



G. C. ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS

**ADDITIONAL
SUBSURFACE INVESTIGATION**

OF

**UNIFORMS FOR INDUSTRY
129-09 JAMAICA AVENUE
RICHMOND HILL, NEW YORK 11418**

PREPARED FOR:

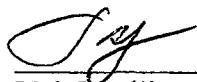
**UFI INC.
73 FOSTER AVENUE
VALLEY STREAM, NEW YORK 11580**

DATE ISSUED: MARCH 29, 2006

GCE PROJECT NUMBER: 05-116-00

The environmental assessment described herein was conducted 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 Proposal/Work Order Number 05006, 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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03/23/06

Date

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TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Purpose	
1.2	Site Background	
2.0	INVESTIGATION FIELD ACTIVITIES.....	2
2.1	Soil Investigation	
2.1.1	Soil Boring	
2.1.2	Soil Sampling	
2.2	Groundwater Investigation	
2.2.1	Monitoring Well Installation	
2.2.2	Monitoring Well Survey and Groundwater Level Measurement	
2.2.3	Groundwater Sampling	
2.3	Quality Assurance/Quality Control Program	
3.0	PHYSICAL CHARACTERISTICS OF THE SITE	7
3.1	Site Topography	
3.2	Geology and Hydrogeology	
3.2.1	Regional Geology and Hydrogeology	
3.2.2	Site Geology	
3.2.3	Site Hydrogeology	
3.3	Sensitive Environmental Receptors	
4.0	INVESTIGATION RESULTS	9
4.1	Petroleum Hydrocarbons	
4.2	Chlorinated Hydrocarbons	
5.0.	DISCUSSION.....	11
6.0	SUMMARY OF FINDINGS AND RECOMMENDATIONS	11
6.1	Summary of Findings	
6.2	Recommendations	

LIST OF FIGURES

1. Site Locus Map
2. Site Plan and Monitoring Wells Location
3. USGS Topographic Map
4. Schematic Geological Cross-section
5. Groundwater Contours
6. Free Product and BTEX Isopleths

7. PCE Isopleths
8. TCE Isopleths
9. DCE Isopleths
10. VC Isopleths

LIST OF APPENDICES

- A. Limitations and Service Constraints
- B. Soil Boring Logs
- C. Monitoring Well Logs
- D. Laboratory Analytical Results

LIST OF TABLES

1. Summary of Detected Compounds (Soil Sampling)
2. Summary of Detected Compounds (Groundwater and Free Product Sampling)
3. Elevation Survey
4. Groundwater Measurements

1.0 INTRODUCTION

This report presents the findings of an Additional Subsurface Investigation at the Uniforms for Industry property located at 129-09 Jamaica Avenue, Richmond Hill, New York 11418 (the Property), conducted by G. C. Environmental, Inc. (GCE) in accordance with the Consulting Services Agreement signed prior to initiation of the investigation, and GCE Proposal No. 05006.

1.1 Purpose

The main objectives of this Additional Subsurface Investigation are:

- To obtain additional information concerning the extent and nature of current groundwater contamination plume(s) below the Site;
- To obtain soil quality data in selected areas of the Site; and
- To offer recommendations for further investigation or corrective action, if warranted.

1.2 Site Background

The Site is located at 129-01 Jamaica Avenue, Richmond Hill, NY 11418. The building was formerly owned and operated by Vortex Laundry, which utilized a petroleum dry cleaning machine during the 1930's through 1950's. Uniforms for Industry (UFI) acquired the property in the 1950's and conducted laundry operations with limited dry cleaning operations (including use of tetrachloroethylene from 1995-98) through November 2002, when all operations were ceased.

The Site consists of an approximately 1.72 acre irregular-shaped parcel of land and is developed with two (2) interconnected one (1)- to two (2)-story vacant industrial buildings, hereafter referred to as the "Main Building" and the "New Building", located on the central and southeastern portions of the Site, respectively. The on-site facility, constructed of brick, steel, wood and concrete in 1929 and expanded several times in the 1950s and 1960s with the New Building constructed in 1991, occupies approximately sixty-five percent (65%) of the Site. The remainder of the Site consists of gravel-lined land located on the western portion of the Site and adjacent to the eastern exterior wall of the on-site facility, concrete-paved land located on the western and eastern portions of the Site and adjacent to the northern exterior wall of the on-site facility, vegetated land located on the northern and eastern portions of the Site and asphalt-paved parking areas and driveways located throughout the remainder of the Site.

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

2.0 INVESTIGATION FIELD ACTIVITIES

2.1 Soil Investigation

2.1.1 Soil Borings

On April 28, 2005, GCE contracted Summit Drilling Co., Inc., of Bound Brook, New Jersey (Summit), to advance soil borings and to install groundwater monitoring wells at the Site. In accordance with GCE's Proposal No. 05006, the soil boring and well installation was to be performed utilizing a Geoprobe or truck-mounted hollow-stem auger drilling rig. However, due to the presence of underground obstructions, most likely cobbles and/or small boulders, Summit was not able to advance soil borings below the depth of approximately 7 feet below grade.

Based on the inability of a hollow-stem drilling rig to advance below this depth, on June 20 through August 4, 2005, GCE contracted Warren George, Inc., of Jersey City, New Jersey (WGI), to advance soil borings and to install groundwater monitoring wells at the Site using ODEX drilling and 5-inch inner diameter casing.

Prior to commencement of the work, GCE arranged for a public underground utilities mark-out to be performed at the Site. The selection of the boring locations was based on previously identified areas of environmental concern, the accessibility of the Site, on-site conditions, and the locations of public underground utilities.

The soil borings were advanced as follows: soil borings B-1 and B-2 were advanced on the central portion of the Site at the location of the three removed 2,000-gallon mineral spirit USTs; soil boring B-3 was advanced in the central portion of the Site at the location of the removed 7,500-gallon mop oil UST; soil borings B-4, B-5, B-6, B-7 and B-8 were advanced inside the southern portion of the main building where numerous trenches, holes, and ditches associated with the historical wastewater discharge system were located; soil borings B-9 and B-10 were advanced on the central portion of the western parking lot at the location of two removed 6,000-gallon No. 2 fuel oil and mop oil USTs; soil boring B-11 was advanced inside the eastern portion of the new building at the former location of the historic filling station with four gasoline tanks; and soil boring B-12 was advanced on the eastern portion of the property, approximately 20 feet to the south of the dry well DW-2. Monitoring well MW-8 was installed in the central portion of the Site, down-gradient of the location of the removed 10,000-gallon mop oil UST; monitoring well MW-12 was installed on the southwestern portion of the western parking lot down-gradient of dry well DW-3; and monitoring well MW-5 was installed on the southeastern portion of the property, down-gradient of the

dry well DW-1. Soil samples were collected from all of the monitoring well locations from surface grade to groundwater, or when portable photoionization detector (PID) readings indicated no elevated levels of total VOCs.

The boring locations are presented in Figure 2 - Site Plan. The boring logs are presented in Appendix B.

2.1.2 Soil Sampling

Subsurface soil samples were collected from soil borings B-1 through B-12 and from monitoring wells MW-5, MW-8 and MW-12 at 5 foot intervals using a 2-inch diameter split-spoon sampler. The soil samples were visually classified and logged by GCE's on-site geologist for soil characterization purposes. Laboratory obtained glassware was used for the soil samples and consisted of the following:

- Volatile Organic Compounds (VOCs) – one 4-ounce glass jar equipped with teflon-lined cap per sample;
- Semi-Volatile Organic Compounds Base Neutrals (B/N) – one 8-ounce glass jar equipped with teflon-lined cap per sample.

The soil samples from the borings were placed into glass containers equipped with teflon-lined caps. Air in the head space of the 8-oz glass container (B/N) was allowed to develop. The head space 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.

Based on the field screening results and observations, samples with elevated levels of total VOCs and the deepest samples in soil borings with no elevated levels of total VOCs were submitted to the laboratory for analysis. The following sixteen (16) soil samples were submitted to the laboratory:

<u>Sample ID</u>	<u>Boring No.</u>	<u>Depth, Feet below grade</u>	<u>PID Readings, parts per millions (ppm)</u>
B-1 S-8	B-1	37-37	512.0
B-2 S-8	B-2	35-37	621.0
B-3 S-8	B-3	35-37	24.0
B-4 S-7	B-4	30-32	2.9
B-5 S-7	B-5	30-32	2.9
B-6 S-6	B-6	30-32	1.8
B-7 S-7	B-7	30-32	0.2
B-8 S-7	B-8	30-32	1.0
B-9 S-7	B-9	30-32	0.2
B-10 S-7	B-10	30-32	0.3
B-11 S-2	B-11	5-7	120.0
B-11 S-7	B-11	30-32	0.0

The soil samples were logged and transferred under a chain-of-custody protocol to Chemtech Consulting Group, Inc. (Chemtech), Mountainside, New Jersey, a New York State ELAP-approved laboratory. All soil samples were analyzed for the presence of VOCs using EPA Method 8260 and B/Ns using EPA Method 8270.

2.2 Groundwater Investigation

2.2.1 Monitoring Well Installation

On June 20 through August 4, 2005, GCE observed the installation and development of eight (8) monitoring wells (MW-5 - MW-12) at the Site by WGI. The selection of the monitoring well locations was based on previously identified areas of environmental concern, the accessibility of the Site, on-site conditions and the locations of public underground utilities.

Monitoring well MW-5 is located on the eastern portion of the Site in the general area of closed and covered dry wells; MW-6 and MW-7 are located along the eastern and northern property boundaries; MW-8 is located in the gravel-paved land immediately down-gradient of the leaking and removed mop oil, mineral oil, solvents and mineral spirits USTs, MW-9 is located inside the new building, in the area of the historical gasoline tanks; MW-10 is located inside the main building in the main laundry area; MW-11 and MW-12 are located on the western parking lot, along the northern and western property boundaries. Please refer to the Figure 2 for the Site Plan and location of existing monitoring wells.

The monitoring wells were installed using the ODEX drilling method with a five-inch inner diameter casing. The monitoring wells were constructed

of Schedule 40, 2.0-inch diameter PVC riser pipe, attached with threaded joints to schedule 40, 2.0-inch diameter, 0.020-inch slotted PVC well screen. A 15-foot screen section was placed at each well. All wells were extended to a depth of approximately fifty feet below grade, which is approximately ten feet below the water table. 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 feet above 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 foot below ground surface.

The monitoring wells were fitted with eight-inch diameter flush-mounted protective watertight manholes set to prevent tampering and provide protection from the surface water runoff. After installation, the monitoring wells were developed using a submersible pump until the groundwater appeared to be free of sediments. Approximately 55 gallons of water were pumped out from the each monitoring well into DOT-approved 55-gallon drums which will be disposed of off-site in accordance with all applicable regulations. The newly installed wells were allowed to stabilize and equilibrate for approximately two weeks.

The monitoring well locations are presented in the Figure 2 – Site Plan. Details of monitoring well construction are presented in the Monitoring Well Logs shown in Appendix B.

2.2.2 Monitoring Well Survey and Groundwater Level Measurement

On August 11, 2005, GCE conducted an elevation survey of the newly installed monitoring wells and groundwater level measurements. An elevation survey was conducted using the floor of the gate of the existing new building as a benchmark with an elevation of approximately 60 feet above mean sea level.

Depth to groundwater and free product 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 level measurements were taken from an etch mark at the top of the PVC casing of each well.

In monitoring wells with measurable free product, a correction was made for the water table deflection caused by the free product, using the following equation:

$$H_c = H_m + (H_o * p_o / p_w)$$

where:

H_c = corrected ground water elevation (ft)

H_m = measured groundwater elevation (ft)

H_o = apparent (observed) thickness of free product (ft)

p_o = density of free product (g/ml) = 0.88

p_w = density of water (g/ml), usually assumed = 1.0

The corrected groundwater elevation value is then used to prepare a potentiometric surface map or groundwater contours map for the aquifer.

2.2.3 Groundwater Sampling

On August 11, 2005, GCE collected groundwater samples from the two existing and seven newly installed monitoring wells. Monitoring wells MW-1, MW-2, MW-8, and MW-11 were not sampled due to the presence of free product in these wells. A free-product sample was collected from MW-8. Laboratory obtained glassware was used for the groundwater and free product samples and consisted of the following:

- Volatile Organic Compounds (VOCs) – two (2) 40-ml glass vials preserved with hydrochloric acid and with a teflon-lined cap;
- Semi-Volatile Organic Compounds Base Neutrals (B/N) – one (1) 1-liter glass container equipped with a teflon-lined cap.

All nine (9) groundwater samples, 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, MW-10 WS-1 and MW-12 WS-1, were logged and transferred under a chain-of-custody protocol to Chemtech Consulting Group, Inc. (Chemtech), Mountainside, New Jersey, a New York State ELAP-approved laboratory for analysis of VOCs using EPA Method 8260 and B/N using EPA Method 8720.

2.3. Quality Assurance/Quality Control Program

This section provides information on the Site specific quality assurance/quality control program.

Soil Borings and Monitoring Well Installation

All drilling equipment utilized in 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 the borehole.

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.

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 has stagnated and/or thermally stratified in the well casing. The wells were purged using a submersible pump. Purged groundwater was discharged into DOT-approved 55-gallon drums which will be disposed of in accordance with all applicable regulations. 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. The sample was then transferred into sample containers as listed below which were then 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.

As part of the quality control measures, a trip blank and four field blanks were included among the samples submitted to the Chemtech laboratory and analyzed for VOCs using EPA Method 8260.

3.0 PHYSICAL CHARACTERISTICS OF THE SITE

3.1 Site Topography

According to the US Geological Survey (USGS) Topographic Map of Jamaica,

New York Quadrangle, US Geological Survey (USGS), dated 1966, photorevised 1979, the Site's elevation is approximately 60 feet above mean sea level. Topographically, the Site is level with no abrupt changes in elevation. The topography in the vicinity of the Site slopes gently to the south towards Jamaica Bay located approximately 4 miles to the south of the Site. Please refer to Figure 3 for the USGS Topographic Map.

3.2 Geology and Hydrogeology

3.2.1 Regional Geology and Hydrogeology

According to the Hydrogeologic Framework of Long Island, New York, U.S. Geological Survey, 1989, the geology in the area of the Site consists of approximately 150 feet of glacial deposits composed of clay, sand, gravel and boulders, which form Upper Glacial Aquifer, underlain by approximately 125 feet of sand, clay and gravel, which form the Magothy aquifer. The Magothy aquifer is underlain by approximately 180 feet of clay, which form Raritan confining unit, underlain by approximately 195 feet of sand and gravel, which form Lloyd aquifer. The bedrock in the area of the Site consists of crystalline metamorphic and igneous rocks and is approximately 650 feet below grade.

Based on GCE's review of plans prepared by ACE Boring, Inc., dated September 18, 1994 and provided by the Client, the geology in the area of the Site to the explored depth of approximately 30 feet below grade consists of medium fine sand, trace silt and gravel, some boulders.

Based on the USGS Water Table on Long Island New York, March-April 1984, regional groundwater flow direction is to the north-northeast towards a cone of depression, located approximately 1.6-miles to the north-northeast of the Site. Depth to groundwater in the area of the Site is approximately 56 feet below grade.

3.2.2 Site Geology

Based on the information gathered during the Additional Subsurface Investigation, the geology of the Site to the explored depth of approximately 50 feet below grade consists of dense, brown-gray (beneath the free product – light-gray), fine-coarse sand with some fine-coarse gravel and occasional cobbles and small boulders. Please refer to the Figure 4 for the schematic geological cross-section of the Site.

3.2.3 Site Hydrogeology

Based on the results of monitoring well survey and groundwater level measurement (see Tables 3 and 4), groundwater flow direction at the Site

is to the southwest. Depth to groundwater below the Site is approximately 40 feet below grade (see Figure 4). Water table is rather flat, but forms a small groundwater mound in the vicinity of monitoring well MW-1. This localized groundwater mound is inducing free product to migrate outward in all directions from the source of the release. Please refer to the Figure 5 for the Groundwater Contours. Hydraulic conductivity (not measured) should be rather high due to rather coarse sediments (fine-coarse sand and gravel). Hydraulic gradient is opposite, very low (between MW-1 and MW-12 the gradient is about $0.55/280 = 0.002$ ft/ft).

3.3 Sensitive Environmental Receptors

According to the 1980 U.S. Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory Map for Jamaica, New York Quadrangle, the nearest designated wetlands is unnamed pond located approximately 4,800 feet to the northwest of the Site which is designated as Palustrine, Forested, Broad Leaved Deciduous, Seasonal Saturated (PFO1E). According to the 1975 New York State Department of Environmental Conservation (DEC) Freshwater Wetlands Map for Jamaica, Queens County, New York Quadrangle, the nearest designated wetlands is Willow Lake located approximately 6,000 feet to the north of the Site which is designated as "JA-1".

4.0 INVESTIGATION RESULTS

Visual inspection and laboratory analysis of soil and groundwater samples indicated that the Site is heavily contaminated. Two types of contamination were revealed below the Site: petroleum hydrocarbons and chlorinated hydrocarbons (chlorinated solvents).

4.1 Petroleum Hydrocarbons

Petroleum hydrocarbons, which are LNAPL (light nonaqueous phase liquids) and are less dense than water, occurred below the Site in all three phases:

Residual phase hydrocarbons are found only in the soil borings B-1 and B-2 (see Table 1) located on the gravel-lined land in the area of removed underground storage tanks formerly storing mop oil, solvents and mineral spirits (demolished former filter and mop oil rooms). These soil borings indicated that excavation and removal of contaminated soil was extended only to approximately 14 feet below grade, but not to 22 feet as was indicated in previous reports. Below 14 feet down to the saturated zone approximately 38 feet below grade, soil consists of in-situ dark-gray fine-coarse sand and gravel with strong petroleum odor and elevated total volatile organic compounds (TVOC) concentrations via photoionization detector (PID) up to 500-600 parts per million (ppm) (see Figure 4). Soil sample collected from 35-37 feet below grade in the soil boring B-2 indicated elevated concentrations of m/p-xylene, o-xylene, n-butylbenzene, p-isopropyltoluene,

1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene (see Table 1). It should be noted that petroleum odor and elevated TVOC concentrations via PID up to 100-160 ppm were also observed in all soil samples collected below 15.5 feet below grade in MW-8 (see Figure 4). However, analytical results indicated that all compounds were non-detect, or detected below their detection limit (see Table 1).

Liquid phase hydrocarbons (free product) float on the surface of the water table and cover an area of approximately 12,000 square feet on the central portion of the Site (see Figure 6). Petroleum fingerprint analysis revealed that free product, assumed to be mop oil, consists of a mixture of kerosene and 40W lubricating oil. According to the laboratory results, the density of free product collected in well MW-8 is 0.88 g/cc.

Free product was observed in monitoring well MW-8, where in the central portion of the plume it has apparent (observed) thickness of 6.06 feet. In monitoring wells MW-1, MW-2 and MW-11 free product is wedged out and has a thickness of 0.14, 0.18 and 0.09 feet, respectively. An actual formation free product thickness and consequently the exact volume of the free product cannot be calculated on the basis of just one monitoring well. Furthermore, the actual formation thickness is usually less than the observed thickness in the monitoring well, especially in the fine-grained soil due to capillary effects (see Figure 4).

Aqueous or dissolved phase hydrocarbons, producing petroleum groundwater contamination, are present under the main portion of the Site as well as beneath the residential properties located adjacent to the west (see Figure 6). The groundwater plume was not delineated from the west and could cover more extensive area beneath the residential properties. Due to insufficient data, free product contour and main petroleum compounds - BTEX (benzene, toluene, ethylbenzene and xylenes) isopleths are constructed manually in accordance with groundwater flow directions.

4.2 Chlorinated Hydrocarbons

Chlorinated hydrocarbons are present at the Site including tetrachloroethene (PCE), trichloroethene (TCE), dichloroethene (DCE) and vinyl chloride (VC), which are DNAPL (dense nonaqueous phase liquids). Being denser than water, these compounds have a different fate and distribution under the Site and are not detected in all soil borings or detected far below their detection limits (see Table 1). However, groundwater samples results indicated that PCE, TCE and DCE occupied practically the entire area beneath the Site and beyond its boundaries with higher concentrations located along the northern, eastern and southern boundaries of the Site (see Table 2). Minimal concentrations or lack of contamination is observed in the central portion of the Site. The western portion of the site is still not fully investigated (see Figures 7, 8 and 9). The distribution of the VC is slightly different and higher concentrations were present in the central

and western portions of the Site where petroleum free product is present (see Figure 10).

Please refer to Tables 1 and 2 for a Summary of the Detected Compounds. The laboratory analytical report is included in Appendix C.

5.0 DISCUSSION

Residual phase and liquid phase hydrocarbons (free product) indicate on-site source(s) of petroleum contamination – most likely leaking underground tanks in the vicinity of soil borings B-1 and B-2 (demolished former filter and mop oil rooms).

During excavation and removal of several USTs, the mop oil and filter rooms were demolished and the area was filled in with sand and gravel fill, effectively creating an infiltration gallery for rain water, which may have transported contamination to the groundwater and promoted an increase in the volume of free-product. This could explain why free product was not revealed during previous round of groundwater sampling in October 2004.

6.0 SUMMARY OF FINDINGS AND RECOMMENDATIONS

6.1 Summary of Findings

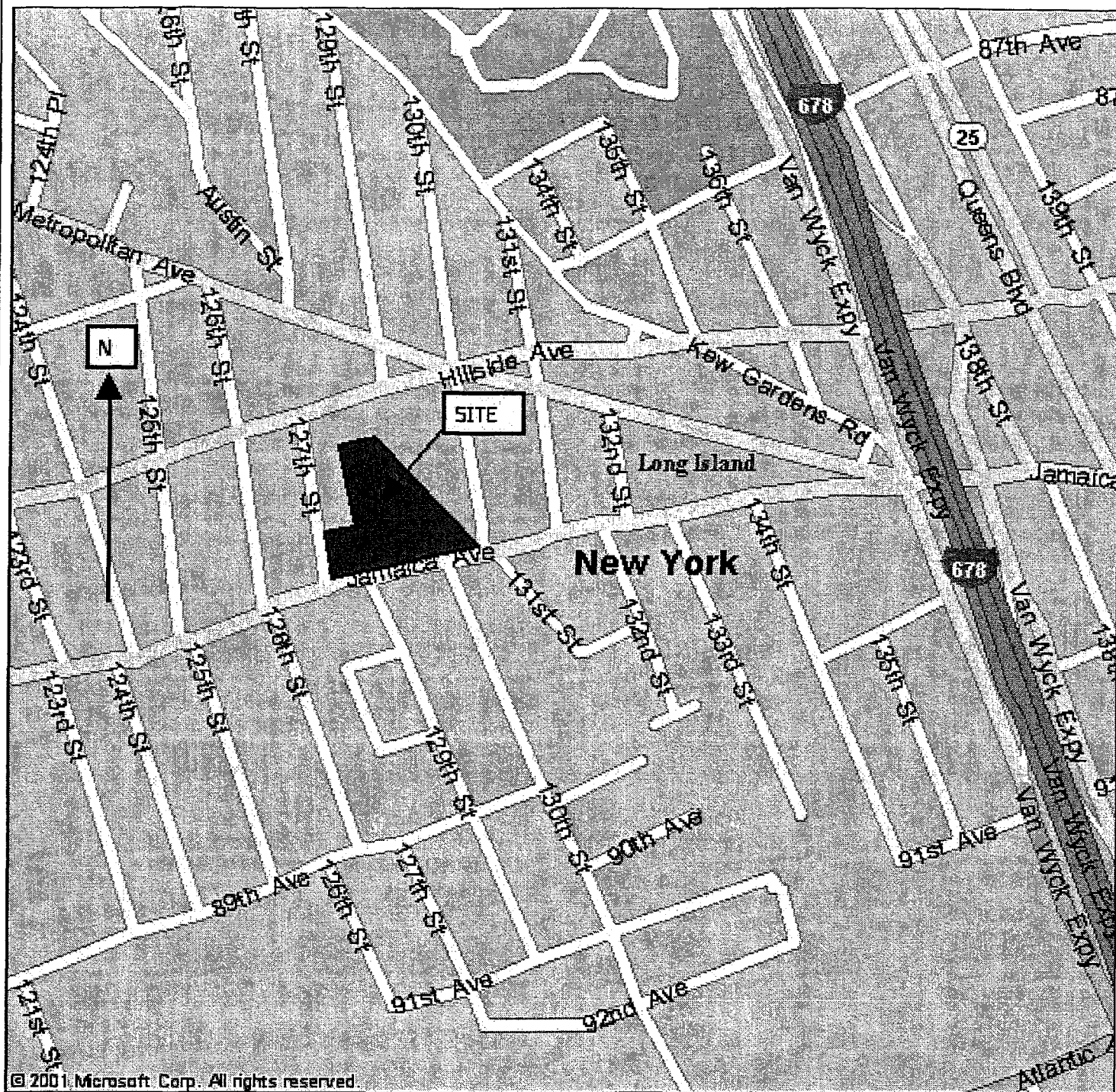
In April - August 2005, GCE performed an Additional Subsurface Investigation at the subject Site, which consisted of advancement of twelve (12) soil borings and the installation of eight (8) groundwater monitoring wells and subsequent elevation survey, collection of groundwater level measurements and groundwater samples, to determine the groundwater flow direction and the extent and origin of the soil and groundwater contamination discovered at the Site during the previous subsurface investigations. GCE's investigation revealed the following:

The existing petroleum contamination originated from on-site sources, most likely from the leaking underground tanks in the vicinity of soil borings B-1 and B-2.

For a better understanding of subsurface geochemical conditions on the Site, soil and groundwater should be analyzed for additional compounds including TPH, Total Organic Carbon, Dissolved Oxygen, Chemical Oxygen Demand, Oxidation Reduction Potential and pH. Lack of these data and insufficient data in the western portion of the Site do not allow for us to determine the source of chlorinated solvents unambiguously.

6.2 Recommendations

Further investigation is warranted to determine the source and better define the extent of the contamination on the Site.



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



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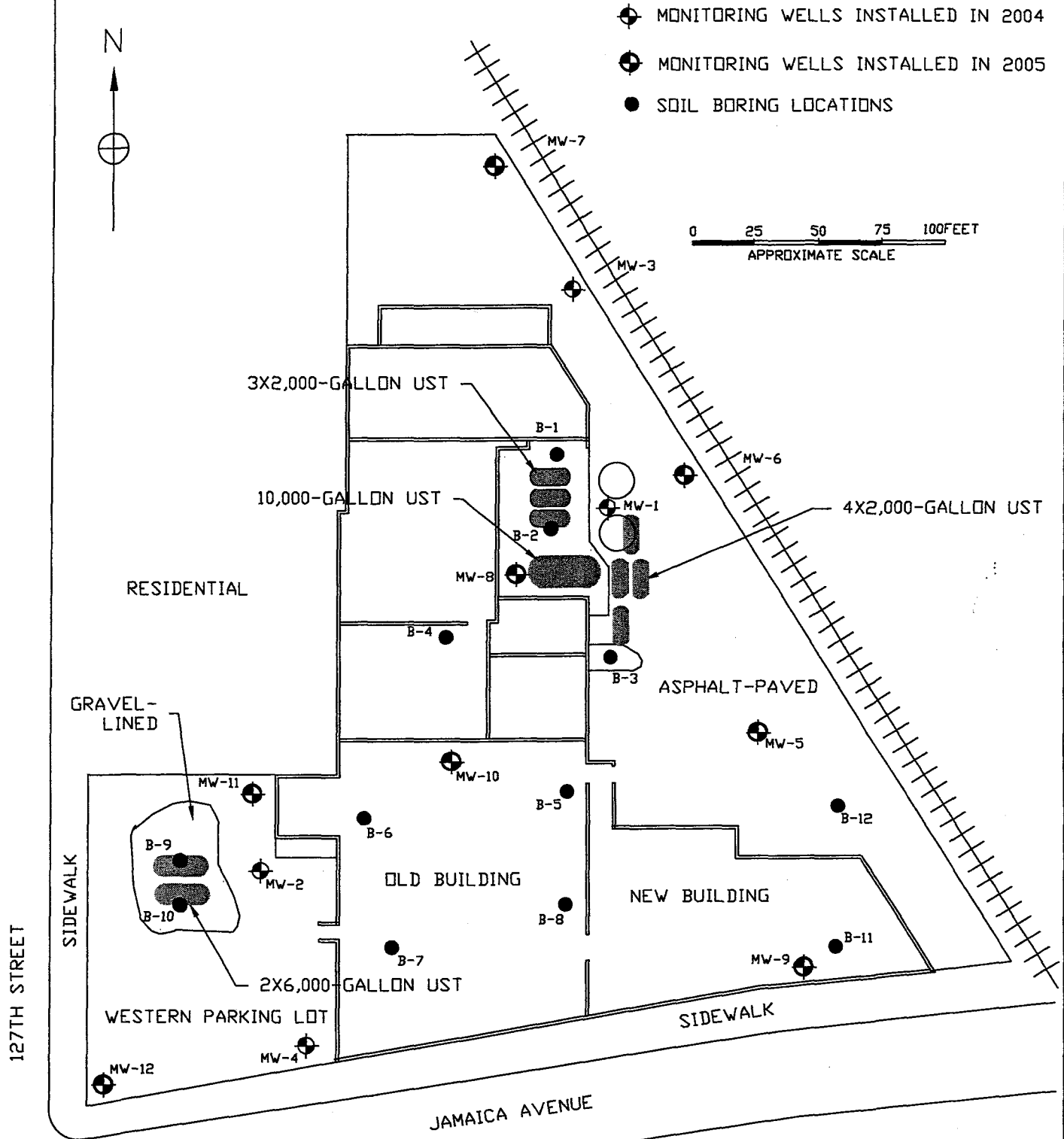
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DWG. TITLE:

FIGURE 1
SITE LOCUS
MAP



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DWG. TITLE:

FIGURE 2
SITE PLAN
AND MONITORING
WELL LOCATIONS



JAMAICA, NEW YORK
7.5 MINUTE SERIES
TOPOGRAPHIC QUADRANGLE
USGS 1966, PHOTOREVISED 1979



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FIGURE 3

USGS
TOPOGRAPHIC
MAP

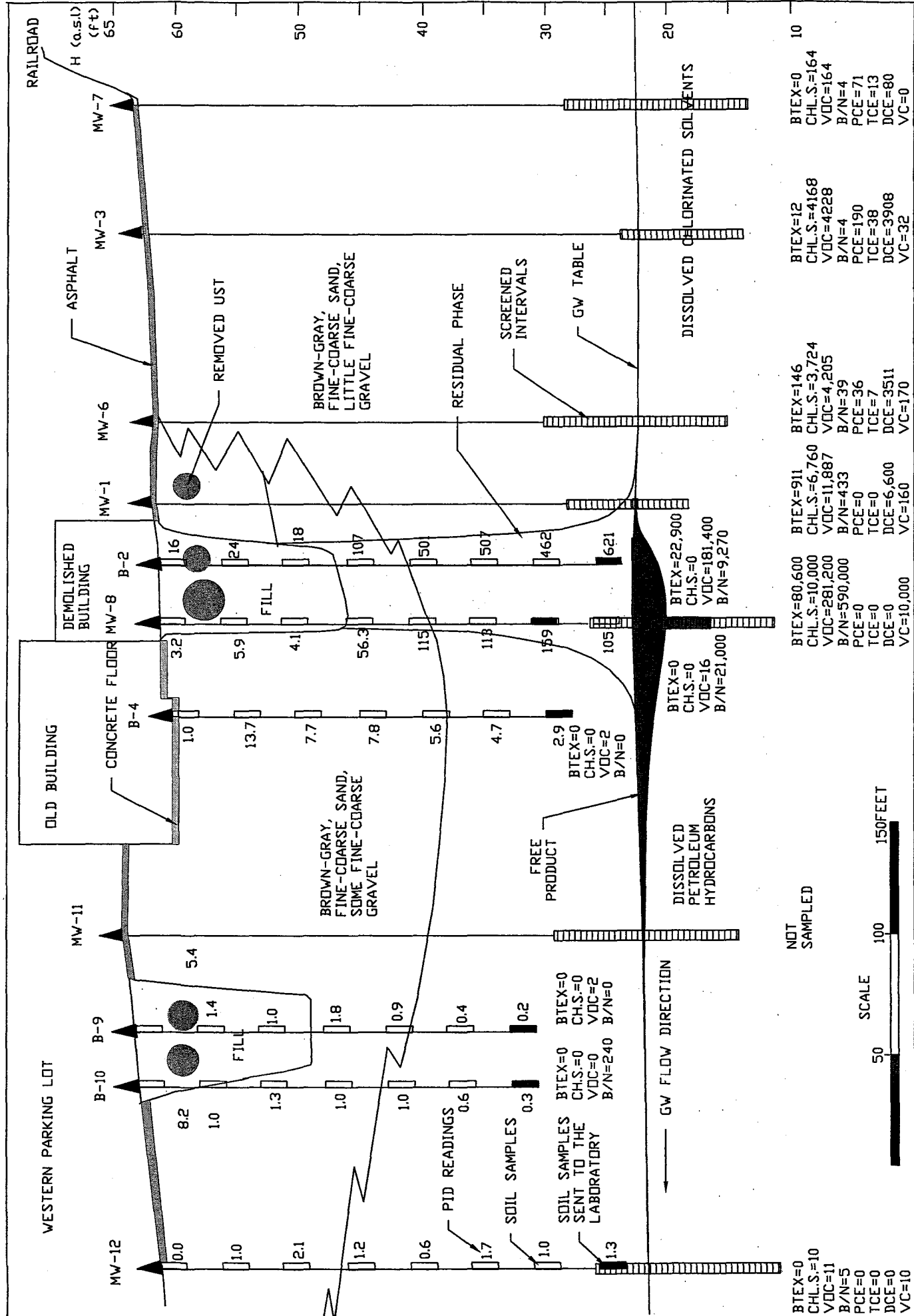


FIGURE 4

SCHEMATIC GEOLOGICAL CROSS-SECTION

ADDITIONAL SUBSURFACE INVESTIGATION

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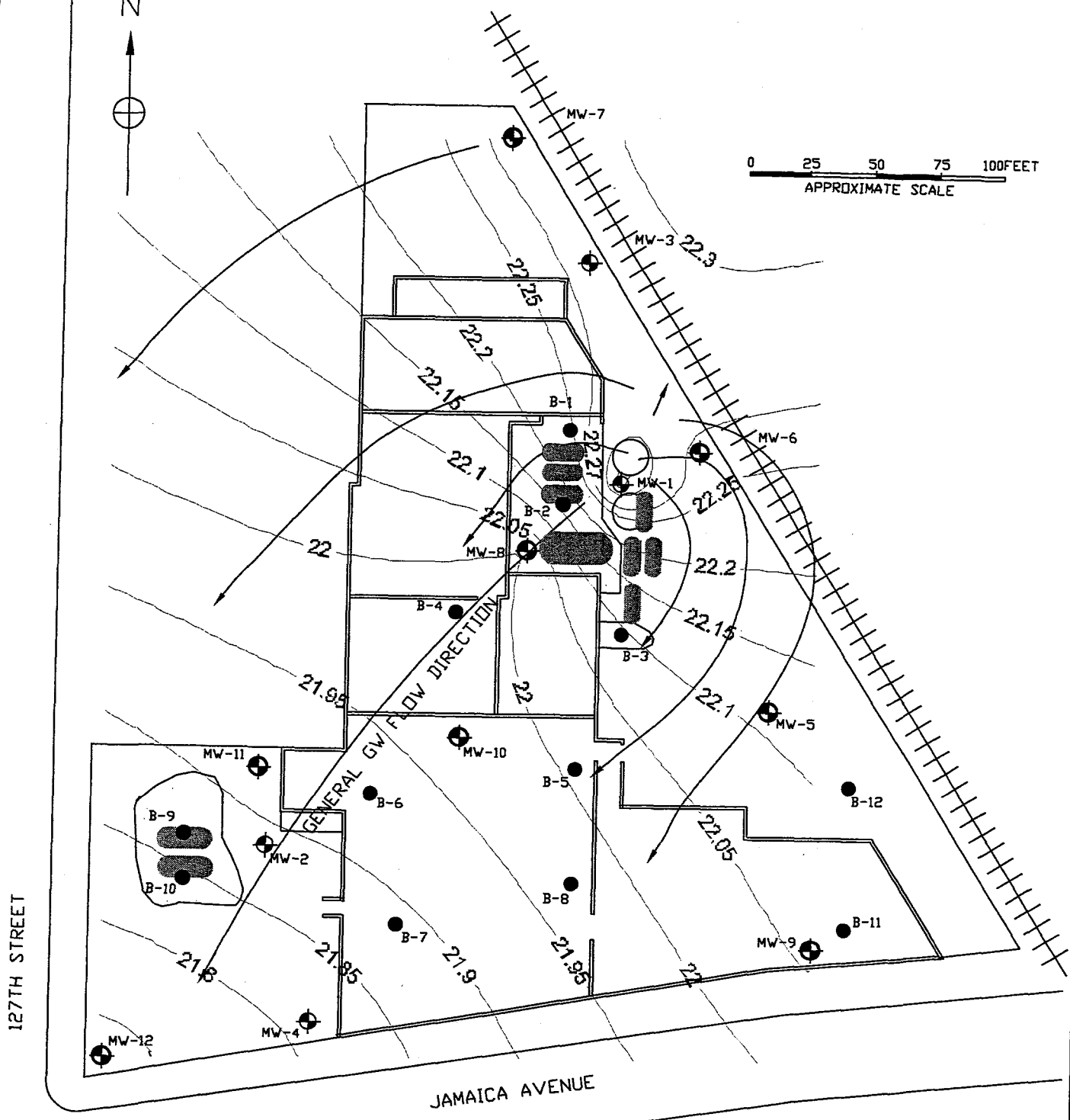
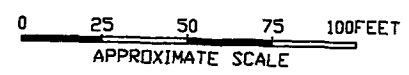
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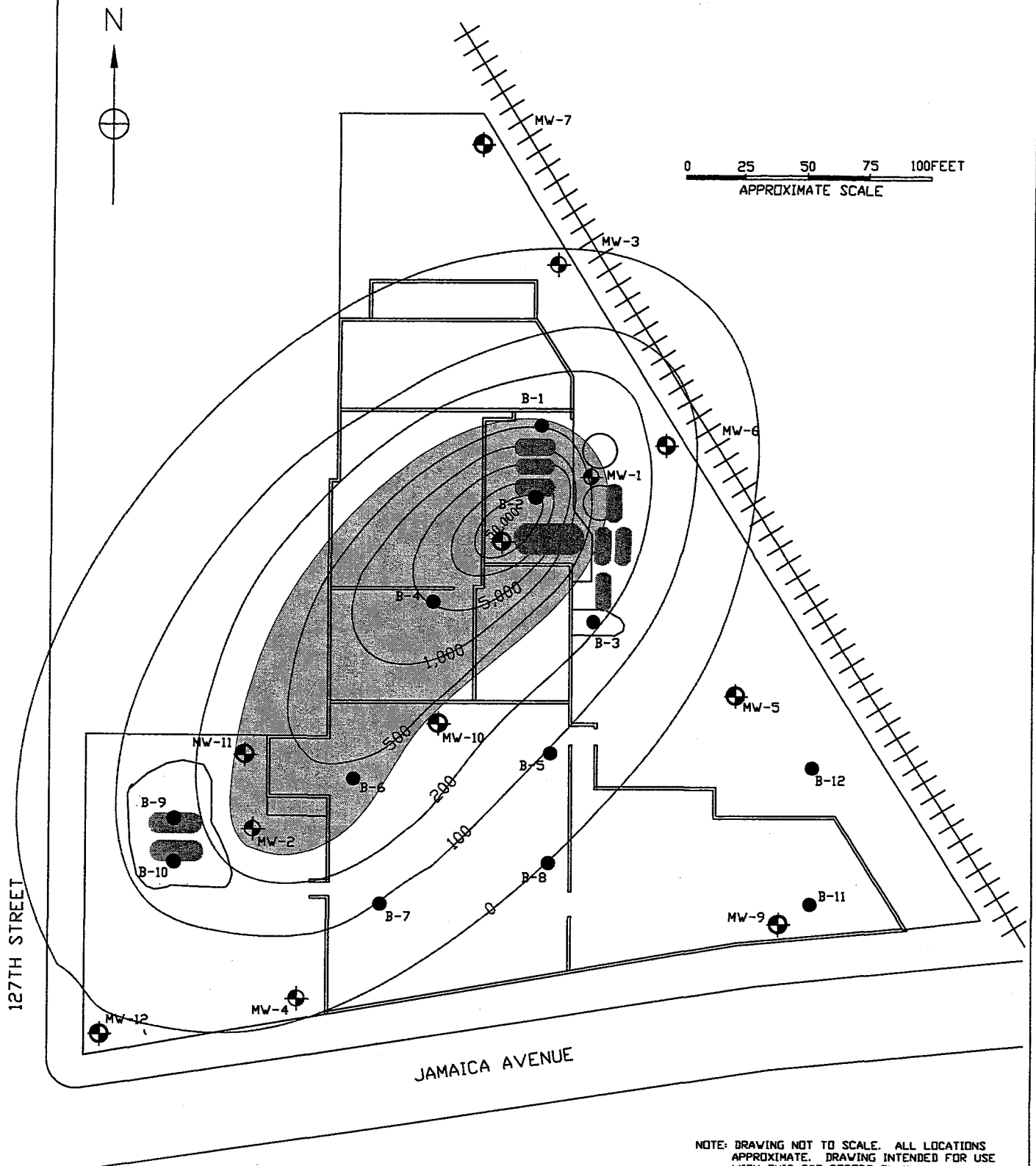
ADDITIONAL SUBSURFACE INVESTIGATION

UNIFORMS FOR INDUSTRY
129-09 JAMAICA AVENUE
RICHMOND HILL, NEW YORK 11418

GCE PROJECT NO: 05-116

DWG. TITLE:

FIGURE 5
GROUNDWATER
CONTOURS
(FEET)



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



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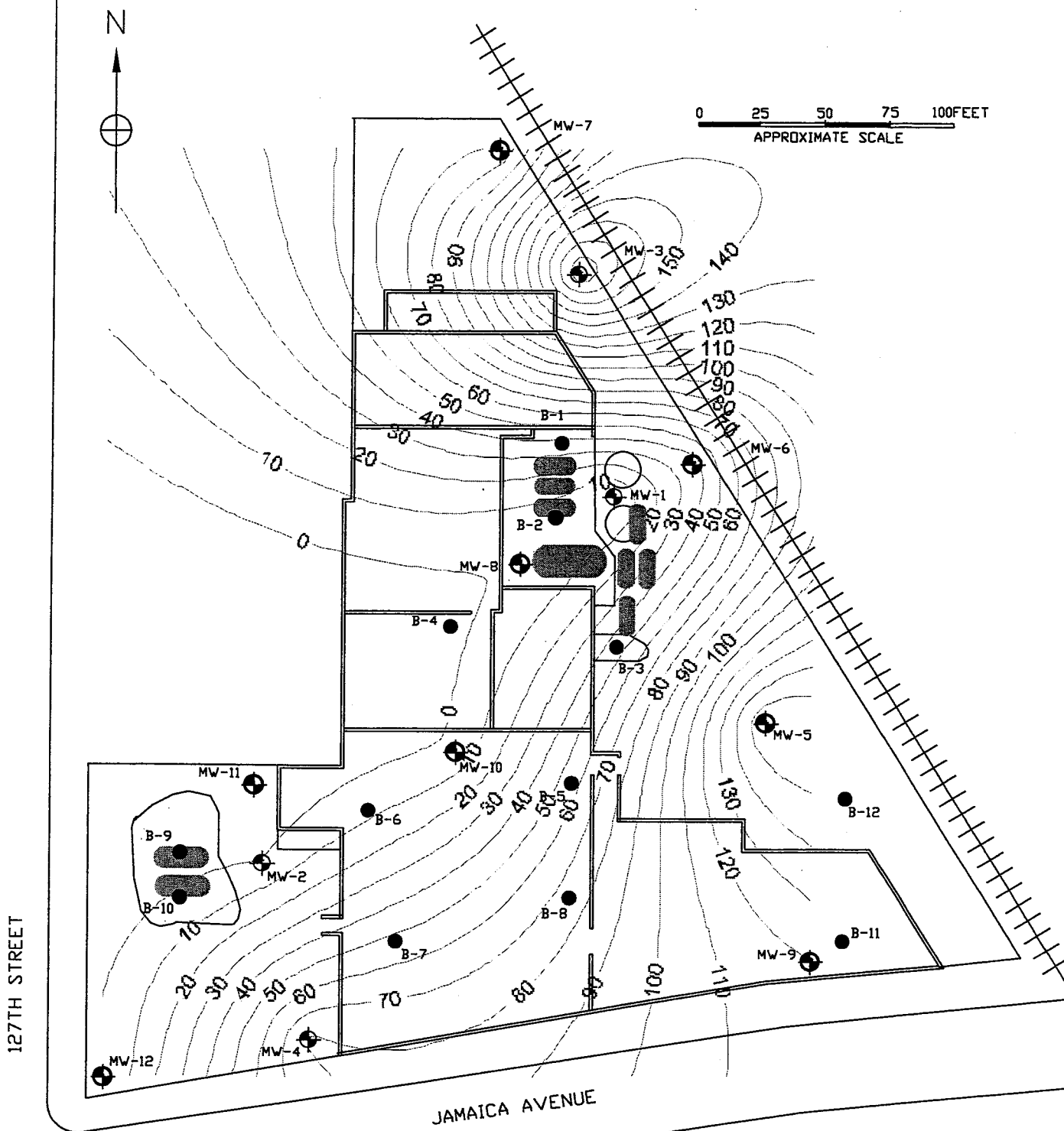
ADDITIONAL SUBSURFACE INVESTIGATION

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FIGURE 6
FREE PRODUCT
AND
BTEX ISOPLETHS
(ug/L)



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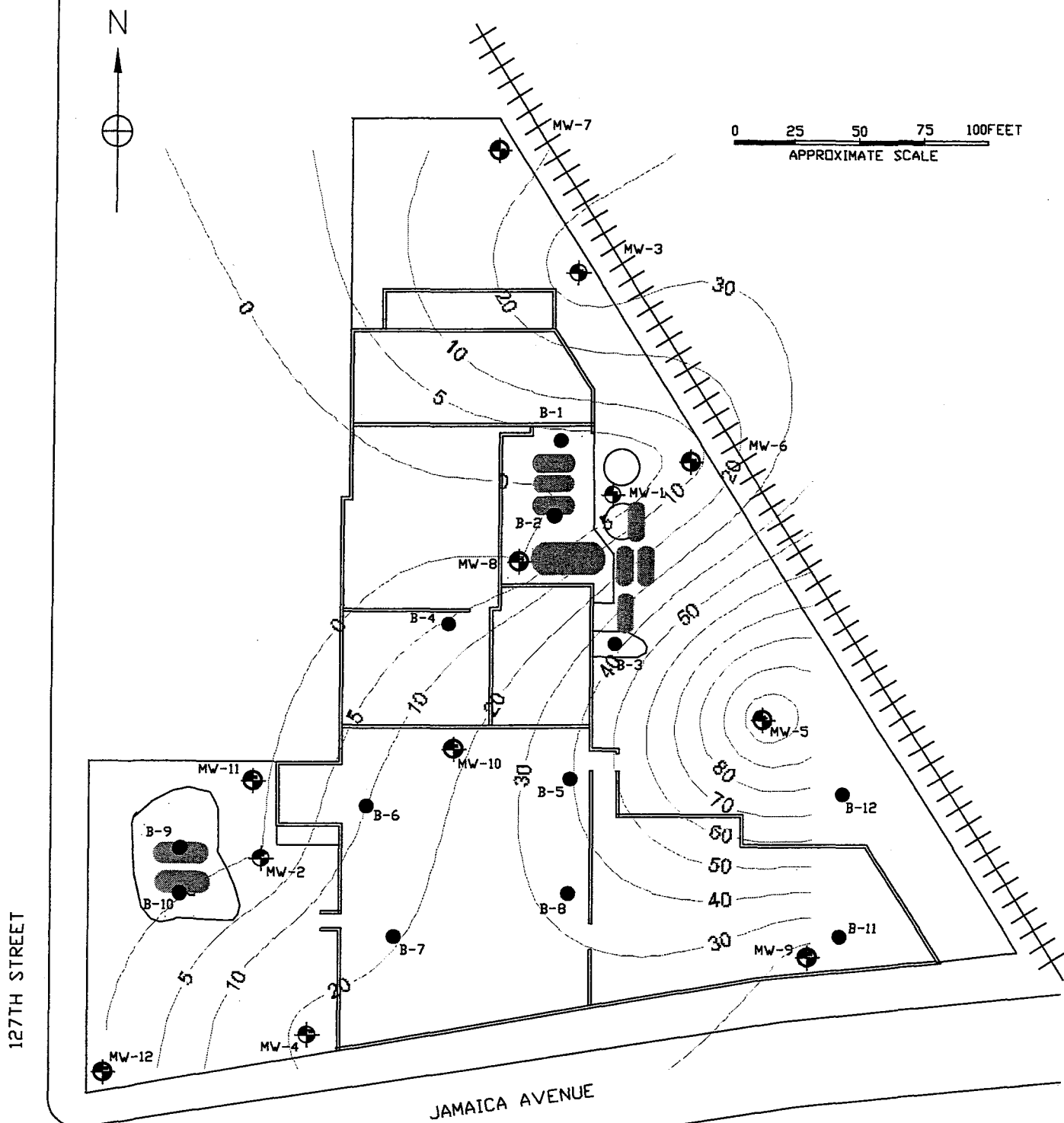
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FIGURE 7
PCE
ISOPLETHS
(ug/L)



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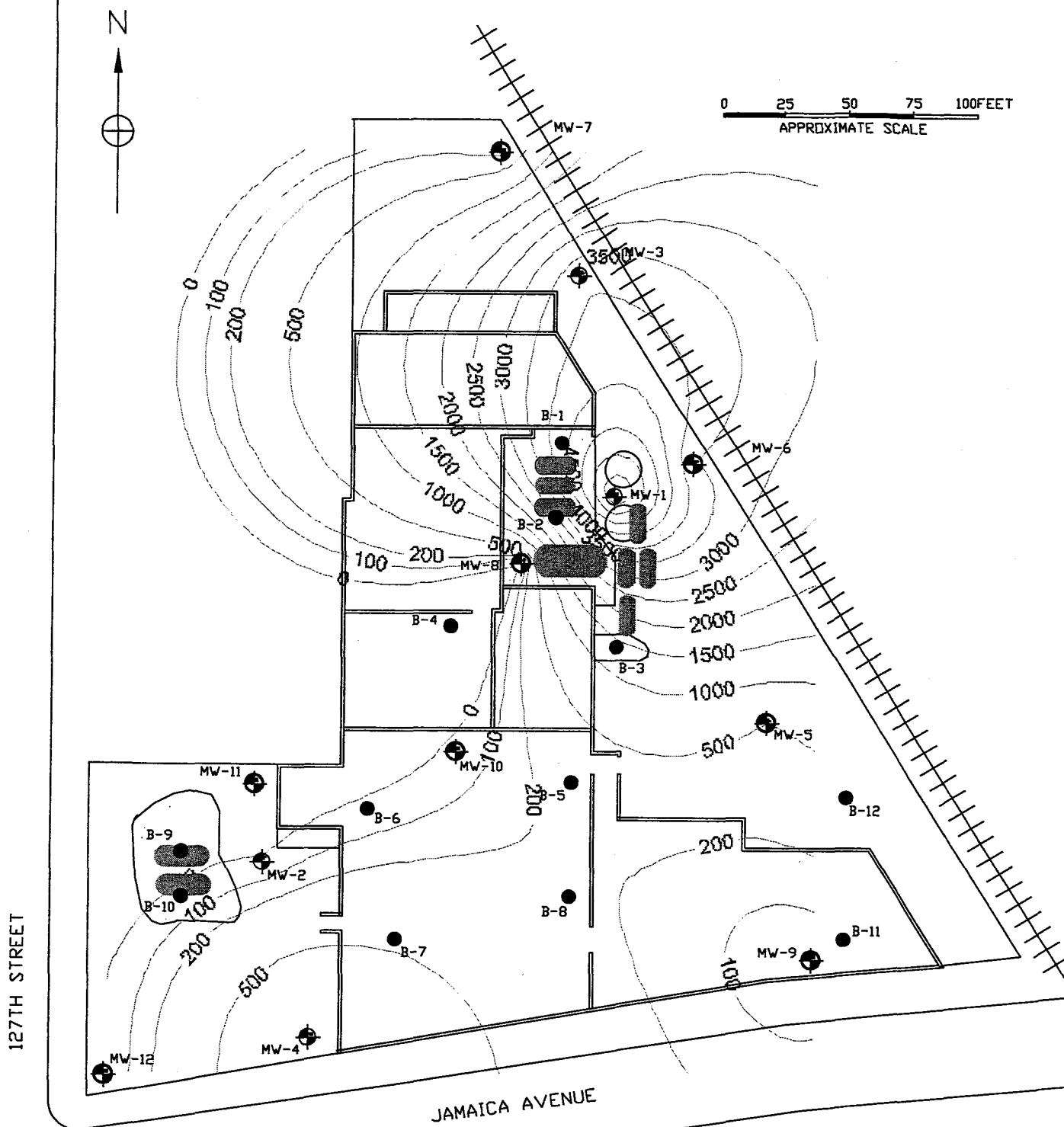
ADDITIONAL SUBSURFACE INVESTIGATION

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129-09 JAMAICA AVENUE
RICHMOND HILL, NEW YORK 11418

GCE PROJECT NO: 05-116

DWG. TITLE:

FIGURE 8
TCE
ISOPLETHS
(ug/L)



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



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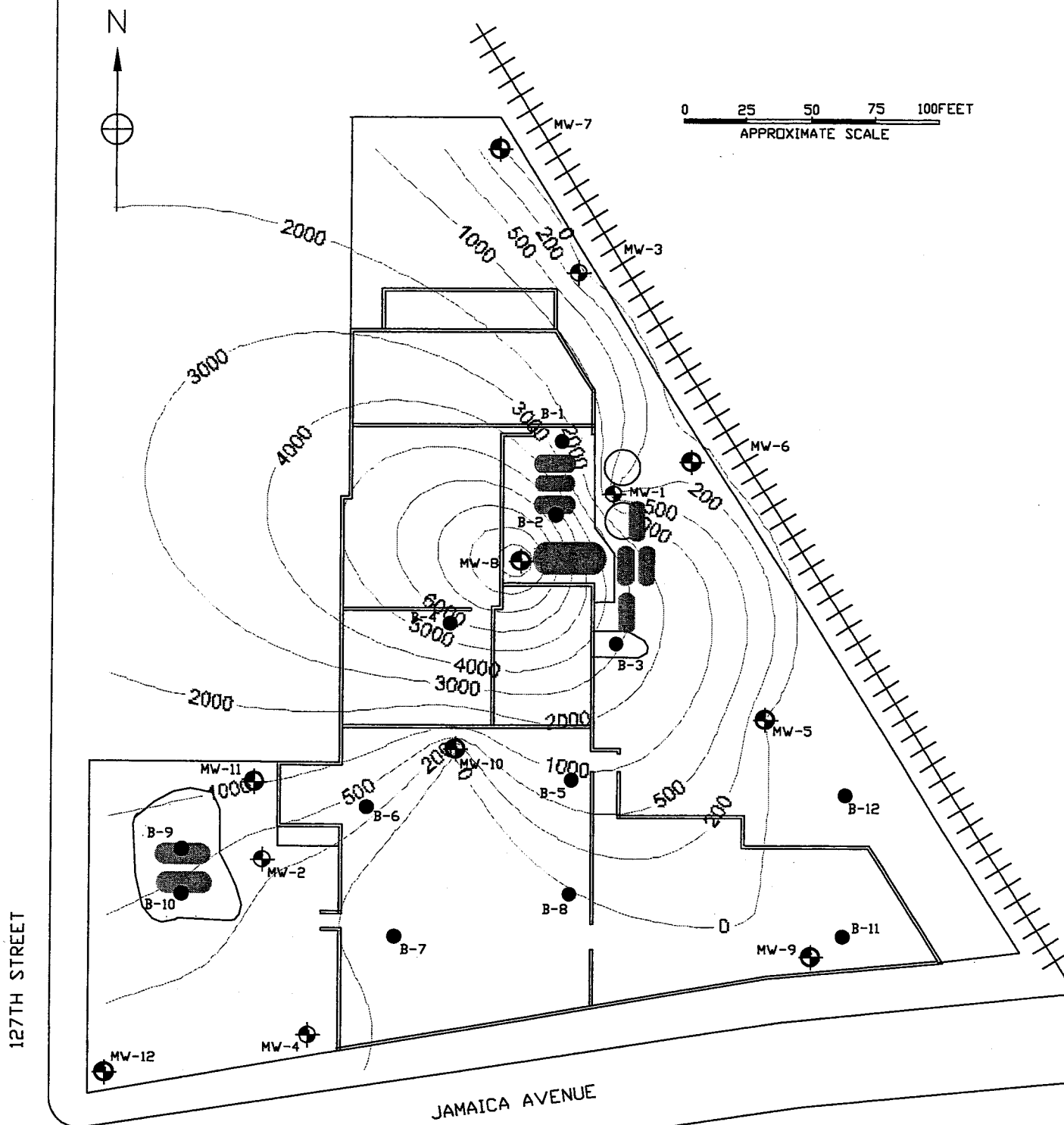
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129-09 JAMAICA AVENUE
RICHMOND HILL, NEW YORK 11418

GCE PROJECT NO: 05-116

DWG. TITLE:

FIGURE 9
DCE
ISOPLETHS
(ug/L)



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



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UNIFORMS FOR INDUSTRY
129-09 JAMAICA AVENUE
RICHMOND HILL, NEW YORK 11418

GCE PROJECT NO: 05-116

DWG. TITLE:

FIGURE 10
VC
ISOPLETHS
(ug/L)

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 and/or groundwater 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.

FIELD GEOLOGIST: VAL GATALLIN DRILLING CONTRACTOR: WARREN GEORGE, INC. REMAN: GREG MARNEY	BORING/MW NO.: B-1 LOCATION: 129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418 DATE: 07/06-07/07/2005	GROUND ELEV.: TOP OF CASING ELEV.:
---	--	---

CASING: SIZE: 5" NUMBER: LENGTH:	SAMPLER: TYPE: 2"Ø SPLIT-SPOON HAMMER: FALL:	GROUNDWATER LEVEL READINGS: DATE: DEPTH:
---	---	--

SAMPLE						GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
TH	CAS. BL./FT.	NO.	DEPTH	PEN./RE	BLOWS					
		S-1	0-2	50%	7,9,9	FILL	FILL: DARK-GRAY, FINE-COARSE SAND AND GRAVEL, SOME CLAY-SILT, FRAGMENTS OF GLASS, WOOD, ASPHALT, CONCRETE (CONSTRUCTIONAL DEBRIS)		3.2	
		S-2	5-7	50%	17,16,11				10.6	
		S-3	10-12	5%	3,100/2",REF	SAND AND GRAVEL	DARK-GRAY, FINE-COARSE SAND AND FINE-COARSE GRAVEL, PETROLEUM ODDOR		105	
		S-4	15-17	5%	48,100/1",REF				258	
		S-5	20-22	10%	100/2"REF				480	
		S-6	25-27	30%	40,100/3",REF				500	
		S-7	30-32	10%	35,100/5",REF				512	
		S-8	35-37	60%	26,33,20				512	
						<div><div></div>END OF BOREHOLE</div>				

NOTES: SOIL SAMPLE B-1, S-8 WAS SENT TO THE LABORATORY

 G. C. ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS 10 SAW MILL RIVER ROAD, ARDSLEY, NY 10502	ADDITIONAL SUBSURFACE INVESTIGATION UNIFORMS FOR INDUSTRY 129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418 DEC SOIL NO. 02-00110	DWG. TITLE: <div style="border: 1px solid black; padding: 5px; text-align: center;">B-1</div>
--	---	--

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
DE: 5'	TYPE: 2" SPLIT-SPOON	DATE:
WATER:	HAMMER:	DEPTH:
CL:	FALL:	

[illegible]

TESTS: SOIL SAMPLE B-2, S-8 WAS SENT TO THE LABORATORY



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ADDITIONAL SUBSURFACE
INVESTIGATION

UNIFORMS FOR INDUSTRY
129-09 JAMAICA AVENUE
RICHMOND HILL, NY 11418

מסר שם : 02-00110

DWG. TITLE:

B-2

B-3

LD GEOLOGIST:	VAL GATALLIN	BORING/MW NO:	B-4	GROUND ELEV:
RING CONTRACTOR:	WARREN GEORGE, INC.	LOCATION:	129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418	TOP OF CASING ELEV:
REMAN:	MIKE KELLY	DATE:	07/26-07/27/2005	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
DE: 5'	TYPE: 2" SPLIT-SPOON	DATE:
HAMMER:	HAMMER:	DEPTH:
LL:	FALL:	

[illegible]

DEC 20 11 AM 03-09119

B-4

B-6

BORING/MONITORING WELL LOG

GROUND ELEV.: _____

TOP OF CASING ELEV.:

DATE: 08/02/2005

GROUNDWATER LEVEL READINGS:

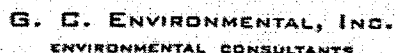
DATE:

DEPTH:

FALL:

[illegible]

NOTES: SOIL SAMPLE B-7, S-7 WAS SENT TO THE LABORATORY



DEC SPILL NO. 02-08119

FIELD GEOLOGIST:	VAL GATALLIN	BORING/MW NO.: B-8	GROUND ELEV.:
RING CONTRACTOR:	WARREN GEORGE, INC.	LOCATION: 129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418	TOP OF CASING ELEV.:
REMAN:	MIKE KELLY	DATE: 08/02/2005	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 5"	TYPE: 2"Ø SPLIT-SPDON	
NUMBER:	HAMMER:	
SIZE:	FALL:	DEPTH:

SAMPLE					GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
TH	CAS. BL./FT.	NO.	DEPTH	PEN./RE	BLOWS				
		S-1	1-3	50%	15,16,17	FILL		1.6	
		S-2	5-7	40%	15,100/5*,REF	SAND AND GRAVEL		0.8	
		S-3	10-12	20%	44,100/5*,REF			0.5	
		S-4	15-17	40%	33,48,41			0.4	
		S-5	20-22	40%	20,33,35			1.0	
		S-6	25-27	20%	36,43,45	SAND		0.6	
		S-7	30-32	50%	20,21,18	END OF BOREHOLE		0.2	

NOTES: SOIL SAMPLE B-8, S-7 WAS SENT TO THE LABORATORY



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ADDITIONAL SUBSURFACE
INVESTIGATION

UNIFORMS FOR INDUSTRY
129-09 JAMAICA AVENUE
RICHMOND HILL, NY 11418


DEC 2011 NO. 02-00110

DWG. TITLE:

B-8

LD GEOLOGIST:	VAL GATALLIN	BORING/MW NO.: B-9	GROUND ELEV.:
RING CONTRACTOR:	WARREN GEORGE, INC.	LOCATION: 129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418	TOP OF CASING ELEV.:
REMAN:	GREG MARNEY	DATE: 07/27-07/28/2005	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
IE: 5"	TYPE: 2" SPLIT-SPOON	
MMER:	HAMMER:	
LL:	FALL:	DEPTH:

SAMPLE						GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
TH	CAS. BL./FT.	NO.	DEPTH	PEN./RE	BLOWS					
		S-1	0-2	75%	14,15,20	FILL	FILL: DARK-GRAY, FINE- COARSE SAND AND GRAVEL, LITTLE CLAY-SILT, FRAGMENTS OF GLASS, WOOD, ASPHALT, CONCRETE (CONSTRUCTIONAL DEBRIS)		5.4	
		S-2	5-7	10%	25,13,15				1.4	
		S-3	10-12	30%	14,10,15	1.0				
		S-4	15-17	50%	30,68,44	1.8				
						SAND AND GRAVEL	BROWN-GRAY, FINE-COARSE SAND AND FINE-COARSE GRAVEL		0.9	
		S-5	20-22	50%	40,53,60					
		S-6	25-27	30%	30,60,78	SAND	BROWN-GRAY, FINE-COARSE SAND, LITTLE FINE-COARSE GRAVEL	0.4		
		S-7	30-32	50%	10,8,8		 END OF BOREHOLE	0.2		

NOTES: SOIL SAMPLE B-9, S-7 WAS SENT TO THE LABORATORY



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ADDITIONAL SUBSURFACE
INVESTIGATION

UNIFORMS FOR INDUSTRY
129-09 JAMAICA AVENUE
RICHMOND HILL, NY 11418

DEC 2001 NO. 02-00110

DWG. TITLE:

B-9

LD GEOLOGIST:	VAL GATALLIN	BORING/MW NO.: B-10	GROUND ELEV.:
RING CONTRACTOR:	WARREN GEORGE, INC.	LOCATION: 129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418	TOP OF CASING ELEV.:
REMAN:	GREG MARNEY	DATE: 07/26-07/27/2005	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 5"	TYPE: 2" SPLIT-SPOON	DATE:
WEIGHT:	HAMMER:	DEPTH:
WALL:	FALL:	


OTES: SOIL SAMPLE B-10, S-7 WAS SENT TO THE LABORATORY

B-10

LD GEOLOGIST:	VAL GATALLIN	BORING/MW NO.: B-12	GROUND ELEV.:
RING CONTRACTOR:	WARREN GEORGE, INC.	LOCATION: 129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418	TOP OF CASING ELEV.:
REMAN:	GREG MARNEY	DATE: 06/23-06/27/2005	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
DE: 5'	TYPE: 2" SPLIT-SPOON	DATE:
HAMMER:	HAMMER:	DEPTH:
FL:	FALL:	

[illegible]

 <p>G. C. ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS</p> <p>0 SAW MILL RIVER ROAD, ARDSLEY, NY 10502</p>	<p>ADDITIONAL SUBSURFACE INVESTIGATION</p> <p>UNIFORMS FOR INDUSTRY 129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418</p>	<p><u>DWG. TITLE:</u></p>
	<p>DEC 20 1980</p>	<p>B-12</p>

MW-5

MW-7

DURING/ MONITORING WELL LOG

FIELD GEOLOGIST: VAL GATALLIN DRILLING CONTRACTOR: WARREN GEORGE, INC. REMAN: GREG MARNEY	BORING/MW NO.: MW-8 LOCATION: 129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418 DATE: 07/13/2005	GROUND ELEV.: 61.1' TOP OF CASING ELEV.: 60.77'
---	---	--

CASING: 5" TYPE: 2" SPLIT-SPOON HAMMER: FALL:	SAMPLER: TYPE: 2" SPLIT-SPOON HAMMER: FALL:	GROUNDWATER LEVEL READINGS: DATE: 08/11/2005 DEPTH: 44.10' BELOW GRADE
--	--	--

SAMPLE						GENERAL STRATA DESCIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
TH	CAS. BL./FT.	NO.	DEPTH	PEN./RE	BLOWS					
		S-1	0-2	50%	6,7,7	FILL	FILL: DARK-GRAY, FINE-COARSE SAND AND GRAVEL, TRACE CLAY-SILT, FRAGMENTS OF GLASS, WOOD, ASPHALT, CONCRETE (CONSTRUCTIONAL DEBRIS)		3.2	MONITORING WELL MANHOLE MONITORING WELL CAP
		S-2	5-7	50%	12,6,8				5.9	
		S-3	10-12	75%	24,22,20				4.1	BENTONITE-CEMENT GROUT
		S-4	15-17	70%	25,95,100/8				56.3	
		S-5	20-22	70%	30,85,100/5	SAND AND GRAVEL	DARK-GRAY FINE-COARSE SAND AND FINE-COARSE GRAVEL, WITH PETROLEUM ODDOR		115	
		S-6	25-27	10%	100/5, REF.				113	
		S-7	30-32	40%	41,100/2, REF.				159	
		S-8	35-37	20%	24,50,100/3				105	
						FREE PRODUCT				BENTONITE SEAL
						SAND AND GRAVEL	DARK-GRAY FINE-COARSE SAND AND FINE-COARSE GRAVEL, "OILY", WITH PETROLEUM ODDOR			FILTER PACK No. 2 SAND
						GROUNDWATER				SCHEDULE 40 2" DIA. PVC SCREEN WITH SLOTS 0.01"
										END OF BOREHOLE


NOTES: SOIL SAMPLE MW-8, S-7 AND FREE PRODUCT WERE SENT TO THE LABORATORY

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--	--	---------------------

OLD GEOLOGIST:	VAL GATALLIN	BORING/MW NO.: MW-9	GROUND ELEV.: 60'
RING CONTRACTOR:	WARREN GEORGE, INC.	LOCATION: 129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418	TOP OF CASING ELEV.:
REMAN:	MIKE KELLY	DATE: 07/14/2005-7/19/2005	59.64'

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 5"	TYPE:	DATE: 08/11/2005
NUMBER:	HAMMER:	DEPTH: 37.58' BELOW GRADE
COL:	FALL:	

SAMPLE						GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING	NOTES	
TH	CAS. BL./FT.	NO.	DEPTH	PEN./REC.	BLOWS						
							CONCRETE			MONITORING WELL MANHOLE	
							FILL: BROWN CLAY-SILT, SOME FINE-COARSE SAND AND GRAVEL			MONITORING WELL CAP	
						SAND AND GRAVEL	BROWN-GRAY FINE-COARSE SAND, LITTLE FINE-COARSE GRAVEL			BENTONITE-CEMENT GROUT	

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	UNIFORMS FOR INDUSTRY 129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418 REG. DRILL NO. 82-00110	MW-9

MW-10

MW-11

BORING/MONITORING WELL LOG

FIELD GEOLOGIST:	VAL GATALLIN	BORING/MW NO.: MW-12	GROUND ELEV.: 61.1'
BORING CONTRACTOR:	WARREN GEORGE, INC.	LOCATION: 129-09 JAMAICA AVENUE RICHMOND HILL, NY 11418	TOP OF CASING ELEV.: 60.86'
FOREMAN:	GREG MARNEY	DATE: 07/20-7/21/2005	

CASING:	SAMPLER:	GROUNDWATER LEVEL READINGS:
SIZE: 5"	TYPE: 2" SPLIT-SPOON	DATE: 08/11/2005
HAMMER:	HAMMER:	DEPTH: 39.13' BELOW GRADE
FALL:	FALL:	

SAMPLE						GENERAL STRATA DESCRIP.	SAMPLE DESCRIPTION	WELL INSTALLATION LOG	FIELD TESTING (PPM)	NOTES
DEPTH	CAS. BL./FT.	NO.	DEPTH	PEN./RE	BLOWS					
		S-1	1-3	50%	8,7,100/2		FILL: DARK-GRAY, FINE-COARSE SAND AND GRAVEL, TRACE CLAY-SILT		0.0	MONITORING WELL MANHOLE MONITORING WELL CAP
		S-2	5-7	25%	13,10,7				1.0	
10		S-3	10-12	25%	40,100/1,REF	SAND AND GRAVEL	BROWN-GRAY FINE-COARSE SAND AND FINE-COARSE GRAVEL		2.1	BENTONITE-CEMENT GROUT
		S-4	15-17	50%	33,100/5,REF				1.2	
20		S-5	20-22	50%	90,68,56	SAND AND GRAVEL	BROWN-GRAY FINE-COARSE SAND, LITTLE FINE-COARSE GRAVEL; SLIGHTLY WET		0.6	
		S-6	25-27	50%	60,100/3,REF				1.7	
30		S-7	30-32	75%	11,21,22				1.0	
		S-8	35-37	75%	41,81,100				1.3	BENTONITE SEAL
							GROUNDWATER			
40						SAND AND GRAVEL				FILTER PACK No. 2 SAND
										SCHEDULE 40 2" DIA. PVC SCREEN WITH SLOTS 0.01"
50										END OF BOREHOLE

NOTES: SOIL SAMPLE MW-12, S-8 AND GROUNDWATER SAMPLE MW-12, WS-1 WERE SENT TO THE LABORATORY



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ADDITIONAL SUBSURFACE INVESTIGATION

UNIFORMS FOR INDUSTRY
129-09 JAMAICA AVENUE
RICHMOND HILL, NY 11418

DEC 2011 NO. 02-09110

DWG. TITLE:

MW-12

Table 1
Summary of Detected Compounds (Soil Sampling)
129-09 Jamaica Avenue, Richmond Hill, NY
GCE Project No. 05-116-00

Parameter		TAGM-Recommended soil Cleanup Objectives (ug/Kg)	Concentrations (ug/Kg)															
			B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11, S-2	B-11, S-7	B-12	MW-5	MW-8	MW-12
VOC	Acetone	200	290	7,600	23										6	9	9	
	Benzene	60																
	2-Butanone	300			5													
	Chloroform	300	8														1	
	Dichloroethene (DCE)	200																
	Ethylbenzene	5,500	89	3,600														
	Isopropylbenzene	2,300	200															
	Methylene chloride	100			4	2			2		2				4	5	5	2
	m/p-Xylene	1,200	470	11,000														
	n-Propylbenzene	3,700	460															
	n-Butylbenzene	10,000	780	14,000														
	o-Xylenes	600	310	8,300														
	p-Isopropyltoluene	10,000	1,100	19,000									1					
	sec-Butylbenzene	10,000	390	8,100														
	1,3,5-Trimethylbenzene	3,300	1,900	21,000									1					
	1,2,4-Trimethylbenzene	10,000	4,800	83,000									2					
	Trichloroethene (TCE)	700	12															
	Tetrachloroethene (PCE)	1,400					2		4				15					
	Toluene	1,500	12															
	Vinyl chloride (VC)	200																
B/N	Naphthalene	13,000	300	5,800														
	Total VOCs		11,121	181,400	33	2	2	0	6	0	2	0	19	0	10	14	16	2
	Total BTEX		881	22,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2-Methylnaphthalene	36,400	990	870														
	Bis(2-ethylhexyl)phthalate	50,000	1,200	3,100	66				150			240	430				17,000	
	Butylbenzylphthalate	50,000	280	1,400													4,100	
	Di-n-octylphthalate	50,000											250					
	Di-n-butylphthalate	8,100	140															
	Naphthalene	13,000	1,700	3,900														
	Total SVOCs BN		4,310	9,270	66	0	0	0	150	0	0	240	680	0	0	0	21,100	0

Compounds were non-detected or detected below their detection limit.

11,000 Compounds were detected above the TAGM Recommended Soil Cleanup Objectives.

Table 2
Summary of Detected Compounds (Groundwater and Free Product Sampling)
129-09 Jamaica Avenue, Richmond Hill, NY
GCE Project No. 05-116-00, 08/11/2005

Parameter		New York Groundwater Quality Standards & Guidance values (ug/L)	Concentrations (ug/L)											
			MW-1 11/24/04	MW-2 11/24/04	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8 (Free Product)	MW-9	MW-10	MW-11	MW-12
VOC	Acetone	50	460					20				40		
	Benzene	1		15								3.6		
	2-Butanone	n/s										6.6		
	cis-1,2-Dichloroethene (DCE)	5	6,600	6	3,900	970	500	3,500	80		28	33		1
	1,1-Dichloroethene	5			3.2			3						
	trans-1,2-Dichloroethene	5			5.2	2	1	8				1.6		
	Ethylbenzene	5	91	96				21		27,000		57		
	Isopropylbenzene	5	100	19	2.6			27		14,000		50		
	Methyl-Tert-Butyl-Ether (MTBE)	50										1		
	m/p-Xylene	5	440	100				11		15,000		210		
	n-Propylbenzene	5	240	26				29		22,000		83		
	n-Butylbenzene	5	180	10	1.2			8.9		8,200		25		
	o-Xylenes	5	280	6.8	7.9	0.84		76		20,000		160		
	p-Isopropyltoluene	5	86	5.1	4.3			35		12,000		89		
	sec-Butylbenzene	5	110	7.2	2.5		1.1	17		8,800		26		
	tert-Butylbenzene	5		1.1				5.7		1,600		5.8		
	1,3,5-Trimethylbenzene	5	680	44	6.2			13		26,000		270		
	1,2,4-Trimethylbenzene	5	2,300	170	24			190		84,000		810		
	Trichloroethene (TCE)	5			38	23	110	6.5	13		16	18		
	Tetrachloroethene (PCE)	5			190	81	160	36	71		120	2.3		
	Toluene	5		21	1.4			11		4,600		23		
	Vinyl chloride	2	160	280	32	190	7.6	170		10,000		18		10
	Naphthalene	10	160	430	9.9		2.4	17		28,000		240		
	Total VOCs		11,887	1,237	4,228	1,267	782	4,205	164	281,200	164	2,173		11
	Total BTEX		911	258	12	1	0	146	0	80,600	0	504		0
B/N	2-Methylnaphthalene	n/s	31	150				16				3.7		
	Acenaphthene	20		4.7				1.4						
	Bis(2-ethylhexyl)phthalate	5	220	5.4	4.3	7.1	11	7.2	4.4	590,000	4.3	9.1		4.9
	Butylbenzylphthalate	50	36	1.8								4.3		
	Diethylphthalate	50	2									9.9		
	Di-n-butylphthalate	50	14	1.3		1.5		1.5				4.6		
	Fluorene	50		6.6				3.7						
	Phenanthrene	50		7.4				3.7						
	Naphthalene	10	130	190				5.9				46		
Total SVOCs (BN)			433	367	4	9	11	39	4	590,000	4	78		5

n/s	No standards
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	Compounds were non-detected or detected below their detection limit.
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460	Compounds were detected above the New York Groundwater Quality Standards & Guidances values.
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Note:

Monitoring wells MW-1, MW-2 and MW-11 were not sampled due to a presence of a thin free product in these wells.

GW results from MW-1 and MW-2 are from the second round of groundwater sampling conducted on 11/24/04.

Monitoring well MW-8 was sampled for a free product, not for groundwater.

Table 3 Elevation Survey 129-09 Jamaica Avenue, NY, GCE Project No. 05-116, 08/11/2005 Benchmark - Floor of N. gates (60.00')				
	BS	^	FS	Elevation
B.M (Floor of N. gates)	6.48	66.48		60.00
MW-1		66.48	4.53	61.95
MW-3		66.48	4.10	62.38
MW-5		66.48	7.42	59.06
MW-6		66.48	4.80	61.68
MW-7		66.48	3.09	63.39
MW-8		66.48	5.71	60.77
B.M.	4.96	64.96		60.00
MW-9		64.96	5.32	59.64
p.2		64.96	4.91	60.05
p.2	5.12	65.17		60.05
MW-10		65.17	5.37	59.80
p.3		61.73	3.44	66.52
p.3	4.79	66.52		66.52
MW-2		66.52	3.71	62.81
MW-4		66.52	5.77	60.75
MW-11		66.52	2.35	64.17
MW-12		66.52	5.66	60.86

Table 4

Groundwater Sampling

129-09 Jamaica Avenue, Richmond Hill, NY, GCE Project No. 05-116, 08/11/2005

MW number	Well Diameter	Screen length	Total well depth	Depth to Free Product	Depth to GW	Thickness of Free Prod	Length Purged	3.00 Volumes	Purged Water Vol	Casing Elevation	GW Elevation	GW Elevat Corrected
MW-1	2"	15'	43.78	39.61	39.75	0.14				61.96	22.21	22.33
MW-2	2"	15'	54.8	40.9	41.08	0.18				62.81	21.73	21.89
MW-3	2"	15'	48.53		40.1		8.43	4.05	5	62.38	22.28	22.28
MW-4	2"	15'	46.11		38.94		7.17	3.44	5	60.75	21.81	21.81
MW-5	2"	15'	48.5		36.95		11.55	5.54	6	59.06	22.11	22.11
MW-6	2"	15'	46.43		39.42		7.01	3.36	4	61.68	22.26	22.26
MW-7	2"	15'	49.8		41.11		8.69	4.17	5	63.39	22.28	22.28
MW-8	2"	15'	49.65	38.04	44.1	6.06				60.77	16.67	22.00
MW-9	2"	15'	47		37.58		9.42	4.52	5	59.64	22.06	22.06
MW-10	2"	15'	47		37.83		9.17	4.40	5	59.8	21.97	21.97
MW-11	2"	15'	50.1	42.24	42.33	0.09				64.17	21.84	21.92
MW-12	2"	15'	50.3		39.13		11.17	5.36	6	60.86	21.73	21.73

Corrected GW elevations in wells with a free product, were calculated using a formula: $H_c = H_m + (H_o * p_o / p_w)$

where:

H_c = GW elevation corrected

H_m = measured GW elevation

H_o = Thickness of free product

p_o = density of free product = 0.88 g/ml

p_w = density of water = 1 g/ml