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May 22, 2009

New York State Department of Environmental Conservation Division of Environmental Remediation, Bureau of Technical Support 625 Broadway, 11th Floor Albany, New York 12233-7020

Attn: Mr. Christopher Magee

Re: Test Pit and Soil Boring Investigation Results

CPB Edgemere Site (SP# 02-07599)

3229 Far Rockaway Boulevard (Block 15950, Lot 29)

Edgemere, Queens, New York

TRC Job No. 159807

Dear Mr. Magee:

TRC has prepared the following letter report to summarize the test pit and soil boring investigation program completed at the CPB Edgemere site (Site) between March 10 and May 7, 2009.

1.0 INTRODUCTION

Following the observation of petroleum hydrocarbons in the subsurface soils of the Site during due diligence activities in 2002, remedial investigation activities were initiated. In 2004, two former underground storage tank (USTs) and petroleum-impacted soils were excavated and removed from the Site. In 2008, TRC conducted additional environmental investigations at the Site, including soil borings and monitoring wells. During these activities, TRC observed petroleum hydrocarbons in the shallow hydrogeologic zone. The observation of petroleum hydrocarbons was unexpected, based on the documented 2004 remedial excavation that was undertaken to remove the petroleum hydrocarbon impact. General fluctuations in ground water elevations in the shallow zone may influence the observations of petroleum product in the wells.

The presence of the petroleum hydrocarbons may render the current remedial plan, primarily designed to address chlorinated solvent impacts, potentially inefficient or ineffective and therefore, may necessitate the development of a more comprehensive remedial strategy that concurrently addresses both petroleum and chlorinated solvent impacts in the southwestern

portion of the Site. Therefore, TRC conducted additional investigation activities in 2009 to further evaluate and possibly removed the petroleum hydrocarbon impact.

This letter reviews the site background, summarized recent investigation activities, presents an evaluation of the known petroleum hydrocarbon and chlorinated solvent impacts at the Site, and proposed future actions to address these conditions.

2.0 BACKGROUND

The 1.3-acre Site is located between Far Rockaway Boulevard and the Rockaway Freeway (near Beach 32nd Street) in Edgemere, New York. Figure 1 provides a Site Location Map and Figure 2 presents the Site Plan. The Site is located approximately 450 feet south west of the Norton Basin of the Jamaica Bay and approximately 2,200 feet (0.4 miles) north of the Atlantic Ocean. The property is currently vacant and has been designated on local tax maps as Block 15990, Lot 29. A review of historic Sanborn Maps and available literature indicate that a water body known as Norton's Creek extended from Norton Basin through the western portion of the Site, and was reported by the New York Times to be filled in 1906.

Geology

The overburden material encountered at the Site has been divided into three distinct geologic zones (shallow, intermediate and deep) which are described below.

Shallow Zone

The shallow zone is approximately 20 feet thick and consists of layers of artificial fill materials (including brown fine to coarse sand with varying amounts of debris), and native or dredged soils (brown and gray sands with minor gravels) from the surface to depths ranging from 8 to 20 feet below grade. Below the artificial fill and sand layers, organic silty clay (1-4 feet thick) with interbedded sand lenses are found at the base of the shallow zone, at depths ranging from approximately 11 and 20 feet below grade. The depth, composition and thickness of the clay layer vary greatly.

The depth to water in the shallow zone is approximately 6 to 11 feet below grade, occurring within the artificial fill or the sand. Ground water flows primarily to the northwest, toward Jamaica Bay under relatively flat horizontal hydraulic gradients with an average of approximately 0.003 feet/foot (ft/ft). No tidal influence has been observed in shallow zone monitoring wells.



Intermediate Zone

The intermediate zone consists of two lithologic units. A light brown-green coarse to fine sand with gravel and varying amounts of silt and clay is encountered at a depth of approximately 20 feet below grade. The silt and clay content increases with depth at 30 feet below grade. A second clay unit (about 17 feet thick) occurs at a depth of approximately 37 feet below grade and consists of dark grey soft clay with interbedded sand or silt laminations and trace shell fragments.

Ground water in the intermediate zone principally occurs within the sand. Ground water flows primarily to the west under very small horizontal hydraulic gradients with an average of approximately 0.0007 ft/ft. Ground water levels within this zone are influenced by tidal fluctuations of nearby surface water bodies with corresponding fluctuations that range form approximately 0.1 to 0.3 feet. Tidal fluctuations do not cause gradient reversals but impart a relative deviation/shift in a northwesterly or southwesterly direction to the flow.

The vertical ground water flow potential between the shallow and intermediate zones across the shallow silty clay is predominantly downward with temporary localized changes due to tidal fluctuations and precipitation.

Deep Zone

The lower clay layer serves as an aquitard separating the intermediate and deep zones and appears to act as a confining/semi-confining unit to both zones. This clay layer appears to be continuous and consistent throughout the investigation area. A brown-gray, fine to medium sand occurs underneath the second clay unit at a depth of approximately 54 feet below grade and is greater than 40 feet thick.

Site Operational History

A review of Sanborn fire insurance (Sanborn) maps depicting the Site in 1933, 1951, and 1981 and historical aerial photography indicates that a linear building structure was formerly located on the Site, along the western property boundary. The building's use was reported on the 1933 Sanborn map as a plumbing supply house, and on the 1951 Sanborn map used as a garage. Both Sanborn maps depict two gasoline tanks in the northern portion of the building. The building was not present on the 1981 Sanborn map, and no additional Sanborn maps depicting the Site between 1933 and 1981 are available. Available on-line historic aerial photographs depict the building in 1954 and 1966.



Environmental Investigation History

In 2002, environmental site investigation activities conducted at the Site revealed evidence of a petroleum release, and the New York State Department of Environmental Conservation (NYSDEC) subsequently assigned Spill Number 02-07599 to the property.

To address the petroleum impacts, Anson Environmental, Ltd. (Anson) of Huntington, New York conducted a soil excavation program at the Site between June and November 2004. During the soil excavation activities, two fuel oil underground storage tanks (USTs), 300 and 1,500 gallons in capacity, were uncovered and removed. Anson reported that 13,882 tons of petroleum-impacted soil and 12,430 gallons of oil and water were removed for off-Site disposal. The final extent of excavation was reported to be approximately 11,000 square feet in area, and 8 feet below grade. During these excavation activities, an area of soil (green in color) was also discovered, which was later found to contain elevated concentrations of chlorinated volatile organic compounds (CVOCs). This area was also excavated and 418 tons of contaminated soil was reportedly removed for off-site disposal. No discussions were reported about the occurrence or observations of petroleum hydrocarbon free product in the area of the CVOC remedial excavation.

In preparation of a remedial pilot study to estimate the feasibility of chemical oxidation to address ground water CVOC impacts, TRC conducted additional environmental investigations at the Site in 2008, which included the installation of monitoring wells and soil borings. In association with these activities, TRC observed petroleum hydrocarbon impacts in the organic clay, initially as localized residual impacts in the shallow zone. However, at later time (March 2009), petroleum accumulations were observed in shallow monitoring well PZ-2 and intermediate monitoring well MW-4i in thicknesses of up to 2.12 feet and 0.15 feet, respectively. The observation of petroleum hydrocarbons at the Site warranted additional investigation. These activities are summarized in the following section.

3.0 <u>INVESTIGATION TECHNICAL OVERVIEW</u>

The following subsections provide a technical overview of the remedial investigation activities completed between March and May 2009 at the Site.

March 2009 Test Pit Program

On March 9-10, 2009, TRC completed an exploratory test pit excavation program designed to evaluate the extent of the free product observed at PZ-2, and to remove free product and impacted soil. During this program, an excavation contractor (Brookside Environmental Inc. of Huntsville, NY [Brookside]) completed three test pits (TP's -1, -2, and -3), to the west, north,



and east of PZ-2, respectively. As required by the State law, at least 3 days prior to initiation of intrusive activities, Brookside requested an underground utility mark-out from the New York State one-call service (e.g., DigSafe). Test pits TP-1 through TP-3 generally extended to the west, north, and east of well PZ-2 until no visible evidence of petroleum impacts or product was observed along the sidewalls of the excavations. To mitigate potential cross contamination between the shallow and intermediate zones, the excavations were terminated at the top of the clay layer at approximately 9.5 feet below grade. The test pit locations are depicted on Figure 2.

During test pit excavation activities, TRC screened soils removed from the test pits using visual and olfactory observations, and a photo-ionization detector (PID), and directed Brookside to stockpile soils exhibiting evidence of petroleum impacts. TRC additionally logged each test pit for lithology, presence or absence of evidence of petroleum impacts, sensory observations, PID measurements, and presence of ground water, and photographed the materials encountered during the test pit excavation activities. All field observations and measurements were documented by TRC in a field notebook.

During excavation of TP's -1 through -3, petroleum impacted soil and LNAPL were encountered warranting removal in the vicinity of PZ-2 and adjacent monitoring wells near the ground water table. An estimated 80 tons of petroleum-impacted soils were removed from the excavation, staged on plastic sheeting, and covered by plastic sheeting for future off-site disposal. Following the completion of excavation activities, and prior to test pit backfilling, approximately 445 gallons of petroleum hydrocarbons and water were removed from test pit TP-2 by a vacuum truck operated by Enviro-Waste Oil Recovery LLC of Mahopac, NY (Enviro-Waste). Following fluid removal, each test pit was backfilled with excavated soils that did not exhibit field evidence of petroleum impacts, and with imported clean fill. Attachment 1 provides test pit excavation logs, and Attachment 2 presents photos of the test pit locations. Table 1 provides a summary of sample collection locations, analytical parameters, and rationale for sample collection.

April 2009 Test Pit Program

Based on the findings of the March 2009 test pit program, TRC initiated a second test pit excavation program in April 2009 to delineate the petroleum hydrocarbons near areas of concern identified in historic documents (e.g., former gasoline tanks, Anson excavation area, etc.). Prior to conducting this program, Brookside requested an underground utility mark-out from DigSafe, as required. Under TRC's oversight, Brookside completed ten test pits (TP's -4, through -13) at varying locations at the Site. To mitigate potential cross contamination between the shallow and intermediate zones, the excavations were terminated at the top of the clay layer (where encountered). The locations of test pits TP-4 through TP-13 are depicted on Figure 2.



During test pit excavation activities, TRC screened soils removed from the test pits using visual and olfactory observations, and a photo-ionization detector (PID), and directed Brookside to stockpile soils exhibiting evidence of petroleum impacts. TRC additionally logged each test pit for lithology, presence or absence of evidence of petroleum impacts, sensory observations, PID measurements, and presence of ground water, and photographed the materials encountered during the test pit excavation activities. Based on sensory observations and PID measurements, TRC selected soil samples bias toward suspected contamination, collected these samples with dedicated, disposable sampling equipment, and submitted them for analysis under laboratory chain-of-custody procedures to Accutest Laboratories of Dayton, New Jersey (Accutest) for analysis of total petroleum hydrocarbons (TPHC), volatile organic compounds (VOCs), and base-neutral organic compounds (BNs). An isolated area of green and blue discolored soil was observed in the south east corner of TP-7, and towards the north of TP-12. This soil did not possess any odors or elevated PID readings. All field observations, measurements, and sample collection information were documented by TRC in a field notebook.

During April 2009 test pit excavation activities, petroleum-impacted soil and floating petroleum hydrocarbons were encountered at test pit TP-5 in association with a former building foundation wall (grade beam). An estimated 20 tons petroleum-impacted soils were removed from the excavation, staged on plastic sheeting, and covered by plastic sheeting for future off-site disposal. Following the completion of excavation activities, and prior to test pit backfilling, approximately 1830 gallons of petroleum hydrocarbons and water were removed from test pit TP-5 by a vacuum truck operated by Enviro-Waste. Following fluid removal, each test pit was backfilled with excavated soils that did not exhibit field evidence of petroleum impacts, and with imported clean fill. Attachment 1 provides test pit excavation logs, and Attachment 2 presents photos of the test pit locations.

During the April 2009 test pit program, samples of the floating petroleum hydrocarbons (product) were collected for laboratory analysis from shallow zone monitoring well PZ-2 and intermediate zone well MW-4i. These samples were submitted to Accutest Laboratories for analysis of product type and volatile organic compounds (VOCs). Table 1 provides a summary of the soil and product sample collection locations, analytical parameters, and rationale for sample collection.

Following receipt of analytical results from Accutest, product samples from wells PZ-2 and MW-4i were sent to Torkelson Geochemistry, Inc, (Torkelson) for additional product type and forensic analysis.



May 2009 Soil Boring Program

On May 4th, 6th, and 7th, 2009, TRC completed a supplemental soil boring program to delineate the vertical and areal extent of petroleum hydrocarbons within and below the shallow zone. As required by the State law, an underground utility mark-out was requested prior to conducting intrusive activities. Under TRC oversight, a drilling subcontractor (Zebra Environmental Corp. of Lynbrook, New York [Zebra]) completed 25 soil borings (SB's -1, through -25) to depths ranging from 15 to 40 feet using the direct push (Geoprobe®) drilling method. Soil borings were generally located on a 25-foot grid pattern, with additional borings located in the vicinity of the MW-4 well cluster. The soil boring locations are depicted on Figure 2.

During soil boring activities, TRC screened soil boring cuttings using visual and olfactory observations, and a photo-ionization detector (PID). TRC additionally logged each soil boring for lithology, presence or absence of evidence of petroleum impacts, sensory observations, PID measurements, and presence of ground water, and photographed the materials encountered during the soil boring activities. Based on sensory observations and PID measurements, TRC selected soil samples bias toward suspected contamination, collected these samples with dedicated, disposable sampling equipment, and submitted them for analysis under laboratory chain-of-custody procedures to Accutest for analysis of VOCs. All field observations, measurements, and sample collection information were documented by TRC in a field notebook.

At four soil boring locations (SB-5, SB-11, SB-18, and SB-21), ground water samples were collected from the direct-push boreholes from the upper portion and lower portion of the intermediate zone sands for analysis of VOCs. To collect these samples, decontaminated drilling rods containing a 4-foot length of decontaminated stainless steel screen were advanced through the soil borehole to the base of the targeted ground water sample interval. The drill rods were then pulled 4 feet upward, exposing the screen inside to the formation. Through this screen, the borehole was purged to remove excessive sediment and sampled for VOC analysis using dedicated, disposable tubing and a decontaminated stainless steel foot check valve. Following sample collection, the screen and drill rods were removed and decontaminated for future use. Finally, all of the borings that penetrated the first clay unit were grouted using a Portland cement and bentonite mixture, to minimize the potential for vertical contaminant migration.

Attachment 1 provides soil boring logs, and Attachment 2 presents selected photos from the soil boring program. Table 1 provides a summary of sample collection locations, analytical parameters, and rationale for sample collection.

4.0 <u>INVESTIGATION FINDINGS</u>



The following subsections provide a summary of the findings of the remedial investigation activities completed between March and May 2009 at the Site.

Lithology

In test pits TP-1, TP-2, TP-3, TP-5, TP-6, TP-7, and TP-8, the artificial fill material consisted of brown sand with large concrete blocks, concrete aggregate, bricks, and timbers from the ground surface to depths of up to 9.5 feet below grade. Similar fill material was encountered at depths greater than 5 feet below grade in borings SB-6, SB-7, SB-9, SB-10, SB-11, SB-12, SB-13, SB-14, SB-15, SB-16, SB-17, SB-18, SB-19, SB-22, SB-23, and SB-24.

Below the fill materials and sands (as described in the geology section above), clay or organic materials (peat, roots, etc.) were encountered in all soil borings at depths ranging from 10 to 26 feet below grade. Clay/organic thicknesses varied from a 0.5-foot thick layer of peat (at SB-3) to an apparent thickness of 3.5 feet boring SB-13. Despite encountering clay in each boring, the range of depths and thicknesses of the clay encountered indicate that the organic clay is discontinuous, with intervening sand lenses. As such, stratigraphic correlation between the observed clay lenses indicates that gaps are present between the shallow zone sand and intermediate zone sand, which would account for the presence of some contaminants (CVOCs and petroleum) within the intermediate zone.

Free and Residual Petroleum

Field evidence of mobile (free-phase) and non-mobile (residual-phase) petroleum hydrocarbons encountered in several locations are summarized on the following table:



Test Pit/Boring Location	Free or Residual Product Depth (feet)	Observations:
TP-3	9.5	Staining, Odor, Free-Phase Product On Ground Water Table
TP-5	9.5-13	Staining, Odor, Free-Phase Product On and Below Ground Water Table
TP-6	8-10	Odor, Residual Petroleum-Like Globules
TP-8	8-8.5	Free-Phase Product on Ground Water Table
TP-13	10-10.5	Odor, Residual Petroleum-Like Globules
SB-7	N/A	Petroleum-Like Sheen Within Macrocore Sleeve From 10-15 ft Core
SB-9	8-16.5	Sheen, Odor, Residual Product Globules Product On and Below Ground Water Table
SB-10	6.5-7	Odor, Residual Petroleum-Like Globules
SB-11	7-12	Sheen, Odor, Residual Product Globules Product On and Below Ground Water Table
SB-12	6-13.5	Sheen, Odor, Residual Product Globules Product On and Below Ground Water Table
SB-14	6-13	Sheen, Odor, Free-Phase Product On and Below Ground Water Table
SB-15	6	Petroleum-Like Staining
SB-16	6.25-7	Sheen
SB-17	6.5	Sheen
SB-18	6-7	Petroleum-Like Sheen and Odor
SB-19	6.5	Free-Phase Product On Ground Water Table
SB-22	8.5-12	Petroleum-Like Sheen and Odor
SB-23	10-11	Odor, Free-Phase Product Below Ground Water Table

To further characterize the petroleum hydrocarbons, samples were submitted for total petroleum hydrocarbon (TPHC) analysis. A total of 10 soil samples from test pits TP-4 through TP-13 were analyzed for TPHC. TPHC analytical results ranged from less than 1 milligram per kilogram (mg/kg) (samples TP-4 9.5-10 and TP-11 11.5-12) to 17,900 mg/kg (sample TP-5 10-10.5). The TPHC analytical results are summarized in Table II, and on Figure 3. Figure 3 also summarizes the estimated extent of free and residual petroleum present, based on soil analytical results and field evidence of petroleum impacts, as summarized above. As shown on Figure 3, the estimated extent of free and residual petroleum generally lies within the boundaries of the 2004 Anson excavation area, and spans an area of approximately 100 feet by 100 feet.



Product Analysis Results

Product samples collected from PZ-2 and MW-4 on April 28, 2009 were submitted to Accutest for product identification. Accutest reported that both samples match gas chromatograph patterns for weathered number (No.) 6 fuel oil and for weathered heavier petroleum products (such as hydraulic oil). Each sample was also analyzed for the presence of the principal CVOC found at the Site, trichloroethene (TCE). The sample from well PZ-2, screening the shallow zone, contained TCE in a concentration of 123 milligrams per liter (mg/L). The sample from well MW-4i, screening the intermediate zone, contained TCE in a concentration of 23,500 mg/L (approximately 2.35% by mass).

Following analysis by Accutest, product samples were sent to Torkelson for additional analyses. Final analytical results from Torkelson are not currently available. Upon receipt, these laboratory results will be submitted to the NYSDEC under separate cover.

VOC and BN Soil Results

A total of 22 soil samples were analyzed for VOCs. Tetrachloroethene (PCE), TCE, trans-1,2-dichloroethene (trans-1,2-DCE), vinyl chloride (VC), and 1,1-dichloroethene (1,1-DCE) were detected in one or more soil sample in excess of the New York State Department of Environmental Conservation (NYSDEC) Restricted Use Soil Cleanup Objective (RUSCO). TCE, the principal contaminant of concern for the Site, was detected in ten soil samples in excess of the NYSDEC RUSCO, in concentrations ranging from 1.42 mg/kg to 6,990 mg/kg. TCE results in excess of 100 mg/kg were detected in samples SB-13 10-10.5 (659 mg/kg), SB-13 11-11.5 (996 mg/kg), SB-17 8.5-9 (201 mg/kg), SB-17 15-15.5 (889 mg/kg), SB-20 12-12.5 (1,980 mg/kg), and SB-14 32-32.5 (6,990 mg/kg). Observations from the SB-14 32-32.5 sample indicated a strong solvent odor and highly elevated PID readings. Soil VOC samples results are summarized on Figure 4, and in Table 2.

A total of 11 soil samples were analyzed for BNs. Concentrations of a total of seven BN compounds from sample TP-5 9-9.5 and one BN compound from sample TP-5 10-10.5 exceeded the NYSDEC RUSCO for their respective compound. These compounds are likely attributed to the presence of petroleum within the soil sample. Soil BN sample results are summarized in Table 2.

Chlorinated VOC Ground Water Results

A total of 8 hydropunch ground water samples (plus one duplicate sample) were collected from 4 soil borings (SB-5, SB-11, SB-18, and SB-21). At each boring location, one sample was collected from near the base of the intermediate zone and one sample was collected from near the top of the intermediate zone, and was analyzed for VOCs to evaluate the relative width of the



CVOC plume. In these samples, TCE, cis-1,2-dichloroethene (cis-1,2-DCE), and VC were detected in only 2 samples (SB-11 GW 25-27 and SB-5 GW 23-27) above the NYSDEC's Ground Water Quality Standards (GWQS). As shown on Figure 2, soil borings SB-11 and SB-5 are located approximately and 25 and 55 feet northwest of the MW-4 well cluster, respectively. Trans-1,2-DCE was additionally detected in sample SB-11 GW 25-27 in concentrations above the NYSDEC's GWQS. Additionally, total xylenes, a VOC related to petroleum products, was detected in sample SB-5 GW 23-27 at a concentration that exceeds the NYSCEC's GWQS. Hydropunch sample locations are shown on Figure 2. Ground water analytical results are provided in Table 3. Additional lab results are pending from contingent samples and will be presented when they are available.

5.0 <u>CONCLUSIONS</u>

Based on the March-May 2009 investigation activities and previous investigations, the following conclusions are provided:

- Analytical results for samples collected from the shallow clay lenses indicate that CVOC impact to the first clay unit covers a greater area than previously recognized;
- Despite the completion of the 2004 remedial excavation, an area of more than 1,000 square yards of free and residual petroleum impacts is present at and below the ground water table, around the MW-4 well cluster (the area of the Site that requires ground water CVOC remediation);
- Despite encountering clay in each boring, the range of depths and thicknesses of the clay
 encountered indicate that the organic clay is discontinuous, with intervening sand lenses.
 As such, stratigraphic correlation between the observed clay lenses indicates that gaps are
 present between the shallow zone sand and intermediate zone sand, which would account
 for the presence of some contaminants (CVOCs and petroleum) within the intermediate
 zone;
- The concentrations of TCE measured in soil sample SB-14 32.5-33 (e.g. 32-33 feet below grade) and the product sample collected from MW-4i indicate that a TCE source area is present in the vicinity of MW-4i in the intermediate zone; and
- Product sample analytical results indicate a relationship between petroleum hydrocarbons encountered in the shallow and intermediate zones, and a relationship between the petroleum and TCE impacts in the intermediate zone.



While hydropunch ground water samples suggest that ground water impacts to the
intermediate ground water zone are restricted to the vicinity of the MW-4i location (the
area planned for ground water remediation for CVOCs), soil analytical results from the
first clay unit from a number of locations, especially soil boring SB-20, suggest that
CVOC impacts to the first clay may require remediation as a CVOC source;

6.0 REMEDIAL ALTERNATIVES ANALYSIS

TRC and the Client (CPB) are currently evaluating alternative remedial options to address the expanded area of contamination. Based on the results of this investigation, the potential treatment area has expanded beyond the scope of the previously proposed remedial options. Additionally, the petroleum product area is larger than previously anticipated, which alters the remedial goals and objectives, and will require a different treatment plan.

Based on the information provided in this report, additional time is required to develop and evaluate proposed remedial alternatives with our client in the next two weeks. TRC will submit a revised project schedule to the NYSDEC under separate cover, providing the revised remedial plan for the Site.

If you have any questions or need additional information, please call.

Very truly yours,

TRC ENVIRONMENTAL CORPORATION

Howard Nichols, P.E.

Project Manager

Nidal Rabah, PhD., P.E.

Vice President

Enclosures:

Figure 1 – Site Location Map

Figure 2 – Site Plan with TRC Test Pit and Soil Boring Locations

Figure 3 – Approximate Extent of Free and Residual Product

Table 1 – Sample Summary Table

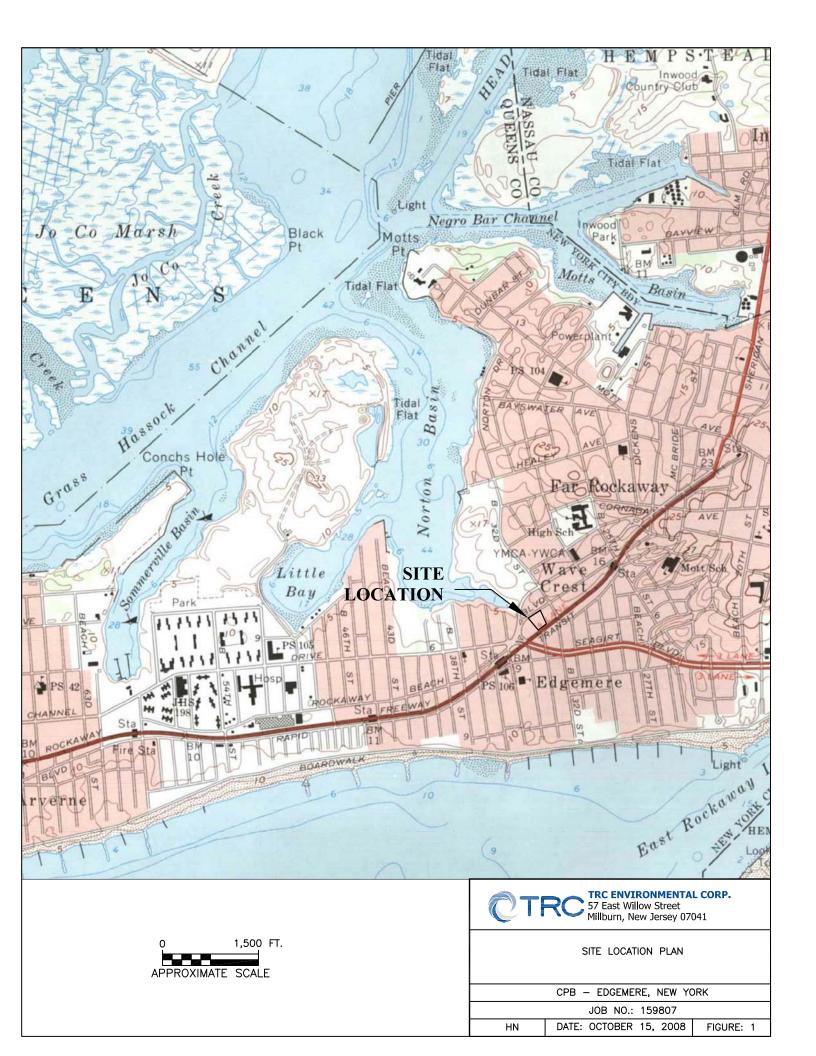
Table 2 – Soil Analytical Results Summary

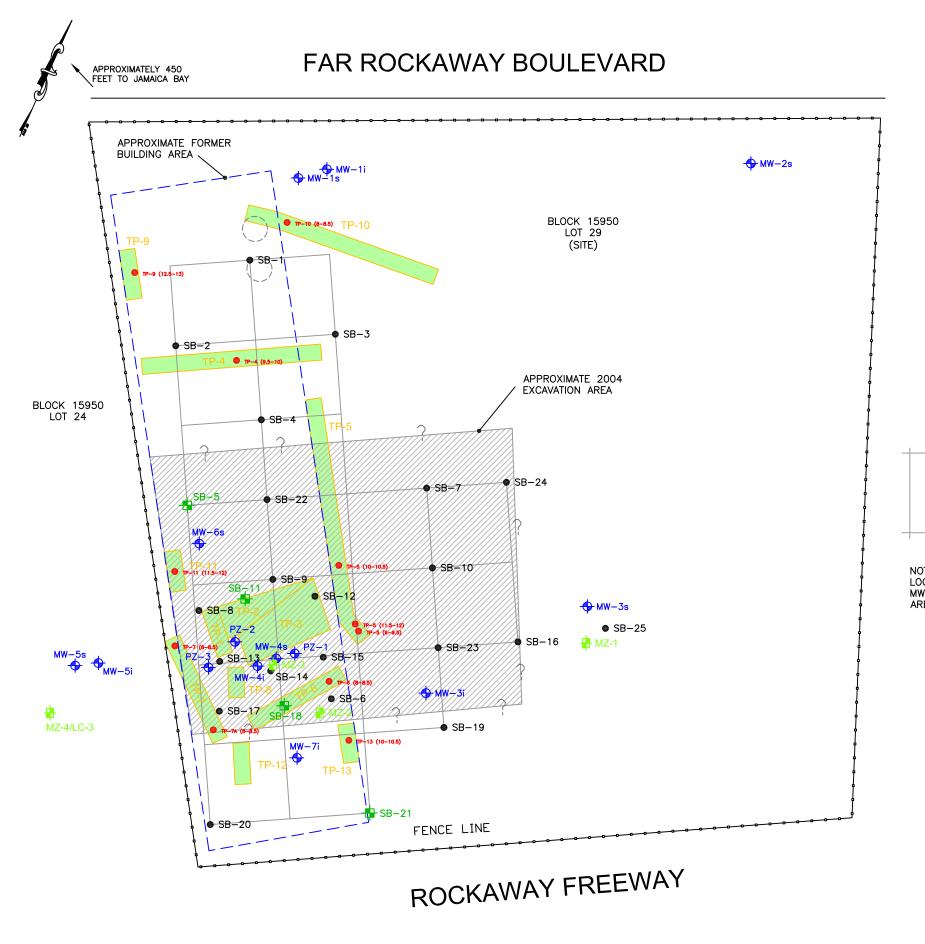
Table 3 – Hydropunch Ground Water Sample Results Summary



Attachment 1 – Test Pit and Soil Boring Logs Attachment 2 – Selected Test Pit and Soil Boring Photographs







GROUND WATER

SB-11	
Date	05/07/09
Depth	25' - 29'
c-1,2 DCE	2000
t-1,2 DCE	13.3
TCE	710
VC	238

SB-5	
Date	05/06/09
Depth	23' - 27'
cis-1,2 DCE	18.5
TCE	7.9
VC	9.1
Xvlenes	7.2

EXPLANATION



SOIL BORING

SOIL BORING WITH HYDROPUNCH GROUND WATER SAMPLING

TEST PIT LOCATION

APPROXIMATE LOCATION OF GASOLINE TANKS SHOWN ON 1951 SANBORN FIRE INSURANCE MAP

30 FT.

APPROXIMATE SCALE

25-FOOT SAMPLE GRID

LOCATIONS OF MONITORING WELLS MW-5s, MW-5i, MA-6s, AND MW-7i ARE APPROXIMATE.

		MW-4s
	05/07/09	Date
	25' - 29'	Depth
CE	2000	t-1,2 DCE
E	13.3	TCE
	710	
	220	DTCD

•		
	ate	
ı		

1 100 2		
Date	08/19/08	08/19/08
Depth	15.5' - 16'	16' - 16.5'
t-1,2-DCE	2.83	0.318
TCE	3.78	0.235
VC	5.89	1.15

04/16/08

17' - 17.5'

100-0		
Date	09/03/08	09/03/08
Depth	24.5' - 25'	25' - 25.5'
-1,2-DCE	0.747	ND
TCE .	26.7	9.18
/C	3.67	0.0013

PTSB-4

Depth	401 40 51	
Doptiii	13 - 13.5	13.5' - 14
TCE	0.0114	2.5
VC	0.357	0.23

TP-13	
Date	04/30/09
Depth	10' - 10.5'
TCE	1.42

TP-11	
Date	04/30/09
Depth	11.5' - 12
t-1,2 DCE	0.918
TCE	3.99
VC	3.15

SB-8	
Date	05/04/09
Depth	13' - 13.5'
1,1-DCE	0.431
t-1,2-DCE	1.18
TCE	47.8
VC	6.24

SOIL

SB-13		
Date	05/04/09	05/04/09
Depth	10' - 10.5'	11' - 11.5'
PCE	1.43	ND
TCE	659	996
VC	ND	5.98

B-17		
ate	05/04/09	05/04/09
epth	8.5' - 9'	15' - 15.5'
1,2-DCE	0.627	0.562
CE	0.0944	6.06
CE	201	889
C	2.58	0.365

3-20	
ate	
epth	

Jate	05/04/09
Depth	12' - 12.5'
-1,2-DCE	2.01
PCE	5.56
ГСE	1980
/C	2.18

Date	05/07/09
Depth	20' - 20.5'
-1,2-DCE	0.342
CE	2.27
/C	3.26

Date	05/07/09
Depth	20' - 20.5'
-1,2-DCE	0.999
/C	9.06

SB-14

05/07/00	
05/07/09	05/07/09
21.5' - 22'	32.5' -33'
0.999	ND
ND	32.4
0.178	6990
9.06	ND
ND	3.31
	0.999 ND 0.178 9.06

Parameter	NYSDEC Soil SCO
PCE = Tetrachloroethylene	1.4
TCE = Trichloroethylene	0.7
c-1,2-DCE = cis-1,2-Dichloroethylene	
t-1,2-DCE = trans-1,2-Dichloroethylene	0.3
1,1-DCE = 1,1-Dichloroethylene	0.4
VC = Vinyl chloride	0.2
Benzene	0.06
Toluene	1.5
Ethyl Benzene	5.5
Xylenes	1.2

Parameter	NYSDEC Soil SCO
PCE = Tetrachloroethylene	5
TCE = Trichloroethylene	5
c-1,2-DCE = cis-1,2-Dichloroethylene	5
t-1,2-DCE = trans-1,2-Dichloroethylene	5
VC = Vinyl chloride	2
Xylenes	5



TRC ENVIRONMENTAL CORP. 57 East Willow Street

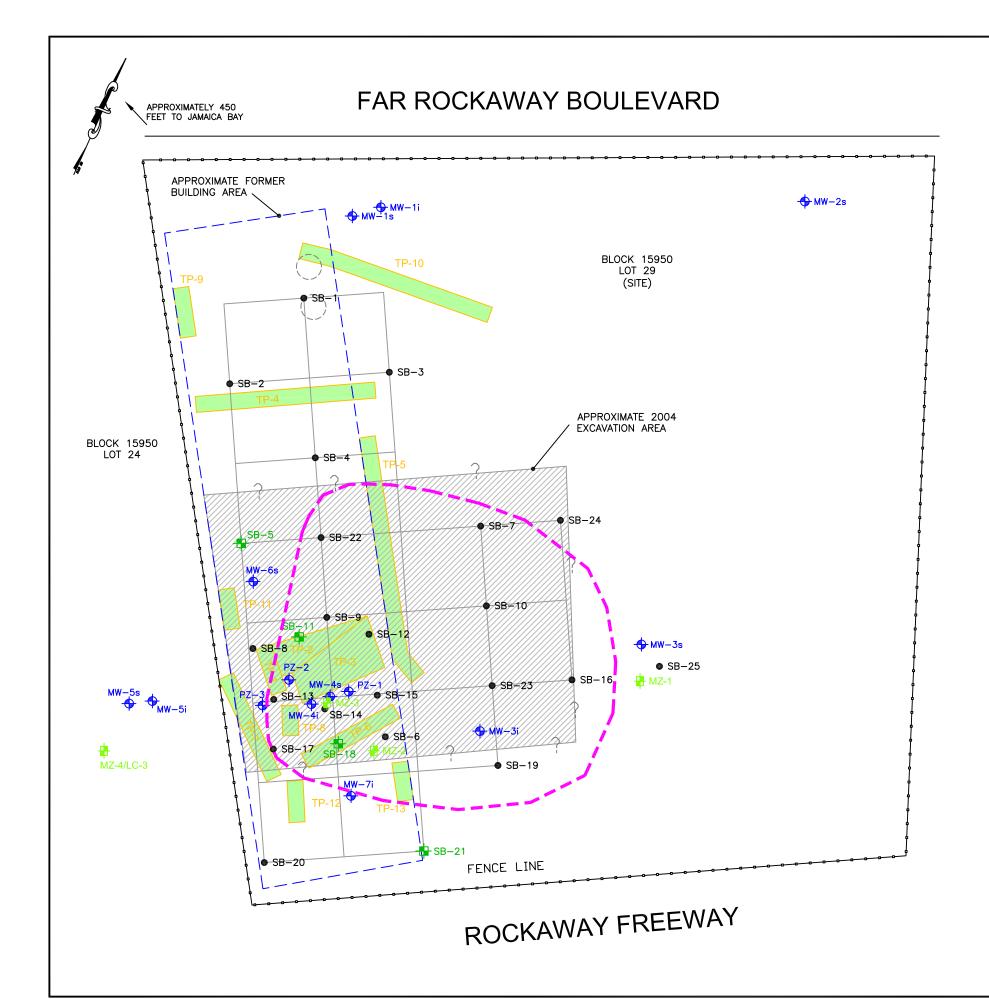
Millburn, New Jersey 07041

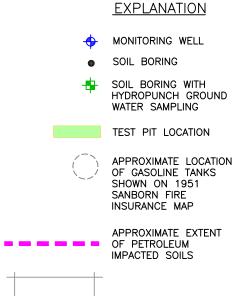
SITE PLAN WITH TRC TEST PIT AND SOIL BORING LOCATIONS (MARCH - APRIL 2009)

CPB - EDGEMERE, NEW YORK JOB NO.: 159807

SM/LB DATE: MAY 2009 FIGURE: 2

SOIL **GROUND WATER**





NOTE: LOCATIONS OF MONITORING WELLS MW-5s, MW-5i, MA-6s, AND MW-7i ARE APPROXIMATE.



TRC ENVIRONMENTAL CORP. 57 East Willow Street

25-FOOT SAMPLE GRID

SITE PLAN WITH APPROXIMATE

EXTENT OF PETROLEUM IMPACTS (MARCH - APRIL 2009)

CPB - EDGEMERE, NEW YORK

JOB NO.: 159807

SM/LB DATE: MAY 2009 FIGURE: 3

Table la Soil Sample Collection Summary CPB Property - Edgemere, New York

Test Pit/Soil Boring Sample Identification		Depth Interval (ft. bgs)	Sample Date	Analytical Parameters	Sample Collection Rationale		
TP-4	TP-4 9.5-10	9.5-10	4/29/2009	TPHC, VOCs, BNs	Verify absence of VOCs and LNAPL north of remediation area		
	TP-5 9-9.5	9-9.5	4/29/2009	TPHC, VOCs, BNs	Assess PZ-2 area for presence of LNAPL and/or VOC impact		
TP-5	TP-5 10-10.5	10-10.5	10-10.5 4/29/2009 TPHC, VOCs, BN		Assess TP-5 Area for VOCs in association with LNAPL, to support remedial design evaluation		
	TP-5 11.5-12	11.5-12	4/29/2009	TPHC, VOCs, BNs	Vertical Delineation of TP-5 Area		
TP-6	TP-6 8-8.5	8-8.5	4/28/2009	TPHC, VOCs, BNs	Assess PZ-2 area for presence of LNAPL and/or VOC impact		
TP-7	TP-7 8-8.5	8-8.5	4/28/2009	TPHC, VOCs, BNs	Assess PZ-2 area for presence of LNAPL and/or VOC impact		
IF-/	TP-7A 8-8.5	8-8.5	4/28/2009	TPHC, VOCs, BNs	Assess PZ-2 area for presence of LNAPL and/or VOC impact		
TP-9	TP-9 12.5-13	12.5-13	4/30/2009	TPHC, VOCs, BNs	Verify absence of impact in association with off-site gasoline tanks shown on historical Sanborn fire insurance maps		
TP-10	TP-10 8-8.5	8-8.5	4/28/2009	Assessment for Gasoline UST shown on 1951 Sanborn fire insurance map			
TP-11	TP-11 11.5-12	7 115-12 4/30/2009 TPHC: VOCs BNs I		Verify absence of LNAPL & VOCs with western building foundation wall (grade beam)			
TP-13	TP-13 10-10.5	10-10.5 4/30/2009 TPHC, VOCs, E		TPHC, VOCs, BNs	Delineate LNAPL/VOC impacts in association with eastern foundation wall (grade beam) to south		
SB-8	SB-8 13-13.5	13-13.5 5/4/2009		VOCs	Assess first clay layer for VOC impact		
SB-11	SB-11 20-20.5	20-20.5 5/7/2009		VOCs	Assess first clay layer for VOC impact		
SB-13	SB-13 10-10.5	10-10.5	5/4/2009	VOCs	Assess sand immediately above first clay for VOC impact		
36-13	SB-13 11-11.5	11-11.5	5/4/2009	VOCs	Assess first clay layer for VOC impact		
SB-14	SB-14 21.5-22	21.5 - 22	5/7/2009	VOCs	Assess first clay layer for VOC impact		
0B-14	SB-14 32.5-33	32.5-33	5/7/2009	VOCs	Assess sand at interface with second clay layer for VOC impact		
SB-15	SB-15 16-16.5	16-16.5	5/4/2009	VOCs	Assess first clay layer for VOC impact		
SB-17	SB-17 8.5-9	8.5-9	5/4/2009	VOCs	Assess first clay layer for VOC impact		
35-17	SB-17 15-15.5	15-15.5	5/4/2009	VOCs	Assess first clay layer for VOC impact		
SB-18	SB-18 20-20.5	20-20.5	5/7/2009	VOCs	Assess first clay layer for VOC impact		
SB-20	SB-20 12-12.5	12-12.5	5/4/2009	VOCs	Assess first clay layer for VOC impact		

Notes:
TPHC = Total Petroleum Hydrocarbons
VOCs = Volatile Organic Compounds
BNs = Base Neutral Organic Compounds
LNAPL = Light Non-Aqueous Phase Liquids
QA/QC = Quality Assurance/Quality Control

Table la Soil Sample Collection Summary CPB Property - Edgemere, New York

Hydropunch Ground Water Samples:

Boring Identification	Sample Identification	Screen Interval (ft.)	Sample Date	Analytical Parameters	Rationale
SB-5	SB-5 GW 23-27	23-27	5/6/2009	VOCs	Shallow Ground Water Assessment
35-3	SB-5 GW 33-36	32-36	5/6/2009	VOCs	Shallow Ground Water Assessment
SB-11	SB-11 GW 25-29	25-29	5/7/2009	VOCs	Shallow Ground Water Assessment
35-11	SB-11 GW 33-37	33-37	5/7/2009	VOCs	Shallow Ground Water Assessment
	SB-18 GW 20-24	24-28	5/7/2009	VOCs	Shallow Ground Water Assessment
SB-18	SB-18 GW 27-31	27-31	5/7/2009	VOCs	Shallow Ground Water Assessment
	SB-18A GW	27-31	5/7/2009	VOCs	Duplicate for QA/QC Purposes
SB-21	SB-21 GW 24-28	24-28	5/6/2009	VOCs	Shallow Ground Water Assessment
3D-21	SB-21 GW 36-40	36-40	5/6/2009	VOCs	Shallow Ground Water Assessment

Notes:

VOCs = Volatile Organic Compounds QA/QC = Quality Assurance/Quality Control

Table la Soil Sample Collection Summary CPB Property - Edgemere, New York

Product Sample Identification	Source	Sample Date	Analytical Parameters	Rationale
PZ-2 Prod	PZ-2 (Screened 3-13 ft bgs)	4/28/2009	GC Fingerprint, TCE	Identify Product type and determine TCE content
MW-4i Prod	MW-4i (Screened 27-40 ft bgs)	4/28/2009	GC Fingerprint, TCE	Identify Product type and determine TCE content

Table II Volatile Organic Compounds in Soil CPB Site - Edgemere, NY

		Date Lab Sa	Sampled:	TP-10 8-8.5 4/28/2009 JA17566-1 8-8.5	TP-13 10-10.5 4/30/2009 JA17769-8 10-10.5	TP-11 11.5-12 4/30/2009 JA17769-6 11.5-12	TP-6 8-8.5 4/28/2009 JA17566-4 8-8.5	TP-7 8-8.5 4/28/2009 JA17566-5 8-8.5	TP-7A 8-8.5 4/28/2009 JA17566-6 8-8.5	TP-4 9.5-10 4/29/2009 JA17769-4 9.5-10	TP-5 9-9.5 4/29/2009 JA17769-1 9-9.5 Accutest
VOCs (mg/kg)	CAS No.	Abbry.	RSCO								Acculest
Acrolein	107-02-8	Acrolein		ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	107-13-1	Acryl		ND	ND	ND	ND	ND	ND	ND	ND
Benzene	71-43-2	Benzene	0.06	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	75-27-4	BDCM		ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	75-25-2	Bromoform		ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	74-83-9	BM		ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	56-23-5		0.6	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	СВ	1.7	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3	CE	1.9	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	110-75-8	2-CVE		ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	Chloroform	0.3	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	74-87-3	CM		ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	124-48-1	DBCM		ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	1,2-DCB		ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1	1,3-DCB		ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7	1,4-DCB		ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	75-71-8	DCDFM		ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	1,1-DCA	0.2	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	1,2-DCA	0.1	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	75-35-4	1,1-DCE	0.4	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethylene	156-59-2	c-1,2-DCE		0.0032	I ND	43.9	ND	0.0064	0.0021	J ND	ND
trans-1,2-Dichloroethylene	156-60-5	t-1,2-DCE	0.3	ND	ND	0.918 J	0.0023	J ND	ND	ND	ND
1,2-Dichloropropane	78-87-5	1,2-DCP		ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	10061-01-5	c-1,3-DCP		ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6			ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4		5.5	0.0019	I ND	ND	0.014	ND	ND	ND	ND
Methylene chloride	75-09-2		0.1	ND	ND	ND	ND	0.0014	J 0.0014	J 0.0014 J	0.0012 J
1,1,2,2-Tetrachloroethane	79-34-5	1,1,2,2-PCA		ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene (PCE)	127-18-4	PCE	1.4	ND	ND	ND	ND	0.0017	J 0.001	J ND	0.00056 J
Toluene	108-88-3	Toluene	1.5	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	71-55-6		0.8	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5	, , -	6	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene (TCE)	79-01-6		0.7	ND	1.42	3.99	0.0029	J 0.0928	0.125	ND	ND
Trichlorofluoromethane	75-69-4	TCFM		ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	75-01-4		0.2	ND	ND	3.15	ND	ND	ND	ND	ND
Xylenes (total)	1330-20-7	Xylene	1.2	0.0016	I ND	0.18 J	ND	ND	ND	ND	ND
Total Targeted VOCs				0.0067	1.42	52.138	0.0192	0.1023	0.1295	0.0014	0.00176
Total TICs			500	0.228	49.8	J 3.5 J	0.987	J ND	ND	ND	ND
Total VOCs				0.2347	51.22	55.64	1.01	0.10	0.13	0.00	0.00

Table II Volatile Organic Compounds in Soil CPB Site - Edgemere, NY

		Date	Sampled:	TP-5 11.5-12 4/29/2009 JA17769-2 11.5-12	TP-5 10-10.5 4/29/2009 JA17769-3 10-10.5	TP-9 12.5-13 4/30/2009 JA17769-5 12.5-13	SB-8 13-13.5 5/4/2009 JA17930-1 13-13.5	SB-13 10-10.5 5/4/2009 JA17930-2 10-10.5	SB-13 11-11.5 5/4/2009 JA17930-3 11-11.5	SB-17 8.5-9 5/4/2009 JA17930-4 8.5-9	SB-17 15-15.5 5/4/2009 JA17930-5 15-15.5
		La	boratory:	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest
VOCs (mg/kg)	CAS No.	Abbry.	RSCO	710001001	7.000.000	7.000.000	7.000.000	7.0001001	7.0001001	7.000.000	7.000.001
Acrolein	107-02-8	Acrolein		ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile		Acryl		ND	ND	ND	ND	ND	ND	ND	ND
Benzene			0.06	ND	ND	ND	0.0013	J ND	ND	0.0016	J ND
Bromodichloromethane		BDCM		ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		Bromoform		ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	74-83-9	BM		ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	56-23-5	CT	0.6	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	СВ	1.7	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3	CE	1.9	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	110-75-8	2-CVE		ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	Chloroform	0.3	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	74-87-3	CM		ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	124-48-1	DBCM		ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	1,2-DCB		ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1	1,3-DCB		ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7	1,4-DCB		ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	75-71-8	DCDFM	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	1,1-DCA	0.2	ND	ND	ND	ND	ND	ND	0.0152	ND
1,2-Dichloroethane	107-06-2		0.1	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	75-35-4		0.4	ND	ND	ND	0.431	ND	ND	0.342	J ND
cis-1,2-Dichloroethylene	156-59-2	c-1,2-DCE		ND	ND	ND	121	23.1	295	74.3	76.3
trans-1,2-Dichloroethylene	156-60-5	. ,	0.3	ND	ND	ND	1.18	J ND	ND	0.627	0.562 J
1,2-Dichloropropane	78-87-5	1,2-DCP		ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	10061-01-5			ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6			ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene			5.5	0.118	0.368	ND	0.0073	0.245	J ND	0.0149	ND
Methylene chloride			0.1	ND	ND	0.001 J	0.0029	J ND	ND	0.0026	J ND
1,1,2,2-Tetrachloroethane	79-34-5	1,1,2,2-PCA		ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene (PCE)	127-18-4	PCE	1.4	ND	ND	ND	ND	1.43	J ND	0.0944	6.06
Toluene	108-88-3	Toluene	1.5	ND	ND	ND	0.0117	0.185	J ND	0.0128	ND
1,1,1-Trichloroethane	71-55-6		0.8	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5		6	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene (TCE)	79-01-6		0.7	ND	ND	ND	47.8	659	996	201	889
Trichlorofluoromethane	75-69-4	TCFM		ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	75-01-4		0.2	ND	ND	ND	6.24	ND	5.98	J 2.58	0.365 J
Xylenes (total)	1330-20-7	Xylene	1.2	0.474	0.915	ND	0.0267	0.933	J ND	0.0499	ND
Total Targeted VOCs				0.592	1.283	0.001	176.7009	684.893	1296.98	279.0404	972.287
Total TICs	1		500	66.3	166	ND	NA	NA	NA	NA	NA
Total VOCs				66.89	167.28	0.00	176.70	684.89	1296.98	279.04	972.29

Table II Volatile Organic Compounds in Soil CPB Site - Edgemere, NY

		Date Lab Sa	mple No.: Sampled: mple No.: Depth: aboratory:		SB-20 12-12.5 5/4/2009 JA17930-7 12-12.5 Accutest		SB-18 20-20.5 5/7/2009 JA18286-6 20-20.5 Accutest		SB-11 20-20.5 5/7/2009 JA18286-7 20-20.5		SB-14 21.5-22 5/7/2009 JA18286-8 21.5-22		SB-14 32.5-33 5/7/2009 JA18286-9 32.5-33
VOCs (mg/kg)	CAS No.	Abbrv.	RSCO										
Acrolein	107-02-8	Acrolein		ND	ND		ND		ND		ND		ND
Acrylonitrile	107-13-1	Acryl		ND	ND		ND		ND		ND		ND
Benzene	71-43-2	Benzene	0.06	ND	ND		ND		ND		ND		ND
Bromodichloromethane	75-27-4	BDCM		ND	ND		ND		ND		ND		ND
Bromoform	75-25-2	Bromoform		ND	ND		ND		ND		ND		ND
Bromomethane	74-83-9	BM		ND	ND		ND		ND		ND		ND
Carbon tetrachloride	56-23-5	CT	0.6	ND	ND		ND		ND		ND		ND
Chlorobenzene	108-90-7	СВ	1.7	ND	ND		ND		ND		ND		ND
Chloroethane	75-00-3	CE	1.9	ND	ND		ND		ND		ND		ND
2-Chloroethyl vinyl ether	110-75-8	2-CVE		ND	ND		ND		ND		ND		ND
Chloroform	67-66-3	Chloroform	0.3	ND	ND		ND		ND		ND		ND
Chloromethane	74-87-3	CM		ND	ND		ND		ND		ND		ND
Dibromochloromethane	124-48-1	DBCM		ND	ND		ND		ND		ND		ND
1,2-Dichlorobenzene	95-50-1	1,2-DCB		ND	ND		ND		ND		ND		ND
1,3-Dichlorobenzene	541-73-1	1,3-DCB		ND	ND		ND		ND		ND		ND
1,4-Dichlorobenzene	106-46-7	1,4-DCB		ND	ND		ND		ND		ND		ND
Dichlorodifluoromethane	75-71-8	DCDFM		ND	ND		ND		ND		ND		ND
1,1-Dichloroethane	75-34-3	1,1-DCA	0.2	ND	ND		ND		ND		ND		ND
1,2-Dichloroethane	107-06-2	1,2-DCA	0.1	ND	ND		ND		ND		ND		ND
1,1-Dichloroethylene	75-35-4	1,1-DCE	0.4	ND	ND		ND		ND		ND		ND
cis-1,2-Dichloroethylene	156-59-2	c-1,2-DCE		ND	254		31.6		56.4		76.7		42.9
trans-1,2-Dichloroethylene	156-60-5	t-1,2-DCE	0.3	ND	2.01	J	0.342	J	0.999		0.613		ND
1,2-Dichloropropane	78-87-5	1,2-DCP		ND	ND		ND		ND		ND		ND
cis-1,3-Dichloropropene	10061-01-5	c-1,3-DCP		ND	ND		ND		ND		ND		ND
trans-1,3-Dichloropropene	10061-02-6	t-1,3-DCP		ND	ND		ND		ND		ND		ND
Ethylbenzene	100-41-4	EB	5.5	ND	ND		ND		ND		ND		ND
Methylene chloride	75-09-2	MC	0.1	ND	ND		ND		ND		ND		ND
1,1,2,2-Tetrachloroethane	79-34-5	1,1,2,2-PCA	0.6	ND	ND		ND		ND		ND		ND
Tetrachloroethylene (PCE)	127-18-4	PCE	1.4	ND	5.56	J	0.122	J	ND		ND		32.4
Toluene	108-88-3	Toluene	1.5	ND	ND		ND		ND		ND		ND
1,1,1-Trichloroethane	71-55-6	1,1,1-TCA	0.8	ND	ND		ND		ND		ND		ND
1,1,2-Trichloroethane	79-00-5	1,1,2-TCA	6	ND	ND		ND		ND		ND		ND
Trichloroethylene (TCE)	79-01-6	TCE	0.7	0.0172	1980		2.27		0.46	J	0.178	J	6990
Trichlorofluoromethane	75-69-4	TCFM		ND	ND		ND		ND		ND		ND
Vinyl chloride	75-01-4	VC	0.2	ND	2.18	J	3.26		9.06		15.7		ND
Xylenes (total)	1330-20-7	Xylene	1.2	ND	ND		0.0836	J	ND		ND		3.31 J
Total Targeted VOCs				0.0172	2243.75		37.6776		66.919		93.191		7068.61
Total TICs			500	NA	NA		ND		ND		ND		ND
Total VOCs				0.02	2243.75		37.68		66.92		93.19		7068.61

Table II Base Neutrals (BNs) in Soil CPB Site - Edgemere, NY

					TP-10 8-8.5	TP-6 8-8.5	TP-7 8-8.5	TP-7A 8-8.5	TP-5 9-9.5	TP-5 11.5-12	TP-5 10-10.5	TP-4 9.5-10		TP-11 11.5-12	
				Date Sampled:	04/28/09	04/28/09	04/28/09	04/28/09	04/29/09	04/29/09	04/29/09	04/29/09	04/30/09	04/30/09	04/30/09
			La	b Sample No.:		JA17566-4	JA17566-5	JA17566-6	JA17769-1	JA17769-2	JA17769-3	JA17769-4	JA17769-5	JA17769-6	JA17769-8
				Laboratory:	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest
BNs (ppm)	Cas No.	Abbrv.	RSCO	sco											
Acenaphthene	83-32-9	ACP	100	20	ND	0.0845	ND	ND	0.604	0.925	4.28	ND	ND	ND	0.487
Acenaphthylene	208-96-8	ACPL	100	100	ND	ND	ND	ND	0.0825	ND	ND	ND	ND	ND	ND
Anthracene	120-12-7	ANT	100	100	ND	0.0506 J	ND	ND	1.71	0.824	2.3	ND	ND	ND	0.367
Benzidine	92-87-5	BZd			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	56-55-3	B(a)a	1	1	ND	ND	ND	ND	2.33	0.433	0.771	ND	ND	ND	0.104
Benzo(a)pyrene	50-32-8	B(a)p	1	1	ND	ND	ND	ND	1.93	0.408	0.246	ND	ND	ND	ND
Benzo(b)fluoranthene	205-99-2	B(b)f	1	1	ND	ND	ND	ND	1.73	0.556	0.263	ND	ND	ND	0.069
Benzo(g,h,i)perylene	191-24-2	B(g,h,j)p	100	100	ND	ND	ND	ND	1.09	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	207-08-9	B(k)f	1	0.8	ND	ND	ND	ND	0.895	ND	ND	ND	ND	ND	0.0254 J
4-Bromophenyl phenyl ether	101-55-3	4-BPE			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	85-68-7	BBP			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	91-58-7	2-CNP			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	106-47-8	4-CLA			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	218-01-9	Chrysene	1	1	ND	ND	ND	ND	2.19	0.589	1.39	ND	ND	ND	0.258
bis(2-Chloroethoxy)methane	111-91-1	b(2-C)m			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	111-44-4	b(2-C)e			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	108-60-1	b(2-CIP)e			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	7005-72-3	4-CPPE			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	1,2-DCB			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	122-66-7	1,2 DPH			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1	3,3-DCB	17	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7	1,4-DCB	9.8	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	121-14-2	2,4-DNT			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	606-20-2	2,6-DNT			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	91-94-1	3,3-DCBd			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	53-70-3	D(a,h)a	0.33	0.33	ND	ND	ND	ND	0.389	0.0924	ND	ND	ND	ND	ND
Di-n-butyl phthalate	84-74-2	DBP			ND	ND	ND	ND	ND	ND	ND	ND	ND	0.181	0.122
Di-n-octyl phthalate	117-84-0	DOP			ND	0.118 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	84-66-2	DEP			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	131-11-3	DMP			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	117-81-7	b(2-EH)p			ND	ND	ND	ND	0.106	0.613	ND	ND	ND	ND	ND
Fluoranthene	206-44-0	FluA	100	100	ND	ND	ND	ND	5.46	0.82	0.667	ND	ND	ND	0.182
Fluorene	86-73-7	Fluorene	100	30	ND	0.115	ND	ND	1	1.06	4.97	ND	ND	ND	0.612
Hexachlorobenzene	118-74-1	HCB	0.33	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3	HCBD			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	77-47-4	HCCPD			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	67-72-1	HCE			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	193-39-5	I(1,2,3-cd)p	0.5	0.5	ND	ND	ND	ND	0.968	0.202	ND	ND	ND	ND	ND
Isophorone	78-59-1	IP			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	Nap	100	12	ND	ND	ND	ND	0.116	0.84	ND	ND	ND	ND	ND
Nitrobenzene	98-95-3	NB			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	62-75-9	NDMA			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	621-64-7	NDPA			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	86-30-6	NDPhA			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	85-01-8	PhA	100	100	ND	0.213	ND	ND	6.98	3.78	13.2	ND	ND	ND	0.252
Pyrene	129-00-0	Pyrene	100	100	ND	0.0498 J	ND	ND	3.95	1.06	2.84	ND	ND	ND	0.299
1,2,4-Trichlorobenzene	120-82-1	1,2,4-TCB			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Targeted BNs					ND	0.6309	ND	ND	31.5305	12.2024	30.927	ND	ND	0.181	2.7774
Total TICs					2.85 J	10.82 J	0.55	ND	16.52	103.3	J 56 J	0.2	J ND	0.57 J	57.3 J
Total BNs					2.85	11.4509	0.55	ND	48.0505	115.5024	86.927	0.2	ND	0.751	60.0774
Total PHC					26.9	262	60.5	NA	823	3890	17900	ND	18	ND	3460
E	•	•		•											

Table III Multi-Zine Ground Water Sample Results Volatile Organic Compounds CPB Site - Edgemere, NY

		TRC Raviv Sample No Date Sample Lab Sample No	d: 05/07/09 .: JA18286-1	SB-18 GW 20-24 05/07/09 JA18286-2	SB-18A GW 05/07/09 JA18286-3	SB-11 GW 25-29 05/07/09 JA18286-4	SB-11 GW 33-37 05/07/09 JA18286-5	SB-21 GW 36-40 05/06/09 JA18141-1	SB-21 GW 24-28 05/06/09 JA18141-2	SB-5 GW 32-36 05/06/09 JA18141-3	SB-5 GW 23-27 05/06/09 JA18141-4	TB-050709 05/07/09 JA18286-10
W00 (1)	0.00.	Laborator		Accutest	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest	Accutest
VOCs (ppb)	CAS No.	Abbry. GWQ:							1			
Acrolein	107-02-8		ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	107-13-1		ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	71-43-2	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	0.59 J	ND
Bromodichloromethane	75-27-4	BDCM -		ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	75-25-2	Bromoform -	110	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	74-83-9		ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	56-23-5		ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7		ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3		ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether		2-CVE -		ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	CHIOIOIOIIII	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	74-87-3	CM -	110	0.42 J	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	124-48-1		ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1		ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1		ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	75-71-8		ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3		0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	1,2-DCA 0.		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	75-35-4		ND ND	ND	ND	5	J ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethylene	156-59-2		2.9	1.7	2.9	2000	1.4	ND	0.29	J ND	18.5	ND
trans-1,2-Dichloroethyler			ND ND	ND	ND	13.3	ND	ND	ND	ND	2.7	ND
1,2-Dichloropropane	78-87-5	1,2-DCP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	10061-01-	5 c-1,3-DCP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloroproper	ne 10061-02-6	6 t-1,3-DCP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	EB .	ND ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Methylene chloride	75-09-2	MC :	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethan	e 79-34-5	1,1,2,2-PCA	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene (PC	E 127-18-4	PCE	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	108-88-3	Toluene	ND ND	ND	ND	ND	ND	ND	ND	ND	0.82 J	ND
1,1,1-Trichloroethane	71-55-6		ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.1.2-Trichloroethane	79-00-5	1.1.2-TCA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene (TCE)	79-01-6	TCE .	ND ND	ND	ND	710	0.58	J ND	ND	ND	7.9	ND
Trichlorofluoromethane	75-69-4		i ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	75-01-4		0.71	1 J	0.65	J 238	ND	ND	ND	ND	9.1	ND
Xylenes (total)	1330-20-7		ND ND	ND ND	ND	ND ND	ND	ND	110	ND	7.2	ND ND
Total Targeted VOCs	.000 20 7	7,9,0,10	145	145	IND	IND	IND.	NB	0.3	145	49.7	IND .
Total TICs	1	50	4.5	0	7.6	1	0	0	0.3	0	49.7	0
Total TICS	1	50	4.5	0	7.0	0	0	0	0.29	0	49.7	0
TOTAL VOCS									0.29		49.7	



SAMPLER TYPE/DIA.: Macrocore/2"

Environmental Corporation SOIL BORING LOG

BORING NUMBER

SB-1

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

LOCATION: Edgemere, New York PROJECT NAME: CPB

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

DEPTH TO WATER: 7.5 Feet

BORING METHOD: Direct Push TOTAL DEPTH DRILLED: 20 Feet DATE DRILLED: 05/06/09

DRILLER: L. Reiss

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0 _						Unpaved.
_ 1 _			ND ND ND			0 to 2' - FILL: Brown medium to fine SAND, little concrete, brick, gravel, & asphalt, moist
_ 2 _		40	ND ND			2 to 4' - FILL: Light brown medium to fine SAND, moist
_ 3 _		48	ND ND			
_ ⁴ _			ND - -			
6 _			ND ND			5 to 7.5' - FILL: Light brown medium to fine SAND, moist
7 _			ND ND ND		_	7.5 to 9' - FILL: Black gravel-sized material (slag-like or clinker-
_ 8 _		54	ND ND		ľ	like), wet
_ 9 _			ND ND			9 to 9.5' - Gray medium to fine SAND, wet
_ ¹⁰ _			- ND ND			10 to 11' - Gray medium to fine SAND, wet
12			ND ND			11 to 12.5' - Gray coarse to medium SAND, some coarse to fine rounded gravel, wet
13		60	ND 9.8 7.2			12.5 to 14' - Gray medium to fine SAND, wet
14			1.2 ND			14 to 15' - Gray CLAY, damp
_ 15 _			ND			End of Boring at 15 feet below grade
_ 16 _						
_ 17 _						
18						
19						
20						TRC Job No. 159807

Environmental Corporation SOIL BORING LOG

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

BORING NUMBER

SB-2

PROJECT NAME: CPB **LOCATION:** Edgemere, New York

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

DATE DRILLED: 05/06/09

SAMPLER TYPE/DIA.: Macrocore/2"	DEPTH TO WATER: 7.5 Feet	DRILLER: L. Reiss
BORING METHOD: Direct Push	TOTAL DEPTH DRILLED: 20 Feet	LOGGED BY: S. McCray

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
_			ND			0 to 1.5' - FILL: Brown medium to fine SAND, little concrete, brick,
_ 1 _			ND			gravel, & asphalt, moist
			ND			
_ 2 _			ND			1.5 to 2.5' - FILL: CONCRETE
		48	ND			
_ 3 _			ND			2.5 to 4' - FILL: Light brown medium to fine SAND, moist
			ND			
_ 4 _			ND			
-			-			
_ 5 _						5 to 7.5' - FILL: Light brown medium to fine SAND, moist
6			ND ND			10 to 7.5 TILL. Light brown mediant to line o/MVD, moist
_ 0 _			ND			
7			ND			
- ' -			ND		_	7.5 to 9' - FILL: Black gravel-sized material (slag-like or clinker-
8		54	ND		ľ	like), wet
_			0.9			
9			0.7			9 to 9.5' - Gray medium to fine SAND, wet
			2.2			
10			-			
			ND			10 to 14.5' - Gray medium to fine SAND, wet
_ 11 _			ND			
			ND			
12			ND			
		54	ND			
13			ND			
4.4			ND			
_ 14 _			7.0 0.2			
15			-			
_ '3 _			0.8			15 to 17.5' - Gray medium to fine SAND, wet
16			0.7			
			0.3			
17			ND			
<u> </u>		26	ND			17.5 to 18' - Gray CLAY, damp
18		36	ND			
_			-			
19	<u> </u>		-			
_			-			
20			-		<u></u>	End of Boring at 20 feet below grade

TRC **Environmental Corporation**

SOIL BORING LOG

SB-3

BORING NUMBER

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

LOCATION: Edgemere, New York PROJECT NAME: CPB

PROJECT NO.: 159807 CONTRACTOR: Zebra Environmental

DEPTH TO WATER: 7 Feet

DATE DRILLED: 05/06/09

DRILLER: L. Reiss

LOGGED BY: S. McCray

SAMPLER TYPE/DIA.: Macrocore/2"

BORING METHOD: Direct Push TOTAL DEPTH DRILLED: 20 Feet

DEPTH **BLOW** UNIFIED RECOVERY PID SAMPLE FROM COUNT LITHOLOGIC CLASSIFICATION AND COMMENTS SURFACE **DESIGNATION** (INCHES) (ppm) PER 6 IN. (FEET) Unpaved. 0 0 to 3' - FILL: Brown medium to fine SAND, little concrete, brick, ND gravel, & asphalt, moist ND ND ND 2 ND 42 3 to 3.5' - FILL: Light brown medium to fine SAND, moist ND 3 ND 4 5 5 to 8' - FILL: Light brown medium to fine SAND, wet at 7 feet ND below grade ND 6 ND ND 7 8 to 8.5' - Gray medium to fine rounded GRAVEL, some coarse to ND 42 fine sand, wet ND 8 ND 9 10 10 to 12' - Gray medium to fine rounded GRAVEL, some coarse to ND fine sand, wet ND 11 ND ND 12 ND 30 12 to 13' - Gray medium to fine SAND, wet 13 14 15 15 to 15.5' - Gray medium to fine SAND, some silt, wet ND ND 15.5 to 16' - PEAT 16 ND 16 to 17.5' - Gray medium to fine SAND, wet ND 17 17.5 to 18' - Light brown coarse to fie SAND, some rounded gravel, ND 48 wet ND 18 ND ND 19 End of Boring at 20 feet below grade (Boring Grouted)

TPC Joh No. 15080

Environmental Corporation SOIL BORING LOG

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

BORING NUMBER

SB-4

LOCATION: Edgemere, New York

PROJECT NO.: 159807

PROJECT NAME: CPB

CONTRACTOR: Zebra Environmental

SAMPLER TYPE/DIA.: Macrocore/2"

DEPTH TO WATER: 7.5 Feet

TOTAL DEPTH DRILLED: 20 Feet

BORING METHOD: Direct Push

DATE DRILLED: 05/06/09

DRILLER: L. Reiss

DEPTING PER 6 IN. PID (INCHES) PID PID			<u> </u>		li .	<u> </u>
ND	FROM SURFACE	COUNT			UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
1	0					Unpaved.
1				ND		0 to 2.5' - FILL: Brown medium to fine SAND, little concrete, brick,
2	_ 1 _			ND		gravel, & asphalt, moist
3						
2.5 to 3.5' - FILL: Light brown medium to fine SAND, moist 2.5 to 3.5' - FILL: Light brown medium to fine SAND, wet at 7.5 feet below grade 5 to 8.5' - FILL: Light brown medium to fine SAND, wet at 7.5 feet below grade 7	_ 2 _					
ND	_		42			2.5 to 2.5! FILL Limbt brown modium to fine CAND model
4	3 –					2.5 to 3.5 - FILL: Light brown medium to line SAND, moist
5	1			-		
ND	├					
ND	5			_		
7				ND		
T	6					below grade
ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND				ND		
8	7					
ND ND ND ND ND			42		•	
9	8 _					
	0			ND		
11	F 9 -			-		
11	10			-		
12	'			ND		10 to 12' - FILL: Light brown medium to fine SAND, wet
12	11			ND		
13				ND		
13	12					
ND			48			
	_ 13 _					_
15	4.4					12.5 to 14 - Gray medium to line SAND, wet
15	□ 14 □					
0.5 0.5 0.3 15 to 16.5' - Gray medium to fine SAND, wet 17 0.2 16.5 to 17' - Gray CLAY, damp 24	15					
	'			0.5		15 to 16.5' - Gray medium to fine SAND, wet
0.3 0.2 16.5 to 17' - Gray CLAY, damp	16					
24				0.3		
	17			0.2		16.5 to 17' - Gray CLAY, damp
			24	-		
19	_ 18 _			-		
	4.0			-		
	L 19 −			-		
20 End of Boring at 20 feet below grade	20			-		End of Boring at 20 feet below grade

Environmental Corporation SOIL BORING LOG

SB-5

BORING NUMBER

PROJECT NAME: CPB

LOCATION: Edgemere, New York

(Page 1 of 2)

PROJECT NO.: 159807

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

CONTRACTOR: Zebra Environmental

DATE DRILLED: 05/06/09

SAMPLER TYPE/DIA.: Macrocore/2"

DEPTH TO WATER: 6.5 Feet

DRILLER: L. Reiss

BORING METHOD: Direct Push

TOTAL DEPTH DRILLED: 40 Feet

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
1 _			ND ND			0 to 1' - FILL: Brown medium to fine SAND, little fine rounded gravel, moist
_ 2 _		20	ND ND ND			1 to 3' - FILL: Light brown medium to fine SAND, trace coarse to fine rounded gravel, moist
3 _		36	ND -			
5			- - -			
6 _			ND ND ND		•	5 to 8.5' - FILL: Light brown medium to fine SAND, trace coarse to fine rounded gravel, wet at 6.5 feet below grade
7 _		42	ND ND			
8 —		42	0.6 ND -			
_ 10 _			-			10 to 11.5' - FILL: Light brown medium to fine SAND, trace coarse
_ 11 _			ND ND ND			to fine rounded gravel, wet at 6.5 feet below grade
_ 12 _		54	0.9 ND 0.6			11.5 to 14.5' - Gray medium to fine SAND, wet
_ 13 _ _ 14 _			0.6 ND 3.1			
15			0.4			15 to 18' - Gray medium to fine SAND, wet
_ 16 _			7.4 10.5 8.1			To to to oray modalit to line of the five
_ 17 _ 18		36	7.6 1.7 5.4			
_ 18 _			- -			
20			-			TRC Job No. 159807



Environmental Corporation

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

SOIL BORING LOG

BORING NUMBER

SB-5

(Page 2 of 2) DEPTH **BLOW** UNIFIED RECOVERY PID SAMPLE FROM COUNT LITHOLOGIC CLASSIFICATION AND COMMENTS SURFACE (INCHES) **DESIGNATION** (ppm) PER 6 IN. (FEET) 20 to 22' - Gray medium to fine SAND, wet 10.0 7.1 21 5.5 5.2 22 ND 22 to 22.5' - Gray CLAY, damp 30 SB-5 GW 23 23-27 24 25 25 to 25.75' - Gray CLAY, damp ND 25.75 to 26' - Gray coarse to medium SAND, some coarse ND 26 rounded gravel, wet ND ND 27 ND 26 to 27.5' - Gray SILT, and fine to very fine sand, trace shells, 1" 48 ND peat at base 28 ND 27.5 to 29' - Light gray medium to fine SAND, wet 29 ND 30 30 to 32' - Light gray medium to fine SAND, wet ND ND 31 ND ND SB-5 GW 32 32 to 33' - Orange-brown fine to very fine SAND, damp to wet ND 32-36 36 ND 33 34 35 35 to 35.75' - Orange-brown fine to very fine SAND, damp to wet ND ND 36 ND 35.75 to 36.75 - Dark greenish-gray fine to very fine SAND, trace ND 37 36.75 to 37 - Dark greenish-gray CLAY, damp 24 38 39 End of Boring at 40 feet below grade (Boring Grouted) 40

Environmental Corporation | SOIL BORING LOG

BORING NUMBER

SB-6

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

SAMPLER TYPE/DIA.: Macrocore/2"

BORING METHOD: Direct Push

LOCATION: Edgemere, New York PROJECT NAME: CPB

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

DATE DRILLED: 05/04/09

DEPTH TO WATER: 6 Feet DRILLER: C. Green

LOGGED BY: S. McCray TOTAL DEPTH DRILLED: 20 Feet

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
			3.5			0 to 2.5' - FILL: Brown medium to fine SAND, some silt, trace
_ 1 _			2.3			brick, concrete & asphalt, moist
2			0.7 1.3			
			-			
3		30	-			
			-			
_ 4 _			-			
_			-			
_ 5 _			1.8			5 to 7' - FILL: Brown medium to fine SAND, some silt, trace brick,
6			12.9		•	concrete & asphalt, wet at 6.0 feet below grade, petroleum-like
			0.9			odor 6.0-6.5 feet below grade
_ 7 _			-			
		24	-			
_ 8 _			-			
9			_			
			-			
_ 10 _			-			
			0.9			10 to 13' - Gray medium to fine SAND, wet, slight petroleum-like odor
_ 11 _			0.8			
12			0.8			
		36	0.4			12.5 to 14' - Light gray medium to fine SAND, wet, solvent-like
13		30	0.7			odor
			-			
_ 14 _			-			
15			-			
'			1.2			15 to 15.5' - Gray CLAY, damp
16			1.5			15.5 to 16.5' - Light brown medium to fine SAND, wet
			1.3			
_ 17 _			-			
18		18	_			
'0 -			-			
19			-			
			-			End of Boring at 20 feet below grade
20			-			(Boring Grouted) TRC Job No. 159807

Environmental Corporation | SOIL BORING LOG

BORING NUMBER

SB-7

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

LOCATION: Edgemere, New York PROJECT NAME: CPB

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

SAMPLER TYPE/DIA.: Macrocore/2" **DEPTH TO WATER:** 7 Feet

BORING METHOD: Direct Push TOTAL DEPTH DRILLED: 20 Feet DATE DRILLED: 05/04/09

DRILLER: C. Green

BOK	ING METHOD.	Direct F usin		TOTAL DEPT	וואט ו	LED. 201 66t	LOGGED BT. G. McCray
DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFIC	CATION AND COMMENTS
						Unpaved.	
_ 0 _			ND			0 to 3' - FILL: Brown medium to	fine SAND, trace concrete, brick
1			ND			gravel, & asphalt, moist	3,,
<u> </u>			ND				
2			ND				
		36	ND				
_ 3 _			ND				
4			-				
├			_				
5			-				
			ND			5 to 8.5' - FILL: Brown medium to	
_ 6 _			ND			brick, gravel, & asphalt, wet at 7	feet below grade
			ND				
_ 7 _			ND ND		•		
8		42 I	ND				
├			ND				
9			ND				
			-				
_ 10 _			-			10 to 10.5' - Gray fine to very fine	SCAND wot
11			ND ND			To to 10.5 - Gray line to very line	SAND, wet
_ 11 _			ND			10.5 to 11.5' - Light gray medium	to fine SAND, some rounded
12			-			gravel	to line SAND, some rounded
		18	-				acro core sleeve from 10-15 foot
_ 13 _			-				erval
4.4			-				
_ 14 _			-				
15			_				
			ND			15 to 15.5' - Gray medium to fine	e SAND, wet
16			ND			15.5 to 17' - Gray CLAY, damp	
			ND				
_ 17 _			ND ND			17 to 17.5' Gray medium to fine S	SAND some clay little silt wet
18		30	ND			Tr. to 17.5 Gray medium to line s	orive, some day, little siit, wet
'0 -			-				
19			-				
			-				
20			-			End of Boring at 2	20 feet below grade

Environmental Corporation | SOIL BORING LOG 57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

SB-8

BORING NUMBER

PROJECT NAME: CPB

LOCATION: Edgemere, New York

PROJECT NO.: 159807

CONTRACTOR: Zebra Environmental

SAMPLER TYPE/DIA.: Macrocore/2" BORING METHOD: Direct Push

DEPTH TO WATER: 6 Feet

TOTAL DEPTH DRILLED: 15 Feet

DATE DRILLED: 05/04/09

DRILLER: C. Green

	On-	0	ır.			
DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
			0.3			0 to 2.5' - FILL: Brown medium to fine SAND, little gravel, trace
_ 1 _			1.6			asphalt, damp
			1.0			
2			0.7			
		32	0.3			
3		32	-			
			-			
4			-			
		1	_			
5		1	-			
			1.0			5 to 5.75' - FILL: Brown medium to fine SAND, little gravel, trace
6			0.9		▼	
			0.4			
7		1	0.7			
<u> </u>			0.8			5.75 to 8.5' - Gray medium to fine SAND, trace rounded gravel,
8		42	1.3			trace organics (roots), wet, slight sulfurous odor
⊢		1	0.2			
9			0.2			
⊢			_			
10			_			
<u> </u>			1.8			10 to 13' - Gray medium to fine SAND, trace rounded gravel, trace
11			1.6			organics (roots), wet, slight sulfurous odor
├ '' -			1.4			
40			7.8			
_ 12 _		-	17.2			13 to 15' - Gray CLAY
40		60	42.4			Total of Gray Obiti
_ 13 _		1	76.8	CD 0 40 40 5		
4.4		1		SB-8 13-13.5		
_ 14 _		-	53.0			
4.5	-	-	21.5			
_ 15 _			-		-	End of Boring at 15 feet below grade
4.0	-	-				End of boiling at 15 feet below grade
_ 16 _		-				
		-				
_ 17 _		-				
		_				
18						
19						
20]				TRC Joh No. 159807

Environmental Corporation | SOIL BORING LOG

BORING NUMBER

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

SB-9

PROJECT NAME: CPB

LOCATION: Edgemere, New York

PROJECT NO.: 159807

CONTRACTOR: Zebra Environmental

SAMPLER TYPE/DIA.: Macrocore/2" BORING METHOD: Direct Push

DEPTH TO WATER: 7 Feet

TOTAL DEPTH DRILLED: 20 Feet

DATE DRILLED: 05/06/09

DRILLER: L. Reiss

	1						
F SU	EPTH ROM RFACE EET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
	0						Unpaved.
F	0 _			ND			0 to 3' - FILL: Brown medium to fine SAND, little concrete, brick,
	1		42	ND			gravel, & asphalt, moist
H	' –			ND			
	2			ND			
				ND			
	3			0.4			
				0.3			
	4			-			
				-			
	5 _			-			
				0.5			5 to 8.5' - FILL: Brown medium to fine SAND, little concrete, brick, gravel, & asphalt, wet at 7 feet below grade, petroleum-like sheen and odor 8-8.5 feet below grade
L	6 _		42	0.5			
				0.6			
_	7			0.5			
	_			0.2			
L	8 _			ND			
	•			-			
F	9 _			-			
	10			-			
H	10 _			3.2		\vdash	10 to 13.5' - Gray medium to fine SAND, wet, petroleum-like sheen
	11			3.9			and odor 10-13 feet below grade, petroleum-like residual 10-12 feet below grade
	`` =		3	39.1			
	12			4.9			
	_			1.9			
	13		42	1.5			
				2.5			
L	14			-			
				-			
L	15 _		1 1	-		\$	15 to 16.5' - Gray medium to fine SAND, wet, petroleum-like sheen and odor, thin clay lense at 15.5 feet below grade 16.5' - ORGANICS (fine roots), and clay, damp
				20			
L	16 _			105			
				1.5			
H	17 _			-			
	40			-			
H	18 _			-			
	10			-			
H	19 _			-			
	20						End of Boring at 20 feet below grade

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

Environmental Corporation SOIL BORING LOG

BORING NUMBER

SB-10

PROJECT NAME: CPB

LOCATION: Edgemere, New York

PROJECT NO.: 159807

CONTRACTOR: Zebra Environmental

SAMPLER TYPE/DIA.: Macrocore/2"

DEPTH TO WATER: 6.5 Feet

BORING METHOD: Direct Push

TOTAL DEPTH DRILLED: 15 Feet

DATE DRILLED: 05/04/09

DRILLER: C. Green

DEPTH FROM SURFACI (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
_ 1		42	ND ND			0 to 2' - FILL: Brown medium to fine SAND, trace concrete, brick, gravel, & asphalt, moist
_ 2			ND ND ND			2 to 3.5' - FILL: CONCRETE
_ 3			ND ND			
_ 4 5			- - -			
_ 6			ND ND			5 to 6.5' - FILL: Brown medium to fine SAND, trace concrete, brick, gravel, & asphalt, moist
_ 7		24	ND 11.3			6.5 to 7' - Gray medium to fine SAND, wet, petroleum-like residual and odor
_ 8			-			
_ 9			-			
_ 10 11			- ND ND			10 to 12' - Gray medium to fine SAND, wet, slight petroleum-like odor
12		30	ND ND			12 to 13' - Gray medium to fine SAND, little rounded gravel, wet
_ 13			ND - -			13 to 13.5' - Gray CLAY, damp
_ 14			-			
_ 15			-			End of Boring at 15 feet below grade
_ 16						
_ 17 18						
18						
20						TRC Job No. 159807



Environmental Corporation SOIL BORING LOG

BORING NUMBER

SB-11

PROJECT NAME: CPB

LOCATION: Edgemere, New York

(Page 1 of 2)

PROJECT NO.: 159807

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

CONTRACTOR: Zebra Environmental

DATE DRILLED: 05/07/09

SAMPLER TYPE/DIA.: Macrocore/2"

DEPTH TO WATER: 6.5 Feet

DRILLER: L. Reiss

BORING METHOD: Direct Push

TOTAL DEPTH DRILLED: 40 Feet

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
1			ND ND			0 to 3' - FILL: Brown medium to fine SAND, little silt, trace brick, concrete, asphalt, & gravel, moist
2			ND ND			
_ 3 _		36	ND ND			
4 _			-			
_ 5 _			-			5 to 7' - FILL: Brown medium to fine SAND, little silt, trace brick,
_ 6 _			ND ND ND		_	concrete, asphalt, & gravel, moist
7 _		36	ND 5.6			7 to 8' - Gray medium to fine SAND, wet, petroleum-like sheen, odor, and residual
_ 8 _			5.2			
9 _			-			
_ 10 _			- ND			10 to 13' - Gray medium to fine SAND, little coarse to fine gravel, wet, petroleum-like odor, sheen, and residual 10-12 feet below
11 _		36	ND 8.2 ND			grade
13			ND ND			
14			-			
15			-			
16		36	ND ND			15 to 18' - Gray medium to fine SAND, solvent-like odor 18 feet
_ 17 _			ND ND			
_ 18 _			ND 90.0			
_ 19 _			-			
20			-			TRC Job No. 159807



BORING NUMBER

SB-11 (Page 2 of 2)

		0				(Page 2 of 2)
DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
			46.0	SB-11 20-20.5		20 to 22.5' - Gray CLAY, damp
21		1	42.0			,
├ ⁻			38.6			
22			8.6			
├ ~ →			14.8			
		30	7.6			
_ 23 _		-	7.0			
		-	-			
_ 24 _		1	-			
			-			
25			-			
			3.2	SB-11 GW		25 to 26' - PEAT, and gray clay, damp
26			2.6	25-29		
			5.0			
27			6.0			
Г		48	7.8			26 to 29' - Light brown coarse to fine SAND, some coarse to fine
28		40	9.2			rounded gravel, wet
			10.0			
29			12.2			
┟┈┤			-			
30			_			
┟┉┧			ND			30 to 33' - Light brown coarse to fine SAND, some coarse to fine
31		1	ND			rounded gravel, wet
⊩ ′′			ND			
32		-	ND			
32			ND			
		48		00 44 014		
33		-	ND	SB-11 GW		33 to 34' - Orange-brown fine to very fine SAND, little silt, damp to
			ND	33-37		wet
_ 34 _		1	ND			wet
			-			
35			-			
			ND			35 to 36.5' - Orange-brown fine to very fine SAND, little silt, damp
36			ND			to wet
			ND			
37]	ND			36.5 to 37.25' - Green-gray very fine SAND, trace shells, damp to
7		36	ND			wet
38		30	ND			37.25 to 38' - Green-gray CLAY, damp
┌ ┤		1	-			
39			_			
		1	-			End of Boring at 40 feet below grade
40		1	_			(Boring Grouted)

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

BORING NUMBER

SB-12

LOCATION: Edgemere, New York PROJECT NAME: CPB

DEPTH TO WATER: 6 Feet

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

DATE DRILLED: 05/04/09

DRILLER: C. Green

LOGGED BY: S. McCray

SAMPLER TYPE/DIA.: Macrocore/2"

BORING METHOD: Direct Push TOTAL DEPTH DRILLED: 20 Feet

	i -	ır -	ı		Ú .	
DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
_ 0 _						Unpaved.
4			ND ND			0 to 3' - FILL: Brown medium to fine SAND, some silt, trace gravel, brick, concrete & asphalt, moist
_ 1 _			ND			Silving controlled a approach, motor
2			4.5			
			ND			
3		36	ND			
			-			
4			-			
			-			
_ 5 _			-			
			ND			5 to 6' - FILL: Brown medium to fine SAND, some silt, trace gravel,
_ 6 _			ND		•	brick, concrete & asphalt, moist
_		42	37.9			6 to 8.5' - Gray medium to fine SAND, wet, petroleum-like odor and stains, product present within saturated sand
7 -			63.2 42.8			Stains, product procent within saturated sand
8			59.8			
⊢ ° −			63.1			
9			-			
			_			
10			-			
			22.3			10 to 13.5' - Gray fine to very fine SAND, wet, petroleum-like odor
11			17.9			and sheen
			5.1			
12			8.4			
		42	7.0			
13			5.0			
1.4			2.8			
_ 14 _		-	_			
15			_			
├ '' −			ND			15 to 16' - Gray fine to very fine SAND, wet, petroleum-like odor
16		1	ND			
		1	ND			16 to 17' - Gray CLAY, damp, slight petroleum-like odor
17			ND			
		24	-			
18			-			
			-			
19			-			
			-			End of Paring at 20 fact below grade
20			-			End of Boring at 20 feet below grade

SB-13

BORING NUMBER

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

LOCATION: Edgemere, New York PROJECT NAME: CPB

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

DATE DRILLED: 05/04/09

DRILLER: C. Green

LOGGED BY: S. McCray

SAMPLER TYPE/DIA.: Macrocore/2" **DEPTH TO WATER:** 7 Feet

BORING METHOD: Direct Push TOTAL DEPTH DRILLED: 15 Feet

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
			19.2			0 to 1.0' - FILL: Brown SILT, and medium to fine sand, trace concrete & asphalt, moist
			-			. ,
_ 2 _		40	-			
_ 3 _		12	-			
4			-			
5			-			
			9.0 28.2			5 to 7' - FILL: Brown SILT, and medium to fine sand, trace concrete & asphalt, moist
6 _			96.8			
7 –		00	141 -		•	7 to 8' - Dark gray medium to fine SAND, with thin clay lenses, wet,
8 _		36	-			slight solvent-like odor in association with clay lenses
9 _			-			
10			-			
11			3602 1902	SB-13 10-10.5		10 to 11' - Dark gray medium to fine SAND, wet, solvent-like odor
			2630	SB-13 11-11.5		
_ 12 _		54	467 85.0			11 to 14.5' - Gray CLAY
_ 13 _		34	439 174			
_ 14 _			340			
15			-			
16						End of Boring at 15 feet below grade
_ 17 _						
_ 18 _						
_ 19 _						
20						TRC Job No. 159807



BORING NUMBER

SB-14

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

LOCATION: Edgemere, New York

(Page 1 of 2)

PROJECT NO.: 159807

PROJECT NAME: CPB

CONTRACTOR: Zebra Environmental

DATE DRILLED: 05/07/09

SAMPLER TYPE/DIA.: Macrocore/2"

DEPTH TO WATER: 6 Feet

DRILLER: L. Reiss

BORING METHOD: Direct Push

TOTAL DEPTH DRILLED: 35 Feet

0			UNIFIED	
				Unpaved.
1		ND		0 to 2' - FILL: Brown medium to fine SAND, trace gravel, brick,
		ND		concrete, & asphalt, moist
		ND		
2		ND		
	36	ND		
3		ND		
		-		
4 +		-		
5		-		
		ND		5 to 6' - FILL: Brown medium to fine SAND, trace gravel, brick,
6		ND	•	concrete, & asphalt, moist
		ND		6 to 8.5' - Gray medium to fine SAND, wet, petroleum-like sheen
7		49.8		and odor, petroleum-like product 6-7.5 feet below grade
	42	31.5		
8		48.2		
_		17.8		
9 —		5.0		
10		[
		49.9		10 to 15' - Gray medium to fine SAND, wet, petroleum-like
11		50.1		product 10-12 feet below grade, petroleum-like odor 12-13 feet
		64.4		below grade
12		15.9		
	60	7.8		
13		4.0		
 		ND		
14		ND		
15		ND ND		
F '3 +		ND		15 to 18.5' - Gray medium to fine SAND, wet
16		ND		, , , , , , , , , , , , , , , , , , ,
		ND		
17		ND		
	42	ND		
18		ND		
		ND		
19		-		
20		-		TRC Job No. 159807



Environmental Corporation

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

SOIL BORING LOG

BORING NUMBER

SB-14

(Page 2 of 2) DEPTH **BLOW** RECOVERY UNIFIED PID SAMPLE FROM COUNT LITHOLOGIC CLASSIFICATION AND COMMENTS SURFACE (INCHES) **DESIGNATION** (ppm) PER 6 IN. (FEET) 20 to 21.5' - Gray medium to fine SAND, wet ND ND 21 204 SB-14 21.5-22 21.5 to 22.5' - Gray CLAY, slight solvent-like odor, damp 52.0 22 ND 30 23 24 25 25 to 25.5' - Gray CLAY, damp ND 25.5 to 29' - Light brown medium to fine SAND, little coarse to fine ND 26 rounded gravel, wet ND ND 27 ND 48 ND 28 ND 29 ND 30 30 to 32.5' - Orange-brown fine to very fine SAND, damp to wet ND ND 31 ND ND 32 32.5 to 33.5' - Green-gray very fine SAND, trace shells, strong 2083 SB-14 32.5-33 42 solvent-like odor 564 33 33.5 - Green-gray CLAY, damp 2.3 34 35 End of Boring at 35 feet below grade (Boring Grouted) 36 37 38 39 40

BORING NUMBER

SB-15

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

SAMPLER TYPE/DIA.: Macrocore/2"

LOCATION: Edgemere, New York PROJECT NAME: CPB

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

DATE DRILLED: 05/04/09

DEPTH TO WATER: 6.0 Feet

DRILLER: C. Green

BORING METHOD: Direct Push TOTAL DEPTH DRILLED: 20 Feet

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
			ND			0 to 2.7' - FILL: Brown medium to fine SAND, some silt, trace
_ 1 _			ND			brick, concrete & asphalt, damp
			ND			
_ 2 _			ND			
		32	ND			
_ 3 _			-			
4			-			
_			-			
5			-			
_			16.4			5 to 5.5' - FILL: Brown medium to fine SAND, some silt, trace
6			51.9		•	brick, concrete & asphalt, damp
_			0.3			
_ 7 _			-			
		24	-			5.5 to 7' - Gray medium to fine SAND, wet at 6.0 feet below grade,
_ 8 _			-			petroleum-like stain at 6.0 feet
			-			
_ 9 _			-			
40			-			
_ 10 _			- ND			10 to 12.5' - Gray fine to very fine SAND, wet
11			ND			To to 12.6 Oray into to very line of the s, the
_ '' _			ND			
12			ND			
		20	ND			
13		30	-			
			-			
14			-			
			-			
15			-			15 to 16' Cray fing to york fing SAND wet
40			ND ND			15 to 16' - Gray fine to very fine SAND, wet
16			ND	SD 15 16 16 5		16 to 16.5' - Gray CLAY, damp
17			ND	SB-15 16-16.5		16.5 to 17.5' - Light brown medium to fine SAND, wet
_ '' _			ND			
18		30	-			
_			-			
19]	-			
			-			
20			-			End of Boring at 20 feet below grade

BORING NUMBER

SB-16

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

LOCATION: Edgemere, New York PROJECT NAME: CPB

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

DATE DRILLED: 05/04/09

SAMPLER TYPE/DIA.: Macrocore/2" **DEPTH TO WATER:** 6 Feet DRILLER: C. Green

BORING METHOD: Direct Push TOTAL DEPTH DRILLED: 15 Feet

		II 1		<u> </u>	ı —	
DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
⊢			ND			0 to 3' - FILL: Brown medium to fine SAND, some silt, trace
1			ND			concrete, brick, gravel, & asphalt, moist
			ND			
_ 2 _			ND			
		36	ND			
_ 3 _			ND			
4			-			
<u> </u>			_			
5			-			
			ND			5 to 5.5' - FILL: Brown medium to fine SAND, some silt, trace
_ 6 _			ND		•	concrete, brick, gravel, & asphalt, moist
			ND			5.5 to 6.25' - FILL: CONCRETE
7 -			36.4			6.25 to 7' - Gray medium to fine SAND, wet, petroleum-like sheen
8		24	-			
⊢ ° −			_			
9			-			
			-			
10			-			
			ND			10 to 11.5' - Gray medium to fine SAND
_ 11 _			ND ND			11.5 to 13' - Gray CLAY, some organics (meadow mat-like plant fibers), damp
12			3.3			
- '2 -			8.1			ilibers), damp
13		36	2.2			
			-			
14			-			
			-			
_ 15 _			-			End of Boring at 15 feet below grade
16						Lind of boiling at 10 leet below grade
'°						
17						
]				
18						
_ 19 _						
20						
20						TRC Job No. 159807

SAMPLER TYPE/DIA.: Macrocore/2"

BORING METHOD: Direct Push

SB-17

BORING NUMBER

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

LOCATION: Edgemere, New York PROJECT NAME: CPB

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

DATE DRILLED: 05/04/09

DEPTH TO WATER: 6.5 Feet DRILLER: C. Green

LOGGED BY: S. McCray TOTAL DEPTH DRILLED: 20 Feet

	·		1		1	
DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
						Hanavad
_ 0 _			83.6			Unpaved. 0 to 2.5' - FILL: Brown medium to fine SAND, and silt, trace brick,
1			8.6			concrete & asphalt, damp
├ ' -			3.6			
2			9.0			
		20	-			
3		30	-			
			-			
4			-			
			-			
_ 5 _			-			CA-71 FILL Provence division to fine CAND and all to an abid.
			9.4			5 to 7' - FILL: Brown medium to fine SAND, and silt, trace brick, concrete & asphalt, wet at 6.5 feet, petroleum-like sheen at 6.5
_ 6 _			6.4 97.4			feet
7			74.2		•	
├ ′ -			6.3			7 to 8' - Gray medium to fine SAND, wet, slight solvent-like odor
8		48	39.2			, , , ,
			87.2			
9			-	SB-17 8.5-9		8 to 9' - Gray CLAY, damp, slight solvent-like odor
			-			
_ 10 _			-			
			20.0			10 to 12.5' - Gray fine to very fine SAND, wet
_ 11 _			62.7			
40			28.4 32.4			
_ 12 _			71.2			12.5 to 14' - Light gray medium to fine SAND, wet, solvent-like
13		48	368			odor
⊢ '			154			
14			145			
			-			
15			-			
			1701	SB-17 15-15.5		15 to 16.5' - Gray CLAY, with thin interbeds of sand, solvent-like
_ 16 _			497			odor
			256			
_ 17 _			-			
10		18	-			
_ 18 _			_			
19			_			
<u></u>			-			
20						End of Boring at 20 feet below grade

SB-18

BORING NUMBER

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

LOCATION: Edgemere, New York

(Page 1 of 2)

PROJECT NO.: 159807

PROJECT NAME: CPB

CONTRACTOR: Zebra Environmental

DATE DRILLED: 05/07/09

SAMPLER TYPE/DIA.: Macrocore/2"

DEPTH TO WATER: 6 Feet

DRILLER: L. Reiss

BORING METHOD: Direct Push

TOTAL DEPTH DRILLED: 35 Feet

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0	_					Unpaved.
_			ND			0 to 2' - FILL: Brown medium to fine SAND, some silt, trace gravel,
1			ND			brick, concrete, & asphalt, moist
			ND			
_ 2 _			ND			
		24	-			
_ 3 _			-			
4			-			
F '-			_			
5			-			
6			ND DN		•	5 to 6' - FILL: Brown medium to fine SAND, some silt, trace gravel, brick, concrete, & asphalt, moist
			1.2		•	6 to 8' - Gray medium to fine SAND, wet, petroleum-like sheen and
7			22.7			odor 6-7 feet below grade
		36	1.0			
_ 8 _			0.9			
			-			
_ 9 _			-			
10			-			
			1.7			10 to 14.5' - Gray medium to fine SAND, wet,
11			2.0			
			2.7			
_ 12 _			2.6			
		60	3.5			
_ 13 _			8.0 5.4			
14			4.6			
' -			3.4			14.5 to 15' - Light brown medium to fine SAND, little medium to
15			3.2			fine rounded gravel, wet
			6.3			15 to 19' - Light brown medium to fine SAND, little medium to fine
_ 16 _			6.8			rounded gravel, wet
47			7.6 7.3			
_ 17 _			7.3 8.0			
18		48	10.6			
· · -			12.3			
19			14			
			-			
20			-			TRC Job No. 159807



BORING NUMBER

SB-18 (Page 2 of 2)

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
			13.8	SB-18 20-20-5		20 to 21' - Gray CLAY, damp
_ 21 _			23.7	SB-18 GW		
			24.8	20-24		21 to 21.5' - Gray-black organic CLAY, damp
_ 22 _			10.7 10.5			21.5 to 23' - Light brown medium to fine SAND, wet
23		36	4.2			21.0 to 20 Eight brown modium to line of the five
			5.0			
24			5.6			
			-			
25			-			
			0.7			25 to 29' - Light brown medium to fine SAND, wet
_ 26 _			0.7 0.8			
27			0.3	SB-18 GW		
		40	0.9	27-31		
28		48	1.0			
			1.2			
_ 29 _			1.3			
			-			
_ 30 _			-			30 to 31' - Orange-brown fine to very fine SAND, damp to wet
31			ND ND			oo to or orange brown into to vory line orang, damp to wot
" -			ND			31 to 33' - Green-gray very fine SAND, trace shells, damp to wet
32			ND			3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
		48	ND			
_ 33 _		40	ND			
			ND			33 to 34' - Green-gray CLAY, damp
_ 34 _			ND			
35			-			
33 -						End of Boring at 35 feet below grade
36						(Boring Grouted)
37						
_ 38 _						
39						
L 39 -						
40						

BORING NUMBER

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

SB-19

PROJECT NAME: CPB

LOCATION: Edgemere, New York

PROJECT NO.: 159807

CONTRACTOR: Zebra Environmental

SAMPLER TYPE/DIA.: Macrocore/2"

DEPTH TO WATER: 6 Feet

DRILLER: C. Green

BORING METHOD: Direct Push

TOTAL DEPTH DRILLED: 15 Feet

LOGGED BY: S. McCray

DATE DRILLED: 05/04/09

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
_ 1 _			ND ND			0 to 3' - FILL: Brown medium to fine SAND, some silt, trace concrete, brick, gravel, & asphalt, moist
_ 2 _		36	ND ND ND			
_ 3 _		30	ND -			
_ 4 _ 5 _						
6 _			ND DN		•	5 to 6' - FILL: Brown medium to fine SAND, some silt, trace concrete, brick, gravel, & asphalt, moist
_ 7 _			ND 19.9 39.6			6 to 8' - Gray medium to fine SAND, wet, free-phase petroleum-like product at 6.5 feet below grade
_ 8 _		36	17.8 -			
_ ⁹ _						
_ 11 _			ND ND			10 to 13' - Gray CLAY, damp
_ 12 _			ND ND ND			13 to 13.5' - Gray fine to very fine SAND, some silt, wet
_ 13 _		42	ND ND			
_ 14 _ 15						
_ 16 _						End of Boring at 15 feet below grade
_ 17 _						
_ 18 _						
_ 19 _ 20						TRC Job No. 159807

BORING NUMBER

SB-20

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

PROJECT NAME: CPB **LOCATION**: Edgemere, New York

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

DEPTH TO WATER: 5 Feet SAMPLER TYPE/DIA.: Macrocore/2"

BORING METHOD: Direct Push TOTAL DEPTH DRILLED: 15 Feet DATE DRILLED: 05/04/09

DRILLER: C. Green

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0 _			ND			Unpaved. 0 to 2.5' - FILL: Light brown medium to fine SAND, little silt, trace
1 _			ND ND			rounded gravel, wood, & concrete, moist
_ 2 _			ND ND			
_ 3 _		30	-			
4 _			-			
5 _			- ND		•	5 to 8' - Gray medium to fine SAND, trace rounded gravel, wet
6 _			ND ND			
7 –		36	ND ND			
8 _		30	ND -			
9 _			-			
_ 10 _			1.9			10 to 12' - Gray medium to fine SAND, trace rounded gravel, wet
_ 11 _			49.0 322			
_ 12 _		30	3321 807	SB-20 12-12.5		12 to 12.75' - Gray CLAY, solvent-like odor
_ 13 _			-			12.75 to 13' - Light brown medium to fine SAND, wet
_ 14 _			-			
_ 15 _			=			End of Boring at 15 feet below grade (Boring Grouted)
_ 16 _						(Borning Grouted)
_ 17 _						
18 <u></u>						
20						



BORING NUMBER

SB-21

PROJECT NAME: CPB

LOCATION: Edgemere, New York

PROJECT NO.: 159807

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

CONTRACTOR: Zebra Environmental

DATE DRILLED: 05/06/09

SAMPLER TYPE/DIA.: Macrocore/2"

DEPTH TO WATER: 6.5 Feet

DRILLER: L. Reiss

(Page 1 of 2)

BORING METHOD: Direct Push

TOTAL DEPTH DRILLED: 40 Feet

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
0 -			ND ND			0 to 0.25' - FILL: Brown SILT, some organics (roots), little medium to fine sand, moist
			ND ND			0.25 to 3.5' - FILL: Light brown medium to fine SAND, trace silt,
_ 2 _		42	ND			damp
_ 3 _			ND ND			
_ 4 _			-			
_ 5 _			- ND			5 to 6.5' - FILL: Light brown medium to fine SAND, trace silt, damp
_ 6 _			ND ND		•	6.5 to 8.5' - Light brown coarse to fine SAND, little rounded gravel,
7 _			ND ND			wet
_ 8 _		60	ND ND			
9 _			ND			8.5 to 10' - Gray coarse to fine SAND, some rounded gravel, wet
_ 10 _			ND 0.4			40 to 40 751 Octov OLAV doctor
_ 11 _			ND ND			10 to 10.75' - Gray CLAY, damp
12			ND ND			10.75 to 11.75' - Gray medium to fine SAND, little organics (roots), wet
13		36	ND ND			11.75 to 12.25' - Gray CLAY, little organics, damp 12.25 to 13' - Gray medium to fine SAND, wet
14			-			
15			-			
16			2.4 0.5			15 to 15.5' - Light gray medium to fine SAND, wet 15.5 to 16.5' - Gray CLAY, damp
			1.5 17.5			
_ 17 _		30	29.0			16.5 to 17.25' - Dark brown PEAT 17.25 to 17.5' - Light brown medium to very fine SAND, wet
_ 18 _			0.5 -			
_ 19 _			- -			
20			-			TRC Job No. 159807



Environmental Corporation

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

SOIL BORING LOG

BORING NUMBER

SB-21

(Page 2 of 2) DEPTH **BLOW** UNIFIED RECOVERY PID SAMPLE FROM COUNT LITHOLOGIC CLASSIFICATION AND COMMENTS SURFACE (INCHES) **DESIGNATION** (ppm) PER 6 IN. (FEET) 20 to 24.5' - Light brown medium to very fine SAND, little rounded ND gravel, wet ND 21 ND ND 22 ND 54 ND 23 ND 24 ND ND **SB-21 GW** 25 24-28 25 to 28.5' - Light brown medium to very fine SAND, little rounded ND gravel, wet ND 26 ND ND 27 ND 48 ND 28 ND 28.5 to 29' - Orange-brown coarse to fine SAND, little coarse to 29 ND fine gravel, wet 30 30 to 31' - Light brown coarse to medium SAND, wet ND ND 31 ND 31 to 31.75' - Light brown medium to fine SAND, wet ND 32 31.75 to 32.25' - Orange-brown fine to very fine SAND, damp to ND 33 ND 33 34 35 NO RECOVERY **SB-21 GW** 36 36-40 37 0 38 39 End of Boring at 40 feet below grade (Boring Grouted) 40

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

BORING NUMBER

SB-22

PROJECT NAME: CPB

LOCATION: Edgemere, New York

PROJECT NO.: 159807

CONTRACTOR: Zebra Environmental

SAMPLER TYPE/DIA.: Macrocore/2"

DEPTH TO WATER: 7.5 Feet

BORING METHOD: Direct Push

TOTAL DEPTH DRILLED: 20 Feet

DATE DRILLED: 05/07/09

DRILLER: L. Reiss

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
			ND			0 to 3' - FILL: Brown medium to fine SAND, some silt, little
_ 1 _			ND			concrete, brick, gravel, & asphalt, moist
			ND			
_ 2 _			ND ND			
3		36	ND			
			-			
4 _			-			
			-			
_ 5 _			- ND			5 to 7.5' - FILL: Brown medium to fine SAND, some silt, little
6			ND ND			concrete, brick, gravel, & asphalt, moist
□			ND			
7			ND			
		42	ND		•	7.5 to 8.5' - Gray medium to fine SAND, wet, petroleum-like sheen and odor at 8.5 feet below grade
_ 8 _			ND ND			and odor at 6.5 feet below grade
9			-			
F ~ -			-			
10			-			
			8.2			10 to 14.5' - Gray medium to fine SAND, wet, petroleum-like sheen and odor 10-12 feet below grade
_ 11 _			12.7			and odor 10-12 reet below grade
12			15.5 ND			
'-		E 4	ND			
_ 13 _		54	ND			
			ND			
14			ND			
15			ND -			
├ '` -			ND			15 to 17.5' - Gray medium to fine SAND, wet
16			ND			
			ND			
17			ND			17.5 to 18' - Gray CLAY, damp
18		36	ND ND			17.5 to 10 - Glay GLAT, damp
10 -			-			
19			-			
			-			
20			-			End of Boring at 20 feet below grade

BORING NUMBER

SB-23

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

SAMPLER TYPE/DIA.: Macrocore/2"

LOCATION: Edgemere, New York PROJECT NAME: CPB

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

DEPTH TO WATER: 7 Feet

DATE DRILLED: 05/04/09

DRILLER: C. Green

LOGGED BY: S. McCray

BORING METHOD: Direct Push TOTAL DEPTH DRILLED: 15 Feet

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
0 _			ND			0 to 3' - FILL: Brown medium to fine SAND, some silt, trace
1			ND			concrete, brick, gravel, & asphalt, moist
├ ' -		1	ND			
2			ND			
├			ND			
3		36	ND			
			_			
4			-			
_			_			
5			-			
			ND			5 to 8' - FILL: Brown medium to fine SAND, some silt, trace
6			ND			concrete, brick, gravel, & asphalt, wet at 7.0 feet below grade
			ND			
7			ND		▼	
		36	ND			
_ 8 _			ND			
			-			
9 _			-			
			-			
_ 10 _			-			40 to 441. Once you divise to fine CAND and a cideal material and like
			37.2			10 to 11' - Gray medium to fine SAND, wet, residual petroleum-like product at 10-10.5 feet below grade, petroleum-like odor 10-11 feet
_ 11 _		-	2.9			below grade
40			ND ND			11 to 13' - Gray CLAY, damp
_ 12 _		-	ND			THE TO GIAY OLAT, GAILP
12		42	ND			
_ 13 _		-	ND			13 to 13.5' - Light brown medium to fine SAND, little rounded
14		1				gravel, wet
<u></u>		1	_			
15			_			
<u> </u>						End of Boring at 15 feet below grade
16		1				
<u> </u>		1				
17						
		1				
18		1				
19						
20		1				TPC Job No. 150807

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

Environmental Corporation SOIL BORING LOG

BORING NUMBER

SB-24

PROJECT NAME: CPB

LOCATION: Edgemere, New York

PROJECT NO.: 159807

CONTRACTOR: Zebra Environmental

SAMPLER TYPE/DIA.: Macrocore/2"

DEPTH TO WATER: 7.5 Feet

BORING METHOD: Direct Push

TOTAL DEPTH DRILLED: 15 Feet

DATE DRILLED: 05/07/09

DRILLER: L. Reiss

FR SURI	PTH OM FACE EET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
(0						Unpaved.
	1 _			ND ND			0 to 3' - FILL: Brown medium to fine SAND, some silt, trace concrete, brick, gravel, & asphalt, moist
_ 2	2 _			ND ND			
	3 _		42	ND ND ND			
	4 _			-			
	5 _			- ND			5 to 7.5' - FILL: Brown medium to fine SAND, some silt, little
_ (6 _			ND ND			concrete, brick, gravel, asphalt, clay, & gravel-sized slag-like or clinker-like material, moist
- 7	7 _		48	ND ND		•	
_ {	8 _		40	ND ND			7.5 to 9' - Gray medium to fine SAND, wet
	9 _			ND -			
	0 _			- ND ND			10 to 13' - Gray CLAY, some organics (peat-like stalks and stems), damp
	' _ 2			ND ND			·
	- <u> </u>		36	ND ND			
	4			-			
_ 1	5 _			-			Ford of Doring at 45 forth plans and de
_ 1	6 _						End of Boring at 15 feet below grade
_ 1	7 _						
_ 1	8 _						
_ 1	9 _						
2	20						TRC Joh No. 159807

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

SB-25

BORING NUMBER

LOCATION: Edgemere, New York PROJECT NAME: CPB

PROJECT NO.: 159807 **CONTRACTOR**: Zebra Environmental

DATE DRILLED: 05/07/09

SAMPLER TYPE/DIA.: Macrocore/2" **DEPTH TO WATER:** 7 Feet DRILLER: L. Reiss

BORING METHOD: Direct Push TOTAL DEPTH DRILLED: 15 Feet

DEPTH FROM SURFACE (FEET)	BLOW COUNT PER 6 IN.	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0						Unpaved.
_ 1 _			ND ND			0 to 4' - FILL: Brown medium to fine SAND, some silt, trace concrete, brick, gravel, & asphalt, moist
_ 2 _			ND ND			
_ 3 _		48	ND ND ND			
_ 4 _			ND -			
_ 5 _			- ND			5 to 7' - FILL: Brown medium to fine SAND, some silt, trace
_ 6 _			ND ND			concrete, brick, gravel, & asphalt, moist
_ 7 _		36	ND ND			
_ 8 _			ND -			7 to 8' - Gray medium to fine SAND, wet
_ ⁹ _						
			ND ND			10 to 12' - Gray CLAY, some organics (peat-like stalks and stems), damp
12			ND ND			
13		24	-			
14			-			
15			-			End of Boring at 15 feet below grade
16						
_ 17 _						
18						
_ 19 _ 20						

TEST PIT NUMBER TRC ENVIRONMENTAL CORP. **TEST PIT LOG** TP-1 57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 PROJECT NAME: CPB LOCATION: Edgemere, NY DATE COMPLETED: 03/10/09 OPERATOR: B. Pamoll **PROJECT NO.:** 159807 **CONTRACTOR:** Brookside Environmental LOGGED BY: D. Avudzega DEPTH Conceptualized FROM PID (ppm) LITHOLOGIC CLASSIFICATION AND COMMENTS SURFACE (FEET) **Cross Section** NA NA 0 to 2.0' - FILL: Topsoil, organics (leaves) FILL (Topsoil) NA NA 2 NΑ 2.0 to 9.5' - FILL: Gray fine to coarse SAND, huge (up to 4 inches thick and 4feet long) concrete slabs, construction debris (timber, snow fence), no staining, no odor, groundwater encountered at NΑ 3 NΑ NΑ NA 5 NA NΑ NΑ 6 NΑ NΑ NA Fill without Concrete NA 8 Or Native Sand NA 9 NA NA Ground Water End of test pit at 9.5 ft bgs. 10 11 12 13 14 15 16 17 18 19 20 **TEST PIT PLAN PROPORTIONS USED GRAIN SIZE** 15' 0 - 10% Boulder >203 mm >8 in. Trace (TR) 10 - 20% Little (LI.) Cobble 76 - 203 mm 3 - 8 in. 5' 20 - 35% C. Gravel 19 -76 mm 3/4 - 3 in. Some (SO.) 35 - 50% And Gravel 4.75 - 19 mm 3/16 - 3/4 in. C. Sand 2.0 - 4.75 mm 5/64 - 3/16 in. M. Sand 0.4 - 2.0 mm 1/64 - 5/64 in. North F. Sand 0.075 - 0.4 mm Silt 0.002 - 0.075 mm 26 cu. yd. Vol. = Clay <0.002 mm

TEST PIT NUMBER TRC ENVIRONMENTAL CORP. **TEST PIT LOG** TP-2 57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 PROJECT NAME: CPB LOCATION: Edgemere, NY DATE COMPLETED: 03/10/09 OPERATOR: B. Pamoll **PROJECT NO.:** 159807 **CONTRACTOR:** Brookside Environmental LOGGED BY: D. Avudzega DEPTH Conceptualized FROM PID (ppm) LITHOLOGIC CLASSIFICATION AND COMMENTS SURFACE (FEET) **Cross Section** NA NA 0 to 2.0' - FILL: Topsoil, organics (leaves) FILL (Topsoil) NA NA 2 NΑ 2.0 to 9.5' - FILL: Gray fine to coarse SAND, huge (up to 4 inches thick and 4feet long) concrete slabs, construction debris (timber, snow fence), no staining, no odor, groundwater encountered at NΑ 3 NΑ NΑ NA 5 NA NΑ NΑ 6 NΑ NΑ NA Fill without Concrete NA 8 Or Native Sand NA 9 NA NA Ground Water End of test pit at 9.5 ft bgs. 10 11 12 13 14 15 16 17 18 19 20 **TEST PIT PLAN PROPORTIONS USED GRAIN SIZE** 15' 0 - 10% Boulder >203 mm >8 in. Trace (TR) 10 - 20% Little (LI.) Cobble 76 - 203 mm 3 - 8 in. 10' (At Widest) 20 - 35% C. Gravel 19 -76 mm 3/4 - 3 in. Some (SO.) 35 - 50% And Gravel 4.75 - 19 mm 3/16 - 3/4 in. C. Sand 2.0 - 4.75 mm 5/64 - 3/16 in. M. Sand 0.4 - 2.0 mm 1/64 - 5/64 in. North F. Sand 0.075 - 0.4 mm Silt 0.002 - 0.075 mm 69 cu. yd. Vol. = Clay <0.002 mm

TEST PIT NUMBER TRC ENVIRONMENTAL CORP. **TEST PIT LOG** TP-3 57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 PROJECT NAME: CPB LOCATION: Edgemere, NY DATE COMPLETED: 03/10/09 OPERATOR: B. Pamoll **PROJECT NO.:** 159807 **CONTRACTOR:** Brookside Environmental LOGGED BY: D. Avudzega DEPTH Conceptualized FROM PID (ppm) LITHOLOGIC CLASSIFICATION AND COMMENTS SURFACE (FEET) **Cross Section** NA NΑ 0 to 2.0' - FILL: Topsoil, organics (leaves) FILL (Topsoil) NA NΑ 2 NΑ 2.0 to 9.5' - FILL: Gray fine to coarse SAND, huge (up to 4 inches thick and 4 feet long) concrete NΑ slabs, construction debris (timber, snow fence), staining, odor present, groundwater encountered 3 at 9.5 feet, floating product on groundwater. NΑ NΑ NA 5 NA Fill with Concrete NA NA 6 NΑ NΑ NΑ Fill without Concrete NΑ 8 Or Native Sand NΑ \sim \sim NΑ Petroleum-Stained Soil Above the Ground Water Table 9 \cong \approx NA End of test pit at 9.5 ft bgs. 10 Ground Water &Floating 11 Product 12 13 14 15 16 17 18 19 20 **TEST PIT PLAN PROPORTIONS USED GRAIN SIZE** 27' 0 - 10% Boulder >203 mm >8 in. Trace (TR) 10 - 20% Little (LI.) Cobble 76 - 203 mm 3 - 8 in. 17' (At Widest) 20 - 35% C. Gravel 19 -76 mm 3/4 - 3 in. Some (SO.) 35 - 50% And Gravel 4.75 - 19 mm 3/16 - 3/4 in. C. Sand 2.0 - 4.75 mm 5/64 - 3/16 in. M. Sand 0.4 - 2.0 mm 1/64 - 5/64 in. North F. Sand 0.075 - 0.4 mm Silt 0.002 - 0.075 mm 100 cu. yd. Vol. = Clay <0.002 mm

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

TEST PIT LOG

TEST PIT NUMBER TP-4

PROJECT NAME: CPB LOCATION: Edgemere, NY

DATE COMPLETED:

OPERATOR:

04/29/09 B. Pamoll

PROJECT NO.: 159807

CONTRACTOR: Brookside Environmental

LOGGED BY: S. McCray

	11	100007	CONTRACTOR: Brookside Environment			o. mcoray			
DEPTH FROM SURFACE (FEET)	ppm)	SAMPLE DESIGNATION AND DEPTH (feet)	LITHOLOGIC CLASSIFI	CATION AND	COMMENTS				
1 N	ID		0 to 2' - FILL: Dark brown medium to fine SAN	ID, little concr	rete, wood, & metal,	moist			
2 N	ID		2 to 5.5' - FILL: Light brown medium to fine SAND, moist						
3 N	ID								
4 N	ID								
5 <u>ND</u>			5.5 to 6' - FILL: black gravel-sized material (slag-like or clinker-like), trace brick cinder & coal, moist to damp 6 to 8' - Gray fine to very fine SAND, damp						
6 N	ID		0 to 0 0 tay into to 101, mile 0, 112, damp						
7 N	ID								
8 ND - Ground water encountered at 8 feet below grade 8 to 8.5' - Gray medium to fine SAND, wet									
9 N	ID		10 to 6.5 - Gray medium to line SAND, wet						
10 N	ID	TP-4 9.5-10							
_ 11N	ID								
12 N	ID		End of test	t nit at 12 ft ho	ns				
13			End of test pit at 12 ft bgs.						
14									
15									
16									
TES	T PIT		PROPORTIONS USED		GRAIN SIZE				
	50		Trace (TR) 0 - 10% Little (LL) 10 - 20%	Boulder	>203 mm	>8 in.			
5'	5'		Little (LI.) 10 - 20% Some (SO.) 20 - 35%	Cobble C. Gravel	76 - 203 mm 19 -76 mm	3 - 8 in. 3/4 - 3 in.			
			And 35 - 50%	Gravel	4.75 - 19 mm	3/16 - 3/4 in.			
				C. Sand M. Sand	2.0 - 4.75 mm 0.4 - 2.0 mm	5/64 - 3/16 in. 1/64 - 5/64 in.			
	North			F. Sand	0.075 - 0.4 mm				
Vol. = 1	11	cu. yd.		Silt Clay	0.002 - 0.075 mm <0.002 mm				

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TEST PIT LOG

TEST PIT NUMBER TP-5

PROJECT NAME: CPB LOCATION: Edgemere, NY

DATE COMPLETED:

OPERATOR:

04/29/09 B. Pamoll

PROJECT NO.: 159807 CONTRACTOR: Brookside Environmental

LOGGED BY: S. McCray

T KOSEOT NO.		CONTRACTOR: Brookside Environmental			o. Micoray	
DEPTH FROM SURFACE (FEET) PID (ppm	SAMPLE DESIGNATION AND DEPTH (feet)	LITHOLOGIC CLASSIFICATION AND COMMENTS				
1 ND 2 ND		0 to 9.5' - FILL: Dark brown medium to fine SAND 0.5' thick), little concrete aggregate, brick, asphaligrade, wet below 9 feet				
3 ND		grade, not solon o loot				
4 ND	_					
5 ND		- Foundation wall (grade beam) for former building Grade beam was approximately 1.5 feet wide, an	I from 2 to 6 feet bel	ow grade. Test		
6 ND 7 ND		pit excavation followed the grade beam. Free-phase petroleum-like product entered excavation the ground water table from the soil under the grade beam. Ground water at 9 feet below grade, free-phase petroleum-like product enters excavation from				
8 <u>ND</u>	_					
9 6.0	TP-5 9-9.5	southern sidewall - Black SILT, and organics (roots and stalks) present 9.0-9.5 feet below grade in center of excavation				
28.8	TP-5 10-10.5	9.5 to 13' - Gray medium to very fine SAND, petroleum-like staining and odor, free phase petroleum-like product observed within the sand matrix below the ground water table				
12 10.2	TP-5 11.5-12					
13		End of test pi	it at 13 ft bo	gs		
15						
16	T DI AN	DDODODTIONS HOLD				
TEST PI		PROPORTIONS USED		GRAIN SIZE		
5'	30' ->	Little (Ll.) 10 - 20%	Boulder Cobble C. Gravel	>203 mm 76 - 203 mm 19 -76 mm	>8 in. 3 - 8 in. 3/4 - 3 in.	
		And 35 - 50%	Gravel C. Sand M. Sand	4.75 - 19 mm 2.0 - 4.75 mm 0.4 - 2.0 mm		
Vol. = 193	lorth _ cu. yd.	8	F. Sand Silt Clay	0.075 - 0.4 mm 0.002 - 0.075 mm <0.002 mm		

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PROJECT NO.: 159807

TEST PIT LOG

CONTRACTOR: Brookside Environmental

TEST PIT NUMBER TP-6

PROJECT NAME: CPB LOCATION: Edgemere, NY

DATE COMPLETED:

OPERATOR:

04/28/09 B. Pamoll

LOGGED BY: S. McCray

	70L01 NO		CONTRACTOR: Diconside Environmen		LOOGLD D1.	o. wcoray			
DEPTH FROM SURFACE (FEET)	PID (ppm)	SAMPLE DESIGNATION AND DEPTH (feet)	LITHOLOGIC CLASSIFICATION AND COMMENTS						
_ 1 _	ND								
_ 2 _	ND		0 to 8' - FILL: Dark brown medium to fine SAND, some concrete blocks (average size 3' x 3' x 0.5' thick), little concrete aggregate, brick, asphalt, and timbers, moist						
_ 3 _	ND								
_ 4 _	ND								
_ 5 _	ND								
_ 6 _	ND								
_ 7 _	ND								
8 _		TD 0 0 0 5	Ground water encountered at 8 feet below grade						
_ 9 _	78.8	TP-6 8-8.5	8 to 9.5' - Gray medium to fine SAND, wet, moderate petroleum-like odor and petroleum-like globules, clay lenses at eawstern end of excavation (where PID reading = 78.8 ppm)						
_ 10 _	59.2		9.5 to 10' - Gray CLAY, moist, moderate petro						
_ 11 _			End of test pit at 10 ft bgs.						
_ 12 _									
_ 13 _									
_ 14 _									
_ 15 _									
16									
	TEST PIT		PROPORTIONS USED		GRAIN SIZE				
 	← 30)' <u> </u>	Trace (TR) 0 - 10%	Boulder	>203 mm	>8 in.			
5'			Little (LI.) 10 - 20% Some (SO.) 20 - 35%	Cobble C. Gravel	76 - 203 mm 19 -76 mm	3 - 8 in. 3/4 - 3 in.			
		<u> </u>	And 35 - 50%	Gravel	4.75 - 19 mm				
	(N	()		C. Sand M. Sand		5/64 - 3/16 in. 1/64 - 5/64 in.			
North Vol. = <u>56</u> cu. yd.				F. Sand Silt Clay	0.075 - 0.4 mm 0.002 - 0.075 mm <0.002 mm				
				Olay	\0.002 IIIII				

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TEST PIT LOG

TEST PIT NUMBER **TP-7**

PROJECT NAME: CPB LOCATION: Edgemere, NY

DATE COMPLETED:

OPERATOR:

04/28/09 B. Pamoll

PROJECT NO.: 159807 CONTRACTOR: Brookside Environmental

LOGGED BY: S. McCray

	100001	CONTRACTOR: Diconside Environmen		LOGOLD D1.	o. wcoray	
DEPTH FROM SURFACE (FEET) PID (ppm)	SAMPLE DESIGNATION AND DEPTH (feet)	LITHOLOGIC CLASSIFICATION AND COMMENTS				
1 ND 2 ND 3 ND		0 to 1.5' - FILL: Dark brown medium to fine Sothick), concrete aggregate & brick, moist 1.5 to 8' - FILL: Light brown medium to fine So			e size 3' x 3' x 0.5'	
4 ND 5 ND						
6 ND						
8 8.7	TP-7 7.5-8 ▼ TP-7A 8-8.5	- Ground water encountered at 8 feet below g	rade			
9 ND		8 to 8.5' - Gray medium to fine SAND, wet 8.5 to 9' - Gray CLAY with patches of green medium to fine sand and blue silt, damp to wet End of test pit at 9 ft bgs.				
11						
13						
14						
16 TEST PIT	PLAN	PROPORTIONS USED		GRAIN SIZE		
	orth cu. yd.	Trace (TR) 0 - 10% Little (LI.) 10 - 20% Some (SO.) 20 - 35% And 35 - 50%	Boulder Cobble C. Gravel Gravel C. Sand M. Sand F. Sand Silt		>8 in. 3 - 8 in. 3/4 - 3 in. 3/16 - 3/4 in. 5/64 - 3/16 in. 1/64 - 5/64 in.	
VOI. =			Clay	<0.002 mm		

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TEST PIT LOG

TEST PIT NUMBER **TP-8**

PROJECT NAME: CPB LOCATION: Edgemere, NY

DATE COMPLETED:

OPERATOR:

04/28/09 B. Pamoll

PROJECT NO.: 159807 CONTRACTOR

CONTRACTOR: Brookside Environmental

LOGGED BY: S. McCray

PK	JJECT NO.:	100001	CONTRACTOR	: DIOOKSIDE ETIVITOTITIE	inal	LOGGED BY:	S. MCCray
DEPTH FROM SURFACE (FEET)	PID (ppm)	SAMPLE DESIGNATION AND DEPTH (feet)		LITHOLOGIC CLASSIFICATION AND COMMENTS			
_ 1 _	ND						
2 _	ND			brown medium to fine SA crete aggregate & brick, r		ncrete blocks (averag	e size 3' x 3' x
_ 3 _	ND						
4 _	ND						
5 _	ND						
6 _	ND						
7 _	ND						
_ 8 _	-						
9	8 to 8.5' - Gray medium to fine SAND, wet, free-phase petroleum-like product observed within the sand matrix						oserved within the
				End of te	st pit at 8.5 ft b	ogs.	
_ 10 _							
_ 11 _							
_ 12 _							
_ 13 _							
_ 14 _							
15							
16		•					
	TEST PIT	PLAN	PROPOR	RTIONS USED		GRAIN SIZE	
	← 9	\longrightarrow	Trace (TR)	0 - 10%	Boulder	>203 mm	>8 in.
5'			Little (LI.)	10 - 20% 20 - 35%	Cobble C. Gravel	76 - 203 mm 19 -76 mm	3 - 8 in. 3/4 - 3 in.
			Some (SO.) And	35 - 50%	Gravel	4.75 - 19 mm	
	(F				C. Sand M. Sand	2.0 - 4.75 mm	
	North				F. Sand	0.075 - 0.4 mm	
Vol. =	14	cu. yd.			Silt	0.002 - 0.075 mm	
					Clay	<0.002 mm	loh No. 150907

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TEST PIT LOG

TEST PIT NUMBER TP-9

PROJECT NAME: CPB LOCATION: Edgemere, NY

DATE COMPLETED:

04/30/09

OPERATOR: B. Pamoll
LOGGED BY: S. McCray

PRO	PROJECT NO.: 159807		CONTRACTOR: Brookside Environme	LOGGED BY:	S. McCray		
DEPTH FROM SURFACE (FEET)	PID (ppm)	SAMPLE DESIGNATION AND DEPTH (feet)	LITHOLOGIC CLASSIFICATION AND COMMENTS				
_ 1 _	ND		0 to 2' - FILL: Dark brown medium to fine SA	AND, little cond	crete & brick, dry to m	oist	
_ 2 _	ND		2 to 8' - FILL: Light brown medium to fine S/	AND, moist to	damp		
_ 3 _	ND						
_ 4 _	ND						
_ 5 _	ND						
_ 6 _	ND						
_ 7 _	ND						
_ 8 _	8 ND - Ground water encountered at 8 feet below grade						
9 _	ND		8 to 12' - Gray medium to fine SAND, wet				
10	ND						
11	ND						
12	ND						
			12 to 12.5' - Gray fine to very fine SAND, we	et			
_ 13 _	ND	TP-9 12.5-13	12.5 to 13' - Gray rounded GRAVEL, and co				
_ 14 _			End of to	est pit at 13 ft l	ogs.		
_ 15 _							
16							
16	TEST PIT	PLAN	PROPORTIONS USED		GRAIN SIZE		
	← 15	5'>	Trace (TR) 0 - 10%	Boulder	>203 mm	>8 in.	
•		-	Trace (TR) 0 - 10% Little (LI.) 10 - 20%	Cobble	76 - 203 mm	3 - 8 in.	
5'			Some (SO.) 20 - 35%	C. Gravel		3/4 - 3 in.	
			And 35 - 50%	Gravel	4.75 - 19 mm	3/16 - 3/4 in.	
	(*)			C. Sand M. Sand		5/64 - 3/16 in. 1/64 - 5/64 in.	
	North			F. Sand	0.075 - 0.4 mm		
Vol. =	36	cu. yd.		Silt	0.002 - 0.075 mm		
				Clay	<0.002 mm	loh No. 159807	

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TEST PIT LOG

TEST PIT NUMBER TP-10

PROJECT NAME: CPB LOCATION: Edgemere, NY

DATE COMPLETED:

04/28/09

PROJECT NO.: 159807 CONTRACTOR: Brookside Environmental

OPERATOR: B. Pamoll
LOGGED BY: S. McCray

FRU	JJECT NO.:	.: 159607 CONTRACTOR: BIOOKSIDE ETIVITOTITIETIDI LOGGED BY: S. MCCray				G. WICCI ay		
DEPTH FROM SURFACE (FEET)	PID (ppm)	SAMPLE DESIGNATION AND DEPTH (feet)	LITHOLOGIC CLASSIFICATION AND COMMENTS					
_ 1 _	ND		0 to 1.5' - FILL: Dark brown medium to fine SAND, little brick & concrete, moist					
_ 2 _	ND		1.5 to 8.5' - FILL: Light brown medium to fine SAND, trace silt, moist to damp					
_ 3 _	ND							
_ 4 _	ND							
_ 5 _	ND							
_ 6 _	ND			avel-sized material (slag- ccavation at 6-7 feet below		ike) with trace brick,	coal, and cinders	
_ ⁷ _								
_ 8 _	8 ND TP-10 8-8.5 - Ground water encountered at 8.5 feet below grade							
9 _	ND		8.5 to 9' - Dark brov	vn CLAY, and silt, damp t	to wet, slight o	dor		
			End of test pit at 9 ft bgs.					
_ 10 _								
_ 11 _								
_ 12 _								
_ 13 _								
_ 14 _								
_ 15 _								
16								
ı	TEST PIT	PLAN	PROPOF	RTIONS USED		GRAIN SIZE		
	← 60)'	T (TD)	0 - 10%	Boulder	>203 mm	>8 in.	
-		-	Trace (TR) Little (Ll.)	10 - 20%	Cobble	76 - 203 mm	3 - 8 in.	
5'	5'		Some (SO.)	20 - 35%	C. Gravel	19 -76 mm	3 - 8 iii. 3/4 - 3 in.	
			And	35 - 50%	Gravel	4.75 - 19 mm	3/16 - 3/4 in.	
					C. Sand M. Sand	2.0 - 4.75 mm	5/64 - 3/16 in. 1/64 - 5/64 in.	
	No	orth			F. Sand	0.075 - 0.4 mm		
Vol. =	Vol. = 100 cu. yd.				Silt	0.002 - 0.075 mm		
					Clay	<0.002 mm		
							lah Na 150007	

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TEST PIT LOG

TEST PIT NUMBER **TP-11**

PROJECT NAME: CPB LOCATION: Edgemere, NY

DATE COMPLETED: **04**OPERATOR: **B.**

04/30/09 B. Pamoll

PROJECT NO.: 159807 CONTRACTOR: Brookside Environmental

DEPTH FROM SURFACE (FEET)	PID (ppm)	SAMPLE DESIGNATION AND DEPTH (feet) LITHOLOGIC CLASSIFICATION AND COMMENTS				C. McGray		
_ 1 _	ND		0 to 2' - FILL: Dark brown medium to fine SAND, little concrete & brick, dry to moist					
2 _	ND		2 to 8' - FILL: Light brown medium to fine SAND, moist to damp					
_ 3 _	ND							
4 _	ND							
_ 5 _	ND							
_ 6 _	ND							
7 _	ND							
8 _	1.2	•	- Ground water encountered at 8 feet below grade 8 to 10.5' - Gray medium to fine SAND, wet, sulfurous-like odor					
9 _	ND							
_ 10 _	6.8							
11 _	7.6	TP-11 11.5-12	10.5 to 11.5' - Gray rounded GRAVEL, and co	parse to medi	um sand, wet			
13	7.0		End of test pit at 12 ft bgs.					
14								
15								
16								
	TEST PIT		PROPORTIONS USED		GRAIN SIZE			
\[\frac{1}{\sqrt{1}} \]	← 12	2' →	Trace (TR) 0 - 10%	Boulder	>203 mm	>8 in.		
5'			Little (LI.) 10 - 20% Some (SO.) 20 - 35%	Cobble C. Gravel	76 - 203 mm 19 -76 mm	3 - 8 in. 3/4 - 3 in.		
			Some (SO.) 20 - 35% And 35 - 50%	Gravel	4.75 - 19 mm	3/16 - 3/4 in.		
				C. Sand M. Sand	2.0 - 4.75 mm 0.4 - 2.0 mm			
Vol. =	North Vol. = <u>27</u> cu. yd.			F. Sand Silt Clay	0.075 - 0.4 mm 0.002 - 0.075 mm <0.002 mm			

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TEST PIT LOG

TEST PIT NUMBER **TP-12**

PROJECT NAME: CPB LOCATION: Edgemere, NY

DATE COMPLETED:

OPERATOR:

04/30/09 B. Pamoll

PROJECT NO.: 159807

CONTRACTOR: Brookside Environmental

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			. Drookside Environine		LOGOLD D1.	o. wcoray		
DEPTH FROM SURFACE (FEET)	PID (ppm)	SAMPLE DESIGNATION AND DEPTH (feet)	LITHOLOGIC CLASSIFICATION AND COMMENTS						
_ 1 _	ND		0 to 1.5' - FILL: Dark brown medium to fine SAND, little concrete (blocks) & brick, dry to moist						
_ 2 _	ND		1.5 to 8' - FILL: Light brown medium to fine SAND, moist to damp						
_ 3 _	ND								
4 _	ND								
_ 5 _	ND								
6 _	ND								
7 —	ND		- Ground water encountered at 8.5 feet below grade						
8 _	ND	TP-12 8-8.5	8 to 8.5' - Light gray CLAY, mottled patches/bands of green medium to fine sand and blue fine sand/silt, damp to wet						
9 _	End of test pit at 8.5 ft bgs.								
_ 10 _									
_ 11 _ 12									
13		•							
14									
15									
16									
	TEST PIT PLAN		PROPORTIONS USED			GRAIN SIZE			
↓ ·		\longrightarrow	Trace (TR)	0 - 10%	Boulder	>203 mm	>8 in.		
			Little (LI.) Some (SO.)	10 - 20% 20 - 35%	Cobble C. Gravel	76 - 203 mm 19 -76 mm	3 - 8 in. 3/4 - 3 in.		
			And	35 - 50%	Gravel	4.75 - 19 mm			
N la ab					C. Sand M. Sand	2.0 - 4.75 mm	5/64 - 3/16 in. 1/64 - 5/64 in.		
North Vol. = 19 cu. yd.					F. Sand Silt	0.075 - 0.4 mm 0.002 - 0.075 mm			
					Clay	<0.002 mm			

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TEST PIT LOG

TEST PIT NUMBER TP-13

PROJECT NAME: CPB LOCATION: Edgemere, NY

DATE COMPLETED:

OPERATOR:

04/30/09 B. Pamoll

PROJECT NO.: 159807

CONTRACTOR: Brookside Environmental

DEPTH FROM SURFACE (FEET)	PID (ppm)	SAMPLE DESIGNATION AND DEPTH (feet)	LITHOLOGIC CLASSIFICATION AND COMMENTS							
_ 1 _ _ 2 _	ND ND		0 to 10' - FILL: Dark brown medium to fine SAND, some concrete blocks (average size 3' x 3' x .05' thick), little brick, concrete aggregate, asphalt, & timbers, moist to damp to 9 feet below grade, wet at 9'							
_ 3 <u>_</u>	ND ND									
_ 5 _	ND									
_ 6 _ 7	ND ND									
8 _	ND									
9 <u> </u>	ND	•	- Ground water encountered at 9 feet below grade 10 to 10.5' - Gray fine to very fine SAND, wet, petroleum-like odor and petroleum-like globules							
_ 11 _	5.2	TP-13 10-10.5								
_ 12 _ _ 13 _										
_ 14 _										
_ 15 _ _ 16										
	TEST PIT PLAN		PROPORTIONS USED		GRAIN SIZE					
		>	Trace (TR) Little (LI.) Some (SO.)	0 - 10% 10 - 20% 20 - 35%	Boulder Cobble C. Gravel	>203 mm 76 - 203 mm 19 -76 mm	>8 in. 3 - 8 in. 3/4 - 3 in.			
North Vol. = 23 cu. yd.			And	35 - 50%	Gravel C. Sand M. Sand F. Sand Silt Clay	4.75 - 19 mm 2.0 - 4.75 mm 0.4 - 2.0 mm 0.075 - 0.4 mm 0.002 - 0.075 mm <0.002 mm				





Photo 1: View of south wall of test pit TP-3 (southwestern corner of Site, near MW-4s/MW-4i well cluster), showing buried concrete blocks, metal, and other debris.



Photo 2: View of test pit TP-3 (southwestern corner of Site, near MW-4s/MW-4i well cluster), showing free-phase petroleum product encountered.



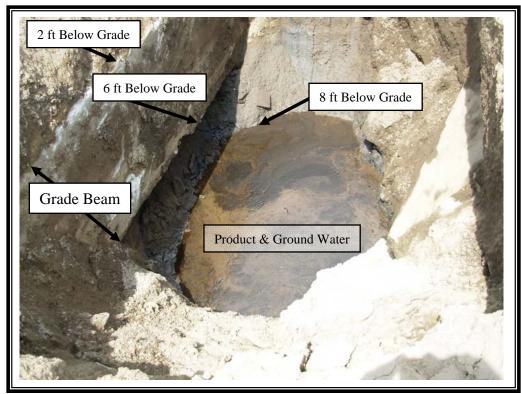


Photo 3: View of test pit TP-5, showing former building foundation wall (grade beam) and free-phase petroleum encountered.

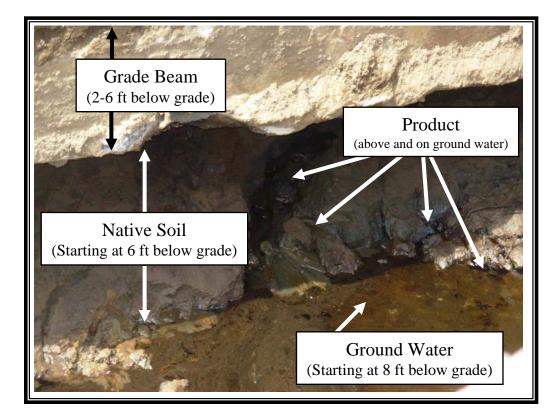


Photo 4: View of western wall of test pit TP-5, showing free-phase petroleum below grade beam.



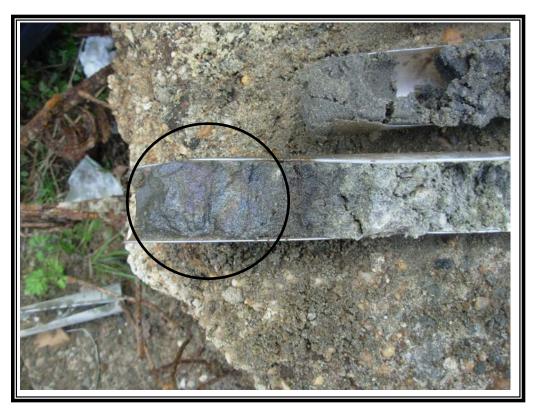


Photo 5: View of soil core from soil boring SB-22, showing petroleum sheen (circled) within saturated gray sand (8.5 feet below grade).

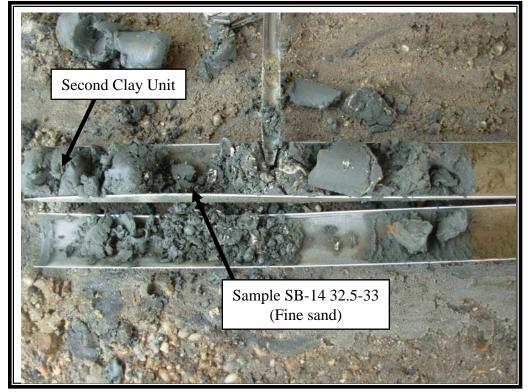


Photo 6: View of soil core from soil boring SB-14, showing greenish-gray sand immediately above second clay, where solvent-like odor and elevated photo ionization detector readings were found. Sample SB-32 32.5-33 contained 6,990 milligrams per kilogram (mg/kg) of trichloroethene.



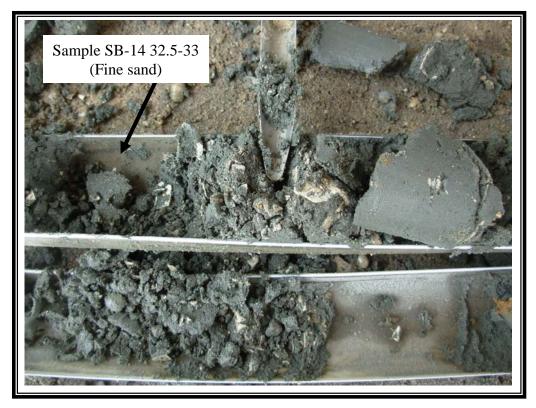


Photo 7: Closer view of soil core from soil boring SB-14, showing interval where sample SB-32 32.5-33 was collected. Note that second clay, sampled soil, and shallower soils are the same color, and that the sample did not contain any staining, and the greenish-gray color appears to be natural.