAY   16-20   30   0.4   hard moist brown and grey CLAY little mottling   10   10   10   10   10   10   10   1		4-8	48	82	moist hard mottled pink/grey/brown CLAY
48 401 2" blacktop, moist grey/brown CLAY, gravel, glass fragments 38" very stiff - hard mottled pink/grey/brown CLAY 4-8 48 112 hard dry mottled pink/grey/brown CLAY 8-11 48 70 hard moist pink mottled grey/brown CLAY (moistening with depth) 11-15 48 45 very stiff moist mottled pink/grey/brown CLAY 11-19 48 9 24" soft moist mottled pink/grey/brown CLAY 15-19 48 9 24" soft moist mottled pink/grey/brown CLAY 19-23 48 0 soft to med. stiff pink CLAY, little grey mottling 19-24" very stiff moist mottled pink/grey/brown CLAY 19-25" seam of soil 24" very stiff moist mottled pink/grey/brown CLAY 10" loose black gravel and silt/clay 30" dry very stiff brown CLAY some pink/grey mottling 4-8 48 26 dry hard mottled pink/grey/brown CLAY vertical joints 8-12 38 16 16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY 12-16 40 5 very stiff mottled pink/grey/brown CLAY 12-16 40 5 very stiff mottled pink/grey/brown CLAY 16-20 30 0.4 hard moist brown and grey CLAY little mottling					lenses of wet coarse sand fine gravel at 7 & 8'
38" very stiff - hard mottled pink/grey/brown CLAY  4.8	SB-5	0-4			2" blacktop
4-8			48	401	2" blacktop, moist grey/brown CLAY, gravel, glass fragments
8-11 48 70 hard moist pink mottled grey/brown CLAY (moistening with depth)  11-15 48 45 very stiff moist mottled pink/grey/brown CLAY at 12' thin seam of black/brown clay and fine gravel  15-19 48 9 24" soft moist mottled pink/grey/brown CLAY .25" seam of soil 24" very stiff moist mottled pink/grey/brown CLAY  19-23 48 0 soft to med. stiff pink CLAY, little grey mottling  blacktop  172 10" loose black gravel and silt/clay 30" dry very stiff brown CLAY some pink/grey mottling  4-8 48 26 dry hard mottled pink/grey/brown CLAY vertical joints  8-12 38 16 16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY  12-16 40 5 very stiff mottled pink/grey/brown CLAY 16-20 30 0.4 hard moist brown and grey CLAY little mottling		. <b></b>			38" very stiff - hard mottled pink/grey/brown CLAY
11-15  48  45  very stiff moist mottled pink/grey/brown CLAY at 12' thin seam of black/brown clay and fine gravel  15-19  48  9  24" soft moist mottled pink/grey/brown CLAY .25" seam of soil 24" very stiff moist mottled pink/grey/brown CLAY  19-23  48  0  soft to med. stiff pink CLAY, little grey mottling  blacktop  10" loose black gravel and silt/clay 30" dry very stiff brown CLAY some pink/grey mottling  4-8  48  48  26  dry hard mottled pink/grey/brown CLAY vertical joints  8-12  38  16  16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY  12-16  40  5  very stiff mottled pink/grey/brown CLAY 12-16  40  5  very stiff mottled pink/grey/brown CLAY 16-20  30  0.4  hard moist brown and grey CLAY little mottling	Ŀ	4-8	48	112	hard dry mottled pink/grey/brown CLAY
at 12' thin seam of black/brown clay and fine gravel  15-19  48  9  24" soft moist mottled pink/grey/brown CLAY .25" seam of soil 24" very stiff moist mottled pink/grey/brown CLAY  19-23  48  0  soft to med. stiff pink CLAY, little grey mottling  blacktop  10" loose black gravel and silt/clay 30" dry very stiff brown CLAY some pink/grey mottling  4-8  48  26  dry hard mottled pink/grey/brown CLAY vertical joints  8-12  38  16  16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY  12-16  40  5  very stiff mottled pink/grey/brown CLAY  12-16  40  5  very stiff mottled pink/grey/brown CLAY  16-20  30  0.4  hard moist brown and grey CLAY little mottling	Ŀ	B-11	48	70	hard moist pink mottled grey/brown CLAY (moistening with depth)
15-19 48 9 24" soft moist mottled pink/grey/brown CLAY .25" seam of soil 24" very stiff moist mottled pink/grey/brown CLAY  19-23 48 0 soft to med. stiff pink CLAY, little grey mottling blacktop 10" loose black gravel and silt/clay 30" dry very stiff brown CLAY some pink/grey mottling  4-8 48 26 dry hard mottled pink/grey/brown CLAY vertical joints  8-12 38 16 16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY  12-16 40 5 very stiff mottled pink/grey/brown CLAY 16-20 30 0.4 hard moist brown and grey CLAY little mottling		11-15	48	45	very stiff moist mottled pink/grey/brown CLAY
24" very stiff moist mottled pink/grey/brown CLAY  19-23					at 12' thin seam of black/brown clay and fine gravel
24" very stiff moist mottled pink/grey/brown CLAY  19-23		15-19	48	9	24" soft moist mottled pink/grey/brown CLAY
19-23 48 0 soft to med. stiff pink CLAY, little grey mottling  blacktop 10" loose black gravel and silt/clay 30" dry very stiff brown CLAY some pink/grey mottling 4-8 48 26 dry hard mottled pink/grey/brown CLAY vertical joints 8-12 38 16 16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY  12-16 40 5 very stiff mottled pink/grey/brown CLAY 16-20 30 0.4 hard moist brown and grey CLAY little mottling	ľ				
blacktop 10" loose black gravel and silt/clay 30" dry very stiff brown CLAY some pink/grey mottling 4-8 4-8 4-8 4-12 38 4-8 4-9 4-9 4-9 4-8 4-9 4-9 4-9 4-9 4-9 4-9 4-9 4-9 4-9 4-9		[			24" very stiff moist mottled pink/grey/brown CLAY
40 172 10" loose black gravel and silt/clay 30" dry very stiff brown CLAY some pink/grey mottling 4-8 48 26 dry hard mottled pink/grey/brown CLAY vertical joints 8-12 38 16 16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY 12-16 40 5 very stiff mottled pink/grey/brown CLAY 16-20 30 0.4 hard moist brown and grey CLAY little mottling			48	0	
30" dry very stiff brown CLAY some pink/grey mottling 4-8 48 26 dry hard mottled pink/grey/brown CLAY vertical joints 8-12 38 16 16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY 12-16 40 5 very stiff mottled pink/grey/brown CLAY 16-20 30 0.4 hard moist brown and grey CLAY little mottling	SB-6	0-4	ĺ		
4-8 48 26 dry hard mottled pink/grey/brown CLAY vertical joints 8-12 38 16 16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY 12-16 40 5 very stiff mottled pink/grey/brown CLAY 16-20 30 0.4 hard moist brown and grey CLAY little mottling			40	172	,
8-12 38 16 16" dry hard pink CLAY, little mottling 22" very stiff mottled pink/grey/brown CLAY  12-16 40 5 very stiff mottled pink/grey/brown CLAY  16-20 30 0.4 hard moist brown and grey CLAY little mottling	L				
22" very stiff mottled pink/grey/brown CLAY  12-16 40 5 very stiff mottled pink/grey/brown CLAY  16-20 30 0.4 hard moist brown and grey CLAY little mottling			+		
12-16 40 5 very stiff mottled pink/grey/brown CLAY 16-20 30 0.4 hard moist brown and grey CLAY little mottling	1 1 1	3-12	38	16	
16-20 30 0.4 hard moist brown and grey CLAY little mottling					
20-23 24 0.0 hard moist brown CLAY, trace mottling			+		<del></del>
		20-23	24	0.0	hard moist brown CLAY, trace mottling

Bold indicates intervals from which soil samples were taken for laboratory analysis.

## 2020 BE3 REMEDIAL INVESTIGATION/ ALTERNATIVES ANALYSIS REPORT

Borehole ID: BH-01

Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/17/2019 Geologist\Engineer: Peter Gorton Location: 42.930471° -78.895773°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1039-1101

Borehole
Depth Soil Description PPM



Project: 57 - 71 Tonawanda

Client: Eran Epstein

11

12

Address: 57-71 Tonawanda Street Buffalo, NY 14213

0

0



Borehole ID: BH-02

Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/18/2019

Geologist\Engineer: Peter Gorton Location: 42.930664° -78.895301°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1045-1130

Borehole PID Depth Soil Description PPM (Ft)



PHOTO: SOIL CORES



Project: 57 - 71 Tonawanda

Client: Eran Epstein

9

10

11

12

Address: 57-71 Tonawanda Street Buffalo, NY 14213

Gravely

Sand with some Silt

Red-Brown

Clay

Very Wet Red-Brown

Clay

0

0

0

0

0

0

0

0

0

0

0



Borehole ID: BH-03

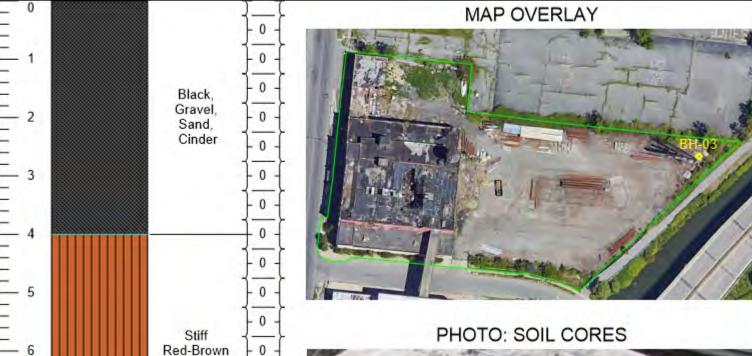
Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/18/2019 Geologist\Engineer: Peter Gorton Location: 42.930909° -78.895107°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1045-1130

Borehole
Depth Soil Description PID
(Ft)





Project: 57 - 71 Tonawanda

Client: Eran Epstein

9

10

11

12

Address: 57-71 Tonawanda Street Buffalo, NY 14213

Clay

Soft

Red-Brown

Clay, Moist

0

0

0

0

0

0

0

0

0

0



Borehole ID: BH-04

Drilling Company: Nature's Way

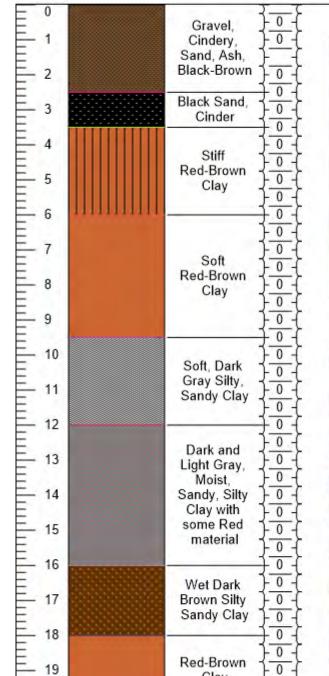
Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/17/2019

Geologist\Engineer: Peter Gorton Location: 42.930777° -78.895483°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1040-1250

Borehole PID Depth Soil Description PPM (Ft)



# MAP OVERLAY





Project: 57 - 71 Tonawanda

Client: Eran Epstein

20

Address: 57-71 Tonawanda Street Buffalo, NY 14213

Clay



Borehole ID: BH-05

Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/18/2019 Geologist\Engineer: Peter Gorton Location: 42.930959° -78.895565°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions

Time: 1330-1436

Borehole			PID
Depth	Soil	Description	PPM
(Ft)			L L IVI

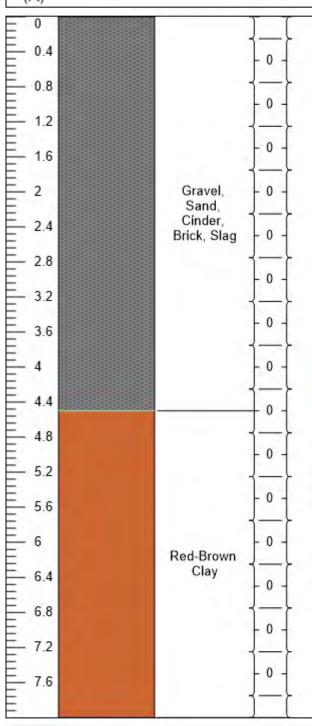




PHOTO: SOIL CORES



Project: 57 - 71 Tonawanda

Client: Eran Epstein



Borehole ID: BH-06

4.4

4.8

5.2

5.6

6

6.4

6.8

7.2

7.6

Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/18/2019 Geologist\Engineer: Peter Gorton Location: 42.930997° -78.895728°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1436-1500

Borehole
Depth Soil Description PPM
(Ft)



0

0

0

0

0

0

0

Red-Brown Clay

Project: 57 - 71 Tonawanda

Client: Eran Epstein



Borehole ID: BH-07

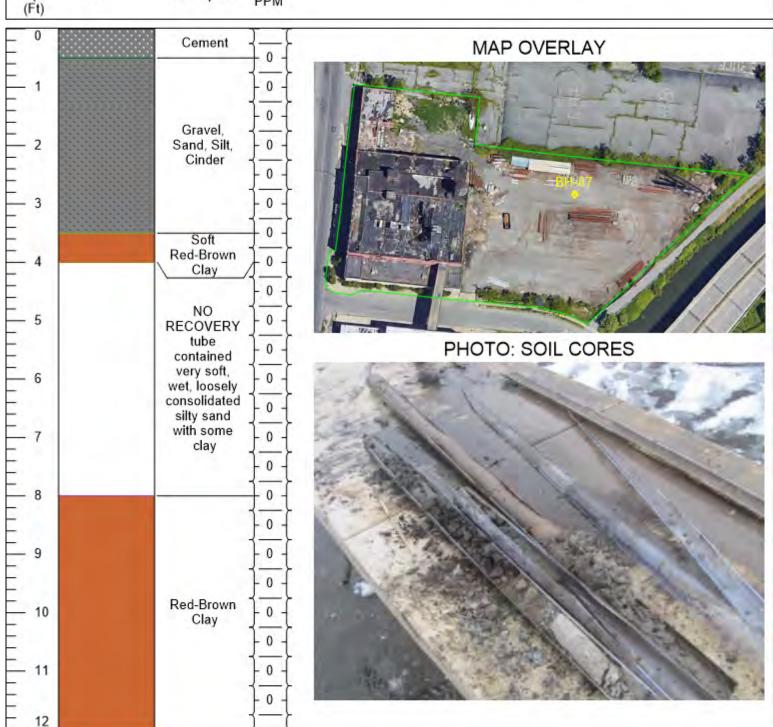
Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/17/2019 Geologist\Engineer: Peter Gorton Location: 42.930872° -78.895858°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1217-1350

Borehole
Depth Soil Description PPM



Project: 57 - 71 Tonawanda

Client: Eran Epstein



Borehole ID: BH-08

Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/18/2019 Geologist\Engineer: Peter Gorton Location: 42.930697° -78.895854°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1350-1500

Borehole
Depth Soil Description PPM



Project: 57 - 71 Tonawanda

Client: Eran Epstein

11

12

Address: 57-71 Tonawanda Street Buffalo, NY 14213

Soft Red-Brown

Clay

0



Borehole ID: BH-09

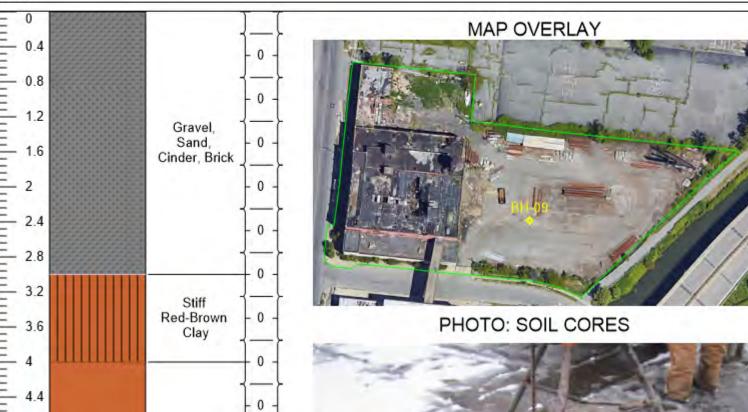
Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/18/2019 Geologist\Engineer: Peter Gorton Location: 42.930655° -78.89609°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1500-1530

Borehole
Depth Soil Description PPM
(Ft)





Project: 57 - 71 Tonawanda

Client: Eran Epstein

4.8

5.2

5.6

6

6.4

6.8

7.2

7.6

Address: 57-71 Tonawanda Street Buffalo, NY 14213

0

0

0

0

0

0

Red-Brown

Clay



Borehole ID: BH-10

Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/18/2019

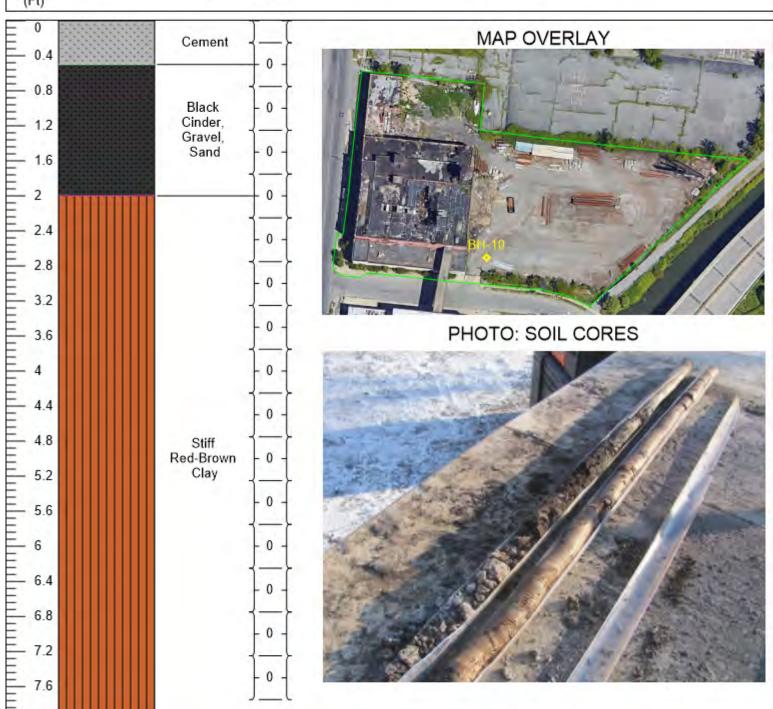
Geologist\Engineer: Peter Gorton Location: 42.930566° -78.896377°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions

Time: 0920-0950





Project: 57 - 71 Tonawanda

Client: Eran Epstein



Borehole ID: BH-11

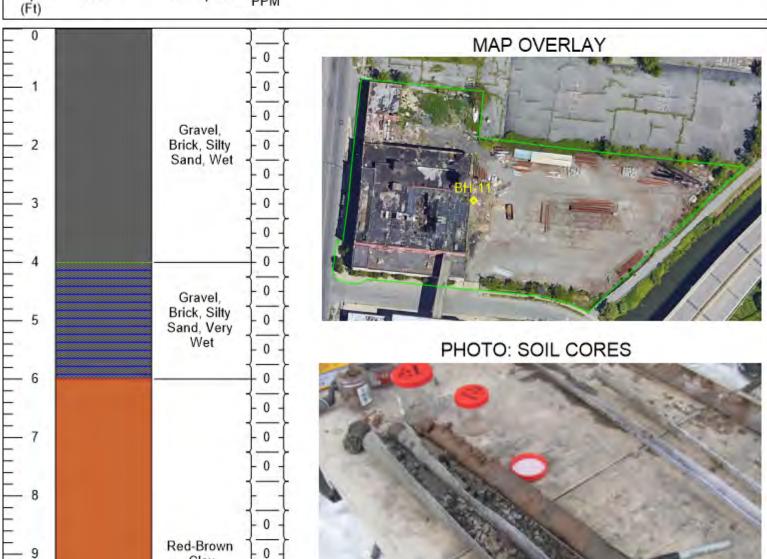
Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/18/2019 Geologist\Engineer: Peter Gorton Location: 42.930822° -78.896412°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1020-1210

Borehole
Depth Soil Description PPM



Project: 57 - 71 Tonawanda

Client: Eran Epstein

10

11

12

Address: 57-71 Tonawanda Street Buffalo, NY 14213

Clay

0

0

0

0

0



Borehole ID: BH-12

Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/19/2019 Geologist\Engineer: Peter Gorton Location: 42.930587° -78.896337°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1210-1300





Project: 57 - 71 Tonawanda

Client: Eran Epstein

3.8

Address: 57-71 Tonawanda Street Buffalo, NY 14213

0



Borehole ID: BH-13

Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: 25°F, Windy Drill Date: 12/18/2019 Geologist\Engineer: Peter Gorton Location: 42.931023° -78.896338°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1500-1600

Borehole
Depth Soil Description PID PPM



Project: 57 - 71 Tonawanda

Client: Eran Epstein



Borehole ID: SSB1

Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: Indoors, Cold Drill Date: 03/18/2020

Geologist\Engineer: Peter Gorton Location: 42.930623° -78.896554°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1230-1250

Borehole PID Depth Soil Description PPM (Ft)

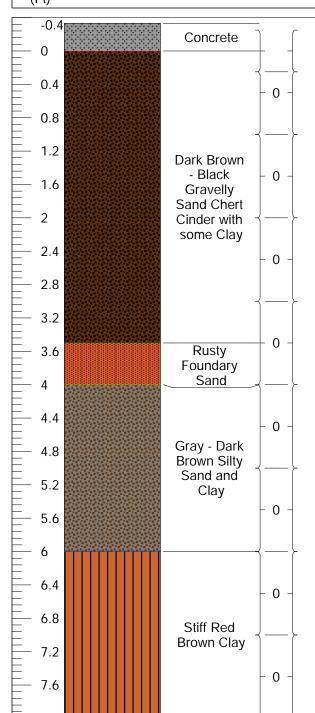






PHOTO OF CORES

Project: 57 - 71 Tonawanda

**Client:** Eran Epstein



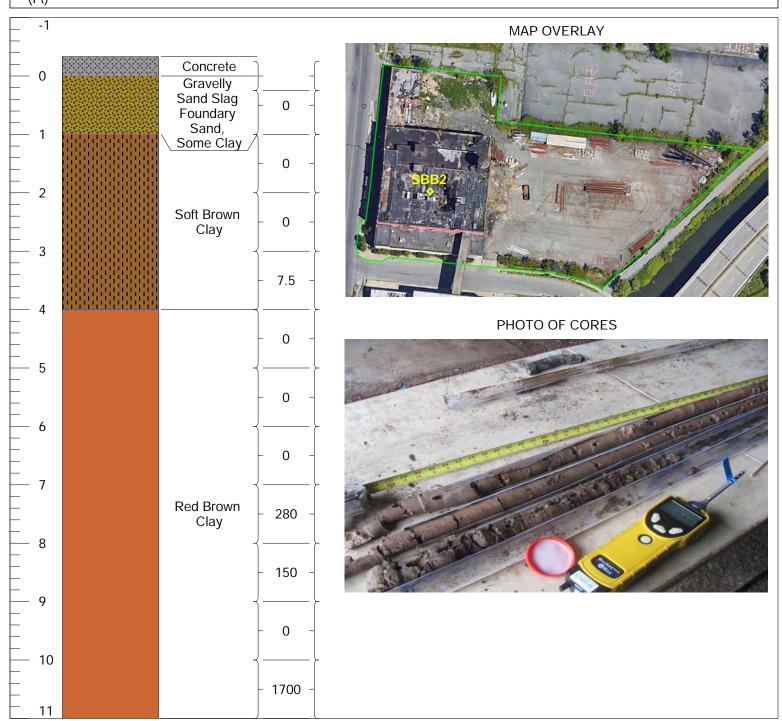
Borehole ID: SSB2

Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: Indoors, Cold Drill Date: 03/18/2020 Geologist\Engineer: Peter Gorton Location: 42.930713° -78.896765° Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 1250-1320

Borehole
Depth Soil Description PID
(Ft)



Project: 57 - 71 Tonawanda

**Client:** Eran Epstein



Borehole ID: SSB3

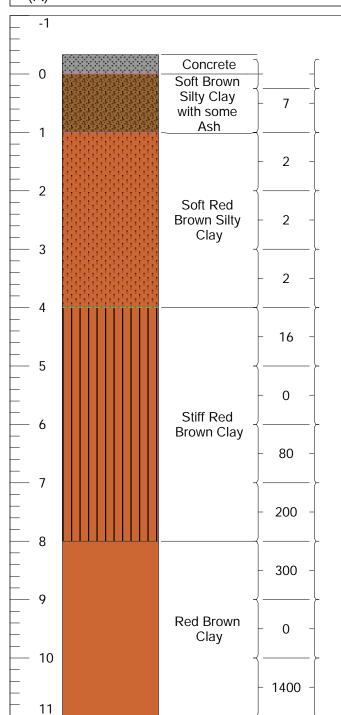
Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: Indoors, Cold Drill Date: 03/19/2020 Geologist\Engineer: Peter Gorton Location: 42.930671° -78.897005°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 0830-0920

Borehole
Depth Soil Description PID
(Ft)



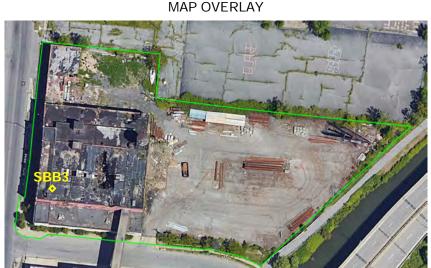


PHOTO OF CORES



Project: 57 - 71 Tonawanda

**Client:** Eran Epstein



Borehole ID: SSB4

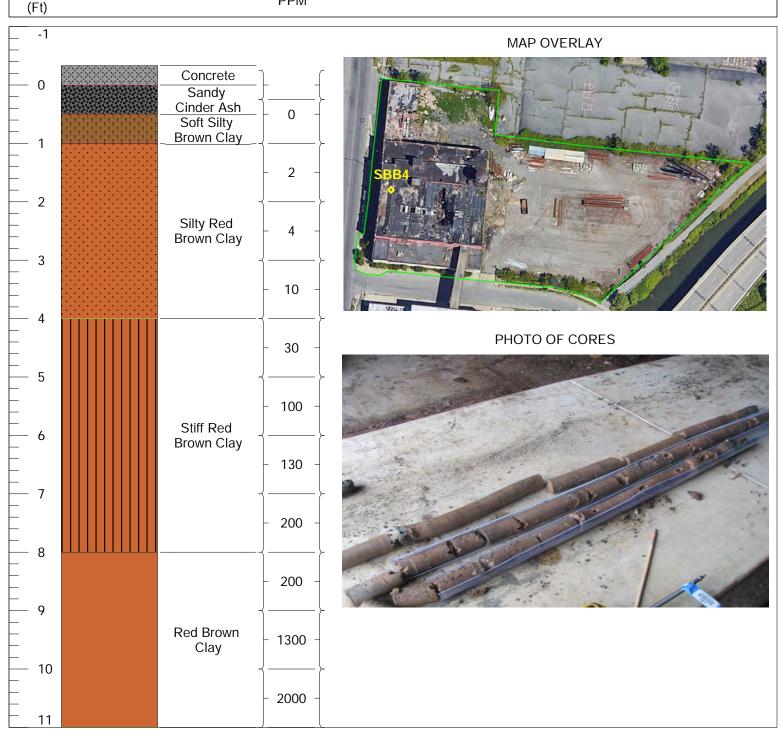
Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: Indoors, Cold Drill Date: 03/19/2020 Geologist\Engineer: Peter Gorton Location: 42.930817° -78.896979°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 0920-0950

Borehole
Depth Soil Description PID
PPM



Project: 57 - 71 Tonawanda

**Client:** Eran Epstein



Borehole ID: SSB5

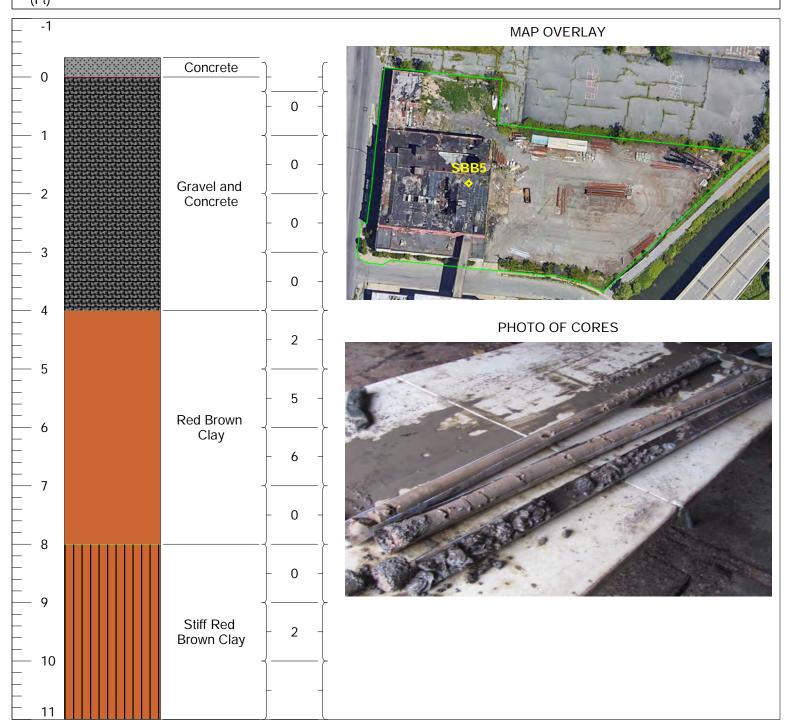
Drilling Company: Nature's Way

Drill Type: 2" Geoprobe Weather: Indoors, Cold Drill Date: 03/19/2020 Geologist\Engineer: Peter Gorton Location: 42.930791° -78.896548°

Analysis: 375, Metals, PFA's, sVOC, VOC

Lab: Paradigm Solutions Time: 0950-1020

Borehole
Depth Soil Description PID
(Ft)



Project: 57 - 71 Tonawanda

**Client:** Eran Epstein





Depth (Ft) Description TYPE #

Project: 57-71 Tonawanda Street

Address: 57 Tonawanda St. Buffalo NY, 14211

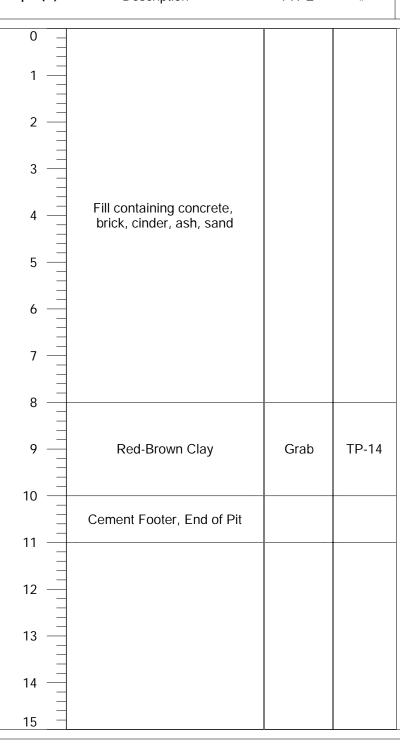
Client: Eran Epstein

Contractor: Nature's Way Contracting

Equipment: Track Hoe

Date: January 8th, 2020 Latitude: 42.931135 Longitude: -78.896398

Test Pit Name: TP-14





**Test Pit Photo** 

#### **Log Book Description**

Fill including black cinder, sand, concrete rubble and wood.

Concrete footer running East-West inside old building foundation.

See 1981Sanborn Map for historic details.

Sample Collected at 8-9 Feet

Technician On Site: Peter Gorton
On Site Time: 8:00 a.m.
Off Site Time: 3:30 p.m.





Depth (Ft) Description TYPE #

Project: 57-71 Tonawanda Street

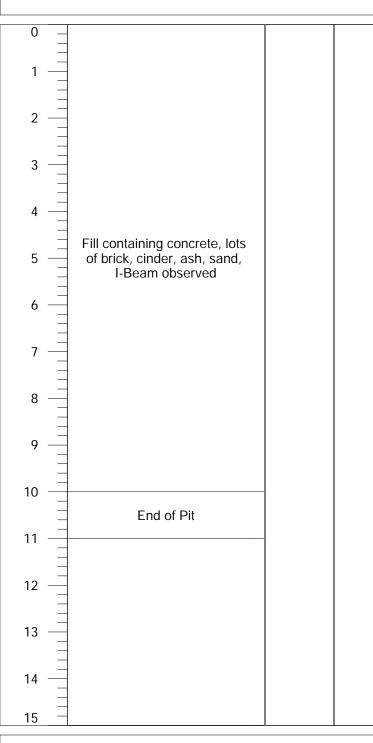
Address: 57 Tonawanda St. Buffalo NY, 14211

Client: Eran Epstein

Contractor: Nature's Way Contracting

Equipment: Track Hoe Date: January 8th, 2020

Latitude: 42.931193 Longitude: -78.896596 Test Pit Name: TP-15





**Test Pit Photo** 

#### **Log Book Description**

Fill consisted of sand, cinder, lots of brick, cement, wood and a foundation wall.

Test pit 6 foot wide, 8 foot long 9 to 10 feet deep.

No sample collected.

Technician On Site: Peter Gorton
On Site Time: 8:00 a.m.
Off Site Time: 3:30 p.m.





Depth (Ft) Description TYPE #

Project: 57-71 Tonawanda Street

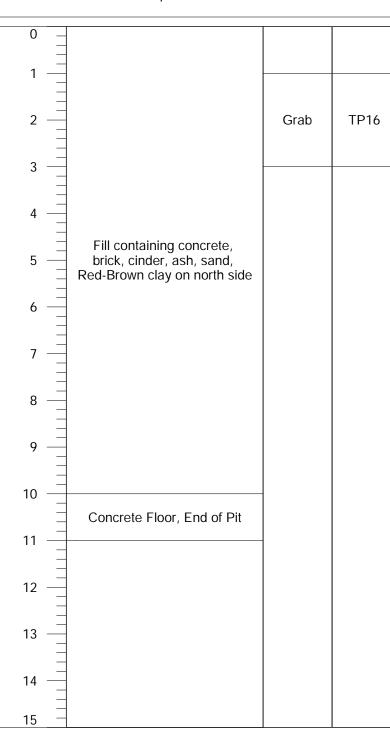
Address: 57 Tonawanda St. Buffalo NY, 14211

Client: Eran Epstein

Contractor: Nature's Way Contracting

Equipment: Track Hoe Date: January 8th, 2020

Latitude: 42.931248 Longitude: -78.896751 Test Pit Name: TP-16





Test Pit Photo

#### **Log Book Description**

Fill consisted of brick, cement, metal, ash, sand and cinder. Cement block wall and Red-Brown clay on north side.

Pit is 6 foot by 6 foot with refusal encountered at 10 feet, observed possible cement floor.

Sample collected between 1-3 feet.

Technician On Site: Peter Gorton
On Site Time: 8:00 a.m.
Off Site Time: 3:30 p.m.





Depth (Ft) Description TYPE #

Project: 57-71 Tonawanda Street

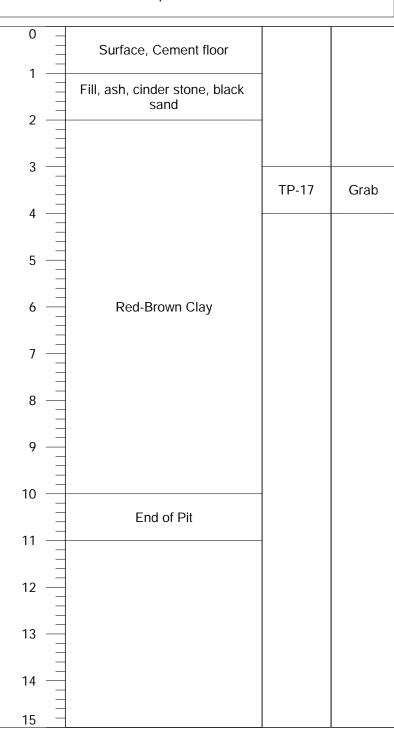
Address: 57 Tonawanda St. Buffalo NY, 14211

Client: Eran Epstein

Contractor: Nature's Way Contracting

Equipment: Track Hoe Date: January 8th, 2020

Latitude: 42.931064 Longitude: -78.896837 Test Pit Name: TP-17





**Test Pit Photo** 

#### **Log Book Description**

Surface feateured a cement floor, 1-2 feet consisted of fill material of ash, black sand, cinder and stone. 2-10 feet consisted of red-brown clay.

Pit is 13 feet long, 7 feet across and 10 feet deep. Pit dug east to west, sample taken from east end. West end had a suspected wood floor.

Sample collected between 3-4 feet.

Technician On Site: Peter Gorton
On Site Time: 8:00 a.m.
Off Site Time: 3:30 p.m.





Depth (Ft) Description TYPE #

Project: 57-71 Tonawanda Street

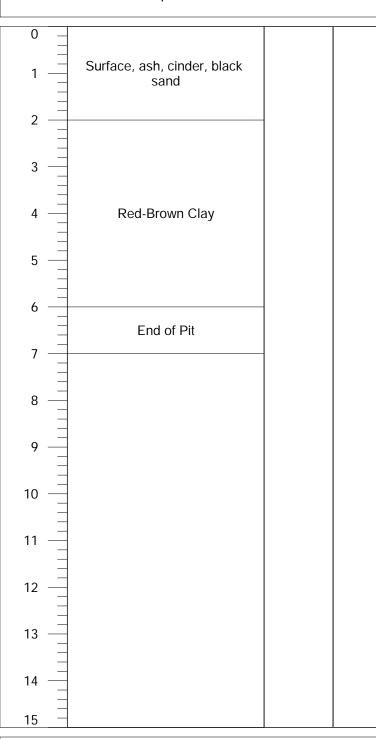
Address: 57 Tonawanda St. Buffalo NY, 14211

Client: Eran Epstein

Contractor: Nature's Way Contracting

Equipment: Track Hoe Date: January 8th, 2020

Latitude: 42.931065 Longitude: -78.89662 Test Pit Name: TP-18





Test Pit Photo

#### **Log Book Description**

Fill at 1-2 feet consisted of ash, cinder and blacks sand. 2-6 feet red-brown clay. Pit is 13 feet long, 5 feet wide and 6 feet deep.

No Sample Collected.

Technician On Site: Peter Gorton
On Site Time: 8:00 a.m.
Off Site Time: 3:30 p.m.

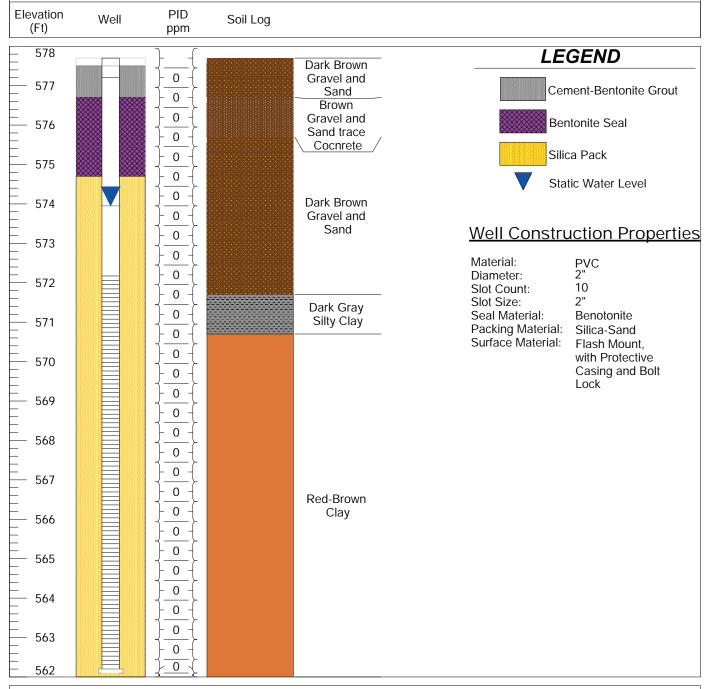


Project: Fedder Lofts
Location: 57 Tonawanda Street
Client: Eran Epstein

Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
Drill Type: 6" Hollow Stem Auger

Driller: Nate
Drill Date: 1/13/2020



Monitoring Well Designation:MW-01 Latitude:42.9304808° Longitude:-78.8957223° Elevation:577.70 Feet



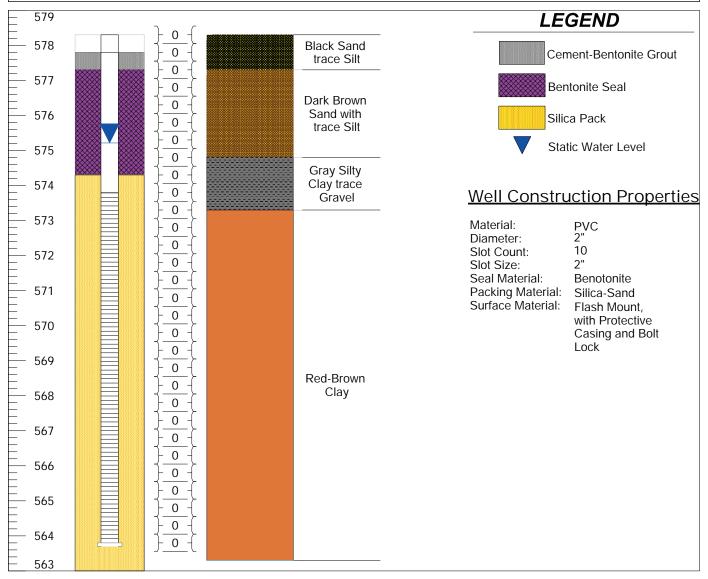
Project: Fedder Lofts
Location: 57 Tonawanda Street
Client: Eran Epstein

Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
Drill Type: 6" Hollow Stem Auger

Driller: Nate
Drill Date: 1/13/2020

Elevation Well PID Soil Log (Ft)



Monitoring Well Designation: MW-02 Latitude: 42.9308709°

Langitude: -78.8951537° Elevation: 578.33 Feet



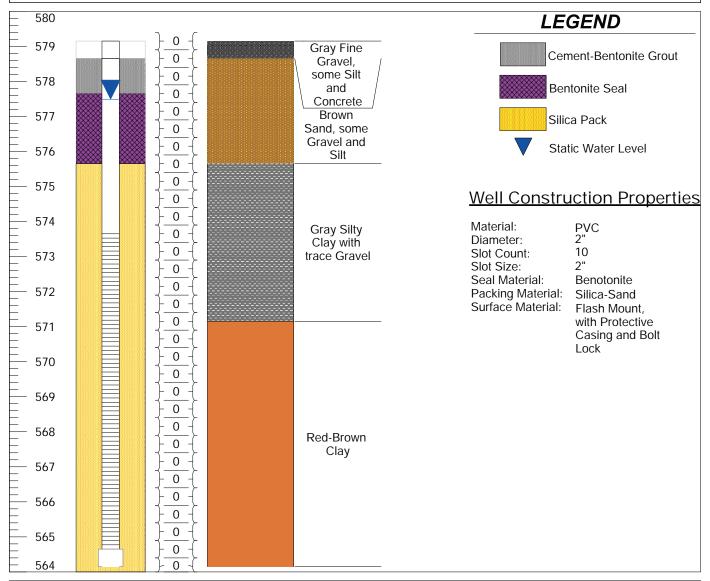
Project: Fedder Lofts
Location: 57 Tonawanda Street
Client: Eran Epstein

Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
Drill Type: 6" Hollow Stem Auger

Driller: Nate
Drill Date: 1/13/2020

Elevation Well PID Soil Log (Ft) Soil Log



Monitoring Well Designatio:MW-03 Latitude: 42.9306862°

Longitude: -78.8958226° Elevation: 579.15 Feet



Project: Fedder Lofts
Location: 57 Tonawanda Street
Client: Eran Epstein

Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
Drill Type: 6" Hollow Stem Auger

Driller: Nate
Drill Date: 1/14/2020

Elevation PID Well Soil Log (Ft) ppm 0 **LEGEND** Gray Fine 582 0 Gravel, 0 some Silt Cement-Bentonite Grout 0 and 580 0 Concrete 0 Bentonite Seal 0 578 0 Silica Pack 8.0 0.9 576 Static Water Level 1.2 3.7 574 6.5 7.2 Well Construction Properties 15.1 572 58 Material: PVC 2" 84.1 Diameter: 0 10 570 Slot Count: 0 2" Slot Size: 0 Seal Material: Benotonite 97.3 568 Red-Brown Packing Material: Silica-Sand 116.4 Clay, trace Surface Material: Flash Mount, 221.6 Clay Fine with Protective 566 148.1 Gravel Casing and 508.1 Fine Sand Bolt Lock 147.2 564 224 176.3 50.9 562 61 68.9 35.5 560 16.4 15.2 558 17.3 13 20.1 556 17.5 13.2 4.4 554 2.7 2 552

> Monitoring Well Designation:MW-04 Latitude: 42.930726° Longitude: -78.8971051°

Elevation: 582.75 Feet

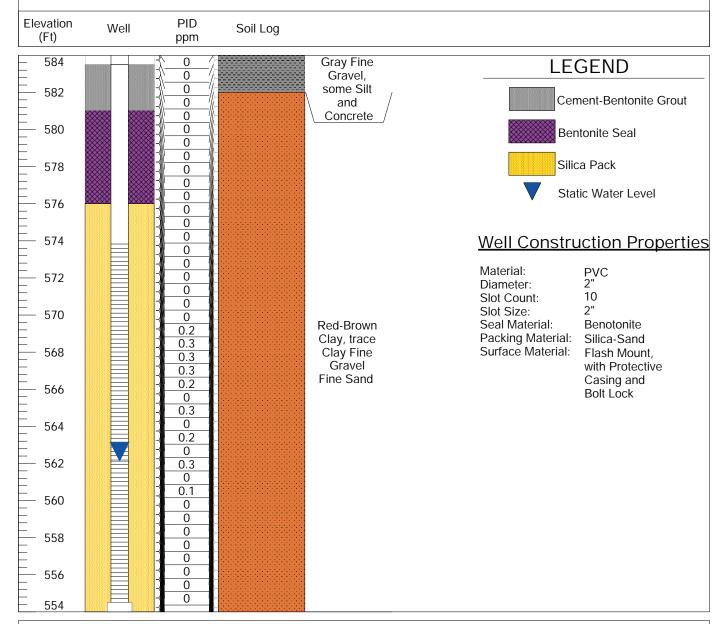


Project: Fedder Lofts
Location: 57 Tonawanda Street
Client: Eran Epstein

Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
Drill Type: 6" Hollow Stem Auger

Driller: Nate
Drill Date: 1/15/2020



Monitoring Well Designation: MW-05

Latitude: 42.9311924° Longitude: -78.8970434° Elevation: 584.0 Feet



# 2020 NYSDEC REMEDIAL INVESTIGATION

			5	NEW YORK	Department o	ſ				SOIL BORING	G LOG	i	,
			_	OPPCRIUMITY	Conservation					BORING NO: SB-100			
ROJEC	Г:	31 To	onawan	da Street (	Off-Site - R	emedial Ir	nvestigation			SHEET:	1 of 2		
LIENT:		NYSI	DEC							SITE NO.: C915299A			
RILLING	CONTRA	СТО	₹:	TREC Env	rironmenta	1				BORING LOCATION:			
ROUND	WATER:					CASING	SAMPLER	CORE	TUBE	DATE STARTED:	09/18	/20	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE FINISHED:	09/18	/20	
					DIA.		2"			DRILLER:	Eric Han	nman	
					WT.			1:.		GEOLOGIST:	Steven I	/loelle	-
					FALL					REVIEWED BY:			
		SAI	MPLE						DESCR	IPTION			
DEPTH	STRATA	NO	TYPE	% REC	COLOR	MOIST.			MATE	RIAL	uscs	PID	(ppm)
FEET	OHAIA	110.	111.	/0 IXLO	OOLOR				ESCR	IPTION	0000	Soil	BHS
	x x x x x x x x x x x x x x x x x x x				Brown	Dry	2" Topsoil wi						
1	XXXXX		4.		Gray		6" Angular gi				<u> </u>		
	$\bowtie$				Gray		Gravel and b	rick frag	ment ir	silty clay loam soil matrix	Fill		1
2	***************************************	1	2.0" MC	50%	to	Slightly						2.8	N/A
3	XXXXX		IVIC		Dark Gray	Moist to							
3	***************************************				to	Moist							
4	XXXXX		,		Black								
•	XXXXX				Brown	Wet	Sand and an	igular gra	vel in a	a clayey silt matrix	Fill		
5	***************************************							· · · · ·					
	*******												
6	******		2.0"	200/	* 1							00	NI/A
	XXXXX	2	MC	30%								0.0	N/A
7	********			j							İ	1	ł
			-	-									
8							- piece of wo			<u> </u>			
	XXXXX				Gray	Wet	Sand and mo			avel, trace silt & clay, no	Fill		
9	XXXXX	-			-	:	Jodoi. Possii	de iaii iii.					
4.0	<b>XXXXX</b>		0.01								1		
10	XXXXX	3	2.0" MC	25%								0.0	N/A
11	<b>******</b>		IVIO				-						
11	*****		Í										
12	$\times\!\!\times\!\!\times\!\!\times$												
					Gray	Wet	Same as abo	ove with	trace o	f brick fragments. Slight	Fill		
13	<b> </b>						petroleum/co			• • • • • • • • • • • • • • • • • • •			
14		4	2.0"	23%								N/A	0.2
-	₩₩		MC	2370							1	"^	0.2
15	<b> </b>					1							1
	<b> </b>												
16					Gray	Wet	0.8' same as	ahovo			Fill	ļ	-
47					Gray	vvet	o.o same as	above					
17					Black		0.7' Silty Cla	v with a	coal ta	odor	ML-CL	1	
18	Шиши		2.0"		Gray	<del> </del>	Fine Sand, t				SM	71.4	
10		5	MC	53%								,	80.
19			1										
20							- reddish br	own coal	tar in t	ip of sampler			
			•					F1	of Darie	a @ 20! has		•	
								<u> </u>	חוסם וי	ng @ 28' bgs			
	ÆNTS:						tracked direct-			SITE NO.: C915299A			

	NEW YORK DOPARTMENT of Environmental									SOIL BORING LOG					
				7	Conservation	<u> </u>				BORING NO: SB-100					
PROJEC*	Τ:	31 T	onawan	da Street (	Off-Site - R	emedial Ir	nvestigation			SHEET:	2 of 2				
CLIENT:		NYS	DEC							SITE NO.: C915299A					
DRILLING	G CONTRA	CTO	R:	TREC Env	/ironmenta	1				BORING LOCATION:					
GROUND	WATER:					CASING	SAMPLER	CORE	TUBE	DATE STARTED:	09/18	/20			
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE FINISHED:	09/18	/20			
					DIA.		2"			DRILLER:	Eric Han	nman			
					WT.					GEOLOGIST:	Steven N	/loeller			
					FALL					REVIEWED BY:					
		SA	MPLE			<u> </u>			DESCR				-		
DEPTH									MATE	RIAL	T	PID	(ppm)		
FEET	STRATA	NO.	TYPE	% REC	COLOR	MOIST.			DESCRI		USCS	Soil			
					Gray	Wet	1 3' fine & me	edium :		ce silt & clay. Coal tar	SM	0011	Bile		
21					0.0,		staining & od		ouria, ira	oo one a day. Ooar tar	0.01				
22			2.0"		Reddish	Moist	Bottom 0.2' S	Silty Cla	av with vi	sible reddish brown coal	ML-CL		i I		
		6	MC	38%	Brown		tar.	,				N/A	547		
23											1				
20						* .									
24				-											
		_			Gray	Wet	1 2' fine & me	adium (	Sand tra	ce silt & clay. Coal tar	SM	_	823		
25					Clay	VVCL	staining & od				Sivi		023		
		. '					otumning or ou								
26			0.011	*	Reddish	DNAPL	Silty Clay, he	avily ta	ar impacte	<b>-</b> d	ML-CL		1295		
26		7	2.0" MC	78%	Brown	D. W. L.		•	•		IMIL OL	N/A			
0.7			IVIC	ř			- 4 thick me	eaium te	o coarse	sand stringer					
27							<u></u>								
								ome int	er layerin	g of sand/gravel & silty					
28			_				clay					igsquare			
29											1				
			İ.												
30															
							}								
31															
32						ļ									
						-									
33															
					1	1									
34					1										
	1	1			]										
35					1						1	1	1		
36	L	<u> </u>									<b>_</b>	<u> </u>			
	1					1									
37												] '			
	1	1			1						1				
38	4														
						1									
39	[				1	[					1				
											1				
40	<u> </u>		<u> </u>									Щ_			
								End	of Borin	g @ 28' bgs					
CCTC	ATTA LETO	ъ .				0000 5=									
COMN	IENTS:						racked direct-	push ri	g;	SITE NO.: C915299A					
					II MW-100 i					BORING NO	D.: SB	-100	)		
		BHS	i = Bag I	Headspace	NR = No	t Recorded	i i			_ =					

	,		 5	NEW YORK	Department o	ŗ				SOIL BORING	3 LOG		
				OPPERTUNITY	Environmenta Conservation					BORING NO: SB-103			
PROJECT	Т:	31 T	onawan	da Street (	Off-Site - R	emedial Ir	vestigation			SHEET:	1 of 2		
CLIENT:		NYS	DEC							SITE NO.: C915299A			
DRILLING	CONTRA	СТО	R:	TREC Env	rironmenta	l				BORING LOCATION:			
GROUND	WATER:					CASING	SAMPLER	CORE	TUBE	DATE STARTED:	09/18/	20	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE FINISHED:	09/18/	20	
					DIA.		2" DRILLER: Eric Hamm			ıman			
					WT.		-			GEOLOGIST:	Steven M	loeller	
-					FALL					REVIEWED BY:			
		SA	MPLE						DESCR	IPTION		*	
DEPTH	077474		7/05	0/ 550	001.00	MOIOT			MATE	RIAL		PID (	(ppm)
FEET	STRATA	NO.	TYPE	% REC	COLOR	MOIST.			DESCRI	PTION	USCS	Soil	BHS
	XXXXXX				Brown	Slightly	1' Topsoil w	ith grav	el				
1	XXXXX					Moist						.	
	***************************************				Gray	to	8" Sand and	l angula	r Gravel		Fill	. 1	ď
2	***************************************	1	2.0"	55%		Dry					ł	N/A	N/A
	***************************************	•	MC	33 /6	Reddish			ilty clay	with sand	d, gravel, & brick			IVA
3					Brown		fragments						
	XXXXX				to Black								
4	XXXXX				Diack								
	XXXXX				Dark	Moist		sand, sil	ty clay, c	layey silt, brick pieces &	Fill		
5	XXXXX				Brown to	to Wet	gravel						
	XXXXX				Black	vvet							
6	XXXXX	2	2.0"	48%								0.0	N/A
	$\times\!\!\times\!\!\times\!\!\times$	-	MC										
7	XXXXX	!										,	
	XXXXX				,								
8	<u> </u>												
					Black	Wet	Fine to coar	se San	d & Grave	el, trace silt & clay	SM-GM		
9													
				,									i ii
10		3	2.0"	35%								0.0	N/A
			MC										
11					Crovich		Last four inc	hoo oo	rco Cono	I & Gravel, trace silt & clay	SM CM		
40					Grayish Brown		Last lew inc	1162 606	arse Sand	i & Graver, trace sitt & clay	SIVI-GIVI		
12	****				Black	Wet	0.8' fine car	nd trace	eilt aray	vel & brick pieces. Fall in.	Fill		
12					Diack	VVCt	0.0 1110 341	ia, iracc	, one, grav	rer a briok pieces. Tairin.	'"		
13	*****				****************		Fine to coal	rse San	d & Grave	el, trace silt & clay	SM-GM		
14	<b> </b>		2.0"			1		. 50 Suit	_ S 5/4V	, 400 o a olaj	5 0		
	<b> </b>	4	MC	50%	1							N/A	68.2
15	<b> </b>			1									
	<b> </b>				[		- last few in	nches N	APL impa	acted - sheen & coal			
16	<b> </b>						tar odor						
					Black	Wet	Same as at	ove. C	utside of	sample liner tube did not	011 011		
17		1					show NAPL	. impact	s.		SM-GM		
	1	1		}							]	'	
18		_ ا	2.0"	050/							1	64	
	1	5	MC	25%								6.4	N/A
19												.	
	<b>1</b>												
20											<u></u>		
								Fno	d of Borin	g @ 24' bgs			
	***					N 10000							
COMN	MENTS:						tracked direc	t-push r	ig;	SITE NO.: C915299A			
					II MW-103 i					BORING NO	).: SB	-10?	3
1		BHS	S = Bag	Headspace	NR = No	t Recorded	d				··· •••		•

				NEWYORK	Department o	f	·			SOIL BORING	G LOG		
			ے	OPPORTUNITY	Department o Environmenta Conservation	d				BORING NO: SB-103		-	
PROJEC	T:	31 T	nawan	da Street (	Off-Site - R	emedial Ir	vestigation	-		SHEET:	2 of 2		7
CLIENT:	<del> </del>	NYS								SITE NO.: C915299A			
DRILLING	CONTRA	СТОІ	₹:	TREC Env	rironmenta	ı				BORING LOCATION:			
GROUND	WATER:					CASING	SAMPLER	CORE	TUBE	DATE STARTED:	09/18/	/20	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE FINISHED:	09/18/	/20	
					DIA.		2"			DRILLER:	Eric Ham	nman	
		ļ			WT.		<u>-</u>			GEOLOGIST:	Steven N	/loeller	
					FALL					REVIEWED BY:			
		SA	MPLE						DESCR				
DEPTH FEET	STRATA	NO.	TYPE	% REC	COLOR	MOIST.			MATE DESCRI		uscs	Soil	(ppm) BHS
21					Black	Wet	1.4' fall in.				Fill		
	XXXX												
22		6	2.0"	100%	Gray					I, slightly plastic, sticky.	ML-SM	N/A	248.4
		١	MC	10070	Reddish		NAPL impac			ngs, very firm, plastic.	ML-CL	19/7	240.4
23					Brown					22.5' (top of clay) but not	02		
24							into clay.						
25				-									
	İ												
26													
27			·										
28						-				<u> </u>			
29													
30													
31											·		
32													
33													
34													
35													
36													
37													
38													
39	_												
40													
								End	of Borin	g @ 24' bgs			
COMP	MENTS:	Bori	na nerfo	rmed with	Geographa	6620 DT 1	tracked direc	t-nush ri	ia.	SITE NO.: C915299A	<del>.</del>		
COIVII	1.				II MW-103 i			, publi li	·3 <sup>,</sup>			<u> </u>	
					NR = No					BORING NO	).: SB	-103 	5

			2	NEW YORK STATE OF OPPORTUNITY	Department o Environments Conservation	f il				SOIL BORING	S LOG		
					<u>'</u>			•		BORING NO: SB-106	1 (0		
PROJECT				da Street	Off-Site - R	emedial Ir	vestigation			SHEET:	1 of 2		
CLIENT:		NYS								SITE NO.: C915299A			
	CONTRA	СТОІ	R:	TREC Env	/ironmenta					BORING LOCATION:		· · · · · · · · · · · · · · · · · · ·	
GROUND	WATER:					CASING	SAMPLER	CORE	TUBE	DATE STARTED:	09/18	20	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE FINISHED:	09/18	20	
					DIA.		2"			DRILLER:	Eric Ham	man	
					WT.					GEOLOGIST:	Steven N	loeller	
					FALL					REVIEWED BY:			
		SA	MPLE						DESCR	IPTION			
DEPTH									MATE	RIAL		PID	(ppm)
FEET	STRATA	NO.	TYPE	% REC	COLOR	MOIST.			DESCRI	*	USCS	Soil	BHS
	XXXXXX				Brown	Moist	4" Topsoil w	ith arav				0011	Dilo
4	XXXXX				Gray	Worst	Few inches	_		r gravel			-
1	XXXXX				Brown	1.				gravel inclusions, gray silty	Fill		
	KXXXXX		0.0"		DIOWII		partings	ity ciay,	piastic, į	graver inclusions, gray silty	F.III		- 1
2	XXXXX	1	2.0" MC	55%			Partings					N/A	N/A
	XXXXXX		IVIC										
3	$\times\!\!\times\!\!\times\!\!\times$												
	XXXXX					·							
4	XXXXXX												
	***************************************				Brown	Moist	1' same as a	above			Fill		
5	XXXXXX					to Wet							
	XXXXXX				Black		Silty fine sar	nd (pos	sibly foun	dry sand), no odors	Fill		· 1
- 6	XXXXXX	2	2.0"	53%								N/A	N/A
			MC	55 /6								14/74	17/7
7	XXXXXX										i		
	XXXXXX					i					<b>.</b>		
8													
	888888				Grayish	Wet	0.7' possible	fall in			Fill		
9	XXXXXX				Brown	***************************************			*********				
<u> </u>					Black		1.3' Silty Fin	e Sand	. some a	ravel in top 4", sheen,	SM		
10			2.0"				slight coal ta		,	, , , , , ,			
- 10		3	MC	50%								N/A	N/A
11				,									-
11													
40													
12					Black	Wet	1.5' same a	a above			SM		
					DIACK	vvet	1.5 Same as	s above	ŧ		Sivi		
13													
	imminini				Black		1 5' Silty Cla	v nlaci	ic soft s	sticky, sheens, strong coal	ML-CL		
14		4	2.0"	75%	Diack		tar odor	y, piasi	, auit, 8	sucky, andenia, allung cual	IVIL-OL	N/A	N/A
	<b>XIIXIIX</b>		MC			1							
15													1
16				<u> </u>			1.01.5						
	<b> </b>				Black	Wet	1		olty Sand	& Gravel, sticky, sheens,	SM-GM		
, 17	<b> </b>	1					coal tar odo	۱.					
									***********		ļ.,,,,,		
18		5	2.0"	75%	Gray		slightly firm	ay to Cla	ayey Silt,	plastic, sticky, soft to	ML-CL	N/A	N/A
		ľ	MC	.5%			Sildinia IIIII					. 37.	````
19					1						ł		
		l											[ ]
20	<b>XIIXIIX</b>			<u></u>	<u> </u>	<u> </u>					<u>L</u>		
								End	l of Borin	g @ 24' bgs			
								<u>=110</u>	. UI DUIIN	y w z4 bys			
COMN	MENTS:	Bori	ng perfo	rmed with	a Geoprobe	6620 DT t	racked direct	-push r	ig;	SITE NO.: C915299A			
					II MW-106 i					PODING NO	) . CD	400	
				Headspace		t Recorded		ems		BORING NO	).: 3B	-106	•

				NEW YORK	Department of Environmenta	f				SOIL BORIN	G LOC	;	
			2 م	OPPORTUNITY	Environmenta Conservation	al				BORING NO: SB-106			
ROJEC	T:	31 To	onawan	da Street (	Off-Site - R	emedial Ir	nvestigation			SHEET:	2 of 2		
LIENT:		NYSI								SITE NO.: C915299A			
RILLING	G CONTRA	СТО	R:	TREC Env	/ironmenta	1				BORING LOCATION:			
ROUNE	WATER:					CASING	SAMPLER	CORE	TUBE	DATE STARTED:	09/18	/20	
DATE	TIME	LE	VEL	TYPE	TYPE		Macrocore			DATE FINISHED:	09/18	/20	
					DIA.		2"			DRILLER:	Eric Har	nman	
					WT.		-		:	GEOLOGIST:	Steven I	Moelle	•
					FALL		-			REVIEWED BY:			
		SAI	MPLE				•		DESCR	IPTION			
EPTH	STRATA	NO.	TYPE	% REC	COLOR	MOIST.			MATE	RIAL	uscs	PID	(ppn
FEET	SIRAIA	NO.	1176	// KEC	COLOR	MOIS1.			DESCRI	The second secon	0303	Soil	В⊦
					Reddish	Slightly		ace rour	nded gra	vel with coarse sand, very	ML-CL		
21					Brown	Moist	firm						
22		6	2.0"	50%								N/A	N/.
00			MC										
23											1		
24				.*									
4	annininini	-			<u> </u>	-					<del>                                     </del>		
25						1							
20	1												
26													
	1					٠,							
27							Ì						
28										·			
												-	
29													
			,										
30													
31	-												
20													
32	-					1	<del> </del>		,		1	ļ	$\vdash$
33													
	1				1								1
34												1	
	1											1	
35	1										1		
36												<u> </u>	<u> </u>
	:	1											
37	-												
20											1		
38	-												
39													
39	1												
40											1		İ
		<u> </u>		I	J	·	<u> </u>		-4 D ·	@ 041 b	<u> </u>	-	
								⊨nd	ot Roun	g @ 24' bgs			
COM	MENTS:	Borir	ng perfo	rmed with	a Geoprobe	6620 DT	tracked direct	-push ri	g;	SITE NO.: C915299A			

# APPENDIX D WELL CONSTRUCTION DIAGRAMS

#### 1989 CRA SITE INVESTIGATION REPORT

TABLE 2 MONITORING WELL STRATIGRAPHY

Well Description	Depth (BGS)	Material Description
MW1-89	0' - 0.2'	black moist gravelly sand fill
	0.2' - 1.5'	brown dry silty sand fill, with many large stones and some bricks, cinders, concrete rubble, and lumps of silty clay
	1.5' - 6.0'	brown dry clayey silt fill, with some sand, many large stones and some concrete rubble
•	6.0' - 10.0'	brown moist clayey silt fill, with some gravel, concrete and asphalt rubble, stones, rocks, and wood fragments
	10.0' - 12.0'	brown moist silty clay fill, with some stones, rocks, gravel, cinders, ash, and wood fragments

Notes:	- static water level	7.0 ft. BGS*
	<ul> <li>bottom of well</li> </ul>	11.3 ft. BGS
	<ul> <li>top of well</li> </ul>	2.9 ft. AGS**
	<ul> <li>top of sandpack</li> </ul>	7.3 ft. BGS
	<ul> <li>screened interval</li> </ul>	11.0 - 9.0 ft. BGS
	<ul> <li>total well length</li> </ul>	13.9 ft.

BGS - below ground surface AGS - above ground surface

TABLE 2 MONITORING WELL STRATIGRAPHY

Well Description	Depth (BGS)	Material Description
MW2-89	0' - 0.3'	black moist gravelly sand fill
	0.3' - 1.5'	brown dry silty sand fill, with some gravel, some cinders, stones, rocks, concrete rubble, and trace brick material
	1.5' - 6.0'	brown dry gravelly sand fill, with trace silt, some concrete rubble, asphalt rubble, stones and rocks
•	6.0' - 9.0'	brown wet sandy silt fill, with some gravel and clay lumps and trace wood fragments
	9.0' - 11.0'	same as above except soil has an iridescent sheen and diesel odor

Notes:	-	static water level	6.0 ft. BGS*
	_	bottom of well	8.0 ft. BGS
	*	top of well	2.3 ft. AGS**
	-	top of sandpack	4.0 ft. BGS
	-	screened interval	7.7 - 5.7 ft. BGS
	_	total well length	10.0 ft.

- BGS below ground surface AGS above ground surface

### 1992 NYSDEC PHASE II INVESTIGATION REPORT

DATE				
		P	_	•

FINISHED 9-26-90



### E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG

HOLE NUMBER GW-1 SURFACE ELEVATION. GROUNDWATER DEPTH

PROJECT		dders Aut	บ	LOCATION HW comes of lot.	į i
	<u> </u>	26040		10 € 0 40 20	
DEPTH - FT WARPER SAMPLE	١ž١	BLOWS ON SAMPLER 0 6 12 12 18 24	PROFILE SAMPLE ID	FIELD IDENTIFICATION OF SOILS	NOTES
TD=q' SS  SCREEN TSS  SCREEN TSS  Seal 2.5-3.5	2 3 4 5	12 18 24 25 35 5 3 1 1 2 1 7 1 1 7		SS#1 0-2' 1.3' Recavery 0-0.5' Black gravery sand fill 0.5-0.65' Ted brick. 0.65-1.0' Concrete 1.0-1.3' Black sand fill.  SS#2 2-4' 1.1' Recovery 0-0.7' Black sandy fill with quasy appearance + oil-like aroma. 0.7'-1.1' leddish known clay fill w/krick.  SS#3 4-6' 0.7' Recovery All Moist reddish known clay-cavit see any foreign fragments renhans its natural 1!)  SS#4 6-8' 0.8' Recovery All wet reddish known clay w/ no visible siqus of faill material. Clay (as in #3) Clay is highly consider hooderately plastic. SS#5 8-10' 1.4' Recovery All dry reddish known clay, tight, highly cohesive + plastic. Appears natural. Water is sifting on top of this layer.	OVA = 0 HHU=0 DRY  OVA > 1000 HNU=15 par
				SSHU 9-11/ Same as #5 There is water in the hole.	OVA HNU=0
640088	لــــــــــــــــــــــــــــــــــــــ				<u> </u>

CLASSIFICATION/BY\_

1. Was ecology and environment

D	A	T	Ε

STARTED 9-26-90

	FIN	SH	ED	1-20	- 10
SHE	ET_	1	OF		



### E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG

HOLE NUMBER GW-Z
SURFACE ELEVATION
GROUNDWATER DEPTH

ì	PROJ	ECT.	F	edders 1	tuto.	LOCATION HE comes of lot no	ear
YPLOGO			P16040		Scajacanda Creek.		
DEPTH — FT	WELL DIAGRAM	SAMPLE TYPE	SAMPLE NO.	BLOWS ON SAMPLER  0 6 12 12 18 24	PROFILE SAMPLE ID	FIELD IDENTIFICATION OF SOILS	NOTES
	0.	<<	1	le 11	5B-2A	55#1 0-21 1.7 Recovery	HNU= 10 ppm -
3 - 3 - 4 - 5	D:14.5  Screen 4.5.14.5  Sand 4-14.5  Seal 3-4	55	1 2 3 4 5 6 7	18 24	SB-ZA SB-ZB SB-3C NONE	0-0.6 Black sandy fill w/ knick, glaed, slag, etc.  0.6-1.1' (oncrete (weathered)  1.1-1.7' Feddiok-brown + black clay fill w/ sand, slag, (foundry madrial) etc.  SS#2 2-4' 1.1e' Recovery  0-1.0' Dank known sandy fill w/ brick, slag, a white ceramic material, black glass (foundry)  1.0-1.1e' Black sandy clay fill, quady in appearance but not in touch.  SS#3 4-1e' 0.4' Recovery  Limited sample volume: will spoon again.  0-0.4' Wet black sandy fill.  2nd time retrieved nothing but water.  SS#4 (1-8' 0.4' Recovery.	Both only @ very end do spoon.
						Appears to be Material that was stuck in bit. Augen cultings indicate saturated black sandy fill, spoon shows damp sandy clay fill.  55 #5 8-10' Ho recovery.  Try again - 240 spoon in saturated gravelly sand fill.  55 #10 10-12' 1.0' Recovery.  All wood, as in Gw. 3b.  55 #7 12-14' 1.0' Recovery.  0-0.4' Reddish known sandy clay fill w/ brick fragments.  0.4-0.9' wood  0.9-1.0' Black clay w/ wood.	HMU=0 OVA=0 Saturated. OVA=10 HMU N/A OVA=100 HMU=0

C-3 CLASSIFICATION/BY

R. Wat

STARTED 9-25-90 FINISHED 9-212-90



#### E + E DRILLING AND TESTING CO., INC. SUBSURFACE LOG

HOLE NUMBER GW-3
SURFACE ELEVATION
GROUNDWATER DEPTH

	9801	ECT	F	edders A	10tz	LOCATION SE corner of Lot	en
PROJECT Fedders Auto					Scajacanda Creek.		
DEPTH - FT	WELL DIAGRAM	SAMPLE TYPE	SAMPLE NO.	BLOWS ON SAMPLER  0 6 12  12 18 24	PROFILE	FIELD IDENTIFICATION OF SOILS	NOTES
_	.0					Third try @ GW-3	-
=	000 000					Auger to 4' then splitspoon.	
5-		<b>SS</b>	1 2	2 1 1		All black sandy fill as we've	HHU=0 OVA 41ppm
10-		SS	3	1 1 1		gravel, brick, wood, etc.  Wet below 5!	water table near 51
-		55 55	4	1 0 2 1		55 # 2 10-8' 1.2' Recovery.	HUL=0 0UA 4 1 pp.
15-	TP:14.5'			7 1		reddish brown + black class Fill with slag+cote flagments Moist to wet.	
-	screen 4.5-14.5 sand					SS # 3 8-10' 1.8' Recovery	HAU = 0 OJA C I ROPM
20 —	4-145' seal 3-4'					0-0.5' Sandy clayey fill(black) 0.5-1.1' Reddish known + black clay	SATURATED
25—						fill with gravel. 1-1-1-8' Coarsé sand 4 coke/slag Fill material.	
=						55#4 10-12' O. 6' Recovery	HNU-O OVA = 50 ppn
30 <u> </u>						Saturated black sandy clay fill SSITS 12-14' Ho recovery Dut	saturated.
-						spoon is all wet. Will run another spoon 4 try to get something	4Nu=0 0VA=0 wet to
ъ— 						row recovered 1.0' to about	saturated.
40-					(	0-0.5 Brown sandy fill w/ clay + brick fragments. 0.5-1.1 Black organic-rich	
-						1.1-1.4 Clayey reat moss 1.4-1.8 Brown Soudy day,	
64008	3					intact shalls of gostupads.	

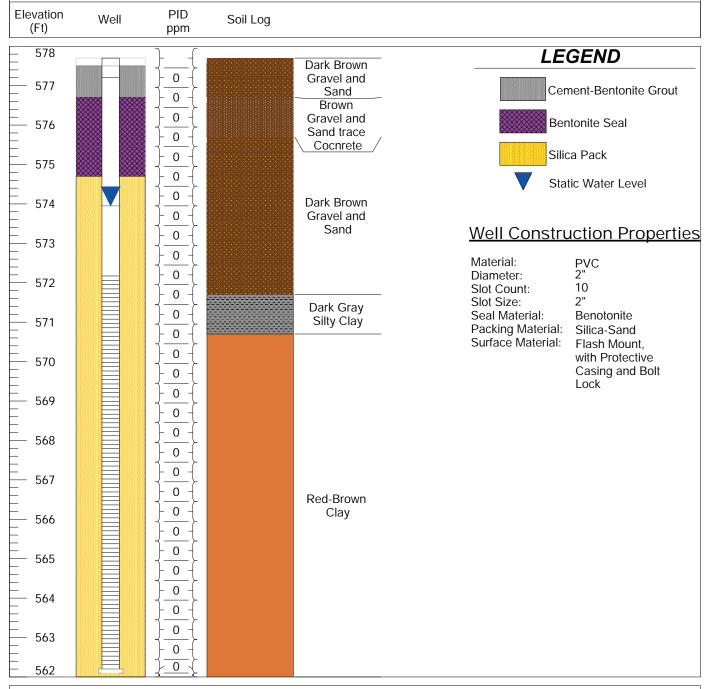
#### 2020 BE3 REMEDIAL INVESTIGATION/ ALTERNATIVES ANALYSIS REPORT

Project: Fedder Lofts
Location: 57 Tonawanda Street
Client: Eran Epstein

Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
Drill Type: 6" Hollow Stem Auger

Driller: Nate
Drill Date: 1/13/2020



Monitoring Well Designation:MW-01 Latitude:42.9304808° Longitude:-78.8957223° Elevation:577.70 Feet



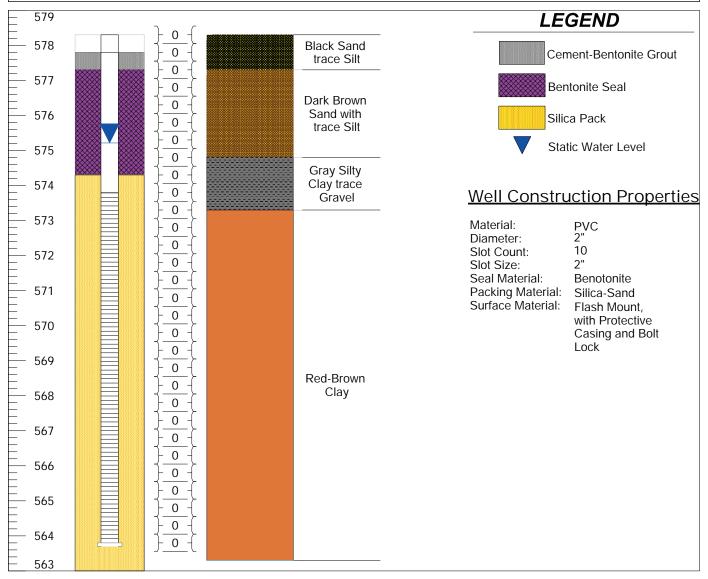
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Location: 57 Tonawanda Street
Client: Eran Epstein

Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
Drill Type: 6" Hollow Stem Auger

Driller: Nate
Drill Date: 1/13/2020

Elevation Well PID Soil Log (Ft)



Monitoring Well Designation: MW-02 Latitude: 42.9308709°

Langitude: -78.8951537° Elevation: 578.33 Feet



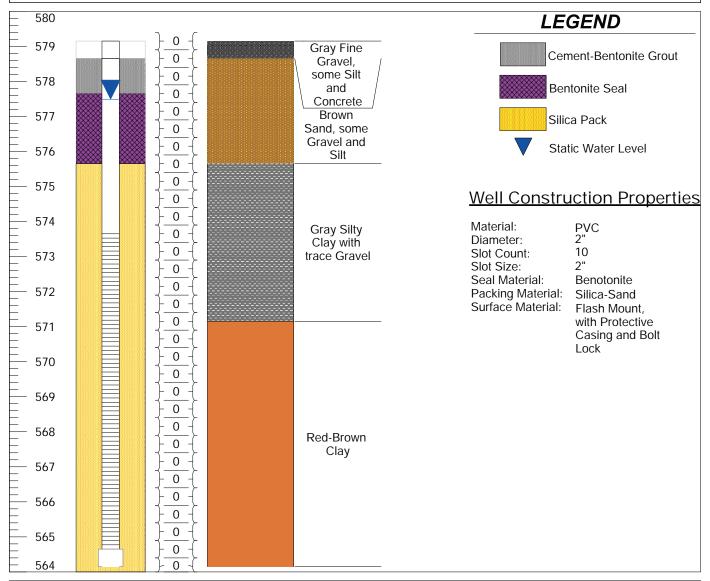
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Location: 57 Tonawanda Street
Client: Eran Epstein

Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
Drill Type: 6" Hollow Stem Auger

Driller: Nate
Drill Date: 1/13/2020

Elevation Well PID Soil Log (Ft) Soil Log



Monitoring Well Designatio:MW-03 Latitude: 42.9306862°

Longitude: -78.8958226° Elevation: 579.15 Feet



Project: Fedder Lofts
Location: 57 Tonawanda Street
Client: Eran Epstein

Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
Drill Type: 6" Hollow Stem Auger

Driller: Nate
Drill Date: 1/14/2020

Elevation PID Well Soil Log (Ft) ppm 0 **LEGEND** Gray Fine 582 0 Gravel, 0 some Silt Cement-Bentonite Grout 0 and 580 0 Concrete 0 Bentonite Seal 0 578 0 Silica Pack 8.0 0.9 576 Static Water Level 1.2 3.7 574 6.5 7.2 Well Construction Properties 15.1 572 58 Material: PVC 2" 84.1 Diameter: 0 10 570 Slot Count: 0 2" Slot Size: 0 Seal Material: Benotonite 97.3 568 Red-Brown Packing Material: Silica-Sand 116.4 Clay, trace Surface Material: Flash Mount, 221.6 Clay Fine with Protective 566 148.1 Gravel Casing and 508.1 Fine Sand Bolt Lock 147.2 564 224 176.3 50.9 562 61 68.9 35.5 560 16.4 15.2 558 17.3 13 20.1 556 17.5 13.2 4.4 554 2.7 2 552

> Monitoring Well Designation:MW-04 Latitude: 42.930726° Longitude: -78.8971051°

Elevation: 582.75 Feet

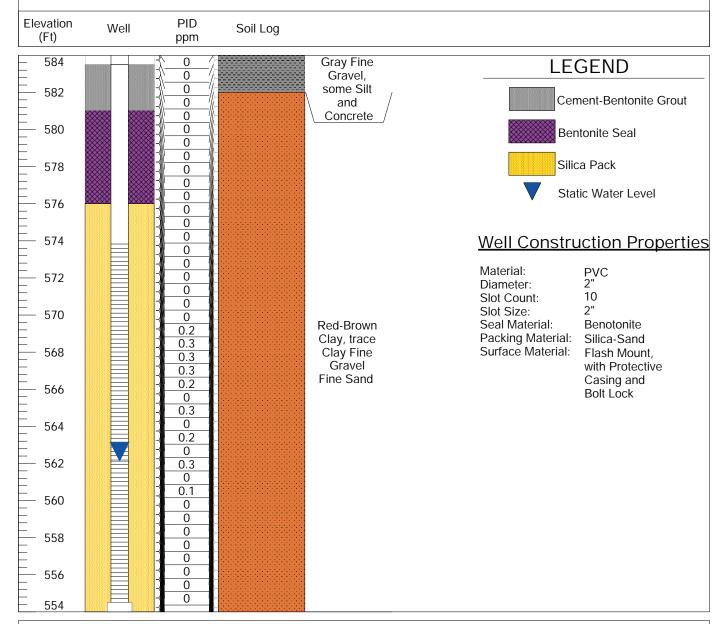


Project: Fedder Lofts
Location: 57 Tonawanda Street
Client: Eran Epstein

Client Address: 57-71 Tonawanda Street Buffalo, NY 14211

Drilling Company: Nature's Way Contracting
Drill Type: 6" Hollow Stem Auger

Driller: Nate
Drill Date: 1/15/2020



Monitoring Well Designation: MW-05

Latitude: 42.9311924° Longitude: -78.8970434° Elevation: 584.0 Feet



# 2020 NYSDEC REMEDIAL INVESTIGATION

