

Remedial Investigation Report BCP Site #C828131 NYSDEC Index #B8-0705-05-08

Location:

Carriage Cleantown 1600 Penfield Road Penfield, New York 14526

Prepared for:

Springs Land Company, LLC P.O. Box 262 Port Gibson, New York 14537

LaBella Project No. 205237.01

June 2009

Last Revised: February 2011

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1.0 Introduction

LaBella Associates P.C. ("LaBella") prepared this Remedial Investigation (RI) Interim Remedial Measures (IRM) Report on behalf of the Springs Land Company, LLC (Springs Land) for the former Carriage Cleantown facility located at 1600 Penfield Road in the Town of Penfield, Monroe County, New York, herein after referred to as the "Site". A Project Location Map is included as Figure 1. Springs Land entered the Brownfield Cleanup Program (BCP) under volunteer status and recently purchased the property as part of a redevelopment plan.

This report outlines the work completed in accordance with the Remedial Investigation Work Plan: Supplemental Site Characterization (dated June 2005), the Supplemental RI Work Plan (dated February 2006), and the Interim Remedial Measures Work Plan (dated August 2006) which were approved by New York State Department of Environmental Conservation (NYSDEC). This report was completed in general accordance with the NYSDEC Division of Environmental Remediation (DER) BCP Guide dated May 2004 and the Draft DER-10 (*Technical Guidance for Site Investigation and Remediation*) dated December 2002.

1.1 Site Description

The Site consists of approximately 0.60 acres of land improved by an approximately 4,550 square foot building, which is currently vacant. The remainder of the Site is predominantly paved with landscaped lawn areas along the western and northern portions of the Site. The surrounding properties are commercial properties with some residential beyond. The properties directly adjacent to the Site and the occupants are indicated below:

- North 1606 Penfield Road: Day Care Facility and Dance Studio
- East 1610 Penfield Road: Unoccupied Automated Banking Facility
- South Right of Way (ROW): Penfield Road (with a large parking lot for commercial plaza beyond)
- West 1598 Penfield Road: Commercial office space with three tenants

A Site Plan (included as Figure 2), illustrates the Site boundaries and the adjacent properties.

1.2 Site History

The current building was constructed in approximately 1961 and has reportedly been operated as a dry cleaner from that time until approximately 2005. However, on-site dry cleaning operations may not have been implemented for the entire time period. A plumbing diagram (unknown date) indicated that drain lines from the building discharged to a 1,500-gallon pre-cast concrete wastewater holding tank located adjacent to the northern portion of the building. Pertinent information from the plumbing diagram is shown on Figure 3.

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1.3 Previous Investigations

LaBella conducted a preliminary Phase II Environmental Site Assessment (ESA) in August 2002 at the Site as part of a potential real estate transaction. The preliminary Phase II ESA identified the presence of solvent-impaired soil and shallow groundwater at the Site in the area of the concrete holding tank. The preliminary Phase II ESA consisted of advancing nine (9) soil borings (designated B-1 through B-9) and installing one groundwater monitoring well (designated MW-1). The approximate locations of the soil borings and monitoring well are shown on Figure 3. Soil and groundwater samples were submitted for analytical testing in order to evaluate subsurface conditions.

The analytical results indicated that Tetrachloroethene (PCE) is present in soil at levels above the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 Soil Clean-up Objectives to Protect Groundwater Quality. In addition, PCE was also present above its associated 6 New York Code of Rules and Regulations (6 NYCRR) Part 703 Groundwater Standard in the shallow groundwater monitoring well installed at the Site. Based on observations made during the soil boring and sampling study, and the comparison of the analytical data to the NYSDEC standards, there appeared to be a remedial concern with regard to solvent impaired soil and groundwater in the vicinity of the 1,500-gallon pre-cast concrete wastewater holding tank located immediately north of the building.

LaBella also implemented a Passive Soil Gas Survey on August 27, 2003 to determine the presence, identity, and 'relative' concentrations of targeted contaminants along the down-gradient property lines at the Site. The soil gas survey results were used to assess whether targeted compounds may potentially be migrating off site. The soil gas survey consisted of sampling at thirteen (13) soil gas sampling locations (designated SG-1 through SG-13), which are shown on Figure 3.

The analytical results from the Passive Soil Gas Survey indicated that the highest constituent detected at the Site was PCE with lesser amounts of the PCE breakdown product trichloroethylene (TCE). Based on the analytical results, the highest levels of PCE and TCE were concentrated in the vicinity of the northwest property corner. A comprehensive Passive Soil Gas Survey Report was submitted to the NYSDEC on October 27, 2003.

1.4 Standards, Criteria and Guidelines

This section identifies the Standards, Criteria and Guidelines (SCGs) for the Site. The SCGs identified are used for the purpose of this evaluation in order to quantify the extent of contamination at the Site that may require remedial work. The SCGs are not intended to be the final site cleanup objectives. The site cleanup objectives may be defined as part of a remedial work plan and/or re-evaluated based on the BCP cleanup tracks or if a Site Specific Risk-Based Closure Assessment is performed. The SCGs for soil and groundwater are provided below.

Soil SCGs

Analytical results for soils will be compared to the Restricted Use Soil Cleanup Objectives (RUSCOs) presented in 6 NYCRR Subpart 375-6—Remedial Program Soil Cleanup Objectives (RPSCOs). Specifically, the RUSCOs for the Protection of Public Health—Commercial and the RUSCOs for the Protection of Groundwater will be used to determine the warranted extent of additional remedial work (if any) at the Site for overburden vadose zone soil. [NOTE: Previous reports (refer to Section 1.3) compared soil analytical results to the NYSDEC Technical and Administrative Guidance Memorandum

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(TAGM) 4046 Recommended Soil Cleanup Objectives (RSCOs) and NYSDEC TAGM 4046 Soil Cleanup Objectives to Protect Groundwater Quality. Although, these standards were applicable at the time the reports were completed, since the Site is now a BCP site, the data from these reports will be compared to the Commercial and Protection of Groundwater 6 NYCRR Subpart 375-6 RPSCOs as part of the evaluation in this report.]

The SCGs for soil are shown in Table 1 below for the chlorinated volatile organic compounds (CVOCs) contaminants that are the primary contaminants for the Site.

Table 1
Remedial Investigation SCGs for Soil

Chlorinated VOCs	Subpart 375-6 Restricted Use Soil Cleanup Objective for the Protection of Public Health: Commercial (µg/Kg)	Subpart 375-6 Restricted Use Soil Cleanup Objective for the Protection of Groundwater (µg/Kg)
Tetrachloroethene (PCE)	150,000	1,300
Trichloroethene (TCE)	200,000	470
(cis) 1,2-Dichloroethene (cis-1,2-DCE)	500,000	250
(trans) 1,2-Dichloroethene (trans-1,2-DCE)	500,000	190
1,1- Dichloroethene (1,1-DCE)	500,000	330
Vinyl Chloride (VC)	13,000	20

Notes:

Groundwater SCGs

The SCGs for groundwater will be the 6 NYCRR Part 703 Groundwater Standards. The Part 703 Groundwater Standards for the CVOCs at the Site are shown in Table 2.

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⁽¹⁾ All concentrations listed in micrograms per kilogram (µg/Kg) roughly equivalent to parts per billion (ppb)

Table 2
Remedial Investigation SCGs for Groundwater

CVOCs	NYSDEC Part 703 Groundwater Standards (µg/L)
Tetrachloroethene (PCE)	5
Trichloroethene (TCE)	5
(cis) 1,2-Dichloroethene (cis-1,2-DCE)	5
Dichloroethene (cis-1,2-DCE) (trans 1,2-DCE)	5
1,1- Dichloroethene (1,1-DCE)	5
Vinyl Chloride (VC)	2
Toluene	5

Note:

Although the NYSDEC Pert 703 Groundwater Standards are presented as the groundwater SCGs, it is expected that based on the use of the Restricted Use Soil Cleanup Objectives that an environmental easement will be put in place which will provide for a groundwater use restriction for the site

Soil Vapor SCGs

The SCGs for soil vapor will be the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Criteria as referenced in Guidance for Evaluating Soil Vapor Intrusion in the State of New York (February 2005).

2.0 Site Investigation

The RI work completed as part of this project is detailed in this section. The subsections describe the various investigation work and sampling completed for each media. The site investigation work consisted of a two phased shallow soil boring evaluation, a shallow groundwater evaluation, a deep soil and groundwater evaluation, and a soil gas evaluation. The sampling results (nature and extent of impact) are discussed in Section 4.0.

2.1 Shallow Soil Evaluation

Methodology

The shallow soil evaluation was implemented using direct-push "Geoprobe" subsurface sampling unit to advance four-foot Macrocore soil samplers into the shallow overburden soil. LaBella retained Trec Environmental, Inc. (TREC) of Spencerport, New York to conduct the Geoprobe work. A LaBella field geologist was on-site to continuously assess soils from the borings for visible impairment, olfactory indications of impairment, evidence of non-aqueous phase liquids (NAPL), and/or indication of detectable Volatile Organic Compounds (VOCs) with a Photoionization Detector (PID), collectively referred to as "evidence of impairment." Field PID readings were taken at several locations in each 4-

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foot macrocore sleeve, and the maximum value was noted for each 2-foot interval. The field readings were collected from the macrocore sleeves. The drilling equipment was decontaminated prior to use, including an alconox and potable water washed, followed by a potable water rinse. In between each boring, decontamination procedures were repeated. Cuttings and decontamination water were staged on polyethylene sheeting and containerized in 55-gallon drums until disposal (refer to Section 2.6).

Fieldwork

The shallow soil evaluation was completed in two phases. The first phase of soil borings were advanced between October 27, 2005 and November 2, 2005 and consisted of a grid sampling scheme to evaluate the concrete wastewater holding tank source area. In addition, several additional borings were advanced to evaluate potential sources within the building interior. A second phase of soil borings were advanced on March 30, 2006 and April 27, 2006 to further evaluate a second source area associated with a former PCE Still historically located in the southeastern corner of the building. The shallow soil borings advanced at the Site are shown on Figure 4. The two phases of shallow soil borings are further discussed separately below:

1st Phase Soil Borings

The 1st phase of soil borings consisted of a 15 feet grid radiating outward (north) from the concrete wastewater holding tank. A total of twenty-five (25) soil borings (designated B-10 through B-34) were advanced as part of the grid. In addition, four (4) soil borings (designated B-39 through B-42) were advanced to evaluate the floor drains/drain lines within the building that discharge to the holding tank and to further define the extent of impacts from the wastewater holding tank. [Note: Borings B-35 through B-38 were advanced as part of the shallow groundwater evaluation and are discussed in Section 2.2.]

Soil samples from these borings were collected to evaluate for the extent of soil from the wastewater holding tank area that may exceed SCGs and hazardous waste criteria. A list of the soil samples submitted is included in Table 3 and the PID readings are also provided for each two foot interval.

Table 3

Phase 1 Shallow Soil Borings

PID Readings & Analytical Testing

Soil Boring ID		A 1 (1 100 (1))							
	0'-2'	2'-4'	4'-6'	6'-8'	8'-10'	10'-12'	12'-14'	14'-16'	Analytical Testing
B-10	0.4	0.1	0.1	0.0	0.8	I.R.	0.0		NA
B-11	0.7	0.2	0.2	0.0	0.1	I.R.			NA
B-12	0.2	0.1	0.2	0.3		4			NA
B-13	253	I.R.	3.2	1.2					NA
B-14	35.1	4.1	31.4	9.6	2.0	I.R.			NA
B-15	0.9	0.3	4.2	1.0	0.1	0.1			NA
B-16	9.1	2.1	0.1	0.1	0.1	0.4	0.8	I.R.	NA
B-17	2.2	I.R.	1.7	0.8	2.0	6.3	2.8	I.R.	NA
B-18	1.8	1.9	0.4	3.7	1.0	I.R.			NA

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Table 3 (continued)

Phase 1 Shallow Soil Borings PID Readings & Analytical Testing

Soil				Analytical Testing					
Boring ID	0'-2'	2'-4'	4'-6'	6'-8'	8'-10'	10'-12'	12'-14'	14'-16'	Analytical resulig
B-19	11.7	10.4	4.3	0.3	0.4	0.1			NA
B-20	3.5	I.R.	0.7	0.5	0.7	I.R.			NA
B-21	38.7	I.R.	14.9	10.6	51.7	I.R.	0.9	I.R.	TCL VOCs (8'-9')
B-22	143	I.R.	68.1	64.2	833	29.4			TCL & TCLP VOCs (8.8'- 9.3')
B-23	12.9	46.4	28.2	19.9	29.8	47.1	2.1	I.R.	NA
B-24	79	8.6	6.4	9.3	2.2	1.2	0.4	I.R.	NA
B-25	2.9	1.6	2.1	1.3	4.0	3.1			NA
B-26	14.6	14.4	15.2	10.0	69.1	I.R.	11.1	I.R.	TCL VOCs (9'- 10')
B-27	149	223	300	1,374	6,820	I.R.	573	I.R.	TCL & TCLP VOCs (8'-9') TCL & TCLP VOCs (12'-13')
B-28	51.5	72.0	37.6	35.1	134	>9,999	3,918	I.R.	TCL & TCLP VOCs (10'- 11') TCL & TCLP VOCs (12'- 13')
B-29	79.4	I.R.	5.9	1.9	2.5	I.R.			TCL VOCs (8'- 10.6')
B-30	3.9	I.R.	3.1	15	5.4	21.8			NA
B-31	5.3	11.5	20.7	8.3	511	I.R.	64.9	I.R.	TCL VOCs (9'- 10')
B-32	69.0	72.0	>9,999	4,731	3,411	I.R.			NA
B-33	63.1	I.R.	32.0	8.0	5.0	8.9			TCL VOCs (10'- 11')
B-34	113	8.4	4.1	0.7	3.1	0.9	*****		NA
B-35	0.2	0.1	0.1	0.1	0.2	I.R.			NA
B-36	0.1	2.3	0.5	0.0	4.9	I.R.	0.3	I.R.	NA
B-37	0.2	I.R.	4.1	1.6	2.2	I.R.	19.0	I.R.	NA
B-38	0.2	0.3	0.2	0.2	0.1	I.R.	0.1	I.R.	NA
B-39	16.1	8.1	99.8	10.7	91.2	128			TCL VOCs (10'- 11.2')
B-40	21.6	18.3	52.9	24.3	98.7	39.1		W 20 CE CE	TCL & TCLP VOCs (9'- 10')
B-41	223	39.7	81.8	25.6	39.2	21.3			TCL VOCs (9'- 10')
B-42	0.3	0.2	8.4	23.3	13.8	8.4			NA

Notes:

PID Readings collected using a MiniRae 2000.

TCL VOCs = Target Compound List (TCL) VOCs tested via USEPA Method 8260B.

TCLP VOCs = TCL VOCs tested via USEPA Method 8260B subsequent to extraction via USEPA Method 1311.

I.R. = Sample not collected due to insufficient recovery

---- Boring terminated prior to this depth.

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As shown, 'significant' impacts (defined as PID readings greater than 1,000 parts per million [ppm]) were observed in borings B-27 (6 to 10 feet in depth), B-28 (10 to 14 feet in depth), and B-32 (4 to 10 feet in depth) which were advanced with 8-feet to the north, northeast and southwest of the concrete wastewater holding tank, respectively.

The Soil Boring Logs are included in Appendix 1.

2nd Phase Soil Borings

The second phase of soil borings consisted of an additional thirteen (13) soil borings (designated B-43 through B-55) advanced within the building interior and exterior to further evaluate the extent of impacts from the former PCE Still and floor drain areas. Two additional shallow soil borings (B-44R and B-52R) were also advanced to confirm analytical results from soil borings B-44 and B-52.

Soil samples from these borings were collected to evaluate for the extent of soil that may exceed hazardous waste criteria and SCGs from the area of the former PCE Still. Samples were chosen on a worst-case basis and were kept on ice until analysis by STL Laboratories, Inc. (now Test America). STL provided ASP category B deliverable data packages. A list of the soil samples submitted is included in Table 4 and the PID readings are also provided for each two foot interval.

Table 4
Phase 2 Shallow Soil Borings
PID Readings & Analytical Testing

Soil			Analytical Testing						
Boring ID	0'-2'	2'-4'	4'-6'	6'-8'	8'-10'	10'-12'	12'-14'	14'–16'	Analytical Testing
B-43	0.0	0.0	0.3	0.1	0.0	0.0	5.2	I.R.	NA
B-44	4,351	3,554	239	67.4	385	49.8	117	I.R.	TCL VOCs & TCLP VOCs (1.3'- 2.3') TCL VOCs (12' - 14')
B-44R	>2,000								TCL VOCs (1' - 2')
B-45	1,369	820	2,512	564	515	72.9	5.4	I.R.	NA
B-46	19.6	11.9	48.3	118	117	14.9	4.6	I.R.	TCL VOCs (8'- 9')
B-47	10.0	34.7	13.1	0.7	1.0	0.0	0.2	I.R.	NA
B-48	0.8	0.5	0.2	0.0	0.0	0.0	20.4	I.R.	TCL VOCs (12'- 13.9')
B-49	12.2	10.9	3.3	0.3	1.2	0.8	10.8	I.R.	NA
B-50	38.7	48.8	16.9	1.2	4.0	0.3	8.8	I.R.	NA
B-51	64.8	47.3	54.9	17.0	37.3	16.9	1.7	I.R.	TCL VOCs (8'-9')
B-52	0.1	0.0	6.7	113	198	578			TCL VOCs (9.8'- 10.6')
B-52R	0.1	0.0	424	96.5	371	84.0			TCL VOCs (8'- 9')

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Table 4 (continued) Phase 2 Shallow Soil Borings PID Readings & Analytical Testing

Soil			A 1.4 175 44						
Boring ID	0'-2'	2'-4'	4'-6'	6'-8'	8'-10'	10'-12'	12'-14'	14'-16'	Analytical Testing
B-53	1.0	0.8	0.1	0.0	0.3	0.0	0.3	I.R.	NA
B-54	0.3	0.0	0.1	0.0	0.0	0.2	1.6	0.1	TCL VOCs (12'- 14.6')
B-55	1.4	0.0	0.6	0.2	0.3	0.0			NA

Notes:

PID Readings collected using a MiniRae 2000.

TCL VOCs = Target Compound List (TCL) VOCs tested via USEPA Method 8260B.

TCLP VOCs = TCL VOCs tested via USEPA Method 8260B subsequent to extraction via USEPA Method 1311.

1.R. = Sample not collected due to insufficient recovery

---- = Boring terminated prior to this depth.

As shown, 'significant' impacts (defined as PID readings greater than 1,000 ppm) was observed in boring B-44 (0 to 4 feet in depth), B-44R (0 to 2 feet in depth), and B-45 (0 to 2 feet and 4 to 6 ft in depth). The PID readings from these borings generally decreased with depth.

The Soil Borings Logs are included in Appendix 1.

2.2 Shallow Groundwater Evaluation

Methodology

The shallow groundwater evaluation was implemented using direct-push Geoprobe equipment to install shallow overburden groundwater monitoring wells. LaBella retained TREC to install the monitoring wells on October 27, 2005 (MW-1 through MW-5) and March 30, 2006 (MW-7 through MW-10). The shallow overburden groundwater monitoring wells were generally installed to 15-feet below the ground surface (BGS); however, due to some 'cave-ins' within the borings, the actual installation depths ranged between 10 feet and 15.7 feet BGS. Each well was completed with 10-feet of 1-inch Inside Diameter (ID), Schedule 40, 0.010-inch slotted well screen connected to an appropriate length of 1-inch ID Schedule 40 PVC well riser to complete the well. The annulus around the screen section was sandpacked with size 00N quartz sand to approximately 2-feet above the screen section. The remaining annulus was filled with a bentonite chip seal to approximately 1-feet below ground surface and then grouted to ground surface. Each well was completed with a flush mount well cover. Copies of the Well Construction Logs are included in Appendix 2.

The wells were developed on October 31, 2005 (MW-1 through MW-5) and April 3, 2006 (MW-7 through MW-10). Well development consisted of purging the wells using dedicated polyvinylchloride (PVC) bailers while collecting groundwater quality field indicator parameters (i.e., pH, temperature, specific conductivity, and turbidity). Well development continued until field indicator parameters stabilized for three consecutive readings and at least 3 well volumes were purged. *Monitoring Well Development Logs* are included in Appendix 3.

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Prior to sampling, the wells were allowed to equilibrate for at least 48 hours. Groundwater sampling consisted of initially checking for Dense and Light Non-Aqueous Phase Liquids (DNAPL & LNAPL) with a Heron H..01L Interface meter and then purging at least 3 well volumes with PVC dedicated bailers while collecting field indicator parameters with the removal of each well volume. No dense or light non-aqueous phase liquids were observed with the Heron meter or in any of the purged water, however a slight perchloroethylene odor was noted in water from MW-9 and MW-10. The groundwater samples were collected in laboratory supplied sample jars, placed on ice in a cooler, and transported to the laboratory using standard chain-of-custody protocols.

Groundwater samples were tested for United States Environmental Protection Agency (USEPA) Target Compound List (TCL) VOCs using USEPA Method 8260B. The samples were preserved with hydrochloric acid (HCL) and ice prior to shipping. [Note: The groundwater sample from MW-1 was analyzed by Paradigm prior to the BCP project and was not provided as an ASP Category B Deliverables data package.] Samples from MW-2 through MW-10 were analyzed by Severn Trent Laboratories, Inc. (STL) in Buffalo, New York and the results are provided as ASP Category B Deliverables. Monitoring Well Sampling Logs are included in Appendix 4.

Fieldwork

The shallow groundwater evaluation consisted of installing and sampling eight shallow overburden groundwater monitoring wells (designated MW-2 through MW-5 and MW-7 through MW-10). MW-1 was part of the initial Phase II ESA for the Site and was not sampled during this phase of the investigation. In addition, during the redrilling of boring B-52, a temporary groundwater monitoring well was installed in this location and purged/sampled (designated sample B-52R-GW). The well was then removed and the boring backfilled. This sample was collected in order to further evaluate the apparent anomalous soil sample results. The locations of the shallow groundwater monitoring wells are illustrated on Figure 4. [Note: Monitoring well MW-6M & MW-6D were installed and sampled as part of the deep groundwater evaluation (refer to Section 2.3).]

Initially, four (4) monitoring wells (designated MW-2 (B-37), MW-3 (B-35), MW-4 (B-36), and MW-5 (B-38)) were installed along the northern, eastern, and western property lines of the Site during the Phase I Soil Boring program on October 27 & 28, 2005 to evaluate the potential for groundwater contaminants to migrate off-site. These wells were developed on October 31, 2005 and sampled on November 2, 2005. However, due to a laboratory error, the samples were not analyzed within holding time. As such, these wells were resampled on November 21, 2005. Well sampling logs for both sampling events are included in Appendix 4.

The remaining four (4) shallow overburden groundwater monitoring wells (designated MW-7 (B-43), MW-8 (B-49), MW-9 (B-44), and MW-10 (B-47)) were installed within and immediately northwest of the Site building on March 30, 2006 as part of the second phase of soil borings completed at the Site. These wells were developed on April 3, 2006 and sampled on April 5, 2006.

[Note: Monitoring Well MW-1 was not sampled as part of the RI since this well was damaged sometime between the August 2002 Phase II ESA and the RI work. The replacement of this well will be addressed in the remedial design.]

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2.3 Deep Soil and Groundwater Evaluation

Due to the potential for the denser chlorinated solvents to 'sink', a deep soil and groundwater evaluation was conducted in order to evaluate the vertical extent of contamination at the Site.

<u>Methodology</u>

The deep soil and groundwater evaluation was implemented by advancing one deep soil boring directly adjacent to the concrete wastewater holding tank source area (i.e., the area with the highest detected concentrations of CVOCs). The location of the deep boring is illustrated on Figure 4. [Note: The Supplemental RI Work Plan indicated that two deep soil borings would be advanced; however, based on field observations the second deep boring did not appear necessary. As such, LaBella obtained verbal approval from NYSDEC to only advance the one soil boring and monitoring well.]

A truck-mounted rotary drill rig was used to advance 6.25-inch ID hollow stem augers (HSAs). Split-spoon soil samples were collected during advancement of the soil boring to evaluate the soil types for any confining layers and for evidence of impairment. Soil samples were collected on a worst-case basis as determined by evidence of impairment (i.e., PID readings, visual and olfactory observations). A LaBella field geologist was on-site to continuously assess soils from the boring. Samples were kept on ice in coolers and submitted to Paradigm for analysis.

Subsequent to terminating the boring (based on field observations and NYSDEC approval), a "nested pair" of two (2) groundwater monitoring wells was installed within the resulting borehole in order to evaluate potential impacts to groundwater at several depths. The intent of this work was to evaluate for dense NAPL (DNAPL) and/or significant contamination at depth that would warrant remedial actions.

Subsequent to installation, the wells were developed. Well development consisted of purging the wells while collecting groundwater quality field indicator parameters (i.e., pH, temperature, specific conductivity, and turbidity). Well development continued until field indicator parameters stabilized for three consecutive readings and at least 3 well volumes were purged. *Monitoring Well Development Logs* are included in Appendix 3.

Prior to sampling, the wells were allowed to equilibrate for a minimum of at least 48 hours. Groundwater sampling consisted of implementing passive diffusion bag samplers in order to discretely sample from the well screen interval. Upon retrieval, the diffusion bag samplers were opened, and the contained water was transferred to laboratory supplied bottlewear. Groundwater samples were tested for TCL VOCs using USEPA Method 8260B. The samples were preserved with hydrochloric acid (HCL) and ice and shipped to STL.

Fieldwork

The deep boring and monitoring well installation work was conducted between February 20 and 22, 2006. Headspace PID readings were taken in ziplock bags. Since the previous work conducted at the Site (i.e. soil borings B-2 and B-26) had generally characterized the 'top' 15-feet of soil at this location, one split-spoon soil sample was collected every 5-feet for the initial 15-feet. Continuous split-spoon soil sampling was conducted from 15 feet to 42 feet after which depth split-spoon soil samples were again collected every 5 feet to a depth of 70 feet BGS due to sampling complications from 'running sand'.

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Split-spoon soil samples were also collected continuously from 70 feet to 74 feet at which time the boring was terminated. The boring was terminated since evidence of significant impairment was not encountered and the soil type appeared to be changing. Specifically, soil type from the ground surface to approximately 70 feet predominantly consisted of sand; however, at 70 feet BGS the predominant soil type consisted of SILT with little very fine-grained Sand at 70-feet BGS followed by coarse to fine-grained GRAVEL and SILT & CLAY at 71-feet BGS. In addition, at 73.1 feet BGS, shale was encountered. Due to this apparent confining layer and the absence of significant impacts, the boring was terminated.

Soil samples from the deep boring were collected to evaluate for significant impacts to the deep soil that would require remedial action. A list of the soil samples submitted to Paradigm for analysis is provided in Table 5 below along with the PID readings for each two-foot interval sampled.

Table 5

Deep Soil Boring
PID Readings & Analytical Testing

, ,							
MW-6	PID Reading	Analytical					
4'-6'	4.6	NA					
8'-10'	81.0	NA					
14'-16'	7.9	TCL VOCs (14'- 14.7')					
16'-18'	8.2	NA					
18'-20'	0.2	NA					
20'-22'	0.5	TCL VOCs (20'- 21.1')					
22'-24'	0.0	NA					
24'–26'	0.3	NA					
26'-28'	0.0	NA					
28'-30'	0.0	NA					
30'-32'	0.0	NA					
32'-34'	0.0	NA					
34'-36'	0.0	NA					
36'-38'	0.0	NA					
38'-40'	0.0	NA					
40'-42'	0.0	NA					
45'-47'	0.0	NA					
50'-52'	0.0	NA					
55'-57'	0.0	NA					
60'-62'	0.3	NA					
65'-67'	3.8	TCL VOCs (65'- 66.4')					
70'-72'	1.8	NA					
72'-74'	0.1	NA					

Notes:

PID Readings collected using a MiniRae 2000. TCL VOCs = Target Compound List (TCL) VOCs tested via USEPA Method 8260B.

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As shown in Table 5, elevated PID readings, defined as greater than 1 ppm, were not detected between 18 feet and 62 feet BGS. PID readings slightly above background was detected at depths of 65 feet to 67 feet and 70 feet to 72 feet. Soil samples from three depths including 65 feet to 66.4 foot interval were submitted to Paradigm for analytical testing in order to evaluate the vertical extent of PCE contamination greater than SCGs.

The deep groundwater monitoring well cluster consisted of installing two 1-inch groundwater monitoring wells. The 'deep' well (designated MW-6D) consisted of a 10 feet of 1-inch ID Schedule 40, PVC 0.010-inch slotted screened section installed between 62 feet and 72 feet in depth and the 'medium depth' well (designated MW-6M) consisted of 10 feet of 1-inch ID Schedule 40, PVC 0.010-inch slotted screen section installed between 30 feet and 40 feet in depth. Each well screen was manifolded to an appropriate length of 1-inch ID Schedule 40 PVC well riser to complete the well. The annulus around the screened sections was sandpacked with size 00N quartz sand to approximately 2-feet above and below each screened section. The annulus between the sand packs (i.e., between approximately 42.5 feet and 60 feet BGS) was filled with a bentonite chip seal. [Note: The bentonite seal between the well screen/sand pack sections was placed in order facilitate two discrete groundwater sampling depths.] In addition, the annulus above the upper sand pack was sealed with bentonite chips from about 25.2 feet to 28 feet BGS. A cement/bentonite grout was used to finish the wells along with a flush mount well cover. A Well Construction Log for MW-6M and MW-6D is included in Appendix 2.

The deep monitoring wells were developed on February 23, 2006 and allowed to equilibrate for at least 48 hours prior to sampling. Prior to development, the wells were evaluated for DNAPL using a Heron H.01L interface meter. No NAPL was noted with the Heron meter or observed in purged water during development. The groundwater sampling for these deep monitoring wells was accomplished by using passive diffusion bag samplers (24" long, 1.25" wide) in order to obtain discrete samples from two depths (33" and 65" BGS). As such, when installed the prefilled and weighted diffusion bag samplers were lowered into the monitoring wells using measured/pre-cut nylon rope in order to set the diffusion bag into the middle of the screened section. The samplers were deployed on February 27, 2006 and retrieved on March 13, 2006. The liquid within the diffusion bags was transferred to laboratory supplied 40 milliliter (ml) sampling bottles and preserved with HCL acid. The bottles were sent under chain-of-custody control in ice packed coolers to STL for analytical testing and the results were provided in ASP Category B deliverables data package.

2.4 Soil Gas Evaluation

The purpose of the soil gas evaluation was to determine if the impacted subsurface soils and groundwater have impacted soil gas on the adjacent property and was used as part of the Qualitative Exposure Assessment. The RI Work Plan initially proposed that soil gas sampling points be installed in the same areas as shallow monitoring wells MW-2, MW-3 and MW-4; however, based on the work completed as part of this RI the locations of the soil gas sampling points were revised. This modification to the sampling points was discussed with NYSDEC and NYSDOH in a January 6, 2006 meeting. The final approved soil gas sampling locations (designated SG-15 through SG-17) installed along the western property line and on the parcel adjacent to the west of the Site are shown on Figure 4.

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Methodology

The soil gas sampling points were installed by TREC using direct-push Geoprobe equipment. Each soil gas sampling point was installed to approximately 4 feet BGS and utilized stainless steal sampling probes with ¾-feet screened sections between 3.25 feet and 4 feet BGS. The screened sections were backfilled with glass beads to create a sampling zone. The soil vapor probes were sealed above the sampling zone with a bentonite slurry to the protective casings which were grouted in place to minimize infiltration of water or outdoor air and to prevent damage to the soil gas point. Soil Boring Logs for the three soil vapor sampling points are included in Appendix 1. Soil Gas Sampling Probe Construction Logs are included in Appendix 5.

Subsequent to installation, the probes were allowed to equilibrate for at least 24 hours prior to purging and sampling. Purging consisted of removing one to three probe volumes (i.e., the volume of the sample probe and riser tube/pipe) in order to ensure that the samples collected were representative of soil gas conditions. During purging of the sample point, a tracer gas evaluation was also conducted. The tracer gas evaluation was used to verify the integrity of the soil gas probe seal. Butane was the tracer gas used for this study. An enclosure was constructed around the soil gas sampling point (PVC piping) and sealed into the bentonite seal within the flush mount casing. Subsequently, the enclosure was enriched with the tracer gas. The purged soil gas was then tested for the presence of the tracer gas.

The soil gas samples were collected using 1-liter summa canisters with laboratory calibrated regulators to ensure the flow rate during purging did not exceed 0.02 liters per minute (L/min) in order to minimize outdoor air infiltration. The Summa Canister were connected to the soil gas sampling point via polyethylene tubing. The soil gas samples were collected over the same general time period and in the same manner at all locations to minimize possible discrepancies.

Subsequent to the completion of soil gas sampling, the samples were sent under chain-of-custody control to Paradigm for testing. The samples were tested for VOCs using USEPA Method TO-15.

At the time of sampling, the following information was documented on sampling log sheets (included in Appendix 6):

- weather conditions (e.g., precipitation, outdoor temperature, barometric pressure, wind speed and direction) should be noted for the past 24 to 48 hours;
- any pertinent observations should be recorded, such as odors and readings from field instrumentation;
- sample identification;
- date and time of sample collection;
- sampling depth;
- identity of sampler(s);
- sampling methods and devices;
- purge volumes;
- volume of soil vapor extracted;
- the vacuum before and after samples are collected;
- apparent moisture content (dry, moist, saturated, etc.) of the sampling zone; and,
- chain-of-custody protocols used to track samples from sampling point to analysis.

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Fieldwork

The three soil gas sampling points (designated SG-15, SG-16, and SG-17) were installed on March 30, 2006. The locations of the soil gas sampling points are shown on Figure 4. The soil gas sampling points were sampled on May 25, 2006. Initially, the tracer gas evaluation was conducted in order to confirm a representative sample. The tracer gas used was butane gas. The sampling enclosure was enriched with butane prior to purging the soil gas probe. A PID was used to evaluate for tracer gas (or other constituents) in the purged soil gas. [Note: Prior to conducting the tracer gas evaluation, the PID was tested for reaction to the tracer gas in order to ensure the PID would register for butane. PID readings of 45 to 109 ppm were observed during this test.] The purged soil gas did not detect PID readings greater than 0.6 ppm. As such, the seal appeared to be adequate and the soil gas sampling proceeded.

Each soil gas sample was collected over a 6-hour period using the laboratory supplied, pre-calibrated regulators. Vacuum gauges installed on each Summa Canister were monitored to ensure that the sample was collected slowly over the sampling period. Two field problems occurred during the soil gas sampling work. Both problems were rectified and sampling completed. The first problem encountered was the regulator for sample SG-16 did not draw for the first 90 minutes of sampling. LaBella contacted the laboratory and it was determined that the regulator should be removed, cleaned, and replaced. Subsequent to completing this, the canister/regulator began operating properly and the sample was collected. The second problem was the regulator for sample SG-17 did not appear to be working partially through the sampling based on monitoring of the vacuum gauge. Specifically, the vacuum gauge did not show an increase in pressure for three consecutive readings over a 30-minute interval. As such, the laboratory was contacted and a replacement Summa Canister and regulator with vacuum gauge was mobilized to the Site. Since this sample was started at a later time, this sample was collected over a four hour period and no problems were noted with this re-sample.

2.5 Quality Assurance/Quality Control

The quality assurance/quality control (QA/QC) procedures identified in the Work Plan were implemented during the fieldwork completed as part of the RI. The general QA/QC procedures included: drilling techniques; soil, groundwater and soil gas sampling procedures; field equipment calibration procedures; decontamination procedures, etc.

In addition to the field procedures/techniques, QA/QC testing was also conducted by the laboratory. Specifically, four trip blank samples were submitted for analytical testing as part of the soil and groundwater sampling. The results of the trip blank samples are included with the laboratory data packages. VOCs were detected in three of the four trip blank samples; however, the concentrations detected were only slightly above the laboratory detection limits or estimated values that were below the reported laboratory detection limits. As such, it does not appear that the results of the trip blank data affect the reported laboratory data for the soil and groundwater samples.

The laboratory reports were provided in Analytical Services Protocol Category B Deliverables. The laboratory data is being submitted as a separate package.

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2.6 Investigation Derived Waste

The soil boring and groundwater sampling work resulted in generating approximately three (3) drums of soil cuttings and two (2) drums of purge waters from well development and purging activities. The soil cuttings and purge waters were disposed of as part of the Interim Remedial Measure (IRM) soil removal.

3.0 Physical Characteristics of Site

3.1 Geology

The geology of the Site generally consists of medium to fine-grained SAND beneath the surface materials (i.e., topsoil, asphalt or building floor slab) for the uppermost 4 feet, with medium to very fine-grained SAND with some to no Silt and trace amounts of Clay and Gravel between 4 feet and up to 12 feet BGS. Below 12 feet BGS soils predominantly consisted of medium to very fine-grained SAND with some to no Silt with occasional Gravel until 70 feet BGS at which depth SILT followed by Coarse to fine-grained GRAVEL and SILT & CLAY were encountered. Shale mixed with fine-grained SAND with little Silt was encountered from 72.4 feet BGS to 74-feet BGS at which depth the boring was terminated.

3.2 Hydrogeology

The shallow overburden groundwater flow direction was initially evaluated based on the monitoring wells installed as part of the first phase of soil boring. The groundwater flow direction was based on static water levels collected from surveyed monitoring wells MW-2 through MW-5 on November 2, 2005 and indicated a groundwater flow to the northwest (i.e., from the Site towards the rear of the 1598 Penfield Road parcel). The static water levels, casing well elevations and calculated groundwater elevations are provided in Appendix 7. Subsequent to installation of the second phase of borings/wells, a complete round of static water levels was collected on April 28, 2006 to further evaluate the groundwater flow direction based on all eight (8) shallow overburden wells installed at the Site as part of the RI work (i.e., MW-2 through MW-5 and MW-7 through MW-10). [Note: The groundwater elevation for MW-10 appeared anomalously low and as such, this groundwater elevation was not used in the groundwater flow contouring.] The static water levels and calculated groundwater elevations are provided in Appendix 7. The groundwater flow direction based on the April 28, 2006 data generally confirmed the groundwater flow direction to the northwest with a slight northern trend also. Groundwater contours for the November 2, 2005 and April 28, 2006 data are illustrated on Figure 6.

3.3 Demography, Land Use and Water Use

The Site is surrounded by commercial properties and the area is generally a commercial area. However, a residential townhouse complex is located to north-northwest beyond the immediately adjacent parcels. The area is zoned for commercial use and drinking water for the area is supplied by the municipality. Irondequoit Creek (a surface water) is located over 600 feet to the northwest and west of the Site.

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4.0 Nature and Extent of Impact

The nature and extent of impacts is discussed in this section based on the analytical data and field observations. The nature and extent of impacts are separated into shallow soil impacts (vadose zone and saturated zone), shallow groundwater impacts, deep soil impacts, deep groundwater impacts and soil gas impacts.

4.1 Shallow Soil Sample Results

As shown in Table 4 in Section 2.1, (13) soil samples collected for the first phase of shallow soil borings were analyzed for TCL VOCs using USEPA Method 8260B. The intent of these soil samples was to evaluate the horizontal and vertical extent of soil impacted with PCE and breakdown products. Soil samples were submitted from several "worst case" locations to evaluate for potential hazardous waste and from areas anticipated to be below the hazardous waste criteria and/or SCGs. The sampling results for total VOCs were compared to the SCGs identified in Section 1.4. In addition, to the samples tested for total VOCs, six soil samples were also tested for Toxicity Characteristic Leachate Procedure (TCLP) VOCs in order to evaluate for hazardous waste characteristics and for 'Contained-In Criteria'. Table 6 shows the results from the initial sampling and these results are illustrated on Figure 5.

Table 6

Phase I Shallow Soil Samples Summary of Detected Volatile Organic Compounds Results in micrograms per Kilogram (ug/Kg) or about parts-per-billion (ppb)

					_	Samp	le Location and	Depth						Subpart 375-6 Remedial Program	Subpart 375-6	
Parameter	B-21	B-22	B-26	B-27	B-27	B-28	B-28	B-29 ⁺	B-31	B-33 ⁺	B-39	B-40	B-41	Soil Cleanup Objectives for the Protection of Public	Remedial Program Soil Cleanup Objectives for the	Hazardous Waste Criteria Toxicity Characteristic ⁽²⁾
	(8'-9')	(8.8'-9.3')	(9'-10')	(8'-9')	(12'-13')	(10'-11')	(12'-13')	(8'-10.6')	(9'-10')	(10'-11')	(10'-11.2')	(9'-10')	(9'-10')	Health: Commercial Use (1)	Protection of Groundwater ⁽¹⁾	Characteristic
Total Volatiles*				•										JI		
Tetrachloroethene (PCE)	4,800 D	4,300 D	1,400 D	34,000 D	810 D	43,000 D	54,000 E	84 DJ	150 D	60 DJ	7,900 D	460 D	530 D	150,000	1,300	N/A
Trichloroethene (TCE)	60	32	69	53	17	63	38	15	7 DJ	76	4,500 D	140	170	200,000	470	N/A
cis-1,2-Dichloroethene (DCE)	41	7	16	6	6	33	14	46	<6	34	2,100 D	40	75 D	500,000	250	N/A
trans-1,2-DCE	<5	<5	<5	<6	<6	<6	<6	<6	<6	2 J	86	5 J	2 J	500,000	190	N/A
Vinyl Chloride (VC)	<11	<11	<10	<12	<12	<11	<11	<12	<11	<12	50	<12	<12	13,000	20	N/A
1,1-DCE	<5	<5	<5	1 J	<6	<6	<6	<6	<6	<6	6	<6	<6	500,000	330	N/A
1,1,1-Trichloroethane (TCA)	<5	<5	<5	31	<6	<6	<6	<6	<6	<6	<6	<6	<6	500,000	680	N/A
Carbon Disulfide	1 J	13	9	<6	6	2 J	2 J	3 J	<6	<6	4 J	<6	<6	NL	NL	
Methylcyclohexane	<5	1 J	<5	<6	<6	<6	1 J	<6	<6	<6	<6	<6	<6	NL NL	NL NL	N/A N/A
Ethylbenzene	<5	<5	<5	3 J	<6	<6	<6	<6	<6	<6	<6	<6	<6	390,000	1,000	N/A N/A
Isopropylbenzene	<5	<5	<5	25	<6	3 J	11	<6	<6	<6	<6	<6	<6	NL	NL	N/A
Total Xylenes	<16	<16	<16	9 J	<18	<17	5 J	<18	<17	<17	4 J	<18	<18	500,000	1,600	N/A
Methylene Chloride	<5	<5	<5	<6	<6	<6	<6	<6	25 DJ	<6	<6	6	<6	500,000		
TCLP Volatiles**									20 00	.0	٠٠	<u> </u>	~0	300,000	50	N/A
Tetrachloroethene (PCE)	NA	400	NA	28,000	83	960	2,800	NA	NA	NA	NA	65	NA	N/A	N/A	700
Trichloroethene (TCE)	NA	<50	NA	5.8 J	<50	<50	<50	NA	NA	NA	NA	6.6 J	NA NA	N/A N/A	N/A	500

VOC analysis by United States Environmental Protection Agency (USEPA) Method 8260B

- = 6 New York Code of Rules and Regulations (NYCRR) Subpart 375-6 Remedial Program Soil Cleanup Objectives
- (2) = Characteristic of Hazardous Waste Contaminant Concentration for Toxicity listed in 6 NYCRR Part 371.3 (e), used for disposal criteria.
- = Sediment action level listed in NYSDEC TAGM 3028 "Contained-In Criteria" dated November 30, 1992, used for disposal criteria.
- = Groundwater action level listed in NYSDEC TAGM 3028 "Contained-In Criteria" dated November 30, 1992, used for disposal criteria.
- =Sample results in Micrograms per Kilogram ($\mu g/Kg$) or Parts per Billion (ppb).
- =Sample results in micrograms per Liter (µg/L) or ppb.
- TCLP = Sample tested for VOCs subsequent to a Toxicity Characteristic Leachate Procedure (TCLP) extraction.
- NA = Sample not analyzed.
- = Constituent not detected above the reported laboratory detection limit shown.
- = Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- =This flag is used when the analyte is found in the associated blank, as well as in the sample
- = This flag identifies all compounds identified in an analysis at the secondary dilution factor.
- = This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- NL = A value is not listed in NYCRR Subpart 375-6 for these compounds.
- 4,800 = Bold type denotes a detected concentration that exceeds Subpart 375-6 RPSCOs for the Protection of Groundwater.
 - = Green highlight denotes a concentration that exceeds the Characteristic Hazardous Waste Contaminant Concentration for Toxicity.
 - = Sample analyzed outside of the VOC holding time.

As shown in Table 6, nine (9) of the thirteen (13) Phase I soil samples tested for total VOCs detected concentrations of VOCs greater than their associated RUSCOs for the Protection of Groundwater. As such, it is anticipated that these areas will require evaluation as part of any overall site remedy. Three (3) soil samples collected from borings B-27 (8'-9') and B-28 (10'-11' and 12'-13'), which were advanced approximately 5 feet and 10 feet away from the concrete holding tank were also tested for TCLP VOCs and indicated concentrations of PCE that exceed the characteristic hazardous waste criteria. A soil sample collected deeper in B-27 (12'-13') detected significantly lower total concentrations of VOCs and the TCLP results indicated that soil from this depth is below the hazardous waste criteria. [Note: The soil samples from soil boring B-28 indicated an increase in the concentrations of CVOCs between samples from 10'-11' and 12'-13'; however, PID readings were decreasing with depth. Due to insufficient recovery, a sample from below 13' was not obtained for analytical testing.] Two other soil samples (B-22 [8.8'-9.3'] and B-40 [9'-10']) were submitted for TCLP testing and indicated that these areas were not considered hazardous waste. Due to an elevated concentration of PCE in soil boring B-39, the NYSDEC requested that additional soil borings be advanced to the south and west of B-39. As such, the second phase of soil borings was implemented.

The second phase of soil borings included the submittal of seven (7) additional soil samples for analysis for total TCL VOCs and one of these samples (B-44 (1.3'-2.3')) being tested for TCLP VOCs. The results of the second phase soil borings appeared consistent with the field observations and PID readings with the exceptions of two soil samples, B-44 (1.2'-2.3') and B-52 (9.8'-10.6'). The PID readings for these soil samples did not appear to be consistent with the laboratory data. As such, additional samples from in proximity to these sample locations/depths were collected (B-44R [1'-2'] and B-52R [8'-9']) and tested in order to re-evaluate the results. [Note: A Data Usability Summary Report (DUSR) was not completed for samples B-44R [1'-2'] and B-52R [8'-9'].] As such, a total of nine (9) soil samples were analyzed and the sample results for the nine soil samples from the second phase borings are summarized in Table 7 and illustrated in Figure 5.

Samples collected from B-29 and B-33 (as shown on Table 6) were analyzed outside of the VOC holding time.

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Table 7

Phase II Shallow Soil Samples Summary of Detected Volatile Organic Compounds Results in micrograms per kilogram (ug/Kg) or about parts-per-billion (ppb)

			Subpart 375-6 Remedial Program Soil Cleanup	Subpart 375-6 Remedial Program							
Parameter	B-44	B-44 R ⁺	B-44	B-46	B-48	B-51	B-52	B-52R ⁺	B-54	Objectives for the Protection of Public Health: Commercial Use (ug/Kg) ⁽¹⁾	Soil Cleanup Objectives for the Protection of Groundwater (ug/Kg) ⁽¹⁾
	(1.3'-2.3')	(1'-2')	(12'-14')	(8'-9')	(12'-13.9')	(8'-9')	(9.8'-10.6')	(8'-9')	(12'-14.6')		
Total Volatiles*								W/V-x-			
Tetrachloroethene (PCE)	130 R	245	490 E	140 D	25	26	16,000 D	3,140	2 Ј	150,000	1,300
Trichloroethene (TCE)	<5 R	<8.67	140 D	270 D	8	5 J	2,100 D	881	2 J	200,000	470
cis-1,2-Dichloroethene (DCE)	<5 R	NA	130	380 D	26	17	870 D	NT	21	500,000	250
trans-1,2-DCE	<5 R	<8.67	2 Ј	42	<6	<6	32	<178	3 J	500,000	190
1,1-DCE	<5 R	<8.67	<6	5 J	<6	<6	2 Ј	<178	<6	500,000	330
1,1,2-TCA	<5 R	<8.67	<6	3 Ј	<6	<6	<6	<178	<6	NL	NL
Acetone	<27 R	NA	<28	<29	<29	32	<32	NT	<32	500,000	50
Carbon Disulfide	<5 R	NA	<6	<6	1 J	<6	<6	NT	<6	NL	NL
TCLP Volatiles**	MANUEL		***************************************		1						
Tetrachloroethene (PCE)	<50 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Trichloroethene (TCE)	<50 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Notes:

VOC analysis by United States Environmental Protection Agency (USEPA) Method 8260B

- (1) = 6 New York Code of Rules and Regulations (NYCRR) Subpart 375-6 Remedial Program Soil Cleanup Objectives
- (2) = Sediment action level listed in NYSDEC TAGM 3028 "Contained-In Criteria" dated November 30, 1992, used for disposal criteria.
- * =Sample results in Micrograms per Kilogram (μg/KG) or Parts per Billion (PPB).
- NA = Sample not analyzed.
- NT = Constituent not tested for.
- = Constituent not detected above the reported laboratory detection limit shown.
- Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data Indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- B =This flag is used when the analyte is found in the associated blank, as well as in the sample
- D = This flag identifies all compounds identified in an analysis at the secondary dilution factor.
- = This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- NL = A value is not listed in Subpart 375-6 RPSCOs for these compounds.
- **4,800** = Bold type denotes a detected concentration that exceeds Subpart 375-6 RPSCOs for the Protection of Groundwater.
- R = This flag indicates the data was rejected by the data usability summary report preparer.
- = Indicates that a data usability summary report was not completed on this sample.

As shown on Table 7, six (6) of the nine (9) soil samples did not detect concentrations of total VOCs above the NYSDEC RUSCOs for the Protection of Groundwater. The three (3) samples in which VOCs were detected at concentrations greater than the RUSCOs for the Protection of Groundwater were B-46 (8'-9'), B-52 (9.8'-10.6') and the resample of B-52 (i.e., B-52R [8'-9']). The PID readings and field observations from this boring did not appear to correspond with the initial sampling. Borings B-44 and B-45 noted PID readings greater than 1,000 ppm up to 6 feet in depth; however, the concentration of total VOCs from B-44 1'-2' did not detect concentration of total VOCs above the RUSCOs. In addition, this sample also did not detect concentrations of VOCs subsequent to a TCLP extraction at levels above the reported laboratory method detection limits.

Based on the shallow soil sampling results, the extent of soil exceeding characteristic hazardous waste criteria has been defined. This area appears to be limited to the area around the concrete holding tank specifically, in the area between the wastewater holding tank, B-1, B-8, B-27 and B-28. The extent of soil exceeding hazardous waste is approximately 800 square feet and is illustrated on Figure 8. The vertical extent of the area of hazardous waste has been estimated based on PID readings and soil sampling results and appears to range from approximately 4 feet to 12 feet in depth in the immediate area of the concrete holding tank to approximately 6 feet to about 13 feet to 14 feet in depth to the north and east of the holding tank.

In addition to the area of soil exceeding characteristic hazardous waste criteria, the extent of soil exceeding SCGs for the Site has also been generally defined, and is illustrated on Figure 8. The areas of soil exceeding SCGs are generally limited to within the saturated zone, with the potential exception of vadose zone soil in the area of the former PCE Still. Although laboratory data indicates only low concentrations of PCE in the vadose zone soil around the former PCE Still area, it is anticipated that this area would require remedial work in the event this area is disturbed in the future. The remaining areas of soil impacts above SCGs are within the saturated zone and will be addressed as part of any groundwater remediation.

4.2 Shallow Groundwater Sample Results

The shallow groundwater sampling consisted of installation and sampling of eight (8) new monitoring wells and collecting one (1) groundwater sample from a temporary well within boring B-52R. The sampling results are summarized on Table 8 and are compared to 6 NYCRR Part 703 Groundwater Standards. The shallow groundwater results are also illustrated on Figure 6.

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Table 8

Shallow Groundwater Samples Summary of Detected Volatile Organic Compounds Results in micrograms per liter (ug/L) or about parts-per-billion (ppb)

						V	Vell Location an	d Sampling Da	ite						NYCRR Part 703
Parameter	MW-1 ⁺	MV	W-2	M	W-3	MV	W-4	MV	W-5	MW-7	MW-8	MW-9 ⁺	MW-10	B-52R-GW ⁺	Groundwater Standards and
	8/28/2002	11/2/2005*	11/21/2005	11/2/2005*R	11/21/2005	11/2/2005*	11/21/2005	11/2/2005*	11/21/2005	4/5/2006	4/5/2006	4/5/2006	4/5/2006	4/27/2006	Guidance Values $\left(\text{ug/L}\right)^{(1)}$
Tetrachloroethene (PCE)	142,000	2,500	1,900 D	1.2 J	<1.0	<1.0	<1.0	2.1	1.9	<1.0	29	4,600	92	1,340	5
Trichloroethene (TCE)	4,840	1,200	900 D	<1.0	<1.0	<1.0	<1.0	1.2	1.1	<1.8	26	5,300	62	1,240	5
cis-1,2-Dichloroethene (DCE)	4,060	2,100	1,400 D	0.58 J	<1.0	<1.0	<1.0	2.5	2.2	800 D	850	4,900	310	<20.0	5
trans-1,2-DCE	<2,000	16	10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10	28	76 D	7.4	<20.0	5
Vinyl Chloride (VC)	<2,000	25	21	0.76 J	<1.0	<1.0	<1.0	1.1	1.4	130	94	15	84	<20.0	2
1,1-DCE	<2,000	3.6	2.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	14	0.76	<20.0	5
Toluene	<2,000	11	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.58	1.6	<1.0	<20.0	5
Total VOCs	150,900	5,855.6	4,235	2.54 J	None Detected	None Detected	None Detected	6.9	6.6	141.7	1,027.58	14,907	556.16	2,580	Not Applicable

Notes:

VOC analysis by United States Environmental Protection Agency (USEPA) Method 8260B

(1) = Ambient Groundwater Standards or Guidance Values referenced in New York Code of Rules and Regulations (NYCRR) Part 703.

900 = Bold denotes a concentration that exceeds the Gourndwater Standards or Guidance Values referenced in NYCRR Part 703

- < 1.0 = Compound not detected above the reported laboratory detection limit.
- * = The laboratory analyzed the 11/2/2005 samples outside of their holding times, therefore wells were resampled on 11/21/2005.
- + indicates a data usability summary report was not completed for this sample.
- D = This flag identifies all compounds identified in an analysis at the secondary dilution factor.
- J = Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater th
- R laboraotry results for well MW-3 were rejected for the 11/2/2005 sample

As shown on Table 8, concentrations of PCE or breakdown products that exceed the 6 NYCRR Part 703 Groundwater Standards were detected in seven (7) of the nine (9) groundwater samples collected. The detected concentrations of VOCs, if any, in monitoring wells MW-3, MW-4, and MW-5 were below their respective 6 NYCRR Part 703 Groundwater Standards. These wells appear to be upgradient and/or cross gradient of the identified source areas at the Site. Groundwater samples from MW-1 (from the 2002 Phase II ESA investigation), MW-2, MW-9, and B-52R-GW detected significantly elevated concentrations of PCE and breakdown products. Monitoring wells MW-7, MW-8, and MW-10 also detected elevated concentrations that appear to require remedial action. Monitoring wells MW-2 and MW-7 are located within approximately 10 feet of the northwest property line. Each of the monitoring wells with detected VOCs indicate degradation of the PCE is occurring. This is based on the concentrations of the breakdown products TCE and 1,2-DCE being at similar and/or higher concentrations than PCE (the apparent contaminant source). In addition, although concentrations of CVOCs in groundwater over a wide area exceed SCGs, the concentrations of CVOCs significantly decrease with distance from the source areas. Specifically, the concentration total CVOCs in the former PCE Still source area (MW-9) decrease from approximately 15,000 ppb to 2,500 ppb in MW-10 which is approximately 25 feet downgradient of MW-9.

Groundwater samples collected from wells MW-2, MW-2DL, MW-4, MW-5, and Trip Blank during the 11/2/2005 sample event were analyzed outside of their holding time by the laboratory. Therefore the wells were resampled on 11/21/2005. Also, a DUSR was not completed for sample results MW-1 and B-52R-GW included in Table 8.

4.3 Deep Soil and Groundwater Sample Results

The depth of detected soil impacts was evaluated during the advancement of the deep soil boring with field observations including PID readings and confirmed with analytical testing. A summary of the detected TCL VOCs is provided in Table 9 below and shown on Figure 7.

Table 9

Deep Soil Boring

Summary of Detected Volatile Organic Compounds (ug/Kg)

		Sample Depth	l	Subpart 375-6 RUSCOs for the Protection of Public	Subpart 375-6 RUSCOs for the	
Constituent	14' – 14.7'	14' – 14.7' 20' – 21.1' 65' – 66.4'		Health: Commercial Worker Receptor (1)	Protection of Groundwater (1)	
Tetrachloroethene (PCE)	ND<18.2	ND<7.91	ND<7.71	150,000	1,300	
Trichloroethene (TCE)	ND<18.2	ND<7.91	ND<7.71	200,000	470	
cis-1,2-Dichloroethene (DCE)	164	ND<7.91	ND<7.71	500,000	250	
trans-1,2-DCE	ND<18.2	ND<7.91	ND<7.71	500,000	190	
Vinyl Chloride	ND<18.2	ND<7.91	ND<7.71	13,000	20	

Notes:

VOC analysis by United States Environmental Protection Agency (USEPA) Method 8260B
(1) 6 New York Code of Rules and Regulations (NYCRR) Subpart 375-6 Remedial Program Soil Cleanup Objectives
<18.2 = denotes constituent was not detected at a concentration above the reported laboratory detection limit.

NL = denotes a value is not listed for this contaminant.

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As shown in Table 9, VOCs were not detected above the reported laboratory method detection limits in the three deep soil samples analyzed, with the exception of one CVOC (cis-1,2-DCE) in the soil sample from 14 feet to 14.7 feet BGS. However, the detected concentration of cis-1,2-DCE was below its associated RUSCOs for the Protection of Public Health: Commercial Worker Receptor and the RUSCO for the Protection of Groundwater. Based on these results, it does not appear that the PCE contamination has impacted soil above SCGs beneath approximately 15 feet BGS.

In addition to the soil evaluation, groundwater samples were collected from two discrete depths in order to evaluate the depth of groundwater that may exceed SCGs and/or require remedial actions. A summary of the detected VOCs is provided in Table 10 below and shown on Figure 7.

Table 10

Deep Groundwater Samples

Summary of Detected Volatile Organic Compounds (ug/L)

	Sample	e Depth	6 NYCRR Part 703
Constituent	6M ⁺ (30'-40')	6D ⁺ (62'-72')	Groundwater Standards
PCE	19	46	5
TCE	2.3	3.1	5
cis-1,2-DCE	4.4	ND<1.0	5
trans-1,2-DCE	ND<1.0	ND<1.0	5
VC	ND<1.0	ND<1.0	2
Acetone	2.5 J	ND<5.0	50
Chloroform	4.0	0.82 J	7

Notes:

ND < 18.2 = denotes constituent was not detected at a concentration above the reported laboratory detection limit. J = denotes an estimated concentration.

Bold Type = denotes a concentration that exceeds the 6 NYCRR Part 703 Groundwater Standards

† denotes a data usability summary report was not completed for the sample

As shown above, groundwater from the two deep samples detected low concentrations of PCE and other VOCs; however, only PCE was detected at concentrations above its associated 6 NYCRR Part 703 Groundwater Standard. Although the detected concentrations of PCE exceed the groundwater standards, these concentrations are significantly lower than the shallow overburden groundwater and do not appear to represent a remedial concern at the Site. A DUSR was not completed for the samples included in Table 10.

4.4 Soil Gas Sampling Results

The soil gas sampling conducted along the property line and on the adjacent property to the northwest was completed as part of the Qualitative Exposure Assessment. The soil gas sampling results are summarized in Table 11 and illustrated on Figure 7.

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Soil Vapor Testing
Summary of Detected Volatile Organic Compounds (VOCs)
Results in micrograms per cubic meter (ug/m3)

Table 11

Sample ID / Parameter	SG-15		SG-16		SG-17 (Off-Site)	
Chlororform	14.9		1.5	7	1.27	
1,2-Dichloropropane	0.989		ND<0.67	3	ND<0.751	
Methylene Chloride	27.8	ΕВ	17.	5 B	8.90	В
Tetrachloroethene	ND<0.939		8.4	5	<1.10	
1,1,1-Trichloroethane	1.85		ND<0.79	9	ND<0.885	
Benzene	11.1		9.7	3	1.77	
Ethylbenzene	2.11		2.2	9	2.58	
Toluene	14.5		15.	1	13.4	
m,p-Xylene	6.20		7.1	1	7.11	В
o-Xylene	2.46		2.5	4	2.69	
Styrene	1.34		1.10	3	1.51	
1,4-Dichlorobenzene	2.76		3.1	5	1.84	
Acetone	222	ΕB	26	1 E E	377	ΕВ
2-Butanone	52.4	Е	54.	3 E	69.5	E
2-Hexanone	ND<0.573		ND<0.60	5	1.92	
4-Methyl-2-Pentanone	1.51		2.8	3	1.85	
Carbon Disulfide	2.56	В	6.1	5 B	4.10	В
Freon 11	ND<0.779		2.2	1	1.74	

<0.678 = denotes constituent not detected above the reported detection limit.

B = denotes consituent also detected in the Method Blank.

E = denotes an estimated concentration.

NL = Not Listed

As shown in Table 11, the VOCs reported above the reported laboratory method detection limits include several chlorinated VOCs and additional non-chlorinated VOCs. The detected concentrations of VOCs in the three soil gas samples are below the Final October 2006 New York State Department of Health (NYSDOH) Soil Vapor/Indoor Air Decision Matrices: Sub-Slab Vapor Concentration, Mitigation Criteria (Matrix $1 > 250 \,\mu\text{g/m}^3$ & Matrix $2 > 1,000 \,\mu\text{g/m}^3$).

5.0 Contaminant Fate and Transport

5.1 Potential Routes of Migration

Potential routes of migration identified for this Site include:

- Chlorinated VOCs in subsurface soil migrating and impacting the groundwater table through precipitation or contact with groundwater;
- Chlorinated VOCs migrating in a dissolved groundwater plume; and,
- Chlorinated VOCs volatilizing from impacted groundwater and impacting soil gas (and potentially indoor air quality).

5.2 Contaminant Persistence

The types of VOCs encountered at the Site can naturally biodegrade by sequential reductive dechlorination as follows: PCE to TCE to DCE (cis or trans 1,2-DCE or 1,1-DCE) to VC to ethene. The groundwater results suggest that biodegradation may be occurring at the Site based on the decrease in downgradient concentrations of PCE and the high concentrations of the breakdown products.

5.3 Contaminant Migration

The groundwater contouring completed as part of the RI work indicates that groundwater is flowing to the northwest and slightly to the north toward Irondequoit Creek. The distribution of contamination in the soil and groundwater samples generally concurs with this flow direction. Based on the groundwater flow direction and the sampling completed, CVOCs appear to have migrated from the source areas (concrete holding tank & former PCE Still) to the northwest and were detected along the property line. Furthermore, based on concentrations of CVOCs in groundwater within approximately 10 feet of the northwest property line, it appears that the property to the northwest (1598 Penfield Road) has been impacted by contaminants emanating from the Site. In addition, the soil gas sampling results indicated low level concentrations of VOCs along the northwest property line, the northern corner of the property and the off-site sampling location to the northwest. Although the soil gas concentrations detected are below the NYSDOH decision matrices, two VOCs were detected at concentrations greater than the USEPA Draft Shallow Soil Gas guidance values. In addition, no CVOCs were detected in the soil gas sample SG-17 collected off-site and adjacent to the 1598 Penfield Road structure.

6.0 Qualitative Exposure Assessment

The qualitative exposure assessment has been completed in general accordance with DER-10 Appendix 3B (NYSDOH Qualitative Human Health Exposure Assessment). The qualitative exposure assessment is presented as on-site exposures and off-site exposures and is based on data obtained as part of the RI work and the previous investigation work completed at the Site. [Note: As indicated in the RI Work Plan, a Fish and Wildlife Exposure Assessment was not completed due to the absence of fish and/or wildlife resources on or adjacent to the Site.]

6.1 On-Site Exposure Assessment

Potential Exposure Pathways

Exposure pathways have been evaluated as five elements:

- 1. Contaminant Source As previously discussed, there are two source areas at the Site: the former concrete wastewater holding tank area and the former PCE Still area.
- 2. Contaminant Release and Transport Mechanisms The release of contamination was from previous Site operations in the source areas. Releases from the concrete wastewater holding tank appear to have been directly to the subsurface via infiltration through the concrete and/or cracks within the concrete, as such, significant contamination in this area appears to begin at approximately 4-feet in depth. The former PCE Still source area appears to be from historic use from above the concrete floor slab that migrated through the concrete and into the subsurface (i.e., from the top down). Contamination from both source areas have leached into the groundwater and migrated with groundwater to the northwest.
- 3. Point of Exposure The areas of contamination are located beneath the building, asphalt pavement, or topsoil and groundwater in the area is not used as a source of drinking water. As such, the contamination is not directly accessible to the public and points of exposure are limited. Exposures via direct contact and/or ingestion of soil and groundwater are not a significant concern at this time. As such, the only apparent point of exposure would be vapor intrusion from the sub-slab soil gas. [Note: On-site vapor intrusion was not evaluated as part of the RI since redevelopment of the Site is planned as an unoccupied facility (refer to Receptor Population below). Although not specifically evaluated, based on the current levels of contamination within the subsurface in the source areas, vapor intrusion appears to be a potential concern if the building on-site was occupied.]
- 4. Route of Exposure Since the only apparent point of exposure is vapor intrusion, the route of exposure would be inhalation of the VOCs.
- 5. Receptor Population Since the building is currently vacant, there is not a receptor population currently at the Site. In addition, the Site is planned for redevelopment as an automated (unoccupied) car wash facility that will have open bays (i.e., open air car washing areas). As such, there does not appear to be a future receptor population based on the planned site use.

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Based on the above, a completed on-site exposure pathway does not exist for the current or planned use of the Site.

Although there is not a completed exposure pathway on-site (currently or based on future use), there may be completed exposure pathways during remedial activities and/or redevelopment. As such, measures to protect site workers and the public should be implemented prior to any redevelopment including developing a site-specific Health and Safety Plan (HASP) and a Community Air Monitoring Plan (CAMP). The HASP and CAMP should be submitted to regulatory agencies for review and approval. It is anticipated that specific measures within these plans would include (but not limited to): air monitoring of the work zone and downgradient locations, site/work area controls (fencing), response plans for vapor emissions, etc.

6.2 Off-Site Exposure Assessment

Potential Exposure Pathways

Exposure pathways have been evaluated as five elements:

- 1. Contaminant Source As previously discussed, there are two source areas at the Site that are impacting the neighboring property to the northwest (1598 Penfield Road parcel): the former concrete wastewater holding tank area and the former PCE Still area.
- 2. Contaminant Release and Transport Mechanisms The release of contamination was from previous Site operations in the source areas. Releases from the concrete wastewater holding tank appear to have been directly to the subsurface via infiltration through the concrete and/or cracks within the concrete, as such, significant contamination in this area appears to begin at approximately 4-feet in depth. The former PCE Still source area appears to be from historic use from above the concrete that migrated through the concrete floor slab and into the subsurface (i.e., from the top down). Contamination from both source areas have leached into the groundwater and migrated with groundwater to the northwest. Monitoring wells within 10 feet of the property line identified groundwater contamination at concentrations greater than 6 NYCRR Part 703 Groundwater Standards. Soil gas samples detected two VOCs at concentrations greater than the USEPA Draft Target Shallow Soil Gas Criteria.
- 3. Point of Exposure The off-site areas of contamination are limited to the saturated zone and are approximately 6 feet below the ground surface. Groundwater in the area is not used as a source of drinking water. As such, the contamination is not directly accessible to the public and points of exposure are limited. Exposures via direct contact and/or ingestion of soil and groundwater are not a significant concern at this time. As such, the only apparent point of exposure would be vapor intrusion from the sub-slab soil gas. The soil gas sample collected from 1598 Penfield Road (SG-17) indicated that soil gas concentrations are below the NYSDOH decision matrices. Although Chloroform was detected above the USEPA Draft Target Shallow Soil Gas guidance value, the concentration was only slightly exceeded the criteria (i.e., exceeded by 0.17 µg/m³). [Note: The off-site soil gas sampling location was not collected from beneath the building slab where VOCs may accumulate at higher concentrations; however, it appears that any further evaluation of off-site impacts would be the responsibility of the Responsible Party and/or regulatory agencies.] Based on current data there may be a potential for an off-site point of exposure.

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- 4. Route of Exposure The only apparent route of exposure is via infiltration from sub-slab soil gas. The off-site soil sample indicated that VOC soil gas concentrations are below the NYSDOH Draft Criteria and one VOC exceeded the USEPA Draft Target Shallow Soil Gas Criteria; however, the concentrations of sub-slab soil gas have not been quantified as part of this investigation.
- 5. Receptor Population Based on the groundwater flow direction and the documented locations of contamination the potential receptor population would be occupants of the property to the northwest (1598 Penfield Road). Based on the soil gas sampling results completed as part of the RI there currently does not appear to be a completed exposure pathway. However, the concentrations of soil gas beneath the building have not been quantified.

Although a completed off-site exposure pathway does not currently appear to exist, VOCs may accumulate in the sub-slab soil gas at greater concentrations. However, since the party conducting the work is a Volunteer, additional work is the responsibility of the Responsible Party and/or NYSDEC.

7.0 Interim Remedial Measures

On June 30, 2007, LaBella conducted an IRM Soil Removal program designed to remove impacted soil and groundwater from the source area identified during previous environmental investigations conducted at the Site. Specifically this IRM addressed source area soils in the proximity of the former concrete wastewater holding tank located immediately to the north of the site building. IRM Soil Removal activities followed the IRM Work Plan approved by the NYSDEC on October 18, 2006. A separate IRM Report was submitted to NYSDEC in July 2009; however, a summary of the work completed and the test results is provided below.

7.1 Removal Activities

The remedial excavation work was conducted by the Site owner, Clifton Land Development Company, LLC under the oversight of a LaBella Environmental Geologist. All persons directly involved with the soil removal work were OSHA 40-hr. trained workers. The IRM was focused on the area to the east, north and west of the former concrete wastewater holding tank at the Site where previous environmental investigations (refer to Sections 1.3 and 4.0) identified CVOC-impacted soils at concentrations exceeding 6 NYCRR Subpart 375-6 RPSCOs.

Prior to the start of the IRM excavation activities, approximately 632-gallons of CVOC impacted water was pumped from the former concrete wastewater holding tank and the remedial excavation into a temporary 1,000-gallon polyvinylchloride (PVC) holding tank until it was transported off-site for proper disposal to the Chemical Waste Management Model City Landfill on August 31, 2007 (Refer to Section 7.4). In addition, well development and purge waters generated from the RI were also included with the wastewater holding tank water.

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The soil removal was conducted under the oversight of a LaBella Environmental Geologist. The excavation work consisted of excavating impacted soil from areas to the north, west and east of the former wastewater holding tank where the criteria in the Soil Removal Work Plan–Interim Remedial Action were exceeded. Excavated soils were screened with a PID by a LaBella Environmental Geologist for total VOC concentrations as the soil was removed from the ground. A total of approximately 220-cubic yards of soil was excavated from the source area surrounding the wastewater tank, segregated (based on the PID screening readings made at the time the soil was excavated), and staged on-site in one of four (4) soil piles (Clean Soil, Lightly Impacted Soil, Moderately Impacted Soil, and Heavily Impacted Soil). The remedial excavation was backfilled with approximately 250-cubic yards of soil/stone in order to restore the Site for future redevelopment. Below is a summary of Remedial Excavation Details.

Remedial Excavation Details

Area of Excavation	Depth of Excavation	Estimated Volume of "Clean Soil" Excavated †	Estimated Volume of "Lightly Impacted Soil" Excavated †	Estimated Volume of "Moderately Impacted Soil" Excavated †	Estimated Volume of "Heavily Impacted Soil" Excavated †
		0.0-50 ppm	50-500 ppm	500–2,000 ppm	>2,000-ppm
~645-Sq. Ft.	9.0 to 12.0-Ft.	45-Cu. Yds.	30-Cu. Yds.	80-Cu. Yds.	65-Cu. Yds.

[†] Denotes that the soil volumes are estimated based on the dimensions of the soil piles and the measured dimensions of the IRM excavation.

The segregated soil piles were sampled for waste characterization purposes in accordance with NYSDEC Spill Technology and Remediation Series (STARS) Memo #1 and covered with another layer of 6-mil polyethylene sheeting pending disposal.

Three classes of solid waste (i.e. soil) and one class of liquid waste were removed from the Site as part of the IRM. Each of these waste streams was transported off-site for disposal in accordance with the applicable regulations. The soil was staged on-site in four separate staging piles based on PID readings measured during the IRM. Pending the completion of final waste characterization sampling and confirming disposal arrangements, the soil was staged on double layers of 6-mil polyethylene sheeting surrounded by soil berms. Each soil pile was also covered with a third layer of weighted down 6-mil polyethylene sheeting to prevent precipitation from coming in contact with impacted soil in the pile. In addition, 632 gallons of CVOC impacted groundwater was staged on-site in a temporary 1,000-gallon holding tank pending final waste characterization and disposal.

Six (6) loads of CVOC impacted soil totaling 175.38 tons were transported to Waste Management High Acres Landfill in Fairport, New York for disposal as "Contained In" Non-Hazardous Waste on August 31, 2007. Based on the 'Contained-In' Action Levels, this soil did not require disposal as a hazardous waste.

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One (1) load of CVOC impacted soil totaling 19.22 tons was transported to Waste Management's Model City Landfill in Model City, New York for disposal as Hazardous Waste on August 31, 2007.

Two (2) loads of heavily CVOC impacted soil totaling 43.28-tons were transported to the Recupere Sol, Inc. treatment facility in St. Ambrose, Quebec, Canada for thermal treatment on November 13, 2007. According to the Certificate of Destruction, the treatment of this material was completed by December 5, 2007.

A cumulative total of 632-gallons of CVOC impacted wastewater was pumped from the concrete holding tank prior to its removal and from the IRM excavation. The CVOC impacted water was transported to the Waste Management Model City Landfill in Model City. New York for disposal as Hazardous Waste on August 31, 2007.

[Note: The investigation derived waste generated from the RI was also included with these waste streams.]

The location of the remedial excavation, and the soil staging areas are shown on Figure 10. Additional details on the removal work and disposal documentation are provided in the IRM Report being submitted separately.

7.2 Excavation Confirmatory Soil Sampling Analytical Results

A total of six (6) confirmatory soil samples were submitted for laboratory testing from the remedial excavation. The samples were sent under Chain-of-custody control to STL. Each sample was analyzed for TCL VOCs by USEPA Method 8260B and an ASP Category B Deliverables data package was provided by STL. Table 12 provides a summary of the detected VOCs in the confirmatory soil samples.

Table 12

IRM Excavation Confirmatory Soil Samples Summary of Detected Volatile Organic Compounds (ug/Kg) Results in micrograms per Kilogram (ug/Kg) or about parts per billion

Parameter			Subpart 375-6	Submont 275 (
	Excavation B	ase Samples		Excavation Sid	Remedial Program Soil Cleanup	Subpart 375-6 Remedial Program Soil Cleanup		
	BS-1	BS-2	SW-1	SW-2	SW-3	SW-4	Objectives for the Protection of Public Health: Commercial	
	12.0-ft.	9.0-ft.	8.0-ft.	7.5-ft.	7.5-ft.	8.0-ft.	Use (ug/Kg) ⁽¹⁾	(ug/Kg) ⁽¹⁾
Total Volatiles*		The state of the s	, , , , , , , , , , , , , , , , , , ,	10000			4	
Acetone	<2,100,000	150 JB	<790	<130	210 J	170 JB	500,000	50
Chloromethane	<110,000	15 J	<42	<9.9	<6.4	<6.3	Not I	Listed
cis-1,2-Dichloroethene (DCE)	<300,000	32 J	<110	250 J	<17	<17	500,000	250
Methylene Chloride	5,400,000 B	<110	2,600 B	370 B	<120	<120	500,000	50
Tetrachloroethene (PCE)	130,000,000	9,300	46,000	3,200	4,700 B	1,600	150,000	1,300
Trichloroethene (TCE)	<260,000	75 J	<96	98 J	<15	<15	200,000	470

Notes:

VOC analysis by United States Environmental Protection Agency (USEPA) Method 8260B

- (1) = 6 New York Code of Rules and Regulations (NYCRR) Subpart 375-6 Remedial Program Soil Cleanup Objectives
- (2) = Sediment action level listed in NYSDEC TAGM 3028 "Contained-In Criteria" dated November 30, 1992, used for disposal criteria.
- (3) = Groundwater action level listed in NYSDEC TAGM 3028 "Contained-In Criteria" dated November 30, 1992, used for disposal criteria.
- * =Sample results in Micrograms per Kilogram (μg/Kg) or Parts per Billion (ppb).
- <5 = Constituent not detected above the reported laboratory detection limit shown.</p>
- Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria
- B =This flag is used when the analyte is found in the associated blank, as well as in the sample
 - = A value is not listed in NYCRR Subpart 375-6 for these compounds.
- 4,800 = Bold type denotes a detected concentration that exceeds Subpart 375-6 RPSCOs for the Protection of Groundwater.
 - = Green highlight denotes a concentration that exceeds the Subpart 375-6 RPSCOs for the Protection of Public Health: Commercial Worker Receptors.

As shown on Table 12, VOCs (including PCE, TCE cis-1,2-DCE, acetone, methylene chloride, and chloromethane) were identified in the IRM Excavation confirmatory soil samples at detectable levels. Acetone, PCE, and methylene chloride were detected at concentrations exceeding their respective NYSDEC RPSCOs for the Protection of Groundwater within at least one of the six confirmation samples. PCE and methylene chloride were detected in one of the six confirmation samples at concentrations exceeding their respective NYSDEC RPSCOs for the Protection of Health: Commercial. No other VOCs were detected within the IRM excavation confirmatory samples at concentrations exceeding their associated RPSCOs.

7.3 LaBella Associates' Post-IRM Shallow Groundwater Evaluation

A Shallow Groundwater Evaluation was conducted by LaBella in March 2008 to evaluate the effects of the IRM soil removal on the contaminant concentrations in groundwater. This Shallow Groundwater Evaluation consisted of the resampling of seven (7) overburden groundwater monitoring wells that were originally installed and sampled for the RI (i.e. MW-2 through MW-5 and MW-8 through MW-10). [NOTE: Shallow groundwater monitoring well MW-1 had been damaged prior to November 2005 and was removed during the IRM excavation activities. In addition, shallow overburden monitoring well MW-7 could not be located during the March 2008 sampling event. Finally, nested monitoring well pair MW-6M/6D) was designed and installed to monitor the medium and deep overburden groundwater and therefore were not resampled as part of the post-IRM shallow groundwater evaluation. The replacement of MW-7 will be addressed as part of the remedial design.]

A summary of the concentrations of total CVOCs detected in groundwater samples collected for the most recent Pre-IRM sampling event (i.e. November 2005 for wells MW-2 through MW-5, and April 2006 for wells MW-8 through MW-10) compared to the analytical results for this Post-IRM groundwater sampling event is presented Table 12 below.

Table 13
Shallow Groundwater Samples
Summary of Total Detected VOCs: Pre-IRM vs. Post-IRM

Monitoring Well ID	Source Area Evaluated	Location Relative to the IRM Excavation	Pre-IRM Groundwater Sampling Event (ug/L)	Post-IRM Groundwater Sampling Event (ug/L)	Reduction in Total CVOCs
MW-2	W.W.H.T.	Downgradient	4,235	2,501	41% Reduction
MW-3	W.W.H.T.	Cross-gradient	None Detected	None Detected	No Change
MW-4	W.W.H.T.	Upgradient	None Detected	None Detected	No Change
MW-5	W.W.H.T.	Upgradient	6.6	9.4	42% Increase
MW-8	W.W.H.T. & Still	Cross-gradient	1,081	659	39% Reduction
MW-9*	Still	Cross-gradient	15,001	62,820	319% Increase
MW-10	Still	Cross-gradient	2,580	1,442	44% Reduction

W.W.H.T. = Wastewater Holding Tank
MW-9 is located directly downgradient from the former PCE still source area.

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BCP Site #C828131
Carriage Cleantown, 1600 Penfield Road
LaBella Project No. 205237.01

Copies of the Groundwater Sampling Logs are presented in Appendix 4. The analytical results for post-IRM shallow groundwater sampling are illustrated on Figure 11.

8.0 Site Investigation Conclusions

8.1 Investigation Summary

The previous investigation work and the RI work consisted of the following: advancing a total of fifty-five (55) shallow soil borings and one (1) deep soil boring; conducting a passive soil gas survey using 13 temporary soil gas sampling points; installing three (3) permanent soil gas probes; installing nine (9) shallow overburden groundwater monitoring wells and two (2) deep groundwater monitoring wells; and, collecting/analyzing soil, groundwater and soil gas samples. The RI work was completed in general accordance with the RI Work Plan and Supplemental RI Work Plan approved by NYSDEC. The initial phase of borings consisted of a grid pattern around the concrete wastewater holding tank area to evaluate the extent of shallow soil that exceeds hazardous waste criteria and SCGs. In addition, several of the first phase borings were advanced within the building to evaluate the floor drains/drain lines and other potential source areas. The second phase of soil borings further evaluated the former PCE Still area and overall groundwater impacts. A deep soil boring was advanced/sampled and a nested pair consisting of two deep monitoring wells were installed/sampled in order to evaluate the vertical extent of contamination that may require remedial actions. Soil gas sampling was conducted along property lines and off-site as part of a qualitative exposure assessment.

The analytical testing of soil and groundwater was generally completed by STL in Buffalo and reported in ASP Category B deliverables, with the exception of select samples which were tested locally by Paradigm. In addition, the soil gas samples were tested by Paradigm and provided in ASP Category B deliverables.

8.2 Nature and Extent of Contamination

The nature and extent of contamination at the Site has been delineated. The contamination at the Site is from PCE used as part of former dry cleaning operations. The sources of subsurface contamination appear to be predominantly from the concrete wastewater holding tank formerly located north of the building and to a lesser extent the former PCE Still formerly located in the southern corner of the building. These two source areas appear to have impacted both soil and groundwater. The extent of contamination has been separated into three areas of concern (AOCs), which are described below.

AOC #1: Concrete Wastewater Holding Tank Area

The grid pattern of 1st phase soil borings generally defined the extent of soil that exceeds SCGs and defined the extent of soil that exceeds the hazardous waste criteria. Based on the soil borings, the horizontal extent of soils meeting hazardous waste criteria appeared to be limited to immediately adjacent to the concrete wastewater holding tank area and to the north/northeast to the approximate location of borings B-1, B-27, and B-28. The vertical extent of soils that meet hazardous waste criteria appears to be limited to approximately 10-feet in depth around B-27 and possibly below 15-feet around B-28. Although the deepest soil sample from B-28 exceeded hazardous waste criteria, it is not anticipated that significant contamination extends beyond 14 or 15-feet BGS outside of the B-28 and wastewater holding tank area. This assumption is based on the decreasing PID readings observed in this

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boring and only minimal detections in the deep soil samples and groundwater samples collected from MW-6M/6D.

Based on the RI data, an IRM soil removal was completed which consisted of removing and disposing of approximately 238 tons of contaminated soil and 632 gallons of contaminated waters. The IRM removed the wastewater holding tank and the worst case soils in proximity to the holding tank. The confirmatory sampling results indicated that PCE concentrations in each of the samples were above the Part 375-6 RPSCOs for the Protection of Groundwater and one bottom sample from beneath the former tank area exceeded the RPSCO for Restricted Commercial Use. However, the soil removal work appears to have removed impacts above SCGs from the unsaturated zone.

The remaining impacts around the former concrete wastewater holding tank appear to be within the saturated zone and will require additional remedial measures, which should be evaluated as part of a Remedial Alternatives Analysis.

AOC #2: Former PCE Still Area

The second phase of soil borings generally defined the extent of contamination originating from the former PCE Still area. Contamination from the former PCE Still appears to have migrated from the Still through the floor and into the shallow overburden soil and groundwater. The horizontal extent of impacted soil from the former PCE Still within the vadose zone appears to be limited to soil beneath the southern corner of the building. Although elevated PID readings were measured in soil from borings B-44 and B44R, soil samples from these borings did not indicate concentrations of VOCs that exceed the NYSDEC guidance. However, the actual location of the former PCE Still is approximately 10 feet to the southeast and as such soils in the immediate area of the former PCE Still may require remedial actions. Additional evaluation of this area does not appear warranted at this time since the extent of contamination appears limited based on borings within the area (B-44, B-45, B-48, B-53, B-54, and B-55). Any additional evaluation and/or remediation should be conducted at the time of (or subsequent to) building demolition. The extent of vadose zone soil exceeding SCGs has been conservatively estimated at 425 square feet and is illustrated on Figure 8.

The impacts around the former PCE Still require remedial measures which should be evaluated as part of a Remedial Alternatives Analysis.

AOC #3: Groundwater Contamination

The area of groundwater contamination has been defined at the Site based on eight (8) shallow groundwater monitoring wells and the deep nested pair monitoring wells installed as part of the RI work. In addition, one previous shallow groundwater monitoring well was installed as part of the initial Phase II ESA conducted in August 2002. Based on the groundwater sampling conducted on the deep monitoring wells (MW-6M/6D), it appears that significant groundwater contamination has not migrated to the deep groundwater and is limited to shallow groundwater. The vertical extent of shallow groundwater impacts appears to be approximately 15-feet in depth based on the deep soil and groundwater sampling which detected only minimal concentrations of contaminants at depths greater than 15-feet. In addition, PID readings and laboratory analysis of soil samples from within the saturated zone generally decreased with depth. The horizontal extent of groundwater contamination is relatively widespread across the Site and is summarized below:

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- Northern Extent The groundwater sample from monitoring well MW-3 only detected minor concentrations of CVOCs and soils observed from numerous borings in the northern portion of the property (B-14 through B-20) did not detect significant evidence of impairment. Based on this data, the northern extent of groundwater contamination has been generally defined and is limited to groundwater south of B-16 through B-20.
- Eastern Extent Soils observed from borings B-24, B-29, and B-34 did not encounter evidence of impairment and PID readings were less than 10 ppm from within the saturated zone. Furthermore, a soil sample from boring B-29 from within the saturated zone (8'-10.6') detected only minor concentrations of CVOCs that were below the NYSDEC RUSCO for the protection of groundwater. A groundwater sample from MW-5 detected only minor concentrations of CVOCs, which were below Part 703 Groundwater Standards.
- Southern Extent Soil borings B-53, B-54 and B-55 did not detect evidence of impairment and PID readings from the saturated zone within these borings were below 2 ppm. Therefore, on-site source areas have not impacted the southern portion of the Site.
- Western Extent Groundwater contamination appears to extend up to and beyond the western/northwestern property line. This is based on groundwater samples collected from wells MW-2 and MW-7 which are approximately 10 feet from the west property line. These wells contained concentrations of CVOCs above the Part 703 Groundwater Standards.

Figure 9 illustrates the extent of on-site groundwater potentially requiring remedial action.

8.3 Fate and Transport

The CVOCs at the Site can naturally biodegrade by sequential reductive dechlorination. The groundwater sampling results suggest that biodegradation may be occurring at the Site based on the decrease in downgradient concentrations of PCE and the high concentrations of the breakdown products.

The apparent groundwater flow direction at the Site is to the northwest and slightly to the north. The contaminant distribution in the soil and groundwater samples concurs with this flow direction. CVOCs have migrated from the source areas to the northwest and appear to have impacted the property to the northwest (1598 Penfield Road). Soil gas sampling results indicated low level concentrations of VOCs along the northwest property line, the northern corner of the property and the off-site sampling location to the northwest.

8.4 Potential Exposures

Based on the current data collected from the Site and the off-site soil gas sample, there does not appear to be exposure issues on-site based on the current use and anticipated future site use as an automated car wash. [Note: It is recommended that a CAMP be developed and implemented during site redevelopment in order to protect site workers and the public. A site-specific HASP was developed as part of the RI Work Plan.]

The off-site exposure assessment indicated that although a completed exposure pathway does not appear to exist, there does appear to be a potential route of exposure via infiltration from sub-slab soil areas. However, the concentration of soil gas beneath the building at 1598 Penfield Road was not quantified as part of the work. There is a potential that higher concentrations of VOCs may accumulate in the sub-slab soil gas. However, since Springs Land Company, LLC is under Volunteer status, it appears that

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additional quantitative investigation is not required as part of this BCP program. As such, it appears that any further evaluation of off-site impacts would be the responsibility of the Responsible Party and/or the regulatory agencies.

8.5 Interim Remedial Measure

An IRM Soil Excavation and Disposal action was conducted at the Site in June 2007. The results of the IRM are summarized below:

- Six (6) loads of CVOC impacted soil totaling 175.38 tons were transported to Waste Management High Acres Landfill in Fairport, New York for disposal as "Contained In" Non-Hazardous Waste on August 31, 2007.
- One (1) load of CVOC impacted soil totaling 19.22 tons was transported to the Waste Management Model City Landfill in Model City. New York for disposal as Hazardous Waste on August 31, 2007.
- Two (2) loads of CVOC impacted soil totaling 43.28-tons were transported to the Recupere Sol, Inc. treatment facility in St. Ambrose, Quebec, Canada for thermal treatment on November 13, 2007. According to the Certificate of Destruction, the treatment of this material was completed by December 5, 2007.
- A cumulative total of 632-gallons of CVOC impacted water was pumped from the concrete
 holding tank prior to its removal and from the IRM excavation. This CVOC impacted water
 was transported to the Waste Management Model City Landfill in Model City. New York for
 disposal as Hazardous Waste on August 31, 2007.

8.6 Post-IRM Shallow Groundwater Evaluation

A Shallow Overburden Groundwater Evaluation consisting of the resampling of seven (7) overburden groundwater monitoring wells that were originally installed and sampled for the RI was conducted at the Site subsequent to the IRM Soil Removal in March 2008. Analytical results indicate that total CVOC concentrations within wells down or cross-gradient to the IRM soil removal area had dropped between 39 and 44 percent relative to detected pre-IRM levels. The total CVOC concentration with the samples from monitoring well MW-9 did increase relative to its pre-IRM detected concentration, however, this well is downgradient from the former PCE still source area.

8.7 Conclusions

Based on the work completed as part of the RI, there appears to be the need for additional remedial measures to be conducted at the Site. The Interim Remedial Measure (IRM) implemented to remove the source area soil identified as a characteristic hazardous waste around the concrete wastewater holding tank has been successfully completed and appears to have had an impact in lowering CVOC concentrations in groundwater downgradient from this source area; however, additional remedial measures are warranted in this area. A similar soil removal for unsaturated soils and worst case source area soils in the area of the PCE Still appears prudent. Remediation of groundwater and saturated zone soils also is warranted.

Based on the work completed as part of the RI, an Alternatives Analysis Report should be developed in order to evaluate remedial measures to address the three AOCs that still exist at the Site.

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9.0 Citizen Participation Activities

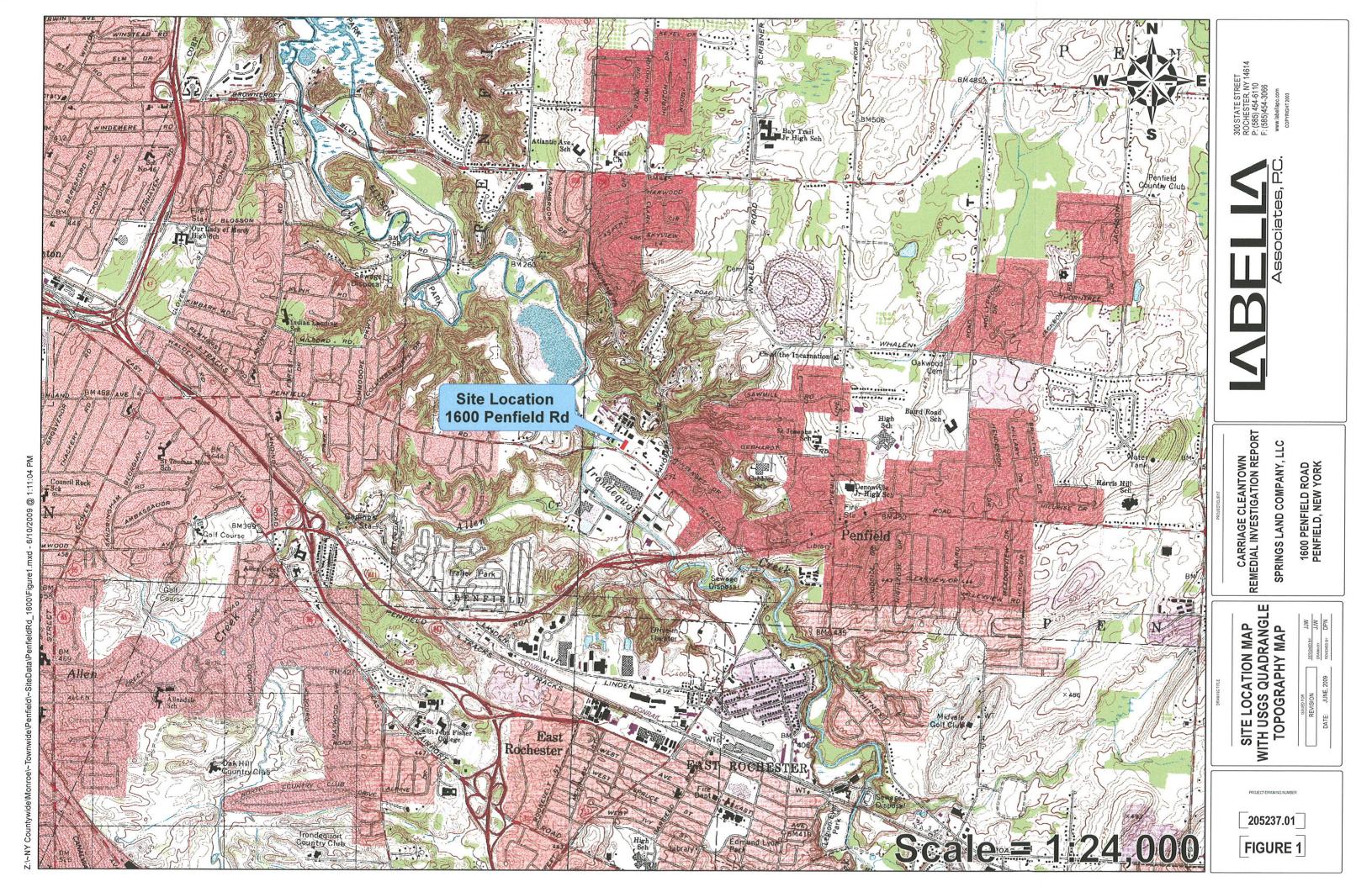
As part of the BCP Agreement enacted for the Site, actions are required to be taken to ensure continued Citizen Participation and education. The Citizen Participation Plan completed for the Site indicates that subsequent the submission of the RI Report, a fact sheet will be prepared/mailed to the brownfield site contact list. As such, within 10-business days of submitting this RI Report, a fact sheet will be submitted to the NYSDEC for review. Subsequent to NYSDEC input, the fact sheet will be mailed to the brownfield site contact list. [Note: These Citizen Participation activities were completed as part of the initial submission of the RI Report.]

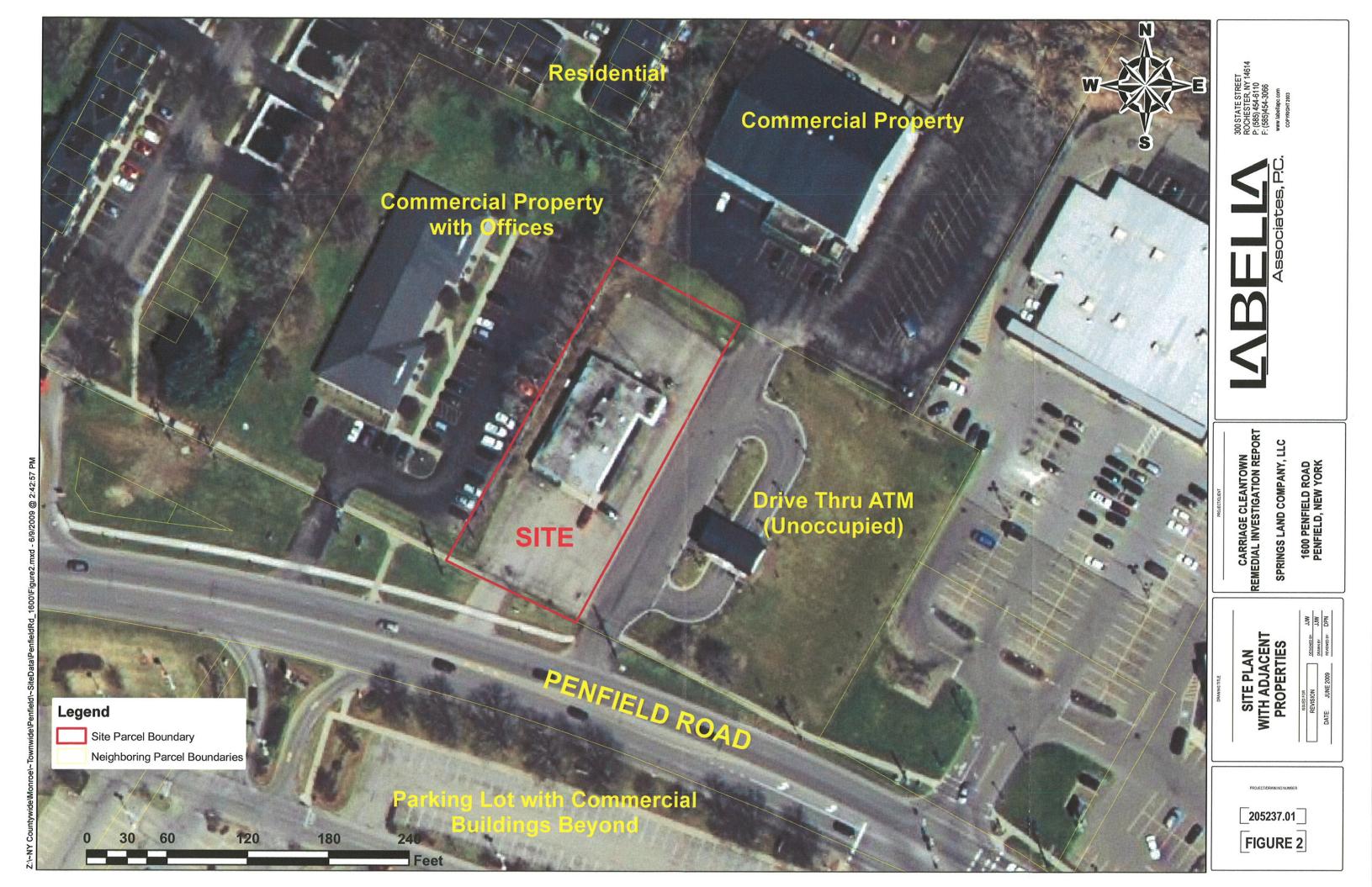
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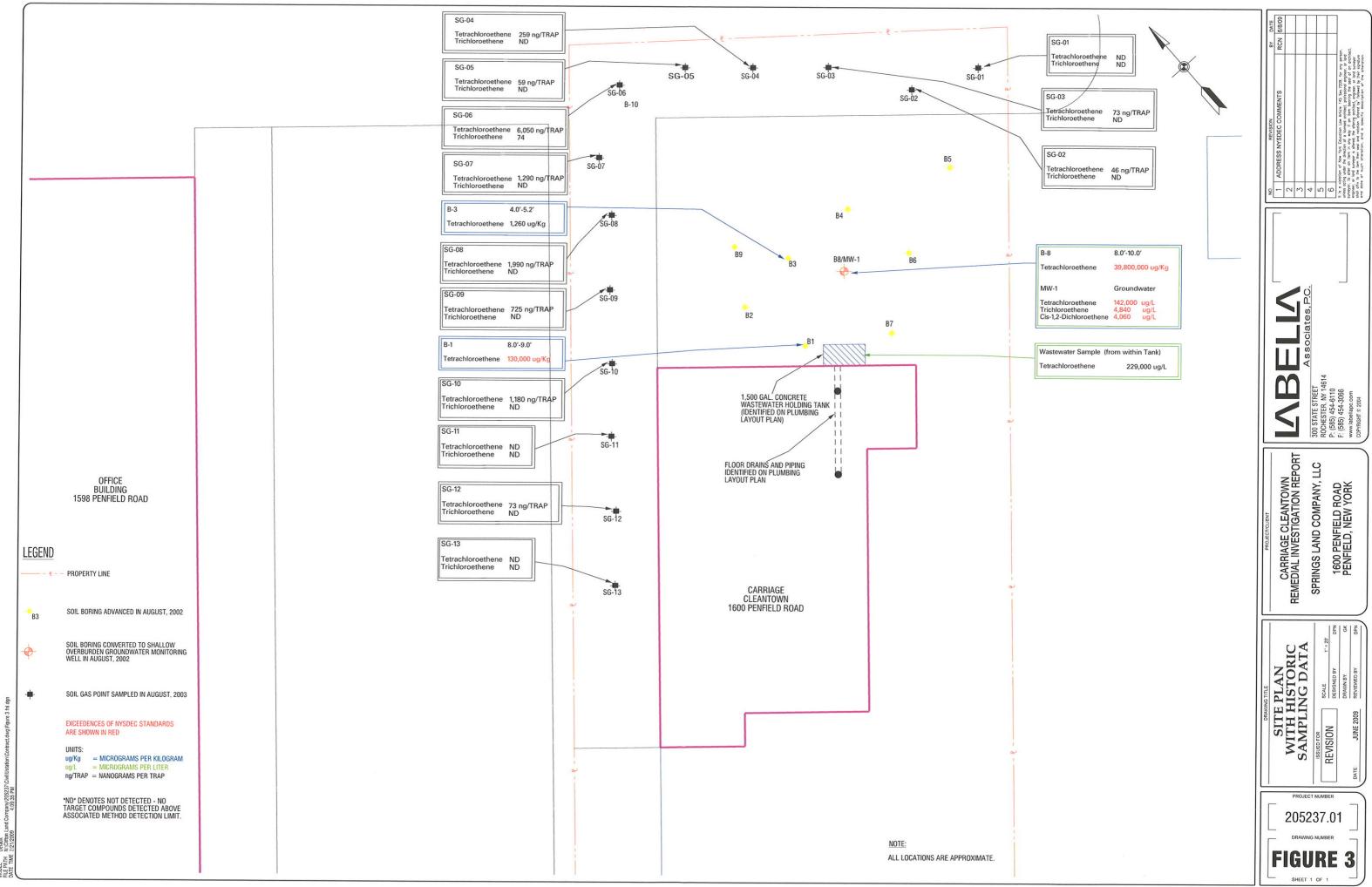
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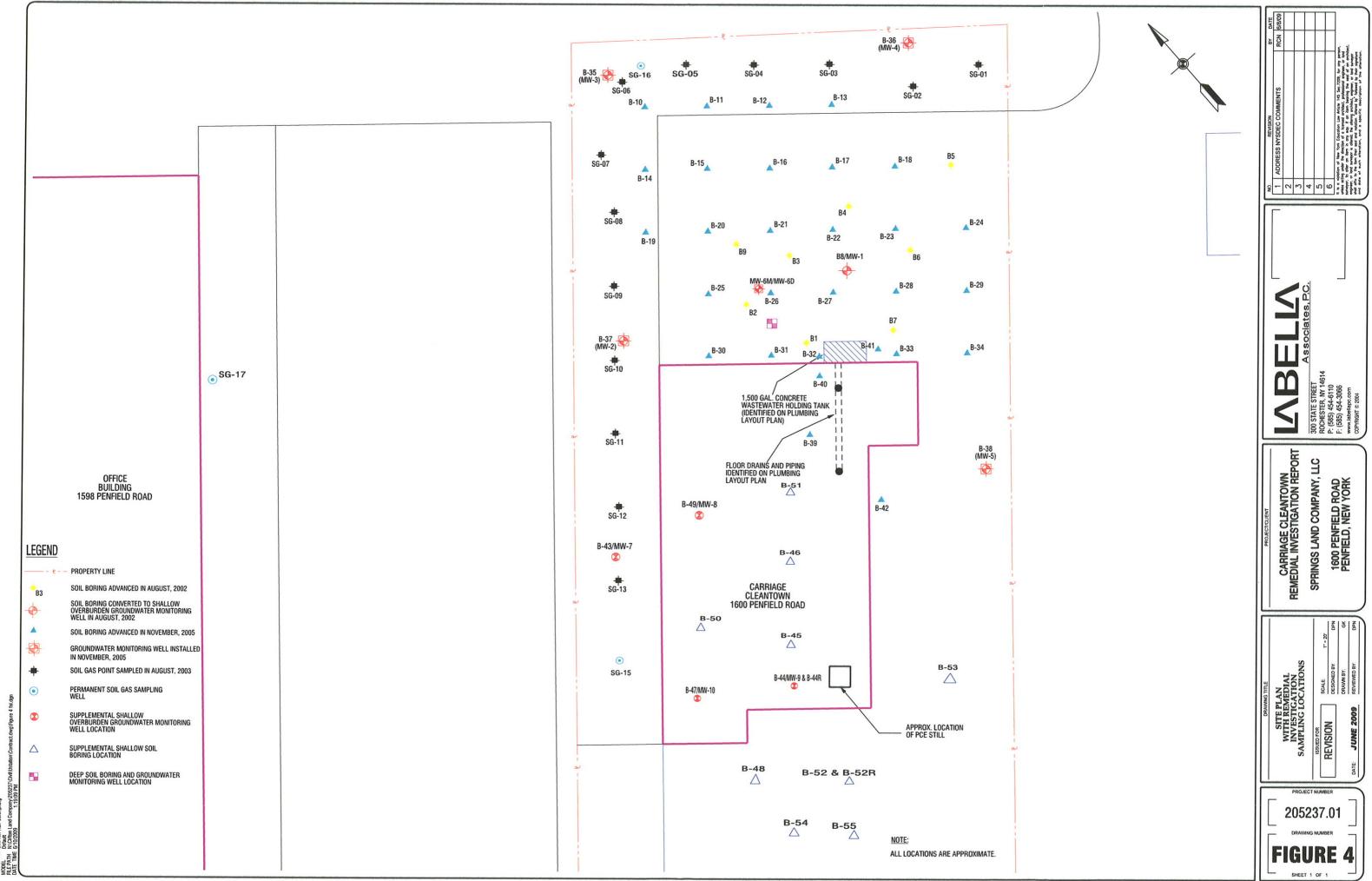
LaBella Associates, P.C. 300 State Street Rochester, New York 14614

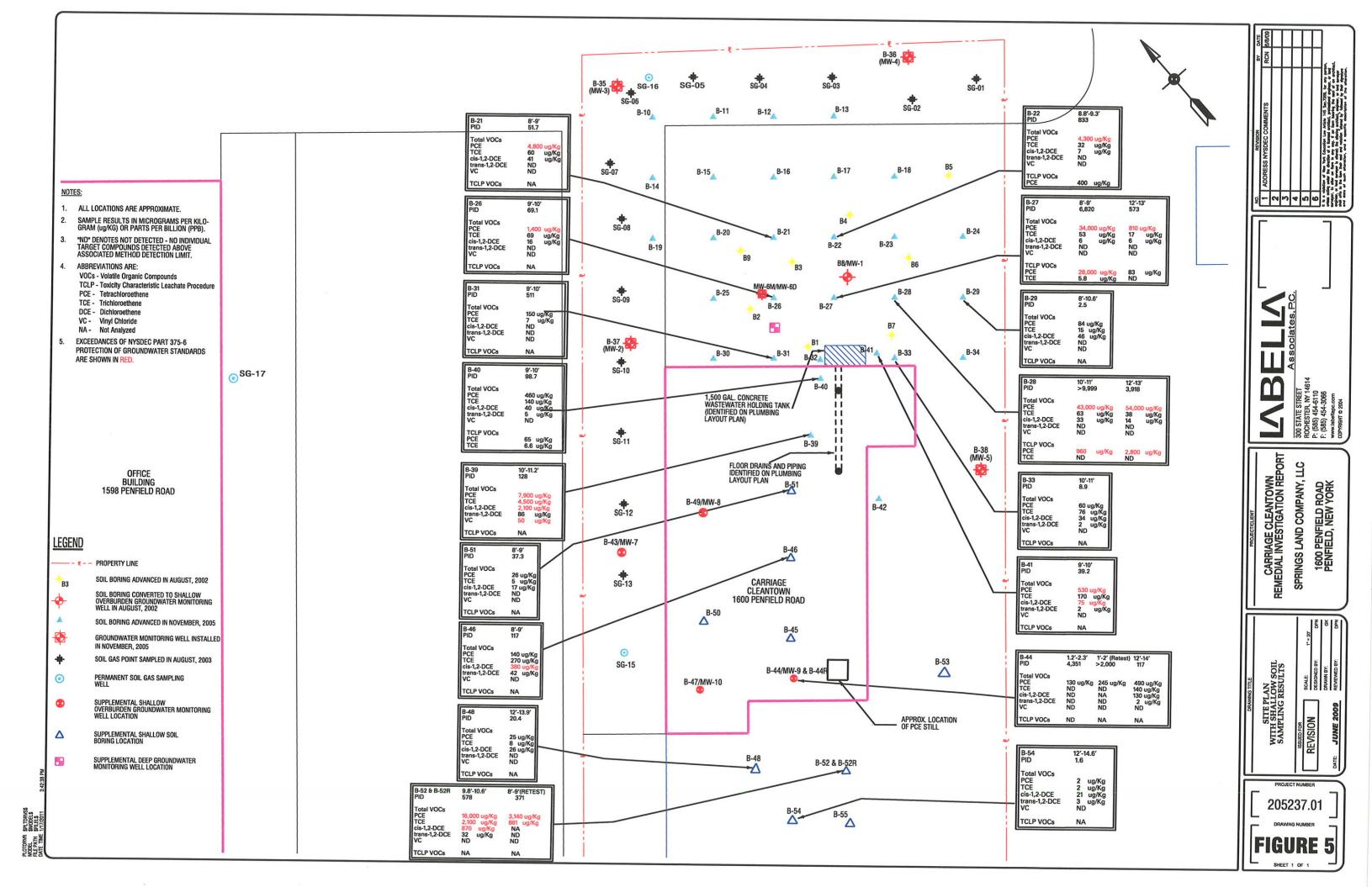
Figures

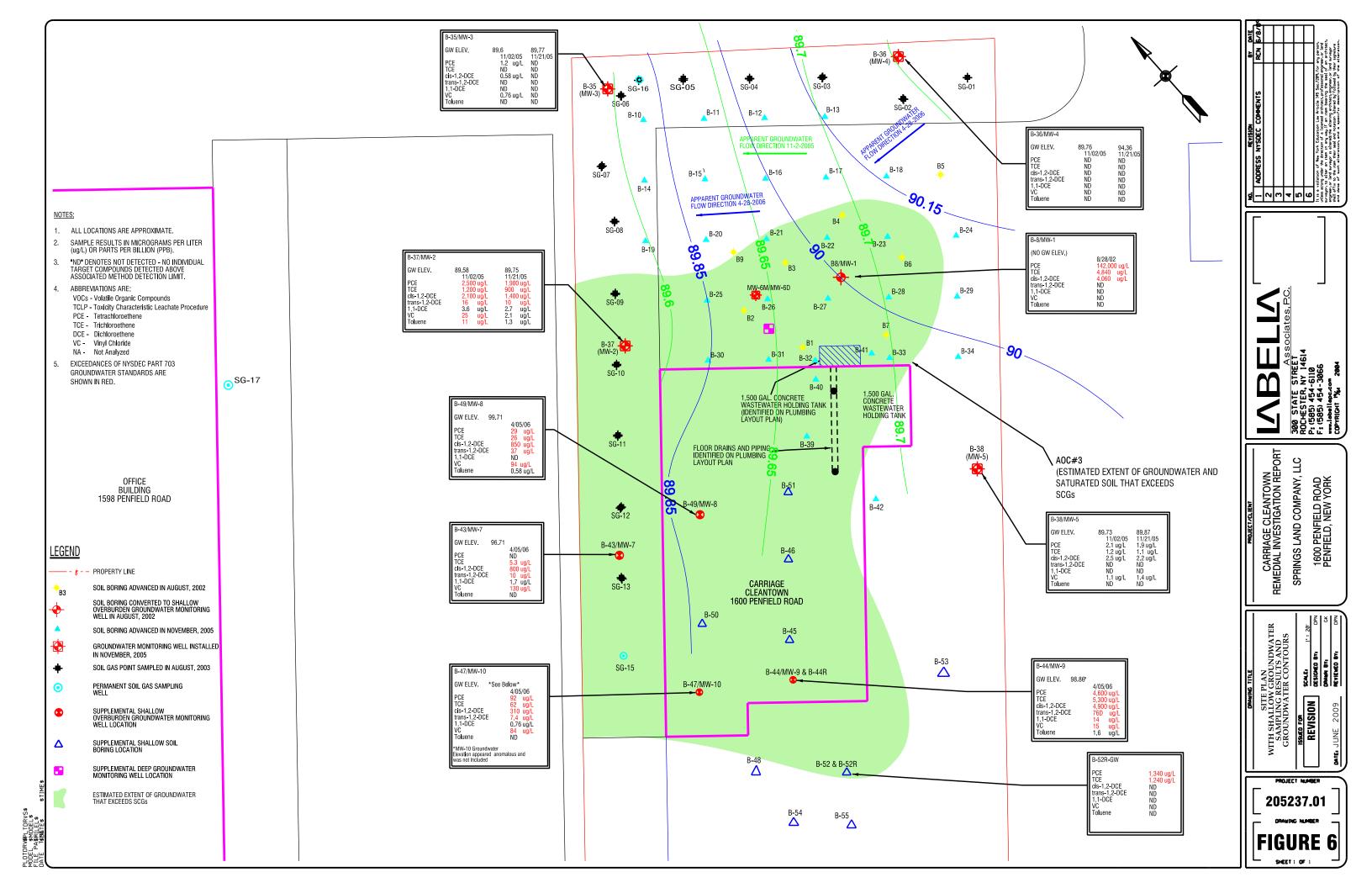


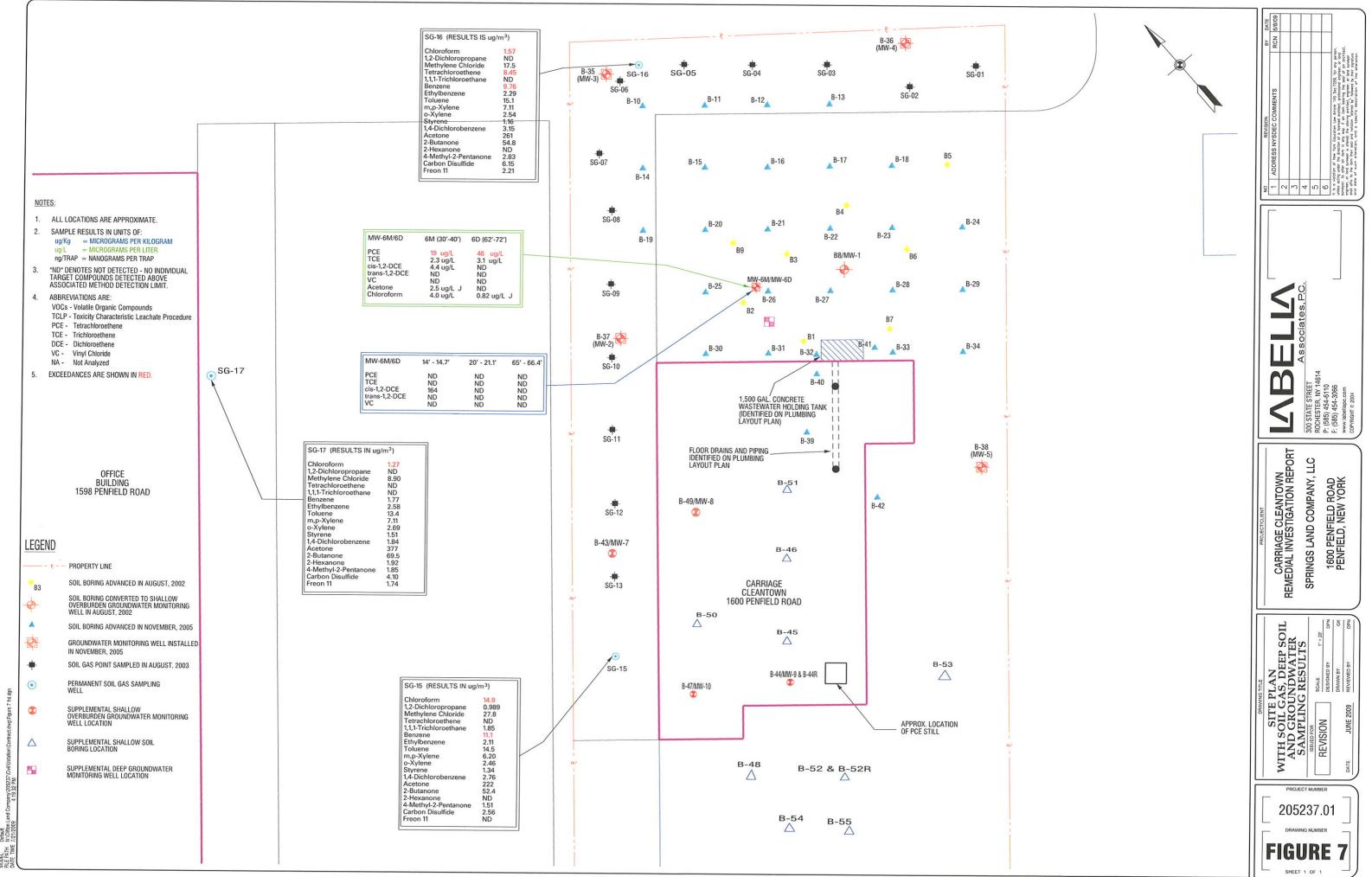


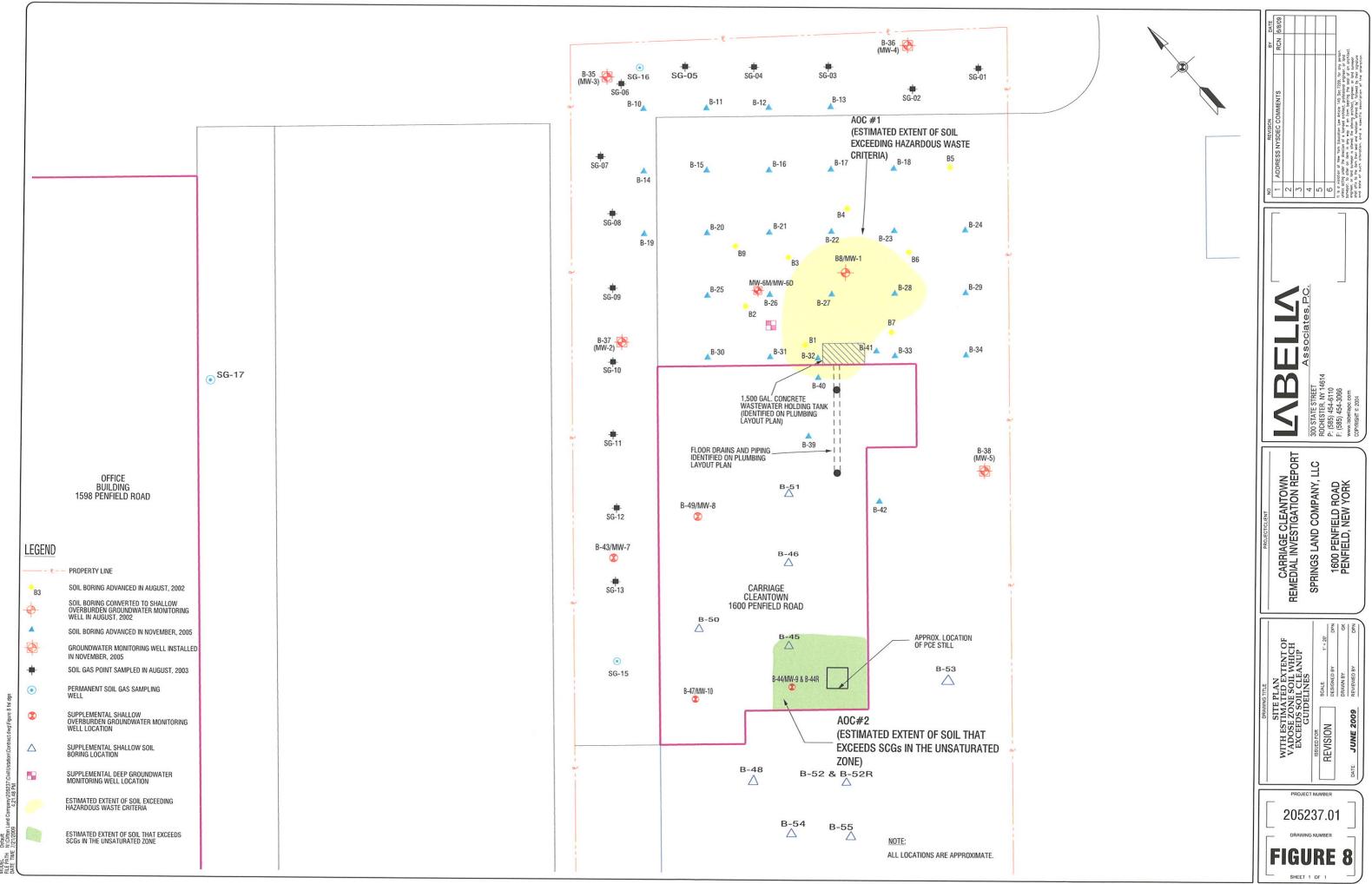




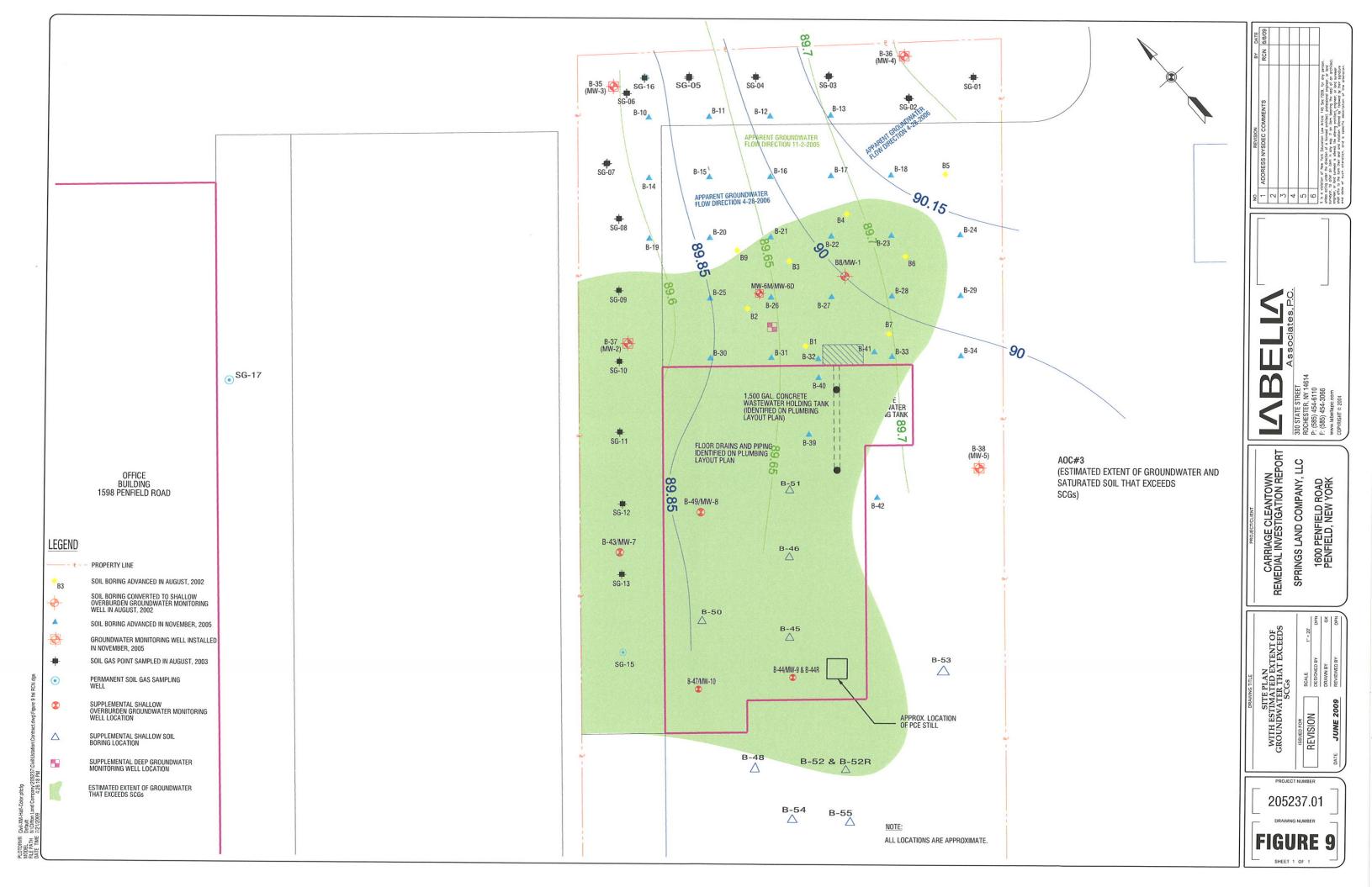


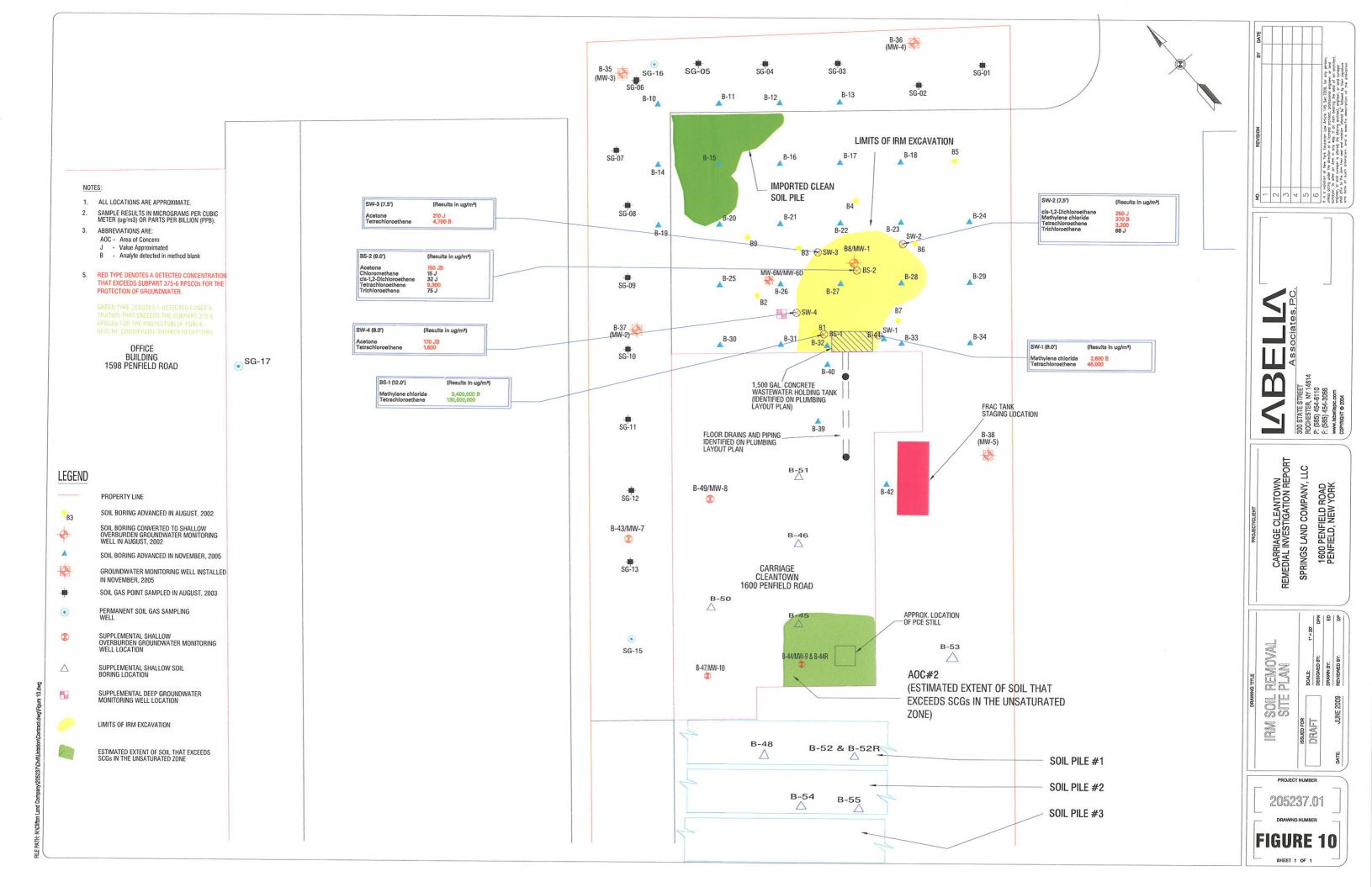


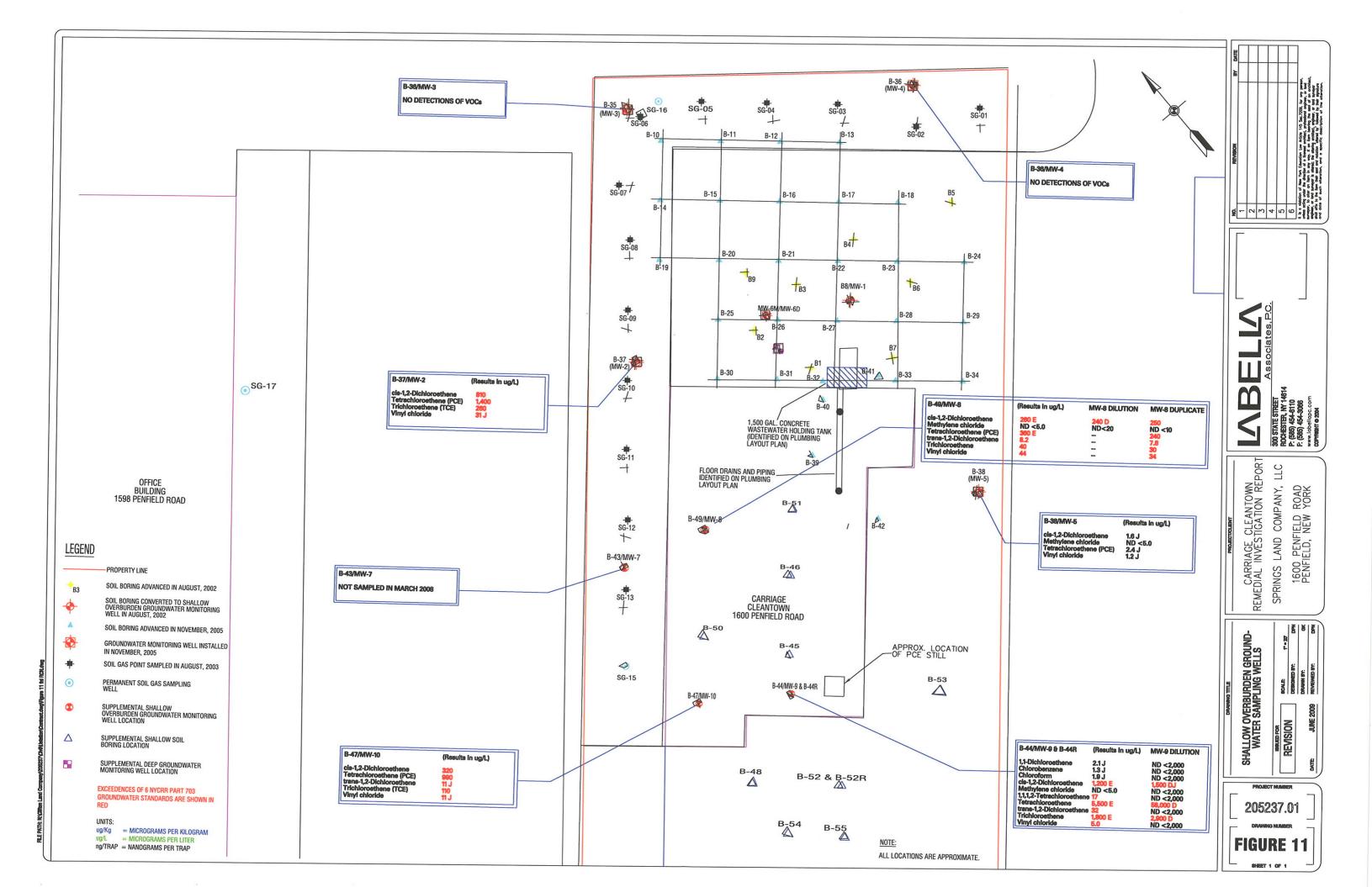




Civil-XM-P Default N:\Clifton







LABELLA La Roll La Rol

LaBella Associates, P.C. 300 State Street
Rochester, New York 14614

Appendix 1Soil Boring Logs



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-10

SHEET

1 OF

1

205237 JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

END DATE: 27-Oct-05

1312 TO 1350 TIME: DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

OVERBURDEN SAMPLING METHOD: Direct Push

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-Inch

OTHER:

						ı	
	SAMPLE NO		STRATA	VISUAL CLASSIFICATION		PID FIELD SCREEN (PPM)	REMARKS
H 0	AND DEPTH S-1	2.8-ft.	CHANGE	TOPSOIL			
ľ	0' to 4'	2.0	0.0-ft	ark brown f SAND, little(-) Silt, organics present (roots, root traces	, humus), damp, no odors	0.4	
			0.4-ft.	ALLUVIUM rown f SAND, trace(+) Silt, damp, no odors.		0.1	
2				Grading To			
				rown mf ⁽⁺⁾ SAND, damp to wet, no odors.		0.1	
	:						
4	S-2 4' - 8'	2.7-ft.	4.0-ft.	rown SILT, some f Sand, wet to saturated @ ~5.5-ft., no odors.		0.1	
	4-8			Grading To			
				rown Clayey SILT, trace f Sand, saturated, no odors.		0.1	
6						0.0	
						:	
8	S-3	2.4-ft.	8.0-ft.	s above, saturated, no odors.			
	8' - 12'	2.4 10.	0.0 1	0 42010, 0444,4104, 710 02010.		0.1	
				(4)		0.8	
10			9.5-ft.	ray cm ⁽⁺⁾ f subrounded to angular GRAVEL, some cmf Sand, satura	ated, no odors.		
12	S-4 12' - 14'	0.7-ft.	12.0-ft.	ray cm SAND, little cm ⁽⁺⁾ f subrounded to subangular Gravel, satura	ated, no odors.	0.0	
14				End of Boring @ 14.0-ft. BGS			
16							
18							
	VATER LEVEL	DATA ELAPSED	BOTTOM OF	BOTTOM OF GROUNDWATER NOTES:			
DATE	TIME	TIME	CASING	BORING			
ļ	<u>. </u>	L	L	, , , , , , , , , , , , , , , , ,			

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations
- and = 35 to 50 % some = 20 to 35%

trace = 1 to 10%

c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20%

f = fine

NA = Not Applicable



300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

PROJECT

BORING: B-11

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization SHEET JOB:

1 OF

1

205237

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York CHKD BY:

CONTRACTOR:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

TIME:

1245 TO 1310

DRILLER:

GROUND SURFACE ELEVATION: NA

DATUM:

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05

END DATE: 27-Oct-05

NA

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

	,					Τ
D E P		SAMPLE			PID FIELD SCREEN	
Т	SAMPLE NO AND DEPTH		STRATA CHANGE	VISUAL CLASSIFICATION	(PPM)	REMARKS
0	S-1 0' to 4'	3.1-ft.		TOPSOIL Dark brown SILT, some f Sand, trace(+) f Gravel, organics present (roots, root traces, hundamp, no odors.		
2			0.4-ft.	ALLUVIUM Brown SILT, some f Sand, damp, no odors.	0.1	
2	:			Grading To	0.2	
				Brown and gray mottled SILT, wet, no odors.		
4	S-2 4' - 8'	3.2-ft.	4.0-ft.	As above, wet to saturated @ 5.0-ft., no odors	0.2	
				Grading To	0.1	
6				Brownish-gray Clayey SILT, saturated, no odors.	0.0	
8	S-3 8' - 12'	2.0-ft.	8.0-ft.	As above, saturated, no odors Grading To	0.1	
			9.3-ft.	Grayish-brown SILT, trace f Sand, saturated, no odors. Gray cmf SAND, little mf angular to subrounded Gravel, saturated, no odors. -	0.1	
10	:					
12				Borehole caves in to 8.8-ft. BGS. End of Boring @ 12.0-ft. BGS		
14						
16						
18						
 	I VATER LEVEL	DATA	BOTTOM OF	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
		,		12.0-FT. Approx. 5.0-FT.		
	NEDAL MOTE					

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-12

SHEET

1 OF

1

205237

CHKD BY:

JOB:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS** TREC Environmental

CONTRACTOR: DRILLER:

Paul Wiley

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

END DATE:

TIME: 1225 TO 1245 DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05

27-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

OVERBURDEN SAMPLING METHOD: Direct Push

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-inch

OTHER:

D E P T H	SAMPLE NO	SAMPLE SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	2.9-ft.	0.0-ft	TOPSOIL Dark brown f SAND, little Silt, trace f Gravel, organics present (roots, root traces, humus), moist to damp, no odors.	0.2	
				Black f GRAVEL (Asphalt fragments), moist, no odors. ALLUVIUM	0.0	
2			0.4-ft.	Brown f SAND, trace(-) to trace(+) Silt, damp, no odors.	0.1	
4	S-2 4' - 8'	3.0-ft.	4.0-ft.	Brown and gray mottled SILT, little(-) f Sand, wet to saturated @ ~5.2-ft., no odors.	0.1	
				Grading To	0.2	
6				Brownish-gray Clayey SILT, saturated, no odors.	0.3	
8				Borehole caves in to 2.4-ft. BGS.		
				End of Boring @ 8.0-ft. BGS		
10						
12						
14						
16						
18						
V	VATER LEVEL		BOTTOM OF	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
				8.0-FT. Approx. 5.2-FT.		
1						

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations
- and = 35 to 50 %
- some = 20 to 35%

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

c = coarse m = medium f = fine

NA = Not Applicable

BORING:

B-12

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

Associates, P.C.

PROJECT Phase II Environmental Site Assessment

Preliminary Subsurface Site Characterization

BORING: B-13

SHEET

1 OF

JOB: 205237

CHKD BY:

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York

CONTRACTOR:

TREC Environmental BORING LOCATION: TIME:

1134 TO 1205

Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

GROUND SURFACE ELEVATION: NA

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

NA

START DATE:

END DATE:

27-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

27-Oct-05

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

D E P T H	SAMPLE NO	SAMPLE SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	1.5-ft.	0.0-ft 0.6-ft.	TOPSOIL Dark brown f SAND, trace(+) Silt, organics present (roots, root traces, humus), damp, moderate chlorinated solvent odor. ALLUVIUM Grayish-brown f SAND, little(-) Silt, damp to wet, no odors.	253 7.4	
4	S-2 4' - 8'	3.4-ft.	4.0-ft,	Gray and brown mottled SILT to Clayey SILT, trace(-) f Sand, wet to saturated @ ~4.3-ft., no odors.	3.2	
6					1.2	
8				Borehole caves in to 4.0-ft. BGS. End of Boring @ 8.0-ft. BGS		,
10						
12 14						
16						
18						
DATE	VATER LEVEL	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES: BORING ENCOUNTERED		
				8.0-FT. Approx. 4.3-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations
- and = 35 to 50 %

trace = 1 to 10%

c = coarse m = medium

BGS = Below the Ground Surface

some = 20 to 35% little = 10 to 20%

f = fine

NA = Not Applicable

BORING:

B-13



Associates, P.C.

PROJECT

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-14

SHEET

1 OF

JOB: **205237**

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

TREC Environmental
Paul Wiley

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: 1425 TO 1445 DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

s START DATE:

28-Oct-05

END DATE: 28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

OVERBURDEN SAMPLING METHOD: Direct Push

AUGER SIZE AND TYPE:

NA

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

D E P	SAMPLE NO	SAMPLE	STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	AND DEPTH				` ′	
0	S-1 0' to 4'	2.7-ft.	0.0-ft 0.2-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Brown cmf SAND, little(+) mf subrounded to angular Gravel, moist, no odors. ALLUVIUM Brown f SAND, trace Silt, damp, no odors.	35.1 0.9	
				Grading To	4.1	
				Brown mf SAND, damp to wet, no odors.		
4	S-2 4' - 8'	3.2-ft.	4.0-ft.	As above, wet to saturated @ 4.9-ft., no odors	20.3	
					31.4	
6			6.7-ft.	Brownish-gray Clayey SILT, saturated, no odors.	9.6	
8	S-3	1.9-ft.	8.0-ft.	Gray Clayey SILT, saturated, no odors.		
	8' - 12'			Grading To	2.0	
				Gray mf ⁽⁺⁾ SAND, trace(-) Silt, saturated, no odors.	1.7	
10			9.7-ft.	Gray cmf SAND and cmf angular to subangular GRAVEL, saturated, no odors.		
12				Borehole caves in to 7.5-ft. BGS.		
				End of Boring @ 12.0-ft. BGS		
14						
14						
16						
40						
18						
				POTTOMOS DOCUMENTED NOTES.		
	VATER LEVEL	DATA ELAPSED	BOTTOM OF			
DATE	TIME	TIME	CASING	BORING ENCOUNTERED		
				12.0-FT. Approx. 4.9-FT		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations
- and = 35 to 50 %

c = coarse m = medium

f = fine

BGS = Below the Ground Surface

some = 20 to 35%

little = 10 to 20% trace = 1 to 10% NA = Not Applicable



BORING: B-15

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization SHEET JOB: CHKD BY: 1 OF

205237

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Paul Wilev

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

1407 TO 1423

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

28-Oct-05

END DATE: 28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-Inch

OTHER:

	SAMPLE NO		STRATA CHANGE		VISUAL CLASSI	FICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	2.8-ft.	0.0-ft 0.2-ft.		FILL MATE nt - Not sampled SAND, little mf angular to subrou		0.9	
2			0.9-ft.		ALLUVII race Silt, damp, no odors.		0.9	
			2.8-ft.	Brown mf SAND	, damp to wet, no odors. layey SILT, wet, no odors.		0.3	
4	S-2 4' - 8'	3.2-ft.	4.0-ft.		mottled Clayey SILT, saturated, n	o odors.	4.2	
				Grading To Brown and gray	 mottled SILT, saturated, no odors		2.6	
6			6.2-ft.	Brown mf SAND	, little Clayey Silt, saturated, no o	dors.	1.0	
8	S-3 8' - 12'	2.6-ft.	8.0-ft.	Gray Clayey SIL	T (Includes trace peat and wood t	fragments), saturated, no odors.	0.1	
				Brownish-gray S odors.	ILT, little(-) f Sand (Includes trace	r(-) peat and wood fragments), saturated, no	0.1	
10			10.0-ft.	Gray cmf SAND	and cmf angular to subangular G	RAVEL, saturated, no odors.	0.1	
12					Borehole caves in to End of Boring @ 1			
14								
16								
18								
V	VATER LEVEL		BOTTOM OF	BOTTOM OF	GROUNDWATER	NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING	ENCOUNTERED			
				12.0-FT.	Approx. 4.0-FT.		**	

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

c = coarse m = medium

BGS = Below the Ground Surface

some = 20 to 35% little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable



Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization BORING: B-16 SHEET

1 OF

JOB: 205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY

ENVIRONMENTAL ENGINEERING CONSULTANTS

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: 1009 TO 1040 DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

28-Oct-05

END DATE: 28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

CONTRACTOR:

DRILLER:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

D E P T H	SAMPLE NO	SAMPLE SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS				
2	S-1 0' to 4'	2.4-ft.	0.0-ft 0.2-ft. 0.6-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Dark brown cmf SAND, some mf subangular Gravel, moist, no odors. ALLUVIUM Brown mf ⁽⁺⁾ SAND, trace(+) mf subrounded to subangular Gravel, moist to damp, no odors.	9.1					
6	S-2 4' - 8'	3.6-ft.	4.0-ft.	Brown and gray mottled SILT, wet to saturated @ ~4.8-ft., no odors. Grading To Brown Clayey SILT, saturated, no odors. Grading To Brown and gray mottled SILT, saturated, no odors.	0.1 0.1 0.1					
8	S-3 8' - 12'	2.1-ft.	8.0-ft. 9.4-ft.	Brownish-gray Clayey SILT, trace f Sand, saturated, no odors. Gray cmf SAND and cmf subrounded to angular GRAVEL, saturated, no odors.	0.1					
12	S-4 12' - 15'	1.3-ft.	12.0-ft.	As above, saturated, no odors.	0.8					
14				End of Boring @ 15.0-ft. BGS						
18										
DATE	VATER LEVEL	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES: BORING ENCOUNTERED 15.0-FT. Approx. 4.8-FT.						

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

some = 20 to 35%

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

m = medium f = fine

c = coarse

NA = Not Applicable



Phase II Environmental Site Assessment
Preliminary Subsurface Site Characterization
Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-17

SHEET

1 OF

JOB: **205237**

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: DATUM: 1

0930 TO 1005 NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

28-Oct-05

END DATE: 28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

<u> </u>					1	
D E P		SAMPLE			PID FIELD SCREEN	
T H	SAMPLE NO AND DEPTH		STRATA CHANGE	VISUAL CLASSIFICATION	(PPM)	REMARKS
0	S-1 0' to 4'	1.5-ft.	0.0-ft 0.2-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Dark brown cmf SAND, some cmf angular to subangular Gravel, moist, no odors. ALLUVIUM	1.4 2.2	
2			0.7-ft.	Brown f SAND, trace Silt, moist, no odors Grading To Brownish-gray SILT, trace(+) f Sand, damp, no odors.		
4	S-2 4' - 8'	3.3-ft.	4.0-ft.	As above, damp, no odors Grading To	1.7	
				Brown and gray mottled Clayey SILT, saturated @ ~5.0-ft., no odors.	0.9	
6					0.6 0.8	
8	S-3 8' - 12'	2.5-ft.	8.0-ft. 8.5-ft.	Brown f SAND, saturated, no odors. Brown Clayey SILT, saturated, no odors Grading To	2.0	
				Brownish-gray SILT, saturated, no odors.	0.5	
10			10.2-ft.	Gray cmf SAND, some cmf angular to subrounded Gravel, saturated, no odors.	6.3	
12	S-4 12' - 15'	1.1-ft.	12.0-ft.	As above, saturated, no odors.	2.8	:
14						
				End of Boring @ 15.0-ft. BGS		
16						· ·
10						
18						
	VATER LEVEL	DATA	воттом ог	BOTTOM OF GROUNDWATER NOTES:	I	
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
		1,,,,,		15.0-FT. Approx. 5.0-FT.		
	NEDAL NOTE	-0				

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10% f = fine

NA = Not Applicable

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-18

SHEET

1 OF

1

205237 JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS** TREC Environmental

CONTRACTOR: DRILLER:

Paul Wilev

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

1105 TO 1130

DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05

END DATE: 27-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

Over	IDUNDEN SA	IVII EIIVO IVIL.	TIOD. Direc	THE USIN		
D E P T H	SAMPLE NO		STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	2.7-ft.	0.0-ft	FILL MATERIAL Asphalt Pavement - Not sampled	0.3	
			0.2-ft.	Brown cmf SAND, little mf subrounded to angular Gravel, (roots, root traces, humus), moist to damp, no odors.	1.8	
2			1.0-ft	ALLUVIUM Brown SILT, little f Sand, damp, no odors. Brown mf ⁽⁺⁾ SAND, damp to wet, no odors. Dark grayish-brown SILT, wet, no odors.	1.9	
4	S-2 4' - 8'	3.1-ft.	4.0-ft.	Brown SILT, little(-) f Sand, wet to saturated @ ~4.9-ft., no odors.	0.4	
				Grading To	0.4	
6				Brown with gray mottling Clayey SILT, saturated, no odors.	3.7	
8	S-3 8' - 12'	1.9-ft.	8.0-ft.	As above, but grayish-brown, saturated, no odors.	0.4	
			9.3-ft.	Gray cmf angular to subangular GRAVEL, little cmf Sand, saturated, no odors.	1.0	
10						
12				Borehole caves in to 8.8-ft. BGS. End of Boring @ 12.0-ft. BGS		
14						
16						
18						
	NATER LEVEL	DATA	BOTTOM OF	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
				12.0-FT. Approx. 4.9-FT.		
1						

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

c = coarse m = medium

BGS = Below the Ground Surface

some = 20 to 35% little = 10 to 20%

trace = 1 to 10%

f = fine

NA = Not Applicable

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-19

1 OF

205237 JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: DATUM:

1450 TO 1510 NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

28-Oct-05

END DATE: 28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-Inch

OTHER:

0.1		IVIT EITYG IVIE	11100. 01100	OTHER.		
D E P T	SAMPLE NO		STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0 2	S-1 0' to 4'	2.6-ft.	0.0-ft 0.2-ft. 0.7-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Dark brown cmf SAND, some(-) mf subangular Gravel, moist, no odors. ALLUVIUM Brown f SAND, damp, no odors. Grading To Grading To	8.4	
4	S-2 4' - 8'	3.2-ft.	4.0-ft. 4.7-ft.	Brown mf SAND, wet, no odors. As above, wet, no odors. Brown and gray mottled SILT, wet to saturated @ ~5.3-ft., no odors.	4.3 0.4	
6				Grading To Brown and gray mottled Clayey SILT, saturated, no odors.	0.3	
8	S-3 8' - 12'	2.5-ft.	8.0-ft.	Light gray Clayey SILT, saturated, no odors.	0.4 0.2	
10			9.9-ft.	Gray cmf angular to subangular GRAVEL, some cmf Sand, saturated, no odors. Borehole caves in to 8.8-ft. BGS.	0.1	
12				End of Boring @ 12.0-ft. BGS		
16						
18						
v	VATER LEVEL		воттом ог	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING		
	NEDAL MOTE					

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

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c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20%

f = fine

NA = Not Applicable

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-20

SHEET

1 OF

1

JOB: 205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

1319 TO 1407

DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

28-Oct-05

END DATE: 28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

OVERBURDEN SAMPLING METHOD: Direct Push									
D E P T	SAMPLE NO	SAMPLE	STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS			
Н	AND DEPTH								
2	S-1 0' to 4'	2.0-ft.	0.0-ft 0.2-ft. 0.4-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Dark brown cmf SAND, trace(+) mf subrounded Gravel, moist, no odors. ALLUVIUM Brown f SAND, trace Silt, moist, no odors. Grading To Brown mf ⁽⁺⁾ SAND, damp, no odors.	2.0 3.5				
4	S-2 4' - 8'	3.0-ft.	4.0-ft.	Brown SILT, trace(+) f Sand, wet to saturated @ ~5.7-ft., no odors.	0.7				
				Grading To	0.7				
6				Brown Clayey SILT, saturated, no odors.	0.5				
8	S-3 8' - 12'	1.7-ft.	8.0-ft.	Gray Clayey SILT, saturated, no odors.	0.7				
				Grading To	0.5				
10			9.5-ft.	Gray SILT, trace f Sand, saturated, no odors. Gray cmf angular to subrounded GRAVEL, some(+) cmf Sand, saturated, no odors.					
12				Borehole caves in to 7.5-ft. BGS.					
12				End of Boring @ 12.0-ft. BGS					
14									
16									
18									
<u> </u>	LATED : 51/5:	DATA	DOTTO! 4 CT	POTTOMOS CROUNDWATER NOTES.	l				
DATE	VATER LEVEL TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES: BORING ENCOUNTERED					
				12.0-FT. Approx. 5.7-FT.					
I 0E	NEDAL NOTE	-0							

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

c = coarse

BGS = Below the Ground Surface

some = 20 to 35%

little = 10 to 20% trace = 1 to 10%

m = medium f = fine

NA = Not Applicable



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners 1600 Penfield Road, Penfield, New York

BORING: B-21

SHEET

1 OF

JOB: 205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

Paul Wiley

TREC Environmental BORING LOCATION:

GROUND SURFACE ELEVATION: NA

END DATE:

TIME: DATUM:

1045 TO 1040 NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

28-Oct-05

28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

	SAMPLE NO.		STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	2.2-ft.	0.0-ft 0.2-ft. 0.8-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Dark brown cmf SAND, little mf ⁽⁺⁾ angular to subangular Gravel, moist, no odors. ALLUVIUM Brown f SAND, trace(-) Silt, damp, no odors.	7.7 38.7	
4	S-2 4' - 8'	2.8-ft.	4.0-ft. 4.6-ft.	Brown mf SAND, wet, no odors. Brown with little gray mottling SILT, wet to saturated @ ~5.2-ft., no odors Grading To Brown with trace gray mottling Clayey SILT, saturated, no odors.	10.1	
8	S-3 8' - 12'	2.1-ft.	8.0-ft. 9.1-ft.	Brown SILT, trace(-) f Sand, saturated, very slight chlorinated solvent odor Grading To Brown SILT, little(-) f Sand, saturated, no odors Gray cmf subrounded to angular GRAVEL and cmf SAND, saturated, no odors.	51.7 11.3	
12	S-4 12' - 15'	0.8-ft.	12.0-ft.	As above, saturated, no odors.	0.9	
14				End of Boring @ 15.0-ft. BGS		
16 18						
	VATER LEVEL		BOTTOM OF	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
				15.0-FT. Approx. 4.8-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

some = 20 to 35%

c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable



Associates, P.C.

PROJECT

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-22

SHEET

1 OF

1

JOB: 205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

0901 TO 0930 DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

28-Oct-05

END DATE: 28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

	T							
D E P T H	SAMPLE NO	SAMPLE SAMPLE RECOVERY	STRATA CHANGE		VISUAL CLASS	IFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	2.4-ft.	0.0-ft 0.2-ft. 1.2-ft.	Dark brown cmf chlorinated solv		angular Gravel, moist to damp, very slight	65.8 143	
6	S-2 4' - 8'	3.1-ft.	4.0-ft. 4.2-ft.	Brown Clayey S solvent odor.		ted @ ~5.2-ft., very slight chlorinated	35.1 68.1 64.2	
8	S-3 8' - 12'	1.3-ft.	8.0-ft. 8.9-ft.			or. nd cmf SAND, saturated, moderate	117 833	
12	S-4 12' - 15'	1.3-ft.	12.0-ft.	As above, satura	ated, very slight chlorinated solver	nt odor.	29.4	
14					End of Boring @ 1	5.0-ft. BGS		
18								
V	VATER LEVEL	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	ENCOUNTERED	NOTES:		
	L			15.0-FT.	Approx. 4.8-FT.	-		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations
- and = 35 to 50 % some = 20 to 35%

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f = fine

NA = Not Applicable



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-23

SHEET

CHKD BY:

TIME:

1 OF

1

JOB:

205237

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

1025 TO 1100

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05

END DATE: 27-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

					1	
D E P		SAMPLE			PID FIELD SCREEN	
T H	SAMPLE NO. AND DEPTH		STRATA CHANGE	VISUAL CLASSIFICATION	(PPM)	REMARKS
0	S-1 0' to 4'	2.5-ft.	0.0-ft 0.2-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Brown cmf SAND, little(+) cmf subrounded to angular Gravel, damp, no odors. ALLUVIUM	5.3 12.9	
2			0.8-ft.	Brown f SAND, trace mf subrounded to angular Gravel, damp to wet, no odors to very slight chlorinated solvent odor.	46.4	
4	S-2 4' - 8'	3.7-ft.		Brown m ⁽⁺⁾ f SAND, little(+) Silt, wet, no odors. Brown SILT, some(-) f Sand, wet to saturated @ ~5.4-ft., no odors.	28.2	
			4.6-ft.	Grading To	21.3	
6				Brown and gray mottled SILT, saturated, no odors.	19.9	
					18.9	
8	S-3 8' - 12'	2.7-ft.	8.0-ft.	Brown m ⁽⁺⁾ f SAND, saturated, no odors.	20.1	
			9.0-ft.	Brown SILT, trace mf Sand, saturated, no odors.	29.8	
10			10.1-ft.	Brownish-gray cm ⁽⁺⁾ f angular to subrounded GRAVEL, some(-) cmf Sand, saturated, no odors.	47.1	
12	S-4 12' - 14'	2.2-ft.	12.0-ft.	As above, saturated, no odors.	2.1	
	,- ,,			Grading To	2.0	
14				Gray c ⁽⁺⁾ m SAND, trace(-) f Gravel, saturated, no odors.		
		:		End of Boring @ 15.0-ft. BGS		
16						
		:				
18						
\	VATER LEVEL		воттом оғ	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
				15.0-FT. Approx. 5.4-FT.		
0.5	NEDAL NOTE					

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

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c = coarsem = medium

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some = 20 to 35% little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

SHEET

BORING: B-24 1 OF

JOB:

205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS** TREC Environmental

CONTRACTOR: DRILLER:

Paul Wilev

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

0850 TO 0920

DATUM:

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05

END DATE: 27-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-Inch

OTHER:

	,					
D		SAMPLE			PID	
E P					FIELD SCREEN	
	SAMPLE NO		STRATA	VISUAL CLASSIFICATION	(PPM)	REMARKS
H	AND DEPTH	RECOVERY	CHANGE			
0	S-1	2.8-ft.	0.0.4	FILL MATERIAL	1.6	
	0' to 4'	ŀ	0.0-ft 0.2-ft.	Asphalt Pavement - Not sampled Brown cm ⁽⁺⁾ f SAND, some(-) mf angular to subrounded Gravel, moist, no odors.	1.0	
ļ			0.9-ft.	Brown mf ⁽⁺⁾ SAND, trace Silt, damp to wet, no odors.	7.9	
2						
					8.6	
-						
4	S-2	3.7-ft.	4.0-ft.	Gray to brown SILT, trace f Sand, wet to saturated @ ~6.0-ft., no odors.		
	4' - 8'			Grading To	6.4	
				Grading 10	3.2	
_				Brown and gray mottled Clayey SILT, trace(-) f Sand, saturated, no odors.		
6					5.0	
					9.3	
8	S-3	2.6-ft.	8.0-ft.	As above, saturated, no odors.		
	8' - 12'			Grading To	2.2	
			9.2-ft.	Brown SILT, trace f Sand, saturated, no odors. Gray cm ⁽⁺⁾ f SAND and cmf angular to subrounded GRAVEL, saturated, no odors.	1.5	
			0.2.11	Giray Citi 1 3 And Citis angular to subfounded CitiA V.E.E., Saturated, No odors.		
10					1.2	
			-		'	
12	S-4	2.0-ft.	12.0-ft.	As above, saturated, no odors.		
	12' - 14'				0.4	
			13.1-ft	Gray cm ⁽⁺⁾ f SAND, saturated, no odors.	0.3	
			10.1 1.	Grading To		
14				Gray mf SAND, saturated, no odors.		
				Borehole caves in to 10.1-ft. BGS.		
16				End of Boring @ 15.0-ft. BGS		
,,,						
18						
		D. T.	DOTTO:: C-	POTTOMOS OPOUNDWATER NOTES.		
	VATER LEVEL	DATA ELAPSED	BOTTOM OF			
DATE	TIME	TIME	CASING	BORING ENCOUNTERED		
	NEDAL MOTE			15.0-FT. Approx. 6.0-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
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- 3) Abbreviations

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BGS = Below the Ground Surface

some = 20 to 35%

little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-25

SHEET

1 OF

1

205237 JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

END DATE:

TIME: 1303 TO 1318 DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

28-Oct-05

28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NΑ

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

	SAMPLE NO AND DEPTH	SAMPLE SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	2.4-ft.	0.0-ft 0.2-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Brown cmf SAND, little mf subrounded to subangular Gravel, moist, no odors.	2.9	
2			1.0-ft.	ALLUVIUM Brown f SAND, trace Silt, moist, no odors Grading To	2.0	
_				Brown mf ⁽⁺⁾ SAND, damp, no odors.	1.6	
4	S-2	3.0-ft.	4.0-ft.	As above, damp to wet, no odors.		
THE REAL PROPERTY AND ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY AND ADDRESS OF THE PERTY ADDR	4' - 8'		4.6-ft.	Brown SILT, trace f Sand, wet to saturated @ ~6.1-ft., no odors.	1.7	
6					1.3	
8	S-3	3.1-ft.	8.0-ft.	As above, saturated, no odors.	4.0	
	8' - 12'			Grading To Brown and gray mottled Clayey SILT, saturated, no odors.	4.0 2.6	
10			10.5-ft. 10.9-ft.	Gray mf SAND, saturated, no odors. Gray cm ⁽⁺⁾ f SAND and cmf subrounded to angular GRAVEL, saturated, no odors.	3.1	
12				Borehole caves in to 8.4-ft. BGS. End of Boring @ 12.0-ft. BGS		
14						
16						
18						
	VATER LEVEL	DATA ELAPSED	BOTTOM OF	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	TIME	CASING	BORING ENCOUNTERED		
				12.0-FT. Approx. 6.1-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

SHEET JOB:

1 OF

205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: 1120 TO 1140 DATUM:

BORING: B-26

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

28-Oct-05

END DATE: 28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE: NA

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-Inch

OTHER:

SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE STRATA VISUAL CLASSIFICATION PRIED SOREEN PRIED PRIED SOREEN PRIED PRIED SOREEN SOREEN PRIED SOREEN SOREEN SOREEN PRIED SOREEN SOREEN						·	
S-1	E P T		SAMPLE		VISUAL CLASSIFICATION	FIELD SCREEN	REMARKS
ALLUVIUM		S-1		0.0-ft	Asphalt Pavement - Not sampled	5.9	
14.4					ALLUVIUM Brown f SAND, trace c angular Gravel, moist to damp, no odors.	14.6	
A - 8'	2					14.4	
A. Brown with little gray mottling SILT, wet to saturated @ -5.6-ft., no odors. 11.9	4		3.3-ft.	4.0-ft.	Brown f SAND, trace Silt, damp to wet, no odors.	45.0	
10.0 10.0		4' - 8'		4.8-ft.	Brown with little gray mottling SILT, wet to saturated @ ~5.6-ft., no odors.		
10 3' - 12' 9.2-ft. 11.1 9.2-ft. 11.1 9.2-ft. 9.2-ft. 11.1 9.2-ft. 9.2-ft.	6					10.0	
10 3' - 12' 9.2-ft. 11.1 9.2-ft. 11.1 9.2-ft. 9.2-ft. 11.1 9.2-ft. 9.2-ft.		:					
10	8		2.0-ft.	8.0-ft.	Grading To	43.7	
12 S-4 12'-14' 12.0-ft. 12.0-ft. 12.0-ft. As above, saturated, no odors. 11.1 11.1				9.2-ft.		69.1	
12' - 14'	10						
14	12		0.2-ft.	12.0-ft.	As above, saturated, no odors.	11.1	
Time Figure Fig							
18	14						
18					End of Boring @ 15.0-ft. BGS		
WATER LEVEL DATA DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 15.0-FT. Approx. 5.6-FT.	16						
WATER LEVEL DATA DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 15.0-FT. Approx. 5.6-FT.	18						
DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 15.0-FT. Approx. 5.6-FT.							
DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 15.0-FT. Approx. 5.6-FT.							
TIME	V	VATER LEVEL		воттом оғ	BOTTOM OF GROUNDWATER NOTES:		
	DATE	TIME		CASING			
	<u> </u>	NEDAL NOTE		<u> </u>	13.0-г і. Арргох. 5.6-г і.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

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trace = 1 to 10%

c = coarse m = medium

BGS = Below the Ground Surface

some = 20 to 35% little = 10 to 20%

f = fine

NA = Not Applicable



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

SHEET JOB:

BORING: B-27 1 OF

205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

0823 TO 0840

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

28-Oct-05

END DATE: 28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

ļ						
D E P	SAMPLE NO	SAMPLE	STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	AND DEPTH					
0	S-1 0' to 4'	2.7-ft.	0.0-ft 0.2-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Dark brown cmf SAND, little(-) mf subrounded to angular Gravel, moist, very slight chlorinated solvent odor. ALLUVIUM	25.4 149	
2			0.6-ft.	Brown f SAND, little Silt, damp to wet, slight chlorinated solvent odor.	223	
4	S-2 4' - 8'	2.9-ft.	4.0-ft.	As above, wet, moderate chlorinated solvent odor.	300	
			5.0-ft.	Brown SILT, wet to saturated @ ~5.4-ft., moderate to strong chlorinated solvent odor.	273	
6					1,374	
8	S-3 8' - 12'	2.0-ft.		As above, saturated, strong chlorinated solvent odor Grading To Brown f SAND, trace(-) Silt, saturated, strong chlorinated solvent odor. Gray cmf SAND, some(+) cmf subround to angular Gravel, saturated, strong chlorinated	6,820 4,164	
10				solvent odor.		
12	S-4 12' - 14'	1.1-ft.	12.0-ft.	As above, saturated, moderate chlorinated solvent odor.	573	,
14						
				End of Boring @ 15.0-ft. BGS	1	
16						
18						
ļ	L			BOTTOM OF GROUNDWATER NOTES:	<u> </u>	
DATE	WATER LEVEL TIME	DATA ELAPSED	BOTTOM OF CASING	BORING ENCOUNTERED NOTES:		
DATE	HIME	TIME	CASING			
		<u> </u>	<u> </u>	15.0-FT. Approx. 5.4-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

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and = 35 to 50 % some = 20 to 35% c = coarse

f = fine

m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

NA = Not Applicable



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-28

SHEET

1 OF

205237 JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

0945 TO 1020 NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05

END DATE: 27-Oct-05 DATUM:

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

ļ	1					I
D E P		SAMPLE			PID FIELD SCREEN	
T	SAMPLE NO AND DEPTH		STRATA CHANGE	VISUAL CLASSIFICATION	(PPM)	REMARKS
0	S-1 0' to 4'	2.6-ft.	0.0-ft 0.2-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Brown cmf SAND, little mf angular to subrounded Gravel, moist, no odors.	9.9	
2			0.9-ft.	ALLUVIUM Brown f SAND, trace(-) f Gravel, damp, no odors Grading To	51.5	
				Brown mf SAND, trace mf angular to subrounded Gravel, damp to wet, very slight chlorinated solvent odor.	72.0	
4	S-2 4' - 8'	3.2-ft.	4.0-ft.	As above, wet, very slight chlorinated solvent odor.	28.4	
			4.7-ft.	Brown and gray mottled SILT, trace(+) f Sand, wet to saturated @ ~5.8-ft., slight chlorinated solvent odor.	37.6	
6				Grading To Brown with trace gray mottling SILT to Clayey SILT, saturated, slight chlorinated solvent odor.	35.1	
8	S-3 8' - 12'	3.3-ft.	8.0-ft. 8.6-ft.	As above, saturated, slight chlorinated solvent odor. Brown mf SAND, little cmf subrounded to angular Gravel, slight chlorinated solvent odor.	127	
40			9.3-ft.	Brown and gray mottled SILT, saturated , slight chlorinated solvent odor Grading To	134	
10			10.5-ft.	Brown mf ⁽⁺⁾ SAND, trace(-) Silt, moderate chlorinated solvent odor. Grayish-brown cmf SAND, little to some(-) cmf angular to subrounded Gravel, saturated, very strong chlorinated solvent odor.	>9,999	
12	S-4 12' - 14'	0.8-ft.	12.0-ft.	Grayish-brown cm ⁽⁺⁾ f SAND, little(-) mf angular to subrounded Gravel, saturated, strong chlorinated solvent odor.	3,918	
14						
				End of Boring @ 14.0-ft. BGS		
16						
18						
├ ──☆	ATER LEVEL	DATA	воттом оғ	BOTTOM OF GROUNDWATER NOTES:	!	-
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
ليطا	NEDAL NOTE			14.0-FT. Approx. 5.5-FT.		-

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
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- 3) Abbreviations

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some = 20 to 35% little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable

PROJECT Phase II Environmental Site Assessment

Preliminary Subsurface Site Characterization

Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-29

SHEET JOB:

1 OF

205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY

ENVIRONMENTAL ENGINEERING CONSULTANTS

TREC Environmental BORING LOCATION:

GROUND SURFACE ELEVATION: NA

27-Oct-05

TIME: 0820 TO 0845 DATUM: NA

Paul Wiley LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05 END DATE:

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

CONTRACTOR:

DRILLER:

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

					1	
D E P T	SAMPLE NO	SAMPLE	STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
н	AND DEPTH				` ′	W. T. W.
2	S-1 0' to 4'	2.0-ft.	0.0-ft 0.2-ft. 1.2-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Brown cm ⁽⁺⁾ f SAND, some cm ⁽⁺⁾ f angular to subrounded Gravel, moist, slight chlorinated solvent odor. Brown cmf angular to subrounded GRAVEL, some(+) cmf ⁽⁺⁾ Sand, damp, no odors.	79.4 9.6	
4	S-2 4' - 8'	3.4-ft.	4.0-ft.	ALLUVIUM Dark gray to brown SILT, little(-) f Sand, wet to saturated @ ~6.7-ft., no odors.	3.1 5.9	
6					1.9	
8	S-3 8' - 12'	2.2-ft.	8.0-ft. 8.5-ft.	As above, saturated, no odors. Brown f SAND, trace Silt, saturated, no odors.	2.0	
10			9.2-ft.	Gray cmf angular to subrounded GRAVEL, some(+) cmf Sand, saturated, no odors.	2.5	
12				Borehole caves in to 8.3-ft. BGS. End of Boring @ 12.0-ft. BGS		
14						
16						
18						
	VATER LEVEL		BOTTOM OF	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
				12.0-FT. Approx. 6.7-FT.		
	NEDAL NOTE					

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

trace = 1 to 10%

c = coarse m = medium f = fine

BGS = Below the Ground Surface

some = 20 to 35%

little = 10 to 20%

NA = Not Applicable

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-30

SHEET

1 OF 205237

1

JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

1230 TO 1300

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles START DATE:

28-Oct-05

END DATE: 28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-Inch

OTHER:

D E P T H	SAMPLE NO		STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
2	S-1 0' to 4'	2.2-ft.	0.2-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Brown cm subrounded to subangular GRAVEL and mf SAND, moist, no odors. ALLUVIUM Brown mf SAND, moist to damp, no odors.	2.0	
4	S-2 4' - 8'	3.1-ft.	4.0-ft.	Brown mf ⁽⁺⁾ SAND, damp, no odors. Grading To Brown and gray mottled Clayey SILT, trace(-) f Sand, wet to saturated @ ~6.5-ft., no odors.	3.1 2.2	
8	S-3	2.5-ft.	8.0-ft.	Brown and gray mortied Clayey SiL1, trace(-) it Sand, wet to saturated @ ~o.s-it., no odors. Brown mf SAND, little Clayey Silt, saturated, no odors.	1.5	
10	8' - 12'		9.5-ft.	Grading To Brown SILT, little(-) f Sand, saturated, no odors Grading To Brown mf ⁽⁺⁾ SAND, little Silt, saturated, no odors. Gray cmf SAND, some cmf angular to subrounded Gravel, saturated, no odors.	5.4	
12				Borehole caves in to 8.4-ft. BGS.	21.8	
14				End of Boring @ 12.0-ft. BGS		
16						
18						
	VATER LEVEL	DATA ELAPSED	BOTTOM OF			
DATE	TIME	TIME	CASING	BORING ENCOUNTERED 12.0-FT. Approx. 6.1-FT.		
F	NEDAL NOTE	-0				

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse

f = fine

m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

NA = Not Applicable



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-31

SHEET JOB:

1 OF

1145 TO 1225

1

205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS TREC Environmental

CONTRACTOR: DRILLER:

Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles START DATE:

END DATE: 28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

28-Oct-05

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-Inch

OTHER:

<u> </u>	1				Г	
D E P		SAMPLE			PID FIELD SCREEN	
Т	SAMPLE NO AND DEPTH		STRATA CHANGE	VISUAL CLASSIFICATION	(PPM)	REMARKS
0	S-1 0' to 4'	2.4-ft.	0.0-ft	FILL MATERIAL Asphalt Pavement - Not sampled Dark brown cmf SAND, little cm ⁽⁺⁾ f angular to subangular Gravel, moist, no odors. ALLUVIUM	3.1 5.3	
2	:		0.6-ft.	Brown f SAND, trace(+) Silt, moist to damp, no odors Grading To Brown mf SAND, damp, no odors.	11.5	
				Brown mr SAND, damp, no odors.	11.5	
4	S-2 4' - 8'	2.7-ft.	4.0-ft.	As above, damp to wet, no odors.	20.7	
			5.0-ft.	Brown SILT, trace f Sand, wet to saturated @ ~6.0-ft., no odors.	8.8	
6		:	:	Grading To Brown and gray mottled SILT, saturated, no odors.	8.3	
	_					
8	S-3 8' - 12'	1.7-ft.	8.0-ft. 8.6-ft.	As above, saturated, no odors. Brown m ⁽⁺⁾ f SAND, saturated, moderate chlorinated solvent odor.	9.1	
10				Gray cmf SAND, saturated, moderate chlorinated solvent odor. Gray cmf SAND, some(+) cmf angular to subangular Gravel, saturated, moderate chlorinated solvent odor.	511	
12	S-4 12' - 15'	0.5-ft.	12.0-ft.	As above, saturated, very faint chlorinated solvent odor.	64.9	
4.4						
14						
				End of Boring @ 15.0-ft. BGS		
16						
18						
,0						
٧	VATER LEVEL		воттом оғ	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
	NEDAL NOTE			15.0-FT. Approx. 6.0-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

c = coarse m = medium

BGS = Below the Ground Surface

some = 20 to 35% little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-32

SHEET JOB:

1 OF

0800 TO 0820

205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

END DATE:

TIME: DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

28-Oct-05

28-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

						
D E P T H	SAMPLE NO AND DEPTH		STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	2.9-ft.	0.0-ft 0.2-ft. 0.6-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Dark brown cmf SAND, little(+) mf ⁽⁺⁾ angular to subangular Gravel, damp, no odors. ALLUVIUM Brown f SAND, some(-) Silt, damp, no odors. Grading To	15.9 69.0 72.0	
4	S-2	3.3-ft.	4.0-ft.	Brown mf SAND, damp to wet, slight chlorinated solvent odor. As above, wet, moderate to strong chlorinated solvent odor.		
	4' - 8'		5.3-ft.	Brown SILT, little(-) f Sand, wet to saturated @ ~5.6-ft., strong chlorinated solvent odor.	351 >9.999	
6				Grading To Brown Clayey SILT, little(+) f Sand, saturated, strong chlorinated solvent odor.	4,731	
10	S-3 8' - 12'	2.2-ft.	8.0-ft. 9.1-ft.	Brown f SAND, little(-) Silt, saturated, strong chlorinated solvent odor Grading To Brown mf SAND, trace(-) Silt, saturated, strong chlorinated solvent odor. Gray cmf SAND, little(-) mf ⁽⁺⁾ subrounded to subangular Gravel, moderate strong chlorinated solvent odor.	3,411 318	
12				Borehole caves in to 8.7-ft. BGS. End of Boring @ 12.0-ft. BGS		
14						
16						
18						
\	VATER LEVEL		BOTTOM OF	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
				12.0-FT. Approx. 5.6-FT.		
	NEDAL NOTE	-0				

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 % some = 20 to 35%

little = 10 to 20%

trace = 1 to 10%

c = coarse

m = medium

BGS = Below the Ground Surface f = fine

NA = Not Applicable

BORING:

B-32

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-33

SHEET

1 OF 205237

1

JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: 0920 TO 0940 DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05

END DATE: 27-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

D E P T	SAMPLE NO		STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
Н	AND DEPTH	RECOVERY	CHANGE		ļ	
0	S-1 0' to 4'	1.7-ft.		Asphalt Pavement - Not sampled Brown cm ⁽⁺⁾ f SAND, some cm ⁽⁺⁾ f angular to subrounded Gravel, moist, no odors. ALLUVIUM	20.8 63.1	
2			0.7-ft.	Brown m ⁽⁺⁾ f SAND, damp, no odors.		
4	S-2 4' - 8'	3.2-ft.	4.0-ft.	As above, wet, very slight chlorinated solvent odor.	32.0	
			5.0-ft.	Dark brownish-gray to brown Clayey SILT to SILT, trace f Sand, saturated, no odors.	10.0	
6					8.0	
8	S-3 8' - 12'	3.0-ft.	8.0-ft. 8.6-ft.	As above, saturated, no odors. Brown mf SAND, saturated, no odors.	4.2	
10			100#	Gray cmf SAND and cmf angular to subrounded GRAVEL, saturated, no odors.	5.0 8.9	
			10.0-ft.	Gray Citis SAND and Citis angular to subrounded GRAVEL, Saturated, no odors.	6.9	
12				Borehole caves in to 9.2-ft. BGS. End of Boring @ 12.0-ft. BGS		
14						
16						
18		,				
1						
\	WATER LEVEL		воттом оғ	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
		111VIL		12.0-FT. Approx. 6.7-FT		
	NEDAL NOTE					

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse

f = fine

m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

NA = Not Applicable

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-34

SHEET

JOB:

TIME:

1 OF

0755 TO 0820

1

205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

END DATE:

DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05

27-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-Inch

OTHER:

D E P		SAMPLE			PID FIELD SCREEN	
T	SAMPLE NO AND DEPTH		STRATA CHANGE	VISUAL CLASSIFICATION	(PPM)	REMARKS
0	S-1 0' to 4'	2.7-ft.	0.0-ft 0.2-ft.	FILL MATERIAL Asphalt Pavement - Not sampled Brown cm ⁽⁺⁾ f SAND, little mf subrounded to rounded Gravel, moist, slight chlorinated solvent odor. ALLUVIUM	113 4.1	
2			1.4-ft.	Brown mf SAND, trace(+) mf(+) angular to subrounded Gravel, moist to damp, no odors.	8.4	
4	S-2 4' - 8'	2.3-ft.	4.0-ft.	As above, damp to wet, no odors.	3.9	
				Brown SILT, little(+) f Sand, wet, no odors. Brown SILT, little(+) rmf angular to subrounded Gravel, little(+) cmf ⁽⁺⁾ Sand, saturated, no odors.	4.1	
6					0.7	
8	S-3 8' - 12'	2.7-ft.	8.0-ft.	As above, saturated, no odors.	3.1	
10			9.8-ft.	Gray mf SAND, some(-) cmf angular to subrounded Gravel, saturated, no odors.	0.9	
10					0.9	
12				Borehole caves in to 8.0-ft. BGS. End of Boring @ 12.0-ft. BGS		
14						
16						
18						
DATE	VATER LEVEL TIME	ELAPSED	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES: BORING ENCOUNTERED		
<u> </u>		TIME				
	NICOAL MOTE			12.0-FT. Approx. 6.7-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

and = 35 to 50 %

c = coarse m = medium f = fine

NA = Not Applicable

BGS = Below the Ground Surface

BORING:

B-34

3) Abbreviations

some = 20 to 35%

trace = 1 to 10%

little = 10 to 20%



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-35 / MW-3

SHEET 1 OF

JOB: 205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: 1400 TO 1450

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05

END DATE: 27-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

				•				
D E P T H	SAMPLE NO		STRATA CHANGE		VISUAL CLASSI	FICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	3.4-ft.	0.0-ft	Dark brown to brown SIL damp, no odors.	TOP SC T, little(+) f Sand, include	IIL s organic matter (roots, root traces, humus)	0.2	
				Grading 10	ALLUVII	JM	0.0	
2			0.6-ft.	Brown SILT to Clayey SIL	_T, damp to wet, no odor	s.	0.0	
							0.1	
4	S-2 4' - 8'	3.3-ft.	4.0-ft.		Clayey SILT, little(-) f Sar	nd, wet to saturated @ ~5.0-ft., no odors.	0.0	
				Grading To Brown with little gray mot	tling Clayey SILT, trace f	Sand, saturated, no odors.	0.1	
6							0.1	
8	S-3 8' - 12'	2.0-ft.	8.0-ft.	Gray c ⁽⁺⁾ mf SAND, little(+	-) cmf subrounded to ang	ular Gravel, saturated, no odors.	0.2	
							0.2	
10								
12					Borehole caves in to	.8.5-# RGS		
12				Well i	End of Sampling @ nstalled to 15-ft. BGS with	12.0-ft. BGS		
14								
16								
18								
H-,	VATER LEVEL	DATA	ВОТТОМ OF	BOTTOM OF	GROUNDWATER	NOTES: Monitoring well MW-3 was const	ructed within I	borehole B-35.
DATE	TIME	ELAPSED TIME	CASING	BORING	ENCOUNTERED	- Due to cave in of the borehole, well inst		
		THVIE		12.0-FT.	Approx. 5.0-FT.	dedicated drive point		
CE	NEBAL NOTE							

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable

BORING: B-35 / MW-3



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-36 / MW-4

SHEET 1 OF

205237 JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR:

Paul Wiley

BORING LOCATION: TREC Environmental

GROUND SURFACE ELEVATION: NA 28-Oct-05

END DATE: 28-Oct-05 TIME: 1510 TO 1550 DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

OVERBURDEN SAMPLING METHOD: Direct Push

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-inch

OTHER:

D E P		SAMPLE			PID FIELD SCREEN	
T H	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	(PPM)	REMARKS
0	S-1 0' to 4'	3.5-ft.	0.0-ft	TOP SOIL Dark brown f SAND, some(-) Silt, includes organic matter (roots, root traces, humus), moist, no odors.	0.1	
2			0.6-ft.	ALLUVIUM Brown and gray mottled Clayey SILT, damp to wet, no odors.	0.1	
					0.2 2.3	
4	S-2 4' - 8'	3.2-ft.	4.0-ft.	As above, wet to saturated @ ~4.6-ft., no odors.	0.5	
	4 0	1		Grading To Gray Clayey SILT, damp to wet, no odors.	0.1	
6				Citay Crayey Sic.1, damp to well, no odoro.	0.0	
8	S-3 8' - 12'	2.2-ft.	8.0-ft.	As above, saturated, no odors Grading To	0.0	
			9.8-ft.	Gray SILT, little(+) f Sand, saturated, no odors. Gray cmf SAND and cmf angular to subangular GRAVEL, saturated, no odors.	4.9	
10						
12	S-4 12' - 15'	2.3-ft.	12.0-ft.	As above, saturated, no odors.	0.3	
				Grading To Gray m ⁽⁺⁾ f SAND, saturated, no odors.	0.1	
14						
16				End of Boring @ 15.0-ft. BGS		
16						
18						
	VATER LEVEL	DATA	BOTTOM OF	BOTTOM OF GROUNDWATER NOTES: Monitoring well MW-4 was cons	I tructed within	borehole B-36.
		ELAPSED		1 1		

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse

m = medium

BGS = Below the Ground Surface

NA = Not Applicable

little = 10 to 20% trace = 1 to 10%

f = fine

BORING: B-36 / MW-4



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-37 / MW-2 1 OF

JOB:

205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS TREC Environmental

CONTRACTOR: DRILLER:

Paul Wiley

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: DATUM:

1455 TO 1550 NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Oct-05

END DATE: 27-Oct-05

DRIVE SAMPLER TYPE: 4-foot Macrocore

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NΑ

OVERBURDEN SAMPLING METHOD: Direct Push

INSIDE DIAMETER: ~1.8-Inch

OTHER:

<u> </u>					1				
D E P		SAMPLE			PID FIELD SCREEN				
	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	(PPM)	REMARKS			
0	S-1 0' to 4'	2.0-ft.	0.0-ft	FILL MATERIAL Asphalt Pavement - Not sampled ALLUVIUM Brown mf SAND, trace Silt, moist to damp, no odors.	0.2 0.1				
2			40.6						
4	S-2 4' - 8'	3.2-ft.	4.0-ft. 4.5-ft.	As above, wet, no odors. Brown mf SAND, trace(+) m ⁽⁺⁾ f subrounded to subangular Gravel, wet, no odors.	4.1				
			5.2-ft.	Brown SILT, little f Sand, wet to saturated @ ~5.7-ft., no odors.	2.6	,			
6				Grading To Brown SILT, saturated, no odors.	1.6				
8	S-3 8' - 12'	2.3-ft.	8.0-ft.	As above, saturated, no odors.	1.2				
				Grading To	2.2				
10				Brown SILT and f SAND, wet to saturated @ ~5.7-ft., no odors.					
12	S-4 12' - 15'	1.5-ft.	12.0-ft.	Brownish-gray cmf SAND, some(+) m ⁽⁺⁾ f subrounded to angular Gravel, saturated, no odors Grading To	8.4				
				Gray c ⁽⁺⁾ mf SAND, saturated, no odors.	19.0				
14									
16				Borehole caves in to 12.3-ft. BGS. End of Sampling @ 15.0-ft. BGS Well installed to 15-ft. BGS with dedicated drive point.					
18									
\	VATER LEVEL		воттом оғ						
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED - Due to cave in of the borehole, well ins	talled by push	ing to 15-feet with			
	<u> </u>	L	<u> </u>	12.0-FT. Approx. 5.7-FT. dedicated drive point					

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 % some = 20 to 35%

little = 10 to 20%

trace = 1 to 10%

c = coarse

f = fine

m = medium

NA = Not Applicable

BGS = Below the Ground Surface

BORING: B-37 / MW-2



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-38 / MW-5

SHEET

1 OF

205237

CHKD BY:

JOB:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR:

Paul Wiley

BORING LOCATION: TREC Environmental

GROUND SURFACE ELEVATION: NA 27-Oct-05

TIME: 1355 TO 1450 DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

END DATE: 27-Oct-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

	SAMPLE NO		STRATA CHANGE		VISUAL CLASS	IFICATION	PID FIELD SCREEN (PPM)	REMARKS			
0	S-1 0' to 4'	2.6-ft.	0.0-ft 0.2-ft.	Asphalt Pavemer Brown mf SAND, Silt), moist to da	ALLUVI , trace mf subrounded to subang		0.2 0.1				
2				, ,			0.3				
4	S-2 4' - 8'	3.7-ft.	4.0-ft.	Brown f SAND, to	race(-) Silt, wet to saturated @ ~	4.5-ft., no odors.	0.2				
			5.0-ft.	Dark brown to br	own SILT, trace(-) f Sand, satura	0.2					
6				Grading To Brown Clayey SI	 LT, saturated, no odors.		0.1				
8	S-3	2.0-ft.	8.0-ft.	Brown and gray	mottled Clayey SILT, saturated,	no odors	0.2				
0	8' - 12'	2.0-11.	0.0-it.	Grading To			0.1				
10				Gray with little br	rown mottling SILT, trace(-) f Sar	nd, saturated, no odors.	0.0				
12	S-4 12' - 15'	1.7-ft.	12.0-ft.	Grading To	and cmf angular to subangular G D, saturated, no odors.	GRAVEL, saturated, no odors.	0.1				
14											
16					Borehole caves in t End of Sampling € Well installed to 15-ft. BGS w	15.0-ft. BGS					
18				воттом ог							
V					GROUNDWATER	NOTES: Monitoring well MW-3 was cons					
DATE	TIME	ELAPSED TIME	CASING	BORING 12.0-FT.	Approx. 4.5-FT.	- Due to cave in of the borehole, well ins dedicated drive point	talled by push	ning to 15-feet with			
	NEDAL NOTE			12.0-51.	1 Арргол. 4.0-г г.	1					

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse

f = fine

m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

NA = Not Applicable

BORING: B-38 / MW-5



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

BORING: B-39 SHEET

1 OF 205237

JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: DATUM:

1020 TO 1042 NA

LABELLA REPRESENTATIVE: C. A. Stiles START DATE:

02-Nov-05

END DATE: 2-Nov-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

INSIDE DIAMETER: ~1.8-Inch

DRIVE SAMPLER TYPE: 4-foot Macrocore

OTHER:

					I	
	SAMPLE NO		STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
<u>Н</u> 0	AND DEPTH S-1 0' to 4'	3.0-ft.	0.0-ft 0.2-ft.	FILL MATERIAL Concrete Slab - Not sampled ALLUVIUM Brown mf ⁽⁺⁾ SAND, slightly moist, no odors	10.8 16.1	
2				Grading To Brown f SAND, trace(-) Silt, damp, no odors.	8.1	
4	S-2 4' - 8'	3.7-ft.	4.0-ft.	Brown Clayey Silt, damp, no odors Grading To Brown SiLT, trace f Sand, wet to saturated @ ~6.2-ft., no odors.	67.4 99.8	·
6				Brown mf ⁽⁺⁾ SAND, saturated, no odors.	10.7 9.3	
8	S-3 8' - 12'	3.2-ft.	8.0-ft. 8.6-ft.	As above, saturated, no odors. Brown SILT, saturated, no odors Grading To	67.2 91.4	
10				Gray Clayey SILT, saturated, very slight chlorinated solvent odor.	128	
12				Borehole caves in to 8.6-ft. BGS. End of Boring @ 12.0-ft. BGS		
14						
16						
18						
DATE	VATER LEVEL TIME	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES: BORING ENCOUNTERED 12.0-FT. Approx. 6.2-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse m = medium f = fine

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

NA = Not Applicable

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-40

SHEET

JOB:

1 OF

205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: 1045 TO 1120

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

02-Nov-05

END DATE: 2-Nov-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-inch

OTHER:

	<u>,</u>					
D E P	0.11515	SAMPLE	CTDATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
T H	SAMPLE NO AND DEPTH		STRATA CHANGE	VISUAL CLASSIFICATION	(FFIVI)	HEMARICS
0	S-1 0' to 4'	2.7-ft.	0.0-ft 0.2-ft.	FILL MATERIAL Concrete Slab - Not sampled ALLUVIUM Brown f SAND, trace(-) Silt, slightly moist, no odors	20.8 21.6	
2				Grading To Brown mf SAND, moist to damp, no odors.	18.3	
4	S-2 4' - 8'	3.3-ft.	4.0-ft.	As above, damp to wet, no odors.	52.9	•
			5.5-ft.	Brown and gray mottled Clayey SILT, trace f Sand, wet to saturated @ ~6.1-ft., no odors.	26.6	
6				, Grading To	24.3	
				Brown and gray mottled Clayey SILT, saturated, no odors.		
8	S-3 8' - 12'	2.6-ft.	8.0-ft.	As above, saturated, no odors.	47.6	
			9.1-ft.	Brown m ⁽⁺⁾ f SAND, saturated, slight chlorinated solvent odor.	98.7	
10				Brown cmf SAND, little mf angular to subangular Gravel, saturated, very slight chlorinated solvent odor.	39.1	ŕ
12				Borehole caves in to 8.2-ft. BGS. End of Boring @ 12.0-ft. BGS		
14						
16						
18						
	WATER LEVEL	DATA ELAPSED	воттом ог	i i		
DATE	TIME	TIME	CASING	BORING ENCOUNTERED		
	1	<u> </u>	<u></u>	12.0-FT. Approx. 6.1-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

c = coarse m = medium

BGS = Below the Ground Surface

some = 20 to 35% little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable



Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-41

SHEET

1 OF

1

JOB: 205237

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR:

TREC Environmental Paul Wiley

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

1135 TO 1150

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

02-Nov-05

END DATE: 2-Nov-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

				1 The same of the	1	
D E P	CAMPLENO	SAMPLE	STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO AND DEPTH			VISUAL CLASSIFICATION	(, , , , , ,	
0	S-1 0' to 4'	2.7-ft.	0.0-ft 0.2-ft. 1.4-ft.	FILL MATERIAL Asphalt Pavement - Not sampled ALLUVIUM Brown f SAND, slightly moist, no odors Organic PEAT, damp, moderate chlorinated solvent odor.	1.7	
2			1.5-ft.	Brown m ⁽⁺⁾ f SAND, damp, slight chlorinated solvent odor.	39.7	
4	S-2 4' - 8'	3.1-ft.	4.0-ft.	As above, damp to wet, slight chlorinated solvent odor.	81.8	
			5.0-ft.	Brown and gray mottled SILT, little(-) f Sand, wet to saturated @ ~5.6-ft., no odors.	22.0	
6				Grading To Brown with trace gray mottling Clayey SILT, saturated, no odors.	25.6	
8	S-3 8' - 12'	2.5-ft.	8.0-ft. 8.5-ft.	As above, saturated, no odors. Brown SILT, saturated, no odors.	14.7	
10			10.8-ft.	Brown cmf SAND, some mf subrounded to angular Gravel, saturated, no odors.	21.3	
12				Borehole caves in to 9.1-ft. BGS. End of Boring @ 12.0-ft. BGS		
14						
18						
				BOTTOM OF GROUNDWATER NOTES:		
DATE	WATER LEVEL	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES: BORING ENCOUNTERED		
		THAT		12.0-FT. Approx. 5.6-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse

m = medium

f = fine

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

NA = Not Applicable

LABELLA Associates PC

PROJECT

Phase II Environmental Site Assessment Preliminary Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-42

SHEET

1 OF

JOB: **205237**

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

TREC Environmental
Paul Wiley

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

END DAT

TIME: DATUM:

1154 TO 1210 NA

LABELLA REPRESENTATIVE: C. A. Stiles

es START DATE:

02-Nov-05

END DATE: 2-Nov-05

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

					1	
D E P		SAMPLE			PID FIELD SCREEN	
	SAMPLE NO AND DEPTH		STRATA CHANGE	VISUAL CLASSIFICATION	(PPM)	REMARKS
0	S-1 0' to 4'	2.6-ft.	0.0-ft	FILL MATERIAL Asphalt Pavement - Not sampled ALLUVIUM Brown f SAND, moist, no odors	0.1	
2		:		Grading To Brown mf SAND, moist to damp, no odors.	0.2	
4	S-2 4' - 8'	3.1-ft.	4.0-ft.	Brown SILT, some(-) f SAND, damp, no odors.	0.1	
				Grading To Gray Clayey SILT, wet to saturated @ ~7.0-ft., no odors.	8.4	
6					23.3	
8	\$-3 8' - 12'	2.6-ft.	8.0-ft.	As above, saturated, no odors.	13.8	
				Grading To Gray and brown mottled Clayey SILT to SILT & CLAY, saturated, no odors.	12.3	
10	-				8.4	
12				Borehole caves in to 7.5-ft. BGS. End of Boring @ 12.0-ft. BGS		
14						
16						
18						
V	VATER LEVEL		воттом оғ			
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
	NED II NOT			12.0-FT. Approx. 7.0-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

trace = 1 to 10%

some = 20 to 35%

c = coarse m = medium

little = 10 to 20%

f = fine

BGS = Below the Ground Surface

NA = Not Applicable

BORING:

B-42



Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-43 (MW-7)

1 OF 1 SHEET

205237.01 JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS TREC Environmental

CONTRACTOR: DRILLER:

Jim Agar

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: 0850 TO 0915

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

30-Mar-06

END DATE: 30-Mar-06

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

		2					.,.	
D E P	SAMPLE NO	SAMPLE	STRATA		VISUAL CLA	SSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
H	AND DEPTH							
0	S-1 0' to 4'	2.9-ft.	0.0-ft	Dark brown f SAl odors.		SOIL sent (roots, root traces, humus), damp, no	0.0	
2			0.4-ft.	Brown mf SAND,		<u>JVIUM</u>	0.0	
2			2.3-ft.	Brown SILT and	vf SAND, damp to wet, no od	ors.	0.0	
4	S-2	3.1-ft.	4.0-ft.	As above, wet, n	o odors.		0.3	
	4' - 8'		4.7-ft.	Grayish-brown S	ILT, some vf Sand, wet to sa	urated @ ~5.2-ft., no odors.	0.2	
6			5.3-ft.	Brown SILT and	vf SAND, saturated, no odors		0.1	
							0.1	
8	S-3 8' - 12'	3.0-ft.	8.0-ft.	Brown with some	gray mottling SILT and vf S/	AND, saturated, no odors.	0.0	
			9.2-ft.	Gray SILT and vf	f SAND, saturated, no odors.		0.0	
10				Grading To			0.0	
				Gray mf ⁽⁺⁾ SAND saturated, no odd	, little(-) Silt, with occasional ors.	varves of brownish-gray Clayey SILT,		
12	S-4 12' - 14'	1.7-ft.	12.0-ft.	Brown cm ⁽⁺⁾ f SAN	ND, saturated, no odors.		5.2	
							1.7	
14	:							
16					End of Boring	@ 16.0-ft. BGS		
					-			
18								
<u> </u>	NATED LEVE	DATA	воттом ог	BOTTOM OF	GROUNDWATER	NOTES:		L
DATE	VATER LEVEL TIME	ELAPSED TIME	CASING	BORING	ENCOUNTERED	- Well MW-7 completed within borehol	e B-43.	
	<u> </u>	<u> </u>		16.0-FT.	Approx. 5.2-FT.			
GF	NERAL NOTE	-s						

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

some = 20 to 35%

c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable

BORING: B-43 (MW-7)



Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-44 (MW-9)

SHEET 1 OF 1

205237.01

JOB: CHKD BY:

300 STATE STREET, ROCHESTER. NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Jim Agar

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: 1020 TO 1100 DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

30-Mar-06

END DATE: 30-Mar-06

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

	1					
D E P T	SAMPLE NO	SAMPLE	STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
Н	AND DEPTH		CHANGE			
0	S-1 0' to 4'	3.3-ft.	0.0-ft 0.3-ft.	FILL MATERIAL Concrete Slab - Not sampled. ALLUVIUM Brown mf SAND, moist to damp, strong chlorinated solvent odor.	2,567 4,351	
2					3,554	
4	S-2 4' - 8'	3.4-ft.	4.0-ft.	Brown mf(+) SAND, wet, moderate to slight chlorinated solvent odor.	239	
			5.3-ft.	Grayish-brown f SAND and SILT, wet, slight chlorinated solvent odor.	208	
6				Grading To Grayish-brown SILT, some vf Sand, wet to saturated @ ~5.8-feet, slight chlorinated solvent odor.	67.4	
8	S-3 8' - 12'	3.2-ft.	8.0-ft.	Brown Clayey SILT, trace vf Sand, saturated, slight chlorinated solvent odor.	385	
10			9.8-ft.	Brown mf(+) to mf SAND, trace(-) Silt, saturated, slight chlorinated solvent odor.	49.8	
12	S-4 12' - 14'	1.7-ft.	12.0-ft.	Brown cm ⁽⁺⁾ f SAND, saturated, no odors.	117	
				Grading To Gray cmf angular to subrounded GRAVEL, some(+) c ⁽⁺⁾ mf Sand, very slight	14.8	
14				chlorinated solvent odor.		
16				End of Boring @ 16.0-ft. BGS		
18						
	WATER LEVEL		BOTTOM OF	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED - Well MW-9 completed within borehole 16.0-FT. Approx. 5.8-FT.	B-44.	
	NEDAL NOTE		<u> </u>	1 100.11 1 100.00111		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %

some = 20 to 35%

c = coarse m = medium

f = fine

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10% NA = Not Applicable

BORING: B-44 (MW-9)

Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-44R

SHEET

1 OF 205237.01

CHKD BY:

JOB:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR:

Not Applicable

BORING LOCATION: ~6-inches southeast of boring B-44

TIME:

1605 TO 1650

DRILLER:

Craig Stiles

TYPE OF DRILL RIG: Hand-Operated Hammer Drill

GROUND SURFACE ELEVATION: NA START DATE:

END DATE: 27-Apr-06 DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

AUGER SIZE AND TYPE:

1.0-inch Outside Diameter

27-Apr-06

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-Inch

_		CAMPIE					PID	
D E P T	SAMPLE NO	SAMPLE	STRATA		VISUAL CLASSI	FICATION	FIELD SCREEN (PPM)	REMARKS
H	AND DEPTH	RECOVERY	CHANGE		VISOAL CLASSI	TIOATION	(1111)	11211711110
0	S-1 0' to 0.5'	100%	0.0-ft 0.3-ft.	Concrete Slab - N	FILL MATE Not sampled. ALLUVII moist to damp, strong chlorinate	UM	>2,000	PID Reading @ Boreh
2								
6								
8								
10								
12		:						
14								
16					O CONTRACTOR OF THE PARTY OF TH			
18								
v	VATER LEVEL	DATA	BOTTOM OF	BOTTOM OF	GROUNDWATER	NOTES:		
DATE	TIME	ELAPSED	CASING	BORING	ENCOUNTERED			
		TIME		0.5-FT.	Not Encountered	1		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

trace = 1 to 10%

c = coarse m = medium

BGS = Below the Ground Surface

some = 20 to 35% little = 10 to 20%

f = fine

NA = Not Applicable

BORING: B-44R



Assuciates, r.c.

PROJECT

Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-45

SHEET

1 OF **205237.01**

JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS
CONTRACTOR: TREC Environmental BORING

DRILLER:

Jim Agar

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

1103 TO 1137

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

30-Mar-06

END DATE: 30-Mar-06

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

OVERBURDEN SAMPLING METHOD: Direct Push

54LT

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

ļ						
D E P		SAMPLE			PID FIELD SCREEN	
T H	SAMPLE NO AND DEPTH		STRATA CHANGE	VISUAL CLASSIFICATION	(PPM)	REMARKS
0	S-1 0' to 4'	3.4-ft.	0.0-ft 0.3-ft.	FILL MATERIAL Concrete Slab - Not sampled. ALLUVIUM Brown mf SAND, moist, moderate to strong chlorinated solvent odor.	1,369 1,004	
2				Grading To Brown mf(+) SAND, moist to damp, moderate chlorinated solvent odor.	820	
4	S-2 4' - 8'	3.7-ft.	4.0-ft.	As above, wet, moderate to strong chlorinated solvent odor.	2,512	=
			5.3-ft.	Brown vf SAND, trace Silt, wet to saturated @ ~5.7-feet, moderate to string chlorinated solvent odor.	1,867	
6				Grading To	564	
				Brown SILT, some vf Sand, saturated, moderate chlorinated solvent odor.	41.6	
8	S-3 8' - 12'	3.2-ft.	8.0-ft.	As above, saturated, moderate to slight chlorinated solvent odor.	515	
				Grading To Brown mf(+) SAND, trace Clayey Silt, saturated, slight chlorinated solvent odor.	267	
10					72.9	
12	S-4 12' - 14'	1.9-ft.	12.0-ft.	Brown cm ⁽⁺⁾ f SAND, saturated, no odors.	5.4	
					4.8	
14						
16				End of Boring @ 16.0-ft. BGS		
18						
	WATER LEVEL	DATA ELAPSED	BOTTOM OF	l		
DATE	TIME	TIME	CASING	BORING ENCOUNTERED		
<u> </u>		<u> </u>		16.0-FT. Approx. 5.7-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

c = coarse m = medium

f = fine

BGS = Below the Ground Surface

some = 20 to 35% little = 10 to 20%

trace = 1 to 10%

NA = Not Applicable



BORING: B-46

Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York SHEET JOB:

1 OF 205237.01

1310 TO 1342

CHKD BY:

TIME:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR:

TREC Environmental

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

DRILLER:

Jim Agar

START DATE:

30-Mar-06

30-Mar-06 END DATE:

DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT AUGER SIZE AND TYPE: NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

SAMPLE NO SAMPLE STRATA SAMPLE STRATA NO DEPTH RECOVERY CHANGE STRATA NO DEPTH RECOVERY CHANGE STRATA O.9-ft							
S-1	E P T		SAMPLE		VISUAL CLASSIFICATION	FIELD SCREEN	REMARKS
A'-8'	0	S-1		0.0-ft	Concrete Slab - Not sampled. ALLUVIUM Brown mf ⁽⁺⁾ SAND, trace(-) Silt with 1-In. thick interbed of Brown SILT, little vf Sand @ 1.5	19.6	
118	4		3.8-ft.	4.0-ft.	odor.		
117 52.6 117 52.6 117	6			5.8-ft.			
12 S-4 1.1-ft. 12.0-ft. Weathered petroleum odor. 4.6 14 End of Boring @ 16.0-ft. BGS MATER LEVEL DATA BOTTOM OF DATINE BOTTOM OF DATINE BORING BORING			3.4-ft.	8.0-ft.	Grading To		
14 16 End of Boring @ 16.0-ft. BGS 18 WATER LEVEL DATA BOTTOM OF DOTTOM			1.1-ft.	12.0-ft.	Brown cm ⁽⁺⁾ f SAND, saturated, no odors.		
WATER LEVEL DATA	14	12' - 14'			weathered petroleum odor.	4.6	
WATER LEVEL DATA BOTTOM OF GROUNDWATER NOTES: DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 16.0-FT. Approx. 5.7-FT.	16				End of Boring @ 16.0-ft. BGS		
DATE TIME ELAPSED CASING BORING ENCOUNTERED	18						
GENERAL NOTES	DATE	TIME	ELAPSED TIME	1	BORING ENCOUNTERED		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

some = 20 to 35%

c = coarse m = medium

NA = Not Applicable

little = 10 to 20% trace = 1 to 10%

f = fine

BGS = Below the Ground Surface



Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-47 (MW-10)

1 OF SHEET

205237.01

CHKD BY:

JOB:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

Jim Agar

TREC Environmental BORING LOCATION:

GROUND SURFACE ELEVATION: NA

1345 TO 1410 TIME:

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

30-Mar-06

END DATE: 30-Mar-06

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

					T	
	SAMPLE NO		STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	AND DEPTH S-1 0' to 4'	3.3-ft.	0.0-ft 0.3-ft.	FILL MATERIAL Concrete Slab - Not sampled. ALLUVIUM Brown mf ⁽⁺⁾ SAND, trace(-) Silt, moist to damp, no odors to very faint chlorinated solvent odor.	10.0 9.4 34.7	
4	S-2 4' - 8'	3.9-ft.	4.0-ft. 4.9-ft.	As above, wet, no odors. Brown SILT and vf SAND, wet to saturated @ ~5.2-feet. No odors.	13.1	
6			5.3-ft. 6.0-ft.	Brown to grayish-brown mt ⁽⁺⁾ SAND, trace Silt, saturated, no odors. Grayish-brown SILT, little vf Sand, saturated, no odors.	0.7	
8	S-3 8' - 12'	3.1-ft.	8.0-ft.	Gray SILT, little vf Sand, saturated, no odors Grading To Gray Clayey SILT, saturated, no odors.	1.0 0.5	
12	S-4 12' - 14'	0.4-ft.	12.0-ft.	Brown cm ⁽⁺⁾ f SAND, saturated, no odors. odors.	0.2	
14						
16		,		End of Boring @ 16.0-ft. BGS		
18 v	VATER LEVEL	DATA	воттом ог	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED - Well MW-10 completed within boreho 16.0-FT. Approx. 5.2-FT.	le B-47.	

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

some = 20 to 35%

c = coarse m = medium

little = 10 to 20% trace = 1 to 10%

f = fine

BGS = Below the Ground Surface

NA = Not Applicable

BORING: B-47 (MW-10)



Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-48

SHEET

1 OF 205237.01

JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS** TREC Environmental

CONTRACTOR: DRILLER:

Jim Agar

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: 1518 TO 1542 DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

30-Mar-06

END DATE: 30-Mar-06

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

Description	L	T				1	
H	E P	CAMDI E NO		CTDATA	VISUAL CLASSIFICATION	FIELD SCREEN	REMARKS
0 'to 4'	н	AND DEPTH	RECOVERY		VISUAL CLASSII ICATION	(1 1 101)	TILIVIALINO
Brown v1 SAND, little(+) Silt, damp to wet, no odors. 0.5		S-1		0.0-ft	Concrete Slab - Not sampled. ALLUVIUM		
A - 8	2					0.5	
S3 S1 S4	4		3.5-ft.	4.0-ft.	As above, wet to saturated @ ~4.6-ft., no odors.	0.2	
8 S-3 3.0-ft. 8.0-ft. As above, saturated, no odors Grading To Brownish-gray SILT & CLAY, saturated, no odors. 10 S-4 1.9-ft. 12.0-ft. Brown cm ^(a) f SAND, saturated, no odors. 20.4 20.3 14 End of Boring @ 16.0-ft. BGS WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER SAND SAND	_			5.5-ft.	Gray to grayish-brown SILT to Clayey SILT, trace(+) vf Sand, saturated, no odors.	0.1	
10	6					0.0	
10	8		3.0-ft.	8.0-ft.		0.0	
12 S-4 1.9-ft. 12.0-ft. Brown cm ⁽⁴⁾ f SAND, saturated, no odors. 20.4 20.3	10					0.0	
12'-14' 20.4 20.3						0.0	
16 End of Boring @ 16.0-ft. BGS 18 WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER INDICES: DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 16.0-FT. Approx. 4.6-FT.	12		1.9-ft.	12.0-ft.	Brown cm ⁽⁺⁾ f SAND, saturated, no odors.	20.4	
WATER LEVEL DATA DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 16.0-FT. Approx. 4.6-FT.	14					20.3	
WATER LEVEL DATA DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 16.0-FT. Approx. 4.6-FT.							
WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 16.0-FT. Approx. 4.6-FT.	16				End of Boring @ 16.0-ft. BGS		
DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 16.0-FT. Approx. 4.6-FT.	18						
TIME TIME CASING BURING ENCOUNTERED 16.0-FT. Approx. 4.6-FT.	V	VATER LEVEL		воттом ог	BOTTOM OF GROUNDWATER NOTES:		<u> </u>
	DATE	TIME		CASING	BORING ENCOUNTERED		
					16.0-FT. Approx. 4.6-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable

Former Carriage Cleaners

1600 Penfield Road, Penfield, New York

Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization BORING: B-49 (MW-8)

SHEET

1 OF 1 205237.01

JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY

ENVIRONMENTAL ENGINEERING CONSULTANTS CONTRACTOR:

Jim Agar

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION: TREC Environmental

GROUND SURFACE ELEVATION: NA

30-Mar-06

1140 TO 1220 TIME:

DATUM: NA

DRILLER: LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

30-Mar-06

END DATE:

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

	SAMPLE NO		STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	AND DEPTH S-1 0' to 4'	2.9-ft.	0.0-ft 0.3-ft. 1.0-ft.	FILL MATERIAL Concrete Slab - Not sampled. ALLUVIUM Brown mf SAND, moist to damp, no odors. Brown and gray mottled SILT, little vf Sand, damp to wet, no odors.	6.7 12.2	
2					10.9	
4	S-2 4' - 8'	3.5-ft.	4.0-ft.	As above, wet to saturated @ ~5.4-feet., no odors. odor.	3.3 1.6	
6					0.3	
8	S-3 8' - 12'	2.7-ft.	8.0-ft.	As above, saturated, no odors.	0.1	
10			9.7-ft.	Brown mf ⁽⁺⁾ SAND, trace Silt, saturated, no odors.	0.8	
12	S-4 12' - 14'	1.7-ft.	12.0-ft.	Brown cm ⁽⁺⁾ f SAND, saturated, no odors. weathered petroleum odor.	10.8 7.2	
14						
16				End of Boring @ 16.0-ft. BGS		
18						
	VATER LEVEL	DATA	воттом оғ	BOTTOM OF GROUNDWATER NOTES:	-	
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED - Well MW-8 completed within borehol	e B-49.	
	NEDAL NOT	<u> </u>	<u> </u>	16.0-FT. Approx. 5.4-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

some = 20 to 35%

c = coarse m = medium

f = fine

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

NA = Not Applicable

BORING: B-49 (MW-8)



Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-50

SHEET

1 OF

JOB:

205237.01

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

TREC Environmental Jim Agar

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

END DATE: 30-Mar-06 TIME: 1225 TO 1250

DATUM: NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

30-Mar-06

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

INSIDE DIAMETER: ~1.8-Inch

DRIVE SAMPLER TYPE: 4-foot Macrocore

OTHER:

		2	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
D E P T H	SAMPLE NO	SAMPLE SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	2.7-ft.	0.0-ft	FILL MATERIAL Concrete Slab - Not sampled. ALLUVIUM Brown mf SAND, moist to damp, no odors.	12.5 38.7	
2					48.8	
4	S-2 4' - 8'	3.1-ft.		Brown vf to f SAND, damp, no odors. Brown to grayish-brown SILT, little vf Sand, wet to saturated @ ~5.6-feet, no odors.	16.9 11.4	
6					1.2	
8	S-3 8' - 12'	3.1-ft.	8.0-ft.	As above, saturated, no odors Grading To Grayish-brown Clayey SILT, trace vf Sand, saturated, no odors.	1.6 4.0	
10				Grayisi Full Williams of Sand, Saddaled, 110 Odors.	0.3	
12	S-4 12' - 14'	2.0-ft.	12.0-ft.	Brown cm ⁽⁺⁾ f SAND, saturated, no odors Grading To Grayish-brown cmf SAND and cmf subrounded to subangular GRAVEL, saturated, slight weathered petroleum odor.	7.7 8.8	
14						
16				End of Boring @ 16.0-ft. BGS		
18						
DATE	TIME	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES: BORING ENCOUNTERED 16.0-FT. Approx. 5.7-FT.		
-	L	1	<u></u>	10.0-11. Δρρίολ. 0.7-11.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

c = coarse m = medium

f = fine

NA = Not Applicable

some = 20 to 35% little = 10 to 20%

trace = 1 to 10%

BGS = Below the Ground Surface



Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-51

SHEET

1 OF 205237.01

JOB: CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Jim Agar

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: DATUM:

1250 TO 1320 NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

30-Mar-06

END DATE: 30-Mar-06

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-Inch

OTHER:

	IDOI IDEI TOA	2		C) doi!		
D E P T H	SAMPLE NO		STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	2.8-ft.	0.0-ft 0.3-ft.	FILL MATERIAL Concrete Slab - Not sampled. ALLUVIUM Brown mf ⁽⁺⁾ SAND, moist to damp, no odors.	26.7 64.8 47.3	
4	S-2 4' - 8'	3.4-ft.	4.0-ft. 5.2-ft.	As above, wet, no odors Grading To Brown f SAND, little(+) Silt, wet to saturated @ ~5.1-feet, no odors. Brownish-gray SILT, little(-) vf Sand, saturated, no odors.	37.5 54.9 17.0	
8	S-3 8' - 12'	4.0-ft.	8.0-ft.	As above, saturated, no odors Grading To Brownish-gray Clayey SILT, saturated, no odors.	37.3 21.4 16.9	
12	S-4 12' - 14'	1.2-ft.	12.0-ft.	Brown cm ⁽⁺⁾ f SAND, saturated, no odors.	14.2	
14				End of Boring @ 16.0-ft. BGS		
18				LIM OF DOTING & 10.0°16. DOLD		
DATE	VATER LEVEL TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES: BORING ENCOUNTERED		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarsem = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable



Associates, P.C.

PROJECT

Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-52

SHEET

1 OF 205237.01

JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

TREC Environmental
Jim Agar

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: DATUM:

1545 TO 1645 : NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

30-Mar-06

END DATE: 30-Mar-06

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

OVERBURDEN SAMPLING METHOD: Direct Push

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

					,	
D E P T H	SAMPLE NO	SAMPLE SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	S-1 0' to 4'	2.9-ft.	0.0-ft 0.2-ft.	FILL MATERIAL Asphalt Pavement - Not sampled. ALLUVIUM Brown mf ⁽⁺⁾ SAND, moist to damp, no odors.	0.1 0.0	
2					0.0	
4	S-2 4' - 8'	3.2-ft.	4.0-ft. 5.5-ft.	As above, wet, no odors Grading To Brown vf SAND, trace Silt, wet to saturated @ ~5.4-feet, no odors. Brownish-gray SILT, little(-) vf Sand, saturated, no odors to very faint chlorinated solvent	0.8 6.7	
6				odor.	113	
8	\$-3 8' - 12'	3.6-ft.	8.0-ft. 8.9-ft.	As above, saturated, very faint chlorinated solvent odor. Brownish-gray mf SAND, trace(-) Silt, saturated, slight to moderate chlorinated solvent odor.	97.9 198	
10					578	
12	S-4 12' - 14'	0.0-ft.	12.0-ft.	Brown cm ⁽⁺⁾ f SAND, saturated, no odors.		
14						
16				End of Boring @ 16.0-ft. BGS		
18						
DATE	VATER LEVEL TIME	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES: BORING ENCOUNTERED 16.0-FT. Approx. 5.4-FT.		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations
- and = 35 to 50 % some = 20 to 35%
- c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10% f = fine

NA = Not Applicable



Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-52R

SHEET

1 OF 205237.01

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR:

TREC Environmental

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION: ~6-Inches west of Boring B-52

TIME: DATUM:

JOB:

1525 TO 1540 NA

DRILLER:

Jim Agar

GROUND SURFACE ELEVATION: NA

END DATE: 27-Apr-06

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

27-Apr-06

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

OVE	NOUNDEN SA		inob. Direc	JI PUSII		OTHER.		
D E P T H	SAMPLE NO	SAMPLE SAMPLE RECOVERY	STRATA CHANGE		VISUAL CLASSI	FICATION	PID FIELD SCREEN (PPM)	REMARKS
2	S-1 0' to 4'	3.0-ft.	0.0-ft 0.2-ft.	Asphalt Paveme	FILL MATE nt - Not sampled. ALLUVII) SAND, moist, no odors.		0.1	
6	S-2 4' - 8'	3.2-ft.		Brownish-gray S chlorinated solve	SAND, some Silt, wet, no odors ILT, little(-) vf Sand, saturated, sa	o moderate chlorinated solvent odor. turated, no odors to very faint AND, slight to very slight chlorinated	24.8 424 96.5	
10	S-3 8' - 12'	3.1-ft.	8.0-ft. 9.1-ft.		ated, slight chlorinated solvent odd	371 109 84.0		
					Bottom of Boring @ 12-feet	Below Surface Grade		
DATE	ATER LEVEL	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING 12.0-FT.	GROUNDWATER ENCOUNTERED Not Encountered			

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations
- and = 35 to 50 %
- c = coarse m = medium

BGS = Below the Ground Surface

some = 20 to 35% little = 10 to 20%

trace = 1 to 10%

f = fine

NA = Not Applicable

BORING: B-52R



Phase II Environmental Site Assessment

Supplemental Subsurface Site Characterization Former Carriage Cleaners 1600 Penfield Road, Penfield, New York

BORING: B-53

1 OF SHEET

JOB:

205237.01

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

TREC Environmental Jim Agar

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

1655 TO 1725 TIME: DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

START DATE:

30-Mar-06

END DATE: 30-Mar-06

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

D E P		SAMPLE						PID FIELD SCREEN	
T	SAMPLE NO AND DEPTH		STRATA CHANGE		VISUAL CLASSI	FICATION		(PPM)	REMARKS
0	S-1 0' to 4'	3.0-ft.	0.0-ft	Asphalt Pavemer	FILL MATE ont - Not sampled. ALLUVI AND, moist to damp, no odors.			0.5 1.0	
2								0.8	
4	S-2 4' - 8'	3.3-ft.	4.0-ft.	As above, damp		E 6 foot no odoro		0.1	
			4.8-ft.	Grading To	e(+) vf Sand, wet to saturated @	~3.0-leet, no odors.		0.0	
6				Brown SILT, satu				0.0	
٠	S-3	3.0-ft.	8.0-ft.	As above, satura	tod no odore				
8	8' - 12'	3,0-11.	0.0-11.	As above, satura	ted, no odors.			0.1	
			9.6-ft.	Brown mf SAND,	little m ⁽⁺⁾ f subrounded Gravel, s	aturated, no odors.		0.3	
10								0.0	
		100	4000						
12	S-4 12' - 14'	1.8-ft.	12.0-ft.	Brown cm ^{(*7} f SAN	ND, saturated, no odors.			0.2	
								0.3	
14									
									-
16					End of Boring @	16.0-ft, BGS			
18									
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<u>I</u> WATER LEVEL	DATA	воттом оғ	BOTTOM OF	GROUNDWATER	NOTES:			·
DATE	TIME	ELAPSED TIME	CASING	BORING	ENCOUNTERED				
				16.0-FT.	Approx. 5.4-FT.		*		
GE	NERAL NOT	ES					į		

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 %

some = 20 to 35%

c = coarse m = medium

little = 10 to 20% f = fine

trace = 1 to 10%

BGS = Below the Ground Surface NA = Not Applicable



Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: B-54 SHEET

1 OF

205237.01 JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

NA

CONTRACTOR: DRILLER:

Jim Agar

TREC Environmental BORING LOCATION:

GROUND SURFACE ELEVATION: NA

END DATE: 30-Mar-06

1730 TO 1757 TIME: DATUM:

NA

LABELLA REPRESENTATIVE: C. A. Stiles

AUGER SIZE AND TYPE:

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

START DATE:

30-Mar-06

DRIVE SAMPLER TYPE: 4-foot Macrocore INSIDE DIAMETER: ~1.8-Inch

OTHER:

OVERBURDEN SAMPLING METHOD: Direct Push PID D SAMPLE **FIELD** Ε SCREEN Р SAMPLE NO SAMPLE VISUAL CLASSIFICATION (PPM) REMARKS Т AND DEPTH RECOVERY CHANGE Н 0 3.6-ft. **FILL MATERIAL** 0.3 0' to 4' 0.0-ft Asphalt Pavement - Not sampled **ALLUVIUM** 0.1 0.2-ft. Brown mf⁽⁺⁾ SAND, moist, no odors. 2 Grading To 0.0 Brown f SAND, little(-) Silt, damp to wet, no odors. 0.0 4 S-2 3.8-ft. 4.0-ft. As above, wet, no odors. 0.1 4' - 8' 0.0 Brownish-gray SILT, trace(+) vf Sand, wet to saturated @ ~5.6-ft., no odors. 5.4-ft. 6 0.0 Grading To Grayish-brown Clayey SILT, saturated, no odors. 0.0 8 S-3 3.3-ft. 8.0-ft. As above, saturated, no odors. 0.0 8' - 12' Grading To 0.0 Brownish-gray vf SAND, little(+) Clayey Silt, saturated, no odors. 10 0.2 10.7-ft. Brown f SAND, trace Silt, saturated, no odors. 12 S-4 2.6-ft. 12.0-ft. Brown cm(+)f SAND, saturated, no odors. 1.6 12' - 14' Grayish-brown cmf subrounded to angular GRAVEL, trace(+) cm Sand, saturated, no odors. 12.5-ft. 0.5 13.3-ft. Brown m(+)f SAND, saturated, no odors. 14 0.1 End of Boring @ 16.0-ft. BGS 16 18 GROUNDWATER NOTES: WATER LEVEL DATA BOTTOM OF **BOTTOM OF** ELAPSED BORING **ENCOUNTERED** DATE TIME CASING TIME 16.0-FT. Approx. 5.6-FT.

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %

some = 20 to 35%

c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable



Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York

END DATE:

BORING: B-55

SHEET

1 OF 1 205237.01

1800 TO 1823

JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS CONTRACTOR: TREC Environmental

OVERBURDEN SAMPLING METHOD: Direct Push

LABELLA REPRESENTATIVE: C. A. Stiles

BORING LOCATION:

GROUND SURFACE ELEVATION: NA START DATE: 30-Mar-06

30-Mar-06

DRIVE SAMPLER TYPE: 4-foot Macrocore

TIME:

DATUM: NA

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

INSIDE DIAMETER: ~1.8-Inch

OTHER:

					T	
	S-2 3.7-ft. 4.0-ft. Dark brown of S-2 4' - 8' S-3 8' - 12' S-3 8' - 12' S-3 S-5			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
Н	AND DEPTH	RECOVERY	CHANGE			
0		3.4-ft.	1	FILL MATERIAL Asphalt Pavement - Not sampled. ALLUVIUM Brown mf ⁽⁺⁾ SAND, moist to damp, no odors.	0.9	
2					0.0	
			2.9-ft.	Brown vf SAND, trace Silt, wet, no odors.	0.0	
4		3.7-ft.	4.0-ft.	Dark brown to brown SILT, wet to saturated @ ~5.8-feet, no odors.	0.6	
6					0.5	
				·	0.2	
8		3.8-ft.	8.0-ft.	As above, saturated, no odors.	0.3	
10			9.9-ft.	Brownish-gray mf ⁽⁺⁾ SAND, trace Silt, saturated, no odors.	0.1	
			11.0-ft.	Brown cmf SAND, some(-) mf subrounded to subangular Gravel, saturated, no odors.	0.0	
12				End of Boring @ 12.0-ft. BGS		
14						
16						
18						
v	VATER LEVEL	DATA	BOTTOM OF	BOTTOM OF GROUNDWATER NOTES:	1	
DATE	TIME	ELAPSED	CASING	BORING ENCOUNTERED		
<u> </u>		TIME		12.0-FT. Approx. 5.8-FT.		

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse

m = medium f = fine

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

NA = Not Applicable

PROJECT

Phase II Environmental Site Assessment 1600 Penfield Road

Penfield, New York

BORING SHEET

MW-6

REMARKS

1 OF 5

205237

JOB# CHKD. BY:

CONTRACTOR: Nothnagle Drilling Co.

Steve Reyes

BORING LOCATION

GROUND SURFACE ELEVATION

DATUM

LABELLA REPRESENTATIVE:

C. Stiles

START DATE

20-Feb-06

END DATE

22-Feb-06

TYPE OF DRILL RIG:

DRILLER

Truck-mount CME Model 85 Hollow-stem Auger Drill Rig

AUGER SIZE AND TYPE

ROCK DRILLING METHOD

4.25-Inch ID

OVERBURDEN SAMPLING METHOD

2" x 2' Split-spoon w/140# Hammer

Not Applicable

		1

WATER LEVEL DATA

DATE TIME WATER CASING

	I					T		1	
D									N
E			SAM	//PLE		(g	SAMPLE DESCRIPTION	PID	
P						F.		READINGS	_
Т	BLOWS	NO.	DEPTH	N-VALUE	RECOVERY	DEPTH (Feet)			E
Н	/6"			1		Ē			1 1
-	/ 0		(FT.)	/RQD(%)	(INCHES)	 			s
1			İ						
2									
~									
3									
4	<u> </u>								\vdash
	6					4.0-ft.	Brown mf SAND, damp, no odors.	4.1	
5	4	S-1	4' - 6'	7	1.5-ft.				s
	3					5.0-ft.	Brown vf SAND, some(-) Silt, damp to wet, no odors.	4.6	
6	4							4.0	
"									
l _									
7									
8									
9									
	4					9.0-ft.	Grayish-brown cmf SAND, some mf subrounded Gravel, saturated, very		
10	5	S-2	9' - 11'	12	1.0-ft.		slight solvent odor.	81.0	s
'0	7	0-2	3 - 11	12	1.0-11.			81.0	٥
	8								
11	.,								\exists
12									
13									
14									
``	5					14.0-ft.	Brownish-gray mf SAND, saturated, no odors.		
15	4	ا ۾	441 40	_					
15	3	S-3	14' - 16'	7	0.7-ft.			7.9	s
16	3								
'''		!	LEGEND			NOTE	ę.	<u> </u>	\dashv
			<u> </u>			NOIE	U .		

- S SPLIT SPOON SOIL SAMPLE
- U UNDISTURBED SOIL SAMPLE
- C ROCK CORE SAMPLE

GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

LBA

PROJECT Phase II Environmental Site Assessment 1600 Penfield Road

Penfield, New York

MW-6 **BORING** SHEET

JOB#

CHKD. BY:

2 OF 5

205237

CONTRACTOR: Nothnagle Drilling Co.

DRILLER

OVERBURDEN SAMPLING METHOD 2" x 2' Split-spoon w/140# Hammer

BORING LOCATION

Steve Reyes

GROUND SURFACE ELEVATION

DATUM

LABELLA REPRESENTATIVE:

C. Stiles

START DATE

20-Feb-06

END DATE

TIME

WATER LEVEL DATA

22-Feb-06

TYPE OF DRILL RIG: Truck-mount CME Model 85 Hollow-stem Auger Drill Rig DATE AUGER SIZE AND TYPE 4.25-Inch ID

WATER CASING REMARKS

ROCK DRILLING METHOD Not Applicable

RUC	V DRIL	_ING I	METHOD	NOT Applic	cable				
D									N
E			S	SAMPLE) aet	SAMPLE DESCRIPTION	PID	0
P		(FT.) /RQD(%) (INC.) S-4 16' - 18' 9 1.3 S-5 18' - 20' 10 1.2 S-6 20' - 22' 5 1.1 S-7 22' - 24' 16 1.3 S-8 24' - 26' 25 1.4 S-9 26' - 28' 18 1.4 S-10 28' - 30' 35 1.5			DEPTH (Feet)	•	READINGS	T	
T	BLOWS	NO.	DEPTH	N-VALUE	RECOVERY	🛓			E
Н	/ 6⁵		(FT.)	/RQD(%)	(INCHES)	<u> </u>			s
	4					16.0-ft	Brownish-gray mf SAND, trace f subrounded Gravel, saturated, no odors.	8.2	
17	4	S-4	16' - 18'	9	1.3-ft.			0.2	s
	5			_				4.7	
18									
	3					18.0-ft	Gray mf SAND, trace f subrounded Gravel, saturated, no odors.		
19	_5	S-5	18' - 20'	10	1.2-ft.			0.2	s
	5								$ $
20	5						(4)		Ш
	4					20.0-ft.	Gray mf ⁽⁺⁾ SAND, saturated, no odors.		
21	2	S-6	20' - 22'	5	1.1-ft.			0.5	s
	3								
22	2								\sqcup
	5					22.0-ft.	As above, saturated, no odors.		
23		S-7	22' - 24'	16	1.3-ft.			0.0	s
1	9	,							
24	18								Щ
	8								
25	11	S-8	24' - 26'	25	1.4-ft.			0.3	s
	14								
26	23								\vdash
	7								
27	7	S-9	26' - 28'	18	1.4-ft.			0.0	s
	11								
28	20					00 0 0	O		Н
	12					28.υ-π.	Gray mf ⁽⁺⁾ SAND, faint stratification visible, saturated, no odors.		
29	12	S-10	28' - 30'	35	1.5-ft			0.0	s
	23								
30	28					00.0 #	As above astrophyl as advar		\dashv
	8					ડ∪.U-π.	As above, saturated, no odors.	0.0	
31	9 23	S-11	30' - 32'	32	1.6-ft.				s
	52							0.0	
	52		LEGENID	L		NOTE	c.		\dashv
I			LEGEND			MOLE	ં		- 1

C - ROCK CORE SAMPLE **GENERAL NOTES:**

S - SPLIT SPOON SOIL SAMPLE U - UNDISTURBED SOIL SAMPLE

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

LBA

PROJECT

Phase II Environmental Site Assessment 1600 Penfield Road Penfield, New York

SHEET JOB#

BORING

3 OF 5

205237

MW-6

CHKD. BY:

CONTRACTOR:	Nothnagle Dril	lina Co

DRILLER Steve Reyes **BORING LOCATION**

GROUND SURFACE ELEVATION

DATUM

LABELLA REPRESENTATIVE:

C. Stiles

START DATE

20-Feb-06 END DATE 22-Feb-06

WATER LEVEL DATA Truck-mount CME Model 85 Hollow-stem Auger Drill Rig DATE TIME WATER CASING **REMARKS** TYPE OF DRILL RIG: AUGER SIZE AND TYPE 4.25-Inch ID OVERBURDEN SAMPLING METHOD 2" x 2' Split-spoon w/140# Hammer

ROCK DRILLING METHOD Not Applicable

ROC	K DRILL	ING M	METHOD	Not Applic	able						<u> </u>	<u> </u>		
D														N
Е			S	SAMPLE		ଛ	SAM	IPLE DES	CRIPT	ION			PID	0
P			_			, Pe							READINGS	1
, T	BLOWS	NO.	DEPTH	N-VALUE	RECOVERY	DEPTH (Feet)							11271311144	E
Н	/ 6"	NO.				E E								s
			(FT.)	/RQD(%)	(INCHES)		Gray mf ⁽⁺⁾ SAND, saturated, r							٦
	2					32.0-π.	Gray mr > SAND, saturated, r	io odors.						
33	2	S-12	32' - 34'	7	1.0-ft.								0.0	s
Ì	5													
34	6													_
"	8					34.0-ft.	As above, saturated, no odors	S.						
١	8	0.40	0.41 0.01	00	406	-							0.0	s
35	14	5-13	34' - 36'	22	1.2-ft.									٥
	17													
36	5													\vdash
	-												0.0	
37	10	S-14	36' - 38'	21	1.6-ft.								0.0	S
	11													
38	16													-
	16													
39	14	S-15	38' - 40'	26	1.7-ft.								0.0	s
39	12	3-13	30 - 40	20	1.7 -11.									
,,	12													
40	3					40.0-ft.	As above (Suspected running	sand)						
	3					, , , , ,	, , (,,					0.0	
41	5	S-16	40' - 42'	8	1.7-ft.									S
42	5													\vdash
43														
44														
44														
45	6						Gray mf SAND, saturated, no	odors.						
	5							·					0.0	
46	5	S-17	45' - 47'	10	0.6-ft.								5.5	S
47	5													\vdash
<u> </u>														Щ
1						1	_							,

LEGEND

NOTES:

- S SPLIT SPOON SOIL SAMPLE
- U UNDISTURBED SOIL SAMPLE
- C ROCK CORE SAMPLE

GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

LBA

PROJECT Phase II Environmental Site Assessment

DATE

1600 Penfield Road Penfield, New York **BORING** SHEET

CHKD. BY:

4 OF 5

MW-6

205237 JOB#

CONTRACTOR:

DRILLER

Nothnagle Drilling Co.

Steve Reyes

BORING LOCATION

GROUND SURFACE ELEVATION

DATUM

LABELLA REPRESENTATIVE:

C. Stiles

START DATE

20-Feb-06

END DATE

22-Feb-06

TYPE OF DRILL RIG:

Truck-mount CME Model 85 Hollow-stem Auger Drill Rig

WATER LEVEL DATA

TIME WATER CASING **REMARKS**

AUGER SIZE AND TYPE

4.25-Inch ID

OVERBURDEN SAMPLING METHOD 2" x 2' Split-spoon w/140# Hammer

ROCK DRILLING METHOD Not Applicable

ROC	K DRILL	ING N	METHOD	Not Applic	cable	,			ll			·	
D	ŀ												N
E			5	SAMPLE		a	SAM	IPLE DES	CRIPT	ION		PID	0
P						E						READINGS	Т
Т	BLOWS	NO.	DEPTH	N-VALUE	RECOVERY	DEPTH (Feet)							E
Н	/6"		(FT.)	/RQD(%)	(INCHES)	🖔							s
	1 , 0		(1 1.)	771020(70)	(INOTILO)						 		Ť
49													
50													-
	7					50.0-€	Gray mf SAND, saturated, no	odors.					
51	10	S-18	50' - 52'	19	1.0-ft.							0.0	s
	9												
52	7					<u> </u>							<u> </u>
												•	İ
53													
						•							
54													
55													
	9					55.0-ft.	Gray f-vf SAND, trace Silt, sat	turated, no	odors				
56	16	Q-10	55' - 57'	37	0.5-ft.		:					0.0	s
30	21	0-19	33 - 37	"	0.5-11.								
57	17						i e						
37													
58													
58													
59													
60	14					60.0-ft.	Brown f-vf SAND, saturated, r	no odors.					
	24			_			,					0.1	_
61	47	S-20	60' - 62'	78	1.4-ft.								s
	100/4"											0.3	
62													
63													
	I		LEGEND	l	<u> </u>	NOTE	L				 		<u> </u>
ĺ			LEGENU			INOIE	ა.						

- S SPLIT SPOON SOIL SAMPLE
- U UNDISTURBED SOIL SAMPLE
- C ROCK CORE SAMPLE

GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

LBA

PROJECT

Phase II Environmental Site Assessment 1600 Penfield Road

Penfield, New York

BORING MW-6 SHEET

CHKD. BY:

5 OF 5

205237 JOB#

CONTRACTOR:

DRILLER

Nothnagle Drilling Co.

Steve Reyes

BORING LOCATION

GROUND SURFACE ELEVATION

DATUM

LABELLA REPRESENTATIVE:

C. Stiles

START DATE

20-Feb-06

END DATE WATER LEVEL DATA

22-Feb-06

TYPE OF DRILL RIG:

Truck-mount CME Model 85 Hollow-stem Auger Drill Rig

AUGER SIZE AND TYPE

4.25-Inch ID OVERBURDEN SAMPLING METHOD 2" x 2' Split-spoon w/140# Hammer

ROCK DRILLING METHOD Not Applicable

DATE	TIME	WATER	CASING	REMARKS

D E P	SAMPLE				DEPTH (Feet)	SAMPLE DESCRIPTION	PID READINGS	N O T	
Т	BLOWS	NO.	DEPTH	N-VALUE	RECOVERY	PTH			E
Н	/ 6"		(FT.)	/RQD(%)	(INCHES)	끰			s
65	14					65 O ft	Gray cmf SAND, little(-) f subrounded Gravel, trace(-) Silt & Clay,		
	21						saturated, no odors.	2.6	
66	20	S-21	65' - 67'	41	1.4-ft.		saurateu, no ouors.	3.8*	S
67	18								Н
68									
69									
70	16 21					70.0-ft.	Brown SILT, little(-) vf Sand, saturated, no odors.	1.8	
71	57 100/4"	57	78	78 1.5-ft.	1 1	Grayish-brown cmf angular to subangular GRAVEL and SILT & CLAY, little cmf Sand, saturated, no odors.	0.5**	S	
72	52						As above, saturated, no odors.		
73	63	S-23	72' - 74'	144	1.2-ft.	72.4-ft.	SHALE, saturated, no odors.	0.1	s
′3	81						Brown f SAND, little(+) Silt, saturated, no odors.		
74	100/2"					73.1-ft.	SHALE, saturated, no odors.	V.1	
75									
76									
77									
78									
79									
	ll								

LEGEND

NOTES:

- S SPLIT SPOON SOIL SAMPLE
- U UNDISTURBED SOIL SAMPLE
- C ROCK CORE SAMPLE

- * denotes a headspace reading of 22.3 ppm was obtained for the 66.0' to 66.4' interval.
- ** denotes a headspace reading of 0.3 ppm was obtained for the 71.0' to 71.5' interval.
- Monitoring wells MW-6M and MW-6D were installed within borehole MW-6.

GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

BORING # MW-6 LBA



PROJECT

Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York

END DATE:

BORING: SG-15

SHEET 1 OF

205237.01 JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

CONTRACTOR: DRILLER:

TREC Environmental Jim Agar

OVERBURDEN SAMPLING METHOD: Direct Push

LABELLA REPRESENTATIVE: C. A. Stiles

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

0920 TO 0935

DATUM: NA

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

START DATE:

30-Mar-06

30-Mar-06

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

]	1				1	
D E P		SAMPLE			PID FIELD SCREEN	
T H	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	(PPM)	REMARKS
0	S-1 0' to 4'	2.7-ft.	0.0-ft	TOPSOIL Dark brown f SAND, some(-) Silt, organics present (roots, root traces, humus), damp, no odors.	0.0	
2			0.45-ft.	ALLUVIUM Brown mf ⁽⁺⁾ SAND, moist, no odors.	0.0	
			2.2-ft.	Brown vf SAND, some Silt, damp to wet, no odors.	0.0	
4				End of Boring @ 4.0-ft. BGS		
6						
8						
10						
12						
12						
14						
16						
18						
V	VATER LEVEL	DATA	воттом оғ	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME	ELAPSED TIME	CASING	BORING ENCOUNTERED		
				4.0-FT. Not Encountered		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations
- and = 35 to 50 % some = 20 to 35%
- c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine

NA = Not Applicable

BORING: SG-15



PROJECT

Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York

END DATE:

BORING: SG-16

SHEET 1 OF

JOB: 205237.01

NA

CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: DRILLER:

TREC Environmental
Jim Agar

OVERBURDEN SAMPLING METHOD: Direct Push

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME: DATUM: 0935 TO 0950

1

LABELLA REPRESENTATIVE: C. A. Stiles

s START DATE:

30-Mar-06

30-Mar-06

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

AUGER SIZE AND TYPE:

NA

00 11121 00

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

D SAMPLE SAMPLE STRATA VISUAL CLASSIFICATION PPED SCREEN PPED	I						
P			SAMPLE				
T SAMPLE NO SAMPLE STRATA						SCREEN	
H AND DEPTH RECOVERY CHANGE 0.0-8 0.0-		SAMPLE NO	SAMPLE	STRATA	VISUAL CLASSIFICATION		REMARKS
0 to 4'		AND DEPTH	RECOVERY	CHANGE			
A	0	S-1	3.2-ft.		TOP SOIL		
2		0' to 4'		0.0-ft		0.0	
ALLUVIUM 0.6-ft. Brown Sil.T., damp to wet, no odors. 6 6 7 10 12 14 16 18 WAIER LEVEL DATA BOTTOM OF SHOUNDWATER DATE TIME SLAPSED TIME CASING BORING ENCOUNTERED TIME SLAPSED CASING BORING ENCOUNTERED A.D.T. Not Encountered NOTES:						0.0	
10 10 11 10 11 10 11 10 11 11 11 11 11 1	1				<u>ALŁUVIUM</u>		
	2			0.6-ft.	Brown SILT, damp to wet, no odors.	0.1	
### End of Boring © 4.0-ft. BGS Boring © 4.0-ft. BGS						0.1	
10 12 14 16 18 WATER LEVEL DATA DATE TIME ELAPSED CASING BORING ENCOUNTERED TIME 10 NOTES: NOTES:						0.0	
10 12 14 16 18 WATER LEVEL DATA DATE TIME ELAPSED CASING BORING ENCOUNTERED TIME 10 NOTES: NOTES:	4				End of Boring @ 4.0-ft, BGS		
10 12 14 16 18 WATER LEVEL DATA BOTTOM OF GROUNDWATER DATE TIME ELAPSED CASING BORING ENCOUNTERED TIME 4.0-FT. Not Encountered	1						
10 12 14 16 18 WATER LEVEL DATA BOTTOM OF GROUNDWATER DATE TIME ELAPSED CASING BORING ENCOUNTERED TIME 4.0-FT. Not Encountered							
10 12 14 16 18 WATER LEVEL DATA BOTTOM OF GROUNDWATER DATE TIME ELAPSED CASING BORING ENCOUNTERED TIME 4.0-FT. Not Encountered							
10	6						
10							
10							
10							
12 14 16 18 WATER LEVEL DATA DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED TIME 1 Not Encountered NOTES:	8						
12 14 16 18 WATER LEVEL DATA DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED TIME 1 Not Encountered NOTES:							
12 14 16 18 WATER LEVEL DATA DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED TIME 1 Not Encountered NOTES:	1						
12 14 16 18 WATER LEVEL DATA DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED TIME 1 Not Encountered NOTES:	10						
14 16 18 WATER LEVEL DATA BOTTOM OF DOTTOM							
14 16 18 WATER LEVEL DATA BOTTOM OF DOTTOM							
14 16 18 WATER LEVEL DATA BOTTOM OF DOTTOM							
18 WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER NOTES: DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 4.0-FT. Not Encountered	12						
18 WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER NOTES: DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 4.0-FT. Not Encountered							
18 WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER NOTES: DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 4.0-FT. Not Encountered							
18 WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER NOTES: DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 4.0-FT. Not Encountered							
WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER DATE TIME ELAPSED CASING BORING ENCOUNTERED 4.0-FT. Not Encountered	14						
WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER DATE TIME ELAPSED CASING BORING ENCOUNTERED 4.0-FT. Not Encountered							
WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER DATE TIME ELAPSED CASING BORING ENCOUNTERED 4.0-FT. Not Encountered							
WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER DATE TIME ELAPSED CASING BORING ENCOUNTERED 4.0-FT. Not Encountered	16						
WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER DATE TIME ELAPSED CASING BORING ENCOUNTERED 4.0-FT. Not Encountered							
WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER DATE TIME ELAPSED CASING BORING ENCOUNTERED 4.0-FT. Not Encountered							
WATER LEVEL DATA BOTTOM OF BOTTOM OF GROUNDWATER DATE TIME ELAPSED CASING BORING ENCOUNTERED 4.0-FT. Not Encountered							
DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 4.0-FT. Not Encountered	18						
DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 4.0-FT. Not Encountered							
DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 4.0-FT. Not Encountered							
DATE TIME ELAPSED TIME CASING BORING ENCOUNTERED 4.0-FT. Not Encountered							
TIME TIME CASING BOHING ENCOUNTERED 4.0-FT. Not Encountered	—	T					
	DATE	TIME		CASING			
					4.0-FT. Not Encountered		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations
- and = 35 to 50 % some = 20 to 35%

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10% m = medium f = fine

c = coarse

NA = Not Applicable

BORING: SG-16



PROJECT

Phase II Environmental Site Assessment Supplemental Subsurface Site Characterization

Former Carriage Cleaners 1600 Penfield Road, Penfield, New York BORING: SG-17

SHEET 1 OF

NA

205237.01 JOB:

CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS**

TYPE OF DRILL RIG: Truck/Track Mounted Geoprobe Model 54LT

NA

CONTRACTOR: DRILLER:

AUGER SIZE AND TYPE:

TREC Environmental Jim Agar

BORING LOCATION:

GROUND SURFACE ELEVATION: NA

TIME:

0950 TO ###

1

DATUM:

LABELLA REPRESENTATIVE: C. A. Stiles

OVERBURDEN SAMPLING METHOD: Direct Push

START DATE:

30-Mar-06

END DATE: 30-Mar-06

DRIVE SAMPLER TYPE: 4-foot Macrocore

INSIDE DIAMETER: ~1.8-Inch

OTHER:

ļ				1		
D E P T	SAMPLE NO	SAMPLE	STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
Н	AND DEPTH	RECOVERY	CHANGE			
0	S-1 0' to 4'	2.8-ft.	0.0-ft	TOPSOIL Dark brown f SAND, some(-) Silt, organics present (roots, root traces, humus), damp, no odors.	0.0	
2			0.5-ft.	ALLUVIUM Brown mf ⁽⁺⁾ SAND, moist, no odors.	0.0	
			2.0-ft.	Brown vf SAND, some Silt, damp to wet, no odors.	0.0	
4				End of Boring @ 4.0-ft. BGS		
6						
8						
10						
12						
14						
16						
18						
<u> </u>	LATED : Exer	DATA	DOTTO:: CT	POTTOMOS CONCUENTIATED NOTES.		
DATE	VATER LEVEL TIME	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES: BORING ENCOUNTERED		
<u> </u>				4.0-FT. Not Encountered		

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine

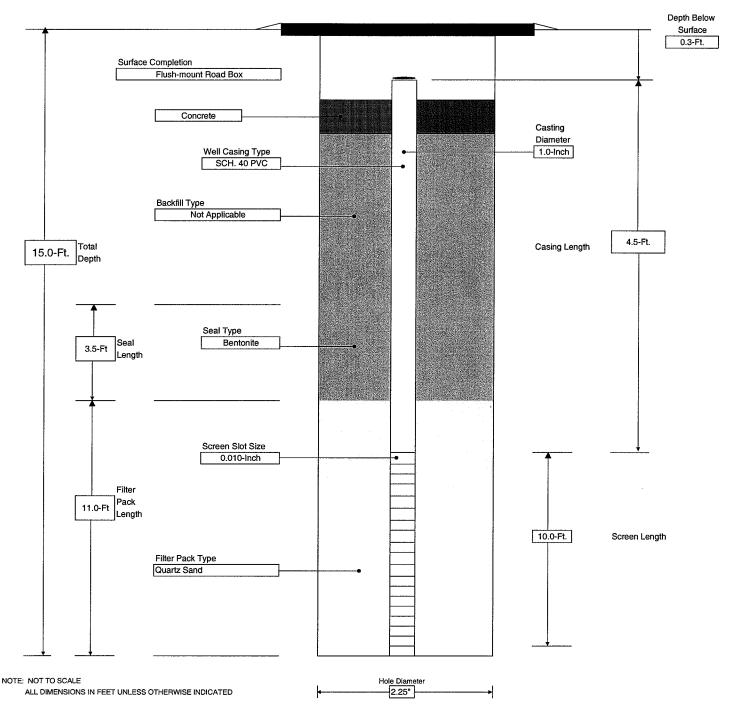
NA = Not Applicable

BORING: SG-17



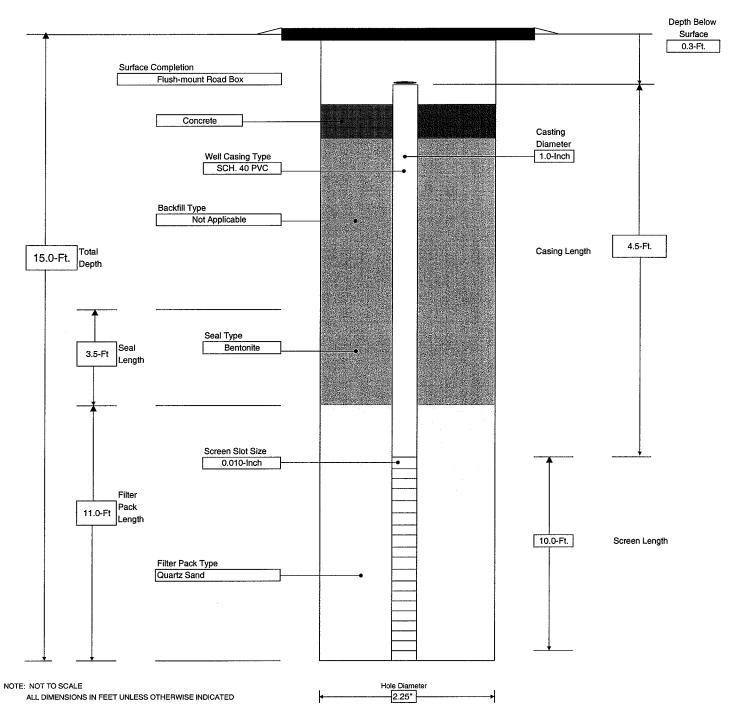
Appendix 2 Monitoring Well Construction Diagrams

WELL ID MW-2 (Boring B-37) PROJECT Phase II Environmental Site Assessment SHEET 1 OF 1 Associates, P.C. 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS Supplemental Site Characterization JOB# 205237.01 1600 Penfield Road, Penfield, New York CHKD. BY: CONTRACTOR: TREC Environmental Services, Inc. BORING LOCATION DRILLER GROUND SURFACE ELEVATION Paul Wiley DATUM START DATE LABELLA REPRESENTATIVE: 27-Oct-05 END DATE C.A. Stiles 27-Oct-05 WATER LEVEL DATA TIME WATER CASING REMARKS TYPE OF DRILL RIG: Track Mounted Geoprobe Model 5400-LT DATE AUGER SIZE AND TYPE N/A OVERBURDEN SAMPLING METHOD Direct Push ROCK DRILLING METHOD N/A



- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

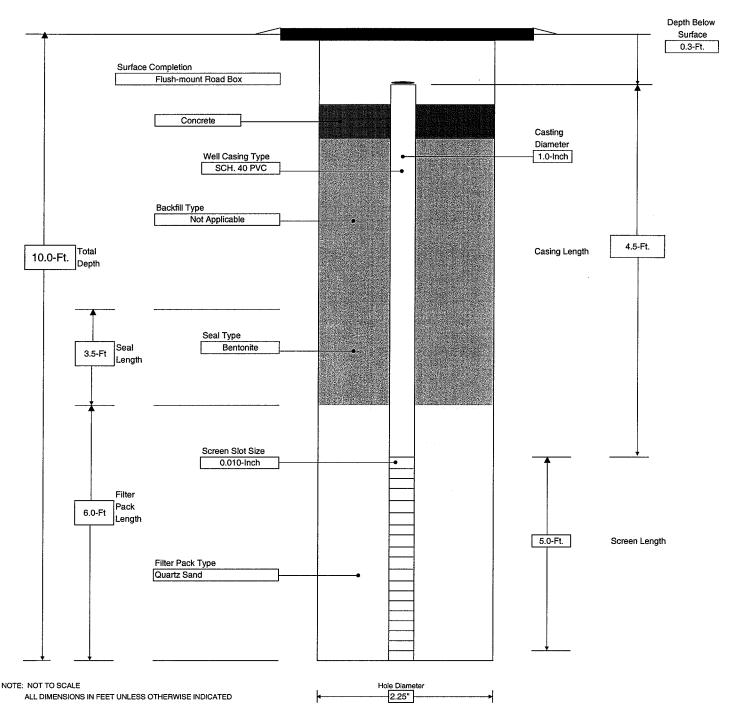
WELL ID MW-3 (Boring B-35) PROJECT SHEET 1 OF 1 Phase II Environmental Site Assessment JOB# 205237.01 300 STATE STREET, ROCHESTER, NEW YORK Supplemental Site Characterization ENVIRONMENTAL ENGINEERING CONSULTANTS 1600 Penfield Road, Penfield, New York CHKD. BY: CONTRACTOR: TREC Environmental Services, Inc. BORING LOCATION DRILLER Paul Wiley GROUND SURFACE ELEVATION DATUM LABELLA REPRESENTATIVE: C.A. Stiles START DATE 27-Oct-05 END DATE 27-Oct-05 WATER LEVEL DATA TYPE OF DRILL RIG: Track Mounted Geoprobe Model 5400-LT DATE TIME WATER CASING REMARKS AUGER SIZE AND TYPE N/A OVERBURDEN SAMPLING METHOD Direct Push ROCK DRILLING METHOD N/A



GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

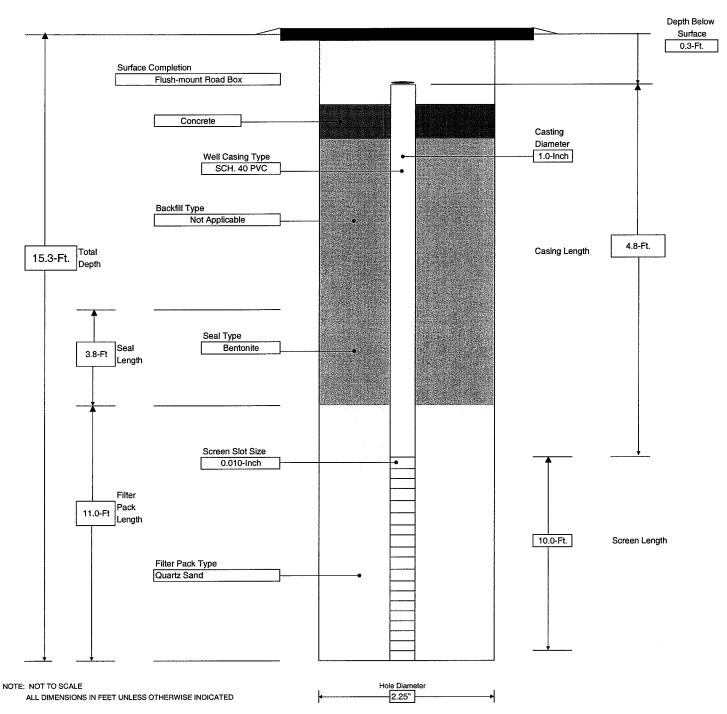
WELL ID MW-4 (Boring B-36) PROJECT SHEET 1 OF 1 Phase II Environmental Site Assessment 300 STATE STREET, ROCHESTER, NEW YORK JOB# 205237.01 Supplemental Site Characterization ENVIRONMENTAL ENGINEERING CONSULTANTS CHKD. BY: 1600 Penfield Road, Penfield, New York CONTRACTOR: TREC Environmental Services, Inc. **BORING LOCATION** DRILLER Paul Wiley GROUND SURFACE ELEVATION DATUM LABELLA REPRESENTATIVE: C.A. Stiles START DATE 27-Oct-05 END DATE 27-Oct-05 WATER LEVEL DATA TYPE OF DRILL RIG: Track Mounted Geoprobe Model 5400-LT DATE TIME WATER CASING REMARKS AUGER SIZE AND TYPE OVERBURDEN SAMPLING METHOD Direct Push ROCK DRILLING METHOD N/A



GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

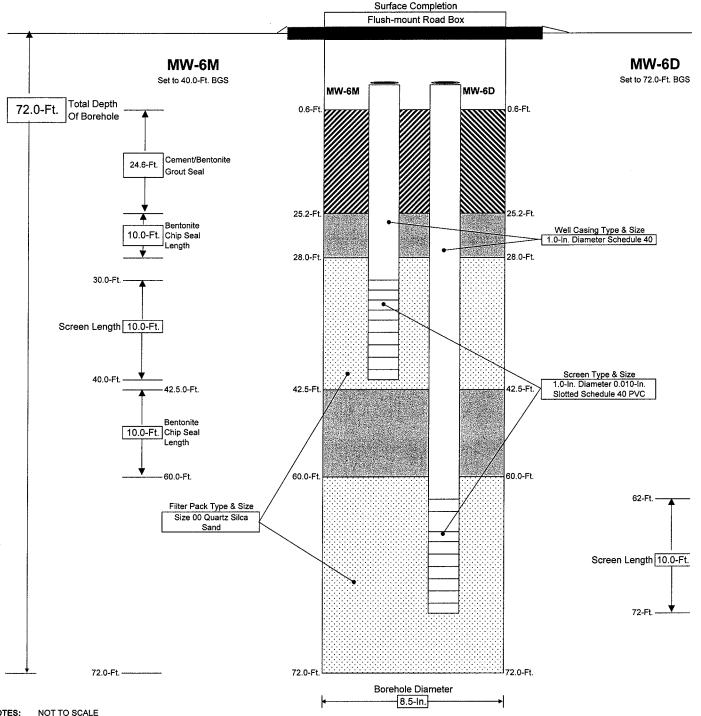
WELL ID MW-5 (Boring B-38) PROJECT SHEET 1 OF 1 Phase II Environmental Site Assessment 205237.01 300 STATE STREET, ROCHESTER, NEW YORK JOB# Supplemental Site Characterization ENVIRONMENTAL ENGINEERING CONSULTANTS 1600 Penfield Road, Penfield, New York CHKD. BY: CONTRACTOR: TREC Environmental Services, Inc. BORING LOCATION DRILLER Paul Wiley GROUND SURFACE ELEVATION DATUM LABELLA REPRESENTATIVE: C.A. Stiles START DATE 27-Oct-05 END DATE 27-Oct-05 WATER LEVEL DATA TYPE OF DRILL RIG: Track Mounted Geoprobe Model 5400-LT DATE TIME WATER CASING REMARKS AUGER SIZE AND TYPE N/A OVERBURDEN SAMPLING METHOD Direct Push ROCK DRILLING METHOD N/A



GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

MW-6M & MW-6D PROJECT WELL ID 1 OF 1 SHEET Phase II Environmental Site Assessment 300 STATE STREET, ROCHESTER, NEW YORK JOB# 205237.01 Supplemental Site Characterization **ENVIRONMENTAL ENGINEERING CONSULTANTS** 1600 Penfield Road, Penfield, New York CHKD. BY: CONTRACTOR: TREC Environmental Services, Inc. **BORING LOCATION GROUND SURFACE ELEVATION** DATUM LABELLA REPRESENTATIVE: C.A. Stiles START DATE 30-Mar-06 END DATE 30-Mar-06 WATER LEVEL DATA TYPE OF DRILL RIG: Track Mounted Geoprobe Model 5400-LT DATE TIME WATER CASING REMARKS AUGER SIZE AND TYPE N/A OVERBURDEN SAMPLING METHOD Direct Push ROCK DRILLING METHOD N/A



NOTES:

ALL DIMENSIONS IN FEET UNLESS OTHERWISE INDICATED

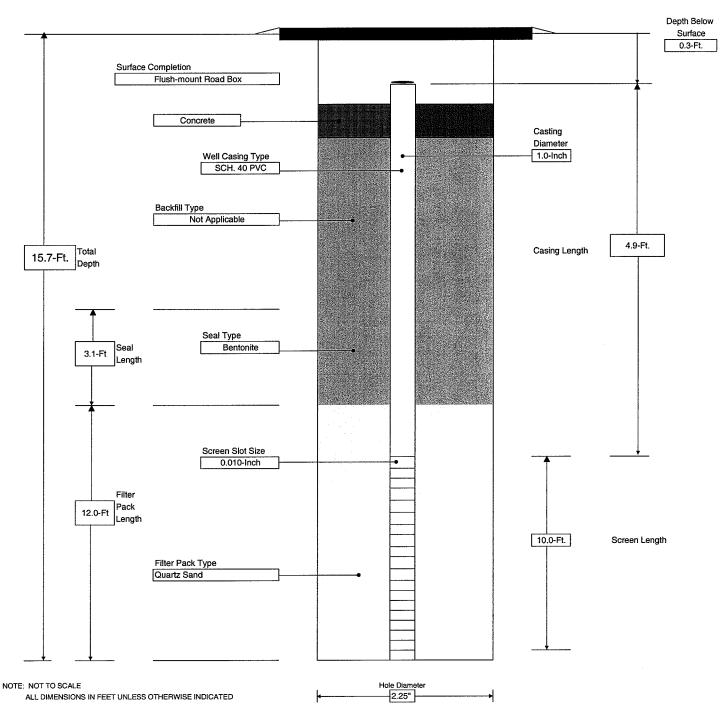
MW-6M SET TO 40.0-FT. WITH 10.0-FT. OF SCREEN (30.0-FT. - 40.0-FT.), FILTER PACK (28.0-FT - 42.5-FT), AND UPPER BENTONITE SEAL (25.2-FT - 28.0-FT)

MW-6D SET TO 72.0-FT. WITH 10.0-FT. OF SCREEN (62.0-FT. - 72.0-FT.), FILTER PACK (60.0-FT - 72.0-FT), AND UPPER BENTONITE SEAL (42.5-FT - 60.0-FT)

GENERAL NOTES:

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

WELL ID MW-7 (Boring B-43) PROJECT SHEET 1 OF 1 Phase II Environmental Site Assessment JOB# 205237.01 300 STATE STREET, ROCHESTER, NEW YORK Supplemental Site Characterization ENVIRONMENTAL ENGINEERING CONSULTANTS CHKD. BY: 1600 Penfield Road, Penfield, New York CONTRACTOR: TREC Environmental Services, Inc. BORING LOCATION DRILLER Jim Agar GROUND SURFACE ELEVATION DATUM START DATE END DATE LABELLA REPRESENTATIVE: C.A. Stiles 30-Mar-06 30-Mar-06 WATER LEVEL DATA TYPE OF DRILL RIG: Track Mounted Geoprobe Model 5400-LT DATE TIME WATER CASING REMARKS AUGER SIZE AND TYPE N/A OVERBURDEN SAMPLING METHOD Direct Push ROCK DRILLING METHOD N/A



GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

WELL ID MW-8 (Boring B-49) **PROJECT** Phase II Environmental Site Assessment SHEET 1 OF 1 300 STATE STREET, ROCHESTER, NEW YORK Supplemental Site Characterization JOB# 205237.01 **ENVIRONMENTAL ENGINEERING CONSULTANTS** 1600 Penfield Road, Penfield, New York CHKD. BY: CONTRACTOR: TREC Environmental Services, Inc. **BORING LOCATION** DRILLER GROUND SURFACE ELEVATION DATUM Jim Agar LABELLA REPRESENTATIVE: C.A. Stiles START DATE 30-Mar-06 END DATE 30-Mar-06 WATER LEVEL DATA TIME WATER CASINGREMARKS TYPE OF DRILL RIG: Track Mounted Geoprobe Model 5400-LT DATE AUGER SIZE AND TYPE N/A OVERBURDEN SAMPLING METHOD Direct Push ROCK DRILLING METHOD N/A 0.9-Ft. Height Above Fround Surfac Surface Completion Stick-up PVC Casing Casting Diameter Well Casing Type 1.0-Inch SCH. 40 PVC Backfill Type Not Applicable 5.0-Ft. Casing Length Total 13.8-Ft Depth Seal Type Bentonite Screen Slot Size 0.010-Inch Filter Pack 11.4-Ft Length 10.0-Ft. Screen Length Filter Pack Type Quartz Sand NOTE: NOT TO SCALE Hole Diameter ALL DIMENSIONS IN FEET UNLESS OTHERWISE INDICATED 2.25" GENERAL NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

WELL ID MW-9 (Boring B-44) **PROJECT** Phase II Environmental Site Assessment SHEET 1 OF 1 300 STATE STREET, ROCHESTER, NEW YORK Supplemental Site Characterization JOB# 205237.01 ENVIRONMENTAL ENGINEERING CONSULTANTS 1600 Penfield Road, Penfield, New York CHKD. BY: CONTRACTOR: TREC Environmental Services, Inc. **BORING LOCATION** DRILLER GROUND SURFACE ELEVATION Jim Agar DATUM LABELLA REPRESENTATIVE: START DATE C.A. Stiles 30-Mar-06 END DATE 30-Mar-06 WATER LEVEL DATA TYPE OF DRILL RIG: TIME WATER CASINGREMARKS Track Mounted Geoprobe Model 5400-LT DATE AUGER SIZE AND TYPE N/A OVERBURDEN SAMPLING METHOD Direct Push ROCK DRILLING METHOD N/A 0.9-Ft. Height Above 3round Surfac Surface Completion Stick-up PVC Casing Casting Diameter Well Casing Type 1.0-Inch SCH. 40 PVC Backfill Type Not Applicable 5.0-Ft. Total Casing Length 14.4-Ft Seal Type Bentonite Length Screen Slot Size 0.010-Inch Filter Pack 11.4-Ft 10.0-Ft. Screen Length Filter Pack Type Quartz Sand NOTE: NOT TO SCALE Hole Diameter ALL DIMENSIONS IN FEET UNLESS OTHERWISE INDICATED 2.25" GENERAL NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

Associates, P.0 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS PROJECT

Phase II Environmental Site Assessment Supplemental Site Characterization 1600 Penfield Road, Penfield, New York

BORING: MW-10 SHEET 1 OF 1 JOB # 205237.01 CHKD. BY:

CONTRACTOR: Trec Environmental, Inc.

DRILLER: J. Agar

LABELLA REPRESENTATIVE: C.A. Stiles

BORING LOCATION:

GROUND SURFACE ELEVATION: N/A

DATUM: N/A START DATE: 3/30/06 END DATE: 3/30/06

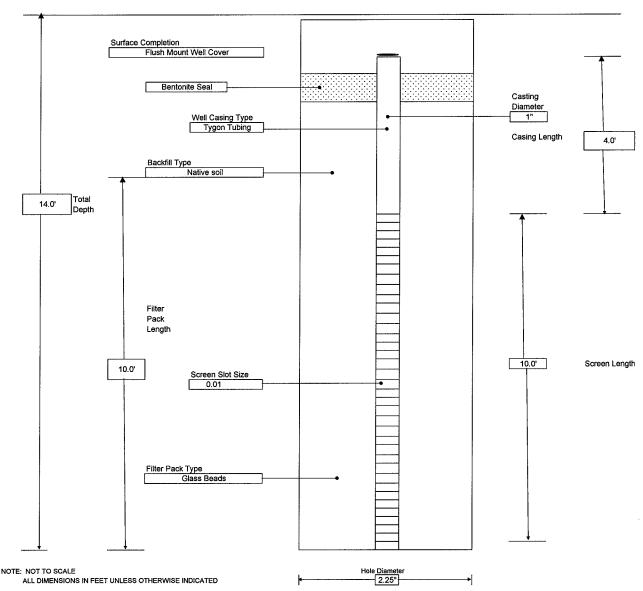
TYPE OF DRILL RIG: Track Mounted Geioprobe Model 5400-LT

AUGER SIZE AND TYPE: N/A

OVERBURDEN SAMPLING METHOD: Direct Push

ROCK DRILLING METHOD: N/A

WATER LEVEL DATA TIME WATER CASING REMARKS DATE



- RAL NOTES:

 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL

 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

 MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.



Appendix 3 Monitoring Well Development Logs



300 STATE STREET, ROCHESTER, NY

(585) 454-6110	FAX:	(585) 454-3066
(000) .0.0.0		(000) .0 . 0000

WELL I.D. MW-6M (Borehole MW-6)

PH: (585) 45	4-6110	FAX: (58	5) 454-3066					
Project Nan	Project Name: Location:		Carriage Cle	aners		_	Project No.: 205237.01	
Location:		1600 Per	nfield Rd., F	Penfield, NY		_		
Developme	nt By:	Craig A.	Stiles			_	Date: February 23, 2006	
Weather:	I	Mostly c	loudy w/ sn	ow showers, 28	to 34°F	- -		
PURGE V	OLUME CA	LCULA'	TION					
Well Diame	eter:	1.0	-inch	_	Static Water	r Level:	6.99 -feet	
Depth of W	ell:	38.22	-feet	_	Single Well	l Volume:	1.3 -gallons	
PURGE &	SAMPLIN	G METH	OD					
X Bailer	- Type:	PVC -	Dedicated	_	Pump -	- Type		
Sampling D	evice:	PVC -	Dedicated	-	Pump Rate:			
FIELD PARAMETER		MEASU	REMENTS	3 - 1/2.				
Time	Gallons	pН	Temp	Conductivity	Turbidity		Comments	
	Purged	<u> </u>	(oC)	(mS/cm)	(NTU)			
1255	~0.5	7.49	8.4	0.213	247		Water turbid - Brown	
1315	1.3	7.05	9.1	0.297	>1,000		No sheen or odor.	
1330	2.6	6.99	9.3	0.319	>1,000			
	1420 3.9 6.94		9.0	0.329	>1,000	 		
1450	5.2	6.95	9.2	0.327	>1,000			
1510	6.5	6.93	9.2	0.326	>1,000			
		<u> </u>						
ļ			<u> </u>					
-								
Total	6.5	Gallons I	Purged	Purge Start Tin	ne: 1255		Purge End Time: 1510	
OBSERVA			u. Bea	I ange otait I in			Targo Dila Timo. 1310	
			abilized for	3 successive we	ll volumes, b	out no obser	vable improvement in turbidity.	
- Developm	ent complete	· .						
						· · · · · · · · · · · · · · · · · · ·		
							A STATE OF THE STA	
	M-11.111E11.111							
ļ								



WELL ID MW-6D (Borehole MW-6)

300 ST/ PH: (585) 45	ATE STREET, 54-6110		FER, NY 5) 454-3066	***		141 44	OD (Doreno	
Project Nan	ne:	Former (Carriage Cle	aners		_	Project No.:	205237.01
Location:		1600 Per	nfield Rd., P	enfield, NY		-		
Developmen	nt By:	Craig A.				-	Date: Februar	ry 23, 2006
Weather:		Mostly c	loudy w/ sn	ow showers, 28	to 34°F	-		
PURGE VO	OLUME CA	LCULA'	TION					
Well Diame	eter:	1.0	-inch	_	Static Water	r Level:	7.14	-feet
Depth of W	ell:	69.65	-feet	•	Single Well	Volume:	2.60	-gallons
PURGE &	SAMPLING	G METH	OD					
X Bailer	- Type:	PVC - Dedicated Pump -			- Type			
Sampling D		PVC -	Dedicated	•	Pump Rate:			
FIELD PA	RAMETER	MEASU	REMENTS	· }				
Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)			Comments
1335	~0.05	7.22	8.8	0.220	>1,000		Water turbid -	
1355	2.6	6.91	9.4	0.267	>1,000		No sheen or o	dor.
1413	5.2	6.82	9.5	0.271	>1,000			
1435 1455	7.8 10.4	6.80	9.4 9.1	0.253 0.260	>1,000			
1433	10.4	0.79	9.1	0.200	>1,000		<u> </u>	
		<u> </u>						
		ļ						W V V V
		ļ						
Total	10.4	Gallons 1	Purged	Purge Start Tir	ne: 1335	I	Purge End Tin	ne: 1455
OBSERVA	TIONS.	-	Ü				C	
		1 .	1:7: 1.0	2 :	11 1 1		11 .	
	meter reading ent complete		abilized for	3 successive we	il volumes, t	out no obse	rvable improvem	ient in turbidity.
- Developin	ent complete	· .						
	201 1220 1230 1230 1230							



300 STATE STREET, ROCHESTER, NY

WELL I.D. MW-7 (Borehole B-43)

PH: (585) 45	4-6110	FAX: (58	5) 454-3066			-			
Project Nam	ie:	Former (Carriage Cle	aners			Project No.:	205237.01	
Location:				Penfield, NY		•	,		
Developmen	nt By:	Craig A.				•	Date: April 3,	2006	
Weather:	•	Mostly c	loudy w/sho	wers, windy, ~5	50 to 64°F	_	_		
PURGE VO	LUME CA	LCULA'	TION			-			
Well Diame	ter:	1.0	-inch	_	Static Water	r Level:	7.14 -	-feet	
Depth of We	ell:	15.16	-feet	•	Single Well	Volume:	0.33	-gallons	
PURGE &		G METH	OD		· .				
Bailer -	Type:	PVC -	Dedicated	_	Pump -	- Туре			
Sampling D	evice:	PVC -	Dedicated	-	Pump Rate:				
FIELD PAI	RAMETER	MEASU	REMENTS						
Time	Gallons Purged	pН	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)			Comments	
1400	~0.05	6.59	14.8	1.204	>1,000		Water turbid -	Brownish-gray.	
1405	0.33	6.88	13.0	1.201	>1,000		No sheen or oc	lor.	
1410	0.67	6.80	12.7	1.301	>1,000				
1415				1.357	>1,000				
1420	1420 1.33 6.78 13.0			1.375	>1,000				
	·····								
							1		
							†		

Total	1.33	Gallons l	Purged	Purge Start Tin	ne: 1400		Purge End Tim	ne: 1420	<u> </u>
OBSERVA	TIONS:	_							
- Field parar	neter reading	gs have sta	abilized for	3 successive we	ll volumes, b	out no obser	vable improvem	ent in turbidity.	
- Developme	nt complete								
		·							
L									



300 STATE STREET, ROCHESTER, NY

WELL I.D. MW-8 (Borehole B-49)

PH: (585) 45	4-6110	FAX: (58	5) 454-3066						
				· · · · · · · · · · · · · · · · · · ·			Project No.:	205237.01	
Project Nam Location:	ie:		Carriage Cle	enfield, NY		-	Floject No	203237.01	
Developmen	ot Rue	Craig A.		emieid, iv i		-	Date: April 3	2006	
Weather:	R Dy.			owers, windy, ~5	50 to 64°F	-	<i>Рис</i> . <u>При 3</u>	<u>, 2000</u>	
				wers, windy,					
PURGE VO	DLUME CA	LCULA'	HON						
Well Diame	ter:	1.0	-inch	_	Static Wate		9.99		
Depth of Wo	ell:	14.55	-feet	_	Single Well	Volume:	0.19	-gallons	
PURGE &	SAMPLING	G METH	OD						
Bailer -	- Type:	PVC -	Dedicated	_	Pump	- Туре			
Sampling D		PVC -	Dedicated	_	Pump Rate:	•			
FIELD PAI	FIELD PARAMETER MEASUREMENTS								
Time	Gallons	pH	Temp	Conductivity (mS/cm)	Turbidity (NTU)			Comments	
1508	Purged ~0.05	6.97	(oC) 10.4	1.316	>1,000		Water turbid	- Brownish-gray.	
1512	0.19	6.82	10.8	1.129	>1,000		No sheen or o		
1515	0.38	6.85	10.9	1.219	>1,000				
1518	0.57	6.82	11.2	1.204	>1,000				
1522	0.76	6.80	11.0	1.217	>1,000				
		ļ			***********		_		
						 			
			. ,						
						<u> </u>			
Total	0.76	_Gallons l	Purged	Purge Start Tin	ne: 1508		Purge End Tir	me: 1522	
OBSERVA	TIONS:								
- Field parar	neter readin	gs have st	abilized for	3 successive we	ll volumes,	but no obse	rvable improven	nent in turbidity.	
- Developme							•		



W	EL	\mathbf{L}	I.D).	M	W	7-9	(Borehole	B-44
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PH: (585) 45	4-6110		5) 454-3066						
Project Nam	ne:	Former C	Carriage Cle	aners			Project No.:	205237.01	
Location:				enfield, NY		•	J		
Developmen	nt By:	Craig A.				•	Date: April 3,	2006	
Weather:	•	Mostly c	loudy w/sho	owers, windy, ~5	50 to 64°F	_			
PURGE VO	DLUME CA	LCULA	ΓΙΟΝ						
Well Diame	ter:	1.0	-inch	_	Static Water	r Level:	9.09 -	feet	
Depth of We	ell:	14.35	-feet		Single Well	Volume:	0.21	-gallons	
PURGE &	SAMPLIN	G METH	OD						
Bailer -	- Type:	PVC - I	Dedicated		Pump -	- Туре			
Sampling D		PVC - Dedicated		_	Pump Rate:				
FIELD PAI	RAMETER	MEASU	REMENTS	.					
Time	Gallons Purged	pН	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)			Comments	
1425	~0.05	6.81	11.7	2.010	840		Water turbid -	Brownish-gray	'.
1430	0.21	6.71	11.5	2.010	>1,000		No sheen, but	slight Perchlor	oethylene
1434	0.42	6.69	11.4	1.753	>1,000		odor.		
1438	0.63	6.70	11.3	1.610 1.436	>1,000				
	1443 0.84 6.72 11.3				>1,000				
1447	1.05	6.67	11.2 11.2	1.408 1.401	>1,000				
1452	1.26	6.70	11.2	1.401	>1,000				
			i						
								1.450	
Total	1.26	_Gallons l	Purged	Purge Start Tir	ne: 1425		Purge End Tim	ie: 1452	
OBSERVA	TIONS:								
- Field parar	neter readin	gs have st	abilized for	3 successive we	ell volumes, l	but no obser	vable improveme	ent in turbidity.	
- Developme	ent complete	÷.							
	<u></u>								
								-	



300 STATE STREET, ROCHESTER, NY

WELL I.D. MW-10 (Borehole B-47)

Project Name:		FAX: (58	5) 454-3066					
Project Nam	ne:	Former (Carriage Cle	aners			Project No.:	205237.01
Location:		_		Penfield, NY		-	_	
Developmen	nt By:	Craig A.	Stiles			-	Date: April 3,	2006
Weather:	•	Mostly c	loudy w/sho	owers, windy, ~5	50 to 64°F	<u>-</u>	_	
PURGE VO	DLUME CA	ALCULA'	FION					
Well Diame	ter:	1.0	-inch	_	Static Water	r Level:	0938 -	-feet
Depth of We	ell:	15.13	-feet	mi	Single Well	Volume:	0.23	-gallons
PURGE &	SAMPLIN	G METH	OD					
Bailer -	- Type:	PVC -	Dedicated	_	Pump -	- Type		····
Sampling D	evice:	PVC -	Dedicated	-	Pump Rate:			
FIELD PAI	RAMETER	MEASU	REMENTS	S				
Time	Gallons	pН	Temp	Conductivity	Turbidity			Comments
	Purged		(oC)	(mS/cm)	(NTU)	1	T T T T T T T T T T T T T T T T T T T	D
1453	~0.05	7.49	10.8	1.420	>1,000		No sheen, but	Brownish-gray.
1456 1500	0.23	6.89 6.84	11.1 11.1	1.413 1.433	>1,000		Perchloroethyl	
1504	0.26	6.90	11.1	1.433	>1,000 >1,000		reichioroemyr	elle odol.
1304 0.09		0.90	11.2	1.414	>1,000		1	
		1		-				
Total	0.69	_Gallons l	Purged	Purge Start Tir	ne: 1453		Purge End Tin	ne: 1504
OBSERVA	TIONS:							
- Field parar	neter readin	gs have st	abilized for	3 successive we	ll volumes, l	but no obser	vable improvem	ent in turbidity.
	ent complete							-



Associates, P.C.

GROUNDWATER DEVELOPMENT FORM

300 STATE STREET, ROCHESTER, NY

WELL I.D. MW-2 (Borehole B-37)

PH: (585) 454-6110		FAX: (58	5) 454-3066					
Project Name: Location:		Former (Carriage Cle	eaners			Project No.: 205237 Task 2	
Location:		1600 Pe	nfield Rd., I	Penfield, NY		-	•	
Developme	nt By:	Craig A.	Stiles			-	Date: October 31, 2005	
Weather:	-	Cloudy,				-		
PURGE V	OLUME CA	LCULA	TION			-		
Well Diame	eter:	1.0	0-inch	_	Static Water	r Level:	6.96-feet	
Depth of W	ell:	14.	96-feet	-	Single Well	Volume:	0.33-gallons	
PURGE &	SAMPLING	G METHOD						
X Bailer	- Type:	PVC -	Dedicated	_	Pump -	- Туре		
Sampling D	evice:	PVC -	Dedicated	•	Pump Rate:			
FIELD PA	RAMETER	MEASU	REMENTS	3				
Time	Gallons Purged	pН	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)		Comments	
0930					276		Water turbid - Brownish-gray.	
0940	0.33	7.01	16.6	0.0245	>1,000		No sheen or odor.	
0946	0.66	6.85	16.9	0.247	>1,000			
0951	0.99	6.81	16.9	0.258	>1,000			
0957	1.32	6.81	16.8	0.684	>1,000			
1004	1.65	6.80	16.6	0.69	>1,000			
1010	1.98	6.77	16.5	0.731	>1,000			
Total	1.98	Gallons I	Purged	Purge Start Tin	ne: 0930		Purge End Time: 1010	
OBSERVA	TIONS:							
- Field parar	neter reading	gs have sta	abilized for	3 successive we	ll volumes, t	out no obser	vable improvement in turbidity.	
- Developme	ent complete	•						
								



300 STATE STREET, ROCHESTER, NY

	•		
(585) 454-6110	FΔX.	(585)	454-3066

WELL I.D. MW-3 (Borehole B-35)

PH: (585) 45	4-6110	FAX: (58	5) 454-3066				
Project Nam	ie:		Carriage Cle			-	Project No.: 205237 Task 2
Location:				enfield, NY		-	
Developmen	nt By:	Craig A.				-	Date: October 31, 2005
Weather:		Cloudy,	~50°F			-	
PURGE VO	DLUME CA	LCULA	ΓΙΟΝ				
Well Diame	ter:	1.0)-inch		Static Water	r Level:	3.91-feet
Depth of We	ell:	14.2	24-feet		Single Well	Volume:	0.42-gallons
PURGE &		G METH	OD				
Bailer -	- Type:	PVC -	Dedicated		Pump -	- Type	
Sampling D		PVC -	Dedicated		Pump Rate:		
FIELD PARAMETER MEASUREMENTS							
Time	Gallons	pН	Temp	Conductivity	Turbidity		Comments
Tille	Purged		(oC)	(mS/cm)	(NTU)		
1020	~0.04	7.00	13.9	0.00125	136		Water turbid - Brownish-gray.
1029	0.42	6.70	14.9	0.00097	>1,000		No sheen or odor.
1035	0.84	6.67	15.2	0.770	>1,000	ļ	
1040	1.26	6.64	15.2	0.300	>1,000		
1045	1.68	6.71	15.1	0.537	842	-	
1050	2.10	6.69	15.2	0.545	>1,000		
1055	2.52	6.65	15.1	0.557	>1,000		
		<u> </u>					
						-	
		 					
, , , , , , , , , , , , , , , , , , ,							
Total	2.52	Gallons l	Purged	Purge Start Tir	ne: 1020		Purge End Time: 1055
		-	8	8			
OBSERVA							
		~	abilized for	3 successive we	ll volumes,	but no obser	rvable improvement in turbidity.
- Developm	ent complete).					
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Associates, P.C.

GROUNDWATER DEVELOPMENT FORM

300 STATE STREET, ROCHESTER, NY

WELL I.D. MW-4 (Borehole B-36)

PH: (585) 45	54-6110	FAX: (58	5) 454-3066				
Project Nar	ne:	Former (Carriage Cle	aners		_	Project No.: 205237 Task 2
Location:		1600 Per	nfield Rd., F	enfield, NY		_	
Developme	nt By:	Craig A.	Stiles			_	Date: October 31, 2005
Weather:		Cloudy,	~55°F			- -	
PURGE V	OLUME CA	ALCULA'	TION				
Well Diame	eter:	1.0	O-inch	_	Static Water	r Level:	4.45-feet
Depth of W	ell:	9.6	0-feet	•	Single Well Volume:		0.21-gallons
PURGE & SAMPLING METHOD							
X Bailer	- Type:	PVC - Dedicated Pump - Type		- Type			
Sampling D	evice:	PVC -	Dedicated	•	Pump Rate:		
FIELD PA	FIELD PARAMETER MEASUREMENTS						
Time	Gallons	pН	Temp	Conductivity	Turbidity		Comments
	Purged		(oC)	(mS/cm)	(NTU)		
1140	~0.04	6.89	15.3	0.940	114		Water turbid - Grayish-brown.
1149	0.21	6.82	15.2	0.889	>1,000		No sheen or odor.
1155	0.42	6.83	15.7	0.873	>1,000		
1200	0.63	6.81	15.4	0.864	>1,000		
						<u> </u>	
-							
					· · · · · · · · · · · · · · · · · · ·		
							M- Argundania
			· · ·			******	
Total	0.63	Gallons I	Purged	Purge Start Tir	ne: 1140		Purge End Time: 1200
OBSERVA	TIONS:						
- Field parai	neter reading	gs have sta	abilized for	3 successive we	ll volumes, b	out no obser	vable improvement in turbidity.
	ent complete						

			<u></u>				
				· · · · · · · · · · · · · · · · · · ·			
							
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Associates, P.C.

GROUNDWATER DEVELOPMENT FORM

	ATE STREET,		TER, NY 5) 454-3066	WE	LL I.D.	MW-	5 (Borehole B-38)	
PH: (585) 45								
Project Nan	ne:		Carriage Cle				Project No.: 205237 Task 2	
Location:				enfield, NY				
Developmen	nt By:	Craig A.					Date: October 31, 2005	
Weather:		Partly clo	oudy, ~52°F					
PURGE VO	OLUME CA	LCULA'	TION					
Well Diame	eter:	1.0)-inch	inch Static Water I		Level:	7.05-feet	
Depth of W	ell:	15.3	30-feet	_	Single Well	Volume:	0.34-gallons	
PURGE & SAMPLING METHOD		1						
X Bailer	- Type:	PVC -	Dedicated		Pump -	Туре		
Sampling D	• •		Dedicated	 -				
	RAMETER							
Time	Gallons Purged	pН	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)		Comments	
1105	~0.04	7.06	17.9	0.813	47.1		Water turbid - Grayish-brown.	
1115	0.34	6.84	17.7	0.952	>1,000		No sheen or odor.	
1123	0.68	6.80	17.3	0.998	>1,000			
1130	1.02	6.88	17.5	1.006	>1,000			
Total OBSERVA	1.02	_Gallons :	Purged	Purge Start Tir	me: 1105		Purge End Time: 1130	
		1	_1:1:1.0	2	-111 1		wohle improvement in turbidity	
	meter readin		adilized for	3 successive we	en volumes, i	Dut no obse	rvable improvement in turbidity.	
- Developm	ent complete	.				· · · · · · · · · · · · · · · · · · ·		
 								



Appendix 4Monitoring Well Sampling Logs



GROUNDWATER SAMPLING FORM

PH: (585) 454-6110 FAX: (585) 454-3066	
Project Name: Former Carriage Cleaners Project No.: 205237	, -
Location: 1600 Penfield Rd., Penfield, NY	
Sampled By: Craig A. Stiles Date: November 2, 2	<u> 2005</u>
Weather: Mostly cloudy, ~55°F	
PURGE VOLUME CALCULATION	
Well Diameter: 1.0-Inch Static Water Level: 7.14-feet	
Depth of Well: 14.70-feet Single Well Volume: 0.31-gallons	
PURGE & SAMPLING METHOD	
Bailer - Type: PVC - Dedicated Pump - Type	
Sampling Device: PVC - Dedicated Pump Rate:	
FIELD PARAMETER MEASUREMENTS	
Time Gallons pH Temp Conductivity Turbidity Comme	ents
1020 ~0.04 7.13 15.5 0.899 >1,000 Water turbid - Grayish	-brown
1025 0.31 6.97 16.4 1.067 >1,000 No sheen or odor.	
1030 0.62 6.96 16.2 1.087 >1,000	
1035	
1045 Sample 6.98 16.3 1.107 >1,000	
The state of the s	5
Total 0.93-Gal. Gallons Purged Purge Start Time: 0930 Purge End Time: 1035	0
WELL SAMPLING	
Sample I.D. MW-2 Sample Time: 1045	
No. of Containers: 2 Sample Preservation: HCl (VOCs) & 4°C	<u> </u>
Sampled VOCs - 8260B TCL VOCs - 8260B NYSDEC STARS Only	PCBs
For: SVOCs - 8270C NYSDEC STARS Only Total RCRA Metals	Other
OBSERVATIONS:	
1035 - Field parameter readings have stabilized for 2 successive well volumes, but no observable impro	ovement
in turbidity.	
1045 - Sample collected and placed in cooler on ice.	



GROUNDWATER SAMPLING FORM

- vv r.i ,i , i , i , i vi vv =,) (borenole b-55	WEI	J. LI). MW	$^{\prime}$ - 3 (Borehole	B-35
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PH: (585) 45	4-6110	FAX: (58	5) 454-3066					
Project Nan	ne:	Former (Carriage Cle	aners			Project No.: 205237	
Location:		1600 Pei	nfield Rd., P	enfield, NY			_	
Sampled By	' :	Craig A.					Date: <u>November 2, 2005</u>	
Weather:			loudy, ~55°	F	7. !**		-	
PURGE VO	OLUME CA						-	
Well Diame	ter:	1.0)-Inch		Static Water	r Level:	4.07-feet	
Depth of W	ell:	14.0	00-feet	Single Well Volume:		0.41-gallons	_	
PURGE &	SAMPLING	G METH	OD					
X Bailer	- Type:	PVC -	Dedicated		Pump -	- Туре		_
Sampling D		PVC -	Dedicated	_	Pump Rate:			-
FIELD PA	RAMETER	MEASU	REMENTS	. 				198.
Time	Gallons	pН	Temp	Conductivity	Turbidity		Comments	
	Purged	<u> </u>	(oC)	(mS/cm)	(NTU)			
0930	~0.04	7.04	14.1	0.930	>1,000		Water turbid - Brownish-gr	ray.
0935	0.41	7.03	15.3	0.961	>1,000		No sheen or odor.	
1000	0.82	7.03	14.1	0.948	>1,000			
1005	1.25	7.02	15.0	0.936	>1,000			
1015	Sample	7.03	14.9	0.979	>1,000	ļ		
		 						
Total	1.25	Gallons	L Purged	Purge Start Tir	ne: 0930	I	Purge End Time: 1015	
WELL SA		_						
		N.	TXX7 2		Sample Tim	.a.	1015	
Sample I.D. No. of Cont		IV.	IW-3 2	-	Sample Pres		HCl (VOCs) & 4°C	_
				-	_			-
Sampled	VOCs						SDEC STARS Only	PCBs Other
For:	SVOC	s - 8270C	NYSDEC ST	ARS Only	Total F	RCRA Metals		Other
OBSERVA								
0930			dings have s	tabilized for 2 s	uccessive we	ell volumes,	but no observable improven	nent
	in turbidi							
0940			quality met	er.				
0955			me purging.					
1015	- Sample co	ollected ar	id placed in	cooler on ice.				
I								

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Associates, PC

GROUNDWATER SAMPLING FORM

300 STATE STREET, ROCHESTER, NY WELL I.D. MW-4 (Borehole B-36)

PH: (585) 45	54-6110	FAX: (58	5) 454-3066					
Project Nar	ne:	Former 6	Carriage Cle	aners			Project No.: 205237	
Location:		1600 Pe	nfield Rd., P	enfield, NY			_	
Sampled By	y:	Craig A.					Date: November 2, 2005	i
Weather:		Mostly o	loudy, ~55°	F				
PURGE V	OLUME CA	LCULA'	TION				-	
Well Diame	eter:	1.0)-Inch		Static Water	r Level:	4.60-feet	
Depth of W	ell:	9.6	6-feet	•	Single Well	Volume:	0.21-gallons	_
PURGE &	SAMPLING	G METH	OD					
Bailer - Type: PVC - Dedicated			Dedicated		Pump	- Туре		
Sampling D	evice:	PVC -	Dedicated	•	Pump Rate:			_
FIELD PA	ELD PARAMETER MEASUREMENTS							
Time	Gallons	pН	Temp	Conductivity	Turbidity		Comments	· · · · · · · · · · · · · · · · · · ·
0005	Purged		(oC)	(mS/cm)	(NTU)			
0905 0909	~0.04	6.87	15.4	0.787	843		Water turbid - Grayish-bro	wn.
0909	0.21	6.84	15.5	0.867	>1,000		No sheen or odor.	
0913	0.42		15.2	0.876	>1,000			
0925		6.83 6.84	15.5 15.4	0.881 0.926	>1,000	<u> </u>		
0923	Sample	0.84	13.4	0.926	>1,000			
		·						
Total	0.63	Gallons l	Durged	Purge Start Tin	ne: 0905	I	Purge End Time: 0917	
		_ Ounons :	uigeu	Turge Start III	iic. 0703		Turge End Time. 0917	
WELL SAI	MPLING							
Sample I.D.		M	W-4		Sample Tim	e:	0925	_
No. of Cont	ainers:		2		Sample Pres	servation:	HCl (VOCs) & 4°C	_
Sampled	V OCs	- 8260B Te	CL.		VOCs -	- 8260B NYS	DEC STARS Only	PCBs
For:			NYSDEC STA	ARS Only	_	CRA Metals		Other
OBSERVA				,			<u></u>	
0917	- Field para	meter reac	lings have st	abilized for 2 s	uccessive we	ll volumes l	out no observable improvem	ent
0,17	in turbidit		iligo nave st	domized for 2 3	uccessive we	n volunies, t	out no observable improvem	Clit
0925			d placed in o	cooler on ice.				
0,23	Sumpio oo	nootoa un	a piacoa in c	ooler on ice.		H H CL SHIPPI		
				1,				



Associates, P.C.

GROUNDWATER SAMPLING FORM

300 STATE STREET, ROCHESTER, NY WELL I.D. MW-5 (Borehole B-38)

500 017								•
PH: (585) 45	4-6110	FAX: (585	5) 454-3066					
Project Nam	ae:	Former C	Carriage Cle	aners			Project No.: <u>205237</u>	
Location:		1600 Per	ıfield Rd., P	Penfield, NY			_	
Sampled By	<i>/</i> :	Craig A.	Stiles				Date: November 2, 2005	
Weather:		Mostly c	loudy, ~55°l	F			-	
PURGE VO	OLUME CA	LCULA?	ΓΙΟΝ					
Well Diame	eter:	1.0)-Inch	Static Water Level:			7.20-feet	_
Depth of W	ell:	14.9	96-feet	_	Single Well	Volume:	0.32-gallons	-
PURGE &	SAMPLING	G METH	OD		_			
X Bailer	- Type:	PVC -	Dedicated_		Pump -	- Type		
Sampling D	• •	PVC -	Dedicated	_	Pump Rate:			-
FIELD PA	RAMETER	. MEASU	REMENTS	5				
Time	Gallons	pН	Temp	Conductivity (mS/cm)	Turbidity (NTU)		Comments	
0834	Purged ~0.04	7.29	(oC) 15.1	0.186	24.3		Water turbid - Brown.	
0839	0.32	7.11	16.1	0.180	>1,000		No sheen or odor.	
0844	0.65	7.02	16.4	0.786	>1,000			
0849	1.00	7.04	16.6	0.814	>1,000	1		
0855	Sample	7.00	16.6	0.797	>1,000			
			<u> </u>					
	ļ			-				
	<u></u>	<u> </u>	<u></u>		2224		- 5 1m; 0055	
Total	1.00	_Gallons I	Purged	Purge Start Tir	ne: 0834		Purge End Time: 0855	
WELL SA	MPLING							
Sample I.D.		M	1W-5		Sample Tim	ne:	0855	
No. of Cont			2	-	Sample Pres		HCl (VOCs) & 4°C	_
	▼ VOCs	8260B T	·CI.	-			SDEC STARS Only	- PCBs
For:			NYSDEC ST	「ARS Only		RCRA Metals		Other
OBSERVA				-				
0849	- Field para	meter read	dings have s	stabilized for 2 s	successive we	ell volumes,	but no observable improven	ient
	in turbidi							
0855	- Sample co	ollected an	d placed in	cooler on ice.				
					••••			

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GROUNDWATER SAMPLING FORM

300 STATE STREET, ROCHESTER, NY WELL I.D. MW-2 (Borehole B-37)

PH: (585) 4	54-6110	FAX: (58	85) 454-3066				RESAMPLE			
Project Na	me:	Former	Carriage Cle	eaners			Project No.: 205237.01			
Location:				Penfield, NY						
Sampled B	y:	Craig A.					Date: November 21, 2005			
Weather:			loudy, ~49°I	F						
PURGE V	OLUME CA									
Well Diam	eter:	1.0	-inch		Static Water	r Level:	7.07 -feet			
Depth of W	/ell:	14.65	-feet	<u>.</u>	Single Well Volume:		0.31 -gallons			
PURGE & SAMPLING METHOD			.OD							
X Bailer	- Type:	PVC -	Dedicated		Pump -	- Type				
Sampling D	Device:	PVC -	Dedicated	<u>-</u>	Pump Rate:					
FIELD PA	FIELD PARAMETER MEASUREMENTS									
Time	Gallons	pН	Temp	Conductivity	Turbidity		Comments			
	Purged		(oC)	(mS/cm)	(NTU)					
1020	~0.05	7.13	14.4	0.259	31.4	ļ	Water turbid - Grayish-brown.			
1025	0.31	6.99	15.1	0.983	>1,000		No sheen or odor.			
1030	0.62	6.92	15.3	1.07	>1,000	<u> </u>				
1035	1.00 Post	6.94	15.2	1.04	>1,000					
1045	Sample	6.95	14.9	1.10	>1,000					
		 	 !				<u> </u>			
										
		+ - #								
Total	1.00-Gal.	Gallons I	Purged	Purge Start Tin	me: 1020		Purge End Time: 1035			
WELL SA		•	· · · · · · · · · · · · · · · · · · ·	1 000 - 1000	.10. 1111		Tugo Dia Timo. 1000			
Sample I.D.		M	fW-2		Sample Time		1045			
No. of Cont		171	2	-	Sample Time Sample Pres		HCl (VOCs) & 4°C			
		2260B To		•						
Sampled For:		- 8260B TO s - 8270C 1	CL NYSDEC STA	ARS Only		- 8260B NYS RCRA Metals	SDEC STARS Only PCBs Other			
OBSERVA	TIONS:					·				
1035	- Field para	meter read	lings have st	tabilized for 2 s	uccessive we	ell volumes,	but no observable improvement			
	in turbidit	,-								
1045	- Sample co	llected an	d placed in c	cooler on ice.						

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GROUNDWATER SAMPLING FORM

300 STA PH: (585) 45	ATE STREET, 64-6110		TER, NY 5) 454-3066	WE	LL I.D.	MW-3	3 (Borehole B-35) RESAMPLE		
Project Nan	ne:	Former (Carriage Cle	aners			Project No.: 205237	7.01	
Location:		1600 Per	nfield Rd., F	Penfield, NY			_		
Sampled By	/:	Craig A.	Stiles				Date: November 21, 20	<u>005</u>	
Weather:		Partly Cl	loudy, ~49°I	7			_		
PURGE VO	OLUME CA	LCULA'	TION						
Well Diame	eter:	1.0	-inch	_	Static Water	r Level:	3.98 -feet		
Depth of W	ell:	13.95	-feet	_	Single Well	Volume:	0.42 -gallon	S	
PURGE &	SAMPLING	3 МЕТН	OD						
X Bailer	- Type:	PVC -	Dedicated	_	Pump -	Туре			
Sampling D	evice:	PVC -	Dedicated	-	Pump Rate:				
FIELD PA	RAMETER	MEASU	REMENTS	3					
Time	Gallons Purged	pН	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)		Comme	nts	
1055	~0.05	7.42	12.6	0.215	97.3	·	Water turbid - Brownish	ı-gray.	
1100	0.42	7.09	12.8	0.897	>1,000		No sheen or odor.		
1105	0.84	7.06	13.0	0.93	>1,000				
1110	1.26	7.04	13.1	0.95	>1,000				
1120	Post Sample	7.07	12.9	0.97	>1,000			uyaya usaa	
				N 0 M	40.55		D 5 15 1110		
Total	1.26	Gallons l	Purged	Purge Start Tir	ne: 1055		Purge End Time: 1110		
WELL SAN	MPLING								
Sample I.D.		M	IW-3		Sample Tim	e:	1120		
No. of Conta			2	_	Sample Pres		HCl (VOCs) & 4°C		
Sampled	V OCs	- 8260B T	CL		VOCs -	- 8260B NYS	DEC STARS Only	PCBs	
For:			NYSDEC ST	ARS Only		CRA Metals		Other	
OBSERVA	TIONS:								
1110	- Field parai	neter reac	lings have s	tabilized for 2 s	uccessive we	ll volumes,	but no observable improv	ement ement	
	in turbidit	у.							
1120	- Sample co	llected an	d placed in	cooler on ice.					

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GROUNDWATER SAMPLING FORM

300 STATE STREET, ROCHESTER, NY WELL I.D. MW-4 (Borehole B-36)

PH: (585) 454-6110		FAX: (585) 454-3066 RESAMPLE							
Project Name:		Former Carriage Cleaners Project No.: 205237.01							
Location:		1600 Penfield Rd., Penfield, NY							
Sampled By	' :	Craig A. Stiles Date: November 21, 2005							
Weather:		Partly Cloudy, ~49°F							
PURGE VO	OLUME CA						_		
Well Diame	ter:	1.0	-inch		Static Water	r Level:	4.48 -1	feet	_
Depth of W			-feet	•	Single Well	Volume:	0.22	-gallons	-
PURGE &				•					-
Bailer	- Type:	PVC -	Dedicated		Pump -	- Type			
Sampling D			Dedicated	•	Pump Rate:				-
FIELD PA		-		- S .	Tump Rute.			. :	-
	Gallons	1	Temp	Conductivity	Turbidity	Ī		<u> </u>	
Time	Purged	pН	(oC)	(mS/cm)	(NTU)			Comments	
1125	~0.05	6.83	13.2	0.513	142		Water turbid - 0	Grayish-brov	wn.
1130	0.22	6.75	13.4	0.819	>1,000		No sheen or od	or.	
1135	0.44	6.79	13.1	0.831	>1,000				
1140	0.66	6.82	13.2	0.834	>1,000				
1150	Post Sample	6.82	13.0	0.846	>1,000				
							<u> </u>		
Total	1.0	Gallons	Purged	Purge Start Tir	ne: 1125		Purge End Tim	e: 1140	
WELL SA	MPLING								
Sample I.D.		M	IW-4		Sample Tim	ne:	115	0	_
No. of Cont			2	=	Sample Pres	servation:	HCl (VOCs	s) & 4°C	
Sampled	V OCs	8260B T	CI	•	□ vocs	- 8260B NYS	SDEC STARS Only	v П	- PCBs
For:				'ARS Only	والمساو				Other
	For: SVOCs - 8270C NYSDEC STARS Only								
OBSERVA									
1140	- Field para	meter rea	dings have s	tabilized for 2 s	uccessive we	ell volumes,	but no observabl	le improvem	ent
	in turbidi								
1150	- Sample co	llected ar	d placed in	cooler on ice.					
					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				

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GROUNDWATER SAMPLING FORM

WELL I.D.	M	W-5	(Borehole	B-38
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PH: (585) 454-6110		FAX: (58	5) 454-3066				RESAMPLE		
Project Nan	ne:	Former Carriage Cleaners Project						205237.01	
Location:				enfield, NY	-				
Sampled By:		Craig A.	Stiles		Date: November	<u>21, 2005</u>			
Weather:		Partly C	loudy, ~49°I	7			-		
PURGE VO	OLUME CA	LCULA'	TION						
Well Diame	eter:	1.0	-inch	_	Static Water	r Level:	7.13 -fee	:t	
Depth of W	ell:	14.77	-feet	•	Single Well	Volume:	0.32 -	gallons	
PURGE & SAMPLING METHOD									
X Bailer	- Type:	PVC -	Dedicated	•	Pump -	Туре		*****	
Sampling D	evice:	PVC -	Dedicated	_	Pump Rate:				
FIELD PA	RAMETER	MEASU	REMENTS	5					
Time	Gallons	pН	Temp	Conductivity	Turbidity		Comments		
	Purged		(oC)	(mS/cm)	(NTU)				
0945	~0.05	7.10	13.8	0.226	96.4		Water turbid - Gra		
0950 0955	0.32	6.91 6.94	15.7 15.6	0.780	>1,000 >1,000		No sheen or odor.		
1000	1.00	6.96	15.6	0.811	>1,000				
	Post	İ							
1010	Sample	6.95	15.3	0.795	>1,000				
Total	1.00	Gallons 1	Puraed	Purge Start Tir	ne: 00/15		Purge End Time:	1000	
		_ Carions :	urgou	Turge Start III	nc. 0743			1000	
WELL SAI		_							
Sample I.D.		<u> </u>	IW-5	•	Sample Tim		1010	0. 490	
No. of Cont			2		Sample Pres		HCl (VOCs) &		
Sampled –		- 8260B T					SDEC STARS Only	PCBs	
For:	☐ SVOCs	s - 8270C	NYSDEC ST	ARS Only	Total R	CRA Metals		Other	
OBSERVA							,		
1000			lings have s	tabilized for 2 s	uccessive we	ell volumes,	but no observable i	mprovement	
1010	in turbidit	<u> </u>	d placed in	cooler on ice.					
1010	- Sample co	necteu an	u piaceu iii	cooler on ice.			.,,		



GROUNDWATER SAMPLING FORM

H:	(585) 454-6110	FAX:	(585) 454-3066

TATELL I	ID	MW	7 (Day	ehole B-43)
VV H.I	1 1)	IVI VV	- / (Kor	ehnle K.43)

PH: (585) 454-6110		FAX: (58	5) 454-3066						
Project Name:		Former (Carriage Cle	aners	Project No.:	205237.01			
Location:		1600 Per	nfield Rd., P	enfield, NY	_				
Sampled By	<i>r</i> :	Craig A.			_ Date: <u>April 5,</u>	2006			
Weather:		Mostly c	loudy breez	y, ~48 to 56°F			_		
PURGE VO	OLUME CA	LCULA'	TION						
Well Diame	ter:	1.0	-inch	_	Static Water	r Level:	7.15	-feet	_
Depth of W	ell:	15.16	-feet	•	Single Well	Volume:	0.33	-gallons	- -
PURGE &	SAMPLING	3 МЕТН	OD						
X Bailer	- Type:	PVC -	Dedicated	_	Pump -	- Type			_
Sampling D	evice:	PVC -	Dedicated	•	Pump Rate:				_
FIELD PA	RAMETER	MEASU	REMENTS)					
Time	Gallons Purged	pН	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)			Comments	
0825	~0.05	7.11	10.3	0.899	>1,000	<u> </u>	Water turbid -	Gravish-brov	wn.
0829	0.33	6.93	11.5	1.067	>1,000		No sheen or o		
0832	0.67	6.84	11.3	1.087	>1,000				
0836	1.00	6.8	11.1	1.085	>1,000				
0845	Post Sample	6.82	11.2	1.107	>1,000				
Total	1.00-Gal.	-Gallons	Purged	Purge Start Tir	ne: 0825		Purge End Tin	ne: 0836	
WELL SAN	MPLING								
Sample I.D.		M	rw-7		Sample Tim	ie:	084	15	_
No. of Cont	ainers:	2			Sample Preservation: HCl (VOCs) & 4°C			_	
Sampled	V OCs	- 8260B T	CL		VOCs -	- 8260B NYS	DEC STARS On	ly 🔲	PCBs
For:	SVOC	s - 8270C	CL NYSDEC ST	ARS Only	Total R	CRA Metals			Other
OBSERVA	TIONS:								
0836	- Field para	meter read	dings have st	tabilized for 2 s	uccessive we	ell volumes,	but no observab	le improvem	ent
	in turbidit	y.							
0845	- Sample co	llected an	d placed in	cooler on ice.					
		· · · · · · · · · · · · · · · · · · ·							



GROUNDWATER SAMPLING FORM

WELL I.D.	MW-8	(Borehole B-49)
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PH: (585) 45	4-6110	FAX: (58	5) 454-3066						
Project Name:		Former C	Carriage Cle	aners			Project No.:	205237.01	
Location:		1600 Per	nfield Rd., P	enfield, NY	_				
Sampled By	<i>i</i> :	Craig A.	Stiles		Date: <u>April 5,</u>	2006			
Weather:		Mostly c	loudy breez	y, ~48 to 56°F			<u> </u>		
PURGE V	OLUME CA	LCULA'	TION						
Well Diame	eter:	1.0	-inch		Static Water	r Level:	10.00	-feet	_
Depth of W	ell:	14.70	-feet		Single Well	Volume:	0.19	-gallons	_
PURGE &	SAMPLIN	G METH	OD						
X Bailer	- Type:	PVC -	Dedicated	_	Pump -	- Туре			_
Sampling D	evice:	PVC -	Dedicated		Pump Rate:				-
FIELD PA	RAMETER	MEASU	REMENTS	.					
T:	Gallons	TT	Temp	Conductivity	Turbidity			Comments	
Time	Purged	pН	(oC)	(mS/cm)	(NTU)				
0850	~0.05	6.93	11.4	1.290	>1,000		Water turbid -		wn.
0854	0.19	6.80	11.1	1.241	>1,000		No sheen or or	dor.	
0857	0.38	6.83	11.1	1.302	>1,000				
0900	0.57	6.84	11.2	1.326	>1,000				
0908	Post Sample	6.82	11.1	1.337	>1,000				
			ļ						
Total	0.57-Gal.	Gallons	Purged	Purge Start Tir	ne: '0850		Purge End Tin	ne: 0900	
WELL SA	MPLING								
Sample I.D		M	IW-8		Sample Tim	ne:	090	08	_
No. of Cont			2	-	Sample Pres	servation:	HCl (VOC	Cs) & 4°C	
Sampled	V OCs	- 8260B T	CL		☐ VOCs	- 8260B NYS	SDEC STARS On	ly	PCBs
For:	SVOC	s - 8270C	NYSDEC ST	ARS Only	Total I	RCRA Metals			Other
OBSERVA	TIONS:						•		
0900	- Field para	meter read	dings have s	tabilized for 2 s	uccessive we	ell volumes,	but no observat	ole improvem	ent
	in turbidi	ty.							
0908	- Sample co	ollected ar	nd placed in	cooler on ice.					
			·····						
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Associates, P.C.

GROUNDWATER SAMPLING FORM

WELL I.D. MW-9 (Borehole B-44) 300 STATE STREET, ROCHESTER, NY FAX: (585) 454-3066 PH: (585) 454-6110 205237.01 Project No.: Project Name: Former Carriage Cleaners 1600 Penfield Rd., Penfield, NY Location: Date: April 5, 2006 Craig A. Stiles Sampled By: Mostly cloudy breezy, ~48 to 56°F Weather: PURGE VOLUME CALCULATION Static Water Level: 9.11 -feet Well Diameter: 1.0 -inch -gallons Depth of Well: 14.80 -feet Single Well Volume: **PURGE & SAMPLING METHOD** Pump - Type Bailer - Type: PVC - Dedicated PVC - Dedicated Pump Rate: Sampling Device: FIELD PARAMETER MEASUREMENTS Conductivity Turbidity Gallons Temp Comments pН Time (NTU) (oC) (mS/cm) Purged Water turbid - Grayish-brown. 0938 ~0.05 7.13 10.1 1.680 >1,000 No sheen, but slight to moderate 7.00 1.787 >1,000 0942 0.23 10.4 6.95 10.1 1.639 >1,000 Perchloroethylene odor. 0947 0.46 6.91 1.613 >1,000 0952 0.69 10.2 Post 9.9 6.91 1.619 >1.000 1000 Sample Purge End Time: 0952 0.69-Gal. Gallons Purged Purge Start Time: '0938 Total WELL SAMPLING 1000 MW-9 Sample Time: Sample I.D. Sample Preservation: HCl (VOCs) & 4°C No. of Containers: VOCs - 8260B NYSDEC STARS Only **PCBs** VOCs - 8260B TCL Sampled SVOCs - 8270C NYSDEC STARS Only Total RCRA Metals Other For: **OBSERVATIONS:** - Field parameter readings have stabilized for 2 successive well volumes, but no observable improvement 0952 in turbidity. - Sample collected and placed in cooler on ice. 1000

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300 ST/ PH: (585) 45	ATE STREET, 54-6110		TER, NY 5) 454-3066	WE	LL I.D.	<u>MW-1</u>	10 (Borehole B-4	47)
Project Nan	ne:	Former (Carriage Cle	aners			Project No.: 205	5237.01
Location:		1600 Per	nfield Rd., F	Penfield, NY			<u>-</u>	
Sampled By	y:	Craig A.	Stiles				Date: <u>April 5, 2006</u>	<u>Š</u>
Weather:		Mostly c	loudy breez	zy, ~48 to 56°F			<u>-</u> -	
PURGE VO	OLUME CA	ALCULA'	ΓΙΟΝ					
Well Diame	eter:	1.0	-inch		Static Water	r Level:	9.40 -feet	
Depth of W	ell:	14.84	-feet	• -	Single Well	Volume:	0.22 -ga	illons
PURGE &	SAMPLING	G METH	OD					
X Bailer	- Type:	PVC -	Dedicated	_	Pump -	- Туре		
Sampling D	evice:	PVC -	Dedicated	· -	Pump Rate:			
FIELD PA	RAMETER	. MEASU	REMENTS	5				
Time	Gallons Purged	pН	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)		Com	nments
0913	~0.05	7.26	10.4	1438	>1,000		Water turbid - Gray	ish-brown.
0916	0.22	6.91	10.9	1.480	>1,000		No sheen, but very	slight
0920	0.44	6.81	11.2	1.447	>1,000		Perchloroethylene of	odor.
0924	0.66	6.87	11.1	1.437	>1,000		<u> </u>	
0930	Post Sample	6.83	10.8	1.440	>1,000		<u> </u>	
		-					<u> </u>	
	 	+ +						
Total	0.66-Gal.	Gallons F	Purged	Purge Start Tin	ne: 0913	<u> </u>	Purge End Time: 09	924
WELL SAN	MPLING							
Sample I.D.	•	<u>M</u>	W-10		Sample Tim	æ:	0930	
No. of Cont	ainers:		2	•	Sample Pres	ervation:	HCl (VOCs) &	4°C
Sampled	V OCs	- 8260B TO	CL		VOCs ·	- 8260B NYS	SDEC STARS Only	PCBs
For:			NYSDEC ST.	ARS Only	Total R	CRA Metals		Other
OBSERVA	TIONS:							
0924			lings have st	tabilized for 2 s	uccessive we	ell volumes,	but no observable im	provement
2020	in turbidit				, <u></u>			
0930	- Sample co	llected and	d placed in o	cooler on ice.				
							A	



GROUNDWATER SAMPLING FORM

WELL I.D. _____ MW-2 300 STATE STREET, ROCHESTER, NY PH: (585) 454-6110 FAX: (585) 454-3066 Project Name: Remedial Investigation: Post-IRM GW Sampling 205237.02 1600 Penfield Road, Penfield, New York Location: 3-Mar-08 Sampled By: Craig A. Stiles Partly Cloudy, ~60°F Weather: PURGE VOLUME CALCULATION 6.95 <u>-Feet</u> Static Water Level: Well Diameter: 1.0 -Inch Depth of Well: Single Well Volume: 0.31 -Gallons 14.55 -Feet **PURGE & SAMPLING METHOD** X Bailer - Type: PVC - Dedicated Pump - Type Sampling Device: Pump Rate: FIELD PARAMETER MEASUREMENTS Turbidity ORP Gallons Temp Conductivity pН Comments Time (mS/cm) (NTU) (mV) Purged (oC) 141 Color = Brown1401 ~0.05 7.47 9.9 1.355 242 1404 0.31 7.29 10.7 1.417 563 67 LNAPL or DNAPL observed YES / NO 1.781 >1,000 15 Petroleum sheen observed. YES / NO 0.62 7.15 11.3 1407 3 Odor detected. YES / NO 1410 0.93 7.04 11.8 1.890 >1,000 0 1415 Sample 7.01 11.7 1.927 >1,000 Purge Start Time: 1401 Purge End Time: 1410 0.93 Gallons Purged Total WELL SAMPLING MW-2 Sample Time: 1415 Sample I.D. Sample Preservation: HCl No. of Containers: X VOCs - 8260B TCL + STARS STARS VOCs Only - Method 8260B Pesticides Sampled **PCBs** -Total/Dissolved TAL Metals SVOCs - 8270C STARS For: **OBSERVATIONS:** Well Volume (1" well) = 0.0408-gal/ft. Well Volume (4" well) = 0.65-gal/ft. Well Volume (2" well) = 0.163-gal/ft.

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	ATE STREET,			WE	LL I.D.		MW-3
PH: (585) 45	4-6110	FAX: (58	5) 454-3066	<u> </u>	<u> </u>		
Project Nan	ne:	Remedia	l Investigati	on: Post-IRM C	W Sampling	<u> </u>	<u>205237.02</u>
Location:		1600 Per	nfield Road,	Penfield, New	York		
Sampled By	':	Craig A.	Stiles				4-Mar-08
Weather:	W	Partly Cl	oudy, ~30°F	-			
PURGE VO	OLUME CA	LCULA	ΓΙΟΝ				
Well Diame	ter:	1.0	-Inch	_	Static Water	Level:	3.22 <u>-Feet</u>
Depth of W	ell:	13.80	-Feet		Single Well	Volume:	0.43 <u>-Gallons</u>
PURGE &	SAMPLING	G METH	OD	• •			
X Bailer	- Type:	PVC - D	edicated		Pump -	Туре	
Sampling D				•	Pump Rate:		
FIELD PA		MEACH	DEMENTS	-	•		
FIELD PA		WIEASU.				077	**
Time	Gallons	pН	Temp	Conductivity (mS/cm)	Turbidity	ORP	Comments
1212	Purged ~0.10	6.93	(oC) 8.8	1.011	(NTU) >1,000	(mV) 26	Color = Brown
1215	0.43	6.89	9.4	1.162	>1,000	20	LNAPL or DNAPL observed YES / NO
1218	0.45	6.88	10.0	1.311	>1,000	5	Petroleum sheen observed. ¥ES / NO
1221	1.29	6.86	10.0	1.335	>1,000	-1	Odor detected. YES / NO
1230	Sample	6.84	10.1	1.390	>1,000	-3	Odd detected. FES / NO
1230	Sample	0.04	10.1	1.570	71,000		
			:				
Total	1.29	Gallons 1	Purged	Purge Start Tin	ne: 1212		Purge End Time: 1221
		_	8	8			
WELL SAI	MPLING						
Sample I.D.		MW-3			Sample Tim	e:	1230
No. of Cont	ainers:	2			Sample Pres	ervation:	HCl
Sampled	Y VOCs	- 8260B TO	CL + STARS		- Method 8260B Pesticides		
For:		- 8270C S				Dissolved TA	
OBSERVA	TIONS:						
			1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				
						· · · · · · · · · · · · · · · · · · ·	
Well Volum	ne (1" well) =	= 0.0408 - g	gal/ft.		Well Volum	e (4" well)	= 0.65-gal/ft.
Well Volum	e (2" well) -	- 0 163-gg	1/ft				

MBELLA

Associates.PC.

300 ST/ PH: (585) 45	ATE STREET, 4-6110		ER, NY 5) 454-3066	WE	LL I.D.		MW-4
Project Nan Location: Sampled By Weather:		1600 Per Craig A.	nfield Road,	ion: Post-IRM C			205237.02 4-Mar-08
	OLUME CA						
Well Diame Depth of W	eter: ell:	9.12	-Inch -Feet		Static Water Single Well		2.42 <u>-Feet</u> 0.27 <u>-Gallons</u>
X Bailer Sampling D	• •	PVC - Do	edicated	_ [Pump -	Туре	
Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1212 1215	~0.10 0.43	6.93 6.89	8.8 9.4	1.011 1.162	>1,000 >1,000	74 12	Color = Brown LNAPL or DNAPL observed YES / NO
1218 1221 1230	0.86 1.29 Sample	6.88 6.86 6.84	10.0 10.1 10.1	1.311 1.335 1.390	>1,000 >1,000 >1,000	-7 -10 -11	Petroleum sheen observed. YES / NO Odor detected. YES / NO
Total WELL SAI Sample I.D. No. of Cont Sampled For:	MPLING ainers: VOCs	MW-3 2 - 8260B TC - 8270C S	CL + STARS	Purge Start Tin	Sample Tim Sample Pres	ervation:	Purge End Time: 1221 1230 HCl 7 - Method 8260B Pesticides AL Metals PCBs
OBSERVA	TIONS:						•
	ne (1" well) = ne (2" well) =				Well Volum	e (4" well)	= 0.65-gal/ft.



Associates, P.C.

300 ST	ATE STREET, 54-6110		ER, NY 5) 454-3066	WE	LL I.D.		MW-5
Project Nan Location: Sampled By Weather:		1600 Per Craig A.	nfield Road,	ion: Post-IRM (Penfield, New			205237.02 3-Mar-08
	OLUME CA				- 	•	
Well Diame Depth of W	eter: 'ell:	1.0	-Inch -Feet		Static Water Single Well		7.16 <u>-Feet</u> 0.31 <u>-Gallons</u>
	SAMPLING - Type: Device:	PVC - D			Pump -	Туре	
FIELD PA	RAMETER	MEASU	REMENTS	3			
Time	Gallons Purged	pН	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1131	~0.05	7.39	8.0	0.7403	74.3	172	Color = Brown
1134	0.31	7.18	11.0	1.259	206	92	LNAPL or DNAPL observed YES / NO
1136 1138	0.62	7.14 7.01	11.2 11.4	1.824 1.875	>1,000 >1,000	76 83	Petroleum sheen observed. YES / NO Odor detected. YES / NO
1145	Sample	7.05	11.5	1.910	>1,000	84	Odor detected. The Fire
Total	0.93	Gallons 1	Purged	Purge Start Tir	ne: 1131		Purge End Time: 1138
WELL SA Sample I.D No. of Cont Sampled	tainers:		CL + STARS	- -		ervation: S VOCs Only	HCl - Method 8260B Pesticides
For:	SVOC	s - 8270C S	STARS		-Total /	Dissolved TA	AL Metals PCBs
OBSERVA	ATIONS:	7					
Well Volum	ne (1" well) -	- 0 0408 <i>c</i>	val/ft		Well Volum	e (4" well)	= 0.65-gal/ft
		["] well) = 0.0408-gal/ft. Well Volume (4" well) = 0.65	– 0.05-ganti.				

LABELLA

Associates, P.C.

300 ST PH: (585) 45	ATE STREET,		TER, NY 85) 454-3066	WE	LL I.D.		MW-8	
Project Nar		Remedia	al Investigat	ion: Post-IRM (<u> </u>	205237.02	
Location:				, Penfield, New	York			
Sampled By	y:	Craig A.					3-Mar-08	
Weather:	***************************************	Partly C	loudy, ~60°	F				
PURGE V	OLUME CA	ALCULA'	TION					
Well Diame	eter:	1.0	-Inch	_	Static Water	Level:	9.97 <u>-Feet</u>	
Depth of W	ell:	14.70	-Feet	_	Single Well	Volume:	<u>0.19</u> -Gallons	
PURGE &	SAMPLING	G METH	OD		• .			
X Bailer	- Type:	PVC - D	edicated	_	Pump -	Type		
Sampling D	evice:			-	Pump Rate:			
FIELD PA	RAMETER	MEASU	REMENTS	- S				
Time	Gallons	aTT.	Temp	Conductivity	Turbidity	ORP	Comments	
	Purged	pН	(oC)	(mS/cm)	(NTU)	(mV)	Confinents	
1037	~0.05	7.68	7.9	0.3582	>1,000	237	Color = Brown	
1039	0.20	7.91	9.1	0.6585	>1,000	236	LNAPL or DNAPL observed YES / NO	
1041	0.40	7.12	9.7	0.8440	>1,000	229	Petroleum sheen observed. YES / <u>NO</u>	_
1045	0.60	7.11	9.7	0.8993	>1,000	221	Odor detected. ¥ES / NO	4
1055	Sample	7.10	9.0	0.9241	>1,000	208		4
								\dashv
	<u></u>							\dashv
								\dashv
								\dashv
Total	0.60	Gallons l	Purged	Purge Start Tin	ne: 1037		Purge End Time: 1045	
WELL SAI	MPLING	<u>-</u>		-				
		3.47337.0			O1- m:		1055	
Sample I.D.		MW-8					1055	
No. of Cont		2		=	_			
Sampled		- 8260B TCL + STARS STARS VOCs Only - Method - 8270C STARS Total /- Dissolved TAL Metals						
For:	SVOCs	- 8270C S	STARS		Total /-I	Dissolved TA	AL Metals PCBs	
OBSERVA	TIONS:							
Blind Dupli	cate sample	(designate	d "BLIND") was collected:	from this wel	ll simultane	eously with the MW-8 sample.	
		i						╛
						****	***************************************	4
						A		_
								4
								\dashv
								\dashv
Well Volum	e (1" well) =	: 0.0408- <u>9</u>	al/ft.		Well Volume	e (4" well)	= 0.65-gal/ft.	\dashv
	e (2" well) =	×		L			San In	+



300 ST/ PH: (585) 45	ATE STREET, 4-6110		TER, NY 5) 454-3066	WE]	LL I.D.		<u>MW-9</u>
Project Nan Location: Sampled By Weather:		1600 Per Craig A.	nfield Road,	on: Post-IRM C			205237.02 3-Mar-08
PURGE VO	OLUME CA	LCULAT	TION			· •	
Well Diame	ell:	14.55		• •	Static Water Single Well		9.02 <u>-Feet</u> 0.23 <u>-Gallons</u>
X Bailer Sampling D	• •	PVC - D		. [Pump -	Туре	
FIELD PA	RAMETER	MEASU	REMENTS	,			
Time	Gallons Purged	pН	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	ORP (mV)	Comments
0927	~0.05	6.48	11.3	3.186	>1,000	141	Color = Brown
0930	0.27	6.68	10.8	3.194	>1,000	67	LNAPL or DNAPL observed YES / NO
0933	0.54	6.77	11.1	3.042	>1,000	15	Petroleum sheen observed. YES / NO
0937 0945	0.81 Sample	6.83 7.03	11.2 10.4	2.948 2.692	>1,000 >1,000	3 0	Odor detected. <u>YES</u> / NO Slight to Moderate Perc Odor
Total	0.81	Gallons 1	Purged	Purge Start Tir	ne: 0927		Purge End Time: 0937
Sample I.D. No. of Cont		MW-9			Sample Tim		0945 HCl
		2		•			<u> </u>
Sampled For:		- 8260B TG - 8270C S	CL + STARS STARS			VOCs Only Dissolved T.	y - Method 8260B Pesticides AL Metals PCBs
OBSERVA				-			
Samples for	matrix spike the MW-9 s		d matrix spi	ke duplicate (M	SD) samples	were colle	ected from this well simultaneously
Well Volum	ne (1" well) =	= 0.0408-9	gal/ft.		Well Volum	e (4" well)	= 0.65-gal/ft.
	ne (2" well) =						

LABELLA Associates, P.C.

Project Name: Remedial Investigation: Post-IRM GW Sampling 205237.02		ATE STREET,			WE	LL I.D.	I	MW-10		
Location: 1600 Penfield Road, Penfield, New York Sampled By: Craig A. Stitles Sampled By: Partly Cloudy, -60°F	PH: (585) 45	54-6110	FAX: (58	5) 454-3066	<u></u>					
Sampled By:	Project Nar	ne:	Remedia	al Investigat	ion: Post-IRM (JW Samplin	g	<u>205237.02</u>		
Weather:	Location:		1600 Pe	nfield Road	, Penfield, New	York	_			
PURGE VOLUME CALCULATION	Sampled By	y:	Craig A.	. Stiles			_	3-Mar-08		
Mell Diameter Line Line Static Water Level: 8.93 Feet Depth of Well: 14.57 Feet Single Well Volume: 0.23 Gallons	Weather:		Partly C	loudy, ~60°I	F		-			
Depth of Well:	PURGE V	OLUME CA	LCULA'	TION						
Purp	Well Diame	eter:	1.0	-Inch	_	Static Water	r Level:	8.93 <u>-Feet</u>		
No. of Containers: 2 Sample LD. MW-10 Sample LD. MBW-10 Depth of W	ell:	14.57	-Feet	_	Single Well	Volume:	0.23 -Gallons			
Sampling Device:	PURGE &	SAMPLING	G METH	OD		. *				
Sampling Device:	X Bailer	- Type:	PVC - D	edicated		Pump -	. Туре			
Time										
Time			MEASII	DEMENTS	-			-		
11me	FIELDIA		T		· · · · · · · · · · · · · · · · · · ·					
1004	Time	1	pН	_			I	Comments		
1006	1004		7 23					Color - Brown		
1009										
1011										
1020 Sample 7.16 10.9 1.245 >1,000 222 Very Slight Perc Odor										
Total		Sample		-						
WELL SAMPLING Sample I.D. MW-10 Sample Time: 1020 No. of Containers: 2 Sample Preservation: HCl Sampled VOCs - 8260B TCL + STARS STARS VOCs Only - Method 8260B Pesticides For: SVOCs - 8270C STARS Total Poissolved TAL Metals PCBs OBSERVATIONS: Well Volume (1" well) = 0.0408-gal/ft. Well Volume (4" well) = 0.65-gal/ft.										
WELL SAMPLING Sample I.D. MW-10 Sample Time: 1020 No. of Containers: 2 Sample Preservation: HCl Sampled VOCs - 8260B TCL + STARS STARS VOCs Only - Method 8260B Pesticides For: SVOCs - 8270C STARS Total Poissolved TAL Metals PCBs OBSERVATIONS: Well Volume (1" well) = 0.0408-gal/ft. Well Volume (4" well) = 0.65-gal/ft.										
WELL SAMPLING Sample I.D. MW-10 Sample Time: 1020 No. of Containers: 2 Sample Preservation: HCl Sampled VOCs - 8260B TCL + STARS STARS VOCs Only - Method 8260B Pesticides For: SVOCs - 8270C STARS Total Poissolved TAL Metals PCBs OBSERVATIONS: Well Volume (1" well) = 0.0408-gal/ft. Well Volume (4" well) = 0.65-gal/ft.										
WELL SAMPLING Sample I.D. MW-10 Sample Time: 1020 No. of Containers: 2 Sample Preservation: HCl Sampled VOCs - 8260B TCL + STARS STARS VOCs Only - Method 8260B Pesticides For: SVOCs - 8270C STARS Total Poissolved TAL Metals PCBs OBSERVATIONS: Well Volume (1" well) = 0.0408-gal/ft. Well Volume (4" well) = 0.65-gal/ft.										
WELL SAMPLING Sample I.D. MW-10 Sample Time: 1020 No. of Containers: 2 Sample Preservation: HCl Sampled VOCs - 8260B TCL + STARS STARS VOCs Only - Method 8260B Pesticides For: SVOCs - 8270C STARS Total Poissolved TAL Metals PCBs OBSERVATIONS: Well Volume (1" well) = 0.0408-gal/ft. Well Volume (4" well) = 0.65-gal/ft.										
Sample I.D MW-10 Sample Time: 1020 No. of Containers: 2 Sample Preservation: HCl Sampled VOCs - 8260B TCL + STARS For: STARS VOCs Only - Method 8260B Pesticides	Total	0.75	Gallons Purged Pu		Purge Start Time: 1004			Purge End Time: 1011		
Sample I.D MW-10 Sample Time: 1020 No. of Containers: 2 Sample Preservation: HCl Sampled VOCs - 8260B TCL + STARS For: STARS VOCs Only - Method 8260B Pesticides	WELL SAN	MPLING								
No. of Containers: Sample Preservation: Sample Preservation: HCl Sampled X VOCs - 8260B TCL + STARS For: STARS VOCs Only - Method 8260B Pesticides PCBs OBSERVATIONS: Well Volume (1" well) = 0.0408-gal/ft. Well Volume (4" well) = 0.65-gal/ft.			MW-10			Cample Tim		1000		
Sampled X VOCs - 8260B TCL + STARS STARS VOCs Only - Method 8260B Pesticides For: SVOCs - 8270C STARS PCBs OBSERVATIONS: Well Volume (1" well) = 0.0408-gal/ft. Well Volume (4" well) = 0.65-gal/ft.	- ,					-				
### For: SVOCs - 8270C STARS				ported.						
OBSERVATIONS: Well Volume (1" well) = 0.0408-gal/ft. Well Volume (4" well) = 0.65-gal/ft.	-									
Well Volume (1" well) = 0.0408-gal/ft. Well Volume (4" well) = 0.65-gal/ft.	For:	SVOCs	- 8270C S	TARS		-Total / I	Dissolved TA	AL Metals PCBs		
	OBSERVA	TIONS:								
							-			
				<u></u>						
	Well Volum	- (1" well) -	- 0.0408-0	-01/ft	<u> </u>	Wall Valum	- (4" well)	0.751/6		
						WEII VOIUIIN	3 (4 WCII) -	= 0.03-gant.		



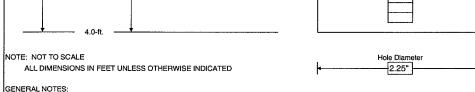
Appendix 5 Soil Gas Sampling Probe Construction Diagrams

WELL ID SG-15 PROJECT Phase II Environmental Site Assessment SHEET 1 OF 1 300 STATE STREET, ROCHESTER, NEW YORK Supplemental Site Characterization JOB# 205237.01 ENVIRONMENTAL ENGINEERING CONSULTANTS 1600 Penfield Road, Penfield, New York CHKD. BY: CONTRACTOR: TREC Environmental Services, Inc. **BORING LOCATION** DRILLER Jim Agar GROUND SURFACE ELEVATION DATUM LABELLA REPRESENTATIVE: START DATE END DATE C.A. Stiles 30-Mar-06 30-Mar-06 WATER LEVEL DATA TYPE OF DRILL RIG: TIME WATER CASINGREMARKS Track Mounted Geoprobe Model 5400-LT DATE AUGER SIZE AND TYPE N/A OVERBURDEN SAMPLING METHOD Direct Push ROCK DRILLING METHOD N/A Surface Completion Flush-Mount Well Cover Tubing Well Casing Type 0.25-Inch Inside Tygon Tubing Diameter 1.0-Ft Length Seal Type Bentonite Tubing 5.0-Ft. Total Length 4.0-Ft Depth

Screen

Length

0.75-Ft.



Screen Slot Size 0.010-Inch

Filter Pack

Filter Pack Type Glass Beads

Length

2.5-Ft

1.5-ft.

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

WELL ID SG-16 PROJECT SHEET 1 OF 1 Phase II Environmental Site Assessment Supplemental Site Characterization JOB# 205237.01 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS CHKD. BY: 1600 Penfield Road, Penfield, New York BORING LOCATION CONTRACTOR: TREC Environmental Services, Inc. GROUND SURFACE ELEVATION DATUM DRILLER Jim Agar START DATE END DATE LABELLA REPRESENTATIVE: 30-Mar-06 30-Mar-06 C.A. Stiles WATER LEVEL DATA TIME WATER CASINGREMARKS TYPE OF DRILL RIG: Track Mounted Geoprobe Model 5400-LT DATE AUGER SIZE AND TYPE N/A OVERBURDEN SAMPLING METHOD Direct Push ROCK DRILLING METHOD N/A Surface Completion Flush-Mount Well Cover 0.5-ft. Tubing 0.25-Inch Inside Well Casing Type Tygon Tubing Diameter 1.0-Ft Length Seal Type Bentonite Tubing 5.0-Ft. Length Total 4.0-Ft 1.5-ft. Screen Slot Size 0.010-Inch Filter Pack 2.5-Ft Length Filter Pack Type Glass Beads 0.75-Ft. 4.0-ft. Hole Diameter NOTE: NOT TO SCALE ALL DIMENSIONS IN FEET UNLESS OTHERWISE INDICATED 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

PROJECT WELL ID SG-17 Phase II Environmental Site Assessment SHEET 1 OF 1 300 STATE STREET, ROCHESTER, NEW YORK Supplemental Site Characterization JOB# 205237.01 ENVIRONMENTAL ENGINEERING CONSULTANTS CHKD, BY: 1600 Penfield Road, Penfield, New York CONTRACTOR: TREC Environmental Services, Inc. BORING LOCATION DRILLER GROUND SURFACE ELEVATION DATUM Jim Agar LABELLA REPRESENTATIVE: C.A. Stiles START DATE 30-Mar-06 END DATE 30-Mar-06 WATER LEVEL DATA TIME WATER CASINGREMARKS TYPE OF DRILL RIG: Track Mounted Geoprobe Model 5400-LT DATE AUGER SIZE AND TYPE N/A OVERBURDEN SAMPLING METHOD Direct Push ROCK DRILLING METHOD N/A Surface Completion Flush-Mount Well Cover Tubing 0.25-Inch Inside Well Casing Type Tygon Tubing Diameter 1.0-Ft Length Seal Type Bentonite Tubing 5.0-Ft. Total Length 4.0-Ft Depth 1.5-ft. Screen Slot Size 0.010-Inch Filter Pack 2.5-Ft Length Filter Pack Type Glass Beads 0.75-Ft. 4.0-ft.

Hole Diameter

2.25"

NOTE: NOT TO SCALE

ALL DIMENSIONS IN FEET UNLESS OTHERWISE INDICATED

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.



Appendix 6Soil Gas Sampling Log

Carriage Cleantown 1600 Penfield Road Penfield, New York

Soil Gas Survey Field Readings 25-May-06

	SG	i-15	SG	ì-16	SG	i-17
Time	Vacuum Reading ⁽¹⁾	Butane Tracer Gas Reading	Vacuum Reading	Butane Tracer Gas Reading	Vacuum Reading	Butane Tracer Gas Reading
Prepurge Soil Gas	0.0 ppm	& 0.0 LEL	0.0 ppm	& 0.0 LEL	0.0 ppm	& 0.0 LEL
Post Purge Tracer Gas		109 ppm		49.5		45.9
Post-Purge Soil Gas	0.0 ppm	& 0.0 LEL	0.6 ppm	& 0.0 LEL	0.2 ppm	& 0.0 LEL
0855	29.50	45.9				
0910	29.00	48.6				
0925	28.50	47.2		***		
0940	28.00	46.1	28.50	38.2		
0955	27.50	45.3	28.25	48.7	29.25	45.9
1010	26.50	47.4	28.00	49.5	29.25	45.8
1025	26.00	42.5	27.00	38.2	29	39.7
1040	25.00	44.0	25.75	36.8	29	39.1
1055	24.25	47.4	25.25	35.9	28.75	40.5
1110	24.00	48.2	24.50	39.0	28.75	42.7
1125	23.75	42.9	23.50	38.3	28.75	44
1140	23.00	43.0	23.50	36.9		pended ⁽³⁾
1155	22.00	40.9	23.00	38.1		
1210	21.00	41.6	22.75	36.3		
1225	20.00	39.7	22.75	37.4		****
1240	19.75	42.9	22.75	39.7		
1255	19.00	39.1	22.75	34.9		
1310	18.25	37.2	22.75	37.0	****	
1325	17.75	37.5	22.75	41.3		
1340	17.00	40.6	22.50	45.7		
1355	16.50	41.0	22.00	39.7		
1410	16.00	44.8	21.50	38.9		
1425	15.00	39.2	20.50	36.2		
1440	14.25	41.4	19.75	39.7		
1442					28.75	38.5
1455	13.00	41.3	18.75	39.1	28.00	37.9
1510		st @ 1455	18.00	37.4	27.00	41.2
1525	(6 Hour		17.50	40.7	26.00	43.1
1540			17.00	37.3	25.25	41.6
1555			16.00	36.9	24.50	44.7
1610			15.50	37.7	23.75	43.6
1625			14.50	36.1	22.75	41.6
1640			13.50	45.8	22.00	45.1
1655			12.75	42.0	21.25	43.8
1710			12.50	41.7	20.50	41.1
1725				st @ 1710	19.50	39.0
1740				nus 1.5 Hours	18.75	37.4
1755				Vacuum Drop	18.00	36.8
1810			Reco		17.75	36.3
1825					16.25	33.2
1840	~~~				15.25	29.4
1842					15.00	31.3
104Z						st @ 1842
						s Total)

⁽¹⁾ Vacuum readings recorded in inches of mercury.

⁽²⁾ Tracer gas (butane) readings measured with a MIniRae 2000 photoionization Detector within the sampling system.

⁽³⁾ First attempted test at SG-17 suspended to to lack of a drop in vacuum levels. Test rerun with fresh Summa canister.



Soil Gas Sampling Form

Soil Gas ID: SG-15

300 STATE STREET, ROCHESTER, NY

PH: (585) 454-6110 FAX: (585) 454-3066 Project Name: Former Carriage Cleaners Project No.: 205237.01 Location: 1600 Penfield Rd. Penfield, NY Sampled By: Craig A. Stiles Date: May 25, 2006 Weather: mostly cloudy, 67-77 degrees F Time: 1500 Probe Diameter: 0.3 -Inch 4.00 -Feet Depth of Probe: X Summa Canister: 6-Liter Purge Volume 25.5L Volume of Soil Vapor Extracted: 5.76L Vacuum before sample collection: 29.5"Hg Vacuum after sample collection: 13"Hg Moisture Content: Not Collected Sampled For: T0-15 **OBSERVATIONS:**



Soil Gas Sampling Form

300 STATE STREET, ROCHESTER, NY

Soil Gas ID: SG-16

PH: (585) 454-6110	FAX: (585) 454-3066	
Project Name:	Former Carriage Cleaners	Project No.: 205237.01
Location:	1600 Penfield Rd. Penfield, NY	
Sampled By:	Craig A. Stiles	Date: May 25, 2006
Weather:		Time: 1710
Probe Diameter:	0.3 -Inch	
Depth of Probe:	4.00 -Feet	
X Summa Canister:	6-Liter	
Purge Volume 34I		
Volume of Soil Vapor Ex	tracted: 5.76L	
Vacuum before sample co	ollection: 28.5"Hg	
Vacuum after sample coll	lection: 12.5"Hg	
Moisture Content:	Not Collected	
Sampled For: T0-1:	5	
OBSERVATIONS:	_	
1		



Soil Gas Sampling Form

300 STATE STREET,	ROCHESTER, NY	Soil Gas ID: SG-17	
PH: (585) 454-6110	FAX: (585) 454-3066		
Project Name:	Former Carriage Clea	eaners Project No.: 205237.01	
Location:	1600 Penfield Rd. Pe	Penfield, NY	
Sampled By:	Craig A. Stiles	Date: May 25, 2006	
Weather: mostly clou	ıdy, 67-77 degrees, calı	alm Time: 1840	
Probe Diameter:	0.3 -Inch	_	
Depth of Probe:	4.00 -Feet	<u> </u>	
X Summa Canister:	6-Liter	-	
Purge Volume 18.7L	e de la companya de l		
Volume of Soil Vapor Ex	tracted: 3.84L		
Vacuum before sample co	ellection: 29.25"Hg	3	
Vacuum after sample coll	ection: 15"Hg		
Moisture Content:	lot Collected		
Sampled For: T0-15	;		
OBSERVATIONS:			

			11/2/2005	186/17	4/28/2006	1010	0000/6/6
Mell ID	TOC Elevation			10.2 IF	2000	000	2000
		Depth to GW	GW Elevation	Depth to GW	GW Elevation	Depth to GW	GW Elevation
MW-2	96.72	7.14	89.58	6.97	89.75	6.95	89.77
MW-3	93.67	4.07	9.68	3.9	89.77	3.22	90.45
MW-4	94.36	4.6	89.76	3.95	90.41	2.42	91.94
MW-5	96.93	7.2	89.73	7.06	89.87	7.16	89 77
MW-7	96.71	NC	1	6.95	89.76	Not Av	Not Available
MW-8	99.71	NC	-	9.79	89.92	26.6	89.74
6-WM	98.86	NC	•	8.94	89.92	9.02	89.84
MW-10	98.28	NC		9.28	68	8.93	89.35
						20:0	00:00

NC = Not Collected since these wells were not installed at this time.

Well ID	TOC Elevation		11/2/2005	4/28/	4/28/2006	:/E/E	3/3/2008
		Depth to GW	GW Elevation	Depth to GW	GW Elevation	Depth to GW	Depth to GW GW Elevation
MW-2	96.72	7.14	89.58	6.97	89.75	6.95	89.77
MW-3	93.67	4.07	89.6	3.9	89.77	3.22	90.45
MW-4	94.36	4.6	89.76	3.95	90.41	2.42	91.94
MW-5	96.93	7.2	89.73	7.06	89.87	7.16	89.77
MW-7	96.71	SC	1	6.95	89.76	Not Av	Not Available
MW-8	99.71	NC		9.79	89.92	9.97	89.74
MW-9	98.86	NC	1	8.94	89.92	9.05	89.84
MW-10	98.28	NC	8	9.28	89	8.93	89.35

NC = Not Collected since these wells were not installed at this time.

Well ID	TOC Elevation		11/2/2005	4/28/	4/28/2006	3/3/;	3/3/2008
		Depth to GW	GW Elevation	Depth to GW	GW Elevation	Depth to GW	GW Elevation
MW-2	96.72	7.14	89.58	6.97	89.75		
MW-3	93.67	4.07	9.68	3.9	89.77	3.22	90.45
MW-4	94.36	4.6	89.76	3.95	90.41	2.42	91.94
MW-5	96.93	7.2	89.73	7.06	89.87	7.16	89.77
MW-7	96.71	NC		6.95	89.76	Not Av	Not Available
MW-8	99.71	NC	-	9.79	89.92	9.97	89.74
MW-9	98.86	NC		8.94	89.92	9.02	89.84
MW-10	98.28	NC		9.28	89	8.93	89.35

NC = Not Collected since these wells were not installed at this time.

Well ID	TOC Elevation		11/2/2005	4/28/	4/28/2006	3/3/	3/3/2008
		Depth to GW	GW Elevation	Depth to GW	Depth to GW GW Elevation	Denth to GW	GW Flevation
MW-2	96.72	7.14	89.58	6.97	89.75		89 77
MW-3	93.67	4.07	89.6	3.9	89.77	3.22	90.45
MW-4	94.36	4.6	89.76	3.95	90.41	2 42	90.43
MW-5	96.93	7.2	89.73	7.06	89.87	7.16	100
MW-7	96.71	SC	-	6.05	80.76	V +014	03.77
MW-8	99.71	NC	-	9.59	89.00	NOI AV	Not Available
MW-9	98.86	NC	1	8.94	89.92	9.09	80.84
MW-10	98.28	SC		9.28	89	8 93	89.35
					3	00:0	00.00

NC = Not Collected since these wells were not installed at this time.

)	TOC Flevation	11/2/2005	2005	4/28/	4/28/2006	7/8/8	3/3/2008
		Depth to GW	GW Elevation	Depth to GW	GW Elevation	Depth to GW	GW Elevation
MW-2	96.72	7.14	89.58	6.97	89.75		89.77
MW-3	93.67	4.07	9.68	3.9	89.77	3.22	90.45
MW-4	94.36	4.6	92'68	3.95	90.41	2.42	91.94
MW-5	96.93	7.2	89.73	90.7	89.87	7.16	89.77
7-WM	96.71	NC		6.95	89.76	Not Av	Not Available
MW-8	99.71	NC	•	62'6	89.92	9.97	89.74
0-WM	98.86	NC	•	8.94	89.92	9.02	89.84
MW-10	98.28	NC	-	9.28	89	8.93	89.35

NC = Not Collected since these wells were not installed at this time.

) - - - -	TOC Flevation		11/2/2005	4/28/	4/28/2006	7/8/8	3/3/2008
		Depth to GW	GW Elevation	Depth to GW	GW Elevation	Depth to GW	GW Elevation
MW-2	96.72	7.14	89.58	6.97	89.75		89.77
MW-3	93.67	4.07	9.68	3.9	89.77	3.22	90.45
MW-4	94.36	4.6	89.76	3.95	90.41	2.42	91.94
MW-5	96.93	7.2	89.73	7.06	89.87	7.16	89.77
MW-7	96.71	NC	-	6.95	89.76	Not Av	Not Available
MW-8	99.71	NC	-	62.6	89.92	9.97	89.74
MW-9	98.86	NC	-	8.94	89.92	9.02	89.84
MW-10	98.28	NC	2 -	9.28	88	8.93	89.35

NC = Not Collected since these wells were not installed at this time.



Appendix 7Shallow Groundwater Elevations

CII IIOM	TOC Flevation		11/2/2005	4/28/	4/28/2006	3/3/;	3/3/2008
		Depth to GW	GW Elevation	Depth to GW	Depth to GW GW Elevation	Depth to GW	Depth to GW GW Elevation
MW-2	96.72	7.14	89.58	26.9	89.75	6.95	89.77
MW-3	93.67	4.07	9.68	3.9	89.77	3.22	90.45
MW-4	94.36	4.6	89.76	3.95	90.41	2.42	91.94
MW-5	96.93	7.2	89.73	90.7	89.87	7.16	89.77
MW-7	96.71	NC	1	6.95	89.76	Not A	Not Available
MW-8	99.71	NC	aa aa	9.79	89.92	26.6	89.74
WW-9	98.86	NC	-	8.94	89.92	9.05	89.84
MW-10	98.28	NC		9.28	86	8.93	89.35

NC = Not Collected since these wells were not installed at this time.