G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

August 17, 2015

Ms. Jamie Verrigni
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7014

Subject: SVE System Design Work Plan
101 Westmoreland Avenue
White Plains, New York 10606
Order on Consent Index No. D3-0504-06-09
Site Code No. 360095
Automobile Club of New York
GCE Project No. 05-003-00

Dear Ms. Verrigni:

Enclosed please find the SVE System Design Work Plan prepared by G. C. Environmental, Inc. (GCE) for the subject site, as modified in response to your August 10, 2015 letter.

If you have any questions concerning this project, please feel free to call me at (631) 206-3700, ext. 111.

Very truly yours,

Gregory Collins
President

Enclosures

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SVE SYSTEM DESIGN WORK PLAN

101 WESTMORELAND AVENUE,
WHITE PLAINS, NEW YORK 10606
ORDER ON CONSENT NO. D3-0504-06-09
SITE CODE NO. 360095

PREPARED FOR:

NEW YORK STATE
DEPARTMENT OF ENVIRONMETNAL CONSERVATION

DIVISION OF ENVIRONMENTAL REMEDIATION
625 BROADWAY,
ALBANY, NEW YORK 12233

ON BEHALF OF:

AUTOMOBILE CLUB OF NEW YORK, INC
1415 KELLUM PLACE,
GARDEN CITY, NEW YORK 11530

DATE ISSUED: August 17, 2015

GCE PROJECT NUMBER: 05-003-00

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G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

PROFESSIONAL ENGINEER CERTIFICATION

I Dean Devoe, certify that I am currently a NYS registered professional engineer or Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this SVE System Design Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Dean Devoe

Signature, Registered Professional Engineer

Dean Devoe

Printed Name, Registered Professional Engineer

STATE OF NEW YORK
DEAN E. DEVOE
(Seal)
No. 072513
LICENSED PROFESSIONAL ENGINEER

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LIST OF ACRONYMS USED IN THIS DOCUMENT:

AOC	Areas of Concern
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
B/Ns	Base Neutrals
CAMP	Community Air Monitoring Plan
CVOCs	Chlorinated volatile organic compounds
CFM	Cubic Foot per Minute
DCA	Dichloroethane (1,1-DCA and 1,2-DCA)
DCE	Dichloroethene (1,1-DCE and 1,2-DCE)
DO	Dissolved Oxygen
HP	Horse Power
LSHH	High Level Switches
ug/m^3, mcg/m^3	Microgram per cubic meter
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
OSHA	Occupational Health & Safety Administration
ORP	Oxidation Reduction Potential
PM_{10}	Particulate Matter
pH	Hydrogen Ion Concentration
PS	Pressure Switch
P&ID	Piping& Instrumentation Diagram
PID	Photoionization Detector
PCE	Perchloroethylene (Tetrachloroethylene)
RAWP	Remedial Action Work Plan
SVE	Soil Vapor Extraction
SCGs	Standards, Criteria and Guidance
SCR	Site Characterization Report
SSO	Site Safety Officer
TCE	Trichloroethylene
1,1,1-TCA	Trichloroethane
USGS	US Geological Survey
UST	Underground Storage Tank
VOCs	Volatile Organic Compound

EXECUTIVE SUMMARY

G. C. Environmental, Inc. (GCE) prepared this soil vapor extraction (SVE) system design work plan (SVE System Design Work Plan) for the remediation of chlorinated volatile organic compounds (CVOCs) at 101 Westmoreland Avenue, White Plains, New York (the Site) in accordance with NYSDEC's DER-10 Technical Guidance for Site Investigation and Remediation dated May 2010 (DER-10).

Treatment Areas: The areas targeted for SVE treatment include the sub-slab and soil vapors found in the samples SS-1 through SS-9. See Figure 4: Site Plan. The primary contaminants of concern (COCs) are CVOCs, namely tetrachloroethylene (perchloroethylene) (PCE), trichloroethylene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), and 1,1-dichloroethene (1,1-DCE).

Geology and Hydrogeology: Based on the information gathered during the Site Characterization (SC) investigation, the geology of the Site to the explored depth of approximately 40 feet below grade consists of approximately two (2) feet of fill, represented by dark- gray to black fine-coarse sand and gravel with fragments of brick and coal, underlain by light-brown, well sorted, fine-coarse sand with little fine gravel.

Groundwater flow direction at the Site is to the west-northwest. Depth to groundwater below the Site ranges from approximately 25 feet below grade to 29 feet.

Overview of SVE Design and Operational Strategy:

- The goal of the SVE system is to reduce CVOC vapors and to create a vacuum within the sub-slab soils as a vapor intrusion control. Soil vapors containing CVOCs will be removed via soil vapor extraction wells that will be installed through the facility's slab floor at two locations.
- The SVE system will be installed at the exterior rear of the building at the western portion of the Site adjacent to the auto detailing area.

- The SVE system will consist of a regenerative blower, inlet and outlet plumbing, air filter, moisture separator, ambient air valve, vacuum gauges, power disconnect and a thermal overload circuit. (See Figure 5: SVE Layout).
- Two (2) soil vapor extraction points (SVE-1 & SVE-2) will be located where elevated concentrations of CVOCs were detected during the SC study. These detections were in the automotive repair shop area (near soil vapor sample SS-3). The SVE system will capture and reduce volatilized CVOCs below the sub-slab area. The SVE system will be installed at the exterior rear of the building at the western portion adjacent to the auto detailing area of the Site. Underground and aboveground piping will be connected from each SVE well to the equipment area where the piping will be manifolded and connected to the vacuum blower. A regenerative vacuum blower rated at 2 HP and capable of 80-150 CFM at 47 inches of water will be used to recover the vapors at the SVE wells. The vapor stream will go through a moisture (air/water) separator (37 gallon capacity) where high efficiency cyclonic separation takes place which is outfitted with a drain for convenient removal of fluids. Clogged filters will be diagnosed by vacuum gauges which are mounted before and after the air filter and are adjusted using an ambient air valve. The pressure switch (PS) and high level switches (LSHH) will act as alarms and are interlocked to the blower which helps monitor the SVE blower operation, flow, pressure and potential malfunctions. The final vapors coming out of moisture separator will be treated using either vapor phase carbon or catalytic incinerator.

Remediation Objectives: The remedial objectives of the SVE system are two-fold: (1) to remediate elevated levels of CVOCs present in the soil vapor of the unsaturated soils in the vicinity of SS-3; and (2) to control migration of soil vapor and reduce CVOC concentrations under the slab. Remedial objective completion will be based on air samples collected from soil vapor monitoring points and soil vapors collected in the sub-slab area. Pressure differential testing will be conducted to verify that adequate negative pressure is created under the slab.

SVE Shutdown: A significant reduction in CVOC mass is expected to occur within the first 6 to 12 month operational period. During this period, the following rationale will be utilized to assess the effectiveness of the SVE system and determine the optimum time to permanently shut down the system. The SVE system will be temporarily shut down when the mass of CVOCs removed during any two consecutive monitoring periods is determined to be equal to or less than 10% of the mass removed during the prior period. The shut-off period will be one month. The SVE system will then be turned on. If the SVE system shows similar results (less than 10% reduction during the next two consecutive monitoring periods), the SVE system should be shut off permanently as it has reached its limit of effectiveness.

Operations and Monitoring: Process and performance monitoring will be conducted during SVE system operations to evaluate overall vapor concentrations and track mass removal rates over time. Well field vapor concentrations will also be periodically evaluated (using vapor probes or the SVE wells under either dynamic (i.e. system on or static system off) conditions) to assess the progress of remediation activities. This data will be used as part of the system optimization strategy which will include maximizing CVOC mass removal rates by focusing SVE wells on areas of higher vapor concentration/vapor production.

Schedule: The SVE system is anticipated to begin operation in late 2015 and operate for up to 2-3 years.

Table: Summary of Project Schedule

Task Description	Dates
Design and Submittal to NYSDEC	September 2015
SVE Operation	October 2015 - November 2017
Sampling	May 2016 - September 2017
SVE Shutdown/Evaluation	September 2017 - October 2017
Demobilization/Decommissioning	November 2017 - January 2018

1.0 INTRODUCTION

This SVE System Design Work Plan was prepared by and/or under the supervision of GCE. The SVE System Design Work Plan was prepared for the Site in accordance with DER-10.

GCE completed a detailed analysis of remedial alternatives to address soil vapors containing CVOCs at the Site. The remedial recommendations were presented in the revised Site Characterization Report (SCR) dated November 2013, previously submitted to the NYSDEC. In that report, GCE recommended a remedial approach consistent with criteria outlined in DER-10.

The following information is included in this SVE Design Work Plan:

- Site background information including a summary of geology, hydrogeology and history of previous work performed at the Site.
- Overview of the remediation approach, including the remedial goals and objectives.
- General Operations, Maintenance and Monitoring (OM&M) protocols.
- Anticipated Project Schedule.

1.1 SUMMARY OF REMEDIATION APPROACH

An SVE system will be installed and operated to address the following Areas of Concern (AOCs) at the Site.

- Sub-slab and soil vapors in the areas where samples SS-1 through SS-9 were taken (See Figure 4: Site Plan).

The goal of the SVE system is to reduce CVOCs vapors and to create a vacuum within the sub-slab soils as a vapor intrusion control. Soil vapor containing CVOCs will be removed using extraction wells that will be installed through the facility’s slab floor at two locations. The SVE wells will be installed at the exterior rear of the building at the western portion of the Site adjacent to the exterior auto detailing area.

Two (2) soil vapor extraction points (SVE-1 & SVE-2) will be located where elevated concentrations of CVOCs were encountered during the SC investigation, in the automotive repair shop area (near soil vapor sample SS-3). Underground and aboveground piping will be connected from each SVE well to the equipment area where the piping will be manifolded and connected to the vacuum blower. A regenerative vacuum blower rated at 2 HP and capable of 80-150 CFM at 47 inches of water will be used to recover the vapors at the SVE wells. The vapor stream will go through a moisture (air/water) separator (37 gallon capacity) where high efficiency cyclonic separation will take place which is outfitted with drain for convenient removal of fluids. Clogged filters will be diagnosed by vacuum gauges which are mounted before and after the air filter and are adjusted using ambient air valve. The PS and LSHH act as alarms and are interlocked to the blower which helps monitor the SVE blower operation, flow, pressure and potential malfunctions. The final vapors coming out of moisture separator will be treated using either vapor phase carbon or catalytic incinerator.

1.2 REMEDIAL OBJECTIVES

The purpose/remedial objectives/goals of the SVE system are as follows:

- To remediate soil vapor containing elevated levels of CVOCs from unsaturated soils in the vicinity of SS-3, and
- To control migration of soil vapor and reduce CVOC concentrations in the sub-slab area.

The air flow characteristics and capacity of the materials beneath the slab will be quantitatively determined by diagnostic testing. Diagnosing testing is conducted by drilling small diameter holes through a building slab, applying a vacuum to one hole, and measuring pressure drops at surrounding test holes. The objective of diagnostic testing is to investigate and evaluate the development of a negative pressure field, via the induced movement of soil gases beneath the slab.

Determination of when the remedial objectives have been met will be based on air samples collected from soil vapor monitoring points and soil vapors collected in sub-slab areas. A significant reduction in CVOC mass is expected to occur within the first 6 to 12 months of operational period. During this period, the following rationale will be utilized to assess the effectiveness of the SVE system and determine the optimum time to permanently shut down the system. The SVE system will be temporarily shut down when the mass of CVOCs removed during any two consecutive monitoring periods is determined to be equal to or less than 10% of the mass removed during the prior period. The shut off period will be one month. The SVE system will then be turned on. If the SVE system shows similar results (less than 10% reduction during the next two consecutive monitoring periods), the SVE system should be shut off permanently as it has reached its limit of effectiveness.

1.2.1 Remedial Selection Criteria

The SVE system for the soil vapors remedy will be compared to the criteria in 6 NYCRR Part 375-1.8 (f). The criteria are summarized below:

1.2.2 Standards, Criteria and Guidance (SCGs)

The NYSDEC currently does not have any standards applicable to sub-slab soil vapor samples. GCE will use the 2006 NYSDOH Guidance for the Evaluation of Soil Vapor Intrusion (NYSDOH Guidance) as SCGs for this project.

1.2.3 Overall protectiveness of public health and the environment

The SVE will be protective of public health and the environment by eliminating the contaminated soil gas as a route of potential exposure and by remediating the soil vapors to meet applicable NYSDOH Guidance.

1.2.4 Short-term effectiveness

A Health and Safety Plan to protect the public and workers will be implemented during construction. The Plan includes a Community Air Monitoring Plan (CAMP) to protect public health. The CAMP is included in Section 4.0. The SVE system is scheduled to be installed and operational within two months of NYSDEC approval.

1.2.5 Long-term effectiveness

The remedy provides long-term effectiveness and permanence by removing CVOCs from soil. The SVE system utilizes proven technology to adequately and reliably remove CVOCs. The CVOCs will be captured and removed from the soil underneath the Site.

1.2.6 Reduction of toxicity, mobility and volume treatment

The on-site remedy does not affect the toxicity of the contaminants; rather, it permanently removes the contaminant mass from the unsaturated soil so that toxicity is no longer an issue.

Vapor-phase granular activated carbon (GAC) or oxidation are the two methods that were considered as viable options for treatment of extracted vapors. The GAC method involves passing extracted soil vapor through a series of vessels filled with GAC. Organic compounds, with an affinity for carbon (such as the CVOCs present within the soil vapor), are transferred from the vapor phase to the solid phase by sorption to the carbon. When the absorptive capacity of the carbon is exhausted, the spent carbon containing the chemical constituents is sent offsite for regeneration. The required frequency for regeneration depends on the concentrations of chemicals in the influent steam, loading rate and the system flow rate.

The oxidation method involves the destruction of CVOCs in extracted vapor using oxidation equipment (typically thermal or catalytic) at high temperatures. Catalytic oxidation units utilize a catalyst to lower the temperature range required for the oxidation to occur. For destruction of CVOCs, a flue gas scrubber is utilized to reduce acid gas emissions. The contaminated air is heated within the oxidation chamber utilizing natural gas, propane, or electricity. The energy costs for this technology can be costly for soil vapors containing low CVOC concentrations. Due to the potentially high energy costs, this technology was not subjected to further analysis in this evaluation.

Treatment with the catalytic incinerator will ensure that CVOC emissions from the SVE system are within the limits specified in the air discharge permit, to be obtained from Westchester

County Department of Health (WCDOH) or NYSDEC as required. Air emissions will be measured periodically using a PID before and after the treatment unit for screening purposes to assess treatment efficiency.

1.2.7 Feasibility

SVE technology at the Site is feasible due to site geological conditions (See sections 2.3, 2.4 & 2.5). The equipment, materials and labor to implement the remedy are readily available and are cost effective.

1.2.8 Institutional Controls and Natural Attenuation of Groundwater

In addition to the active remediation presented above, institutional controls and monitored natural attenuation of groundwater will be part of the remedial action. Once the CVOC concentrations have been reduced in the groundwater, natural attenuation processes will continue to reduce mass and concentrations towards closure goals.

Institutional controls will be implemented for long-term management of the Site and to prevent future exposure to any residual contamination. An environmental easement will be recorded for the Site. The Site Management Plan (SMP) will specify maintenance of the Site cover, future soil and insulation handling requirements, operation and maintenance procedures, and land use restrictions. Periodic inspection and reporting will be required under the SMP to verify that the restrictions and requirements included in the easement remain in-place and effective. An OM&M Manual will be developed including area-specific details. This manual will focus on how to track performance, general maintenance procedures and procedures for determining when operations are complete.

1.2.9 Cost-Effectiveness

The implementation and monitoring costs associated with the proposed remedy are estimated at a reasonable cost. It is anticipated that short-term groundwater monitoring may be required.

1.2.10 Land Use

Following completion of the remedy, the SVE equipment will be removed and the Site will be restored. Land use will be consistent with restrictions contained in the environmental easement.

2.0 SITE BACKGROUND INFORMATION

2.1 Site Description

The Site is located in the City of White Plains, Westchester County, New York, on the northwest side of Westmoreland Avenue, approximately 100 feet to the west of the T-shaped intersection formed by Westmoreland Avenue and Home Place and is occupied by RJT, an Automobile Club of New York-approved auto-repair shop.

The Site consists of an approximately 9,000-square-foot rectangular-shaped parcel of land. The on-site building contains office space, restrooms, a storage closet, an automobile exterior detailing area and an automobile repair area. The remainder of the Site consists of an asphalt-paved parking area located on the northeastern portion of the Site and gravel-paved parking area located on the western portion of the Site (See Figures 1 and 4, for Site Locus Map and Site Plan, respectively).

2.2 Site Topography

According to the US Geological Survey (USGS) Topographic Map of White Plains, New York Quadrangle, US Geological Survey (USGS), dated 1967, photo-revised 1979, the Site's elevation is approximately 210 feet above mean sea level. Topographically, the Site is essentially level with no abrupt changes in elevation. The topography in the vicinity of the Site slopes gently to the northwest towards the Bronx River located approximately 700 feet to the northwest of the Site. (See Figure 2 for the USGS Topographic Map.)

2.3 Regional Geology and Hydrogeology

According to the 1970 Bedrock Geologic Map of New York, Lower Hudson Sheet and the 1989 Surficial Geologic Map of New York, Lower Hudson Sheet prepared by the University of the State of New York, the geology in the area of the Site consists of fluvial sand and gravel, which is underlain by bedrock composed of schist and amphibolites of the Manhattan formation. Based on the information gathered during the SC investigation, depth to bedrock at the Site is greater than 40 feet below grade.

Based on the topography and local waterways, local groundwater flow direction in the area of the Site is believed to be to the northwest towards a portion of Bronx River located approximately 700 feet to the northwest of the Site.

2.4 Site Geology

The geology of the Site to the explored depth of approximately 40 feet below grade consists of approximately two (2) feet of fill, represented by dark- gray to black fine-coarse sand and gravel with fragments of brick and coal, underlined by light-brown, well sorted, fine-coarse sand with little fine gravel.

2.5 Site Hydrogeology

Groundwater flow direction at the Site is to the north-northwest. Depth to groundwater below the Site ranges from approximately 25 feet below grade (in MW-3 located on the eastern border of the Site) to 29 feet (in MW-9 located in the northern portion of the Site). Hydraulic conductivity (not measured) is expected to be relatively high due to rather coarse particle size of sediments (fine-coarse sand with little fine gravel). The measured hydraulic gradient is moderate (between MW-3 and MW-9 the gradient is about 3.45 ft/95 ft = 0.036 ft/ft.) (See Table 10 for Groundwater Level Measurements, 3/18/2009 and Figure 3 Groundwater Contour Map).

2.6 Summary of Previous Investigation

GCE submitted the revised SCR dated November 11, 2013, in accordance with the NYSDEC approved Revised Site Characterization and Interim Remedial Measures Work Plan dated May 11, 2007. A copy of the SCR is provided in Appendix A.

Summary of Findings

GCE's SC investigation of the Site consisted of four (4) soil borings (B-21 through B-24), and the installation of six (6) groundwater monitoring wells (MW-4 through MW-9) and nine (9) soil vapor probes (SS-1 through SS-9). Samples of soil, groundwater, soil vapor and air were collected. GCE also conducted an elevation survey and groundwater level measurement. These activities were done to further delineate the extent of contaminants in soil, groundwater and soil vapors at the Site and to identify the sources of contamination and the migration pathways on or through soil and groundwater. See Figure 4 for the locations of GCE's investigations (borings, probes, etc.).

GCE's investigation revealed the following conditions:

Two (2) types of contaminants were found at the Site: petroleum hydrocarbons and chlorinated hydrocarbons (chlorinated solvents).

Petroleum Hydrocarbons

Petroleum hydrocarbons in the soil were detected during the 2005 Subsurface Investigation in soil borings B-1 and B-5 located on the central portion of the Site, in the area of the removed 550-gallon USTs that had been used to store No. 2 fuel oil and waste oil. Concentrations of BTEX totaling 17.9 mg/kg (0' - 2' below grade) and 4.12 mg/kg (15' - 17' below grade) were detected in soil borings B-1 and B-5, respectively. No evidence of petroleum contamination in the form of free product was observed. Soil delineation activities in the area of the former dry well (soil borings B-12 through B-20) performed in 2008 and 2009 revealed some petroleum compounds (mostly SVOCs) only in the dark-gray fill (0 - 3 feet below grade) and only at concentrations below regulatory standards. During the 2009 SC investigation, some petroleum hydrocarbons were found in soil borings B-21 through B-24, all located in the parking lot, on the northeastern portion of the Site. Boring B-21 contained BTEX, however, in concentrations below the regulatory standards. Several B/Ns, namely benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene and chrysene, were detected above the regulatory standards in soil borings B-23 and B-24 but only in the fill material (0 to 3 feet below grade). The soil below this interval was not impacted.

Petroleum hydrocarbons in groundwater were also detected in 2005 but only in the area of the removed USTs. The concentration of total BTEX detected in groundwater in 2005 was 41.1 ug/l in B-5 and 19.3 ug/l in B-7. During the last round of sampling conducted as part of the 2009 SC investigation, petroleum hydrocarbons were found in monitoring well MW-9, located down-gradient of the removed USTs, however concentrations of BTEX (2 ug/l) were detected below groundwater standards. This data indicates that the source of the detected petroleum hydrocarbons was most likely the removed USTs, formerly located near soil boring B-5. The area of impact was very limited and was moving slowly in the northwestern direction, along the general direction of groundwater flow.

Since the source of petroleum contamination was removed in 2001 and due to the natural attenuation that occurred in the eight years following removal, no further remediation beneath the building was deemed necessary as of 2009.

Petroleum hydrocarbons in groundwater were also detected in soil boring B-21 located in the parking lot, along the northern boundary of the Site and approximately 25 feet to the east of the removed 550-gallon UST (upgradient of the former UST area). Although the concentrations of total BTEX in the groundwater sample from B-21 was measured below groundwater standards (2 ug/l), the groundwater at B-21 is not devoid of petroleum-related impact (i.e. B-21 contained concentrations of 1,2,4-trimethylbenzene at 23 ug/l, 1,3,5-trimethylbenzene at 12 ug/l and naphthalene (SV) at 64 ug/l, all which exceed their respective groundwater standards). The source of these petroleum hydrocarbons is most likely located off-site, on the property located to the north of the Site.

BTEX and other petroleum compounds were not detected in any other soil borings or monitoring wells during the 2009 SC investigation.

Chlorinated Hydrocarbons

The 2005 Subsurface Investigation revealed that the highest concentrations of chlorinated solvents (190 mg/kg) were detected in the soil boring B-1 located on the central portion of the Site and advanced through the central portion of a concrete pad (former location of the historical dry well, which was filled and covered by a concrete pad prior to 2001). Four (4) chlorinated solvent compounds, namely PCE (180 mg/kg), TCE (1.9 mg/kg), cis-1,2-DCE (7.8 mg/kg) and 1,2-DCA (0.6 mg/kg) were detected above the NYSDEC Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater in the uppermost soil sample (0-2 feet below grade). A groundwater sample collected at soil boring B-7 at the same location as B-1, had a total concentrations of 40.2 ug/l, indicating that the dry well was a contributing source of chlorinated solvents to the groundwater sometime in the past. However, soil boring B-12, advanced in 2007 through the same concrete pad, just six (6) inches to the south of the soil boring B-1, revealed that only one chlorinated solvent compound (PCE) at 14 mg/kg was detected above the regulatory standards. Chlorinated solvents were not detected or detected far below regulatory standards in all other 19 soil borings advanced at the Site in 2005, 2007 and 2009 (with exception of B-5 and B-14 with low concentrations of PCE). It should be noted that elevated concentrations of volatile organic compounds (VOCs) including chlorinated solvents, were detected in soil borings B-1 and B-12 only in the uppermost samples (0-2 feet bgs). The 2007 delineation of soil contamination and 2009 IRM excavation activities revealed that uppermost soil (0-2 feet bgs) is represented by fill material consisting of dark-gray, fine-coarse sand and gravel with fragments of bricks and numerous fragments of black coal, which had elevated levels of total VOCs based on field PID readings (above 20 parts per million (ppm)). Soil below 2-3 feet consists of loose, light-gray to yellow fine-medium, poorly graded sand without any visual or olfactory contamination and PID readings ranging from 0-0.2 ppm.

The results of groundwater sampling performed during the 2009 SC activities from nine (9) monitoring wells and four (4) new soil borings show that all monitoring wells in the central portion of the Site (including MW-4 and MW-5 located close to and down-gradient from the dry well) exhibit concentrations of PCE and its breakdown product below 5 ug/l (Groundwater Standard). Concentrations of PCE increase to the north and to the east and are the highest in

MW6 and MW-9 (13-27 ug/l) along the northern boundary of the Site and in MW-2 and MW-3 (16-20 ug/l) along the eastern boundary of the Site. This data indicates that the main source(s) of PCE are located off-site, on the properties located to the north and to the east and hydraulically cross- and up-gradient of the Site. In addition, the PCE concentration at SS-9 (deep soil vapor sample just above the groundwater table, located along the eastern boundary of the Site, near MW-2) was elevated (3,460 ug/m^3), also suggestive of an off-site (up-gradient) contribution of PCE to the Site groundwater.

In addition, concentrations of 1,1,1-TCA and its breakdown products (1,1-DCA and 1,1-DCE) increase to the east and especially to the southwest, and are highest in MW-2 (57 ug/l) along the eastern boundary of the Site and in MW-8 and MW-7 (100-249 ug/l) along the southwestern boundary of the Site. In addition, the 1,1,1-TCA concentration at SS-9 (deep soil vapor sample just above the groundwater table, located along the eastern boundary of the Site, near MW-2) is the highest among the all soil vapor samples (3,938 ug/m^3), also indicating that 1,1,1-TCA originated most likely from the up-gradient off-site source(s).

Thus, the results of the investigations suggest that the former dry well was a contributing local source of chlorinated solvents in the past, and that similar subsurface impacts from adjacent/off-site properties may still be impacting the subject property.

Field measurements of DO indicate slightly anaerobic conditions in groundwater, especially in the central portion of the Site where the petroleum impacts were encountered. Negative values of ORP in the area of the former petroleum plume also suggest reducing conditions, expected for anaerobic groundwater. Temperature (61.0-62.3°C) and pH (6.5-7.0) are optimal for bacterial growth rate.

In aerobic systems, chlorinated solvents usually resist degradation and are persistent. There are no known bacteria that can oxidize these compounds. Under anaerobic conditions, halogenated compounds are commonly bio-transformed. The central portion of the Site, in the area of the former USTs, groundwater had anaerobic conditions. Natural bio-attenuation (reductive dechlorination process) in this area most likely led to a reduction of PCE and 1,1,1-TCA which could explain these lower concentrations.

Soil Vapors

CVOCs, namely PCE, TCE and 1,1,1-TCA were detected in concentrations that are elevated in comparison to the NYSDOH Guidance in the sub-slab soil vapor samples and in the indoor air samples. The highest concentration of 1,1,1-TCA in soil vapors (3,821.30 ug/m^3) was detected in SS-9 (deep soil vapor sample just above the groundwater table, located along the eastern boundary of the Site, near MW-2). This sample also contained its breakdown products, 1,1-DCE (83.37 ug/m^3) and 1,1-DCA (33.22 ug/m^3), which were not detected in any other soil vapor samples. A high concentration of 1,1,1-TCA in this deep soil vapor sample generally coincides with the high concentrations of this compound in groundwater, and indicates that the groundwater is most likely the source of CVOCs in soil vapors at the Site. This data is indicative of an off-site (up-gradient) source of 1,1,1-TCA to the Site groundwater. The highest concentration of PCE (6,785 ug/m^3) together with an elevated concentration of 1,1,1-TCA (3,300 ug/m^3) was detected in SS-3 (shallow sub-slab soil vapor sample, located in the southern portion of the garage building, close to the painting room). There are no soil borings in this area and the closest monitoring well MW-7 detected highest concentrations of 1,1,1,-TCA in groundwater (249 ug/l) but low concentrations of PCE (2 ug/l) and TCE (2 ug/l), which indicates that there is no strict correlation between concentrations of chlorinated solvents in groundwater and shallow sub-slab samples. This data indicates that a source of PCE may be located in the area of SS-3, which will be addressed by installing the SVE system in this area.

GCE's review of the laboratory analytical results and comparison with NYSDOH Guidance indicates the following:

- TCE was detected below concentrations of 5 ug/m^3 in most sub-slab soil vapor samples. In sub-slab soil vapor samples SS-3, SS-6, SS-7 and SS-9, TCE was detected at concentrations ranging between 5 and <50 ug/m^3. Since the indoor air concentrations of TCE were detected at concentrations between 2.5 and <5.0

mcg/m^3, as outlined in Matrix 1 in the NYSDOH Guidance, reasonable and practical actions to reduce and monitor exposures are recommended.

- PCE was detected above concentrations of 100 ug/m^3 in all sub-slab and soil vapor probes. Since the indoor air concentrations of PCE were considerably above 100 mcg/m^3 (5,563.70 and 13,570.00 mcg/m^3), mitigation is recommended to minimize current or potential exposures associated with soil vapor intrusions in accordance with the NYSDOH Guidance.

- 1,1,1-TCA concentrations vary from less than 100 ug/m3 (sub-slab samples SS-1 and SS-2 located in the office area) to more than 1,000 ug/m3 (sub-slab samples SS-3, 4, 5, 6 and 9). The indoor air concentrations for 1,1,1-TCA were less than 3 ug/m3. These 1,1,1-TCA levels fall into several different ranges in the NYSDOH Guidance; no further action, monitoring or mitigation. In sum, as explained in the previously approved SCR, no further investigation or remediation of the soil or groundwater is needed. The only remaining work is addressing the soil vapor detected by the former dry well area which is the purpose of this work plan.

3.0 SOIL VAPOR EXTRACTION (SVE) SYSTEM

The SVE system is designed to collect volatilized contaminated vapors and to prevent migration of vapors from the treatment area to other areas. SVE uses wells that are screened through the unsaturated zone for the extraction of soil vapors. A vacuum is induced at the extraction well, thereby inducing a pressure gradient, which in turn produces vapor flow through the unsaturated zone. The remedial design objective for each component and the rationale for selection of each unit area described below.

The SVE system shall be utilized to mitigate the potential exposures associated with soil vapor detections in the area of the former dry well. The SVE system will be installed at the exterior rear of the building at the western portion of the Site adjacent to the auto detailing area. The SVE system consists of a regenerative blower, inlet and outlet plumbing, air filter, moisture separator, ambient air valve, vacuum gauges, power disconnect and a thermal overload circuit. (See Figure 5: Basic SVE Layout).

Two (2) soil vapor extraction points (SVE-1 & SVE-2) will be located at the automotive repair shop area near soil vapor sample SS-3 where elevated VOCs were identified. The SVE system will capture and remove CVOCs in the sub-slab area. The SVE system will be installed at the exterior rear of the building at the western portion adjacent to the auto detailing area of the Site. Underground and aboveground piping is connected from each SVE well to the equipment area where the piping is manifolded and connected to the vacuum blower. A regenerative vacuum blower rated at 2 HP and capable of 80-150 CFM at 47 inches of water will be used to recover the vapors at the SVE wells. The vapor stream progresses through a moisture (air/ water) separator (37 gallon capacity) where high efficiency cyclonic separation will take place which is outfitted with a drain for the convenient removal of fluids. Moisture will be removed in a knockout drum or tank. Moisture removed in the knockout drum or tank will either be pumped through a GAC drum or characterized and disposed of off-site in accordance with Federal, State and local regulations. Clogged filters will be identified by vacuum gauges which are mounted before and after the air filter and are adjusted using ambient air valve. The PS and LSHH act as alarms and are interlocked to the blower which helps monitor the SVE blower operation, flow, pressure and potential malfunctions. The final vapors coming out of moisture separator will be treated using either vapor phase carbon or catalytic incinerator. See SVE P & I diagram (Figure 8), SVE layout diagram (Figure 5) SVE moisture separator diagram (Figure 6), SVE monitoring well diagram (Figure 9), and SVE blower assembly diagram (Figure 7).

3.1 SVE System Testing

Since it is an engineering control, a pilot test is not necessary and the necessary SVE suction points, air flow and vacuum adjustments, will be modified as necessary during the full scale installation. Baseline differential pressure testing will be conducted to verify adequate negative pressure under the slab, during full scale installation.

The air flow characteristics and capacity of the materials beneath the slab will be quantitatively determined by diagnostic testing. Diagnosing testing is conducted by drilling small diameter holes through a building slab, applying a vacuum to one hole, and measuring pressure drops at surrounding test holes. The objective of diagnostic testing is to investigate and evaluate the development of a negative pressure field, via the induced movement of sub-slab soil gases.

3.2 Radius of Influence (ROI) and SVE Well Spacing

The spacing design of a SVE well network is based upon the location of elevated concentrations. Soil vapor extraction points (SVE-1 & SVE-2) are to be located at the automotive repair shop area near soil vapor sample SS-3 where elevated VOC concentrations were measured.

3.3 Air Sampling

Air sampling of the SVE component of the treatment system will be performed using field instruments to assess thermal oxidizer efficiency and hydrocarbon removal rates. The field instruments will consist of a PID. All field instruments will be calibrated according to manufacturer specifications. Air samples will be collected from the SVE system blower discharge, between carbon vessels, at the discharge of carbon vessels and from each SVE well

(SVE-1 & SVE-2) to assess vapor phase hydrocarbon removal rates. The air samples will be collected using SUMMA canisters at an elapsed time of 1 hour. The samples collected will be tested in a New York State ELAP- approved laboratory for analyses of VOCs using EPA Method TO-15.

3.4 Vapor Treatment

As explained above, vapor-phase GAC treatment is the selected method to treat the extracted vapors. The GAC method involves passing extracted soil vapor through a series of vessels filled with GAC. Organic compounds with an affinity for carbon (such as VOCs present within the soil vapor), are transferred from the vapor phase to the solid phase by sorption to the carbon. When the absorptive capacity of the carbon is exhausted, the spent carbon, containing the chemical constituents, is sent offsite for regeneration. The required frequency for regeneration depends on the concentrations of chemicals in the influent steam, loading rate and the system flow rate.

Treatment with the catalytic incinerator will ensure that VOC emissions from the system are within the limits specified in the air discharge permit, to be obtained from WCDOH or NYSDEC as required. Air emissions will be measured periodically using a PID before and after the treatment unit for screening purposes to assess treatment efficiency.

3.5 Condensate Water

Moisture will be removed in a knockout drum or tank. Moisture removed in the knockout drum or tank will either be pumped through a GAC drum or characterized and disposed of off-site in accordance with Federal, State and local regulations.

4.0 IMPLEMENTATION TASKS

4.1 Community Air Monitoring Plan (CAMP)

Community Air Monitoring Plan (CAMP) requires real time monitoring for the presence of VOCs and dust at the downwind perimeter of designated work area when certain activities are in progress. The following CAMP will be implemented:

Total VOCs will be monitored at the downwind perimeter of the immediate work area and areas occupied within the footprint of building continuously during excavation and drilling activities using a PID. The PID will be calibrated on a daily basis and will be capable of calculating 15-minute running average concentrations. Upwind concentrations of total VOCs will be measured at the start of each working day to establish background levels.

If total VOCs concentrations in the ambient at the downwind perimeter of the work area and areas occupied within the footprint of building exceeds 5 ppm above background levels for 15-minute average, work activities will be temporarily stopped while air monitoring continue. When instantaneous readings show decrease of total VOCs below 5 ppm over background levels, work will resume with continued air monitoring.

If total VOCs concentrations in the ambient at the downwind perimeter of the work area and areas occupied within the footprint of building persists at levels exceeding 5 ppm above background levels but less than 25 ppm, work activities will be stopped, source of vapors will be identified and corrective actions will be taken while air monitoring continue. After these steps, work activities will resume provided that the total VOCs levels at the half the distance downwind from the work area to the nearest commercial structure, but in no case less than 20 feet, is below 5 ppm above background levels for the 15-minute average.

If total VOCs concentrations in the ambient at the downwind perimeter of the work area and areas occupied within the footprint of building exceeds 25 ppm above background levels, work activities will be shut down. Source of vapors will be identified and corrective actions will be taken while air monitoring continue. Work activities will resume only after instantaneous readings show decrease of total VOCs below 5 ppm over background for the period of 2 hours.

All 15-minute readings will be recorded and will be available for the review by the DEC and/or DOH personnel. Instantaneous readings, used for decision making purposes will be also recorded.

Periodic air monitoring for the presence of total VOCs will be conducted during non-intrusive field activities if applicable, such as collection pre-disposal soil samples if necessary.

Particulate concentrations will be continuously monitored at the upwind and downwind perimeters of the work area and areas occupied within the footprint of building, using Portable Real-Time Particulate Monitor equipped with an audible alarm to indicate exceedance of the action level. Such monitor will be capable of measuring particulate matters less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes or less for comparison to the airborne particulate action level. In addition, airborne dust migration will be visually observed during all work activities.

If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m3) greater than levels at the upwind measuring point for the 15-minute period or if airborne dust is observed escaping the work area, then dust suppression techniques, such as water spray will be activated. Work activities will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m3 above the upwind level and provided that no visible dust is escaping the work area.

If, after implementation of dust suppression techniques, downwind PM-10 particulate level are greater than 150 mcg/m3 above the upwind level, work will be stopped and new dust suppression techniques will be implemented. Work will be resumed provided that dust suppression measures are successful in reducing the downwind PM-10 particulate levels to within 150 mcg/m3 of the upwind and no dust migration is visible.

All readings will be recorded and will be available for the review by the DEC and/or DOH personnel.

If a sensitive receptor, such as a school, day care or residential area is adjacent to the site, a fixed monitoring station should be located at that site perimeter, regardless of wind direction, and discussed in the text.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

4.2 Health and Safety Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities.

LEVELS OF PROTECTION

Based upon the hazard evaluation results, Task 1 will be performed in Level D protection. In the event that the established action level is exceeded, the level of protection will be upgraded to Level C. The following is a description of the personal protective equipment required for each level:

Level D

- Hard hat (optional for all tasks except well drilling).

- Disposable coveralls (optional).
- Safety glasses, goggles, or face shield (optional for all tasks except welding, well drilling or work involving pressurized piping).
- Steel-toe and shank, chemical-resistant boots.
- Chemical-resistant gloves (optional except when handling soil, sediment or surface water).
- Hearing protection, NRR of 35 decibels if noise exceeds OSHA safe level of 85 decibels

Level C

- Hard hat (optional for all tasks except well drilling).
- Disposable coveralls (optional).
- Safety glasses, goggles, or face shield (optional for all tasks except welding, well drilling or work involving pressurized piping).
- Steel-toe and shank, chemical-resistant boots.
- Chemical-resistant gloves (optional except when handling soil, sediment or ground water)
- Shoulder harness and lifeline (only required for confined space entry).
- Hearing protection, NRR of 35 decibels if noise exceeds OSHA safe level of 85 decibels.
- Full face air purifying respirator equipped with organic vapor cartridges.

Prior to the start of the field activities, the SSO will be responsible for the designation of the work zone, support zone, and clean zone. The work zone will be an area surrounding the immediate work being performed, where the greatest potential hazards exist. Only the necessary workers required to perform the work will be permitted in this zone. A support zone will be established for the storage of equipment.

Cuttings generated during drilling that are contaminated and cannot be left in place and will be placed in drums or stockpiled under plastic sheeting until they can be removed from the drilling area for disposal. The method of disposal will be determined after the nature of contamination in the cuttings has been determined.

SAFE WORK PRACTICES

All utilities and structures will be cleared and marked out prior to the start of any ground intrusive work.

The SSO will inform all subcontractors of the potential hazards associated with the site and the planned field activities. A copy of the HASP will be made available for their review.

No eating, drinking, or smoking will be permitted in the work and support zones.

No sources of ignition, such as matches or lighters will be permitted in the work and support zones.

Calls for help will be made via the cellular phone.

During hazardous weather conditions, such as lightning and thunder storms, work will cease immediately.

EMERGENCY PLAN

On-site verbal communications should not be a problem since all tasks will be performed in Level D protection. In the event that the action level is exceeded and personnel are upgraded to Level C protection, verbal communications may become difficult. A universal set of hand signals will then be used. They are as follows:

Hand gripping throat:	Can't breathe.
Grip partner's wrist or place hands around waist:	Leave work area
Hand on top of head:	Need assistance.
Thumbs up:	OK, I'm all right.

Thumbs down: No, negative.

Communications from the site will be though a cellular telephone which will be brought to the site.

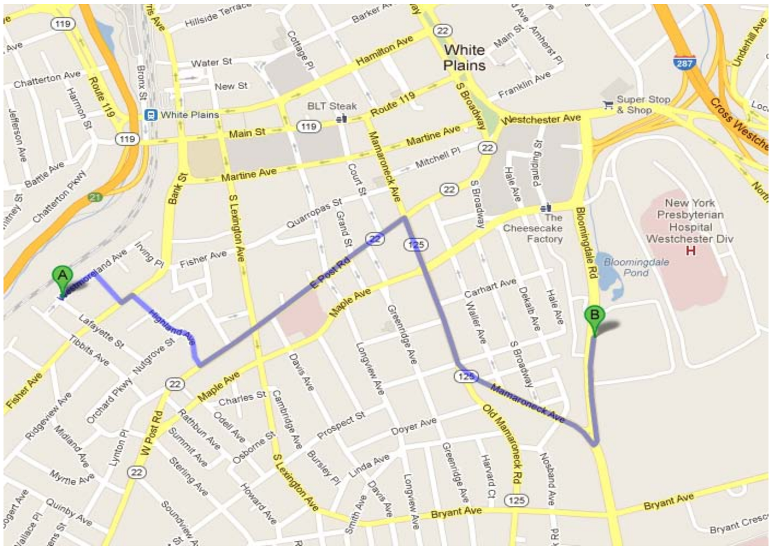
All job-related injuries and illnesses will be reported to the SSO. If medical attention is needed, the injured worker will be decontaminated, if possible, prior to leaving the site. The SSO will investigate the cause of the accident and corrective measures will be taken before the work can resume. It will be the responsibility of the SSO to complete the accident reporting form, OSHA 101, included in this report for all injuries. The completed OSHA 101 should be forwarded to the office health and safety manager within six days for recording into the OSHA 200 log. If there is a fatality, or if five (5) or more workers are hospitalized as a result of a single incident, the SSO will contact the office health and safety manager immediately for OSHA reporting purposes.

EMERGENCY TELEPHONE NUMBERS

Police	911
Fire	911
NY-Presbyterian Hospital	(914) 997-5780

HOSPITAL

The closest hospital to the site is New York-Presbyterian Hospital/Westchester Division, 21 Bloomingdale Road, White Plains, New York 10605.



To get to the hospital, go take the first right onto Interval Street, turn left onto Fisher Avenue, take the first right onto Highland Avenue, turn left onto W. New York Post Road/W Post Road, continue to follow W. Post Road, turn right onto Mamaroneck Avenue, take the first left onto Maple Avenue and turn right to the hospital.

4.3 Operations, Maintenance & Monitoring Manual

An OM&M Manual will be developed including area-specific details. This manual will focus on how to track performance, general maintenance procedures and procedures for determining when operations are complete.

4.4 System Demobilization

After completion of SVE operations, the SVE system will be demobilized and deconstructed; SVE wells and vapor probes will be decommissioned; and site restoration will be completed as needed following demobilization activities.

Site Restoration: Prior to final demobilizing from the site, rough patching/grading will be performed as needed to maintain adequate drainage, and generally return the Site to a condition substantially similar to its condition prior to the start of construction.

5.0 OPERATION AND MONITORING

This section provides a description of the operation strategies, vapor monitoring programs, and soil sampling programs to meet the remediation objectives. This section also includes a brief description of the anticipated day-to-day operation tasks, including process monitoring, general maintenance, and logging/reporting requirements.

5.1 General System Monitoring

The general system operations include routine process monitoring, performance monitoring, and compliance monitoring. The goal of monitoring is to record SVE system data to assess the progress towards the remediation objectives.

5.2 Process Monitoring

Process monitoring includes measurement of flow rates, vacuums/pressures, vapor concentrations, within the SVE process streams. The process monitoring data will be used to evaluate the mechanical performance of the system to ensure that equipment is operating within the desired performance range (i.e., target flow rates) and within manufacturer's specifications. In addition, this data will aid in identifying mechanical issues and/or for system troubleshooting purposes.

5.3 Performance Monitoring

Performance monitoring data generally includes:

Measurement of vapor concentrations in the SVE process (via field PID measurement and/or vapor samples for laboratory analysis).

Measurement of vapor concentrations, vacuums/pressures, flow rates, temperatures at wellheads and vapor probes (to assess subsurface air flow patterns and changes in vapor concentrations as the system is operated over time).

The performance monitoring data is used in conjunction with the process monitoring data to estimate the vapor mass removal rates, total mass removed by the SVE system, and provide data regarding vapor concentrations remaining in the subsurface.

5.4 Compliance Monitoring

Compliance monitoring data has a specific purpose to satisfy the air and water discharge permit requirements.

5.5 Groundwater Level Monitoring

A key aspect to the operation strategy will be regular monitoring of the site groundwater levels.

5.6 Well Field Optimization

The following well flow optimization strategies will be employed during the operation phase of the SVE system:

Adjustment of steam injection ratios for the initial soil heating phase, and/or to maintain the desired subsurface temperatures during operation.

Conduct static soil-gas rebound surveys to determine which portions of the treatment area have achieved adequate COC mass reduction (which would be quantified with soil sampling).

Maximizing VOC mass removal rates as much as possible by focusing on SVE wells within areas of higher vapor concentration/vapor production.

5.7 Soil Sampling

Soil cores will be collected and field-screened for total organic vapors at discrete intervals using a PID and jar vapor-headspace methods. Screening results will be considered when selecting the soil interval to be submitted for laboratory analysis of VOCs by USEPA Method 8260.

The soil data will be used to assess overall COC mass reduction on the soils over the course of the remediation process. A brief description of the soil sampling program is included in this section. A more detailed soil sampling program, with soil sample counts, depths, locations, and selection criteria, will be discussed in the SMP (attached). Soil sampling will be conducted annually.

5.8 Baseline Soil Sampling

The soil characterization sampling data (see SCR) will be used as the baseline soil concentrations. The initial COC mass in each treatment area was based on this data and was discussed in the above sections.

5.9 Interim Soil Sampling

Interim sampling will be performed to demonstrate the progress of soil treatment. Interim soil samples will be collected annually following start-up of the SVE system, as applicable.

5.10 Final Soil Sampling

Based on process and performance monitoring data, when the SVE system has reached an asymptotic mass removal condition, a final soil sampling event will be conducted to determine the overall level of COC mass reduction on the soils.

5.11 Data Evaluation

Process and performance monitoring data will be entered into a spreadsheet to track trends in the data. Additional monitoring can be conducted if warranted based on observed data trends (for example, if blower temperatures collected during the process monitoring indicates a potential impending maintenance issue).

5.12 Status Reporting

General status reporting will be conducted on a quarterly basis. The status reports will detail:

- Total mass removed (per reporting period and cumulatively over the operational lifetime of the system).
- Process parameters recorded during site visits and downloaded via the telemetry system.
- Flow, pressure, vacuum, and total VOC measurements collected in the field at the SVE wellheads.
- Soil temperatures and heating performance.
- Laboratory sample results and the associated laboratory and data validation reports.
- SVE discharge monitoring results.
- Any system outages and corrective measures taken.
- Scheduled maintenance, reconfiguration, or system optimization events.

5.13 SVE Shutdown Protocol

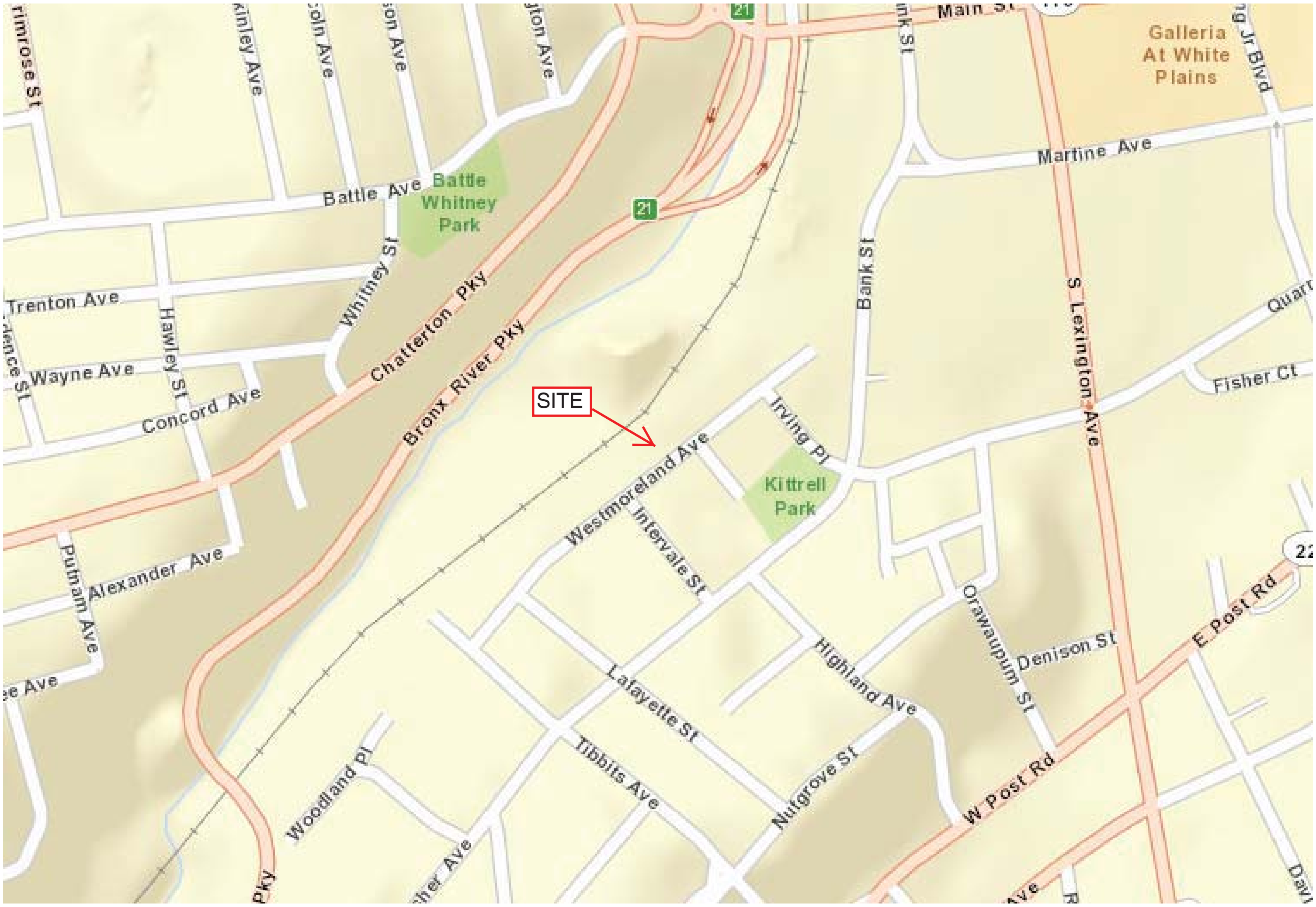
Determination of when the remedial objectives have been met will be based on air samples collected from soil vapor monitoring points and soil vapors collected in all the sub-slab area. A significant reduction in CVOC mass is expected to occur within the first 6 to 12 month operational period. During this period, the following rationale will be utilized to assess the effectiveness of the SVE system and determine the optimum time to permanently shut down the system. The SVE system will be temporarily shut down when the mass of CVOCs removed during any two consecutive monitoring periods is determined to be equal to or less than 10% of the mass removed during the prior period. The shut off period will be one month. The SVE system will then be turned on. If the SVE system shows similar results (less than 10% reduction during the next two consecutive monitoring periods), the SVE system should be shut off permanently as it has reached its limit of effectiveness.

6.0 SCHEDULE AND REPORTING

NYSDEC and NYSDOH review of this SVE Design Work Plan is expected to take approximately four (4) weeks. The project will commence with NYSDEC approval. Construction will include the purchase of a skid mounted SVE system, the installation of piping, major equipment, well construction and electrical wiring. Construction is expected to take approximately 2 weeks.

Quarterly performance monitoring reports will be submitted initially. Once mass removal rates have stabilized, the frequency of reporting may be reduced upon NYSDEC approval.

FIGURES



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FAX: (631) 206-3729

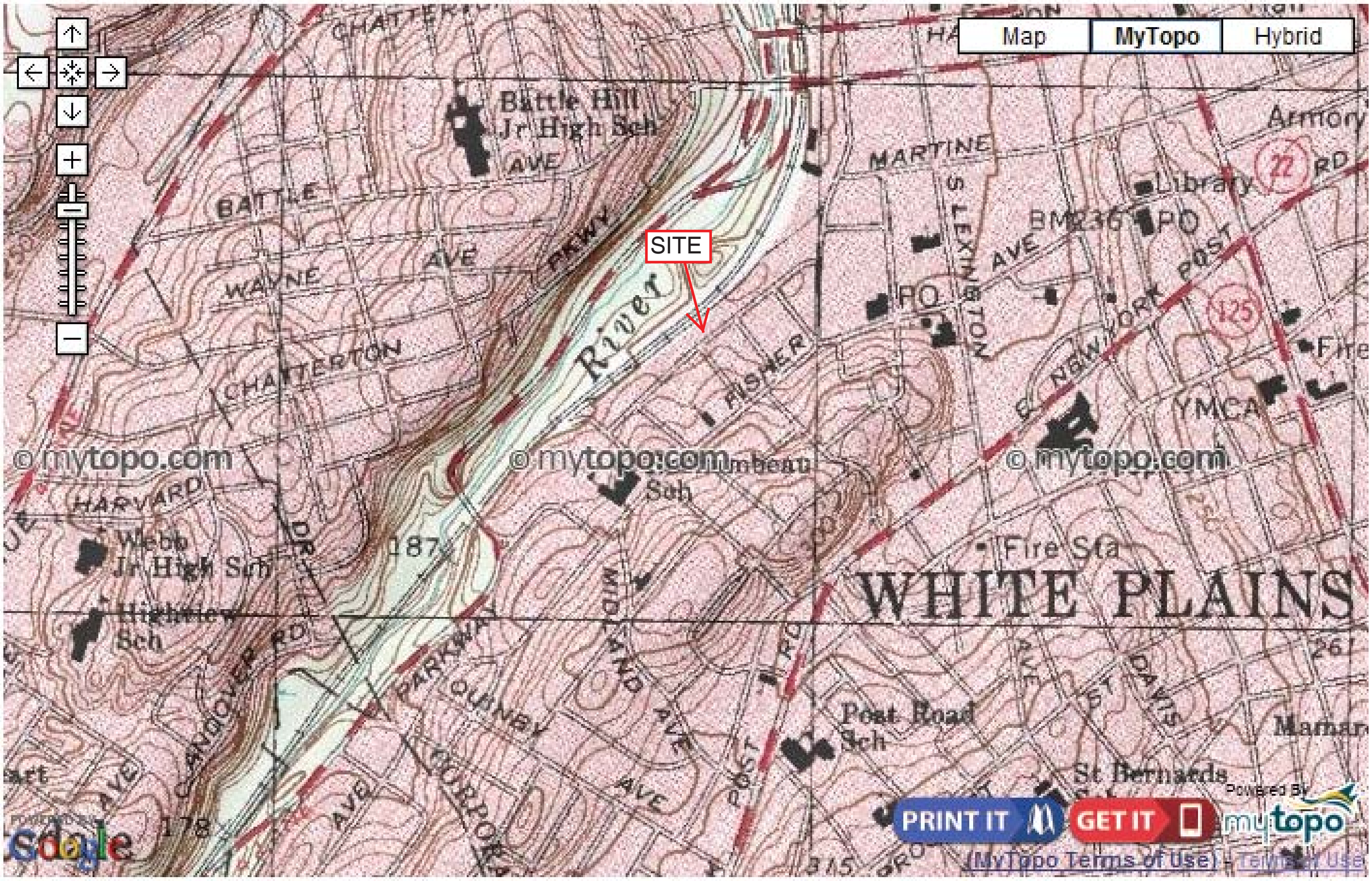
SITE LOCUS MAP

101 WESTMORELAND AVENUE
WHITE PLAINS
NY 10606

GCE PROJECT NO.: 05-003-00

FIGURE 1

STREET MAP



White Plains, New York Quadrangle

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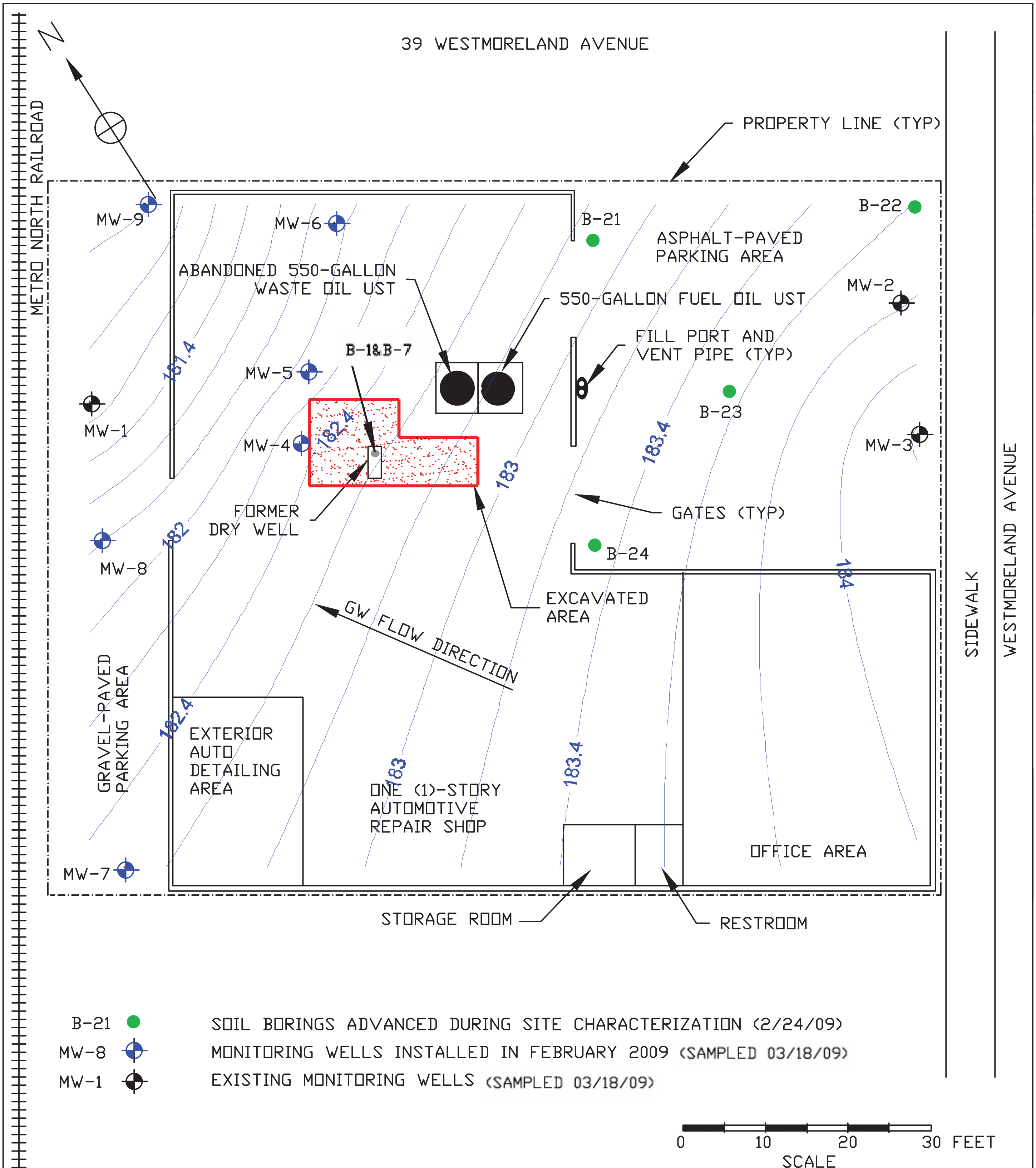
TOPO MAP

101 WESTMORELAND AVENUE
WHITE PLAINS
NY 10606

GCE PROJECT NO.: 05-003-00

FIGURE 2

TOPO
MAP



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SITE CHARACTERIZATION

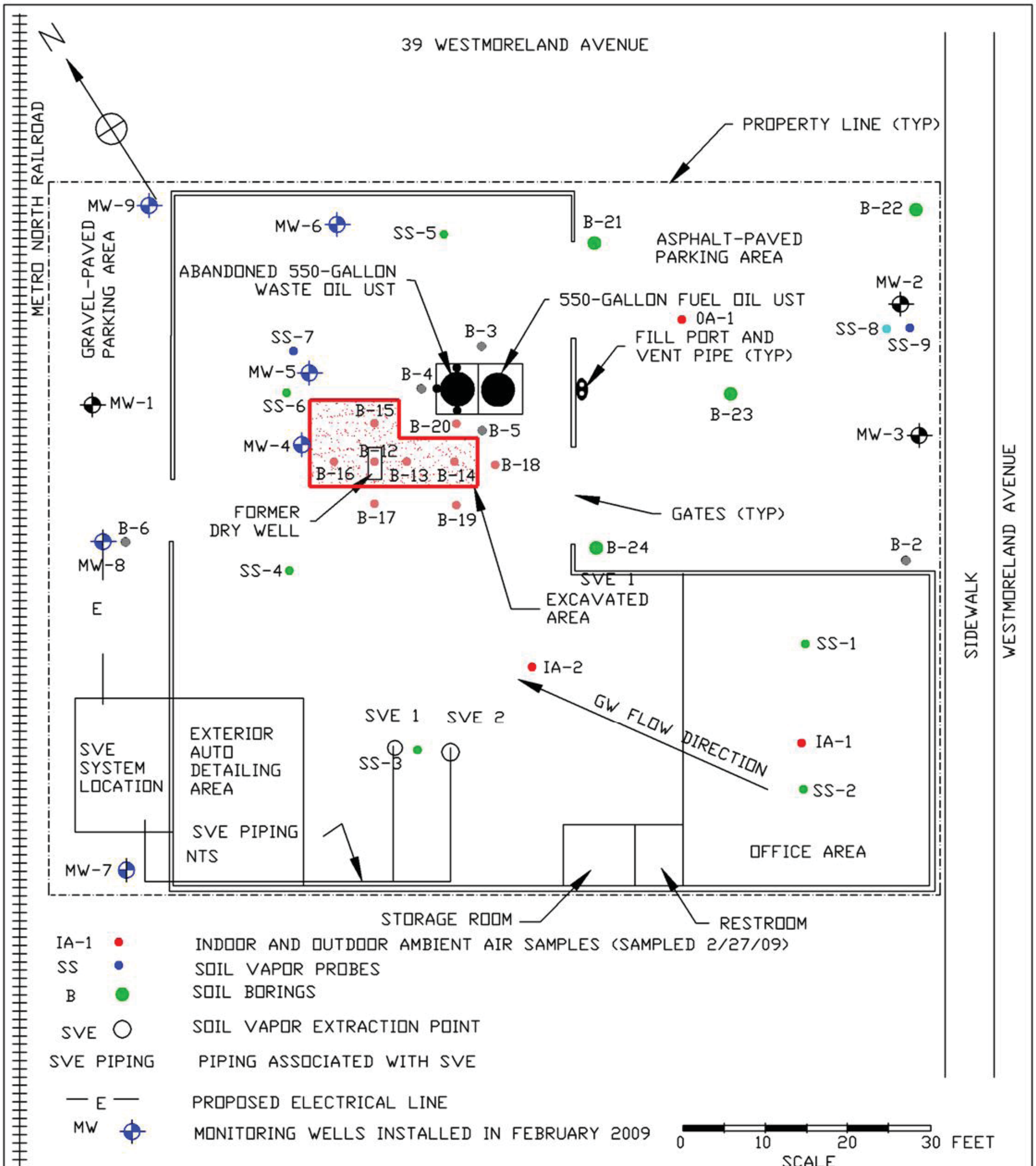
101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK 10606

GCE PROJECT NO: 05-003-00

DWG. TITLE:

FIGURE 3

GROUNDWATER CONTOURS IN FEET ABOVE SEA LEVEL



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BASIC SVE SITE PLAN

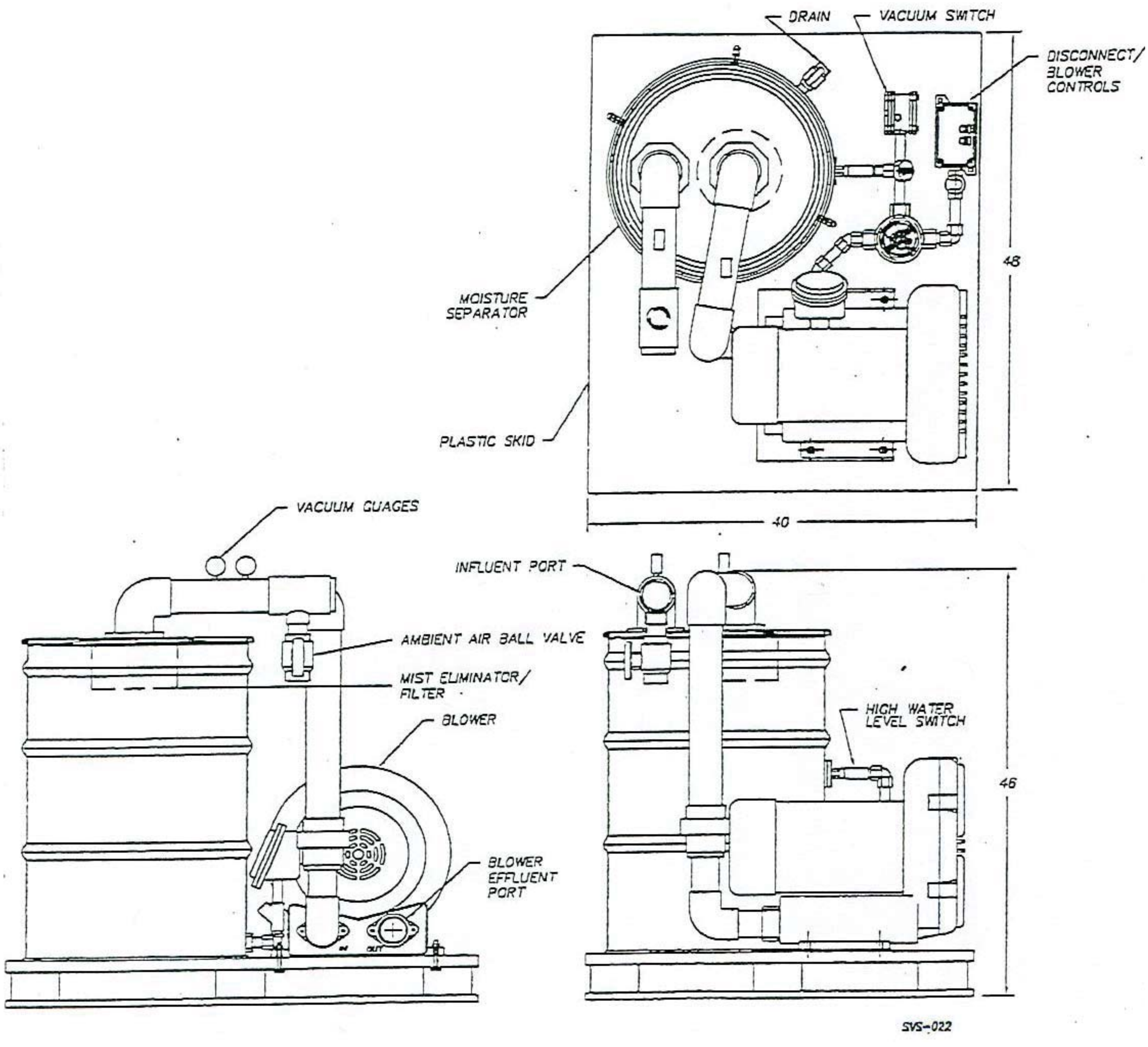
101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK 10606

GCE PROJECT NO: 05-003-00

DWG. TITLE:

FIGURE 4

BASIC
SOIL VAPOR
EXTRACTION
SITE PLAN



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BASIC SVE LAYOUT

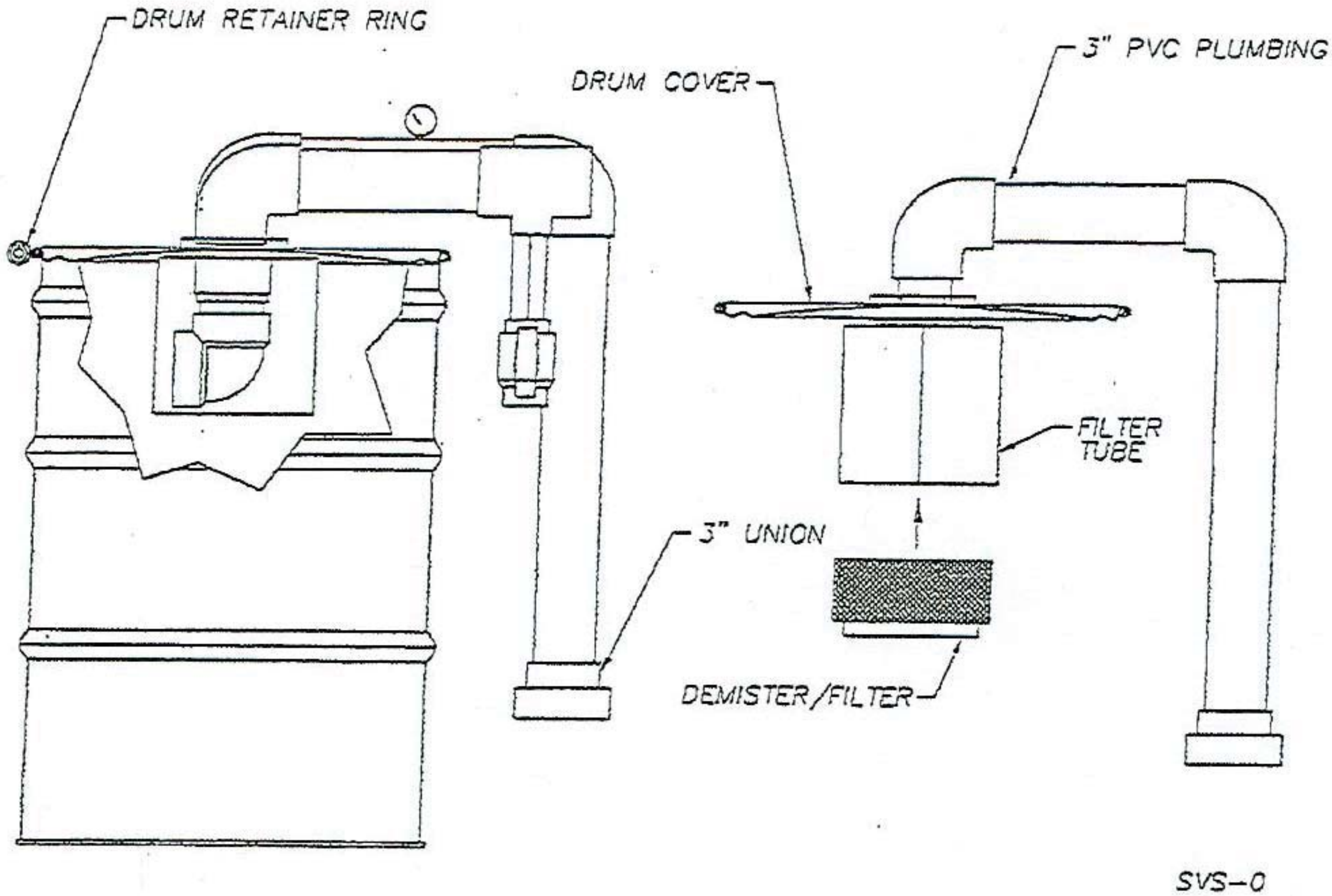
101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK 10606

GCE PROJECT NO:05-003-00

FIGURE 5

DWG.TITLE:

BASIC SOIL VAPOR EXTRACTION LAYOUT



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SVE MOISTURE SEPARATOR

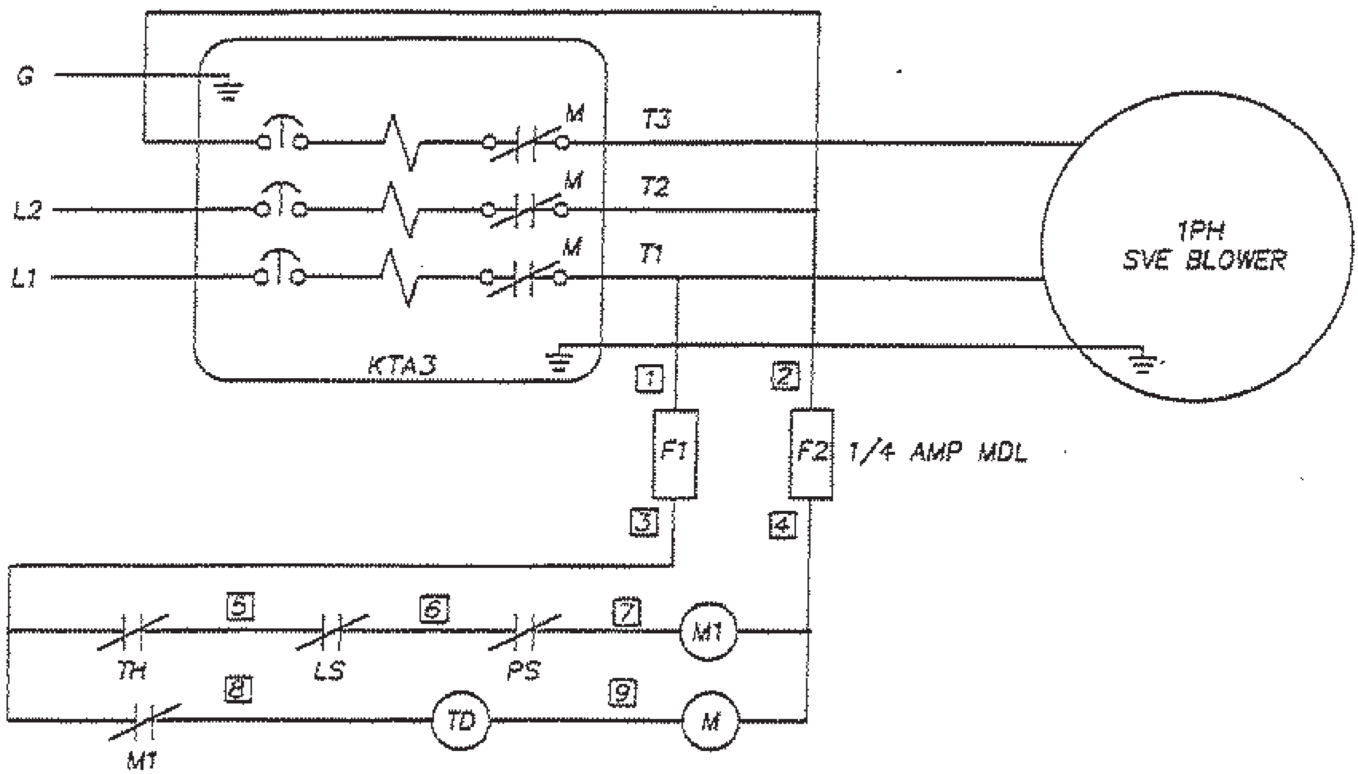
101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK
10606

GCE PROJECT NO:05-003-00

FIGURE 6

DWG.TITLE:

SOIL VAPOR EXTRACTION
MOISTURE
SEPARATOR



1HP THRU 3HP ASSEMBLIES

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SVE BLOWER ASSEMBLY

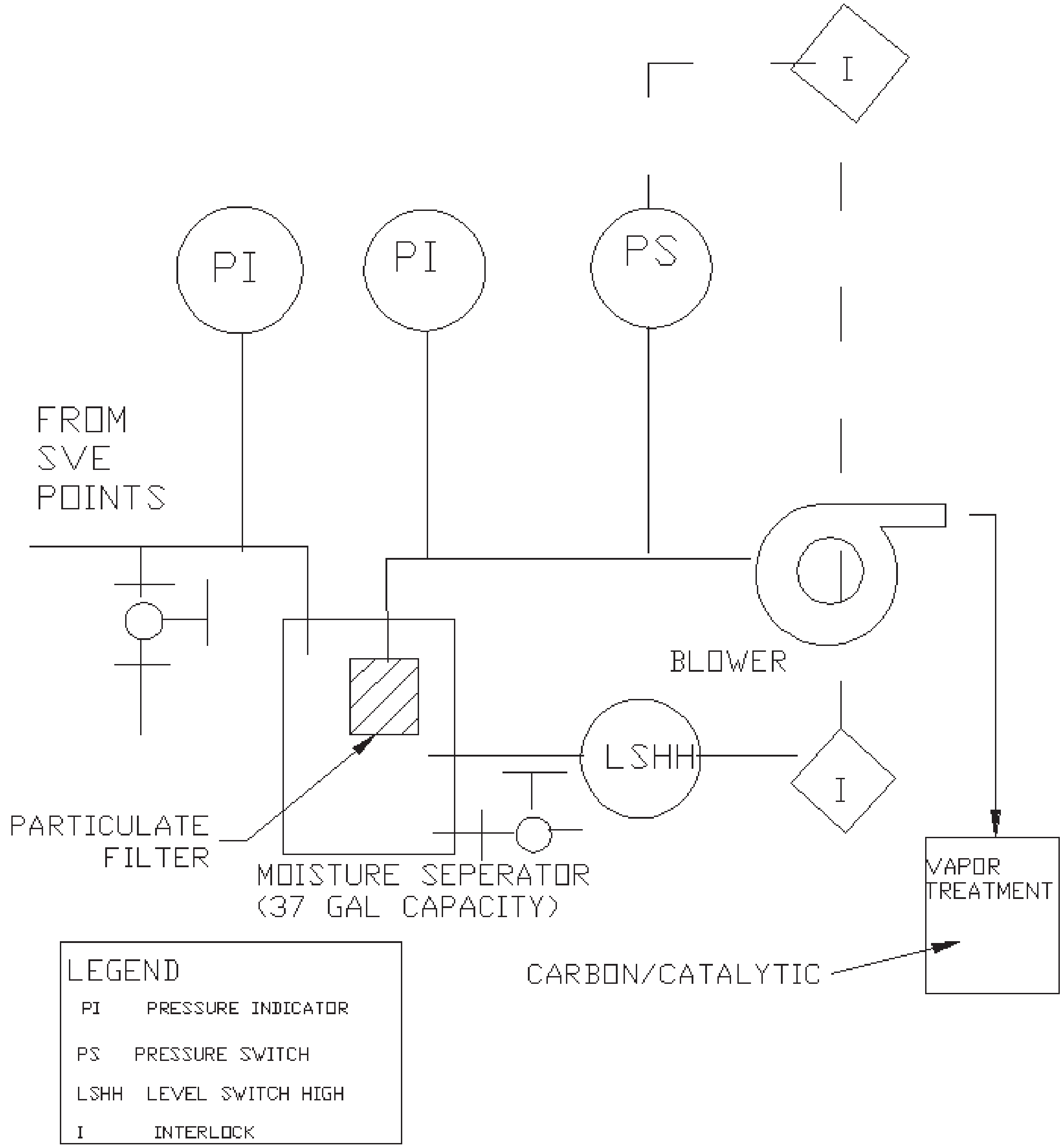
101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK 10606

GCE PROJECT NO:05-003-00

DWG.TITLE:

BLOWER ASSEMBLY
OF BASIC SVE

FIGURE 7



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BASIC SVE
P & I DIAGRAM

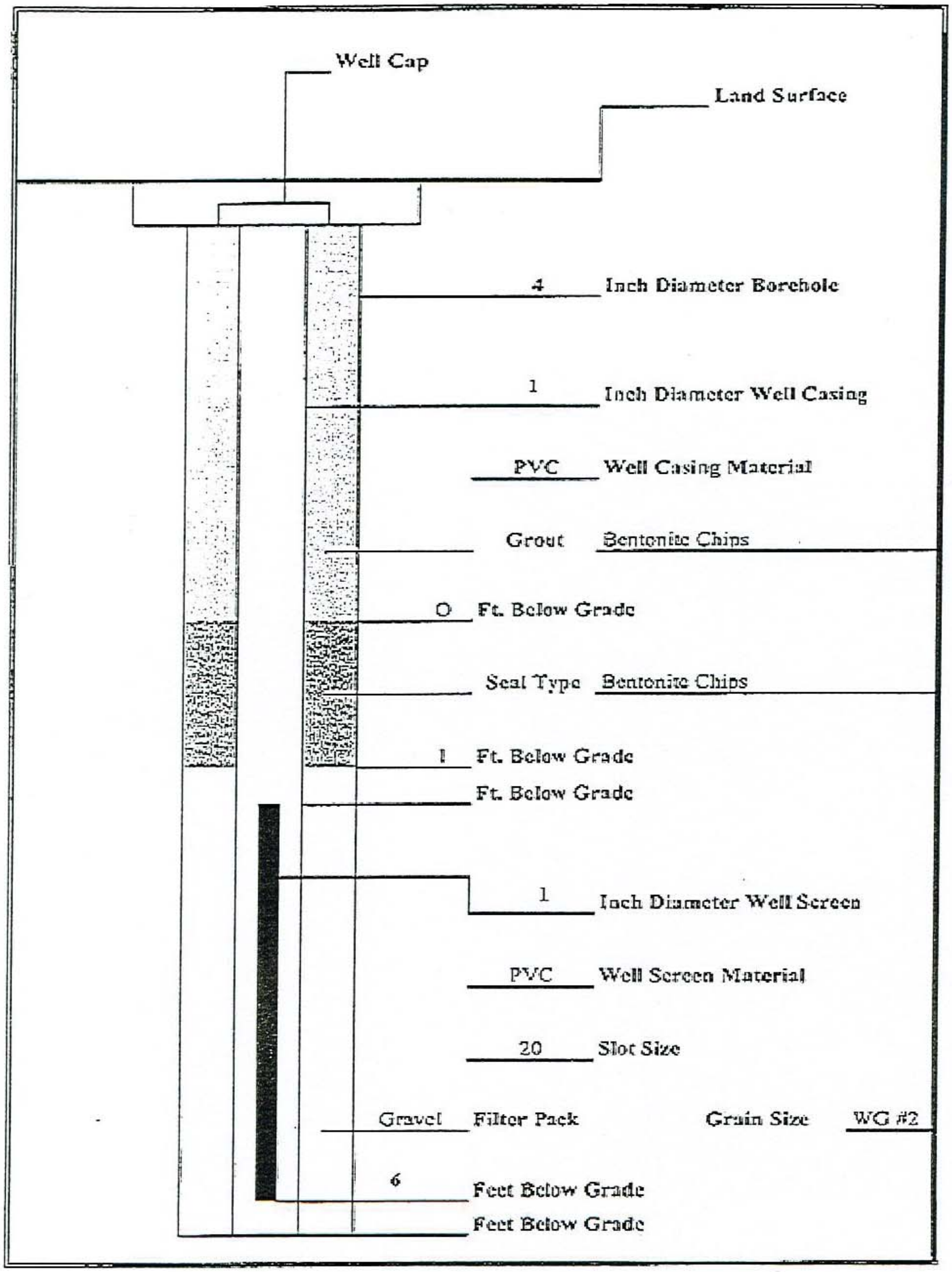
101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK 10606

GCE PROJECT NO:05-003-00

DWG.TITLE:

SVE P & I
DIAGRAM

FIGURE 8



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BASIC SVE MONITORING WELL

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK 10606

GCE PROJECT NO:05-003-00

FIGURE 9

DWG.TITLE:

BASIC SOIL VAPOR EXTRACTION MONITORING WELL

TABLES

Table 1
Summary of Detected Compounds (Soil Sampling, June- September, 2005)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater (ug/kg)	Concentrations (ug/Kg)							
			B-1 S-1A 0-2'	B-2 S-6 25-27'	B-3 S-5 20-22'	B-4 S-6 25-27'	B-5 S-4 15-17'	B-5 S-5 20-22'	B-5 S-6 25-27'	B-6 S-5 20-22'
VOC	Acetone	50	< 460	7	10	11	26	26	11	< 3.5
	Benzene	60	< 33	< 0.47	< 0.41	< 0.49	< 0.49	< 0.42	< 0.41	< 0.41
	2-Butanone	120	< 390	< 3.3	< 2.9	< 3.4	11	< 2.9	< 2.9	< 2.9
	2-Chlorotoluene	n/s	1,700	< 0.48	< 0.42	< 0.50	< 0.50	< 0.43	< 0.42	< 0.42
	cis-1,2-Dichloroethene (DCE)	250	**7,800**	< 0.38	< 0.33	< 0.40	< 0.40	< 0.34	< 0.34	< 0.33
	1,2-Dichlorethane (DCA)	20	**600**	< 0.36	< 0.31	< 0.38	< 0.38	< 0.32	< 0.32	< 0.32
	1,2-Dichlorobenzene	1,100	**150,000**	< 0.45	< 0.39	< 0.47	< 0.47	< 0.40	< 0.40	< 0.40
	1,4-Dichlorobenzene	1,800	**3,900**	< 0.64	< 0.56	< 0.67	< 0.67	< 0.57	< 0.56	< 0.56
	Ethylbenzene	1,000	**1,400**	< 0.41	< 0.36	< 0.43	< 0.43	< 0.37	< 0.37	< 0.36
	Isopropylbenzene	2,300	320	< 0.49	< 0.42	< 0.51	< 0.51	< 0.43	< 0.43	< 0.43
	Methylene chloride	50	**2,300**	5	< 1.9	< 2.2	< 2.2	2	< 1.9	< 1.9
	m/p-Xylenes	1,600	**6,400**	< 1.0	< 0.88	< 1.1	**1,800**	2	< 0.90	< 0.89
	n-Propylbenzene	3,900	1,200	< 0.63	< 0.55	< 0.65	< 0.65	< 0.56	< 0.56	< 0.55
	n-Butylbenzene	10,000	1,100	< 0.40	< 0.34	< 0.41	2,400	< 0.35	< 0.35	< 0.35
	o-Xylene	1,600	**4,200**	< 0.45	< 0.39	< 0.47	**2,300**	54	< 0.40	< 0.40
	p-Isopropyltoluene	10,000	1,400	< 0.50	< 0.43	< 0.52	8,200	190	< 0.44	< 0.44
	sec-Butylbenzene	11,000	660	< 0.49	< 0.43	< 0.51	2,800	< 0.44	< 0.43	< 0.43
	1,3,5-Trimethylbenzene	8,400	4,600	< 0.58	< 0.50	< 0.60	6,900	39	< 0.51	< 0.51
	1,2,4-Trimethylbenzene	3,600	**14,000**	< 0.44	< 0.39	< 0.46	**16,000**	< 0.40	< 0.39	< 0.39
	Trichloroethene (TCE)	470	**1,900**	< 0.36	< 0.31	< 0.38	2	< 0.32	< 0.32	< 0.32
	Tetrachloroethene (PCE)	1,300	**180,000**	3	< 0.74	< 0.89	1,000	**11,000**	< 0.76	< 0.75
	Tert butyl alcohol (TBA)	930	< 610	< 1.9	< 1.7	< 2.0	< 1.7	27	6	< 1.7
	Toluene	700	**5,900**	< 0.47	< 0.41	< 0.49	21	2	< 0.42	< 0.42
	Vinyl chloride (VC)	20	< 37	< 0.96	< 0.84	< 1.0	< 0.85	< 0.86	< 0.85	< 0.85
	Naphthalene	12,000	6,100	< 0.68	< 0.60	< 0.71	**26,000**	17	< 0.61	< 0.60
	Total VOCs		395,480	14	10	11	67,460	11,359	17	0
	Total Chlorinated Solvents		348,200	8	0	0	1,002	11,002	0	0
	Total BTEX		17,900	0	0	0	4,121	58	0	0

n/s	No standards
< 0.49	Compounds were analyzed, but were non-detected or detected below their detection limit.
11,000	Compounds were detected above Part 375-6 Recommended Soil Cleanup Objectives.

Table 2
Summary of Detected Compounds (Groundwater Sampling)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	New York Groundwater Quality Standards & Guidance values	Concentrations (ug/L)													
			MW-1 1/10/03	MW-1 WS-1 9/21/05	MW-1 WS-2 9/21/05	MW-2 WS-1 9/21/05	MW-3 WS-1 9/21/05	MW-3 WS-2 9/21/05	B-2 WS-1 06/8/05	B-3 WS-1 6/22/05	B-4 WS-1 6/22/05	B-5 WS-1 6/22/05	B-6 WS-1 9/21/05	B-7 WS-1 9/21/05	Trip Bl. T-1 9/21/05	Field Bl. F-1 9/21/05
VOC	Acetone	50	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	11	21	< 2.3	8.8	< 2.3	< 2.3
	Benzene	1	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39
	2-Butanone	n/s	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	7.6	< 1.1	< 1.1	< 1.1	< 1.1
	Carbon disulfide	n/s	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	1.8
	Chloroform	7	< 0.33	0.97	1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	1.2	< 0.33	< 0.33	< 0.33	< 0.33
	cis-1,2-Dichloroethene (DCE)	5	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	2.5	< 0.29	**15**	< 0.29	< 0.29
	1,1-Dichloroethene	5	**51**	**18**	**15**	**12**	4.8	**5.1**	1.3	< 0.42	< 0.42	< 0.42	4.6	< 0.42	< 0.42	< 0.42
	1,1-Dichlorethane	5	**20**	< 0.38	< 0.38	4.5	**5.9**	**5.7**	2	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
	1,2-Dichlorethane	0.6	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	**2.4**	< 0.34	< 0.34
	Ethylbenzene	5	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	2.1	< 0.45	< 0.45	< 0.45	< 0.45
	Isopropylbenzene	5	< 0.44	< 0.44	< 0.44	< 0.44	1.7	2	< 0.44	< 0.44	< 0.44	0.9	< 0.44	< 0.44	< 0.44	< 0.44
	Methylene Chloride	5	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	14	< 0.43	< 0.43
	Methyl-Tert-Butyl-Ether (MTBE)	50	< 0.28	0.56	< 0.28	0.75	< 0.28	< 0.28	< 0.28	< 0.28	1.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
	m/p-Xylenes	5	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	**17**	< 1.2	2.3	< 1.2	< 1.2
	n-Propylbenzene	5	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	1	< 0.49	< 0.49	< 0.49	< 0.49
	o-Xylene	5	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	**20**	< 0.46	1.1	< 0.46	< 0.46
	p-Isopropyltoluene	5	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	5.0	< 0.49	< 0.49	< 0.49	< 0.49
	sec-Butylbenzene	5	< 0.44	< 0.44	< 0.44	< 0.44	1.4	1.3	< 0.44	< 0.44	< 0.44	1.2	< 0.44	< 0.44	< 0.44	< 0.44
	Tert-butyl alcohol	50	< 4.5	< 4.5	< 4.5	< 4.5	< 4.5	< 4.5	< 4.5	< 4.5	< 4.5	11.0	< 4.5	< 4.5	< 4.5	< 4.5
	Tert-butylbenzene	n/s	< 0.39	< 0.39	< 0.39	< 0.39	0.51	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39
	1,3,5-Trimethylbenzene	5	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	**10**	< 0.42	2.2	< 0.42	< 0.42
	1,2,4-Trimethylbenzene	5	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	**26**	< 0.44	2.6	< 0.44	< 0.44
	1,1,1-Trichloroethane	5	**270**	**130**	**140**	**170**	**50**	**50**	< 0.32	**21**	< 0.32	< 0.32	**49**	< 0.32	< 0.32	< 0.32
	Trichloroethene (TCE)	5	< 0.46	1.9	1.8	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	1.8	< 0.46	< 0.46
	Tetrachloroethene (PCE)	5	3	2.4	2.3	**8.8**	**16**	**17**	2.0	1.4	1.4	**21**	3.4	**21**	< 0.48	< 0.48
	Toluene	5	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	2	< 0.36	**16**	< 0.36	< 0.36
	Vinyl chloride	2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	Naphthalene	10	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	**54**	< 0.34	< 0.34	< 0.34	< 0.34
	Total VOCs		344	154	160	196	80	81	5	22	14	204	57	87	0	2
	Total Chlorinated Solvents		344	153	160	195	77	5	22	1	25	57	40	0	0	0
	Total BTEX		0	0	0	0	2	0	0	0	42	0	19	0	0	0
	pH			7.30		6.96	7.07									
	T°C			14.95		14.90	14.69									
	Conductivity (us/cm)			2,320		1,710	1,622									
	Dissolved Oxygen (mg/L)			5.8		3.6	0.8									
	ORP (mV)			220		231	216									

n/s	No standards
< 0.42	Compounds were analyzed, but were non-detected or detected below their detection limit.
17	Compounds were detected above the New York Groundwater Quality Standards & Guidances values

Table 3
Summary of Detected Compounds (Soil Sampling, 10/31/2007 and 3/27/2008)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater	Concentrations (ug/Kg)																			
			B-1 2 S-1 0-2'	B-12 S-2 2-4'	B-12 S-7 25-27'	B-13 S-1 0-2'	B-13 S-7 25-27'	B-14 S-1 0-2'	B-14 S-7 25-27'	B-15 S-1 0-2'	B-15 S-7 25-27'	B-16 S-1 0-2'	B-16 S-7 25-27'	B-17 S-1 0-2'	B-17 S-7 25-27'	Duplicate B-12 S-7 25-27'	B-1 8 S-1 0-2'	B-18 S-7 25-27'	B-1 9 S-1 0-2'	B-19 S-7 25-27'	B-20 S-1 0-2'	B-20 S-3 25-27'
VOC	cis-1,2-Dichloroethene (DCE)	250	< 10.75	< 5.10	< 5.10	63	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	54	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
	t-1,2-Dichloroethene (DCE)	190	< 10.75	< 5.10	< 5.10	10	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
	1,2-Dichlorethane (DCA)	20	< 10.75	< 5.10	< 5.10	**36**	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
	1,2-Dichlorobenzene	1,100	**6,000**	8	13	430	10	< 21.50	< 5.10	13	< 5.10	31	< 5.10	< 11.49	< 5.10	11	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
	1,3-Dichlorobenzene	2,400	200	11	< 5.10	< 5.43	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
	1,4-Dichlorobenzene	1,800	670	37	< 5.10	14	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
	p-Isopropyltoluene	n/s	< 10.75	< 5.10	< 5.10	< 5.43	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	9.3	< 5.15
	Methylene chloride	50	< 10.75	< 5.10	< 5.10	30	< 5.26	< 21.50	< 5.10	12	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
	m/p-Xylenes	1,600	< 21.50	< 10.20	< 10.20	13	< 10.52	< 43.01	< 10.20	< 21.73	< 10.20	< 22.72	< 10.20	< 22.98	< 10.20	< 10.20	< 41.66	< 10.98	< 43.01	< 10.52	< 10.30	< 10.30
	Naphthalene	n/s	12	< 5.10	< 5.10	22	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	190	< 5.15
	o-Xylene	1,600	< 10.75	< 5.10	< 5.10	11	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
	1,1,1-Trichloroethane (TCA)	680	< 10.75	< 5.10	< 5.10	< 5.43	< 5.26	**1,400**	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	96	< 5.49	270	< 5.26	< 5.15	< 5.15
	1,2,3-Trichlorobenzene	n/s	52	5	< 5.10	< 5.43	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
	1,2,4-Trichlorobenzene	n/s	270	13	< 5.10	12	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
	Trichloroethene (TCE)	470	17	< 5.10	< 5.10	9	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	18	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
	1,2,4-Trimethylbenzene	3,600	< 10.75	< 5.10	< 5.10	41	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	18	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	8.2	< 5.15
	1,2,4,5-Trimethylbenzene	n/s	< 10.75	< 5.10	< 5.10	100	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	43	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	160	< 5.15
	1,3,5-Trimethylbenzene	8,400	< 10.75	< 5.10	< 5.10	25	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	15	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	11	< 5.15
	Tetrachloroethene (PCE)	1,300	**14,000**	220	21	130	< 5.26	**3,800**	< 5.10	170	< 5.10	300	7	480	< 5.10	27	25	< 5.49	280	5.3	110	< 5.15
	Toluene	700	39	< 5.10	< 5.10	25	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	34	< 5.49	61	< 5.26	< 5.15	< 5.15
SVOC	1,2-Dichlorobenzene	n/s	67,000	410	510	5,400	37	35	< 30.61	2,000	< 5.10	3,100	76	36	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
	1,3-Dichlorobenzene	n/s	1,700	< 153.06	< 30.61	70	< 31.57	< 32.25	< 30.61	< 163.04	< 5.10	< 170.45	< 30.61	< 34.48	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
	1,4-Dichlorobenzene	n/s	8,300	< 153.06	110	210	< 31.57	< 32.25	< 30.61	170	< 5.10	< 170.45	< 30.61	< 34.48	< 30.61	84	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
	1,2,4-Trichlorobenzene	n/s	1,200	< 153.06	< 30.61	< 32.60	< 31.57	< 32.25	< 30.61	< 163.04	< 5.10	< 170.45	< 30.61	< 34.48	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
	2-Methylnapthalene	n/s	5,200	< 153.06	38	93	< 31.57	49	< 30.61	370	< 30.61	500	< 30.61	40	< 30.61	35	< 31.25	< 32.96	260	< 31.57	320	< 30.92
	Acenaphthylene	107,000	< 161.29	< 153.06	< 30.61	< 32.60	< 31.57	< 32.25	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	52	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
	Anthracene	1,000,000	< 161.29	< 153.06	< 30.61	< 32.60	< 31.57	< 32.25	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	34	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
	Benzo(a)anthracene	1,000	170	< 153.06	< 30.61	130	< 31.57	< 161.29	< 30.61	170	< 30.61	< 170.45	< 30.61	290	< 30.61	< 30.61	52	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
	Benzo(a)pyrene	22,000	< 161.29	< 153.06	< 30.61	120	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	250	< 30.61	< 30.61	39	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
	Benzo(b) fluoranthene	1,700	< 161.29	< 153.06	< 30.61	170	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	340	< 30.61	< 30.61	78	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
	Benzo(g,h,i)perylene	1,000,000	< 161.29	< 153.06	< 30.61	46	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	110	< 30.61	< 30.61	43	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
	Benzo(k)fluoranthene	1,700	< 161.29	< 153.06	< 30.61	160	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	300	< 30.61	< 30.61	43	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
	BenzylButylPhthalate	n/s	3,400	< 153.06	85	33	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	< 34.48	< 30.61	91	< 31.25	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
	Bis(2-ethylhexyl)phthalate	n/s	1,800	840	66	< 32.60	< 31.57	< 161.29	< 30.61	< 163.04	160	< 170.45	< 30.61	< 34.48	48	67	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
	Carbazole	n/s	< 161.29	< 153.06	< 30.61	33	< 31.57	< 32.25	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	< 34.48	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
	Chrysene	1,000	260	< 153.06	< 30.61	180	< 31.57	440	< 30.61	260	< 30.61	< 170.45	< 30.61	370	< 30.61	< 30.61	150	< 32.96	170	< 31.57	< 30.92	< 30.92
	Di-n-ButylPhthalate	n/s	270	< 153.06	< 30.61	< 32.60	< 31.57	< 32.25	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	< 34.48	< 30.61	< 30.61	240	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
	Dibenzo(a,h)anthracene	1,000,000	< 161.29	< 153.06	< 30.61	< 32.60	< 31.57	< 32.25	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	57	< 30.61	< 30.61	< 31.25	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
	Fluoranthene	1,000,000	170	< 153.06	< 30.61	250	< 31.57	230	< 30.61	280	< 30.61	< 170.45	< 30.61	410	< 30.61	< 30.61	94	< 32.96	60	< 31.57	33	< 30.92
	Indeno(1,2,3-cd)pyrene	8,200	< 161.29	< 153.06	< 30.61	49	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	130	< 30.61	< 30.61	38	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
	Naphthalene	12,000	3,700	< 153.06	31	120	< 31.57	61	< 30.61	370	< 30.61	320	< 30.61	44	< 30.61	< 30.61	< 31.25	< 32.96	240	< 31.57	< 30.92	< 30.92
	Phenanthrene	1,000,000	660	< 153.06	< 30.61	220	< 31.57	240	< 30.61	180	45	170	< 30.61	180	< 30.61	< 30.61	84	< 32.96	160	< 31.57	450	< 30.92
	Pyrene	1,000,000	660	200	< 30.61	260	< 31.57	440	< 30.61	730	< 30.61	300	< 30.61	390	< 30.61	< 30.61	130	< 32.96	220	< 31.57	100	< 30.92
	Total BTEX		39	0	0	49	0	0	0	0	0	0	0	0	0	0	34	0	61	0	0	0
	Total Chlorinated Solvents		14,017	220	21	242	0	5,200	0	182	0	300	0	552	0	27	121	0	550	5.3	110	0
	Total VOC		21,260	294	34	971	10	5,200	0	195	0	407	7	552	0	38	155	0	611	5.3	488.5	0
	Total SVOC		94,490	1,450	840	7,544	37	1,495	0	4,530	205	4,390	76	3,033	48	277	991	0	1110	0	903	0
	PID Readings (ppm)		42.0	6.5	7.6	21.1	4.0	1.2	1.3	0.2	1.3	4.5	1.8	1.3	0.8	7.6	0.9	7.4	0.9	4.6	18	4.6

n/s	No standards
< 30.92	Compounds were analyzed, but were non-detected or detected below their detection limit.
14,000	Compounds were detected above the Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater

Table 4
Summary of PID Readings and Total VOC Concentrations, Soil Delineation, 10/31/2007 and 3/27/2008
101 Westmoreland Avenue, White Plains , NY
GCE Project No. 05-003-00

Sample number	Interval (feet)	Total VOC Concentrations (ug/Kg)																	
		B-12		B-13		B-14		B-15		B-16		B-17		B-18		B-19		B-20	
		PID	VOC	PID	VOC	PID	VOC	PID	VOC	PID	VOC	PID	VOC	PID	VOC	PID	VOC	PID	VOC
S-1	0-2	**42.0**	**21,260**	**21.1**	**971**	1.2	**5,200**	0.2	195	4.5	407	1.3	552	0.9	155	0.9	611		488
S-2	3-5	6.5	294	2.9		0.0		0.8		0.2		0.2		1.8		0.9			
S-3	5-7	0.2		0.0		0.0		0.2		0.2		0.0		1.8		2.8			
S-4	10-12	0.0		0.2		0.0		0.8		0.0		0.0		0.9		1.8			
S-5	15-17	0.8		0.0		0.8		0.2		0.0		0.0		9.3		2.8		18	
S-6	20-22	1.3		0.0		1.3		0.2		0.2		0.2		10.2		4.6		9.3	
S-7	25-27	7.6	34	4.0	10	1.3	0	1.3	0	1.8	0	0.8	0.0	7.4	0	4.6	5.3	4.6	0

42.0	Elevated levels of PID readings (more than 20 parts per million (ppm)
21,260	Some VOCs exceed Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater

Table 5
Summary of Detected Compounds (IRM Excavation, End Point Soil Sampling, 1/7/2009)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater	Concentrations (ug/Kg)								
			S-1 north wall 4.0'	S-2 east wall 3.5'	S-3 north wall 3.1'	S-4 east wall 2.7'	S-5 south wall 2.8'	S-6 south wall 3.5'	S-7 west wall 4.0'	S-8 bottom 4.5'	S-9 bottom 3.5'
VOC	cis-1,2-Dichloroethene (DCE)	250	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	5	< 5.15
VOC	t-1,2-Dichloroethene (DCE)	190	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,2-Dichlorethane (DCA)	20	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,2-Dichlorobenzene	1,100	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	28	< 5.15
VOC	1,3-Dichlorobenzene	2,400	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,4-Dichlorobenzene	1,800	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	p-Isopropyltoluene	n/s	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	Methylene chloride	50	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	8	< 5.15
VOC	m/p-Xylenes	1,600	< 10.41	< 10.41	< 10.30	< 10.10	< 10.41	< 10.20	< 10.10	< 10.52	< 10.30
VOC	Naphthalene	n/s	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	o-Xylene	1,600	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,1,1-Trichloroethane (TCA)	680	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,2,3-Trichlorobenzene	n/s	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,2,4-Trichlorobenzene	n/s	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	Trichloroethene (TCE)	470	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,2,4-Trimethylbenzene	3,600	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	12	< 5.15
VOC	1,2,4,5-Trimethylbenzene	n/s	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	16	< 5.15
VOC	1,3,5-Trimethylbenzene	8,400	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	7	< 5.15
VOC	Tetrachloroethene (PCE)	1,300	9.4	9.4	< 5.15	< 5.05	< 5.20	< 5.10	10	100	< 5.15
VOC	Toluene	700	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
SVOC	1,2-Dichlorobenzene	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	230	370
SVOC	1,3-Dichlorobenzene	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	1,4-Dichlorobenzene	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	1,2,4-Trichlorobenzene	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	2-Methylnapthalene	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	45	< 30.92
SVOC	Acenaphthylene	107,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Anthracene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Benzo(a)anthracene	1,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	35	< 30.92
SVOC	Benzo(a)pyrene	22,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Benzo(b) fluoranthene	1,700	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	40	< 30.92
SVOC	Benzo(g,h,i)perylene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	95	< 30.92
SVOC	Benzo(k)fluoranthene	1,700	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	35	< 30.92
SVOC	BenzylButylPhthalate	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Bis(2-ethylhexyl)phthalate	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Carbazole	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Chrysene	1,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	46	< 30.92
SVOC	Di-n-ButylPhthalate	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Dibenzo(a,h)anthracene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Fluoranthene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	65	38
SVOC	Indeno(1,2,3-cd)pyrene	8,200	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	35	< 30.92
SVOC	Naphthalene	12,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	44	< 30.92
SVOC	Phenanthrene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	55	< 30.92
SVOC	Pyrene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	68	57
	Total BTEX		0	0	0	0	0	0	0	0	0
	Total Chlorinated Solvents		9	9	0	0	0	0	10	114	0
	Total VOC		9	9	0	0	0	0	10	177	0
	Total SVOC		0	0	0	0	0	0	0	793	465
	PID Readings (ppm)		1.5	0.5	0.0	0.0	0.0	0.0	1.0	5.1	1.0

n/s	No standards
< 31.25	Compounds were analyzed, but were non-detected or detected below their detection limit.

Table 6
Summary of Detected Compounds (Soil and Groundwater Sampling, 2/24/2009)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater (mg/Kg)	Soil Concentrations (mg/Kg)									New York Ambient Water Quality Standards & Guidance Values (class GA) (ug/L)	Groundwater Concentrations (ug/L)					
			B-21 S-6 23-25'	B-21 S-7 26-27'	B-22 S-1 0-2'	B-22 S-7 26-28'	B-23 S-1 1-3'	B-23 S-7 26-27'	B-24 S-1 1-3'	B-24 S-7 26-27'	Duplicate B-23 S-1 1-3'		B-21 WS-1	B-22 WS-1	B-23 WS-1	B-24 WS-1	Duplicate B-23 WS-1	Trip Blank
VOC	1,1-Dichloroethene	0.33	< 0.01	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5	2	2	< 1	1	< 1	< 1
VOC	1,1,1-Trichloroethane (TCA)	0.68	< 0.01	< 0.01	< 0.005	< 0.005	0.11	< 0.005	0.02	< 0.005	0.02	5	**14**	**34**	**9**	**15**	**9**	< 1
VOC	1,2,4-Trimethylbenzene	3.60	0.72	0.27	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	**23**	< 1	< 1	< 1	< 1	< 1
VOC	1,2,4,5-Tetramethylbenzene	n/s	0.38	0.73	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	n/s	7	< 1	< 1	< 1	< 1	< 1
VOC	1,3,5-Trimethylbenzene	8.40	0.66	0.30	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	**12**	< 1	< 1	< 1	< 1	< 1
VOC	Isopropylbenzene	n/s	< 0.01	< 0.01	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	3	< 1	< 1	< 1	< 1	< 1
VOC	m/p-Xylenes	1.60	0.05	< 0.02	< 0.01	< 0.01	< 0.04	< 0.01	< 0.01	< 0.01	0.01	5	< 2	< 2	< 2	< 2	< 2	< 2
VOC	n-Butylbenzene	12	0.10	0.06	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	3	< 1	< 1	< 1	< 1	< 1
VOC	n-Propylbenzene	3.90	0.01	< 0.01	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	< 1	< 1	< 1	< 1	< 1	< 1
VOC	Naphthalene (v)	n/s	1.30	1.10	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	0.04	n/s	68	< 1	< 1	< 1	< 1	< 1
VOC	o-Xylene	1.60	0.10	0.03	< 0.005	< 0.005	< 0.02	< 0.005	< 0.005	< 0.005	< 0.005	5	2	< 1	< 1	< 1	< 1	< 1
VOC	p-Ethyltoluene	n/s	0.29	0.11	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	n/s	5	< 1	< 1	< 1	< 1	< 1
VOC	p-Isopropyltoluene	n/s	0.29	0.18	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	4	< 1	< 1	< 1	< 1	< 1
VOC	sec-Butylbenzene	11	0.05	0.03	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	4	< 1	< 1	< 1	< 1	< 1
VOC	Tetrachloroethene (PCE)	1.30	0.74	0.23	0.04	< 0.005	0.14	< 0.005	0.05	< 0.005	0.03	5	**17**	**19**	4	2	5	< 1
SVOC	2-Methylnapthalene	n/s	16.00	28.00	0.12	< 0.03	0.20	< 0.03	< 0.16	< 0.03	2.00	n/s	170	< 1	< 1	< 1	< 1	< 1
SVOC	Acenaphthene	98	1.40	2.30	0.09	< 0.03	1.20	< 0.03	< 0.16	< 0.03	13.00	20	11	< 1	< 1	< 1	< 1	< 1
SVOC	Acenaphthylene	107	< 0.15	< 0.15	< 0.003	< 0.03	< 0.16	< 0.03	0.63	< 0.03	< 0.03	20	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Anthracene	1000	< 0.15	< 0.15	0.16	< 0.03	1.30	< 0.03	0.24	< 0.03	13.00	50	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Benzo(a)anthracene	1.00	< 0.15	< 0.15	0.20	< 0.03	**2.30**	< 0.03	**3.70**	< 0.03	**13.00**	0.002	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Benzo(a)pyrene	22	< 0.15	< 0.15	0.24	< 0.03	1.80	< 0.03	4.10	< 0.03	17.00	0.002	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Benzo(b)fluoranthene	1.70	< 0.15	< 0.15	0.28	< 0.03	**2.00**	< 0.03	**4.10**	< 0.03	**18.00**	0.002	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Benzo(g,h,i)perylene	1000	< 0.15	< 0.15	0.06	< 0.03	0.44	< 0.03	1.10	< 0.03	3.90	5	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Benzo(k)fluoranthene	1.70	< 0.15	< 0.15	0.31	< 0.03	**1.80**	< 0.03	**4.20**	< 0.03	**17.00**	0.002	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Bis(2-ethylhexyl)phthalate	n/s	< 0.15	0.19	0.20	0.09	0.25	0.06	0.19	0.07	0.72	5	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Carbazole	n/s	< 0.15	< 0.15	0.10	< 0.03	0.60	< 0.03	< 0.16	< 0.03	6.80	n/s	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Chrysene	1.00	< 0.15	< 0.15	0.32	< 0.03	**2.20**	< 0.03	**3.50**	< 0.03	**20.00**	0.002	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Dibenzo(a,h)anthracene	1000	< 0.15	< 0.15	< 0.003	< 0.03	0.28	< 0.03	0.36	< 0.03	2.00	50	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Dibenzofuran	210	< 0.15	< 0.15	0.06	< 0.03	0.38	< 0.03	< 0.16	< 0.03	6.80	5	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Fluoranthene	1000	< 0.15	< 0.15	0.76	< 0.03	4.60	< 0.03	6.40	< 0.03	60.00	50	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Fluorene	386	1.10	< 0.15	0.08	< 0.03	0.63	< 0.03	< 0.16	< 0.03	6.80	50	15	< 1	< 1	< 1	< 1	< 1
SVOC	Indeno(1,2,3-cd)pyrene	8.20	< 0.15	< 0.15	0.06	< 0.03	0.49	< 0.03	1.20	< 0.03	4.50	0.002	< 10	< 1	< 1	< 1	< 1	< 1
SVOC	Naphthalene (sv)	12	2.60	4.40	0.08	< 0.03	0.57	< 0.03	< 0.16	< 0.03	6.90	10	**64**	< 1	< 1	< 1	< 1	< 1
SVOC	Phenanthrene	1000	3.20	5.20	0.85	< 0.03	4.40	< 0.03	0.53	< 0.03	55.00	50	28	< 1	< 1	< 1	< 1	< 1
SVOC	Pyrene	1000	< 0.15	< 0.15	0.86	< 0.03	5.20	< 0.03	8.00	< 0.03	49.00	50	< 10	< 1	< 1	< 1	< 1	< 1
	Total BTEX		0.15	0.03	0	0	0	0	0	0	0.01		2	0	0	0	0	0
	Total Chlorinated Solvents		0.74	0.23	0.04	0	0.25	0	0.06	0	0.05		31	53	13	18	14	0
	Total VOC		4.69	3.03	0.04	0	0.25	0	0.06	0	0.10		164	55	13	18	14	0
	Total SVOC		24.30	40.09	4.83	0.09	30.64	0.06	38.25	0.07	315.42		288	0	0	0	0	0
	PID Readings (ppm)		140.00	62.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							

n/s	No standards
< 0.15	Compounds were analyzed, but were non-detected or detected below their detection limit.
20,000	Compounds were detected above the Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater and/or the New York Ambient Water Quality Standards & Guidance Values

Table 7
Summary of Detected Compounds (Groundwater Sampling, 3/18/2009)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	New York Groundwater Quality Standards & Guidance Values (µg/L)	Concentrations (ug/L)									
			MW-1 WS-1	MW-2 WS-1	MW-3 WS-1	MW-4 WS-1	MW-5 WS-1	MW-6 WS-1	MW-7 WS-1	MW-8 WS-1	MW-9 WS-1	Duplicate MW-2 WS-1
VOCs	Benzene	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Carbon Disulfide	50	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Chloroform	7	2	< 1	< 1	< 1	1	< 1	3	2	< 1	< 1
	1,1-Dichloroethene	5	**14**	3	2	**5**	**5**	4	**13**	**7**	< 1	3
	1,1-Dichloroethane	5	3	1	3	< 1	1	3	**6**	2	< 1	1
	1,2-Dichloroethane	0.6	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Ethylbenzene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	p-Ethyltoluene	n/s	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1
	Freon 113	5	< 1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2
	Isopropylbenzene	5	< 1	< 1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Methylene Chloride	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Methyl-Tert-Butyl-Ether (MTBE)	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	m/p-Xylenes	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	o-Xylene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1
	p-Isopropyltoluene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	sec-Butylbenzene	5	< 1	< 1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Tert-Butyl Alcohol	50	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Tert-Butylbenzene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	1,3,5-Trimethylbenzene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1
	1,2,4,5-Tetramethylbenzene	n/s	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1
	1,2,4-Trimethylbenzene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1
	1,1,1-Trichloroethane	5	**120**	**53**	**21**	**43**	**35**	**22**	**230**	**91**	**9**	**54**
	Trichloroethene (TCE)	5	2	< 1	1	1	< 1	2	2	< 1	< 1	< 1
	Tetrachloroethene (PCE)	5	3	**16**	**19**	3	4	**11**	2	3	**27**	**17**
	Toluene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Vinyl Chloride	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Naphthalene (volatile)	n/s	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	12	< 1
SVOCs*	bis (2-ethylhexyl) phthalate (sv)	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	2-Methylnaphthalene (sv)	n/s	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.1	< 1
	Naphthalene (sv)	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4.5	< 1
	Total BTEX		0	0	0	0	0	0	0	0	2.0	0
	Total Chlorinated Solvents		144	73	46	52	46	42	256	105	36	75
	Total VOCs		144	75	50	52	46	42	256	105	56	77
	Total SVOCs		0	0	0	0	0	0	0	0	8	0
	pH		6.5	6.6	6.5	7.0	6.9	6.7	6.8	6.8	6.7	6.6
	T (^{o}C)		61.1	62.3	62.2	61.0	61.4	61.6	61.7	61.3	61.4	62.3
	Conductivity (uS/cm)		1,270	1,607	1,458	1,791	1,900	1,604	1,510	1,870	1,702	1,607
	Dissolved Oxygen (mg/L)		2.2	1.0	0.0	2.1	0.3	0.4	2.4	1.8	0.5	1.0
	ORP (mV)		-4	-24	-34	20	-9	-7	15	-10	-20	-24

n/s	No standards
< 1	Compounds were analyzed, but were non-detected or detected below their detection limit.
17	Compounds were detected above the New York Groundwater Quality Standards & Guidances Values

Table 8
Summary of Detected Compounds (Soil Vapor Intrusion - Air Sampling, µg/m³)
AAA, 101 Westmoreland Avenue, White Plains, NY, 2/27/2009
GCE Project No. 05-003-00

Sample ID	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-7(D)	SS-8	SS-9	IA-1	IA-2	OA-1
Analyte	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
1,1 Dichloroethane	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	33.22	< 0.39	33.22	< 0.39
1,1 Dichloroethene	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	83.37	< 0.39	83.37	< 0.39
1,1,1-Trichloroethane (TCA)	19.65	24.57	3330.00	2674.90	1201.00	1310.20	485.85	709.67	529.52	3821.30	2.89	< 0.54	< 0.54
1,2,4-Trimethylbenzene	0.84	1.67	73.79	2.12	1.13	1.08	88.54	118.06	< 2.45	59.03	21.15	59.03	< 2.45
1,3,5-Trimethylbenzene	0.54	0.49	22.14	0.79	0.49	0.49	41.81	47.71	< 2.45	17.71	5.90	17.71	< 2.45
2,2,4-Trimethylpentane	10.26	7.93	< 0.46	0.93	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	8.40	24.26	< 0.46
Acetone	76.10	95.12	18.07	18.79	12.60	8.56	380.48	28.54	68.96	99.88	187.86	546.94	8.32
Benzene	5.43	3.83	1.40	0.93	0.80	0.70	2.62	0.80	2.04	0.89	8.94	28.73	0.96
c-1,2-Dichloroethene	< 0.39	< 0.39	43.64	< 0.39	< 0.39	5.55	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39
Chloroform	< 0.97	< 0.97	< 0.97	< 0.97	2.87	< 0.97	< 0.97	< 0.97	2.09	43.34	< 0.97	< 0.97	< 0.97
Dichlorodifluoromethane	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	15.83	27.71	< 0.98
Ethyl Alcohol	22.60	48.96	103.57	126.16	88.50	116.75	< 3.76	< 3.76	82.85	75.32	225.96	414.26	9.60
Ethyl Benzene	6.94	1.69	7.81	7.37	1.78	1.47	30.80	28.63	1.52	21.69	15.62	47.72	0.48
Freon-113	< 0.47	< 0.47	51.38	31.44	41.41	26.84	19.17	24.54	61.34	429.41	< 0.47	< 0.47	< 0.47
Heptane	7.77	7.37	2.05	1.10	1.64	0.86	15.96	2.62	< 2.04	1.68	14.73	40.51	< 2.04
Hexane	22.93	11.29	3.25	< 1.05	38.81	2.58	9.53	< 1.05	45.86	< 1.05	25.75	70.56	< 1.05
Isopropyl Alcohol	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	14.73	< 12.28	< 12.28
m/p-Xylene	21.73	6.52	33.90	23.90	6.52	5.65	130.38	134.73	5.22	99.96	56.50	160.80	1.56
Methyl Ethyl Ketone	< 2.948	16.79	< 2.948	< 2.948	< 2.948	< 2.948	170.87	< 2.948	< 2.948	< 2.948	50.08	147.30	< 2.948
Methylene Chloride	7.30	< 0.34	< 0.34	< 0.34	10.77	3.82	< 0.34	< 0.34	21.19	< 0.34	< 0.34	< 0.34	< 0.34
Methylisobutylketone	11.48	< 4.09	< 4.09	< 4.09	< 4.09	< 4.09	24.61	< 4.09	< 4.09	< 4.09	34.04	106.63	< 4.09
o-Xylene	6.08	2.09	16.95	6.08	1.91	1.69	56.50	60.84	1.43	39.55	19.12	56.50	0.56
p-Ethyltoluene	1.72	1.18	33.89	1.92	1.03	0.83	103.13	127.69	< 2.45	44.69	19.64	47.15	< 2.45
Styrene	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	5.11	11.92	< 0.42
Methyl Tert. Butyl Ether	< 0.36	< 0.36	< 0.36	< 0.36	6.69	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Tetrachloroethene (PCE)	2103.40	1017.80	6785.00	1357.00	284.97	1017.80	1832.00	2171.20	332.47	3460.40	5563.70	13570.00	20.36
Toluene	207.08	109.19	64.01	36.90	52.71	30.87	1129.50	139.31	45.18	18.83	527.10	1506.00	6.40
Trichloroethene (TCE)	3.60	1.56	46.75	0.27	1.18	6.45	4.62	5.91	1.99	17.19	2.20	4.94	< 0.214
Total Chlorinated VOCs	2133.95	1043.93	10256.77	4063.61	1542.20	2370.66	2341.64	2911.32	948.60	7888.23	5584.62	13602.65	20.36
Total BTEX	247.26	123.32	124.07	75.18	63.72	40.38	1349.80	364.31	55.39	180.92	627.28	1799.75	9.96
Total VOCs	2535.45	1358.05	10637.60	4290.60	1756.81	2542.19	4526.37	3600.25	1201.66	8367.46	6825.25	17005.26	48.24

Table 9 Elevation Survey, 3/18/2009 101 Westmoreland Avenue, White Plains, NY GCE Project No. 05-003-00				
Benchmark Location: MW-1 (Elevation: 210.26 ft)				
Monitoring Well No.	BS	^	FS	Casing Elevation (ft)
MW-1	5.02	215.28	-	210.26
MW-9	-	215.28	4.85	210.43
MW-8	-	215.28	5.15	210.13
MW-7	-	215.28	5.35	209.93
MW-4	-	215.28	5.42	209.86
MW-5	-	215.28	5.47	209.81
MW-6	-	215.28	5.52	209.76
MW-3	-	215.28	5.68	209.60
P.2	5.44	215.04	-	209.60
MW-2	-	215.04	5.2	209.84

Table 10
Groundwater Level Measurements, 3/18/2009
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

MW Number	3/18/2009									9/21/2005	
	Well Diameter (inches)	Screen Length (ft)	Total Well Depth (ft)	Length Purged (ft)	3 Well Volumes (gallons)	Volume Purged (gallons)	Casing Elevation (ft)	Depth to GW (ft)	GW Elevation (ft)	Depth to GW (ft)	GW Elevation (ft)
MW-1	2	15	39.5	11.33	5.44	10	210.26	28.17	181.09	29.59	180.67
MW-2	2	15	39.3	13.24	6.36	16	209.84	26.06	183.78	26.78	183.06
MW-3	2	15	38.8	13.42	6.44	16	209.60	25.38	184.22	26.04	183.56
MW-4	2	15	37.6	10.08	4.84	10	209.86	27.52	182.34	-	-
MW-5	2	15	37.3	9.55	4.58	17	209.81	27.75	182.06	-	-
MW-6	2	15	38.7	10.89	5.23	10	209.76	27.81	181.95	-	-
MW-7	2	15	37.6	10.19	4.89	10	209.93	27.41	182.52	-	-
MW-8	2	15	35.5	7.16	3.44	10	210.13	28.34	181.79	-	-
MW-9	2	15	35.8	6.14	2.95	10	210.43	29.66	180.77	-	-

Table 11
Soil Vapor Investigation Log (2/27/2009)
101 Westmoreland Avenue, White Plains, NY
GCE Project N0. 05-003-00

Sample No.	Canister No.	Regulator No.	Regulator Flow Rate (mL/min)	Start Time	End Time	Total Hours	Total Hours	Total Volume	Helium Test
OA-1	56	33	11.00	8:30	5:30	9:00	9.00	5.94	
IA-1 (office)	54	31	11.00	8:30	5:30	9:00	9.00	5.94	
IA-2 (garage)	51	35	11.10	8:45	5:25	8:40	8.67	5.77	
SS-1	10	3	40.40	12:30	3:10	2:40	2.67	6.00	<1%
SS-2	38	16	41.30	12:35	3:15	2:40	2.67	6.00	<1%
SS-3	5	1	41.25	12:45	3:25	2:40	2.67	6.00	<1%
SS-4	20	60	41.30	11:00	5:10	6:10	6.17	6.00	<1%
SS-5	47	ABC	42.30	11:50	2:30	2:40	2.67	6.00	<1%
SS-6	6	26	41.30	11:50	2:30	2:40	2.67	6.00	<1%
SS-7	36	2	40.40	11:50	2:30	2:40	2.67	6.00	<1%
SS-8	15	63	43.10	12:15	2:55	2:40	2.67	6.00	<1%
SS-9	8	62	39.30	12:20	3:05	2:45	2.75	6.00	<1%
Duplicate	14	61	41.30	11:50	2:30	2:40	2.67	6.00	<1%

Table 12
PID and Particulate Readings (2/17/2009 to 2/19/2009)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

02/17/09, GCE 05-003			
Time	**PID**	**Part.**	**Notes:**
9:00	4.5	1.078	Began installing MW-4
9:15	6.1	1.350	
9:30	6.1	1.619	
9:45	6.1	2.329	
10:00	4.5	1.531	
10:15	4.5		Drilling stopped - parts
10:30	4.5		needed (bolts)
10:45	4.5		
11:30	13.7	0.595	Painting being done in vicinity of work
11:45	16.8	0.495	
12:00	15.3	0.278	
12:15	15.3	0.709	
12:30	12.2	0.214	
12:45	9.1	0.281	
1:00	9.1	1.495	Installing MW-6
1:15	6.1	1.154	
1:30	6.1	0.831	
1:45	4.5	10.670	
2:00	0.0	0.400	Doors opened to ventilate
2:15	0.0	1.948	
2:30	0.0	0.885	
2:45	3.0	1.500	
3:00	3.0	1.100	
3:15	1.5	0.545	
3:30	0.0	0.761	Breaking concrete for MW-5
3:45	1.5	0.991	
4:00	1.5	0.874	

02/18/09, GCE 05-003			
Time	**PID**	**Part.**	**Notes:**
7:45	1.5	0.214	Began installing MW-5
8:00	1.5	0.420	
8:15	4.5	0.584	
8:30	1.5	0.443	
8:45	3.0	0.829	
9:00	4.5	0.661	
9:15	4.5	0.774	
9:30	13.7	0.971	Painting being done in
9:45	6.1	0.809	vicinity of work
10:00	6.1	0.617	
10:15	0.0	0.324	Moved outside for MW-
10:30	0.0	0.003	9
10:45	0.0	0.251	
11:00	0.0	0.032	
11:15	0.0	0.018	
11:30	0.0	0.065	
11:45	0.0	0.073	
12:00	0.0	0.103	
12:15	0.0	0.070	
12:30	0.0	0.038	
12:45	0.0	0.051	
1:00	0.0	0.042	
1:15	0.0	n/a	Inside - completing
1:30	0.0	n/a	grout and concrete

02/19/09, GCE 05-003			
Time	**PID**	**Part.**	**Notes:**
8:00	0.0	0.018	Installing MW-8 outside
8:15	0.0	0.120	
8:30	0.0	0.114	
8:45	0.0	0.073	
9:00	0.0	0.048	
9:15	0.0	0.019	
9:30	0.0	0.020	
9:45	0.0	0.021	
10:00	0.0	0.015	
10:15	0.0	0.014	
10:30	0.0	0.006	
10:45	0.0	0.020	
11:00	0.0	0.000	Installing MW-7 outside
11:15	0.0	0.002	
11:30	0.0	0.000	
11:45	0.0	0.000	
12:00	0.0	0.000	
12:15	0.0	0.040	
12:30	0.0	0.020	
12:45	0.0	0.000	
1:00	0.0	0.001	
1:15	0.0	0.008	
1:30	0.0	0.007	
1:45	0.0	0.015	
2:00	0.0	0.000	

Table 13
Analytical Methods/Quality Assurance Summary
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

Sample Media	Sample Location	Sample Description (Boring, Monitoring Well, or Soil Vapor Number)	Sample Number	Depth (feet below ground surface)	VOC (EPA Method 8260)	B/N (EPA Method 8270)	VOC (EPA Method TO-15)	Sample Container and Preservation for VOC			Sample Container and Preservation for B/N		Sample Holding Time
								One (1) 4-oz glass jar	Two (2) 40-mL glass vials with HCL	One(1) 6-liter SUMMA canister	One (1) 8-oz glass jar	One (1) 1-liter amber glass bottle	
Soil	Parking Lot	B-21	B-21, S-6	23-25	✓	✓		✓			✓		VOC - 14 days; B/N - 14 days/ extract 40 days
		B-21	B-21, S-7	26-27	✓	✓		✓			✓		
		B-22	B-22, S-1	0-2	✓	✓		✓			✓		
		B-22	B-22, S-7	26-28	✓	✓		✓			✓		
		B-23	B-23, S-1	1-3	✓	✓		✓			✓		
		B-23	B-23, S-7	26-27	✓	✓		✓			✓		
		B-24	B-24, S-1	1-3	✓	✓		✓			✓		
		B-24	B-24, S-7	26-27	✓	✓		✓			✓		
		Duplicate (B-23, S-1)	Duplicate-1	1-3	✓	✓		✓			✓		
		Trip Blank	Trip Blank		✓				✓				
Groundwater	Parking Lot	B-21	B-21, WS-1	27-29	✓	✓			✓			✓	VOC - 14 days; B/N - 7 days/ extract 40 days
		B-22	B-22, WS-1	28-30	✓	✓			✓			✓	
		B-23	B-23, WS-1	28-30	✓	✓			✓			✓	
		B-24	B-24, WS-1	28-30	✓	✓			✓			✓	
		Duplicate (B-23, WS-1)	Duplicate	28-30	✓	✓			✓			✓	
		MW-1	MW-1, WS-1	29-31	✓	✓			✓			✓	
		MW-2	MW-2, WS-1	26-28	✓	✓			✓			✓	
		MW-3	MW-3, WS-1	26-28	✓	✓			✓			✓	
	Garage	MW-4	MW-4, WS-1	28-30	✓	✓			✓			✓	
		MW-5	MW-5, WS-1	28-30	✓	✓			✓			✓	
		MW-6	MW-6, WS-1	28-30	✓	✓			✓			✓	
	Parking Lot	MW-7	MW-7, WS-1	28-30	✓	✓			✓			✓	
		MW-8	MW-8, WS-1	28-30	✓	✓			✓			✓	
		MW-9	MW-9, WS-1	29-31	✓	✓			✓			✓	
		Duplicate (MW-2, WS-1)	Duplicate	26-28	✓	✓			✓			✓	
		Matrix Spike	MS		✓	✓			✓			✓	
		Matrix Spike Duplicate	MSD		✓	✓			✓			✓	
		Trip Blank	Trip Blank		✓				✓				
Air	Office	SS-1	SS-1	Sub-slab			✓			✓			30 days
		SS-2	SS-2	Sub-slab			✓			✓			
	Garage	SS-3	SS-3	Sub-slab			✓			✓			
		SS-4	SS-4	Sub-slab			✓			✓			
		SS-5	SS-5	Sub-slab			✓			✓			
		SS-6	SS-6	Sub-slab			✓			✓			
		SS-7	SS-7	25-26			✓			✓			
	Park. Lot	SS-8	SS-8	5-6			✓			✓			
		SS-9	SS-9	25-26			✓			✓			
	Garage	Duplicate (SS-7)	Duplicate	25-26			✓			✓			
	Office	IA-1	IA-1				✓			✓			
	Garage	IA-2	IA-2				✓			✓			
	Outside	OA-1	OA-1				✓			✓			

Table 1: New York State Department of Health (NYSDOH) Schedule, Criteria and Guidance Values

Soil Vapor/Indoor Air Matrix 1

October 2006

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)			
	< 0.25	0.25 to < 1	1 to < 5.0	5.0 and above
< 5	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
5 to < 50	5. No further action	6. MONITOR	7. MONITOR	8. MITIGATE
50 to < 250	9. MONITOR	10. MONITOR / MITIGATE	11. MITIGATE	12. MITIGATE
250 and above	13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

Soil Vapor/Indoor Air Matrix 2

October 2006

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)			
	< 3	3 to < 30	30 to < 100	100 and above
< 100	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
100 to < 1,000	5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above	9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

No further action:
Given that the compound was not detected in the indoor air sample and that the concentration detected in the sub-slab vapor sample is not expected to significantly affect indoor air quality, no additional actions are needed to address human exposures.

Take reasonable and practical actions to identify source(s) and reduce exposures:
The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample. Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers tightly capped or by storing volatile organic compound-containing products in places where people do not spend much time, such as a garage or outdoor shed). Resampling may be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

MONITOR:
Monitoring, including sub-slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is needed to determine whether concentrations in the indoor air or sub-slab vapor have changed. Monitoring may also be needed to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined on a site-specific and building-specific basis, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE:
Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MONITOR / MITIGATE:
Monitoring or mitigation may be recommended after considering the magnitude of sub-slab vapor and indoor air concentrations along with building- and site-specific conditions.

APPENDIX A

G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

November 11, 2013

Janet E. Brown
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 3
21 South Putt Corners Road
New Paltz, NY 12561-1620

Subject: Site Characterization Report (2nd Revision)
101 Westmoreland Avenue
White Plains, New York 10606
Order on Consent Index No. D3-0504-06-09
Site Code No. 360095
GCE Project No. 05-003-00

Dear Ms. Brown:

Enclosed please find the **September 2013 revised Site Characterization Report** (2nd Revision) (revised SCR) prepared by G. C. Environmental, Inc. (GCE) for the subject property on behalf of the Automobile Club of New York, Inc., the Respondent. The responses to the comments[1] made in the New York State Department of Environmental Conservation and Health (NYSDEC/NYSDOH) August 16, 2012 letter are addressed as follows and have been incorporated into the revised SCR:

Comment Number 1:
As stated and discussed previously, wording throughout the document needs to be deleted or changed as it is misleading. There remain several mischaracterization and/or speculative statements regarding site conditions that are not supported by site data that must be revised/corrected before the SCR will receive NYSDEC/NYSDOH approval. Generally, these include statements, such as,
"The source of the chlorinated solvents in groundwater is unknown."
"…results documented the dry well is not a source."
"Groundwater contamination is from an off-site source."
Most of the statements regarding contamination throughout the report suggest that all contamination is from off-site, and no sources or potential sources have been identified. The NYSDEC/NYSDOH disagrees with these interpretations/representations. Based on the data collected, it appears there are off-site source(s), as well as on-site contributions/sources of certain chemicals as outlined in the comments herein. For instance, information presented on

[1] For reading convenience, the NYSDEC comments are presented in italicized format, followed by the responses.

page 6 contradicts information on page 8 (and in corresponding tables) regarding the dry well not being a (contributing) source and then later states that soil boring near and from within the dry well had the highest concentrations of PCE (190 mg/kg) and total VOCs. In addition, sub-slab vapor sample SS-3 had the highest concentrations of PCE (6,785 ug/m^3) indicating a potential source below the slab in an area where soil borings were not completed. The text should be changed to indicate the dry well and area SS-3 as contributing sources of PCE to site soils and potentially groundwater. The NYSDEC/NYSDOH acknowledge that there also may be off-site contributions of PCE based on the deep soil vapor sample at SS-9, collected at a depth of 25 feet, below ground surface (bgs) and just above the water table at the up-gradient property line, at a concentrations of 3,460.40 ug/m^3. These distinctions need to be explained in the context of the overall conceptual site model. See further details below regarding groundwater contamination from an off-site source.

Response:
GCE notes that it agrees that the dry well and the area near sub-slab vapor sample SS-3 are contributing sources of tetrachloroethene (PCE) to the site soils and potentially to groundwater. However, GCE strongly believes that the test results demonstrate that the on-site sources are localized and minor in nature and that the main sources of PCE are located off-site. The basis for this contention is as follows. The 2005 Subsurface Investigation determined that the highest concentration of chlorinated solvents (190 mg/kg) was detected in soil boring B-1 located on the central portion of the Site and advanced through the central portion of a concrete pad. (The B-1 location is thought to be the former location of a historical dry well, which was filled and covered by a concrete pad prior to 2001, when GCE started its investigations at the Site..) Four (4) chlorinated solvent compounds, namely PCE (180 mg/kg), trichloroethene (TCE) (1.9 mg/kg), cis-1,2-dichloroethene (cis-1,2-DCE) (7.8 mg/kg) and 1,2-dichlorothane (1,2-DCA) (0.6 mg/kg) were detected above the NYSDEC Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater (Regulatory Standards) in the uppermost soil sample (0-2 feet below grade surface (bgs)) from the sample taken at B-1. A groundwater sample collected from boring B-7, which was located in the same place as B-1, had a total concentration of chlorinated solvents of 40.2 ug/l, indicating that the dry well may have been a contributing source of chlorinated solvents to the groundwater sometime in the past. However, a soil sample taken from boring B-12, advanced in 2007 through the same concrete pad, just six (6) inches to the south of B-1, contained one chlorinated solvent compound (PCE) at a much lower concentration (14 mg/kg), although still above the Regulatory Standards. Chlorinated solvents were not detected or detected far below Regulatory Standards in all of the other 19 soil borings advanced at the Site in 2005, 2007 and 2009 (with the exception of B-5 and B-14, at which low concentrations of PCE were found). It should be noted also that elevated concentrations of volatile organic compounds (VOCs) including chlorinated solvents, were detected in soil samples taken from borings B-1 and B-12 only in the uppermost samples (0-2 feet bgs). The 2007 Delineation of Soil Contamination and 2009 Interim Remedial Measures (IRM) activities revealed that the uppermost soil (0-2 feet bgs) contains old fill material consisting of dark-gray, fine-coarse sand and gravel with fragments of bricks and numerous fragments of black coal. Field PID measurements from this top layer of soil detected widespread levels of total VOCs above 20 parts per million (ppm). The soil found below the top 2-3 feet consists of loose, light-gray to yellow fine-medium, poorly graded sand without any visual or olfactory contamination and PID readings ranged from 0-0.2 ppm. Please see 2007 Delineation of Soil Contamination report and especially Photo 3 in the

2009 IRM report, clearly showing dark-gray fill material with sharp boundary overlying clean native soil.

The sampling performed during the Site Characterization activities in March 2009 of the nine (9) monitoring wells and four (4) soil borings, determined that the highest concentrations of PCE and its breakdown products (TCE, cis-1,2-DCE and 1,2-DCA) in the groundwater were located along the northern and the eastern boundaries of the Site, while all of the monitoring wells located in the central portion of the Site (including MW-4 and MW-5 located nearby and down-gradient to the dry well) had concentrations of PCE below 5 ug/l (Groundwater Standard), Again, this finding indicates that the main sources of PCE are located off-site, on properties located to the north and east and hydraulically cross- and up-gradient of the Site. Please see Figure 7 for PCE Contours in Groundwater. As acknowledged in the NYSDEC comment quoted above, the PCE concentration detected in the deep soil vapor sample, SS-9, collected at a depth of 25 feet below surface, was from an area just above the water table at the up-gradient property line, was elevated (3,460.40 ug/m^3), also suggesting an off-site (up-gradient) source for this contaminant.

The testing also showed that concentrations of 1,1,1-trichloroethane (1,1,1-TCA) and its breakdown products (1,1-dichloroethane [1,1-DCA] and 1,1,-dichlorothene [1,1-DCE]) increase to the east and especially to the southwest, and are highest in MW-2 (57 ug/l) along the eastern boundary of the Site and in MW-8 and MW-7 (100-249 ug/l) along the southwestern boundary of the Site. (Please see Figure 6 for 1,1,1-TCA Contours in Groundwater). In addition, 1,1,1-TCA concentration at SS-9 (deep soil vapor sample just above the groundwater table, located along the eastern boundary of the Site, near MW-2) is the highest among the all soil vapor samples (3,938 ug/m^3), also indicating that 1,1,1-TCA originated most likely from one or more up-gradient off-site source(s), the exact locations of which are unknown.

As per your request, statements you objected to are not in the revised SCR, and the soil vapor data are more thoroughly described in the Section 6.1 – Summary of Findings of the revised SCR.

Comment Number 2:
Section 1.4, page 6, first bullet:

- *First paragraph, last two sentences: These statements are misleading. As discussed in the past, based on the data, it appears there is/are a contributing on-site source(s) of PCE and its breakdown products and off-site source of TCA and possibly PCE their breakdown products. As such, please clarify that in 2005, concentrations of PCE and its breakdown products (TCE, cis-1,2-DCE and 1,2DCA) were highest in groundwater in the central portion of the site, with a total concentration of just over 40 ug/L, which was collected from the boring directly through the dry well and considering these same contaminants exhibited the highest concentration in dry well soils at just over 190 mg/kg in the 0-2-foot horizon with PCE at 180 mg/kg, suggests that the dry well was a contributing source of PCE to the groundwater. In addition, the elevated soil vapor concentrations at SS-3 noted in Comment 1 above suggest another potential on-site source area for PCE. As a result of the PCE contamination in dry well soils, an IRM was subsequently performed to remove the PCE-impacted soils, and a SVE IRM is planned to address the elevated sub-slab concentrations at SS-3. However, concentrations of 1,1,1-TCA and its breakdown* *products (1,1 DCA and 1,1-DCE) were highest at the up-gradient property line (totaling 60-187 ug/L), suggesting an off-site source for these contaminants, and the PCE concentration at SS-9 (deep soil vapor sample just above the groundwater table) was also elevated suggesting an off-site contribution of PCE to site groundwater. Please rework the text to reflect this information.*

Response:
The intent of Section 1.4 was to summarize previous investigations and the information on page 6 of that section only dealt with the findings of the Subsurface Investigation performed at the Site in 2005. Section 1.4 of the revised SCR has been clarified to indicate that the dry well was a contributing source of PCE, and what was discovered during the 2005 Subsurface Investigation. However, as indicated above, GCE strongly believe that the dry well was at most a localized source of PCE sometime in the past. This dry well was filled and covered by a concrete pad, approximately 2 x 4 feet in size. Mr. Tartaglione, of R.J.T. Motorists Services, Inc., the long-term tenant/operator of the Site, was unaware of when this dry well was closed. It was closed prior to 2001, when GCE started its investigations at the Site. All contaminated PCE-impacted soil was removed during 2009 IRM excavation, and the dry well is no longer a potential source of PCE. Groundwater results of the Subsurface Investigation performed in 2005 were based on the data from only three (3) monitoring wells and several soil borings. There was no soil vapor data collected in that 2005 study. More extensive testing of the Site was conducted during March 2009 Site Characterization activities. Nine (9) monitoring wells and some new soil borings were sampled during that study. Results of this investigation demonstrate that a co-mingled plume of chlorinated solvents is migrating to the Site from off-site locations. The PCE portion of the plume appears to coming from the north and east, and the 1,1,1-TCA portion appears to be coming from the east and southwest. The up-gradient potentially responsible parties for these chemicals need to be identified.

Groundwater results and soil vapor data of the 2009 Site Characterization are more thoroughly described in the revised Section 6.1 – Summary of Findings.

- *Second paragraph: This paragraph is also misleading based on the information outlined above, the subsequent identification of elevated PCE concentrations in the sub-slab soil vapor (up to 6,785 ug/m^3 at SS3) in the southern portion of the building, and the use of PCE in the parts washer that, though present and in use with PCE, wasn't identified in the original soil vapor intrusion (SVI) product inventory; this fact should be also be discussed in the appropriate section of the revised report. Sub-slab concentrations of that magnitude suggest a sub-slab source area that was not identified in the previous investigation, and hence the proposed soil vapor extraction system (SVE) in that area. Please again make a distinction between the apparent off-site affects due to 1,1,1-TCA and its breakdown products and the apparent on-site and off-site contribution of PCE and TCA and their breakdown products, instead of making global speculative statements suggesting all chlorinated solvent impacts at the site are from off-site sources.*

Response:
The text of the revised SCR has been revised to address these points and soil vapor data are more thoroughly described in the Section 6.1 – Summary of Findings. See also response to the previous comment. Regarding the comment about "use of PCE in the parts washer that, through

present and in use with PCE…" GCE's soil vapor intrusion product inventory did not identify any products or chemicals containing chlorinated solvent compounds presently being used at the Site. In response to the comment, GCE specially requested information regarding this parts washer and the chemicals used in it. Information supplied by Mr. James Clifford, Respondent's Director of Management Services, the tenant advised that it stopped using Safety Kleen for parts washing about 8-10 years ago, after using it for about 20 years. The tenant was not sure what chemical was used in the parts washer during that 20-year time period. The tenant also advised that the Safety Kleen system was a tub with a 55-gallon drum underneath, that Safety Kleen routinely serviced the parts washer by replacing cleaning agents as needed. The tenant stopped using Safety Kleen because of price increases. Thereafter, the tenant only used kerosene in its parts washer. It purchased its own parts wash system, which was set up the same as the Safety Kleen system – a tub with 55-gallon drum underneath. Over the past 12-18 months, tenant claims that this parts washer is not used. Rather, tenant advises that it is using a non-chlorinated brake cleaner, manufactured by Carquest, only when necessary.

- *Third paragraph: This paragraph suggests that the groundwater is "most likely" under anaerobic conditions, which typically leads to a reduction of PCE, TCE and DCE". Again, without data and appropriate interpretation, these statements are speculative and/or misleading. Oxidation Reduction Potential (ORP), Dissolved Oxygen (DO) and PH were measured in some instances and discussed in Section 6.1 of the report. Please include a discussion of the appropriate data in this section to support your statements.*

Response:
As mentioned before, Section 1.4 is named "History of Previous Investigation" and page six (6) contains only findings of the Subsurface Investigation performed at the Site in 2005. At that time, there were only three (3) monitoring wells where water quality parameters (including ORP, DO and PH) were measured, located along the western (MW-1) and the eastern (MW-2 and MW-3) property lines. The central portion of the Site did not have monitoring wells in 2005, and consequently we had no actual water quality parameters in this area in 2005. For this reason, we indicated that we could only suggest that "In the central portion of the Site, in the area of removed USTs, groundwater is most likely under anaerobic conditions." That was later confirmed during the Site Characterization in 2009 and was discussed more thoroughly in Section 6.1 of the Report. We removed the statement from the Section 1.4 in the revised report to avoid any confusion.

- *Fourth paragraph: It was indicated that the data from 2005 is too old for validation. If a Category A data package was produced, at a minimum a data quality review (DQR) should be performed, discussed and included in the revised SCR. This would include a review and discussion of things like surrogate recoveries and comparison to internal standards, holding times, etc. Many labs hold data for 7 years and could likely provide at least the Form 1 s to perform a DQR and provide some evaluation of data usability. Please inquire with the lab and provide the relevant correspondence (i.e., demonstrate a good faith effort). In addition the lab data sheets for the 2005 data for B-1 through B-5 were never provided in this or previous SCRs and should be included in the revised SCR.*

Response:

The lab data sheets for the 2005 data for B-1 through B-5, along with the Quality Assurance Review (QAR) from the Chemtech Consulting Group, Inc. (Chemtech), Mountainside, New Jersey, a New York State ELAP-approved laboratory, are attached to the revised SCR.

Comment Number 3*:*
Section 2.3.2, p. 14: Please indicate the start and ending vacuum readings on the SUMMA canisters on the SVI data summary tables and briefly discuss in the text.

Response:
The start time and the end time as well as total hours of vacuum readings on the SUMMA canisters have been added to Table 11 in the revised SCR. A discussion of preset hours collection periods with flow rates for soil vapor, indoor and outdoor samples has been added to the text of the revised SCR.

Comment Number 4*:*
Section 6.1: This section should include a comprehensive discussion of all site data/ comprehensive conceptual site model for the site characterization, not just the last round of data collected, or at a minimum, discuss the latest round of data in the context of the overall conceptual site model; otherwise, it's misleading such that the reader could presume from reading the first sentence that only four soil borings were conducted as part of the overall site characterization.

Response:
The revised SCR has been revamped as follows to address this comment. Section 1.4 now contains a history and findings of previous investigations starting in 2001. Section 1.5 now contains a description of the IRM remediation activities, conducted in accordance with the NYSDEC-approved Site Characterization and Interim Remedial Measures (IRM) Work Plan, dated by May 11, 2007. The activities included the 550-gallon waste oil underground storage tank (UST) tightness test, abandonment and closure of this UST and soil delineation in the area of the former dry well at the Site, all done in 2007, the 2008 Additional Site Delineation, and 2009 IRM excavations of the contaminated soil in the area of the former dry well. The reports of these activities have been submitted previously to the NYSDEC. Section 2 of the revised SCR now covers field activities and findings from the last round of soil, groundwater, and soil vapor sampling performed in January-March 2009. Per your request, the revised SCR includes a comprehensive discussion of all site data in the context of the overall conceptual site model.

Comment Number 5:
Section 6.1, Petroleum Hydrocarbon subsection: While the statement that concentrations of BTEX (benzene, toluene, ethylbenzene, and xylene) in B-21 and MW-9 (groundwater) were detected far below groundwater standards is correct, the groundwater at B-21 is not devoid of petroleum-related impacts (i.e., B-21 contains concentrations of 1,2-4-trimethylbenzene at 23 ug/l, 1,2,5-trimethylbenzene at 12 ug/l and naphthalene (SV) at 64 ug/l, all which exceed their respective groundwater standards (see Table 6).

Response:
Section 6.1 of the revised SCR includes the petroleum-related impact at B-21.

Comment Number 6:
Section 6.1, Chlorinated Hydrocarbon subsection: Similar to comment 4 above, in the first paragraph please discuss the latest round of data in the context of the overall site conceptual model (i.e., solvents weren't detected, or detected above standards, in any of the soil borings" during the last round"); otherwise it's misleading and the reader would reasonably assume that solvents were never detected in the site soils, which is untrue.

Response:
As noted in response to Comment Number 4, the revised SCR report format has been revamped, which also addresses Comment Number 6. Section 1.4 now contains a history and findings of previous investigations starting in 2001. Section 1.5 now contains a description of the IRM remediation activities, conducted in accordance with the NYSDEC-approved Site Characterization and Interim Remedial Measures (IRM) Work Plan, dated by May 11, 2007. The activities included the 550-gallon waste oil underground storage tank (UST) tightness test, abandonment and closure of this UST and soil delineation in the area of the former dry well at the Site, all done in 2007, the 2008 Additional Site Delineation, and 2009 IRM excavations of the contaminated soil in the area of the former dry well. The reports of these activities have been submitted previously to the NYSDEC. Per your request, the revised SCR includes a comprehensive discussion of all site data in the context of the overall conceptual site model.

Comment Number 7:
Section 6.1, Soil Vapors subsection, first paragraph: The NYSDEC/NYSDOH agree that the PCE vapor results at SS-9 are likely the result of contaminated groundwater coming onto the site from upgradient. However, with respect to the results at SS-3, a sub-slab source may exist considering the elevated concentrations noted (see Comment 1), the lack of soil testing in that area, and the subsequent proposal to install a soil vapor extraction (SVE) system in that area to remedy the elevated sub-slab concentrations in lieu of further testing.

Response:
With respect to the results at SS-3, an additional sub-slab source of PCE is added into the revised SCR.

Comment Number 8:
Section 6.1, Soil Vapors subsection, second paragraph: NYSDOH SVI Matrix 2 also covers 1,1,1-TCA.

Response:
Analysis of 1,1,1-TCA is added in the revised SCR report.

Comment Number 9:
Section 6.1, Soil Vapors subsection, second bullet: It's the NYSDEC/NYSDOH's understanding that PCE is still used in the parts washer at the facility. Please confirm if this is still the case. If so, and based on the elevated sub-slab PCE concentrations at SS-3 and in lieu of further testing in that area, GCE proposed a SVE system to remediate the subsurface vapors in unsaturated

soils in this apparent on-site source area, with a secondary benefit of depressurizing the slab. Please update the text accordingly.

Response:
According to information from the tenant, PCE is not currently used in the parts washer and hasn't been used in that equipment for the past 8-10 years. See response to the second bullet point in Comment Number 2.

Comment Number 10:
Section 6.2, Recommendations, first bullet: Similar to previous comments, please discuss the results of the last phase of sampling in the context of the overall conceptual site model. For instance, in the first sentence stating that petroleum compound and chlorinated solvents were not detected or detected far below standards in all soil samples below the site, etc. suggests that contamination was never found on-site. These conclusions can be presented for the recent work, but should be balanced with a discussion of the findings of earlier investigation phases and the interim remedial measures performed (e.g. the dry well soil removal and the petroleum tank removal work) to document that work has been done at the site to address previously-identified on-site contamination.

Response:
As indicated above, the revised SCR has been altered and restructured, and the summary of findings and recommendations have been rewritten to discuss the latest round of data in the context of the overall conceptual site model.

Comment Number 11:
Section 6.2, Recommendations, second bullet: Again, similar to earlier comments, NYSDEC/NYSDOH does not agree that "all chlorinated solvent contamination in the groundwater beneath the site originated from off-site sources. Please add clarifying language as suggested in above comments. Please update the second paragraph of this bullet in accordance with comment 9 above.

Response:
As indicated above, GCE agrees that the dry well and area near the sub-slab SS-3 were sources of PCE to the site soil and potentially groundwater. However, as indicated above, GCE strongly believe that the dry well was at most a localized source of PCE sometime in the past. This dry well was filled and covered by a concrete pad, approximately 2 x 4 feet in size prior to 2001, when GCE started its investigations at the Site. All contaminated PCE-impacted soil was removed during 2009 IRM excavation, and the dry well is no longer a potential source of PCE. The results of groundwater sampling performed during the Site Characterization in March 2009 show that all groundwater monitoring wells in the central portion of the Site (including MW-4 and MW-5 located close to and down-gradient from the dry well) have concentrations of PCE and its breakdown product below the 5 ug/l groundwater standard. Concentrations of PCE in groundwater increase to the north and east and are the highest in MW6 and MW-9 (13-27 ug/l) along the northern boundary of the Site and in MW-2 and MW-3 (16-20 ug/l) along the eastern boundary of the Site (See Figure 7 – PCE Contours in Groundwater). In addition, PCE concentration at SS-9 (deep soil vapor sample just above the groundwater table, located along

the eastern boundary of the Site, near MW-2) are elevated (3,460 ug/m^3). These results show there is an off-site (up-gradient) contribution of PCE to the site groundwater.

Concentrations in groundwater of 1,1,1-TCA and its breakdown products (1,1-DCA and 1,1-DCE) increase to the east and especially to the southwest, and are highest in MW-2 (57 ug/l) along the eastern boundary of the Site and in MW-8 and MW-7 (100-249 ug/l) along the southwestern boundary of the Site (See Figure 6 – 1,1,1-TCA Contours in Groundwater). In addition, 1,1,1-TCA concentration at SS-9 (deep soil vapor sample just above the groundwater table, located along the eastern boundary of the Site, near MW-2) is the highest among the all soil vapor samples (3,938 ug/m^3), also suggesting an off-site (up-gradient) contribution of 1,1,1-TCA to the site groundwater.

Results of this investigation demonstrate that a co-mingled plume of chlorinated solvents is migrating to the Site from off-site locations. The PCE portion of the plume appears to coming from the north and east, and the 1,1,1-TCA portion appears to be coming from the east and southwest. The up-gradient potentially responsible parties for these chemicals need to be identified.

Comment Number 12:
Section 6.2, Recommendations, third bullet: It was the NYSDEC/NYSDOH's understanding that this item was subsequently completed and resulted in the identification of the parts washer that still uses PCE. If so, please update this bullet to reflect this investigation and the subsequent results. If not, please advise as to when this work is planned.

Response:
Regarding that "the parts washer still uses PCE", please see GCE's response to the second bullet point if Comment Number 2 and Comment Number 9.

Comment Number 13:
In the data summary tables, non-detect results should be shown as "less than" their respective detection limits (e.g., <0.5 ug/L). This was a previous comment that was not addressed.

Response:
GCE uses the term "non-detect" in its summary tables rather than the phrase "less than" or the symbol "<" the laboratory detection limits and has done so for many years in reports submitted to Region 3 and other NYSDEC offices, as well as to other organizations and clients, due to the following reasons:

1. The tables are called "Summary of Detected Compounds" and they show the detected compounds, which is of primary importance.
2. Lab detection limits are listed on the lab data sheets, the lab data sheets have this information and are provided with the report as an appendix.
3. Listing the detection limits for every chemical on the summary table regardless of whether it was not detected detracts from the readability of the summary table, is time-consuming and provides no discernible value to the reader. However, per your request, the non-detect results as "less than" their respective detection limits have been added to the tables in this revised SCR.

Comment Number 14:
The Division of Environmental Remediation (DER) requires all data providers (including all PRPs, permitted facilities, consultants, contractors, labs, etc.) to submit all data in the DEC Electronic Data Deliverable (EDD) format for all sites currently working under a DER agreement. The Department will input the pertinent historical data for this site. However, be advised that future data submittals, such as may be required as part of any long-term site management, must be submitted in the EDD format (see: http:/www.dec.ny.gov/chemical/62440.html for further information on EDD submittals.

Response:
We understand this comment to mean that subsequent reports submitted after submittal of this revised SCR should utilize the DEC EDD format, which will be complied with.

Comment Number 15:
Figures: While the figures showing the groundwater contours and the various concentration isopleths indicates the dates when various wells or borings were installed, these dates may or may not be the dates the data were collected in order to draw the contours/isopleths. The dates the data were collected and serve as the basis for contours/isopleths should be indicated on the various figures.

Response:
The dates when samples were collected and serve as the basis for contours/isopleths have been added to the figures in this revised SCR.

The Revised SCR was updated to address all above mentioned comments.

If you have any questions concerning this project, please feel free to call me at (631) 206-3700 ext. 111.

Very truly yours,

Gregory Collins
President

Enclosures

cc: Jack Byrnes, Automobile Club of New York

G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

SITE CHARACTERIZATION

OF

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK 10606
ORDER ON CONSENT NO. D3-0504-06-09
SITE CODE NO. 360095

PREPARED FOR:

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION, REGION 3
21 SOUTH PUTT CORNERS ROAD
NEW PALTZ, NEW YORK 12561

ON BEHALF OF:

AUTOMOBILE CLUB OF NEW YORK, INC.
1415 KELLUM PLACE
GARDEN CITY, NY 11530

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The Site Characterization described herein was prepared by and/or under the supervision of the undersigned, of G. C. Environmental, Inc. (GCE). GCE's investigation consisted solely of the activities described in the Introduction of this report, in accordance with the New York State Department of Environmental Conservation (DEC) approved Revised Site Characterization and Interim Remedial Measures Work Plan, dated May 11, 2007 and subsequent correspondence, last dated April 12, 2009, and is subject to the Limitations and Service Constraints provided in Appendix A and the Consulting Services Agreement signed prior to initiation of the assessment.

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9/29/2013

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1.0 INTRODUCTION

This report presents the findings of the Site Characterization (SC) of the Automobile Club of New York, Inc.'s property located at 101 Westmoreland Avenue, White Plains, New York 10606 (the Site), conducted by G. C. Environmental, Inc. (GCE) in accordance with the New York State Department of Environmental Conservation (DEC) approved Revised Site Characterization and Interim Remedial Measures Work Plan, dated May 11, 2007 and subsequent correspondence, including the letters of April 12, 2009, and August 16, 2012 from the DEC. It is subject to the Limitations and Service Constraints provided in Appendix A and the Consulting Services Agreement signed prior to initiation of the assessment.

1.1 Purpose

The main objectives of this SC are to:

- Delineate the extent of contaminants in soil and groundwater at the Site;
- Identify the sources of contamination and the migration pathways on or through soil and groundwater;
- Investigate preferential pathways for off-site and/or on-site contamination identified during the SC; and
- Collect and evaluate all data necessary to evaluate necessity for and nature of any further remedial action.

1.2 Site Location and Description

The Site is located at 101 Westmoreland Avenue in the City of White Plains, Westchester County, New York, on the northwest side of Westmoreland Avenue, approximately 100 feet to the west of the T-shaped intersection formed by Westmoreland Avenue and Home Place. It is occupied by R.J.T. Motorists Services, Inc., an Automobile Club of New York approved auto-repair shop, which has been the tenant at the site for many years.

The Site consists of an approximately 9,000-square-foot rectangular-shaped parcel of land. The on-site facility consists of an office space, restrooms and a storage closet located in the southern portion of the building, an automobile exterior detailing area in the western portion of the building. The remainder of the building is utilized as an automobile repair shop. The remainder of the Site consists of an asphalt-paved parking area located on the northeastern portion of the Site and gravel-paved parking area located on the western portion of the Site.

Please refer to Figures 1 and 2 for a Site Locus Map and Site Plan, respectively.

1.3 Physical Site Characteristics

1.3.1 Site Topography

According to the US Geological Survey (USGS) Topographic Map of White Plains, New York Quadrangle, US Geological Survey (USGS), dated 1967, photo-revised 1979, the Site's elevation is approximately 210 feet above mean sea level. Topographically, the Site is essentially level with no abrupt changes in elevation. The topography in the vicinity of the Site slopes gently to the northwest towards the Bronx River located approximately 700 feet to the northwest of the Site. Please refer to Fig. 3 for the USGS Topographic Map.

1.3.2 Geology and Hydrogeology

1.3.2.1 Regional Geology and Hydrogeology

According to the 1970 Bedrock Geologic Map of New York, Lower Hudson Sheet and the 1989 Surficial Geologic Map of New York, Lower Hudson Sheet prepared by the University of the State of New York, the geology in the area of the Site consists of fluvial sand and gravel, which is underlain by bedrock composed of schist and amphibolites of the Manhattan formation. Based on the information gathered during this SC, depth to bedrock at the Site is greater than 40 feet below grade. The approximate depth to bedrock in the vicinity of the Site cannot be determined based on the regional geology.

Based on the topography and local waterways, local groundwater flow direction in the area of the Site could be inferred to be to the west-northwest towards a portion of Bronx River located approximately 700 feet to the northwest of the Site.

1.3.2.2 Site Geology

Based on the information gathered during this SC, the geology of the Site to the explored depth of approximately 40 feet below grade consists of approximately 2 feet of fill, represented by dark-gray to black fine-coarse sand and gravel with fragments of brick and numerous fragments of coal, underlined by light-gray to yellow-brown, well sorted fine-medium sand.

1.3.2.3 Site Hydrogeology

Based on the information gathered during this SC, groundwater flow direction at the Site is to the north-northwest. Depth to groundwater below the Site ranges from approximately 25 feet below grade (in MW-3 located on the eastern border of the Site) to 29 feet (in MW-9 located in the northern portion of the Site). Hydraulic conductivity (not measured) is expected to be relatively high due to rather coarse particle size of sediments (fine-coarse sand with little fine gravel). The measured hydraulic gradient is moderate (between MW-3 and MW-9 the gradient is about 3.45 ft/95 ft = 0.036 ft/ft. Please refer to Figure 4 – Groundwater Contours, Table 9 – Elevation Survey and Table 10 – Groundwater Level Measurements.

1.3.3 Sensitive Environmental Receptors

According to the Digital US Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory Map for White Plains, New York Quadrangle, the nearest designated wetlands is a portion of the Bronx River located approximately 700 feet to the northwest of the Site, which is designated as Riverine Upper Perennial, Unconsolidated Bottom, Diked/Impounded (R3UBH). According to the Digital DEC Freshwater Wetlands Map for White Plains, New York Quadrangle, the nearest designated wetlands is a low-lying area located approximately 8,500 feet to the north-northeast of the Site, which is designated as “W-9”. Please refer to Figure 10 and 11 for the Federal and New York State Wetlands Maps, respectively.

1.4 History of Previous Investigations

The Site has a long history of investigation and remediation starting in 2001.

<u>February 4, 2001 Phase I</u>
GCE’s Phase I Environmental Site Assessment, prepared for the Automobile Club of New York, Inc., dated February 4, 2005, attached hereto in Appendix H (Phase I Report), identified the following recognized environmental conditions:

- GCE's visual inspection of the Site identified the presence of one (1) 550-gallon No. 2 fuel oil underground storage tank (UST) and one (1) 550-gallon waste oil UST located beneath the eastern portion of the on-site building. According to Mr. Ray Tartaglione, of R.J.T. Motorists Services, Inc., the long-term tenant/operator of the Site, these two (2) USTs were of single-wall construction and were installed in 2001, replacing one (1) waste oil UST and one (1) No. 2 fuel oil UST that were removed from the same locations. According to Mr. Tartaglione, contaminated soil was encountered during tank removal activities. The DEC was notified of this finding. All soil was excavated and removed. Based on its description, these removed USTs may have environmentally impacted the Site.

According to the Environmental Data Resources, Inc. (EDR) report, the Site is listed as a NY Spills Information Database (SPILLS) and UST site:

> *Automobile Club of New York*
> *101 Westmoreland Ave*
> *White Plains, NY*
> *Spill # 0102386 (opened 6/2/2001; closed 3/22/2005)*
> This SPILLS case occurred on June 2, 2001 when there was a suspected tank failure with a 550-gallon No. 2 fuel oil UST and 250-gallon waste oil UST. At the time of the Phase I, the SPILLS case was listed as still being opened, but it was subsequently marked closed by the DEC. At the time of the Phase I report, EDR noted it as "Tanks have been removed and excavation is underway at site." As noted above, the tenant advised that these two (2) tanks were removed, all contaminated soil was removed and two (2) new USTs were installed. There is one (1) "in-service" 550-gallon used oil UST and one (1) 550-gallon No. 2 fuel oil UST listed for this site.

- GCE's visual inspection of the Site revealed one groundwater monitoring well located in the gravel-paved land on the northwestern portion of the Site. The Westchester County Department of Health (WCDH) requested the installation of this groundwater monitoring well in 2002 after soil contamination was discovered during the removal of the two (2) 550-gallon USTs containing fuel oil and waste oil in 2001. Additional groundwater samples were collected on a quarterly basis for a period of one (1) year. Between January 2002 and January 2003, GCE conducted five rounds of groundwater monitoring at the Site. Laboratory analytical results of the last round indicated that concentrations of several VOCs, namely 1,1-dichloroethene (15 microgram per liter (ug/l), 1,1-dichloroethane (7.5 ug/l), 1,1,1-trichloroethane (1,1,1-TCA) (140 ug/l) and 1,2,4-trimethylbenzene (6.3 ug/l) were detected above the DEC Water Quality Standards for Groundwater (Groundwater Standards) of 5 ug/l for all of the detected compounds.

- According to the 1930 Sanborn Fire Insurance map provided by EDR, there was a gasoline tank located on the southern portion of the Site which is currently occupied by the asphalt-paved parking area. No further information regarding this gasoline tank was provided to GCE. It is possible that this gasoline tank was removed during the construction of the existing building circa 1944. However, potential leaks and/or spills associated with this gasoline tank may have environmentally impacted the Site.

- According to the tenant, there was one (1) dry well located on the central portion of the on-site building. This dry well is currently filled and covered with a concrete slab, approximately 2 x 4 feet in size. The tenant was unaware of when this dry well was closed, but it was at least prior to 2001, when GCE started its investigations at the Site. No further information regarding this dry well was provided to GCE. However, potential petroleum products entering this dry well may have environmentally impacted the Site.

- GCE's visual inspection of the immediate surrounding area revealed the presence of several fill ports and vent pipes, most likely associated with petroleum and/or chemical storage tanks, located along Westmoreland Avenue hydraulically up/cross-gradient of the Site. Based on their location, it is possible that these potential petroleum and /or chemical storage tanks may have environmentally impacted the Site.

- GCE's visual inspection of the surrounding area revealed the presence of Bearing & Motive Specialties, Inc., which is the closest hydraulically up-gradient site with operations that would typically utilize chlorinated solvents, and automotive service and commercial establishments located in the immediate vicinity of the Site. Based on the nature of these establishments, it is likely that they utilize and/or generate petroleum and/or hazardous materials/wastes. Potential leaks and/or spills of petroleum products and/or hazardous materials/wastes at these off-site properties may have environmentally impacted groundwater below the Site.

<u>2005 Subsurface Investigation</u>
In 2005, GCE performed an Additional Subsurface Investigation at the Site, which consisted of installation of seven (7) soil borings (B-1 through B-7) with continuous soil sampling and two (2) groundwater monitoring wells (MW-2 and MW-3) and subsequent well survey, groundwater level measurement and groundwater sampling. The Additional Subsurface Investigation report, prepared by GCE for the Site, was submitted to the DEC on December 6, 2005, and included the following findings:

- Soil and groundwater below the Site are contaminated with two types of contamination: petroleum hydrocarbons and chlorinated hydrocarbons (chlorinated solvents).

- No petroleum contamination was detected in the reported location of a gasoline tank as shown on the 1930 Sanborn Fire Insurance map. Soil boring B-2 advanced in this area show no evidence of any petroleum contamination in all samples collected.

- Petroleum hydrocarbons in the soil were detected only in the soil borings B-1 and B-5 located on the central portion of the Site, in the area of the removed 550-gallon USTs formerly storing No. 2 fuel oil and waste oil. Concentrations of BTEX totaling 17.9 mg/kg (0'-2' below grade) and 4.12 mg/kg (15'-17' below grade) were detected in soil borings B-1 and B-5, respectively. No evidence of petroleum contamination in the form of free product was observed. Petroleum hydrocarbons in groundwater were found only in the area of the removed USTs. Concentrations of BTEX were detected in groundwater samples totaling 41.1 ug/l taken from B-5 and 19.3 ug/l from B-7. The petroleum plume was limited and was moving very slowly in the northwestern direction, along the general direction of groundwater flow. The data indicated an on-site source of petroleum contamination, most likely the former leaking waste oil underground tank located near the location of boring B-5. As a result of natural bioattenuation, the petroleum hydrocarbons are biodegrading and concentrations in groundwater are decreasing with time.

- Chlorinated hydrocarbons and solvents present at the Site included tetrachloroethene (PCE) and its breakdown products – trichloroethylene (TCE), cis-1,2-Dichloroethene (DCE) and 1,2-Dichloroethane (DCA). Another contaminant of concern (COC) is 1,1,1-TCA and its breakdown products – 1,1-DCE and 1,1-DCA. The 2005 subsurface investigation revealed that with the exception of boring B-1 located in the area of the historical dry well, where the concentration of total chlorinated solvents was 348.2 mg/kg (0'-2'), and boring B-5 (20'-22'), where the concentrations of total chlorinated solvents was 11 mg/kg, these compounds were either not detected in any of the soil borings, or detected far below their detection limits. Groundwater sample collected from boring B-7 (which was at the same location as B-1), had a total concentration of 40.2 ug/l, suggesting that the dry well was a potential source of chlorinated solvents to groundwater.

  Groundwater sampling results indicated that PCE and 1,1,1-TCA were present at the Site and off-site, with higher concentrations (160-195 ug/l) located along the northwestern (down-gradient) and southeastern (up-gradient) boundaries of the Site. Minimal or no concentrations of these chemicals were present in the groundwater samples collected from the central portion of the Site, where the petroleum hydrocarbon contamination was detected. Such distribution pattern of the contaminants indicated a strong potential for one or more off-site up-gradient sources of chlorinated solvents impacting groundwater at the subject Site.

Please refer to Table 1 and 2 for a Summary of Detected Compounds (Soil and Groundwater Sampling, June – September, 2005) and to Figure 2 for the location of soil borings and monitoring wells installed in 2005. Laboratory Analytical Results together with Quality Assurance Review from the Chemtech Consulting Group, Inc. (Chemtech), Mountainside, New Jersey, a New York State ELAP-approved laboratory, are attached in Appendix D.

1.5 Previous Site Characterization Reports

2007 Site Characterization

In accordance with the DEC-approved Site Characterization and Interim Remedial Measures (IRM) Work Plan, dated May 11, 2007, GCE performed the following activities:

On April 27, 2007, in accordance with the WCDH requirements, A-1 Crown Leak conducted an UST tightness test of the 550-gallon waste oil UST located in the northern portion of the garage. The tank passed the test. Twelve (12) inches of waste oil was present in the tank at the time of the testing.

In May, 2007 GCE performed an abandonment and closure of this 550-gallon waste oil UST. Residual waste oil was pumped out from the UST, the interior of the UST was cleaned and a visual inspection did not reveal the presence of any dents or holes in the tank walls. Four (4) soil borings were advanced beneath and around the abandoned UST. Laboratory analysis of the soil samples indicated that concentrations of volatile organic compounds (VOCs), semi-volatile base-neutrals organic compounds (B/Ns) and 8 RCRA Metals were either non-detected, detected below their detection limits or detected below the DEC Division of Environmental Remediation Technical and Administrative Guidance Memorandum (TAGM) Recommended Soil Cleanup Objectives (TAGM Standards) in the all soil samples. Upon completion of work, the UST was filled with clean sand, the excavation around tank was backfilled with the original soil and the concrete floor was restored to its original conditions. The Underground Storage Tank Closure report dated July 17, 2007, was submitted to the WCDH on September 12, 2007. In its letter dated September 18, 2007, the WCDH concluded that "no further sampling or remediation is needed at this time". On January 2, 2009, the report was sent to the DEC upon their request. On January 29, 2009, a Certificate of Compliance was received from the Departments of Building, the City of White Plains, NY. Please refer to Appendices J, K and L for the Underground Storage Tank Closure Report, NFA letter from the WCDOH and the Certificate of Compliance from the City of White Plains Building Department, respectively.

On October 31 and November 1, 2007, GCE performed soil delineation in the area of the former dry well at the Site, which consisted of the advancement of six (6) soil borings (B-12 through B-17) in order to further delineate the horizontal and vertical extent of soil contamination discovered at the Site during the 2005 investigation in the area of the former dry well. The Delineation of Soil Contamination and Dry Well Remediation report prepared by GCE for the Site and submitted to the DEC on December 18, 2007 included the following findings:

- Contamination occurs only in the fill and does not exceed 3 feet below grade.

- The soil with the highest contamination was encountered in the central boring B-12 located approximately 6 inches to the south of B-1 (location of former dry well), where concentration of PCE exceeds the DEC Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater (Regulatory Standards), however detected at much lower concentration (14 mg/kg) that found in B-1.

- The soil contamination decreased considerably in borings B-13 and B-14 located at a distance of 5 feet from B-1, and concentrations of VOCs and B/Ns in borings B-15, B-16 and B-17 (10 feet further from B-1) were either non-detect, detected below their detection limits, or detected below the Regulatory Standards.

Upon review of the 2007 Site Characterization report, the DEC, its letter dated January 9, 2008, stated that “the extent of contamination has not been fully delineated in the vicinity of B-14. Therefore, we recommend additional sampling to be performed in the vicinity of B-14 to better define the proposed area to be excavated”.

<u>2008 Delineation of Soil Contamination and 2009 Dry Well Remediation</u>

On March 26, 2008, GCE conducted additional sampling in the area of the former dry well at the Site (the B-14 area), which consisted of the advancement of three (3) additional soil borings (B-18 through B-20) in order to further delineate the horizontal and vertical extent of soil contamination in the vicinity of soil boring B-14.

The Delineation of Soil Contamination and Dry Well Remediation – Additional Delineation report prepared by GCE for the Site was submitted to the DEC on April 29, 2008 included the following findings:

- No visual and/or olfactory contamination was encountered during this investigation.

- Concentrations of VOCs and B/Ns in soil borings B-18, B-19 and B-20 were non-detect, detected below their detection limits, or detected below the Regulatory Standards.

Please refer to Table 3 for a Summary of Detected Compounds (Soil Sampling, 10/31/2007 and 3/27/2008), to Table 4 for a Summary of PID Readings and Total VOC Concentrations, Soil Delineation, 10/31/2007 and 3/27/2008) and to Figure 2 for the location of soil borings advanced during soil delineation in 2007 and 2008.

In January 2009, GCE performed excavation of the contaminated soil in the area of the former dry well in accordance with the approved Interim Remedial Measures (IRM) Work Plan for the Site. On January 7, 2009, the concrete floor was cut, the soil was excavated to a depth of approximately 4.5 feet below grade and was placed in two (2) roll-off containers. Upon analysis of pre-disposal composite soil samples, the excavated contaminated soil was disposed of at the Clean Earth of Carteret, NJ disposal facility. A total of approximately 27.22 tons of contaminated soil was disposed of off-site. Nine (9) post-excavation end-point soil samples were collected. Laboratory analysis of the post-excavation end-point soil samples indicated that the concentrations of VOCs and B/Ns in all soil samples were non-detected, detected below their detection limits, or detected below the Regulatory Standards. The excavation was backfilled with DEC-approved clean crushed stone and the concrete floor slab was restored to its original condition. The IRM report was performed by GCE and submitted to the DEC on April 13, 2009.

Please refer to Table 5 for a Summary of Detected Compounds (IRM Excavation, End Point Sampling, 1/7/2009) and to Figure 2 for the location of the excavation area.

2.0 INVESTIGATION FIELD ACTIVITIES

This Section describes field activities conducted in 2009 by GCE during the final phase of the Site Characterization in accordance with the DEC-approved Revised Site Characterization Work Plan.

2.1 Soil Borings

On February 24, 2009, GCE advanced four (4) additional soil borings (B-21 through B-24) in the parking lot in the northeastern portion of the Site. A DEC representative was present at the Site during the soil boring activities. All borings were advanced using a Geoprobe drilling system to the depth of groundwater. Soil samples from the borings were collected at 5-foot intervals using dedicated disposable polyethylene samplers and were field screened for the presence of total

VOCs using a Thermo Environmental Instruments Inc. Model 580B portable PID with a 10.6 e.V. lamp, calibrated for isobutylene standards. The soil samples were visually classified and logged by the GCE's on-site geologist for soil characterization purposes. The soil boring locations are presented in Figure 2 - Site Plan and Sample Locations. The boring logs are presented in Appendix B.

Laboratory obtained glassware was used for the soil samples and consisted of the following:

- Volatile Organic Compounds (VOCs) – one (1) 4-ounce glass jar equipped with teflon-lined cap per sample;

- Semi-Volatile Base-Neutrals Organic Compounds (B/Ns) – one (1) 8-ounce glass jar equipped with teflon-lined cap per sample;

The soil samples were placed into two (2) glass containers equipped with teflon-lined caps. Air in the head space of the one (1) container (B/Ns) was allowed to develop. The head space was field screened for the presence of total VOCs using a PID.

One (1) soil sample with the highest PID reading from each soil boring and the deepest soil sample collected immediately above the groundwater from each soil boring were submitted under a chain-of-custody protocol to EcoTest Laboratories, Inc. (EcoTest) of North Babylon, New York, a New York State ELAP-approved laboratory and were analyzed for the presence of VOCs using EPA Method 8260 and B/Ns using EPA Method 8270.

One (1) trip blank and one (1) duplicate sample were collected as QA/QC samples and were analyzed for VOCs (trip blank) and for VOCs and B/Ns (duplicate).

Upon their completion, all soil borings were grouted from the bottom up to grade to prevent short-circuiting during the subsequent soil vapor investigation.

2.2 Groundwater Investigation

2.2.1 Monitoring Well Installation

Between February 17 and 19, 2009, GCE installed six (6) additional monitoring wells (MW-4 through MW-9) on the Site as follows: MW-4 was installed to the northwest and as close as possible to the limit of the historical dry well excavation, MW-5 was installed to the west and hydrologically down-gradient of the removed USTs, MW-6 was installed adjacent to the northern interior wall of the building, and MW-7 through MW-9 were installed along the western border of the Site in order to fully delineate the groundwater contamination plume. A DEC representative was present at the Site during the monitoring wells installation activities. The monitoring well locations are presented in Figure 2 - Site Plan. The monitoring well logs are presented in Appendix C.

The groundwater monitoring wells were installed using the Geoprobe drilling system with a 4.25-inch inner diameter hollow-stem auger. The monitoring wells were constructed of Schedule 40, 2.0-inch diameter PVC risers, attached with threaded joints to Schedule 40, 2.0-inch diameter, 0.020-inch slotted PVC well screens. A 15-foot screen section was placed at each well, extending 10 feet below groundwater. Clean silica filter sand No. 2 was placed in the annulus of the borehole to minimize the amount of fine sediment entering the well, to a depth of approximately two (2) feet above the top of the well screen. A two-foot-thick bentonite seal was installed above the sand filter pack to prevent the infiltration of surface water into the well. Bentonite/cement grout was placed from the top of the bentonite seal to approximately one (1) foot below ground surface. The monitoring wells were fitted with eight (8)-inch diameter flush-mounted protective watertight manholes set to prevent tampering and provide protection from the surface water runoff.

During the installation of the monitoring wells, soil samples were not collected. However, soil cuttings were field screened with a PID and were recorded in the well logs.

Upon installation, the monitoring wells were developed using a submersible pump until the groundwater appeared to be free of sediments. The newly installed wells were allowed to stabilize and equilibrate with the aquifer for at least two weeks.

2.2.2 Monitoring Well Survey and Groundwater Level Measurement

On March 18, 2009, GCE conducted an elevation survey and groundwater level measurements of all the existing and newly installed monitoring wells. The monitoring well casing rim elevations were surveyed to the nearest 0.01-foot.

Depth to groundwater was measured using a Solinst oil/water interface probe equipped with a fiberglass measuring tape. The same probe and measuring tape were used for all measurements. All of the groundwater measurements were taken from an etch mark at the top of the PVC casing of each well.

Groundwater elevation values were then used to prepare a potentiometric surface map or groundwater contour map for the aquifer. Based on the information gathered during this SC, groundwater flow direction at the

Site is to the north-northwest. Please refer to Figure 4 – Groundwater Contours, Table 9 – Elevation Survey and Table 10 – Groundwater Level Measurements.

2.2.3 Groundwater Sampling

On February 24, 2009, one (1) groundwater sample was collected from each of the borings (B-21 through B-24) located on the parking lot and were analyzed for the same parameters as the soil samples (VOCs using EPA Method 8260 and B/Ns using EPA Method 8270).

On March 18, 2009, GCE collected groundwater samples from all the existing and all the newly installed monitoring wells. A DEC representative was present at the Site during the groundwater sampling activities. Laboratory obtained glassware was used for the groundwater samples and consisted of the following:

- VOCs – two (2) 40-mL glass vials preserved with hydrochloric acid and equipped with teflon-lined cap per sample;
- B/Ns – one (1) 1-liter glass container equipped with teflon-lined cap per sample;

All groundwater samples, including QA/QC samples, were logged and transferred under a chain-of-custody protocol to EcoTest for analysis of VOCs using EPA Method 8260 and B/Ns using EPA Method 8270, except for the trip blank sample which was analyzed for VOCs only.

In addition, a Hanna water quality multi-parameter system was used to monitor water quality parameters during purging: electrical conductivity, dissolved oxygen, pH, salinity, total dissolved solids, oxidation-reduction potential and temperature. Three of these water quality parameters (dissolved oxygen, pH and oxidation-reduction potential) were used to evaluate the natural attenuation of the contaminants in groundwater.

2.3 Soil Vapor Intrusion Investigation

In accordance with the DEC Program Policy (DER-13/Strategy For Evaluating Soil Vapor Intrusion at Remedial Sites in New York, dated October 18, 2006), all contaminated sites in New York State, especially sites contaminated with chlorinated VOCs, should be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion, which is described as the migration of volatile chemicals (in vapor form) from the subsurface into overlying or adjacent buildings.

2.3.1 Soil Vapor Probe Installation

The DEC-approved Site Characterization and Interim Remedial Measures Work Plan, dated May 11, 2007, proposed that a total of twelve (12) soil vapor probes be installed at the Site. However, based on the extent of the IRM soil removal, the DEC/NYSDOH reduced the number of soil vapor sample locations from twelve (12) to nine (9); see February 11, 2009 e-mail from DEC, with NYSDOH sample location map.

On February 23, 2009, GCE installed six (6) sub-slab soil vapor probes, two (2) deep soil vapor probes and two (2) shallow soil vapor probes at the Site. A DEC representative was present at the Site during the soil vapor probes installation activities. All sub-slab and soil vapor probe installations were performed in accordance with the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 (NYSDOH Guidance). The location of the soil vapor probes was based on the NYSDOH revised location plan.

The six (6) sub-slab soil vapor probes were installed at the Site as follows: two (2) sub-slab vapor probes (SS-1 and SS-2) were installed within the office area and four (4) sub-slab soil vapor probes (SS-3, SS-4, SS-5 and SS-6) were installed within the interior of the repair shop. A 1-inch diameter hole was drilled into the concrete floor using an electric hammer drill with a masonry bit for each soil vapor probe. Laboratory quality inert polyethylene tubing (¼ inch diameter) was installed into each hole. The tubing did not extend further than 2 inches into the sub-slab material. The tubing was attached to a brass fitting with threaded plugs. The brass fittings were installed flush with the floor surface and were sealed to the surface with a mixture of non-VOC-containing and non-shrinking cement and bentonite to minimize infiltration of water or outdoor air.

It should be noted that during the installation of the sub-slab vapor probes in the office area, GCE determined that the office area has no concrete floor slab, but had an approximately 1-foot-thick floor made of wood, below which is an approximately 1-foot free space. It is possible that the sub-slab vapor probes in the office area were installed within floor beams since the makeup of the floor is unknown.

The four (4) remaining soil vapor probes were installed as follows: two (2) soil vapor probes (shallow SS-7 and deep SS-7D) was installed near the location of monitoring well MW-5 and two (2) soil vapor probes (shallow SS-8 and deep SS-9) were installed near the location of monitoring well MW-2 in the eastern portion of the parking lot. Shallow implants (SS-7 and SS-8) were installed at a depth of approximately 5 feet below grade and the deep implants (SS-7D and SS-9) were installed at a depth of approximately 25 feet below grade (2 to 3 feet above groundwater) using the Geoprobe drilling system. The implants, consisting of 1-foot long stainless steel screens, were fitted with laboratory quality inert polyethylene tubing (¼ inch diameter) to the surface and were plugged. Clean glass beads were placed in the annulus of the borehole to create a sampling zone to a depth of approximately two (2) feet above the screen. A two-foot-thick bentonite seal was installed above the glass bead filter pack to prevent outdoor/indoor air infiltration. A mixture of non-VOC-containing and non-shrinking cement and bentonite was placed from the top of the bentonite seal to approximately one (1) foot below ground surface. A six (6)-inch diameter flush-mounted protective watertight manhole was set around the top of each probe tubing and was grouted in place to minimize infiltration of water or outdoor/indoor air, as well as to prevent accidental damage.

All the sub-slab and soil vapor probes were installed as permanent probes. The locations of the soil vapor probes are presented in Figure 2 - Site Plan.

2.3.2 Soil Vapor Sampling

The newly installed soil vapor probes were allowed to stabilize and equilibrate with the subsurface conditions for approximately 48 hours prior to sampling. As a part of soil vapor investigation, a building questionnaire was conducted 24 hours prior to sampling, which included a product inventory to determine whether there were products in the sampling area that contained VOCs. Please refer to Appendix K for NYS DOH Indoor Air Quality Questionnaire.

On February 27, 2009, GCE collected soil vapor samples from all nine (9) sub-slab and soil vapor probes. A DEC representative was present at the Site during the soil vapor sampling activities. The soil vapor samples were collected in the same manner at all locations to minimize possible discrepancies. To ensure stagnant or ambient air was removed from the sampling system and to assure that the samples collected were representative of subsurface conditions, one (1) to three (3) implant volumes (the volume of the soil vapor probe and tube) were purged prior to collecting the samples. Flow rates for both purging and collecting did not exceed 0.2 liters per minute to minimize outdoor air infiltration during sampling. A real time tracer gas (helium) was used prior to collecting soil vapor samples to verify that an adequate seal had been created around the soil vapor probes. No leaks (>10%) were detected prior to soil vapor sampling.

One (1) soil vapor sample was collected from each newly installed soil vapor probe. In addition, one (1) duplicate, two (2) indoor and one (1) outdoor air samples were collected. The two (2) indoor air samples, IA-1 and IA-2, were collected in the office area and in the southern portion of the repair shop, respectively. The outdoor air sample (OA-1) was collected in the central portion of the parking lot. Laboratory obtained samplers were used for the soil vapor, indoor and outdoor air samples and consisted of the following:

- VOCs – one (1) 6-liter SUMMA canister with settable flow controller.

All soil vapor samples were logged and transferred under a chain-of-custody protocol to EcoTest for analysis of VOCs using EPA Method TO-15. The soil vapor samples were collected with SUMMA canisters with preset 2-3 hour collection periods with flow rates of approximately 0.04 liters per minute. The indoor and outdoor air samples were collected with SUMMA canisters with preset 8-hour collection periods with flow rates of approximately 0.01 liters per minute.

Since TCE was listed as a contaminant of concern at the Site, based on DEC’s comments on the PSA Work Plan dated March 27, 2007, the Laboratory Reporting Limits (LRL), of less than 0.25 microgram per cubic meter (mcg/m^3) were used. All other VOCs on the TO-15 full scan list have the LRL of 1-2 mcg/m^3 and less.

2.4 Waste Management

2.4.1 Soil Cuttings

Soil cuttings from the soil borings and monitoring wells completed during this investigation were placed in fifteen (15) labeled and sealed, DOT-approved 55-gallon drums. The drums were stored temporarily in an existing containment area, and on March 4, 2009, the drums were properly disposed of at a disposal facility by WasteOil Solutions (WasteOil) of West Babylon, NY. Please refer to Appendix F for the waste disposal manifests.

2.4.2 Groundwater and Decontamination Water

Groundwater removed from the monitoring wells during development and purging prior to sampling activities were transferred into three (3) labeled and sealed DOT-approved 55-gallon drums and stored on-site until the groundwater samples were analyzed. Based on the sampling results, on March 4, 2009, the purged and developed groundwater was property disposed of at a disposal facility by WasteOil. Please refer to Appendix F for the waste disposal manifests.

2.4.3 Disposable Sampling Equipment

Incidental waste generated during the sampling activities included latex gloves, disposable bailers, plastic sheeting, paper towels and similar expended and discarded field supplies. These materials also were temporarily stored in a 55-gallon drum in the containment area and were disposed of in accordance with all applicable regulations.

3.0 QUALITY ASSURANCE/QUALITY CONTROL

This section provides information on the site-specific quality assurance project plan (QAPP). The goal of this plan is to achieve data quality objectives (DQO) for this project. The laboratory analytical procedures confirmed to the DEC Analytical Services Protocol (ASP). Category B data deliverables and data usability summary reports (DUSR) were prepared for all final delineation samples and for post-remediation confirmatory end-point samples. Please refer to Table 13 for the Analytical Methods/Quality Assurance Summary that was prepared as part of this SC.

GCE utilized EcoTest as the analytical laboratory for the field activities outlined in this investigation. EcoTest is an independent testing laboratory which was founded in 1977. Since its inception, EcoTest strives to produce the most accurate and precise analytical results possible. Their data is used by clients who must comply with federal, state and local regulations such as SPDES, NPDES, RCRA and SDWA.

In order to achieve these goals, EcoTest implements the following procedures:

- Adequately staffed and equipped laboratory facility;
- Successful participation in the proficiency testing program operated by the New York State Department of Health Environmental Laboratory Approval Program or another accredited provider;
- Successful implementation of a NELAC complaint quality system;
- Successful biennial assessments by the New York State Environmental Laboratory Approval Program, or Primary Accrediting Authority;
- Laboratory test results that are supported by quality control data and documented laboratory testing procedures.

Please refer to Appendix E for Laboratory Quality Manual and Certifications.

3.1 Soil Sampling

All drilling equipment utilized in boring advancement was cleaned using mechanical and chemical cleaning procedures which consisted of brushing and sweeping of loose dirt followed by detergent washing and potable water rinsing.

Soil samples were transferred into the appropriate containers using dedicated disposable latex gloves.

3.1.1 Field QA/QC Samples

Field QC samples served as a control and check mechanism to monitor the consistency of sampling methods and the influence of off-site factors on environmental samples.

Duplicate Samples

In addition to replicate analyses performed in the laboratory, field duplicates also served as a measure for precision. Duplicate samples were collected at a frequency of 10 percent of all samples collected (two (2) soil samples). Duplicates were obtained by collecting two (2) grab samples from the same location, placed in separate containers, and identified as different samples. Duplicate samples were analyzed for VOCs using EPA Method 8260 and for B/Ns using EPA Method 8270. It should be noted that the duplicate soil sample B-23, S-1 collected from soil boring B-23 in the interval of 1 to 3 feet below grade in soil consisting of fill, produced different analytical results when compared to the original soil sample collected in this interval. This result was most likely due to low soil recovery from the 5-foot dedicated disposable polyethylene sampler and the very heterogeneous nature of fill, containing fragments of coal, coal tar and asphalt which caused the unrepresentative duplicate soil sample.

3.2 Monitoring Well Installation

All drilling equipment utilized in the well advancement was steam cleaned prior to initial use. All metal parts were cleaned using mechanical and chemical cleaning procedures which consisted of brushing and sweeping off loose dirt followed by detergent washing and potable water rinsing. During the advancement of the boreholes, soil cuttings were collected into DOT-approved 55-gallon steel drums and labeled accordingly. No oil, grease or any petroleum products were used to lubricate rods. Care was taken to insure that no oil, grease or other lubricant was leaking from the drill rig and entering any boreholes.

The PVC riser pipes and screens were transported to the Site and stored, prior to their installation, in their original polyethylene shipping sleeves. To prevent possible contamination of the wells by VOCs, no glue, tape or other solvent containing materials were used to join pipe sections together.

3.3 Groundwater Sampling

Prior to sampling, the standing water volume was calculated by using the depth to groundwater and total depth of the well. Three to five standing volumes of water were purged from the monitoring wells prior to sampling in order to evacuate the water that had stagnated and/or thermally stratified in the well casing. Additionally, pH, temperature and specific conductance was stabilized to +/- 10% over at least 3 successive well volumes. The wells were purged using a submersible pump. When the calculated quantity of water was purged from each well, a water sample was obtained using a dedicated disposable bailer.

The sampling procedure used by GCE utilized a bottom-fill check valve disposable bailer. The bailer, made of polyethylene, was slowly lowered into the well by hand. Once in position, the attached cord was pulled to set the check valve and the bailer was then retrieved.

3.3.1 Field QA/QC Samples

Field QC samples served as a control and check mechanism to monitor the sampling methods and the influence of off-site factors on environmental samples.

Trip Blank

One (1) trip blank was prepared by the laboratory with deionized laboratory grade water and accompanied all sample shipment to the laboratory. The water used was from the same source as that used for the laboratory method blank. The trip blank was handled and transported in the same manner as the samples collected which it accompanied. The trip blank was analyzed for VOCs using EPA Method 8260 to identify the presence of cross-contamination as a result of sample shipment, e.g. contaminated from the air, shipping containers, or from other items coming into contact with the sample bottles.

Duplicate Samples

In addition to replicate analyses performed in the laboratory, field duplicates also served as a measure for precision. Duplicate samples were collected at a frequency of 10 percent of all samples collected (two (2) groundwater samples). Duplicates were obtained by collecting two (2) successive samples from the same location, placed in separate containers, and identified as different samples. Duplicate samples were analyzed for VOCs using EPA Method 8260 and SVOCS using EPA Method 8270.

Matrix Spike/Matrix Spike Duplicates (MS/MSD)

MS/MSD samples were used to assess influences or interferences caused by the physical or chemical properties of the sample itself. MS/MSD data was reviewed in combination with other QC monitoring data to determine matrix effects. The samples for the MS/MSD analyses were collected from a sampling location that was believed to exhibit low-level contamination. A sample from an area of low-level contamination was needed because the objective of MS/MSD analyses is to determine the presence of matrix interferences, which are best achieved with low levels of contaminations. In accordance with the ASP protocol, MS/MSD samples were collected at a frequency of two (2) samples for each 20 samples collected for VOC 8260 and for B/Ns using EPA Method 8270 with a minimum of two (2) samples.

3.4 Soil Vapor Sampling

Extreme care was taken during all aspects of sample collection to ensure that sampling error was minimized and high quality data was obtained. The sampling team members avoided actions (e.g. fueling vehicles, using permanent marking pens, and wearing freshly dry-cleaned clothing or personal fragrances), which could have caused sample interference in the field. Appropriate QA/AC protocols were followed for sample collection and laboratory analysis.

3.4.1 Field QA/QC Samples

Field QA/QC samples were collected, stored, transported and analyzed in a manner consistent with the Site samples. The following QC samples were collected to support the sampling activity:

Duplicate Samples

Duplicate samples were collected at a frequency of 10 percent of all samples collected (one (1) soil vapor sample). A duplicate sample was collected in a separate sample container, concurrently with a soil vapor sample utilizing a T-connection using SUMMA canisters. A duplicate sample was analyzed for VOCs using EPA Method TO-15, the same analysis that was performed on the original sample.

Background Air Samples

Background air samples were collected to characterize site-specific background outdoor and indoor air conditions. These samples were collected concurrently (over an 8-hour period) with and in the same manner as sub-slab and soil vapor samples. They were used in the evaluation of soil vapor results (i.e., to identify potential outdoor and indoor air interferences associated with the infiltration of outdoor and indoor air into the sampling apparatus while the soil vapor sample was collected). One (1) outdoor and two (2) indoor air samples were collected from representative locations at the Site. The outdoor and indoor air samples were analyzed for VOCs using EPA Method TO-15.

Trip blanks were not collected, because it was not possible to duplicate round-trip shipping conditions with a single trip blank since sample canisters were shipped from the lab under vacuum pressure and returned to the lab at or close to ambient pressure.

3.5 Sample Handling and Documentation

The samples were transferred into sample containers which were packed and shipped back to the laboratory in a laboratory-supplied cooler with sufficient ice packs to maintain the sample temperature at 4°C at all times during shipping to the laboratory. Chain-of-custody protocols were maintained from sample collection to delivery to the laboratory. Field information was recorded in field report and sampling log sheets. Full documentation was made as to the location and depth of all samples collected. Each sample was labeled with GCE’s project number, the sample location and depth interval, the date and time, the initials of the sampler and the requested analysis. Samples were delivered to the analytical laboratory as soon as possible after collection.

3.6 Data Validator Qualifications

In accordance with the DEC-approved Site Characterization and Interim Remedial Measures Work Plan, dated May 11, 2007, GCE proposed to utilize the services of Ms. Judy Harris as a third party data validation expert. However, due to unknown reasons, Ms. Harris could not be contacted and GCE had to utilize another data validator. Ms. Renee Cohen of Premier Environmental Services, Merrick, New York was selected by GCE and was approved by the DEC in an e-mail, dated March 5, 2009.

Ms. Cohen has over twenty years experience in environmental analytical processing and data usability interpretation. Her experience includes providing data validation services for various remedial investigation and site characterization purposes. Ms. Cohen holds a Bachelor Degree in Environmental Science and Biology from the Old Dominion University in Norfolk, Virginia. Please refer to Appendix E for Ms. Cohen’s Statement of Qualification and Resume. Ms. Cohen prepared all DUSR for this SC, all of which are included in Appendix D.

Soil and groundwater samples from 2005 Subsurface Investigation were analyzed in Chemtech. These lab results have not been validated; however all lab results were supported by Chemtech Quality Assurance Reviews, all of which are also included in Appendix D.

4.0 COMMUNITY AIR MONITORING

Community Air Monitoring Plan (CAMP) requires real time monitoring for the presence of VOCs and dust at the downwind perimeter of designated work area when certain activities are in progress. The following CAMP was implemented:

Real time monitoring for the presence of VOCs and dust at the downwind perimeter of designated work area was conducted upon arriving at the Site and during drilling activities with 15-minute interval. Total VOCs concentrations were monitored using a PID and never exceeded 5 ppm, an action level at which work activities should be temporarily stopped.

The only exception, when the total VOCs concentrations in the ambient air in the vicinity of the work area exceeded 5 ppm was when painting was being performed in the exterior auto detailing area in the western portion of the garage. When the painting activities were completed, the total VOCs concentrations decreased to less than 5 ppm above background levels. There were no occurrences when the total VOCs concentrations in the ambient air in the vicinity of the work area exceeded 5 ppm above background levels due directly to the drilling activities. During outdoor drilling activities, the total VOCs concentrations in the ambient air in the vicinity of the work area did not exceed 0.0 ppm.

Particulate concentrations were monitored using a Portable Real-Time Particulate Monitor equipped with an audible alarm to indicate exceedance of the action level. Such monitor was capable of measuring particulate matters less than 10 micrometers in size (PM-10). PM-10 particulate level during all drilling activities never exceeded the action level of 150 micrograms per cubic meter (mcg/m^3) and ranged from 0.0 to a maximum of 10.7 mcg/m^3.

Please refer to Table 12 for PID and Particulate Readings.

5.0 LABORATORY ANALYTICAL RESULTS

GCE reviewed the laboratory analytical reports and the DUSR and utilized the corrected laboratory analytical results that are included in the DUSR as the sampling results. The limited number of corrections that are included in the DUSR indicates that the laboratory analytical data are reliable. Please refer to Appendix D for all three (3) DUSR that were prepared for this SC and three (3) DUSR prepared during the previous investigations.

<u>Soil Sampling Results</u>

The soil sampling results were compared to the New York State Department of Environmental Conservation (DEC) Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater (Regulatory Standards). Laboratory analysis of the soil samples indicated the following:

B-23, S-1

Four (4) B/Ns, namely benzo(a)anthracene (2.3 milligrams per kilogram (mg/kg)), benzo(b)fluoranthene (2.0 mg/kg), benzo(k)fluoranthene (1.8 mg/kg) and chrysene (2.2 mg/kg) were detected above the Regulatory Standards of 1.0 mg/kg for benzo(a)anthracene and chrysene, and 1.7 mg/kg for benzo(b)fluoranthene and benzo(k)fluoranthene. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Regulatory Standards.

B-24, S-1

Four (4) B/Ns, namely benzo(a)anthracene (3.7 mg/kg), benzo(b)fluoranthene (4.1 mg/kg), benzo(k)fluoranthene (4.2 mg/kg) and chrysene (3.5 mg/kg) were detected above the Regulatory Standards of 1.0 mg/kg for benzo(a)anthracene and chrysene, and 1.7 mg/kg for benzo(b)fluoranthene and benzo(k)fluoranthene. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Regulatory Standards.

Duplicate (B-23, S-1)

Four (4) B/Ns, namely benzo(a)anthracene (13.0 mg/kg), benzo(b)fluoranthene (18.0 mg/kg), benzo(k)fluoranthene (17.0 mg/kg) and chrysene (20.0 mg/kg) were detected above the Regulatory Standards of 1.0 mg/kg for benzo(a)anthracene and chrysene, and 1.7 mg/kg for benzo(b)fluoranthene and benzo(k)fluoranthene. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Regulatory Standards.

B-21, S-6; B-21, S-7; B-22, S-1; B-22, S-7; B-23, S-7; and B-24, S-7

VOCs and B/Ns were non-detect, detected below their detection limits, or detected below the Regulatory Standards.

Please refer to Table 6 for a Summary of Detected Compounds (Soil and Groundwater Sampling, 2/24/2009).

Groundwater Sampling Results

The groundwater sampling results were compared to the NYSDEC Ambient Water Quality Standards & Guidance Values (Groundwater Standards). Laboratory analysis of the groundwater samples indicated the following:

B-21, WS-1

Several VOCs, namely 1,1,1-TCA (14 micrograms per liter (ug/l)), 1,2,4-trimethylbenzene (23 ug/l), 1,3,5-trimethylbenzene (12 ug/l) and PCE (17 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. One (1) B/N, namely naphthalene (64 ug/l) was detected above the Groundwater Standard of 10 ug/l for this compound. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

B-22, WS-1

Two (2) VOCs, namely 1,1,1-TCA (34 ug/l) and PCE (19 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

B-23, WS-1

One (1) VOC, namely 1,1,1-TCA (9 ug/l) was detected above the Groundwater Standard of 5 ug/l for this compound. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

B-24, WS-1

One (1) VOC, namely 1,1,1-TCA (15 ug/l) was detected above the Groundwater Standard of 5 ug/l for this compound. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

Duplicate (B-23, WS-1)

One (1) VOC, namely 1,1,1-TCA (9 ug/l) was detected above the Groundwater Standard of 5 ug/l for this compound. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

MW-1, WS-1

Two (2) VOCs, namely DCE (14 ug/l) and 1,1,1-TCA (120 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

MW-2, WS-1

Two (2) VOCs, namely 1,1,1-TCA (53 ug/l) and PCE (16 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

MW-3, WS-1

Two (2) VOCs, namely 1,1,1-TCA (21 ug/l) and PCE (19 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

MW-4, WS-1

Two (2) VOCs, namely 1,1-DCE (5 ug/l) and 1,1,1-TCA (43 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. The remaining VOCs and B/Ns were non-detect, detected below their detection limits, or detected below the Groundwater Standards.

MW-5, WS-1

Two (2) VOCs, namely 1,1-DCE (5 ug/l) and 1,1,1-TCA (35 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

MW-6, WS-1

Two (2) VOCs, namely 1,1,1-TCA (22 ug/l) and PCE (11 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

MW-7, WS-1

Three (3) VOCs, namely 1,1-DCE (13 ug/l), DCA (6 ug/l) and 1,1,1-TCA (230 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

MW-8, WS-1

Two (2) VOCs, namely 1,1-DCE (7 ug/l) and 1,1,1-TCA (91 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. The remaining VOCs and

B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

MW-9, WS-1

Two (2) VOCs, namely 1,1,1-TCA (9 ug/l) and PCE (27 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

Duplicate (MW-2, WS-1)

Two (2) VOCs, namely 1,1,1-TCA (54 ug/l) and PCE (17 ug/l) were detected above the Groundwater Standards of 5 ug/l for these compounds. The remaining VOCs and B/Ns were either non-detect, detected below their detection limits, or detected below the Groundwater Standards.

Please refer to Table 7 for a Summary of Detected Compounds (Groundwater Sampling, 3/18/2009).

Soil Vapor Sampling Results

Low BTEX concentrations, ranging between 40.38 and 247.26 microgram per cubic meter (mcg/m^3), were detected in all the soil vapor samples (SS-1 through SS-9, except for SS-7) and in the indoor (627.28 and 1,799.75 mcg/m^3) and outdoor (9.96 mcg/m^3) ambient air samples. Of all the soil samples collected below the slab/grade, higher concentrations of BTEX (approximately 5 times the next highest concentrations) were detected only in the deep soil vapor probe SS-7 (1,349.80 mcg/m^3), located down-gradient of the removed leaking USTs.

Concentrations of chlorinated VOCs, namely PCE, TCE and 1,1,1-TCA were detected in high concentrations in all the soil vapor samples (SS-1 through SS-9) and in the indoor ambient air samples. Additionally, concentrations of 1,1-DCE and 1,1-DCA were detected in soil vapor sample SS-9. The highest concentrations of chlorinated VOCs in the sub-slab soil vapor samples were detected in SS-3, located in the western portion of the Site. The highest concentrations of chlorinated VOCs in the shallow and deep soil vapor samples were detected in SS-9, located in the eastern portion of the Site.

Please refer to Table 8 for a Summary of Detected Compounds (Soil Vapor Intrusion – Air Sampling, 2/27/2009).

All laboratory analytical reports and Data Usability Summary Reports are included in Appendix D.

6.0 SUMMARY OF FINDINGS AND RECOMMENDATIONS

6.1 Summary of Findings

As indicated above, the Site has a long history of investigation and remediation, starting in 2001, when one (1) 500-gallon waste oil UST and one (1) 500-gallon No.2 fuel oil UST were removed from the central portion of the Site, and two (2) new tanks were installed. According to the long-term tenant, contaminated soil was encountered during tanks removal activities. All contaminated soil was excavated and removed. The Westchester County Department of Health (WCDH) required the installation of the down-gradient monitoring well MW-1. Between January 2002 and January 2003, GCE conducted five rounds of groundwater monitoring at the Site.

GCE's Phase I Environmental Site Assessment, dated February 4, 2005 revealed the existence of one (1) dry well located on the central portion of the on-site building. This dry well was filled and covered with a concrete slab, approximately 2 x 4 feet in size. The tenant was unaware of when this dry well was closed, but it was at least prior to 2001, when GCE started its investigations at the Site. No further information regarding this dry well was provided.

In 2005 GCE performed an Additional Subsurface Investigation at the Site. This investigation consisted of installation of seven (7) soil borings (B-1 through B-7) with continuous soil sampling and two (2) groundwater monitoring wells (MW-2 and MW-3) and subsequent well survey, groundwater level measurement and groundwater sampling.

In accordance with the DEC-approved Site Characterization (SC) and Interim Remedial Measures (IRM) Work Plan, dated May 11, 2007, GCE performed the following additional activities: in 2007, the 550-gallon waste oil UST was tightness tested, abandoned in placed and closed; in 2007, soil delineation in the area of the former dry well at the Site was performed and consisted of advancement of six (6) soil borings (B-12 – B-17); in 2008, additional site delineation was performed (soil borings B-18 – B-20); in January 2009, an IRM was conducted that included excavation of the contaminated soil in the area of the former dry well; and in February – March, 2009, GCE performed a SC at the subject Site, which consisted of the advancement of four (4) soil borings (B-21 through B-24), installation of six (6) groundwater monitoring wells (MW-4 through MW-9) and nine (9) soil vapor probes (SS-1 through SS-9) and subsequent soil, groundwater, soil vapor and air sampling, elevation survey and groundwater level measurement, all to further delineate the extent of contaminants in soil, groundwater and soil vapors at the Site and to identify the sources of contamination and the migration pathways on or through soil and groundwater.

Visual inspection, PID field analysis and laboratory analysis of soil, groundwater and soil vapor samples collected during these investigations, indicated that soil, groundwater and soil vapors below the Site are contaminated. Two (2) types of contaminants were revealed below the Site: petroleum hydrocarbons and chlorinated hydrocarbons (chlorinated solvents).

Petroleum Hydrocarbons

As indicated above, petroleum hydrocarbons in the soil were detected during the 2005 Subsurface Investigation in borings B-1 and B-5 located on the central portion of the Site, in the area of the removed 550-gallon USTs formerly storing No. 2 fuel oil and waste oil. Concentrations of BTEX totaling 17.9 mg/kg (0’ - 2’ below grade) and 4.12 mg/kg (15’ - 17’ below grade) were detected in borings B-1 and B-5, respectively. No evidence of petroleum contamination in the form of free product was observed. Soil delineation activities in the area of former dry well (borings B-12 through B-20) performed in 2008 and 2009 revealed some petroleum compounds (mostly SVOCs) only in the dark-gray fill (0 - 3 feet below grade) and only at concentrations far below Regulatory Standards. And finally, during the 2009 Site Characterization, some petroleum hydrocarbons in soil were found in borings B-21 through B-24, all located in the parking lot, on the northeastern portion of the Site. Boring B-21 contained BTEX, however, in concentrations that are below the Regulatory Standards. Several B/Ns, namely benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene and chrysene were detected above the Regulatory Standards only in soil borings B-23 and B-24 and only in the fill material (0 to 3 feet below grade). The soil below this interval was found to be clean.

Petroleum hydrocarbons in groundwater were also found in 2005 only in the area of the removed USTs. Concentrations of BTEX totaling 41.1 ug/l in soil boring B-5 and 19.3 ug/l in boring B-7 were detected in groundwater samples. During the last round of the Site Characterization conducted in 2009, petroleum hydrocarbons were found also in monitoring well MW-9, located down-gradient of the removed USTs, however concentrations of BTEX (2 ug/l) was detected far below Groundwater Standards. This data indicates that the source of petroleum contamination was most likely the former leaking UST(s) located near boring B-5. The petroleum plume was limited and was moving very slowly in the northwestern direction, along the general direction of groundwater flow.

Since the source of petroleum contamination has been removed, and due to the natural attenuation during the eight (8) years following the USTs removal in 2001, the area below the Site building was essentially clean of petroleum products in 2009.

Petroleum hydrocarbons in groundwater were also detected in boring B-21 located on the parking lot, along the northern boundary of the Site and approximately 25 feet to the east and hydrologically cross-up-gradient of the removed 550-gallon UST. Although the concentrations of total BTEX in groundwater sample from B-21 was detected far below Groundwater Standards (2 ug/l), the groundwater at B-21 is not devoid of petroleum-related impact (i.e. B-21 contains concentrations of 1,2,4-trimethylbenzene at 23 ug/l, 1,3,5-trimethylbenzene at 12 ug/l and naphthalene (SV) at 64 ug/l, all which exceed their respective Groundwater Standards (see Table 6). The source of this impact is not known and most likely is located off-site, on the property located to the north of the Site.

BTEX and other petroleum compounds were not detected in any other soil borings or monitoring wells during 2009.

Low BTEX concentrations, ranging between 40.38 and 247.26 mcg/m^3, were detected in all the soil vapor samples (SS-1 through SS-9, except for SS-7) and in the indoor (627.28 and 1,799.75 mcg/m^3) and outdoor (9.96 mcg/m^3) ambient air samples. Elevated concentrations of BTEX were detected only in the deep soil vapor probe SS-7 (1,349.80 mcg/m^3), located down-gradient of the removed leaking USTs.

Chlorinated Hydrocarbons

The 2005 Subsurface Investigation determined that the highest concentrations of chlorinated solvents (190 mg/kg) in soil were detected in boring B-1 located on the central portion of the Site and advanced through the central portion of a concrete pad (presumed location of the historical dry well). Four (4) chlorinated solvent compounds, namely PCE (180 mg/kg), TCE (1.9 mg/kg), cis-1,2-DCE (7.8 mg/kg) and 1,2-DCA (0.6 mg/kg) were detected above the NYSDEC Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater (Regulatory Standards) in the uppermost soil sample (0-2 feet below grade). Groundwater sample collected at boring B-7 at the same location as B-1, had a total concentrations of 40.2 ug/l, indicating that the dry well was a contributing source of chlorinated solvents to the groundwater sometime in the past. However, boring B-12, advanced in 2007 through the same concrete pad, just six (6) inches to the south of the soil boring B-1, revealed that only one chlorinated solvents compound (PCE), (14 mg/kg) was detected above the Regulatory Standards, although at a concentration much lower than previous testing in that location. All other 19 soil borings advanced at the Site in 2005, 2007 and 2009 (with exception of B-5 and B-14 with low concentrations of PCE) chlorinated solvents were not detected or detected far below Regulatory Standards. It should be noted also that elevated concentrations of VOCs including chlorinated solvents, was detected in borings B-1 and B-12 only in the uppermost samples (0-2 feet bgs). The 2007 Delineation of Soil Contamination and the 2009 IRM excavation activities revealed that uppermost soil (0-2 feet bgs) is represented by old fill material consisting of dark-gray, fine-coarse sand and gravel with fragments of bricks and numerous fragments of black coal, which everywhere had elevated level of total VOCs by field PID reading (above 20 parts per million (ppm)). Soil below 2-3 feet soil consists of loose, light-gray to yellow fine-medium, poorly graded sand without any visual or olfactory contamination and PID readings usually 0-0.2 ppm. Please see 2007 Delineation of Soil Contamination report and especially Photo 3 in the 2009 IRM report, clearly showing dark-gray fill material with sharp boundary overlying clean native soil.

The results of groundwater sampling performed during the Site Characterization in March 2009 and based on data from nine (9) monitoring wells and four (4) new soil borings show that in the central portion of the Site in all monitoring wells (including MW-4 and MW-5 located close to and down-gradient from the dry well) concentrations of PCE and its breakdown product in the groundwater are below 5 ug/l (Groundwater Standard). Concentrations of PCE increase to the north and to the east and are the highest in MW6 and MW-9 (13-27 ug/l) along the northern boundary of the Site and in MW-2 and MW-3 (16-20 ug/l) along the eastern boundary of the Site (See Figure 7 – PCE Contours in Groundwater). This data indicate that the main sources of PCE are located off-site, on properties located to the north and to the east and hydraulically cross- and up-gradient of the Site. In addition, PCE concentration at SS-9 (deep soil vapor sample just above the groundwater table, located along the eastern boundary of the Site, near MW-2) also elevated (3,460 ug/m^3), also indicate an off-site (up-gradient) contribution of PCE to the site groundwater.

Concentrations of 1,1,1-TCA and its breakdown products (1,1-DCA and 1,1-DCE) increase to the east and especially to the southwest, and are highest in MW-2 (57 ug/l) along the eastern boundary of the Site and in MW-8 and MW-7 (100-249 ug/l) along the southwestern boundary of the Site (See Figure 6 – 1,1,1-TCA Contours in Groundwater). In addition, 1,1,1-TCA concentration at SS-9 (deep soil vapor sample just above the groundwater table, located along the eastern boundary of the Site, near MW-2) is the highest among the all soil vapor samples (3,938 ug/m^3), also indicating that 1,1,1-TCA originates most likely from one or more up-gradient off-site sources, the exact locations of which are still unknown.

Thus, the results of this investigation determined that the former dry well was a small localized source of chlorinated solvents sometime in the past, and that comingled chlorinated solvent plume is migrating to the Site from off-site locations. The up-gradient potentially responsible parties for these chemicals need to be identified.

Field measurements of DO (See Figure 6 for Dissolved Oxygen Contours in Groundwater) indicate slightly anaerobic conditions in groundwater, especially in the central portion of the Site where petroleum contamination was located and remediated. Negative values of ORP in the area of the former petroleum plume also suggest reducing conditions, expected for anaerobic groundwater.

Temperature (61.0-62.3°C) and pH (6.5-7.0) are optimal for bacterial growth rate. Please refer to the Table 7 for the field parameters data (pH, T(C), Conductivity, DO and ORP).

In aerobic systems, the chlorinated solvents usually resist degradation and are extremely persistent. There are no known bacteria that can oxidize these compounds. Under anaerobic conditions the halogenated compounds are commonly biotransformed. In the case of the Site, in the central portion of the Site, in the area of the former leaking USTs, groundwater had anaerobic conditions. In this area, natural bioattenuation (reductive dechlorination process) most likely lead to a reduction of PCE and 1,1,1-TCA which could explain these lower concentrations.

Soil Vapors

Chlorinated VOCs, namely PCE, TCE and 1,1,1-TCA were detected in concentrations that are elevated in comparison to NYSDOH Guidance in all the soil vapor samples (SS-1 through SS-9) and in the indoor ambient air samples. The highest concentration of 1,1,1-TCA in soil vapors (3,821.30 ug/m^3) was detected in SS-9 (deep soil vapor sample just above the groundwater table, located along the eastern boundary of the Site, near MW-2). In addition, this sample contained breakdown products of PCE, namely 1,1-DCE (83.37 ug/m^3) and 1,1-DCA (33.22 ug/m^3) which were not detected in any other soil vapor samples. High concentration of 1,1,1-TCA in this deep soil vapor sample generally coincides with the high concentration of this compound in groundwater, and indicates that the groundwater is most likely the source of chlorinated VOCs in soil vapors at the Site. This data additionally indicates to off-site (up-gradient) source of 1,1,1-TCA to the site groundwater.

Highest concentration of PCE (6,785 ug/m^3) together with elevated concentrations of 1,1,1-TCA (3,300 ug/m^3) was detected in SS-3 (shallow sub-slab soil vapor sample, located in the southern portion of the garage building, close to the painting room). There is no soil boring in this area and the closest monitoring well MW-7 detected the highest concentrations of 1,1,1-TCA in groundwater (249 ug/l) and very small amounts of PCE (2 ug/l) and TCE (2 ug/l), which indicates that there is no strict correlation between concentrations of chlorinated solvents in groundwater and shallow sub-slab samples. This data indicates that a potential source of PCE is located in the area of SS-3, which is proposed to be addressed by installation of SVE system in this area.

According to the NYSDOH Guidance, New York State currently does not have any standards, criteria or guidance values for concentrations of compounds in sub-slab samples and recommends using NYSDOH Matrices that were developed for TCE (Matrix-1) as well as for and PCE and 1,1,1-TCA (Matrix-2).

GCE's review of the laboratory analytical results and comparison with NYSDOH matrices indicates the following:

- Sub-slab concentrations of TCE below 5 mcg/m^3 were detected in many of sub-slab soil vapor samples. In vapor samples SS-3, SS-6, SS-7 and SS-9, this compound was detected at concentrations ranging between 5 and <50 mcg/m^3. Since the indoor air concentrations of TCW were detected at concentrations between 2.5 and <5.0 mcg/m^3, as outlined in Matrix 1, reasonable and practical actions to reduce and monitor exposures are recommended in accordance with the NYSDOH Guidance.

- Sub-slab concentrations of PCE above 100 mcg/m^3 were detected in all sub-slab and soil vapor probes. Since the indoor air concentrations of tetrachloroethene were considerably above 100 mcg/m^3 (5,563.70 and 13,570.00 mcg/m^3) as outlined in Matrix 2, mitigation is recommended to minimize current or potential exposures associated with soil vapor intrusions in accordance with the DOH Guidance.

- 1,1,1-TCA concentrations vary from less than 100 mcg/m^3 (in sub-slab samples SS-1 and SS-2 located in the office area) to more than 1,000 mcg/m^3 (SS-3, 4, 5, 6 and 9). Since the indoor air concentrations of this compound were less than 3 mcg/m^3 as outlined in Matrix 2, no further action, or monitoring and mitigation is recommended to minimize current or potential exposures associated with soil vapor intrusions in accordance with the NYSDOH Guidance.

6.2 Recommendations

Based on the above findings, GCE recommends the following:

- Since all previously-identified on-site soil contamination was addressed (the two leaking petroleum USTs were removed in 2001; one UST was abandoned in place and closed in 2007; and the contaminated soil around the historical dry well was removed during IRM excavation activities in 2009) and since petroleum compounds and chlorinated solvents were not detected or detected far below Regulatory Standards in all soil samples below the Site during the last phase of the Site Characterization, with exception of only a two-foot-thick layer of fill in soil borings immediately beneath the parking lot, GCE recommends no further investigation or remediation with respect to the soil at the Site.

- Since all data indicate that due to the natural attenuation during eight (8) years from the USTs removal in 2001, the Site is essentially clean of petroleum products; the dry well after IRM excavation is no longer a source of contamination, and the chlorinated solvents contamination in the groundwater beneath the Site originates mostly from off-site source(s), GCE recommends no further investigation or remediation with respect to the groundwater at the Site.

- Since the results of this investigation demonstrate that there are off-site sources for a portion of the comingled chlorinated solvents plume, these sites need to be identified and should be made to perform investigations and remediation of those sites.

- Since PCE sub-slab concentrations of 100 ug/m^3 were detected in all sub-slab and soil vapor probes and the indoor air concentrations of PCE are considerably above 100 ug/m^3 as outlined in Matrix 2, mitigation is recommended to minimize current or potential exposures associated with soil vapor intrusions in accordance with NYSDOH Guidance. This mitigation will also address the TCE and 1,1,1-TCA soil vapor intrusion. GCE recommends installing a Soil Vapor Extraction (SVE) system at the Site with two (2) extraction wells located in the area of SS-3, in order to remediate the subsurface vapors in unsaturated soils in this on-site source area with a secondary benefit of depressurizing the slab.

LIMITATIONS AND SERVICE CONSTRAINTS

Limitations

The findings set forth in the attached environmental site assessment report are strictly limited in time and scope to the date of the evaluation(s). The conclusions presented in the report are based on the services described in the report, and not on scientific tasks or procedures beyond the scope of work agreed in the purchase order/work order prior to the initialization of this assessment or the time and budgeting restraints imposed by the client.

This report may contain recommendations which are partially based on the analysis of data accumulated at the time and locations set forth in the report through the subsurface investigation. However, environmental, geological, and geotechnical conditions can vary from those encountered during this investigation, and that the limitation on available data results in some level of uncertainty with respect to the interpretation of these conditions, despite the use of standard professional care and skill. Therefore, further investigations may reveal additional data or variations of the current data which may require the enclosed recommendations to be reevaluated.

Chemical analyses may have been performed for specific parameters during the course of this assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the subject site.

Partial findings of this assessment are based on data provided by others. No warranty is expressed or implied with the usage of such data.

Because of these limitations, full and complete determination as to whether a certain piece of land is or is not free from environmental contamination cannot be made. The extent of testing and statistical confidence associated with an environmental site assessment is balanced against a reasonable project budget; therefore, 100 percent confidence in environmental site assessment conclusions can never be reached. Therefore, G. C. Environmental, Inc. does not provide guarantees, certifications, or warranties that a property is free from environmental contamination.

Service Constraints

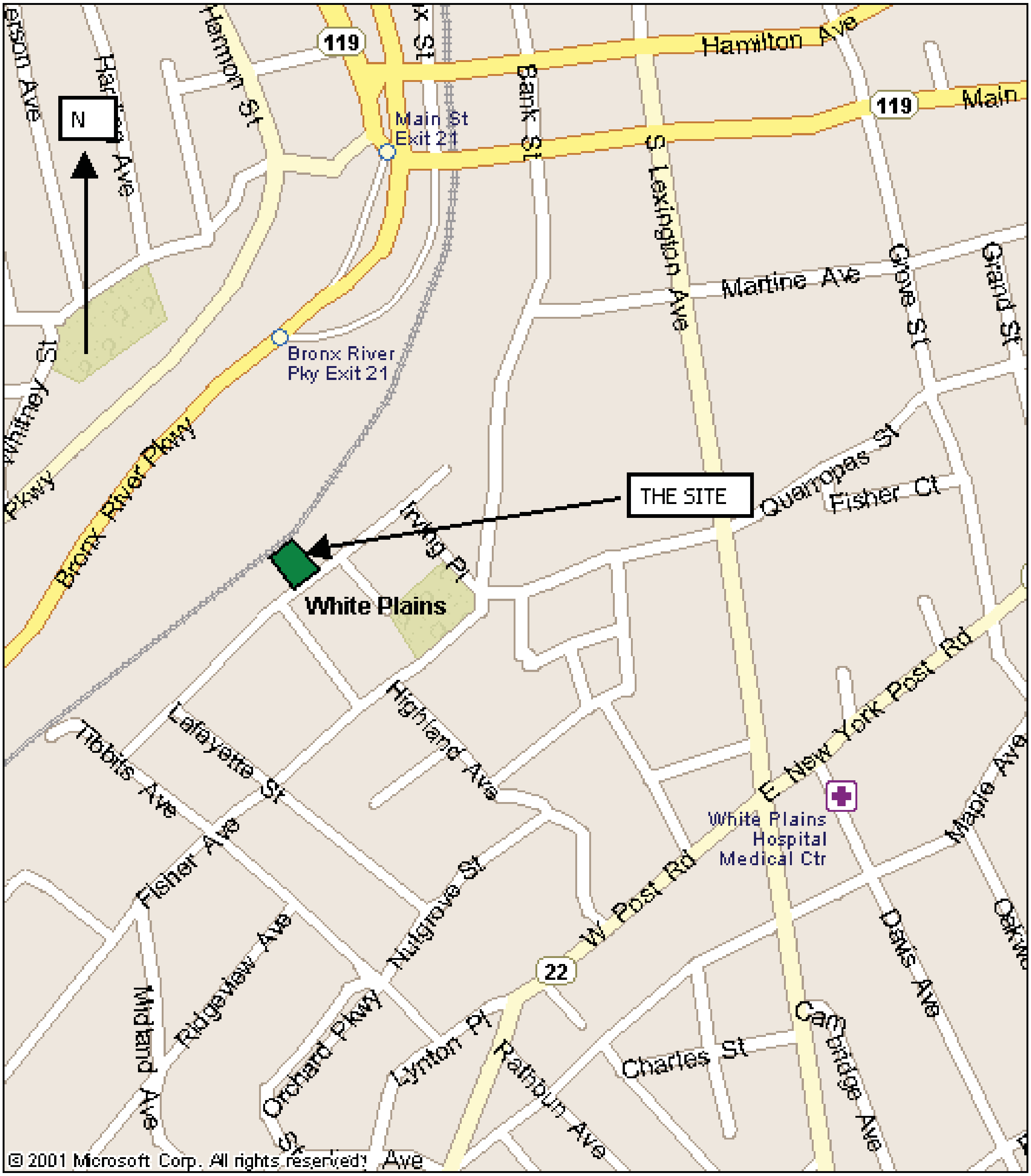
Much of the information provided in this report is based upon personal interviews and research of all practically reviewable documents, records, and maps held by appropriate government and private agencies. This is subject to limitations of historical documentation, availability, and accuracy of pertinent records and the personal recollection of those persons contacted.

The initial site-investigation took into account the natural and man-made features of the subject site, including any unusual or suspect phenomenon. These factors, combined with the subject site's geology, hydrology, topography, and past and present land uses served as a basis for choosing a methodology and location for subsurface investigation as well as soil and/or

groundwater sampling, if conducted. The analytical results of the subsurface investigation, if provided, are meant as a representative overview of the subject site's conditions.
The locations and type of analyses of soil samples, if provided, were chosen based on the same considerations listed in the paragraphs above. If samples were analyzed, they were analyzed for those parameters unique to the subject site as determined during the preceding site-evaluation.

The presence of radioactive materials or wastes, biological hazards, asbestos or lead-based paint was not investigated unless specifically noted otherwise.

This report was prepared for the exclusive use of the client and/or the parties listed on the cover of the report, and is intended for the use listed in a proposal/work order or a Consulting Services Agreement signed prior to initiation of the assessment. The use of this report by any other parties or in any other manner than that listed in a proposal/work order or a Consulting Services Agreement signed prior to initiation of the assessment requires the written consent of G. C. Environmental, Inc. This report must be presented in its entirety.



NOTE: DRAWING NOT TO SCALE. ALL LOCATIONS ARE APPROXIMATE. DRAWING INTENDED FOR USE WITH THIS GCE SC WP ONLY.

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SITE CHARACTERIZATION

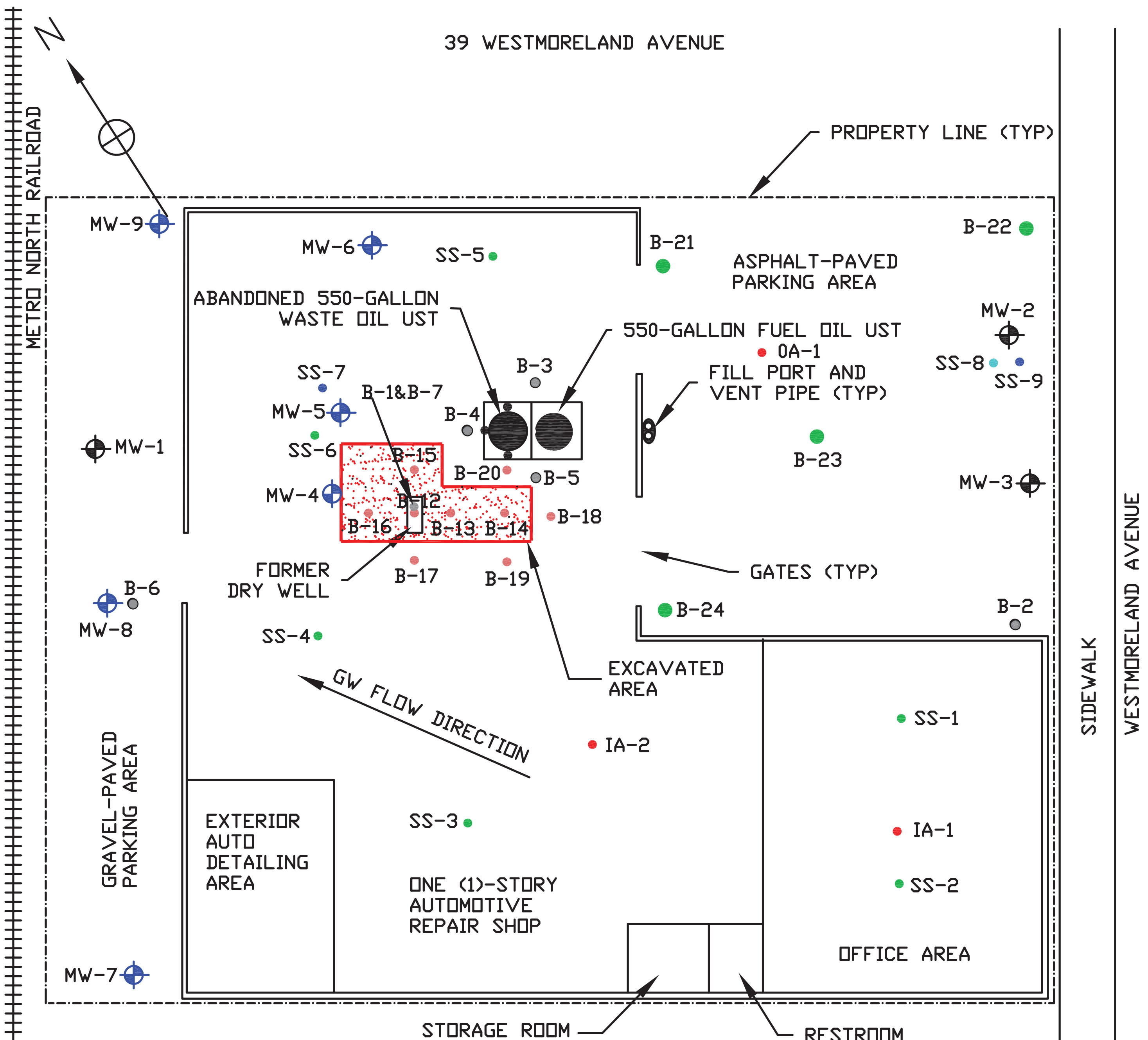
101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK 10606

GCE PROJECT NO: 05-003-00

DWG. TITLE:

FIGURE 1

SITE LOCUS MAP



IA-1 ●	INDOOR AND OUTDOOR AMBIENT AIR SAMPLES (SAMPLED 2/27/09)
SS-7 ●	DEEP SOIL VAPOR PROBES (SAMPLED 2/27/09)
SS-8 ●	SHALLOW SOIL VAPOR PROBE (SAMPLED 2/27/09)
SS-1 ●	SUB-SLAB SOIL VAPOR PROBES (SAMPLED 2/27/09)
B-21 ●	SOIL BORINGS ADVANCED DURING SITE CHARACTERIZATION (2/24/09)
B-12 ●	SOIL BORINGS ADVANCED DURING SOIL DELINEATION (10/31/07 AND 3/26/08)
●	SOIL BORINGS ADVANCED DURING WASTE OIL TANK CLOSURE (05/23/07)
B-2 ●	SOIL BORINGS ADVANCED IN 2005 (JUNE-SEPTEMBER 2005)
MW-8 ⌖	MONITORING WELLS INSTALLED IN FEBRUARY 2009 (SAMPLED 03/18/2009)
MW-1 ⌖	MONITORING WELLS INSTALLED IN 2001-2005 (SAMPLED 03/18/2009)

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SITE CHARACTERIZATION

0 10 20 30 FEET
SCALE

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK 10606

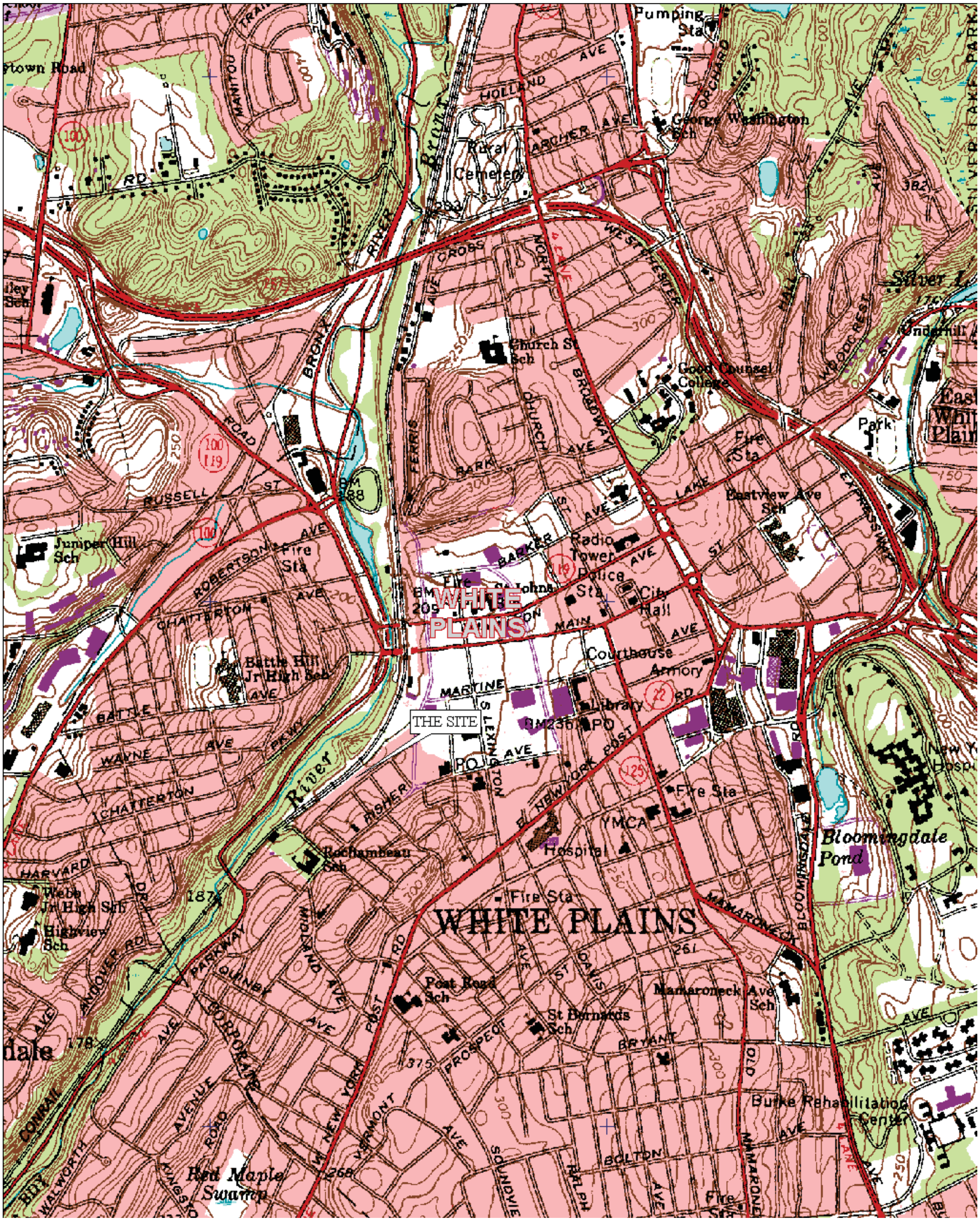
GCE PROJECT NO: 05-003-00

DWG. TITLE:

FIGURE 2

SITE PLAN AND SAMPLE LOCATIONS

N



WHITE PLAINS, NEW YORK
7.5 MINUTE SERIES
TOPOGRAPHIC QUADRANGLE
USGS 1967, PHOTOREVISED 1979

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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK 10606

GCE PROJECT NO: 05-003-00

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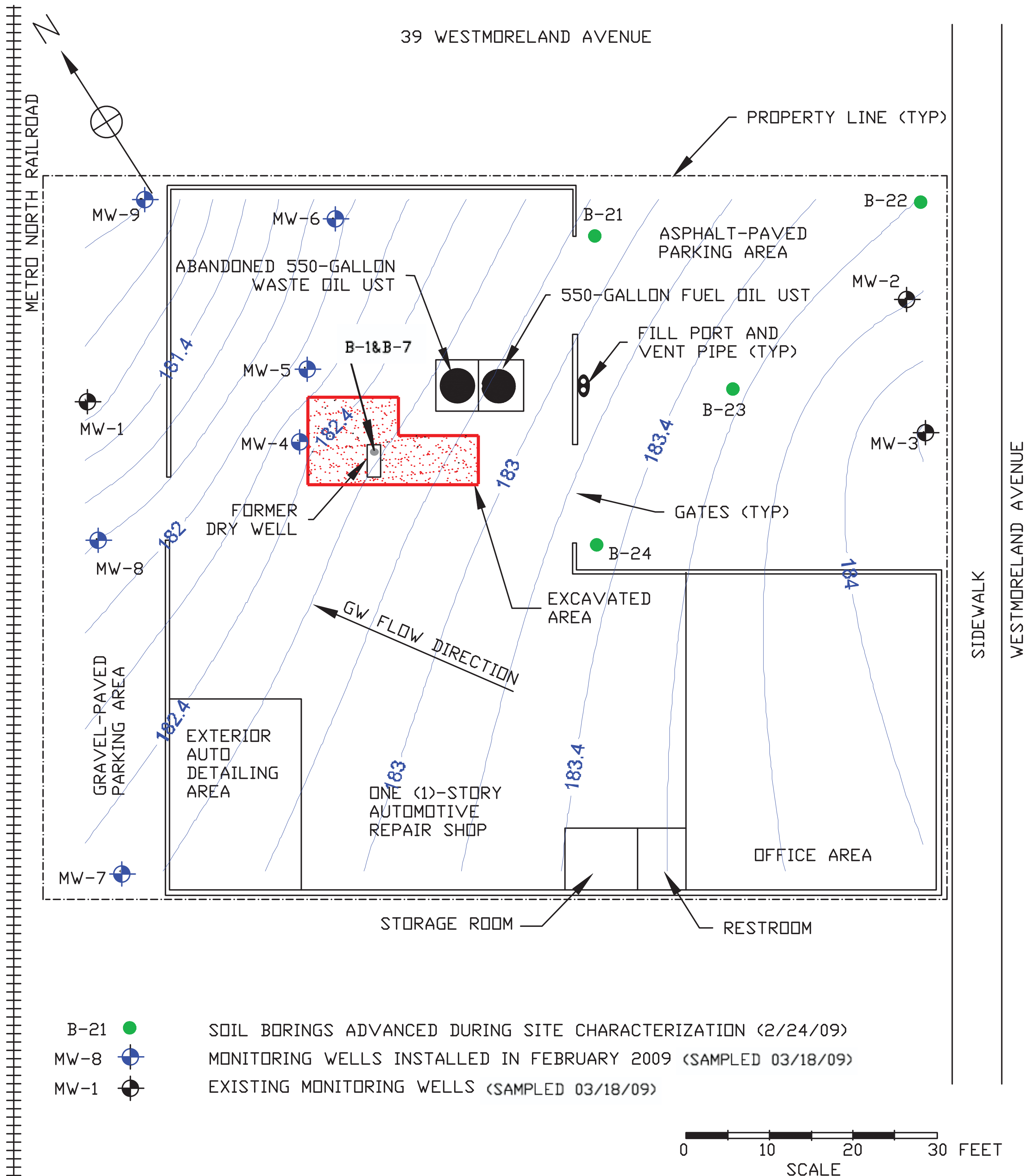
FIGURE 3

USGS
TOPOGRAPHIC
MAP



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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
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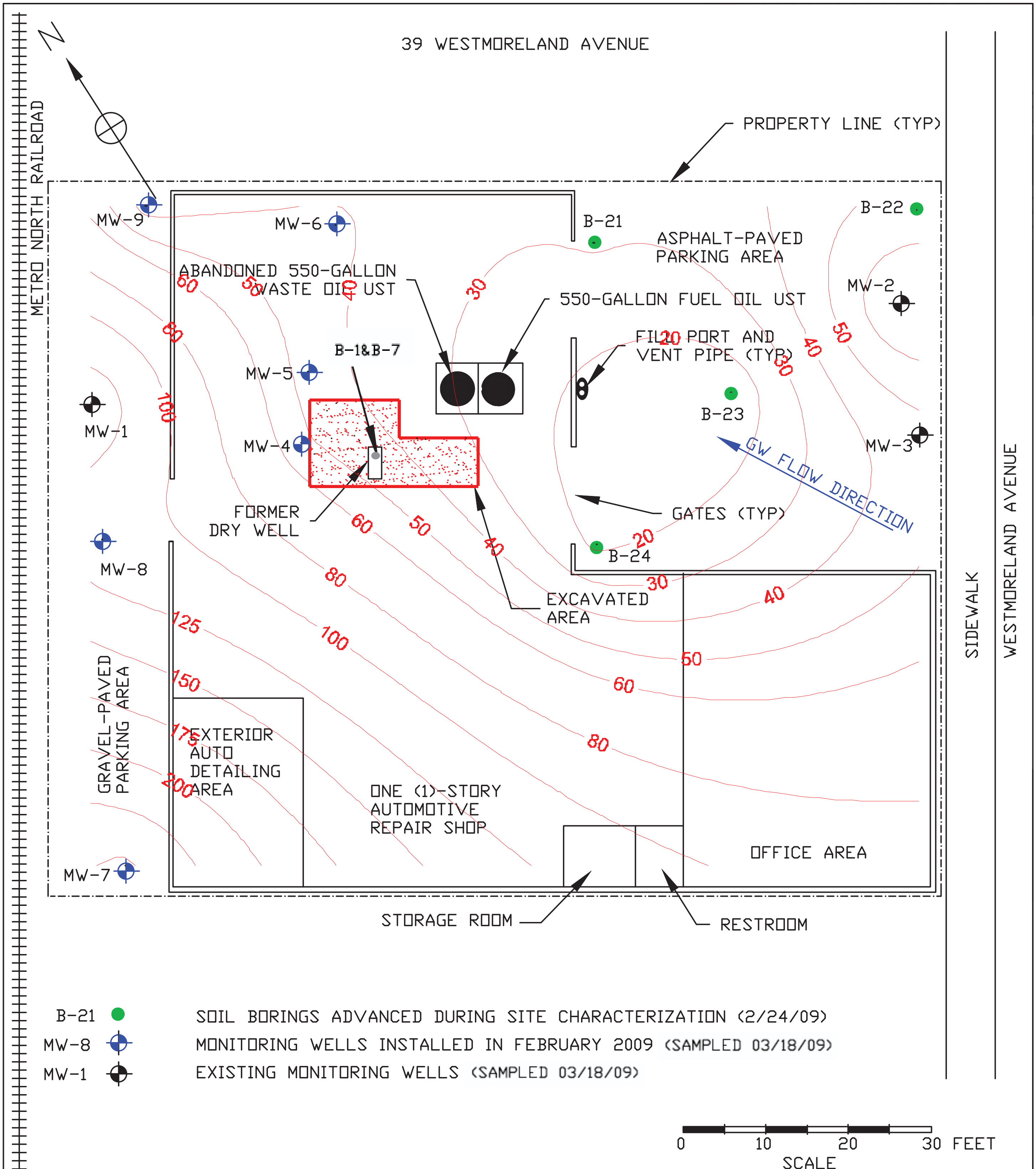
FIGURE 4

GROUNDWATER CONTOURS IN FEET ABOVE SEA LEVEL



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101 WESTMORELAND AVENUE
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FIGURE 5

CHLORINATED SOLVENTS CONTOURS (UG/L) IN GROUNDWATER

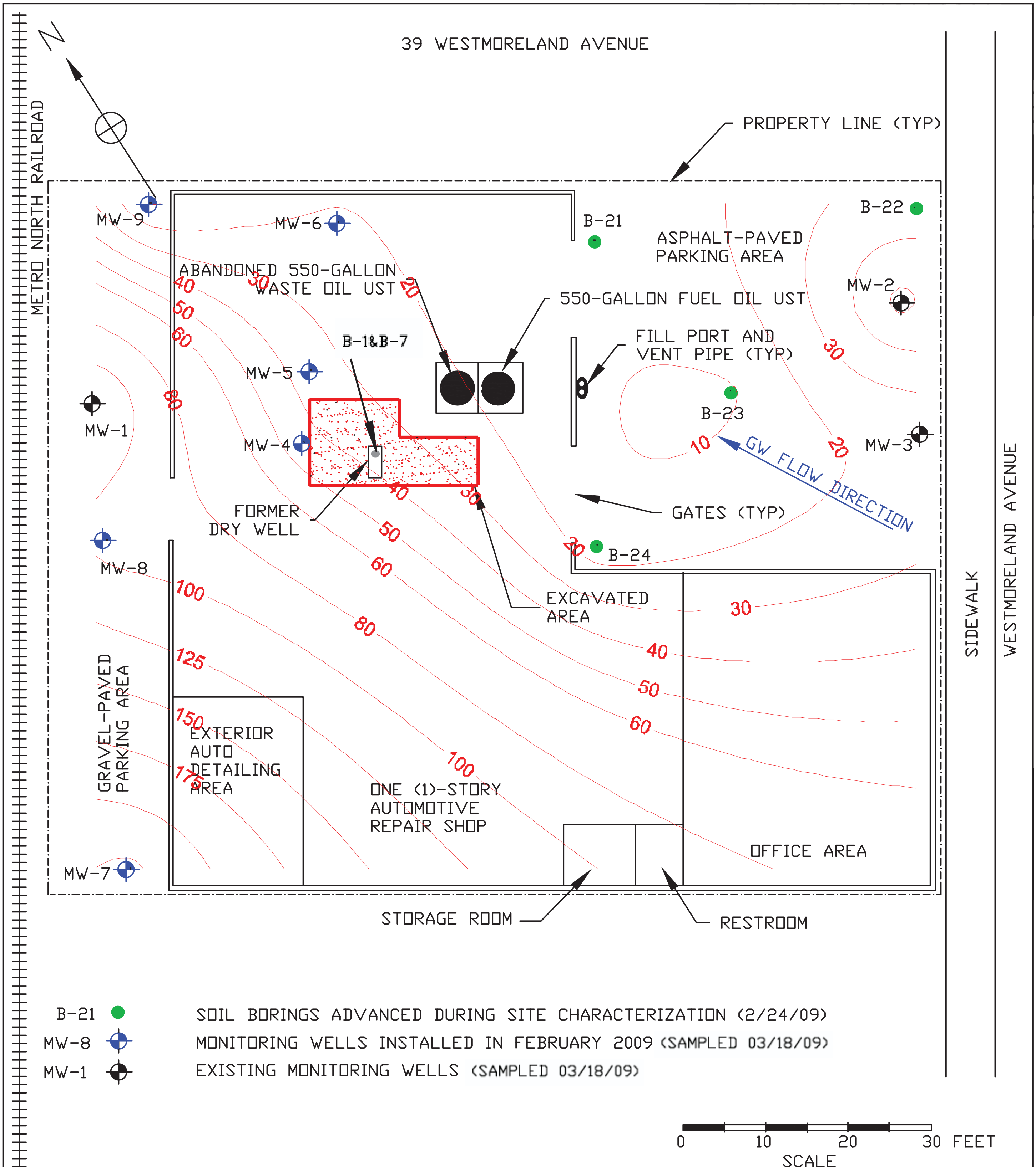

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FIGURE 6

1,1,1-TCA CONTOURS (UG/L) IN GROUNDWATER

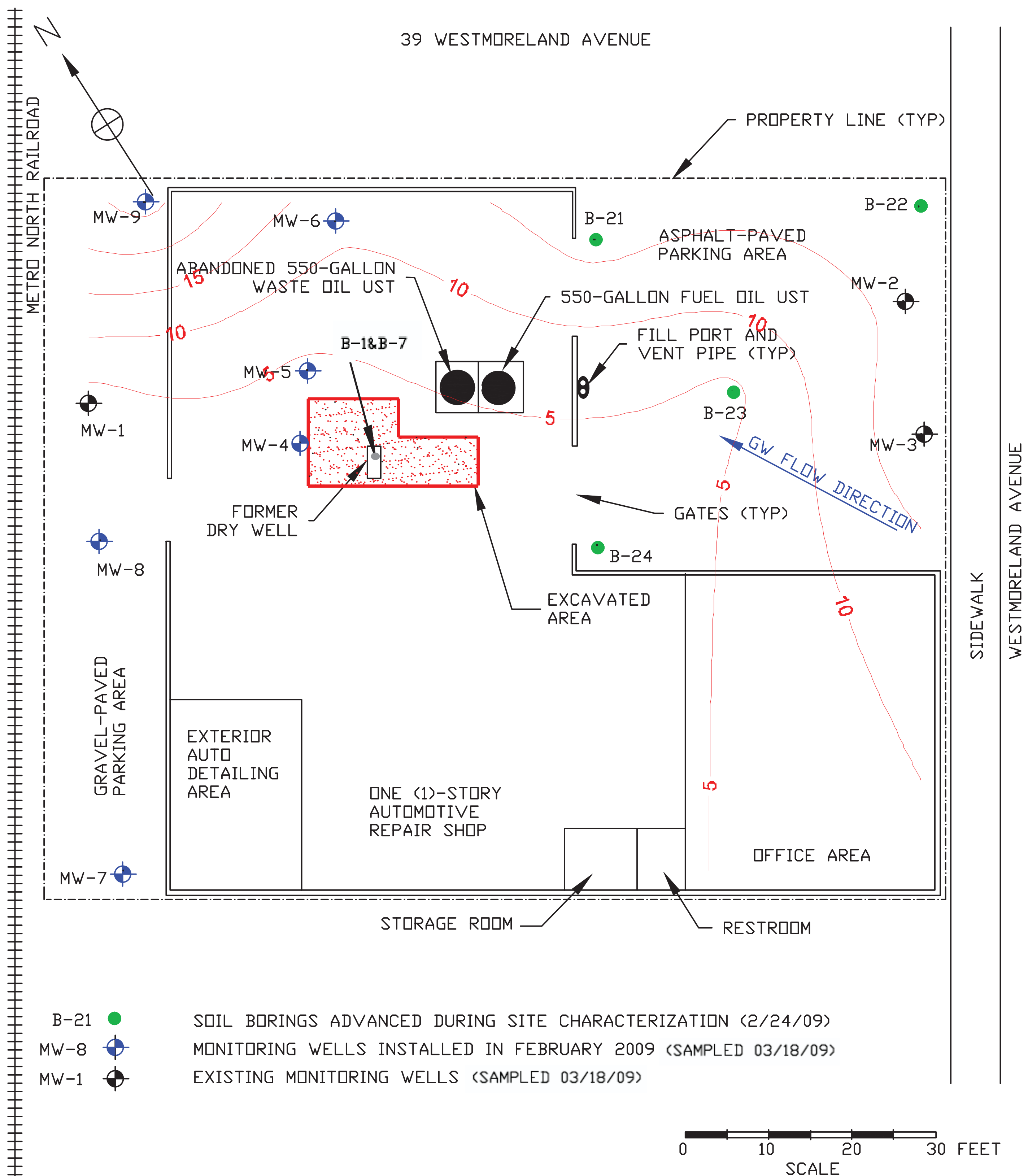

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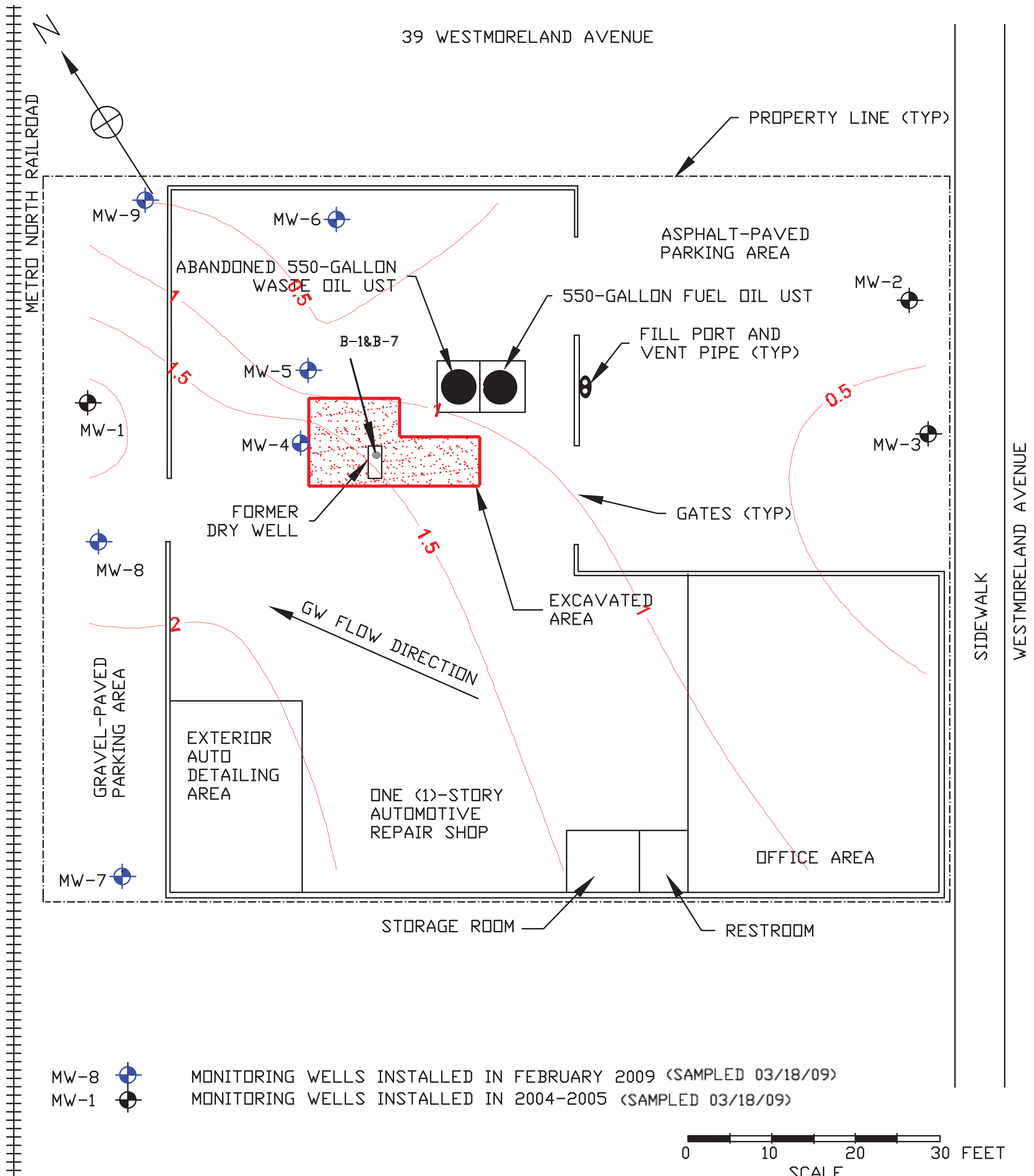
FIGURE 7

PCE CONTOURS (UG/L) IN GROUNDWATER



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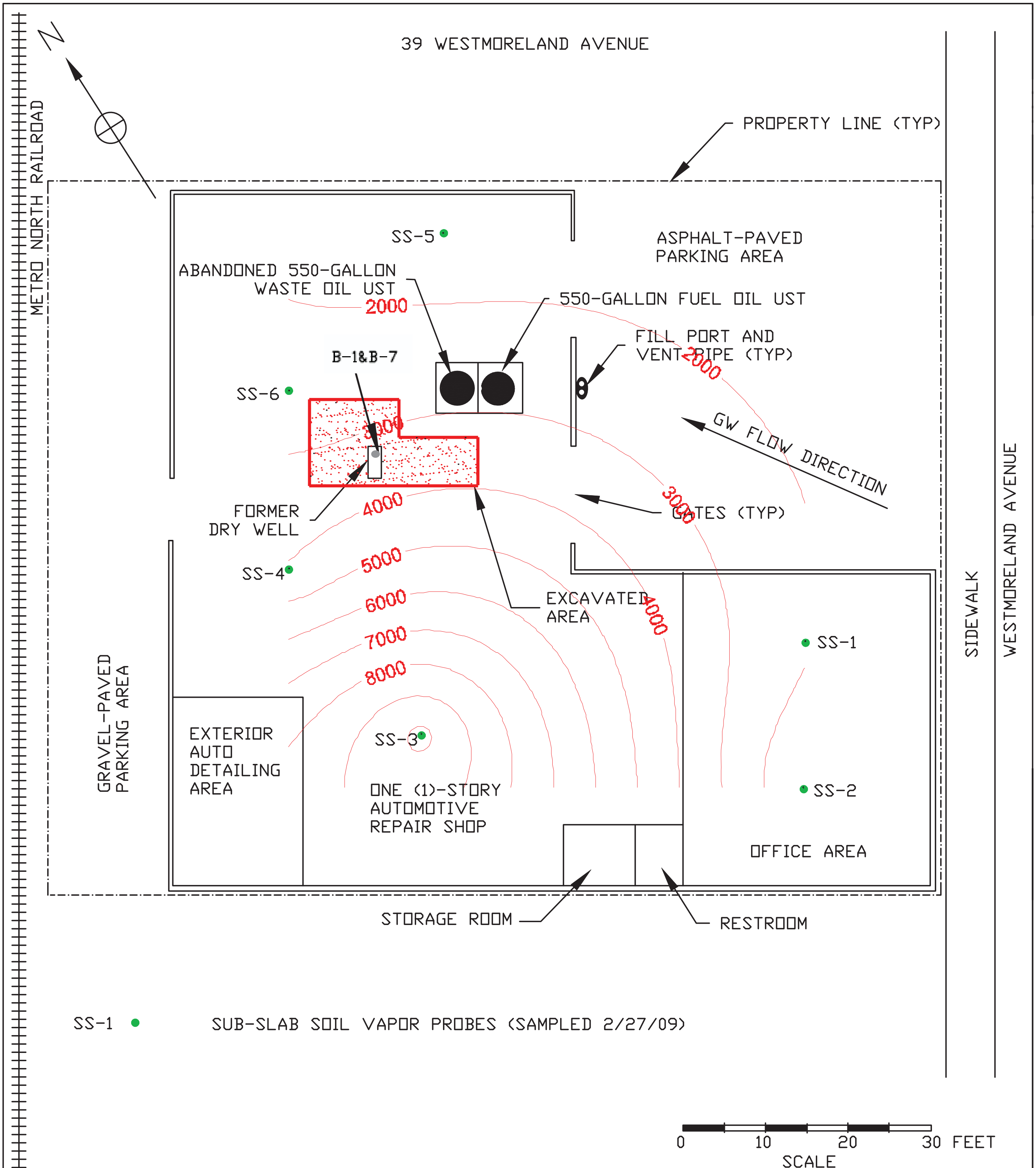
GCE PROJECT NO: 05-003-00

DWG. TITLE:

FIGURE 8

DISSOLVED OXYGEN CONTOURS (MG/L) IN GROUNDWATER



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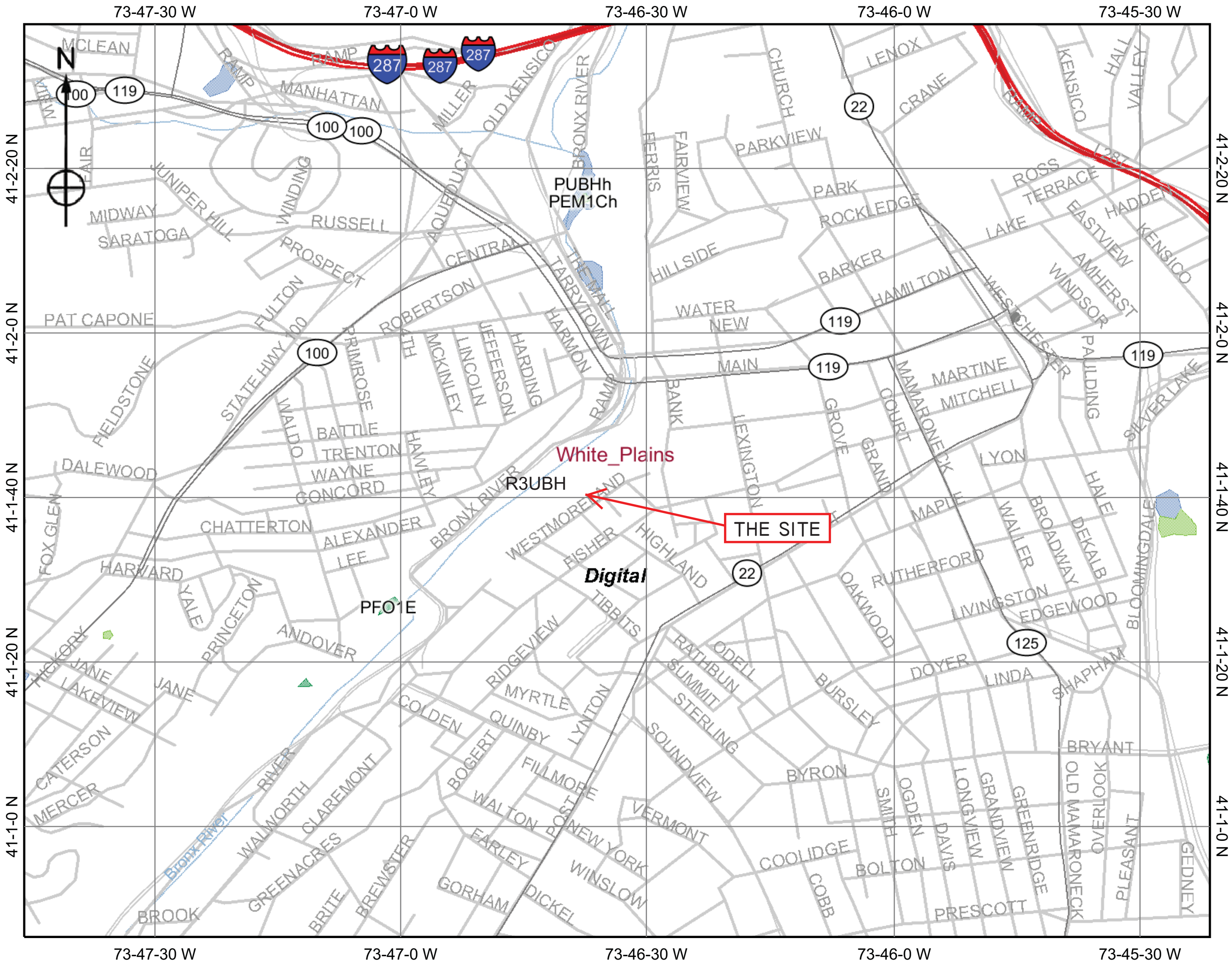
DWG. TITLE:

FIGURE 9

CHLORINATED SOLVENTS CONTOURS (UG/M3) IN SHALLOW SUB-SLAB SOIL VAPOR

FEDERAL WETLANDS MAP - 101 WESTMORELAND AVENUE, WHITE PLAINS, NY



LEGEND

- Interstate
- Major Roads
- Other Road
- Interstate
- State highway
- US highway
- Roads
- Cities
- USGS Quad Index 24K
- Lower 48 Wetland Polygons
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- Lower 48 Available Wetland Data
- Non-Digital
- Digital
- No Data
- Scan
- NHD Streams
- Counties 100K
- States 100K
- South America
- North America

SCALE: 1:24,000

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

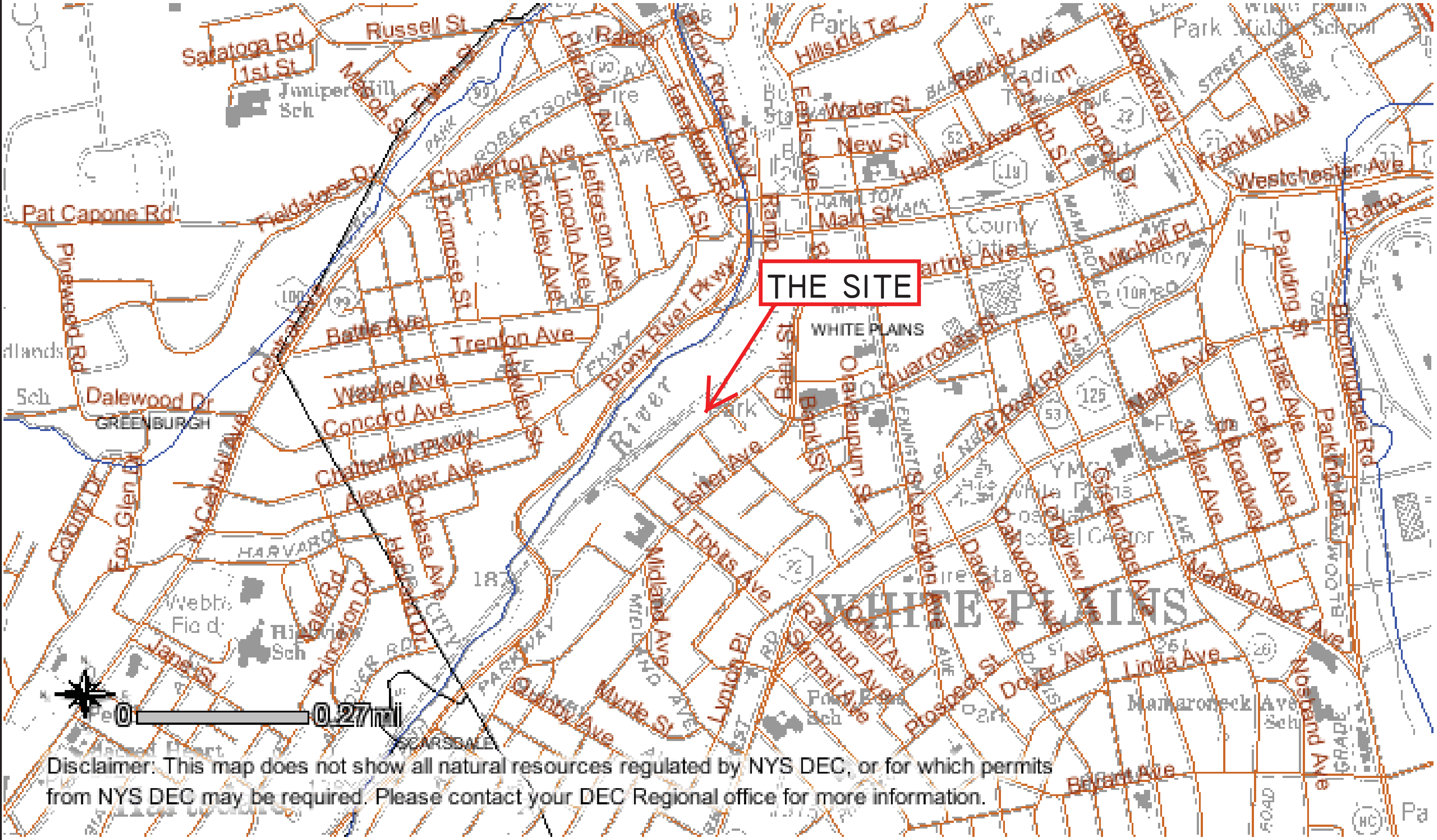
SOURCE: US FISH & WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY ONLINE WETLANDS MAPPER

FIGURE 10

FEDERAL WETLANDS MAP

GCE PROJECT NO: 05-003-00

State Freshwater Wetlands Map



MinX: 601030, MaxX: 604626, MinY: 4543335, MaxY: 4541730

Visible Layers

- Classified Streams
- Classified Ponds
- State-Regulated Freshwater Wetlands
  - Wetland Checkzone
  - State-Regulated Freshwater Wetlands
- Rare Plants and Rare Animals
- Interstate Highways
- Adirondack Park Boundary
- Counties

Disclaimer:This map was prepared by the New York State Department of Environmental Conservation using the most current data available. It is deemed accurate but is not guaranteed. NYS DEC is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data.

SOURCE: NYSDEC ONLINE ENVIRONMENTAL RESOURCE MAPPER

FIGURE II

STATE FRESHWATER WETLANDS MAP

101 WESTMORELAND AVENUE, WHITE PLAINS, NY

GCE PROJECT NO: 05-003-00

Table 1
Summary of Detected Compounds (Soil Sampling, June- September, 2005)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater (ug/kg)	Concentrations (ug/Kg)							
			B-1 S-1A 0-2'	B-2 S-6 25-27'	B-3 S-5 20-22'	B-4 S-6 25-27'	B-5 S-4 15-17'	B-5 S-5 20-22'	B-5 S-6 25-27'	B-6 S-5 20-22'
VOC	Acetone	50	< 460	7	10	11	26	26	11	< 3.5
	Benzene	60	< 33	< 0.47	< 0.41	< 0.49	< 0.49	< 0.42	< 0.41	< 0.41
	2-Butanone	120	< 390	< 3.3	< 2.9	< 3.4	11	< 2.9	< 2.9	< 2.9
	2-Chlorotoluene	n/s	1,700	< 0.48	< 0.42	< 0.50	< 0.50	< 0.43	< 0.42	< 0.42
	cis-1,2-Dichloroethene (DCE)	250	**7,800**	< 0.38	< 0.33	< 0.40	< 0.40	< 0.34	< 0.34	< 0.33
	1,2-Dichlorethane (DCA)	20	**600**	< 0.36	< 0.31	< 0.38	< 0.38	< 0.32	< 0.32	< 0.32
	1,2-Dichlorobenzene	1,100	**150,000**	< 0.45	< 0.39	< 0.47	< 0.47	< 0.40	< 0.40	< 0.40
	1,4-Dichlorobenzene	1,800	**3,900**	< 0.64	< 0.56	< 0.67	< 0.67	< 0.57	< 0.56	< 0.56
	Ethylbenzene	1,000	**1,400**	< 0.41	< 0.36	< 0.43	< 0.43	< 0.37	< 0.37	< 0.36
	Isopropylbenzene	2,300	320	< 0.49	< 0.42	< 0.51	< 0.51	< 0.43	< 0.43	< 0.43
	Methylene chloride	50	**2,300**	5	< 1.9	< 2.2	< 2.2	2	< 1.9	< 1.9
	m/p-Xylenes	1,600	**6,400**	< 1.0	< 0.88	< 1.1	**1,800**	2	< 0.90	< 0.89
	n-Propylbenzene	3,900	1,200	< 0.63	< 0.55	< 0.65	< 0.65	< 0.56	< 0.56	< 0.55
	n-Butylbenzene	10,000	1,100	< 0.40	< 0.34	< 0.41	2,400	< 0.35	< 0.35	< 0.35
	o-Xylene	1,600	**4,200**	< 0.45	< 0.39	< 0.47	**2,300**	54	< 0.40	< 0.40
	p-Isopropyltoluene	10,000	1,400	< 0.50	< 0.43	< 0.52	8,200	190	< 0.44	< 0.44
	sec-Butylbenzene	11,000	660	< 0.49	< 0.43	< 0.51	2,800	< 0.44	< 0.43	< 0.43
	1,3,5-Trimethylbenzene	8,400	4,600	< 0.58	< 0.50	< 0.60	6,900	39	< 0.51	< 0.51
	1,2,4-Trimethylbenzene	3,600	**14,000**	< 0.44	< 0.39	< 0.46	**16,000**	< 0.40	< 0.39	< 0.39
	Trichloroethene (TCE)	470	**1,900**	< 0.36	< 0.31	< 0.38	2	< 0.32	< 0.32	< 0.32
	Tetrachloroethene (PCE)	1,300	**180,000**	3	< 0.74	< 0.89	1,000	**11,000**	< 0.76	< 0.75
	Tert butyl alcohol (TBA)	930	< 610	< 1.9	< 1.7	< 2.0	< 1.7	27	6	< 1.7
	Toluene	700	**5,900**	< 0.47	< 0.41	< 0.49	21	2	< 0.42	< 0.42
	Vinyl chloride (VC)	20	< 37	< 0.96	< 0.84	< 1.0	< 0.85	< 0.86	< 0.85	< 0.85
	Naphthalene	12,000	6,100	< 0.68	< 0.60	< 0.71	**26,000**	17	< 0.61	< 0.60
	Total VOCs		395,480	14	10	11	67,460	11,359	17	0
	Total Chlorinated Solvents		348,200	8	0	0	1,002	11,002	0	0
	Total BTEX		17,900	0	0	0	4,121	58	0	0

n/s	No standards
< 0.49	Compounds were analyzed, but were non-detected or detected below their detection limit.
11,000	Compounds were detected above Part 375-6 Recommended Soil Cleanup Objectives.

Table 2
Summary of Detected Compounds (Groundwater Sampling)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	New York Groundwater Quality Standards & Guidance values	Concentrations (ug/L)													
			MW-1 1/10/03	MW-1 WS-1 9/21/05	MW-1 WS-2 9/21/05	MW-2 WS-1 9/21/05	MW-3 WS-1 9/21/05	MW-3 WS-2 9/21/05	B-2 WS-1 06/8/05	B-3 WS-1 6/22/05	B-4 WS-1 6/22/05	B-5 WS-1 6/22/05	B-6 WS-1 9/21/05	B-7 WS-1 9/21/05	Trip Bl. T-1 9/21/05	Field Bl. F-1 9/21/05
VOC	Acetone	50	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	11	21	< 2.3	8.8	< 2.3	< 2.3
	Benzene	1	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39
	2-Butanone	n/s	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	7.6	< 1.1	< 1.1	< 1.1	< 1.1
	Carbon disulfide	n/s	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	1.8
	Chloroform	7	< 0.33	0.97	1.2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	1.2	< 0.33	< 0.33	< 0.33	< 0.33
	cis-1,2-Dichloroethene (DCE)	5	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	2.5	< 0.29	**15**	< 0.29	< 0.29
	1,1-Dichloroethene	5	**51**	**18**	**15**	**12**	4.8	**5.1**	1.3	< 0.42	< 0.42	< 0.42	4.6	< 0.42	< 0.42	< 0.42
	1,1-Dichlorethane	5	**20**	< 0.38	< 0.38	4.5	**5.9**	**5.7**	2	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
	1,2-Dichlorethane	0.6	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	**2.4**	< 0.34	< 0.34
	Ethylbenzene	5	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	2.1	< 0.45	< 0.45	< 0.45	< 0.45
	Isopropylbenzene	5	< 0.44	< 0.44	< 0.44	< 0.44	1.7	2	< 0.44	< 0.44	< 0.44	0.9	< 0.44	< 0.44	< 0.44	< 0.44
	Methylene Chloride	5	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	14	< 0.43	< 0.43
	Methyl-Tert-Butyl-Ether (MTBE)	50	< 0.28	0.56	< 0.28	0.75	< 0.28	< 0.28	< 0.28	< 0.28	1.6	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
	m/p-Xylenes	5	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	**17**	< 1.2	2.3	< 1.2	< 1.2
	n-Propylbenzene	5	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	1	< 0.49	< 0.49	< 0.49	< 0.49
	o-Xylene	5	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	**20**	< 0.46	1.1	< 0.46	< 0.46
	p-Isopropyltoluene	5	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	5.0	< 0.49	< 0.49	< 0.49	< 0.49
	sec-Butylbenzene	5	< 0.44	< 0.44	< 0.44	< 0.44	1.4	1.3	< 0.44	< 0.44	< 0.44	1.2	< 0.44	< 0.44	< 0.44	< 0.44
	Tert-butyl alcohol	50	< 4.5	< 4.5	< 4.5	< 4.5	< 4.5	< 4.5	< 4.5	< 4.5	< 4.5	11.0	< 4.5	< 4.5	< 4.5	< 4.5
	Tert-butylbenzene	n/s	< 0.39	< 0.39	< 0.39	< 0.39	0.51	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39
	1,3,5-Trimethylbenzene	5	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	**10**	< 0.42	2.2	< 0.42	< 0.42
	1,2,4-Trimethylbenzene	5	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	**26**	< 0.44	2.6	< 0.44	< 0.44
	1,1,1-Trichloroethane	5	**270**	**130**	**140**	**170**	**50**	**50**	< 0.32	**21**	< 0.32	< 0.32	**49**	< 0.32	< 0.32	< 0.32
	Trichloroethene (TCE)	5	< 0.46	1.9	1.8	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	1.8	< 0.46	< 0.46
	Tetrachloroethene (PCE)	5	3	2.4	2.3	**8.8**	**16**	**17**	2.0	1.4	1.4	**21**	3.4	**21**	< 0.48	< 0.48
	Toluene	5	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	2	< 0.36	**16**	< 0.36	< 0.36
	Vinyl chloride	2	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	Naphthalene	10	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	**54**	< 0.34	< 0.34	< 0.34	< 0.34
	Total VOCs		344	154	160	196	80	81	5	22	14	204	57	87	0	2
	Total Chlorinated Solvents		344	153	160	195	77	5	22	1	25	57	40	0	0	0
	Total BTEX		0	0	0	0	2	0	0	0	42	0	19	0	0	0
	pH			7.30		6.96	7.07									
	T°C			14.95		14.90	14.69									
	Conductivity (us/cm)			2,320		1,710	1,622									
	Dissolved Oxygen (mg/L)			5.8		3.6	0.8									
	ORP (mV)			220		231	216									

n/s	No standards
< 0.42	Compounds were analyzed, but were non-detected or detected below their detection limit.
17	Compounds were detected above the New York Groundwater Quality Standards & Guidances values

Table 3
Summary of Detected Compounds (Soil Sampling, 10/31/2007 and 3/27/2008)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater	Concentrations (ug/Kg)																			
			B-1 2 S-1 0-2'	B-12 S-2 2-4'	B-12 S-7 25-27'	B-13 S-1 0-2'	B-13 S-7 25-27'	B-14 S-1 0-2'	B-14 S-7 25-27'	B-15 S-1 0-2'	B-15 S-7 25-27'	B-16 S-1 0-2'	B-16 S-7 25-27'	B-17 S-1 0-2'	B-17 S-7 25-27'	Duplicate B-12 S-7 25-27'	B-1 8 S-1 0-2'	B-18 S-7 25-27'	B-1 9 S-1 0-2'	B-19 S-7 25-27'	B-20 S-1 0-2'	B-20 S-3 25-27'
VOC	cis-1,2-Dichloroethene (DCE)	250	< 10.75	< 5.10	< 5.10	63	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	54	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
VOC	t-1,2-Dichloroethene (DCE)	190	< 10.75	< 5.10	< 5.10	10	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
VOC	1,2-Dichlorethane (DCA)	20	< 10.75	< 5.10	< 5.10	**36**	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
VOC	1,2-Dichlorobenzene	1,100	**6,000**	8	13	430	10	< 21.50	< 5.10	13	< 5.10	31	< 5.10	< 11.49	< 5.10	11	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
VOC	1,3-Dichlorobenzene	2,400	200	11	< 5.10	< 5.43	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
VOC	1,4-Dichlorobenzene	1,800	670	37	< 5.10	14	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
VOC	p-Isopropyltoluene	n/s	< 10.75	< 5.10	< 5.10	< 5.43	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	9.3	< 5.15
VOC	Methylene chloride	50	< 10.75	< 5.10	< 5.10	30	< 5.26	< 21.50	< 5.10	12	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
VOC	m/p-Xylenes	1,600	< 21.50	< 10.20	< 10.20	13	< 10.52	< 43.01	< 10.20	< 21.73	< 10.20	< 22.72	< 10.20	< 22.98	< 10.20	< 10.20	< 41.66	< 10.98	< 43.01	< 10.52	< 10.30	< 10.30
VOC	Naphthalene	n/s	12	< 5.10	< 5.10	22	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	190	< 5.15
VOC	o-Xylene	1,600	< 10.75	< 5.10	< 5.10	11	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
VOC	1,1,1-Trichloroethane (TCA)	680	< 10.75	< 5.10	< 5.10	< 5.43	< 5.26	**1,400**	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	96	< 5.49	270	< 5.26	< 5.15	< 5.15
VOC	1,2,3-Trichlorobenzene	n/s	52	5	< 5.10	< 5.43	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
VOC	1,2,4-Trichlorobenzene	n/s	270	13	< 5.10	12	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
VOC	Trichloroethene (TCE)	470	17	< 5.10	< 5.10	9	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	18	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	< 5.15	< 5.15
VOC	1,2,4-Trimethylbenzene	3,600	< 10.75	< 5.10	< 5.10	41	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	18	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	8.2	< 5.15
VOC	1,2,4,5-Trimethylbenzene	n/s	< 10.75	< 5.10	< 5.10	100	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	43	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	160	< 5.15
VOC	1,3,5-Trimethylbenzene	8,400	< 10.75	< 5.10	< 5.10	25	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	15	< 5.10	< 11.49	< 5.10	< 5.10	< 20.83	< 5.49	< 21.50	< 5.26	11	< 5.15
VOC	Tetrachloroethene (PCE)	1,300	**14,000**	220	21	130	< 5.26	**3,800**	< 5.10	170	< 5.10	300	7	480	< 5.10	27	25	< 5.49	280	5.3	110	< 5.15
VOC	Toluene	700	39	< 5.10	< 5.10	25	< 5.26	< 21.50	< 5.10	< 10.86	< 5.10	< 11.36	< 5.10	< 11.49	< 5.10	< 5.10	34	< 5.49	61	< 5.26	< 5.15	< 5.15
SVOC	1,2-Dichlorobenzene	n/s	67,000	410	510	5,400	37	35	< 30.61	2,000	< 5.10	3,100	76	36	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
SVOC	1,3-Dichlorobenzene	n/s	1,700	< 153.06	< 30.61	70	< 31.57	< 32.25	< 30.61	< 163.04	< 5.10	< 170.45	< 30.61	< 34.48	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
SVOC	1,4-Dichlorobenzene	n/s	8,300	< 153.06	110	210	< 31.57	< 32.25	< 30.61	170	< 5.10	< 170.45	< 30.61	< 34.48	< 30.61	84	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
SVOC	1,2,4-Trichlorobenzene	n/s	1,200	< 153.06	< 30.61	< 32.60	< 31.57	< 32.25	< 30.61	< 163.04	< 5.10	< 170.45	< 30.61	< 34.48	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
SVOC	2-Methylnapthalene	n/s	5,200	< 153.06	38	93	< 31.57	49	< 30.61	370	< 30.61	500	< 30.61	40	< 30.61	35	< 31.25	< 32.96	260	< 31.57	320	< 30.92
SVOC	Acenaphthylene	107,000	< 161.29	< 153.06	< 30.61	< 32.60	< 31.57	< 32.25	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	52	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
SVOC	Anthracene	1,000,000	< 161.29	< 153.06	< 30.61	< 32.60	< 31.57	< 32.25	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	34	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
SVOC	Benzo(a)anthracene	1,000	170	< 153.06	< 30.61	130	< 31.57	< 161.29	< 30.61	170	< 30.61	< 170.45	< 30.61	290	< 30.61	< 30.61	52	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
SVOC	Benzo(a)pyrene	22,000	< 161.29	< 153.06	< 30.61	120	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	250	< 30.61	< 30.61	39	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
SVOC	Benzo(b) fluoranthene	1,700	< 161.29	< 153.06	< 30.61	170	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	340	< 30.61	< 30.61	78	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
SVOC	Benzo(g,h,i)perylene	1,000,000	< 161.29	< 153.06	< 30.61	46	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	110	< 30.61	< 30.61	43	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
SVOC	Benzo(k)fluoranthene	1,700	< 161.29	< 153.06	< 30.61	160	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	300	< 30.61	< 30.61	43	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
SVOC	BenzylButylPhthalate	n/s	3,400	< 153.06	85	33	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	< 34.48	< 30.61	91	< 31.25	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
SVOC	Bis(2-ethylhexyl)phthalate	n/s	1,800	840	66	< 32.60	< 31.57	< 161.29	< 30.61	< 163.04	160	< 170.45	< 30.61	< 34.48	48	67	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
SVOC	Carbazole	n/s	< 161.29	< 153.06	< 30.61	33	< 31.57	< 32.25	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	< 34.48	< 30.61	< 30.61	< 31.25	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
SVOC	Chrysene	1,000	260	< 153.06	< 30.61	180	< 31.57	440	< 30.61	260	< 30.61	< 170.45	< 30.61	370	< 30.61	< 30.61	150	< 32.96	170	< 31.57	< 30.92	< 30.92
SVOC	Di-n-ButylPhthalate	n/s	270	< 153.06	< 30.61	< 32.60	< 31.57	< 32.25	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	< 34.48	< 30.61	< 30.61	240	< 32.96	< 32.25	< 31.57	< 30.92	< 30.92
SVOC	Dibenzo(a,h)anthracene	1,000,000	< 161.29	< 153.06	< 30.61	< 32.60	< 31.57	< 32.25	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	57	< 30.61	< 30.61	< 31.25	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
SVOC	Fluoranthene	1,000,000	170	< 153.06	< 30.61	250	< 31.57	230	< 30.61	280	< 30.61	< 170.45	< 30.61	410	< 30.61	< 30.61	94	< 32.96	60	< 31.57	33	< 30.92
SVOC	Indeno(1,2,3-cd)pyrene	8,200	< 161.29	< 153.06	< 30.61	49	< 31.57	< 161.29	< 30.61	< 163.04	< 30.61	< 170.45	< 30.61	130	< 30.61	< 30.61	38	< 32.96	< 161.29	< 31.57	< 30.92	< 30.92
SVOC	Naphthalene	12,000	3,700	< 153.06	31	120	< 31.57	61	< 30.61	370	< 30.61	320	< 30.61	44	< 30.61	< 30.61	< 31.25	< 32.96	240	< 31.57	< 30.92	< 30.92
SVOC	Phenanthrene	1,000,000	660	< 153.06	< 30.61	220	< 31.57	240	< 30.61	180	45	170	< 30.61	180	< 30.61	< 30.61	84	< 32.96	160	< 31.57	450	< 30.92
SVOC	Pyrene	1,000,000	660	200	< 30.61	260	< 31.57	440	< 30.61	730	< 30.61	300	< 30.61	390	< 30.61	< 30.61	130	< 32.96	220	< 31.57	100	< 30.92
	Total BTEX		39	0	0	49	0	0	0	0	0	0	0	0	0	0	34	0	61	0	0	0
	Total Chlorinated Solvents		14,017	220	21	242	0	5,200	0	182	0	300	0	552	0	27	121	0	550	5.3	110	0
	Total VOC		21,260	294	34	971	10	5,200	0	195	0	407	7	552	0	38	155	0	611	5.3	488.5	0
	Total SVOC		94,490	1,450	840	7,544	37	1,495	0	4,530	205	4,390	76	3,033	48	277	991	0	1110	0	903	0
	PID Readings (ppm)		42.0	6.5	7.6	21.1	4.0	1.2	1.3	0.2	1.3	4.5	1.8	1.3	0.8	7.6	0.9	7.4	0.9	4.6	18	4.6

n/s	No standards
< 30.92	Compounds were analyzed, but were non-detected or detected below their detection limit.
14,000	Compounds were detected above the Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater

Table 4

Summary of PID Readings and Total VOC Concentrations, Soil Delineation, 10/31/2007 and 3/27/2008

101 Westmoreland Avenue, White Plains , NY

GCE Project No. 05-003-00

Sample number	Interval (feet)	Total VOC Concentrations (ug/Kg)																	
		B-12		B-13		B-14		B-15		B-16		B-17		B-18		B-19		B-20	
		PID	VOC	PID	VOC	PID	VOC	PID	VOC	PID	VOC	PID	VOC	PID	VOC	PID	VOC	PID	VOC
S-1	0-2	**42.0**	**21,260**	**21.1**	**971**	1.2	**5,200**	0.2	195	4.5	407	1.3	552	0.9	155	0.9	611		488
S-2	3-5	6.5	294	2.9		0.0		0.8		0.2		0.2		1.8		0.9			
S-3	5-7	0.2		0.0		0.0		0.2		0.2		0.0		1.8		2.8			
S-4	10-12	0.0		0.2		0.0		0.8		0.0		0.0		0.9		1.8			
S-5	15-17	0.8		0.0		0.8		0.2		0.0		0.0		9.3		2.8		18	
S-6	20-22	1.3		0.0		1.3		0.2		0.2		0.2		10.2		4.6		9.3	
S-7	25-27	7.6	34	4.0	10	1.3	0	1.3	0	1.8	0	0.8	0.0	7.4	0	4.6	5.3	4.6	0

42.0	Elevated levels of PID readings (more than 20 parts per million (ppm)
21,260	Some VOCs exceed Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater

Table 5
Summary of Detected Compounds (IRM Excavation, End Point Soil Sampling, 1/7/2009)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater	Concentrations (ug/Kg)								
			S-1 north wall 4.0'	S-2 east wall 3.5'	S-3 north wall 3.1'	S-4 east wall 2.7'	S-5 south wall 2.8'	S-6 south wall 3.5'	S-7 west wall 4.0'	S-8 bottom 4.5'	S-9 bottom 3.5'
VOC	cis-1,2-Dichloroethene (DCE)	250	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	5	< 5.15
VOC	t-1,2-Dichloroethene (DCE)	190	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,2-Dichlorethane (DCA)	20	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,2-Dichlorobenzene	1,100	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	28	< 5.15
VOC	1,3-Dichlorobenzene	2,400	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,4-Dichlorobenzene	1,800	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	p-Isopropyltoluene	n/s	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	Methylene chloride	50	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	8	< 5.15
VOC	m/p-Xylenes	1,600	< 10.41	< 10.41	< 10.30	< 10.10	< 10.41	< 10.20	< 10.10	< 10.52	< 10.30
VOC	Naphthalene	n/s	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	o-Xylene	1,600	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,1,1-Trichloroethane (TCA)	680	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,2,3-Trichlorobenzene	n/s	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,2,4-Trichlorobenzene	n/s	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	Trichloroethene (TCE)	470	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
VOC	1,2,4-Trimethylbenzene	3,600	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	12	< 5.15
VOC	1,2,4,5-Trimethylbenzene	n/s	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	16	< 5.15
VOC	1,3,5-Trimethylbenzene	8,400	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	7	< 5.15
VOC	Tetrachloroethene (PCE)	1,300	9.4	9.4	< 5.15	< 5.05	< 5.20	< 5.10	10	100	< 5.15
VOC	Toluene	700	< 5.20	< 5.20	< 5.15	< 5.05	< 5.20	< 5.10	< 5.05	< 5.26	< 5.15
SVOC	1,2-Dichlorobenzene	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	230	370
SVOC	1,3-Dichlorobenzene	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	1,4-Dichlorobenzene	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	1,2,4-Trichlorobenzene	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	2-Methylnapthalene	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	45	< 30.92
SVOC	Acenaphthylene	107,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Anthracene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Benzo(a)anthracene	1,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	35	< 30.92
SVOC	Benzo(a)pyrene	22,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Benzo(b) fluoranthene	1,700	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	40	< 30.92
SVOC	Benzo(g,h,i)perylene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	95	< 30.92
SVOC	Benzo(k)fluoranthene	1,700	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	35	< 30.92
SVOC	BenzylButylPhthalate	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Bis(2-ethylhexyl)phthalate	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Carbazole	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Chrysene	1,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	46	< 30.92
SVOC	Di-n-ButylPhthalate	n/s	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Dibenzo(a,h)anthracene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	< 31.57	< 30.92
SVOC	Fluoranthene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	65	38
SVOC	Indeno(1,2,3-cd)pyrene	8,200	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	35	< 30.92
SVOC	Naphthalene	12,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	44	< 30.92
SVOC	Phenanthrene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	55	< 30.92
SVOC	Pyrene	1,000,000	< 31.25	< 31.25	< 30.92	< 30.30	< 31.25	< 30.61	< 30.30	68	57
	Total BTEX		0	0	0	0	0	0	0	0	0
	Total Chlorinated Solvents		9	9	0	0	0	0	10	114	0
	Total VOC		9	9	0	0	0	0	10	177	0
	Total SVOC		0	0	0	0	0	0	0	793	465
	PID Readings (ppm)		1.5	0.5	0.0	0.0	0.0	0.0	1.0	5.1	1.0

n/s	No standards
< 31.25	Compounds were analyzed, but were non-detected or detected below their detection limit.

Table 6
Summary of Detected Compounds (Soil and Groundwater Sampling, 2/24/2009)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater (mg/Kg)	Soil Concentrations (mg/Kg)									New York Ambient Water Quality Standards & Guidance Values (class GA) (ug/L)	Groundwater Concentrations (ug/L)					
			B-21 S-6 23-25'	B-21 S-7 26-27'	B-22 S-1 0-2'	B-22 S-7 26-28'	B-23 S-1 1-3'	B-23 S-7 26-27'	B-24 S-1 1-3'	B-24 S-7 26-27'	Duplicate B-23 S-1 1-3'		B-21 WS-1	B-22 WS-1	B-23 WS-1	B-24 WS-1	Duplicate B-23 WS-1	Trip Blank
VOC	1,1-Dichloroethene	0.33	< 0.01	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5	2	2	< 1	1	< 1	< 1
	1,1,1-Trichloroethane (TCA)	0.68	< 0.01	< 0.01	< 0.005	< 0.005	0.11	< 0.005	0.02	< 0.005	0.02	5	**14**	**34**	**9**	**15**	**9**	< 1
	1,2,4-Trimethylbenzene	3.60	0.72	0.27	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	**23**	< 1	< 1	< 1	< 1	< 1
	1,2,4,5-Tetramethylbenzene	n/s	0.38	0.73	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	n/s	7	< 1	< 1	< 1	< 1	< 1
	1,3,5-Trimethylbenzene	8.40	0.66	0.30	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	**12**	< 1	< 1	< 1	< 1	< 1
	Isopropylbenzene	n/s	< 0.01	< 0.01	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	3	< 1	< 1	< 1	< 1	< 1
	m/p-Xylenes	1.60	0.05	< 0.02	< 0.01	< 0.01	< 0.04	< 0.01	< 0.01	< 0.01	0.01	5	< 2	< 2	< 2	< 2	< 2	< 2
	n-Butylbenzene	12	0.10	0.06	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	3	< 1	< 1	< 1	< 1	< 1
	n-Propylbenzene	3.90	0.01	< 0.01	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	< 1	< 1	< 1	< 1	< 1	< 1
	Naphthalene (v)	n/s	1.30	1.10	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	0.04	n/s	68	< 1	< 1	< 1	< 1	< 1
	o-Xylene	1.60	0.10	0.03	< 0.005	< 0.005	< 0.02	< 0.005	< 0.005	< 0.005	< 0.005	5	2	< 1	< 1	< 1	< 1	< 1
	p-Ethyltoluene	n/s	0.29	0.11	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	n/s	5	< 1	< 1	< 1	< 1	< 1
	p-Isopropyltoluene	n/s	0.29	0.18	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	4	< 1	< 1	< 1	< 1	< 1
	sec-Butylbenzene	11	0.05	0.03	< 0.01	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.01	5	4	< 1	< 1	< 1	< 1	< 1
	Tetrachloroethene (PCE)	1.30	0.74	0.23	0.04	< 0.005	0.14	< 0.005	0.05	< 0.005	0.03	5	**17**	**19**	4	2	5	< 1
SVOC	2-Methylnapthalene	n/s	16.00	28.00	0.12	< 0.03	0.20	< 0.03	< 0.16	< 0.03	2.00	n/s	170	< 1	< 1	< 1	< 1	< 1
	Acenaphthene	98	1.40	2.30	0.09	< 0.03	1.20	< 0.03	< 0.16	< 0.03	13.00	20	11	< 1	< 1	< 1	< 1	< 1
	Acenaphthylene	107	< 0.15	< 0.15	< 0.003	< 0.03	< 0.16	< 0.03	0.63	< 0.03	< 0.03	20	< 10	< 1	< 1	< 1	< 1	< 1
	Anthracene	1000	< 0.15	< 0.15	0.16	< 0.03	1.30	< 0.03	0.24	< 0.03	13.00	50	< 10	< 1	< 1	< 1	< 1	< 1
	Benzo(a)anthracene	1.00	< 0.15	< 0.15	0.20	< 0.03	**2.30**	< 0.03	**3.70**	< 0.03	**13.00**	0.002	< 10	< 1	< 1	< 1	< 1	< 1
	Benzo(a)pyrene	22	< 0.15	< 0.15	0.24	< 0.03	1.80	< 0.03	4.10	< 0.03	17.00	0.002	< 10	< 1	< 1	< 1	< 1	< 1
	Benzo(b)fluoranthene	1.70	< 0.15	< 0.15	0.28	< 0.03	**2.00**	< 0.03	**4.10**	< 0.03	**18.00**	0.002	< 10	< 1	< 1	< 1	< 1	< 1
	Benzo(g,h,i)perylene	1000	< 0.15	< 0.15	0.06	< 0.03	0.44	< 0.03	1.10	< 0.03	3.90	5	< 10	< 1	< 1	< 1	< 1	< 1
	Benzo(k)fluoranthene	1.70	< 0.15	< 0.15	0.31	< 0.03	**1.80**	< 0.03	**4.20**	< 0.03	**17.00**	0.002	< 10	< 1	< 1	< 1	< 1	< 1
	Bis(2-ethylhexyl)phthalate	n/s	< 0.15	0.19	0.20	0.09	0.25	0.06	0.19	0.07	0.72	5	< 10	< 1	< 1	< 1	< 1	< 1
	Carbazole	n/s	< 0.15	< 0.15	0.10	< 0.03	0.60	< 0.03	< 0.16	< 0.03	6.80	n/s	< 10	< 1	< 1	< 1	< 1	< 1
	Chrysene	1.00	< 0.15	< 0.15	0.32	< 0.03	**2.20**	< 0.03	**3.50**	< 0.03	**20.00**	0.002	< 10	< 1	< 1	< 1	< 1	< 1
	Dibenzo(a,h)anthracene	1000	< 0.15	< 0.15	< 0.003	< 0.03	0.28	< 0.03	0.36	< 0.03	2.00	50	< 10	< 1	< 1	< 1	< 1	< 1
	Dibenzofuran	210	< 0.15	< 0.15	0.06	< 0.03	0.38	< 0.03	< 0.16	< 0.03	6.80	5	< 10	< 1	< 1	< 1	< 1	< 1
	Fluoranthene	1000	< 0.15	< 0.15	0.76	< 0.03	4.60	< 0.03	6.40	< 0.03	60.00	50	< 10	< 1	< 1	< 1	< 1	< 1
	Fluorene	386	1.10	< 0.15	0.08	< 0.03	0.63	< 0.03	< 0.16	< 0.03	6.80	50	15	< 1	< 1	< 1	< 1	< 1
	Indeno(1,2,3-cd)pyrene	8.20	< 0.15	< 0.15	0.06	< 0.03	0.49	< 0.03	1.20	< 0.03	4.50	0.002	< 10	< 1	< 1	< 1	< 1	< 1
	Naphthalene (sv)	12	2.60	4.40	0.08	< 0.03	0.57	< 0.03	< 0.16	< 0.03	6.90	10	**64**	< 1	< 1	< 1	< 1	< 1
	Phenanthrene	1000	3.20	5.20	0.85	< 0.03	4.40	< 0.03	0.53	< 0.03	55.00	50	28	< 1	< 1	< 1	< 1	< 1
	Pyrene	1000	< 0.15	< 0.15	0.86	< 0.03	5.20	< 0.03	8.00	< 0.03	49.00	50	< 10	< 1	< 1	< 1	< 1	< 1
	Total BTEX		0.15	0.03	0	0	0	0	0	0	0.01		2	0	0	0	0	0
	Total Chlorinated Solvents		0.74	0.23	0.04	0	0.25	0	0.06	0	0.05		31	53	13	18	14	0
	Total VOC		4.69	3.03	0.04	0	0.25	0	0.06	0	0.10		164	55	13	18	14	0
	Total SVOC		24.30	40.09	4.83	0.09	30.64	0.06	38.25	0.07	315.42		288	0	0	0	0	0
	PID Readings (ppm)		140.00	62.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							

n/s	No standards
< 0.15	Compounds were analyzed, but were non-detected or detected below their detection limit.
20,000	Compounds were detected above the Part 375-6 Soil Cleanup Objectives for the Protection of Groundwater and/or the New York Ambient Water Quality Standards & Guidance Values

Table 7
Summary of Detected Compounds (Groundwater Sampling, 3/18/2009)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

	Parameter	New York Groundwater Quality Standards & Guidance Values (µg/L)	Concentrations (ug/L)									
			MW-1 WS-1	MW-2 WS-1	MW-3 WS-1	MW-4 WS-1	MW-5 WS-1	MW-6 WS-1	MW-7 WS-1	MW-8 WS-1	MW-9 WS-1	Duplicate MW-2 WS-1
VOCs	Benzene	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Carbon Disulfide	50	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Chloroform	7	2	< 1	< 1	< 1	1	< 1	3	2	< 1	< 1
	1,1-Dichloroethene	5	**14**	3	2	**5**	**5**	4	**13**	**7**	< 1	3
	1,1-Dichloroethane	5	3	1	3	< 1	1	3	**6**	2	< 1	1
	1,2-Dichloroethane	0.6	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Ethylbenzene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	p-Ethyltoluene	n/s	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1
	Freon 113	5	< 1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2
	Isopropylbenzene	5	< 1	< 1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Methylene Chloride	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Methyl-Tert-Butyl-Ether (MTBE)	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	m/p-Xylenes	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	o-Xylene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1
	p-Isopropyltoluene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	sec-Butylbenzene	5	< 1	< 1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Tert-Butyl Alcohol	50	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Tert-Butylbenzene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	1,3,5-Trimethylbenzene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1
	1,2,4,5-Tetramethylbenzene	n/s	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1
	1,2,4-Trimethylbenzene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1
	1,1,1-Trichloroethane	5	**120**	**53**	**21**	**43**	**35**	**22**	**230**	**91**	**9**	**54**
	Trichloroethene (TCE)	5	2	< 1	1	1	< 1	2	2	< 1	< 1	< 1
	Tetrachloroethene (PCE)	5	3	**16**	**19**	3	4	**11**	2	3	**27**	**17**
	Toluene	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Vinyl Chloride	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Naphthalene (volatile)	n/s	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	12	< 1
SVOCs*	bis (2-ethylhexyl) phthalate (sv)	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	2-Methylnaphthalene (sv)	n/s	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.1	< 1
	Naphthalene (sv)	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4.5	< 1
	Total BTEX		0	0	0	0	0	0	0	0	2.0	0
	Total Chlorinated Solvents		144	73	46	52	46	42	256	105	36	75
	Total VOCs		144	75	50	52	46	42	256	105	56	77
	Total SVOCs		0	0	0	0	0	0	0	0	8	0
	pH		6.5	6.6	6.5	7.0	6.9	6.7	6.8	6.8	6.7	6.6
	T (^{o}C)		61.1	62.3	62.2	61.0	61.4	61.6	61.7	61.3	61.4	62.3
	Conductivity (uS/cm)		1,270	1,607	1,458	1,791	1,900	1,604	1,510	1,870	1,702	1,607
	Dissolved Oxygen (mg/L)		2.2	1.0	0.0	2.1	0.3	0.4	2.4	1.8	0.5	1.0
	ORP (mV)		-4	-24	-34	20	-9	-7	15	-10	-20	-24

n/s	No standards
< 1	Compounds were analyzed, but were non-detected or detected below their detection limit.
17	Compounds were detected above the New York Groundwater Quality Standards & Guidances Values

Table 8
Summary of Detected Compounds (Soil Vapor Intrusion - Air Sampling, μg/m³)
AAA, 101 Westmoreland Avenue, White Plains, NY, 2/27/2009
GCE Project No. 05-003-00

Sample ID	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-7(D)	SS-8	SS-9	IA-1	IA-2	OA-1
Analyte	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³
1,1 Dichloroethane	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	33.22	< 0.39	33.22	< 0.39
1,1 Dichloroethene	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	83.37	< 0.39	83.37	< 0.39
1,1,1-Trichloroethane (TCA)	19.65	24.57	3330.00	2674.90	1201.00	1310.20	485.85	709.67	529.52	3821.30	2.89	< 0.54	< 0.54
1,2,4-Trimethylbenzene	0.84	1.67	73.79	2.12	1.13	1.08	88.54	118.06	< 2.45	59.03	21.15	59.03	< 2.45
1,3,5-Trimethylbenzene	0.54	0.49	22.14	0.79	0.49	0.49	41.81	47.71	< 2.45	17.71	5.90	17.71	< 2.45
2,2,4-Trimethylpentane	10.26	7.93	< 0.46	0.93	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	8.40	24.26	< 0.46
Acetone	76.10	95.12	18.07	18.79	12.60	8.56	380.48	28.54	68.96	99.88	187.86	546.94	8.32
Benzene	5.43	3.83	1.40	0.93	0.80	0.70	2.62	0.80	2.04	0.89	8.94	28.73	0.96
c-1,2-Dichloroethene	< 0.39	< 0.39	43.64	< 0.39	< 0.39	5.55	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39
Chloroform	< 0.97	< 0.97	< 0.97	< 0.97	2.87	< 0.97	< 0.97	< 0.97	2.09	43.34	< 0.97	< 0.97	< 0.97
Dichlorodifluoromethane	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	15.83	27.71	< 0.98
Ethyl Alcohol	22.60	48.96	103.57	126.16	88.50	116.75	< 3.76	< 3.76	82.85	75.32	225.96	414.26	9.60
Ethyl Benzene	6.94	1.69	7.81	7.37	1.78	1.47	30.80	28.63	1.52	21.69	15.62	47.72	0.48
Freon-113	< 0.47	< 0.47	51.38	31.44	41.41	26.84	19.17	24.54	61.34	429.41	< 0.47	< 0.47	< 0.47
Heptane	7.77	7.37	2.05	1.10	1.64	0.86	15.96	2.62	< 2.04	1.68	14.73	40.51	< 2.04
Hexane	22.93	11.29	3.25	< 1.05	38.81	2.58	9.53	< 1.05	45.86	< 1.05	25.75	70.56	< 1.05
Isopropyl Alcohol	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28	14.73	< 12.28	< 12.28
m/p-Xylene	21.73	6.52	33.90	23.90	6.52	5.65	130.38	134.73	5.22	99.96	56.50	160.80	1.56
Methyl Ethyl Ketone	< 2.948	16.79	< 2.948	< 2.948	< 2.948	< 2.948	170.87	< 2.948	< 2.948	< 2.948	50.08	147.30	< 2.948
Methylene Chloride	7.30	< 0.34	< 0.34	< 0.34	10.77	3.82	< 0.34	< 0.34	21.19	< 0.34	< 0.34	< 0.34	< 0.34
Methylisobutylketone	11.48	< 4.09	< 4.09	< 4.09	< 4.09	< 4.09	24.61	< 4.09	< 4.09	< 4.09	34.04	106.63	< 4.09
o-Xylene	6.08	2.09	16.95	6.08	1.91	1.69	56.50	60.84	1.43	39.55	19.12	56.50	0.56
p-Ethyltoluene	1.72	1.18	33.89	1.92	1.03	0.83	103.13	127.69	< 2.45	44.69	19.64	47.15	< 2.45
Styrene	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	5.11	11.92	< 0.42
Methyl Tert. Butyl Ether	< 0.36	< 0.36	< 0.36	< 0.36	6.69	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Tetrachloroethene (PCE)	2103.40	1017.80	6785.00	1357.00	284.97	1017.80	1832.00	2171.20	332.47	3460.40	5563.70	13570.00	20.36
Toluene	207.08	109.19	64.01	36.90	52.71	30.87	1129.50	139.31	45.18	18.83	527.10	1506.00	6.40
Trichloroethene (TCE)	3.60	1.56	46.75	0.27	1.18	6.45	4.62	5.91	1.99	17.19	2.20	4.94	< 0.214
Total Chlorinated VOCs	2133.95	1043.93	10256.77	4063.61	1542.20	2370.66	2341.64	2911.32	948.60	7888.23	5584.62	13602.65	20.36
Total BTEX	247.26	123.32	124.07	75.18	63.72	40.38	1349.80	364.31	55.39	180.92	627.28	1799.75	9.96
Total VOCs	2535.45	1358.05	10637.60	4290.60	1756.81	2542.19	4526.37	3600.25	1201.66	8367.46	6825.25	17005.26	48.24

Table 9 Elevation Survey, 3/18/2009 101 Westmoreland Avenue, White Plains, NY GCE Project No. 05-003-00				
Benchmark Location: MW-1 (Elevation: 210.26 ft)				
Monitoring Well No.	BS	^	FS	Casing Elevation (ft)
MW-1	5.02	215.28	-	210.26
MW-9	-	215.28	4.85	210.43
MW-8	-	215.28	5.15	210.13
MW-7	-	215.28	5.35	209.93
MW-4	-	215.28	5.42	209.86
MW-5	-	215.28	5.47	209.81
MW-6	-	215.28	5.52	209.76
MW-3	-	215.28	5.68	209.60
P.2	5.44	215.04	-	209.60
MW-2	-	215.04	5.2	209.84

Table 10
Groundwater Level Measurements, 3/18/2009
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

MW Number	3/18/2009									9/21/2005	
	Well Diameter (inches)	Screen Length (ft)	Total Well Depth (ft)	Length Purged (ft)	3 Well Volumes (gallons)	Volume Purged (gallons)	Casing Elevation (ft)	Depth to GW (ft)	GW Elevation (ft)	Depth to GW (ft)	GW Elevation (ft)
MW-1	2	15	39.5	11.33	5.44	10	210.26	28.17	181.09	29.59	180.67
MW-2	2	15	39.3	13.24	6.36	16	209.84	26.06	183.78	26.78	183.06
MW-3	2	15	38.8	13.42	6.44	16	209.60	25.38	184.22	26.04	183.56
MW-4	2	15	37.6	10.08	4.84	10	209.86	27.52	182.34	-	-
MW-5	2	15	37.3	9.55	4.58	17	209.81	27.75	182.06	-	-
MW-6	2	15	38.7	10.89	5.23	10	209.76	27.81	181.95	-	-
MW-7	2	15	37.6	10.19	4.89	10	209.93	27.41	182.52	-	-
MW-8	2	15	35.5	7.16	3.44	10	210.13	28.34	181.79	-	-
MW-9	2	15	35.8	6.14	2.95	10	210.43	29.66	180.77	-	-

Table 11
Soil Vapor Investigation Log (2/27/2009)
101 Westmoreland Avenue, White Plains, NY
GCE Project N0. 05-003-00

Sample No.	Canister No.	Regulator No.	Regulator Flow Rate (mL/min)	Start Time	End Time	Total Hours	Total Hours	Total Volume	Helium Test
OA-1	56	33	11.00	8:30	5:30	9:00	9.00	5.94	
IA-1 (office)	54	31	11.00	8:30	5:30	9:00	9.00	5.94	
IA-2 (garage)	51	35	11.10	8:45	5:25	8:40	8.67	5.77	
SS-1	10	3	40.40	12:30	3:10	2:40	2.67	6.00	<1%
SS-2	38	16	41.30	12:35	3:15	2:40	2.67	6.00	<1%
SS-3	5	1	41.25	12:45	3:25	2:40	2.67	6.00	<1%
SS-4	20	60	41.30	11:00	5:10	6:10	6.17	6.00	<1%
SS-5	47	ABC	42.30	11:50	2:30	2:40	2.67	6.00	<1%
SS-6	6	26	41.30	11:50	2:30	2:40	2.67	6.00	<1%
SS-7	36	2	40.40	11:50	2:30	2:40	2.67	6.00	<1%
SS-8	15	63	43.10	12:15	2:55	2:40	2.67	6.00	<1%
SS-9	8	62	39.30	12:20	3:05	2:45	2.75	6.00	<1%
Duplicate	14	61	41.30	11:50	2:30	2:40	2.67	6.00	<1%

Table 12
PID and Particulate Readings (2/17/2009 to 2/19/2009)
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

02/17/09, GCE 05-003			
Time	**PID**	**Part.**	**Notes:**
9:00	4.5	1.078	Began installing MW-4
9:15	6.1	1.350	
9:30	6.1	1.619	
9:45	6.1	2.329	
10:00	4.5	1.531	
10:15	4.5		Drilling stopped - parts
10:30	4.5		needed (bolts)
10:45	4.5		
11:30	13.7	0.595	Painting being done in vicinity of work
11:45	16.8	0.495	
12:00	15.3	0.278	
12:15	15.3	0.709	
12:30	12.2	0.214	
12:45	9.1	0.281	
1:00	9.1	1.495	Installing MW-6
1:15	6.1	1.154	
1:30	6.1	0.831	
1:45	4.5	10.670	
2:00	0.0	0.400	Doors opened to ventilate
2:15	0.0	1.948	
2:30	0.0	0.885	
2:45	3.0	1.500	
3:00	3.0	1.100	
3:15	1.5	0.545	
3:30	0.0	0.761	Breaking concrete for MW-5
3:45	1.5	0.991	
4:00	1.5	0.874	

02/18/09, GCE 05-003			
Time	**PID**	**Part.**	**Notes:**
7:45	1.5	0.214	Began installing MW-5
8:00	1.5	0.420	
8:15	4.5	0.584	
8:30	1.5	0.443	
8:45	3.0	0.829	
9:00	4.5	0.661	
9:15	4.5	0.774	
9:30	13.7	0.971	Painting being done in
9:45	6.1	0.809	vicinity of work
10:00	6.1	0.617	
10:15	0.0	0.324	Moved outside for MW-
10:30	0.0	0.003	9
10:45	0.0	0.251	
11:00	0.0	0.032	
11:15	0.0	0.018	
11:30	0.0	0.065	
11:45	0.0	0.073	
12:00	0.0	0.103	
12:15	0.0	0.070	
12:30	0.0	0.038	
12:45	0.0	0.051	
1:00	0.0	0.042	
1:15	0.0	n/a	Inside - completing
1:30	0.0	n/a	grout and concrete

02/19/09, GCE 05-003			
Time	**PID**	**Part.**	**Notes:**
8:00	0.0	0.018	Installing MW-8 outside
8:15	0.0	0.120	
8:30	0.0	0.114	
8:45	0.0	0.073	
9:00	0.0	0.048	
9:15	0.0	0.019	
9:30	0.0	0.020	
9:45	0.0	0.021	
10:00	0.0	0.015	
10:15	0.0	0.014	
10:30	0.0	0.006	
10:45	0.0	0.020	
11:00	0.0	0.000	Installing MW-7 outside
11:15	0.0	0.002	
11:30	0.0	0.000	
11:45	0.0	0.000	
12:00	0.0	0.000	
12:15	0.0	0.040	
12:30	0.0	0.020	
12:45	0.0	0.000	
1:00	0.0	0.001	
1:15	0.0	0.008	
1:30	0.0	0.007	
1:45	0.0	0.015	
2:00	0.0	0.000	

Table 13
Analytical Methods/Quality Assurance Summary
101 Westmoreland Avenue, White Plains, NY
GCE Project No. 05-003-00

Sample Media	Sample Location	Sample Description (Boring, Monitoring Well, or Soil Vapor Number)	Sample Number	Depth (feet below ground surface)	VOC (EPA Method 8260)	B/N (EPA Method 8270)	VOC (EPA Method TO-15)	Sample Container and Preservation for VOC			Sample Container and Preservation for B/N		Sample Holding Time
								One (1) 4-oz glass jar	Two (2) 40-mL glass vials with HCL	One(1) 6-liter SUMMA canister	One (1) 8-oz glass jar	One (1) 1-liter amber glass bottle	
Soil	Parking Lot	B-21	B-21, S-6	23-25	✓	✓		✓			✓		VOC - 14 days; B/N - 14 days/ extract 40 days
		B-21	B-21, S-7	26-27	✓	✓		✓			✓		
		B-22	B-22, S-1	0-2	✓	✓		✓			✓		
		B-22	B-22, S-7	26-28	✓	✓		✓			✓		
		B-23	B-23, S-1	1-3	✓	✓		✓			✓		
		B-23	B-23, S-7	26-27	✓	✓		✓			✓		
		B-24	B-24, S-1	1-3	✓	✓		✓			✓		
		B-24	B-24, S-7	26-27	✓	✓		✓			✓		
		Duplicate (B-23, S-1)	Duplicate-1	1-3	✓	✓		✓			✓		
		Trip Blank	Trip Blank		✓				✓				
Groundwater	Parking Lot	B-21	B-21, WS-1	27-29	✓	✓			✓			✓	VOC - 14 days; B/N - 7 days/ extract 40 days
		B-22	B-22, WS-1	28-30	✓	✓			✓			✓	
		B-23	B-23, WS-1	28-30	✓	✓			✓			✓	
		B-24	B-24, WS-1	28-30	✓	✓			✓			✓	
		Duplicate (B-23, WS-1)	Duplicate	28-30	✓	✓			✓			✓	
		MW-1	MW-1, WS-1	29-31	✓	✓			✓			✓	
		MW-2	MW-2, WS-1	26-28	✓	✓			✓			✓	
		MW-3	MW-3, WS-1	26-28	✓	✓			✓			✓	
	Garage	MW-4	MW-4, WS-1	28-30	✓	✓			✓			✓	
		MW-5	MW-5, WS-1	28-30	✓	✓			✓			✓	
		MW-6	MW-6, WS-1	28-30	✓	✓			✓			✓	
	Parking Lot	MW-7	MW-7, WS-1	28-30	✓	✓			✓			✓	
		MW-8	MW-8, WS-1	28-30	✓	✓			✓			✓	
		MW-9	MW-9, WS-1	29-31	✓	✓			✓			✓	
		Duplicate (MW-2, WS-1)	Duplicate	26-28	✓	✓			✓			✓	
		Matrix Spike	MS		✓	✓			✓			✓	
		Matrix Spike Duplicate	MSD		✓	✓			✓			✓	
		Trip Blank	Trip Blank		✓				✓				
Air	Office	SS-1	SS-1	Sub-slab			✓			✓			30 days
		SS-2	SS-2	Sub-slab			✓			✓			
	Garage	SS-3	SS-3	Sub-slab			✓			✓			
		SS-4	SS-4	Sub-slab			✓			✓			
		SS-5	SS-5	Sub-slab			✓			✓			
		SS-6	SS-6	Sub-slab			✓			✓			
		SS-7	SS-7	25-26			✓			✓			
	Park. Lot	SS-8	SS-8	5-6			✓			✓			
		SS-9	SS-9	25-26			✓			✓			
	Garage	Duplicate (SS-7)	Duplicate	25-26			✓			✓			
	Office	IA-1	IA-1				✓			✓			
	Garage	IA-2	IA-2				✓			✓			
	Outside	OA-1	OA-1				✓			✓			

APPENDIX A

LIMITATIONS AND SERVICE CONSTRAINTS

Limitations

The findings set forth in the attached environmental site assessment report are strictly limited in time and scope to the date of the evaluation(s). The conclusions presented in the report are based on the services described in the report, and not on scientific tasks or procedures beyond the scope of work agreed in the purchase order/work order prior to the initialization of this assessment or the time and budgeting restraints imposed by the client.

This report may contain recommendations which are partially based on the analysis of data accumulated at the time and locations set forth in the report through the subsurface investigation. However, environmental, geological, and geotechnical conditions can vary from those encountered during this investigation, and that the limitation on available data results in some level of uncertainty with respect to the interpretation of these conditions, despite the use of standard professional care and skill. Therefore, further investigations may reveal additional data or variations of the current data which may require the enclosed recommendations to be reevaluated.

Chemical analyses may have been performed for specific parameters during the course of this assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the subject site.

Partial findings of this assessment are based on data provided by others. No warranty is expressed or implied with the usage of such data.

Because of these limitations, full and complete determination as to whether a certain piece of land is or is not free from environmental contamination cannot be made. The extent of testing and statistical confidence associated with an environmental site assessment is balanced against a reasonable project budget; therefore, 100 percent confidence in environmental site assessment conclusions can never be reached. Therefore, G. C. Environmental, Inc. does not provide guarantees, certifications, or warranties that a property is free from environmental contamination.

Service Constraints

Much of the information provided in this report is based upon personal interviews and research of all practically reviewable documents, records, and maps held by appropriate government and private agencies. This is subject to limitations of historical documentation, availability, and accuracy of pertinent records and the personal recollection of those persons contacted.

The initial site-investigation took into account the natural and man-made features of the subject site, including any unusual or suspect phenomenon. These factors, combined with the subject site's geology, hydrology, topography, and past and present land uses served as a basis for choosing a methodology and location for subsurface investigation as well as soil and/or

groundwater sampling, if conducted. The analytical results of the subsurface investigation, if provided, are meant as a representative overview of the subject site's conditions.
The locations and type of analyses of soil samples, if provided, were chosen based on the same considerations listed in the paragraphs above. If samples were analyzed, they were analyzed for those parameters unique to the subject site as determined during the preceding site-evaluation.

The presence of radioactive materials or wastes, biological hazards, asbestos or lead-based paint was not investigated unless specifically noted otherwise.

This report was prepared for the exclusive use of the client and/or the parties listed on the cover of the report, and is intended for the use listed in a proposal/work order or a Consulting Services Agreement signed prior to initiation of the assessment. The use of this report by any other parties or in any other manner than that listed in a proposal/work order or a Consulting Services Agreement signed prior to initiation of the assessment requires the written consent of G. C. Environmental, Inc. This report must be presented in its entirety.

APPENDIX B

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: DENISE DEGENNARO	BORING/MW NO.: B-1	GROUND ELEV.:	
BORING CONTRACTOR: SUMMIT DRILLING, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:	
FOREMAN: JOHN VOGT	DATE: 06/08/2005		

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: 2"Ø GEOPROBE	DATE:
HAMMER:	HAMMER:	
FALL:	FALL:	DEPTH:

DEPTH	SAMPLE CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH	SAMPLE PEN./RE	SAMPLE BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
		S-1A	0-2						180	PETROLEUM ODOR
		S-1B	5-7			SAND	SAND		1.0	
10		S-2	10-12						0.0	
							END OF BOREHOLE			
20										
30										

NOTES: SOIL SAMPLE B-1, S-1A WAS SENT TO THE LAB. AT DEPTH 12 FEET BOREHOLE WAS COLLAPSED DUE TO DRY SAND.

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ADDITIONAL SUBSURFACE INVESTIGATION

101 WESTMORELAND AVENUE, WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-1

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: DENISE DEGENNARO
BORING CONTRACTOR: SUMMIT DRILLING, INC.
FOREMAN: JOHN VOGT

BORING/MW NO.: B-2
LOCATION: 101 WESTMORELAND AVENUE
WHITE PLAINS, NY 10606
DATE: 06/08/2005

GROUND ELEV.:
TOP OF CASING ELEV.:

CASING:
SIZE:
HAMMER:
FALL:

SAMPLER:
TYPE: 2"Ø GEOPROBE
HAMMER:
FALL:

GROUNDWATER LEVEL READINGS:
DATE:
DEPTH:

DEPTH	CAS. BL./FT.	NO.	DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
		S-1	0-2	40%		FILL	FILL		0.0	
		S-2	5-7	60%					0.0	
10		S-3	10-12	80%					0.0	
		S-4	15-17	100%		SAND	FINE SAND		0.0	
20		S-5	20-22	100%					0.0	
		S-6	25-27	100%			GROUNDWATER		0.0	
30							END OF BOREHOLE			

NOTES: SOIL SAMPLE B-2, S-6 AND GROUNDWATER SAMLE B-2, WS-1 WERE SENT TO THE LABORATORY

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ADDITIONAL SUBSURFACE INVESTIGATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-2

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: IGOR GOLDSTEIN	BORING/MW NO.: B-3	GROUND ELEV.:	
BORING CONTRACTOR: SUMMIT DRILLING, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:	
FOREMAN: JOSE ARRRITTA	DATE: 06/22/2005		

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: 2"Ø GEOPROBE	DATE:
HAMMER:	HAMMER:	
FALL:	FALL:	DEPTH:

SAMPLE DEPTH	CAS. BL./FT.	NO.	DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
0-2		S-1	0-2	NO REC.						
		S-2	5-7				YELLOW MEDIUM SAND		0.3	
10		S-3	10-12						0.2	
		S-4	15-17			SAND	GRAY COARSE SAND		0.2	
20		S-5	20-22						1.6	
		S-6	25-27				GROUNDWATER		0.1	
30							END OF BOREHOLE			

NOTES: SOIL SAMPLE B-3, S-5 AND GROUNDWATER SAMLE B-3, WS-1 WERE SENT TO THE LABORATORY

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ADDITIONAL SUBSURFACE INVESTIGATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-3

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: IGOR GOLDSTEIN
BORING CONTRACTOR: SUMMIT DRILLING, INC.
FOREMAN: JOSE ARRITTA

BORING/MW NO.: B-4
LOCATION: 101 WESTMORELAND AVENUE
WHITE PLAINS, NY 10606
DATE: 06/22/2005

GROUND ELEV.:
TOP OF CASING ELEV.:

CASING:
SIZE:
HAMMER:
FALL:

SAMPLER:
TYPE: 2"Ø GEOPROBE
HAMMER:
FALL:

GROUNDWATER LEVEL READINGS:
DATE:
DEPTH:

DEPTH	SAMPLE: CAS. BL./FT.	NO.	DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
		S-1	0-2	NO REC.						
10										
20										
						SAND				
		S-6	25-27				GROUNDWATER		0.3	
							GRAY FINE SAND			
30										
							END OF BOREHOLE			

NOTES: SOIL SAMPLE B-4, S-6 AND GROUNDWATER SAMLE B-4, WS-1 WERE SENT TO THE LABORATORY

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ADDITIONAL SUBSURFACE INVESTIGATION
101 WESTMORELAND AVENUE, WHITE PLAINS, NY 10606
DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:
B-4

BORING/MONITORING WELL LOG

FIELD GEOLOGIST:	IGOR GOLDSTEIN
BORING CONTRACTOR:	SUMMIT DRILLING, INC.
FOREMAN:	JOSE ARRITTA
BORING/MW NO.:	B-5
LOCATION:	101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606
DATE:	06/22/2005
GROUND ELEV.:	
TOP OF CASING ELEV.:	

CASING:
SIZE:
HAMMER:
FALL:

SAMPLER:
TYPE: 2"Ø GEOPROBE
HAMMER:
FALL:

GROUNDWATER LEVEL READINGS:
DATE:
DEPTH:

DEPTH	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
		S-1	0-2				3 INCHES OF CONCRETE		4.2	
							GRAY MEDIUM SAND			
		S-2	5-7						0.9	
10		S-3	10-12				GRAY FINE SAND		7.6	
		S-4	15-17			SAND			326	
20		S-5	20-22				DARK-YELLOW FINE SAND		73.9	
		S-6	25-27				GROUNDWATER		13.9	
30										
							END OF BOREHOLE			

NOTES: SOIL SAMPLES B-5 S-4, B-5 S-5, B-5 S-6 AND GROUNDWATER SAMLE B-5, WS-1 WERE SENT TO THE LABORATORY.

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ADDITIONAL SUBSURFACE INVESTIGATION

101 WESTMORELAND AVENUE, WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-5

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN
BORING CONTRACTOR: SUMMIT DRILLING, INC.
FOREMAN: JOHN VOGT

BORING/MW NO.: B-6
LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606
DATE: 09/21/2005

GROUND ELEV.:
TOP OF CASING ELEV.:

CASING:
SIZE:
HAMMER:
FALL:

SAMPLER:
TYPE: 2"Ø GEOPROBE
HAMMER:
FALL:

GROUNDWATER LEVEL READINGS:
DATE: 9/21/05
DEPTH: 29.0'

DEPTH	CAS. BL./FT.	NO.	DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
		S-1	0-2	75%		FILL	FILL: DARK-GRAY FINE-COARSE SAND AND GRAVEL		3.8	
		S-2	5-7	100%		SAND	LIGHT-BROWN MEDIUM-COARSE SAND, LITTLE FINE GRAVEL		0.1	
10		S-3	10-12	75%					0.1	
		S-4	15-17	75%					0.0	
20		S-5	20-22	75%					0.0	
							GROUNDWATER			
30							END OF BOREHOLE			

NOTES: SOIL SAMPLE B-1, S-5 WAS SENT TO THE LABORATORY FOR ANALYSIS

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ADDITIONAL SUBSURFACE INVESTIGATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-6

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN	BORING/MW NO.: B-7	GROUND ELEV.: 270'
BORING CONTRACTOR: SUMMIT DRILLING, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:
FOREMAN: JOHN VOGT	DATE: 09/21/2005	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: 2"Ø GEOPROBE	DATE: 9/21/05
HAMMER:	HAMMER:	
FALL:	FALL:	DEPTH: 28.41'

SAMPLE						GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
DEPTH	CAS. BL./FT.	NO.	DEPTH	PEN./RE	BLOWS					
10										
20						SAND	SAND			
							GROUNDWATER			
30										
							END OF BOREHOLE			

NOTES:

BORING WAS ADVANCED WITHOUT SOIL SAMPLING DOWN TO GROUNDWATER. GROUNDWATER SAMPLE B-7, WS-1 WAS SENT TO THE LABORATORY

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ADDITIONAL SUBSURFACE INVESTIGATION

101 WESTMORELAND AVENUE, WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-7

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN	BORING/MW NO.: B-12	GROUND ELEV.:
BORING CONTRACTOR: G.C.ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:
FOREMAN: GREGORZ ZDUNCHIK	DATE: 10/31/2007	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: 2"Ø GEOPROBE	DATE:
HAMMER:	HAMMER:	DEPTH:
FALL:	FALL:	

DEPTH	SAMPLE: CAS. BL./FT.	NO.	DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
							CONCRETE			
		S-1	0-2	70%		FILL	FILL: BROWN-GRAY FINE COARSE SAND, FRAGMENTS OF BRICKS AND COAL		42.0	PETROLEUM? ODOR
		S-2	2-4	70%					6.5	
		S-3	5-7	70%					0.2	
10		S-4	10-12	75%		SAND	LIGHT-GRAY, FINE-COARSE SAND, LITTLE FINE-MEDIUM GRAVEL, IN THE LOWER PORTION - SEAMS OF SILTY SAND		0.0	
		S-5	15-17	75%					0.8	
20		S-6	20-22	80%					1.3	
		S-7	25-27	80%			GROUNDWATER		7.6	
30							END OF BOREHOLE			

NOTES: SOIL SAMPLES B-12, S-1, B-12, S-2 AND B-12, S-7 WERE SENT TO THE LABORATORY

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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-12

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN	BORING/MW NO.: B-13	GROUND ELEV.:
BORING CONTRACTOR: G.C.ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:
FOREMAN: GREGORZ ZDUNCHIK	DATE: 10/31/2007	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: 2"Ø GEOPROBE	DATE:
HAMMER:	HAMMER:	
FALL:	FALL:	DEPTH:

DEPTH	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
							CONCRETE			
		S-1	0-2	70%		FILL	FILL: DARK-GRAY FINE COARSE SAND, FRAGMENTS OF BRICKS AND COAL		21.1	PETROLEUM? ODOR
		S-2	3-5	70%					2.9	
		S-3	5-7	70%					0.0	
10		S-4	10-12	75%		SAND	LIGHT-GRAY, FINE-COARSE SAND, LITTLE FINE-MEDIUM GRAVEL, IN THE LOWER PORTION - SEAMS OF SILTY SAND		0.2	
		S-5	15-17	80%					0.0	
20		S-6	20-22	80%					0.0	
		S-7	25-27	80%			GROUNDWATER		4.0	
30							END OF BOREHOLE			

NOTES: SOIL SAMPLES B-13, S-1 AND B-13, S-7 WERE SENT TO THE LABORATORY FOR ANALYSIS

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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-13

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN	BORING/MW NO.: B-14	GROUND ELEV.:
BORING CONTRACTOR: G.C.ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:
FOREMAN: GREGORZ ZDUNCHIK	DATE: 10/31/2007	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: 2"Ø GEOPROBE	DATE:
HAMMER:	HAMMER:	DEPTH:
FALL:	FALL:	

DEPTH	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
		S-1	0-2	70%			CONCRETE		1.2	
		S-2	3-5	70%		FILL	FILL: DARK-GRAY FINE COARSE SAND, FRAGMENTS OF BRICKS AND COAL		0.0	
		S-3	5-7	70%					0.0	
10		S-4	10-12	75%		SAND	LIGHT-GRAY, FINE-COARSE SAND, LITTLE FINE-MEDIUM GRAVEL, IN THE LOWER PORTION - SEAMS OF SILTY SAND		0.0	
		S-5	15-17	80%					0.8	
20		S-6	20-22	80%					1.3	
		S-7	25-27	80%			GROUNDWATER		1.3	
30							END OF BOREHOLE			

NOTES: SOIL SAMPLES B-14, S-1 AND B-14, S-7 WERE SENT TO THE LABORATORY FOR ANALYSIS

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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-14

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN	BORING/MW NO.: B-15	GROUND ELEV.:
BORING CONTRACTOR: G.C.ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:
FOREMAN: GREGORZ ZDUNCHIK	DATE: 10/31/2007	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: 2"Ø GEOPROBE	DATE:
HAMMER:	HAMMER:	DEPTH:
FALL:	FALL:	

DEPTH	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH	PEN./REC.	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
		S-1	0-2	70%		FILL	CONCRETE; FILL: DARK-GRAY FINE COARSE SAND, FRAGMENTS OF BRICKS AND COAL		0.2	
		S-2	3-5	70%					0.8	
		S-3	5-7	70%					0.2	
10		S-4	10-12	75%		SAND	LIGHT-GRAY, FINE-COARSE SAND, LITTLE FINE-MEDIUM GRAVEL, IN THE LOWER PORTION - SEAMS OF SILTY SAND		0.8	
		S-5	15-17	80%					0.2	
20		S-6	20-22	80%					0.2	
		S-7	25-27	80%			GROUNDWATER		1.3	
30							END OF BOREHOLE			

NOTES: SOIL SAMPLES B-15, S-1 AND B-15, S-7 WERE SENT TO THE LABORATORY FOR ANALYSIS

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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-15

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN	BORING/MW NO.: B-16	GROUND ELEV.:	
BORING CONTRACTOR: G.C.ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:	
FOREMAN: GREGORZ ZDUNCHIK	DATE: 10/31/2007		

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: 2"Ø GEOPROBE	DATE:
HAMMER:	HAMMER:	DEPTH:
FALL:	FALL:	

DEPTH	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH	PEN./REC	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
							CONCRETE			
		S-1	0-2	70%		FILL	FILL: RED-BLACK FINE COARSE SAND, FRAGMENTS OF BRICKS AND COAL		4.5	
		S-2	3-5	70%					0.2	
		S-3	5-7	70%		SAND			0.2	
10		S-4	10-12	75%		SAND	LIGHT-GRAY, FINE-COARSE SAND, LITTLE FINE-MEDIUM GRAVEL, IN THE LOWER PORTION - SEAMS OF SILTY SAND		0.0	
		S-5	15-17	80%					0.0	
20		S-6	20-22	80%					0.2	
		S-7	25-27	80%			GROUNDWATER		1.8	
30							END OF BOREHOLE			

NOTES: SOIL SAMPLES B-16, S-1 AND B-16, S-7 WERE SENT TO THE LABORATORY FOR ANALYSIS

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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-16

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN	BORING/MW NO.: B-17	GROUND ELEV.:
BORING CONTRACTOR: G.C.ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:
FOREMAN: GREGORZ ZDUNCHIK	DATE: 10/31/2007	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: 2"Ø GEOPROBE	DATE:
HAMMER:	HAMMER:	DEPTH:
FALL:	FALL:	

DEPTH	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
							CONCRETE			
		S-1	0-2	70%		FILL	FILL: RED-BLACK FINE COARSE SAND, FRAGMENTS OF BRICKS AND COAL		1.3	
		S-2	3-5	70%					0.2	
		S-3	5-7	70%					0.0	
10		S-4	10-12	75%		SAND	LIGHT-GRAY, FINE-COARSE SAND, LITTLE FINE-MEDIUM GRAVEL, IN THE LOWER PORTION - SEAMS OF SILTY SAND		0.0	
		S-5	15-17	80%					0.0	
20		S-6	20-22	80%					0.2	
		S-7	25-27	80%			GROUNDWATER		0.8	
30							END OF BOREHOLE			

NOTES: SOIL SAMPLES B-17, S-1 AND B-17, S-7 WERE SENT TO THE LABORATORY FOR ANALYSIS

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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-17

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN
BORING CONTRACTOR: G.C.ENVIRONMENTAL, INC.
FOREMAN: GREGORZ ZDUNCHIK

BORING/MW NO.: B-18
LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606
DATE: 3/26/2008

GROUND ELEV.:
TOP OF CASING ELEV.:

CASING:
SIZE:
HAMMER:
FALL:

SAMPLER:
TYPE: 2"Ø GEOPROBE
HAMMER:
FALL:

GROUNDWATER LEVEL READINGS:
DATE:
DEPTH:

DEPTH	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
		S-1	0-2	80%		FILL	CONCRETE FILL: DARK-GRAY FINE COARSE SAND, FRAGMENTS OF BRICKS AND COAL		0.9	
		S-2	3-5	80%					1.8	
		S-3	5-7	70%					1.8	
10		S-4	10-12	70%		SAND	LIGHT-GRAY, FINE-MEDIUM SAND, TRACE FINE-MEDIUM GRAVEL		0.9	
		S-5	15-17	60%					9.3	
20		S-6	20-22	50%					10.2	
		S-7	25-27	40%			GROUNDWATER		7.4	
30							END OF BOREHOLE			

NOTES: SOIL SAMPLES B-18, S-1 AND B-18, S-7 WERE SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
410 SAW MILL RIVER ROAD, ARDSLEY, NY 10502
Tel: (914) 674-4346 Fax: (914) 674-4348

SITE CHARACTERIZATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-18

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN	BORING/MW NO.: B-19	GROUND ELEV.:	
BORING CONTRACTOR: G.C.ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:	
FOREMAN: GREGORZ ZDUNCHIK	DATE: 3/26/2008		

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: 2"Ø GEOPROBE	DATE:
HAMMER:	HAMMER:	
FALL:	FALL:	DEPTH:

DEPTH	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
							CONCRETE			
		S-1	0-2	80%		FILL	FILL: DARK-GRAY FINE COARSE SAND, FRAGMENTS OF BRICKS AND COAL		0.9	
		S-2	3-5	80%					0.9	
		S-3	5-7	70%					2.8	
10		S-4	10-12	70%		SAND	LIGHT-GRAY, FINE-MEDIUM SAND, TRACE FINE-MEDIUM GRAVEL		1.8	
		S-5	15-17	60%					2.8	
20		S-6	20-22	60%					4.6	
		S-7	25-27	50%			GROUNDWATER		4.6	
30							END OF BOREHOLE			

NOTES: SOIL SAMPLES B-19, S-1 AND B-19, S-7 WERE SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS

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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-19

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN	BORING/MW NO.: B-20	GROUND ELEV.:
BORING CONTRACTOR: G.C.ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:
FOREMAN: GREGORZ ZDUNCHIK	DATE: 3/26/2008	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: 2"Ø GEOPROBE	DATE:
HAMMER:	HAMMER:	DEPTH:
FALL:	FALL:	

DEPTH	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH	PEN./RE	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
				0%			CONCRETE			
				0%			HOLE			
				0%						
10				0%		SAND	VERY LOOSE SAND, NO RECOVERY			
		S-1	15-17	60%					18	
20		S-2	20-22	60%		SAND	LIGHT-GRAY, FINE-MEDIUM SAND, TRACE FINE-MEDIUM GRAVEL		9.3	
		S-3	25-27	50%			GROUNDWATER		4.6	
30							END OF BOREHOLE			

NOTES: SOIL SAMPLES B-20, S-1 AND B-20, S-3 WERE SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE,
WHITE PLAINS, NY 10606

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-20

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: JON HICKEY

BORING CONTRACTOR: G. C. ENVIRONMENTAL, INC.

FOREMAN: G. ZDUNCZYK

BORING/MW NO.: B-21

LOCATION: 101 WESTMORELAND AVENUE
WHITE PLAINS, NY 10606

DATE: 02/24/2009

GROUND ELEVATION:

TOP OF CASING ELEV.:

CASING:
SIZE:
HAMMER:
FALL:

SAMPLER:
TYPE: GEOPROBE 6610DT (2" Ø)
HAMMER:
FALL:

GROUNDWATER LEVEL READINGS:
DATE: 02/24/2009
DEPTH: 27'

DEPTH (FT)	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH (FT)	PEN./REC.	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
							ASPHALT AND STONES			
		S-1	1-3	75%		FILL	DARK GREY FINE-COARSE SAND, FRAGMENTS OF RED BRICK AND COAL		0	
		S-2	3-5	75%					0	
10		S-3	8-10	100%		SAND	LIGHT-BROWN FINE-MEDIUM SAND, LITTLE FINE GRAVEL		0	
		S-4	13-15	100%					0	
20		S-5	18-20	100%					39	
		S-6	23-25	100%			GROUNDWATER		140	
		S-7	26-27	85%					62	
30							END OF BOREHOLE			
40										

NOTE: SOIL SAMPLES B-21, S-6 AND B-21, S-7, AND GROUNDWATER SAMPLE B-21, WS-1 WERE SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
410 SAW MILL RIVER ROAD, ARDSLEY, NY 10502
Tel: (914) 674-4346 Fax: (914) 674-4348

SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-21

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: JON HICKEY	BORING/MW NO.: B-22	GROUND ELEVATION:
BORING CONTRACTOR: G. C. ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:
FOREMAN: G. ZDUNCZYK	DATE: 02/24/2009	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: GEOPROBE 6610DT (2" ø)	DATE: 02/24/2009
HAMMER:	HAMMER:	DEPTH: 28'
FALL:	FALL:	

DEPTH (FT)	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH (FT)	PEN./REC.	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
		S-1	0-2	85%			ASPHALT AND STONES		0	
		S-2	3-5	85%		FILL	DARK GREY FINE-COARSE SAND, FRAGMENTS OF RED BRICK AND COAL		0	
10		S-3	8-10	100%		SAND	LIGHT-BROWN FINE-MEDIUM SAND, LITTLE FINE GRAVEL		0	
		S-4	13-15	100%					0	
20		S-5	18-20	100%					0	
		S-6	23-25	100%		GROUNDWATER			0	
		S-7	26-28	100%					0	
30						END OF BOREHOLE				
40										

NOTE: SOIL SAMPLES B-22, S-1 AND B-22, S-7, AND GROUNDWATER SAMPLE B-22, WS-1 WERE SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-22

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: JON HICKEY

BORING CONTRACTOR: G. C. ENVIRONMENTAL, INC.

FOREMAN: G. ZDUNCZYK

BORING/MW NO.: B-23

LOCATION: 101 WESTMORELAND AVENUE
WHITE PLAINS, NY 10606

DATE: 02/24/2009

GROUND ELEVATION:

TOP OF CASING ELEV.:

CASING:
SIZE:
HAMMER:
FALL:

SAMPLER:
TYPE: GEOPROBE 6610DT (2" Ø)
HAMMER:
FALL:

GROUNDWATER LEVEL READINGS:
DATE: 02/24/2009
DEPTH: 27.5'

DEPTH (FT)	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH (FT)	PEN./REC.	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
		S-1	1-3	50%			ASPHALT AND STONES		0	
		S-2	3-5	50%		FILL	DARK GREY FINE-COARSE SAND, FRAGMENTS OF RED BRICK AND COAL		0	
		S-3	8-10	100%					0	
10										
		S-4	13-15	100%		SAND	LIGHT-BROWN FINE-MEDIUM SAND, LITTLE FINE GRAVEL		0	
		S-5	18-20	100%					0	
20										
		S-6	23-25	100%			GROUNDWATER		0	
		S-7	26-27	85%					0	
30							END OF BOREHOLE			
40										

NOTE: SOIL SAMPLES B-23, S-1 AND B-23, S-7, AND GROUNDWATER SAMPLE B-23, WS-1 WERE SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS

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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-23

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: JON HICKEY	BORING/MW NO.: B-24	GROUND ELEVATION:
BORING CONTRACTOR: G. C. ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:
FOREMAN: G. ZDUNCZYK	DATE: 02/24/2009	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE:	TYPE: GEOPROBE 6610DT (2" Ø)	DATE: 02/24/2009
HAMMER:	HAMMER:	DEPTH: 28'
FALL:	FALL:	

DEPTH (FT)	CAS. BL./FT.	SAMPLE NO.	SAMPLE DEPTH (FT)	PEN./REC.	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
		S-1	1-3	75%			ASPHALT AND STONES		0	
		S-2	3-5	75%		FILL	DARK GREY FINE-COARSE SAND, FRAGMENTS OF RED BRICK AND COAL		0	
		S-3	8-10	100%					0	
10										
		S-4	13-15	100%		SAND	LIGHT-BROWN FINE-MEDIUM SAND, LITTLE FINE GRAVEL		0	
		S-5	18-20	100%					0	
20										
		S-6	23-25	100%			GROUNDWATER		0	
		S-7	26-27	85%					0	
30							END OF BOREHOLE			
40										

NOTE: SOIL SAMPLES B-24, S-1 AND B-24, S-7, AND GROUNDWATER SAMPLE B-24, WS-1 WERE SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS

410 SAW MILL RIVER ROAD, ARDSLEY, NY 10502
Tel: (914) 674-4346 Fax: (914) 674-4348

SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

GCE PROJECT NO: 05-003-00

DWG. TITLE:

B-24

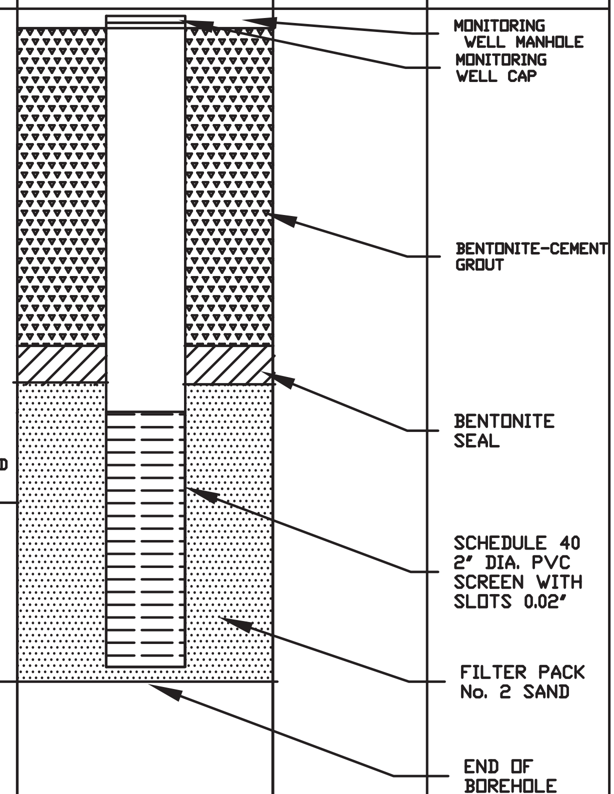
APPENDIX C

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN	BORING/MW NO.: MW-1	GROUND ELEV.: 210.5'
BORING CONTRACTOR: SUMMIT DRILLING	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.: 210.26'
FOREMAN: JOHN VOGT	DATE: 12/27/2001	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 2"	TYPE:	DATE: 09/21/2005
HAMMER:	HAMMER:	
FALL:	FALL:	DEPTH: 29.59' BELOW GRADE

DEPTH	SAMPLE CAS. BL./FT.	NO.	DEPTH	PEN./REC.	BLOWS	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING	NOTES
10						SAND	DARK-BROWN MEDIUM-COARSE SAND, LITTLE FINE GRAVEL			
20										
30							GROUNDWATER ENCOUNTERED			
40										



NOTE: GROUNDWATER SAMPLE MW-1, S-1 WAS SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
410 SAW MILL RIVER ROAD, ARDSLEY, NY 10502
Tel: (914) 674-4346 Fax: (914) 674-4348

ADDITIONAL SUBSURFACE INVESTIGATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

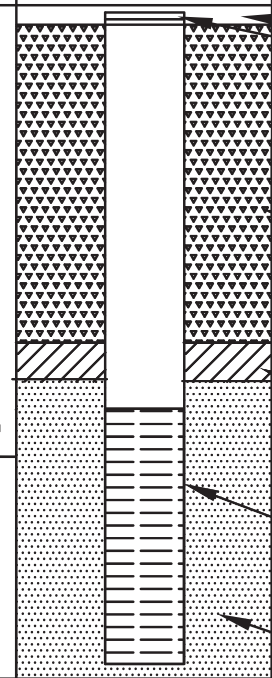
MW-1

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN BORING CONTRACTOR: SUMMIT DRILLING FOREMAN: JOHN VOGT	BORING/MW NO.: MW-2 LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606 DATE: 5/11/2005	GROUND ELEV.: 210.2' TOP OF CASING ELEV.: 209.83'

CASING: SIZE: 2" HAMMER: FALL:	SAMPLER: TYPE: HAMMER: FALL:	GROUNDWATER LEVEL READINGS: DATE: 09/21/2005 DEPTH: 26.78' BELOW GRADE

SAMPLE						GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING	NOTES
DEPTH	CAS. BL./FT.	NO.	DEPTH	PEN./REC.	BLOWS					
10						SAND	LIGHT-BROWN MEDIUM-COARSE SAND, LITTLE FINE GRAVEL			
20										
						GROUNDWATER ENCOUNTERED				
30										
40										



NOTE: GROUNDWATER SAMPLE MW-2, S-1 WAS SENT TO THE LABORATORY FOR ANALYSIS

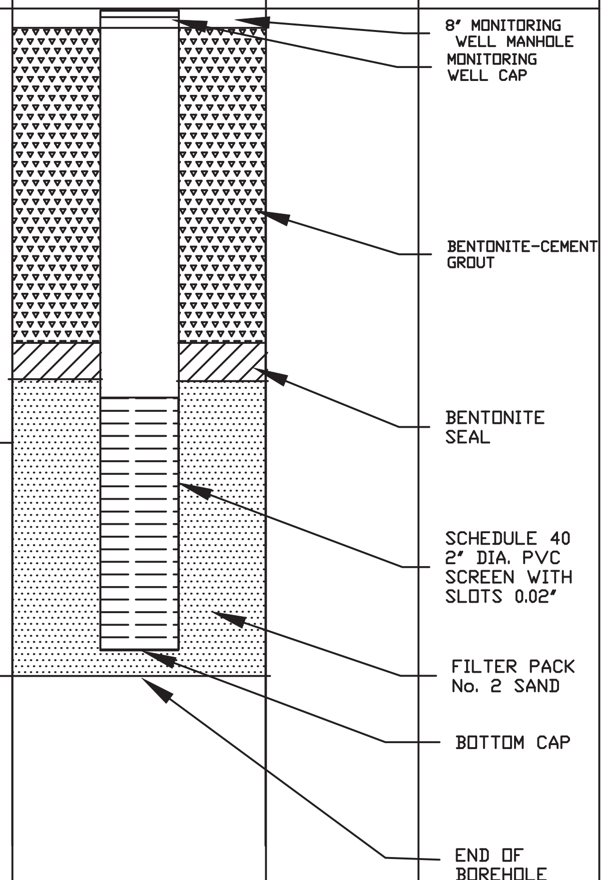
G. C. ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS 410 SAW MILL RIVER ROAD, ARDSLEY, NY 10502 Tel: (914) 674-4346 Fax: (914) 674-4348	ADDITIONAL SUBSURFACE INVESTIGATION 101 WESTMORELAND AVENUE WHITE PLAINS, NEW YORK DEC SPILL NO. 01-02386 GCE PROJECT NO: 05-003-00	DWG. TITLE: MW-2

BORING/MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN BORING CONTRACTOR: SUMMIT DRILLING FOREMAN: JOHN VOGT	BORING/MW NO.: MW-3 LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606 DATE: 5/11/2005	GROUND ELEV.: 209.9' TOP OF CASING ELEV.: 209.59'

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 2"	TYPE:	DATE: 09/21/2005
HAMMER:	HAMMER:	
FALL:	FALL:	DEPTH: 26.04' BELOW GRADE

SAMPLE						GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING	NOTES
DEPTH	CAS. BL./FT.	NO.	DEPTH	PEN./REC.	BLOWS					
10						SAND	LIGHT-BROWN MEDIUM-COARSE SAND, LITTLE FINE GRAVEL			
20										
							GROUNDWATER ENCOUNTERED			
30										
40										



NOTE: GROUNDWATER SAMPLE MW-2, S-1 WAS SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
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ADDITIONAL SUBSURFACE INVESTIGATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

DEC SPILL NO. 01-02386
GCE PROJECT NO: 05-003-00

DWG. TITLE:

MW-3

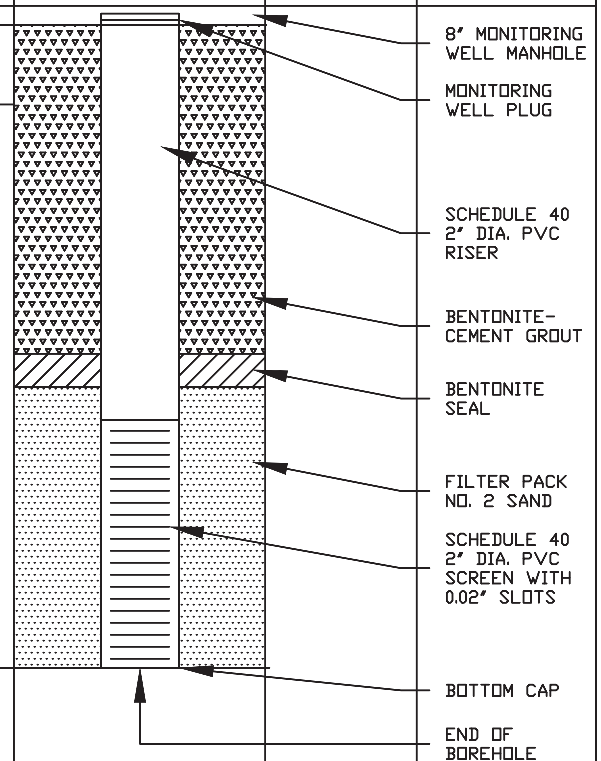
BORING/MONITORING WELL LOG

FIELD GEOLOGIST: JON HICKEY	BORING/MW NO.: MW-4	GROUND ELEVATION:	
BORING CONTRACTOR: G. C. ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.: 209.86'	
FOREMAN: G. ZDUNCZYK	DATE: 02/17/2009		

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 4.25" ID HSA	TYPE:	DATE: 3/18/2009
HAMMER:	HAMMER:	DEPTH: 27.52'
FALL:	FALL:	

SAMPLE DEPTH (FT)	CAS. BL./FT.	NO.	DEPTH (FT)	PEN./REC.	PID	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION
					1.5		CONCRETE
						FILL	DARK GREY FINE-COARSE SAND, FRAGMENTS OF BRICK AND COAL
					1.5	SAND	LIGHT-BROWN MEDIUM-COARSE SAND, LITTLE FINE GRAVEL
					0		
10							
					0		
					0		
20							
							GROUNDWATER ENCOUNTERED AT 27.52'
					0		
30							
					0		
					0		
40							

WELL INSTALLATION LOG



FIELD TESTING

NOTES

NOTE: GROUNDWATER SAMPLE MW-4, WS-1 WAS SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

GCE PROJECT NO: 05-003-00

DWG. TITLE:

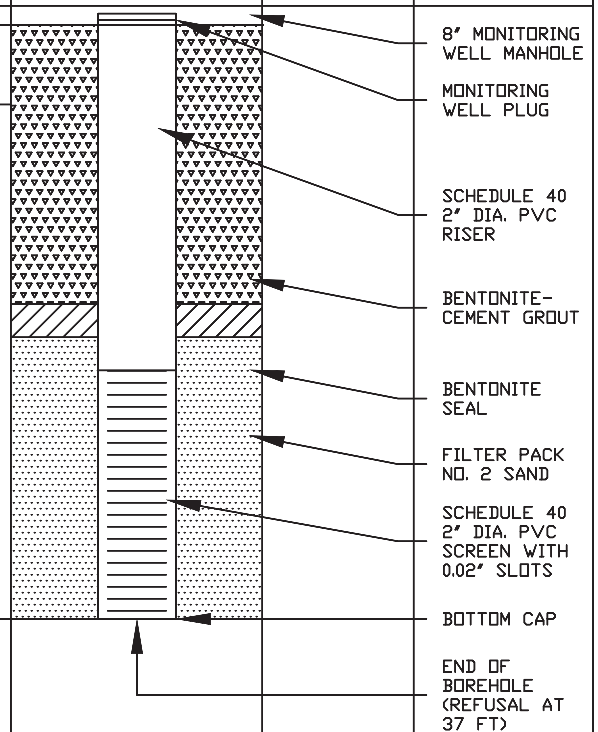
MW-4

BORING/MONITORING WELL LOG

FIELD GEOLOGIST:	JON HICKEY	BORING/MW NO.: MW-5	GROUND ELEVATION:
BORING CONTRACTOR:	G. C. ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.:
FOREMAN:	G. ZDUNCZYK	DATE: 02/18/2009	209.81'

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 4.25" ID HSA	TYPE:	DATE: 3/18/2009
HAMMER:	HAMMER:	DEPTH: 27.75'
FALL:	FALL:	

SAMPLE						GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION
DEPTH (FT)	CAS. BL./FT.	NO.	DEPTH (FT)	PEN./REC.	PID		
							CONCRETE
						FILL	DARK GREY FINE-COARSE SAND, FRAGMENTS OF BRICK AND COAL
					0	SAND	LIGHT-BROWN MEDIUM-COARSE SAND, LITTLE FINE-COARSE GRAVEL
10							
					0		
					0		
20							
					0		GROUNDWATER ENCOUNTERED AT 27.75'
					0		
30							
					0		
40							



NOTE: GROUNDWATER SAMPLE MW-5, WS-1 WAS SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
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SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

GCE PROJECT NO: 05-003-00

DWG. TITLE:

MW-5

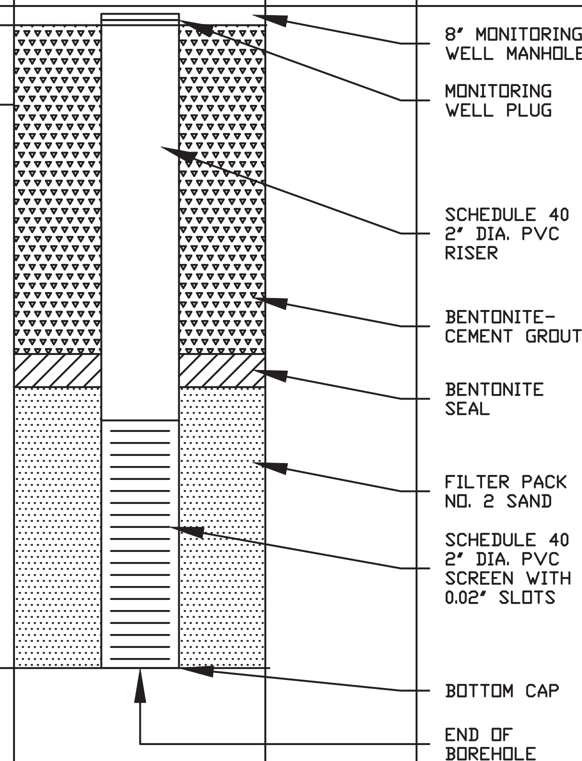
BORING/MONITORING WELL LOG

FIELD GEOLOGIST: JON HICKEY		BORING/MW NO.: MW-6	GROUND ELEVATION:
BORING CONTRACTOR: G. C. ENVIRONMENTAL, INC.		LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.: 209.76'
FOREMAN: G. ZDUNCZYK		DATE: 02/17/2009	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 4.25" ID HSA	TYPE:	DATE: 3/18/2009
HAMMER:	HAMMER:	DEPTH: 27.81'
FALL:	FALL:	

DEPTH (FT)	CAS. BL./FT.	NO.	DEPTH (FT)	PEN./REC.	PID	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION
					0		CONCRETE
					0	FILL	DARK GREY FINE-COARSE SAND, FRAGMENTS OF BRICK AND COAL
10							
					0	SAND	LIGHT-BROWN MEDIUM-COARSE SAND, LITTLE FINE-COARSE GRAVEL
20							GROUNDWATER ENCOUNTERED AT 27.81'
					1.5		
					1.5		
30							
					0		
40							

WELL INSTALLATION LOG



FIELD TESTING

NOTES

NOTE: GROUNDWATER SAMPLE MW-6, WS-1 WAS SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
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Tel: (914) 674-4346 Fax: (914) 674-4348

SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

GCE PROJECT NO: 05-003-00

DWG. TITLE:

MW-6

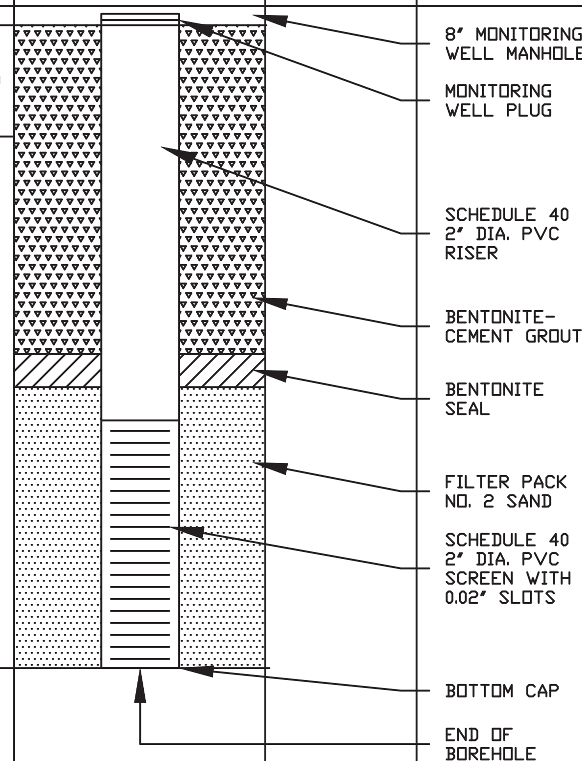
BORING/MONITORING WELL LOG

FIELD GEOLOGIST: JON HICKEY	BORING/MW NO.: MW-7	GROUND ELEVATION:
BORING CONTRACTOR: G. C. ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.: 209.93'
FOREMAN: G. ZDUNCZYK	DATE: 02/19/2009	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 4.25" ID HSA	TYPE:	DATE: 3/18/2009
HAMMER:	HAMMER:	DEPTH: 27.41'
FALL:	FALL:	

DEPTH (FT)	SAMPLE CAS. BL./FT.	NO.	DEPTH (FT)	PEN./REC.	PID	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION
					0		TOPSOIL AND STONES
					0	FILL	DARK GREY MEDIUM-COARSE SAND, FRAGMENTS OF BRICK AND COAL, LITTLE MEDIUM-COARSE GRAVEL
10							
					0	SAND	LIGHT-BROWN MEDIUM-COARSE SAND, LITTLE FINE-MEDIUM GRAVEL
					0		
20							
					0		GROUNDWATER ENCOUNTERED AT 27.41'
30					0		
					0		
40							

WELL INSTALLATION LOG



FIELD TESTING | NOTES

NOTE: GROUNDWATER SAMPLE MW-7, WS-1 WAS SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
410 SAW MILL RIVER ROAD, ARDSLEY, NY 10502
Tel: (914) 674-4346 Fax: (914) 674-4348

SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

GCE PROJECT NO: 05-003-00

DWG. TITLE:

MW-7

BORING/MONITORING WELL LOG

FIELD GEOLOGIST:	JON HICKEY	BORING/MW NO.: MW-8	GROUND ELEVATION:
BORING CONTRACTOR:	G. C. ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.: 210.13′
FOREMAN:	G. ZDUNCZYK	DATE: 02/19/2009	

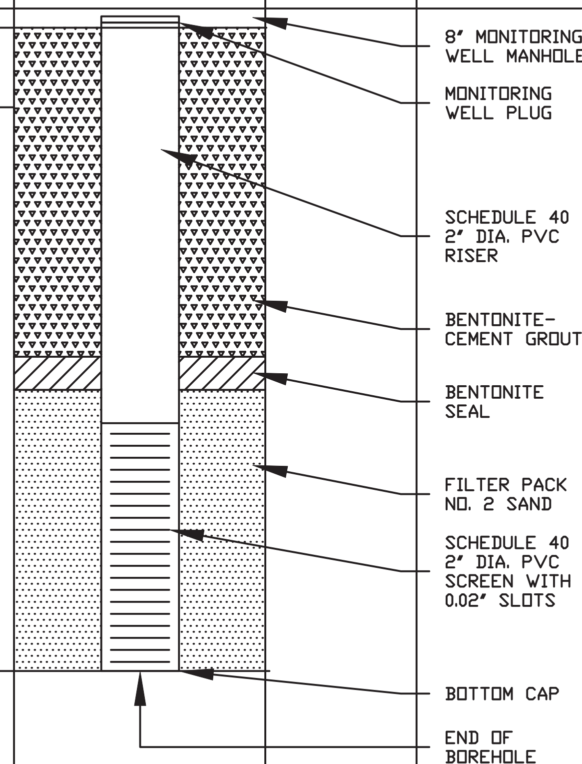
CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 4.25″ ID HSA	TYPE:	DATE: 3/18/2009
HAMMER:	HAMMER:	DEPTH: 28.34′
FALL:	FALL:	

SAMPLE DEPTH (FT)	CAS. BL./FT.	NO.	DEPTH (FT)	PEN./REC.	PID
8–10					0
18–20					0
22–24					0
28–30					0
38–40					0

GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION
	TOPSOIL AND STONES
FILL	DARK GREY FINE-COARSE SAND, FRAGMENTS OF BRICK AND COAL
SAND	LIGHT-BROWN MEDIUM-COARSE SAND, SOME FINE-COARSE GRAVEL

GROUNDWATER ENCOUNTERED AT 28.34′

WELL INSTALLATION LOG



FIELD TESTING

NOTE: GROUNDWATER SAMPLE MW-8, WS-1 WAS SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS

410 SAW MILL RIVER ROAD, ARDSLEY, NY 10502
Tel: (914) 674-4346 Fax: (914) 674-4348

SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

GCE PROJECT NO: 05-003-00

DWG. TITLE:

MW-8

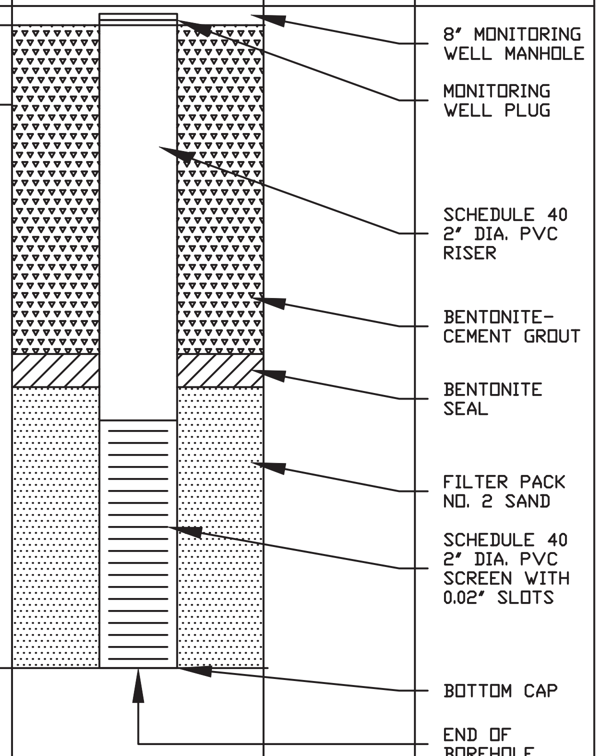
BORING/MONITORING WELL LOG

FIELD GEOLOGIST:	JON HICKEY	BORING/MW NO.: MW-9	GROUND ELEVATION:
BORING CONTRACTOR:	G. C. ENVIRONMENTAL, INC.	LOCATION: 101 WESTMORELAND AVENUE WHITE PLAINS, NY 10606	TOP OF CASING ELEV.: 210.43'
FOREMAN:	G. ZDUNCZYK	DATE: 02/18/2009	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 4.25" ID HSA	TYPE:	DATE: 3/18/2009
HAMMER:	HAMMER:	DEPTH: 29.66'
FALL:	FALL:	

DEPTH (FT)	CAS. BL./FT.	NO.	DEPTH (FT)	PEN./REC.	PID	GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION
					0		TOPSOIL AND STONES
						FILL	DARK GREY FINE-COARSE SAND, FRAGMENTS OF BRICK AND COAL
					1.5		
10							
						SAND	LIGHT-BROWN MEDIUM-COARSE SAND, SOME FINE-COARSE GRAVEL
20							
					0		GROUNDWATER ENCOUNTERED AT 29.66'
					0		
30							
					0		
40							

WELL INSTALLATION LOG | FIELD TESTING | NOTES



NOTE: GROUNDWATER SAMPLE MW-9, WS-1 WAS SENT TO THE LABORATORY FOR ANALYSIS

G. C. ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
410 SAW MILL RIVER ROAD, ARDSLEY, NY 10502
Tel: (914) 674-4346 Fax: (914) 674-4348

SITE CHARACTERIZATION

101 WESTMORELAND AVENUE
WHITE PLAINS, NEW YORK

GCE PROJECT NO: 05-003-00

DWG. TITLE:

MW-9