

37-14 36<sup>th</sup> STREET  
QUEENS COUNTY  
LONG ISLAND CITY, NEW YORK

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# SITE MANAGEMENT PLAN

NYSDEC Site Number: C241156

**Prepared for:**

BCP Volunteer 36 Street QDP LLC  
37-14 36<sup>th</sup> Street, Queens, New York

**Prepared by:**

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**Revisions to Final Approved Site Management Plan:**

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date


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DECEMBER 2015



## CERTIFICATION STATEMENT

I, Ernest Hanna, certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Site Management Plan (SMP) has been submitted for the continual and proper operation, maintenance and monitoring of the remaining or installed monitoring wells specific to Site Number C241156 and that such plan has been approved by the New York State Department of Environmental Conservation, Division of Environmental Remediation.

  
Ernest Hanna, P.E. No. 065440

December 9, 2015

DATE





**37-14 36th STREET  
QUEENS COUNTY  
LONG ISLAND CITY, NEW YORK**

**SITE MANAGEMENT PLAN**

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## LIST OF ACRONYMS

BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BGS	Below Ground Surface
CAMP	Community Air Monitoring Plan
COC	Certificate of Completion
Cr6+	Hexavalent Chromium
DER	Division of Environmental Remediation
EC	Engineering Control
ESA	Environmental Site Assessment
EWP	Excavation Work Plan
GZA	Goldberg-Zoino Associates of New York P.C. d/b/a GZA GeoEnvironmental of New York
HASP	Health and Safety Plan
IC	Institutional Control
mg/kg	Milligram per Kilogram
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PCE	Tetrachloroethene
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
SCO	Soil Cleanup Objective
SVOC	Semi-Volatile Organic Compounds
SMP	Soil Management Plan
TCE	Trichloroethene
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
TPH-GRO	Total Petroleum Hydrocarbon - Gasoline Range Organics
µg/l	Micrograms per Liter
µg/m <sup>3</sup>	Micrograms per Cubic Meter
UST	Underground Storage Tank



## ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as identified below, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan (SMP):

Site Identification: **Site No.: C241156, 37-14 36<sup>th</sup> Street, Long Island City, NY**

<b>Institutional Controls:</b> (ICs)	1. The property may be used for Restricted Residential, Commercial or Industrial Use;
	2. An Environmental Easement was filed with the Queens County Clerk.
<b>Engineering Controls:</b> (ECs)	None
<b>Inspections:</b>	
Groundwater Sampling	
<b>Frequency:</b>	
Quarterly	
<b>Reporting:</b>	
Periodic Review Report	
<b>Frequency:</b>	
Annual	

Further descriptions of the above requirements are provided in detail in the latter sections of this SMP.



## 1.0 INTRODUCTION

### 1.1 General

This SMP is a required element of the remedial program for the 37-14 36<sup>th</sup> Street property located in Long Island City, New York (hereinafter referred to as the “Site”). Please refer to Error! Reference source not found. for a Site location map. The Site is in the New York State (NYS) Brownfield Cleanup Program (BCP), and is identified as Site No. C241156; the BCP is administered by the New York State Department of Environmental Conservation (NYSDEC).

The BCP Volunteer, 36 Street QDP, LLC, entered into a Brownfield Cleanup Agreement (BCA) on March 26, 2014 with the NYSDEC to remediate the Site during redevelopment. The Site location and property boundaries are depicted in **Figure 1 and Figure 2**.

After completion of the remedial work, some contamination was left at the Site; the remaining contamination is hereafter referred to as “residual contamination.” Institutional and Engineering Controls (ICs and ECs) have been incorporated into the Site remedy to control exposure to residual contamination and to protect public health and the environment. An Environmental Easement, granted by 36 Street QDP LLC, to the NYSDEC and recorded with the Queens County Clerk, requires compliance with this SMP and all ECs and ICs placed on the Site. The Environmental Easement is presented in **Appendix A**.

This SMP was prepared to manage residual contamination at the Site until the Environmental Easement is extinguished in accordance with Environmental Conservation Law Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor’s successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC);



- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6 New York Code of Rules and Regulations (NYCRR) Part 375 and the BCA for Site No. C241156, and thereby subject to applicable penalties.

All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the Site is provided in **Appendix B** of this SMP.

This SMP was prepared by Goldberg-Zoino Associates of New York P.C. d/b/a GZA GeoEnvironmental of New York (GZA), on behalf of 36 Street QDP, LLC, in accordance with the requirements of the NYSDEC's Department of Environmental Remediation (DER)-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2010, and the Site-specific guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and ECs that are required by the Environmental Easement for the Site.

The Site Meets and Bounds are described below:

**BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE NORTHERLY SIDE OF NORTHERN BOULEVARD, FORMERLY JACKSON AVENUE, WITH THE WESTERLY SIDE OF 36TH STREET, FORMERLY 7<sup>TH</sup> AVENUE:**

**RUNNING THENCE NORTHERLY ALONG THE WESTERLY SIDE OF 36TH STREET 165.98 FEET;**

**THENCE WESTERLY ALONG A LINE FORMING INTERIOR ANGLE OF 94°45'50" WITH THE WESTERLY SIDE OF 36TH STREET, 101.57;**

**THENCE SOUTHERLY ALONG LINE FORMING AN INTERIOR ANGLE OF 85°14'10" WITH THE PRECEDING COURSE AND PART OF THE DISTANCE THROUGH A PARTY WALL. 74.50 FEET;**

**THENCE EASTERLY AT RIGHT ANGLES TO THE PRECEDING COURSE, 0.50 FEET;**

**THENCE SOUTHERLY ALONG A LINE FORMING AN EXTERIOR ANGLE OF 122°55'43" WITH THE NORTHERLY SIDE OF NORTHERN BOULEVARD AND**



AT RIGHT ANGLES TO THE PRECEDING COURSE, 165.14 FEET TO THE NORTHERLY SIDE OF NORTHERN BOULEVARD;

**THENCE EASTERLY ALONG THE NORTHERLY SIDE OF NORTHERN BOULEVARD, 120 FEET TO THE CORNER AT THE POINT OR PLACE OF BEGINNING.**

## **1.2 Revisions**

Revisions to this plan will be proposed in writing to the NYSDEC's project manager listed in Error! Reference source not found.. The information on this table will be updated as necessary to provide accurate contact information. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shut-down of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the Site conditions. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

## **1.3 Notifications**

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER-10 for the following reasons:

- Sixty-day advance notice of any proposed changes in Site use or ownership that are required under the terms of the BCA, 6 NYCRR Part 375 and/or Environmental Conservation Law.
- Seven-day advance notice of any field activity associated with the remedial program.
- Fifteen-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan (EWP).
- Notice within 48-hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.



- Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, with written confirmation within seven days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change; the NYSDEC will be notified in writing of the proposed change. This will include a certification that a prospective purchaser or Remedial Party has been provided with a copy of the BCA, and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

**Table 1** on the following page includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in **Appendix B**.



**Table 1 Notifications\***

<b>Name</b>	<b>Contact Information</b>
NYSDEC Project Manager, Charles Post	518-402-9768, <a href="mailto:charles.post@dec.ny.gov">charles.post@dec.ny.gov</a>
NYSDEC Regional 2 Hazardous Waste Engineer, Jane O'Connell	718-482-4996, <a href="mailto:jane.oconnell@dec.ny.gov">jane.oconnell@dec.ny.gov</a>
NYSDEC Site Control, Kelly Lewandowski	518-402-9553, <a href="mailto:kelly.lewandowski@dec.gov">kelly.lewandowski@dec.gov</a>

*\* Note: Notifications are subject to change and will be updated as necessary.*



## **2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS**

This section provides a description of the location and layout of the Site; all areas of remaining contamination; remedial activities performed on-Site; history; nature and extent of contamination, both before and after the remedy.

### **2.1 Site Location and Description**

The Site is located in Long Island City, Queens County, New York and is identified as Block 377 and Lot 23 on the Queens County Tax Map. The Site is an approximately 0.47-acre area and is bounded by a five-story brick building (35-02 37th Avenue) to the north, Northern Boulevard and a New York City Subway to the south, 36th Street to the east, and 35-01 and 35-09 Northern Boulevard and 37-15 and 37-21 35th Street to the west. The owner of the Site parcel at the time of issuance of this SMP is Jans Realty L.P., which has executed the environmental easement.

### **2.2 Physical Setting**

#### **2.2.1 Land Use**

The Site's proposed use will consist of a 10-story mix use building with one below-grade level. The Site is zoned as mixed commercial-residential and will be utilized for a commercial car dealership on the ground floor and residential use on upper floors. The properties adjoining the Site and in the neighborhood surrounding the Site primarily include commercial properties.

#### **2.2.2 Hydrogeology**

Queens County is part of the Long Island Hydrogeologic System. Groundwater is the sole source of drinking water for Nassau and Suffolk Counties, but in Kings and Queens Counties potable water is supplied by New York City. The Upper Glacial Aquifer is the uppermost hydrogeologic unit in Queens County and is unconfined. This hydrogeologic unit is comprised of till deposits (clay, silt, sand, gravel, and boulders) in the north portion of Queens and outwash deposits (mostly sand, gravel, and clay) to the south.

The average depth to groundwater is approximately 11 feet below ground surface (bgs) and ranges approximately between 10 to 12 feet bgs. Groundwater flow is generally



from the northeast to the southwest. A groundwater contour map is shown in Error! Reference source not found. for data collected in the most recent groundwater gauging event. On-Site groundwater monitoring wells were abandoned prior to remediation and construction activities. Well construction details and groundwater elevation data is provided in **Table 2**.

### 2.2.3 Geology

Based on a review of the U.S. Geological Survey (USGS) 7.5-minute series Topographic Map of Central Park, New York (1995), the Site is situated approximately 25 feet above mean sea level. Site topography is generally flat, with a downward slope to the southwest. The nearest surface water body is the East River, located 1.18 miles west of the Site.

Physiographically, Queens County is part of the Long Island Lowlands. The surface of the Long Island Lowlands is modified and covered by glacial deposits from the most recent glaciations (Wisconsin Stage), and consists of moraine deposits, glacial drift, and outwash materials. In a roughly north-south cross section, the geology can be characterized as a wedge-shaped layer of Cretaceous and Pleistocene unconsolidated sediments, thickening to the south-southeast. Several impermeable clay layers are found within this sediment sequence, generally creating three distinct regional aquifers.

Soil beneath the Site consisted of several feet of fill material followed by native fine to coarse sands with silt and gravel. Intermittent clay layers were noted in the boring logs. Two cross sections are presented in **Figure 4**. Site specific boring logs are provided in **Appendix C**.

## 2.3 **Investigation and Remedial History**

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 8.0.

GZA performed a Phase I Environmental Site Assessment (ESA), dated November 11, 2011, in general accordance with the ASTM Method E1527-05. The Site was historically used as a gasoline service station, an automobile repair and washing center, and most recently as an automotive dealership. GZA identified the following Recognized Environmental Conditions at the Site during the Phase I ESA:

1. One concrete encased 550-gallon #2 fuel oil tank in the partial cellar;



2. Three in-ground hydraulic car lifts in the northwestern corner of the garage;
3. A decommissioned oil-water separator located inside the garage;
4. Two 4,000-gallon underground storage tanks (USTs), one gasoline and one diesel fuel, abandoned in February of 2000;
5. Abandoned fill ports and subsurface product piping, associated with historic USTs;
6. A former pump island; and
7. Two potential historic UST areas.

Based on the findings of the Phase I ESA, GZA performed a subsurface exploratory Remedial Investigation (RI). Site work was conducted between April and September of 2012. Supplemental RI work was conducted in May of 2014. GZA performed the following scope of work:

1. Advanced 15 soil borings within the project Site, and collected 26 soil samples for chemical analysis to evaluate soil quality;
2. Installed three on-Site groundwater monitoring wells to estimate groundwater flow, as well as six temporary well points and seven “hydropunch” sampling points, for the collection of 22 groundwater quality samples for chemical analysis;
3. Installed three off-Site, upgradient groundwater monitoring wells for the collection of three groundwater quality samples for chemical analysis; and
4. Installed five soil vapor probes within the Site perimeter and collected five soil vapor samples for chemical analysis.

The following is a brief presentation of the RI findings:

1. Elevation of the property ranges from approximately 24 to 26 feet above the Borough President of Queens Datum.
2. Depth to groundwater averages 11 feet below ground surface (bgs) at the Site.
3. Groundwater flow is generally from northeast to southwest beneath the Site.
4. Depth to bedrock is estimated to be greater than 100 feet bgs at the Site.
5. The stratigraphy of the Site consists of asphalt or concrete surface cover, fill material of variable thickness, and native unconsolidated sediments



consisting of fine to coarse sands with silts and gravel.

6. Soil samples collected during the RI showed no pesticides, herbicides, polychlorinated biphenyls (PCBs), hexavalent chromium (Cr6+), or cyanide at detectable concentrations. One volatile organic compound (VOC), acetone, was detected above Unrestricted Use Soil Cleanup Objectives (SCOs) in two deep samples, but below Restricted Residential SCOs. Five semi-volatile organic compounds (SVOCs) were detected at concentrations above their Restricted Residential SCOs in one shallow soil sample. These SVOCs detected are polycyclic aromatic hydrocarbons (PAH), and their concentrations and distribution indicate that they are associated with historic fill material observed during the sampling. Metals including copper, lead, mercury, and zinc were detected slightly above Unrestricted Use SCOs in six soil sampling locations, but below Restricted Residential SCOs.
7. On-Site groundwater samples collected during the RI showed no detectable concentrations of SVOCs, pesticides, herbicides, PCBs, Cr6+, or cyanide. The dissolved metals including iron, magnesium, manganese, and sodium were detected above their respective groundwater quality standards (GQSs). Eight VOCs, including benzene, ethyl benzene, isopropylbenzene, toluene, cis-1,2- dichloroethene, tetrachloroethene (PCE), trans-1,2-dichloroethene, and trichloroethene (TCE) were detected above their corresponding GQSs in groundwater. PCE was detected at a maximum concentration of 490 micrograms per liter ( $\mu\text{g/l}$ ) and TCE was detected to a maximum value of 160  $\mu\text{g/l}$ .
8. Off-Site groundwater samples collected during the RI contained dissolved concentrations of VOCs, including cis-1,2-dichloroethene, PCE, trans-1,2-dichloroethene, and TCE above GQSs: PCE was detected at concentrations above 490  $\mu\text{g/l}$ . Results from off-Site investigations indicate a potential up-gradient source of the chlorinated VOC exceedances. During recent additional off-Site up-gradient investigation (June 2014, RI Addendum), PCE was detected at concentrations as high as 3,100  $\mu\text{g/l}$ .
9. Soil vapor samples collected during the RI showed several petroleum-related compounds and chlorinated VOCs. PCE was identified in all five samples at a maximum concentration of 183 micrograms per cubic meter ( $\mu\text{g/m}^3$ ), which falls within the monitoring level range of the New York State Department of



Health (NYSDOH) soil vapor guidance matrix. TCE was identified in two samples at a maximum concentration of 4.89 µg/m<sup>3</sup>, which is below the NYSDOH soil vapor guidance matrix. Neither PCE nor TCE were detected within any of the soil samples collected at the Site. The Site's history and groundwater sample results for PCE and TCE suggest a possible off-Site origin.

In October 2013, GZA conducted soil waste characterization for the Site. A total of 135 soil samples were collected from nine soil borings at the Site. The following analyses were conducted on the samples by a New York State Environmental Laboratory Approval Program certified laboratory and compared to New York Unrestricted Use SCOs:

- Twenty-seven soil samples were collected and analyzed for VOCs, SVOCs, total metals, PCBs, herbicides, and pesticides.
- Ninety soil samples were collected for total petroleum hydrocarbon - gasoline range organics (TPH-GRO) analysis.
- Seventeen soil samples were collected and analyzed for Resource Conservation and Recovery Act defined Characteristics and Toxicity Characteristics Leaching Procedure (TCLP) metals.
- One sample (PF-1) was collected from soil boring SB-7 for paint filter analysis.

The following constituents were identified above NYSDEC Unrestricted Use SCOs in soil samples:

- The VOCs benzene (one sample) and acetone (two samples) were detected;
- The SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected in multiple samples collected from the Site;
- The pesticides 4,4'-DDD and 4'4'-DDT were detected in one sample;
- Copper, lead, mercury, and zinc were detected in multiple samples from the Site. Arsenic and nickel were each detected in one sample.
- One sample from the TCLP analysis had a reported lead concentration of 14 milligrams per liter; and
- Gasoline range organics were detected in six samples with values greater



than 100 milligram per kilogram (mg/kg).

## 2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the BCP Decision Document, dated June 26, 2014, are as follows:

### 2.4.1 Groundwater

#### *RAOs for Public Health Protection*

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

#### *RAOs for Environmental Protection*

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.

### 2.4.2 Soil

#### *RAOs for Public Health Protection*

- Prevent ingestion/direct contact with contaminated soil.

#### *RAOs for Environmental Protection*

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

### 2.4.3 Soil Vapor

#### *RAOs for Public Health Protection*

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at the site.

## 2.5 Remaining Contamination

This section provides a summary of contamination remaining at the Site following remediation and redevelopment. This information is presented for informational purposes should future excavations or development be performed at the Site and the environmental conditions that could be encountered disclosed. Please note that temporal changes in concentrations and distributions of contaminants can occur; the user should verify existing and current Site conditions prior to performing any work that disturbs the Site remedial



cover.

### 2.5.1 Soil

The remediation of the Site consisted of excavation of all subsurface materials within the property boundary of the Site to a depth of approximately 14 feet bgs. Excavation depths were increased in three locations in order to achieve unrestricted use cleanup objectives. The excavation depth extended into the groundwater table; construction dewatering was required to facilitate excavation of soils, placement of drainage stone, placement of the water proofing, and construction of the subsurface concrete building envelope.

During the RI phase of work, the predominant classes of contamination found in Site soils consisted of the following:

- Fill at the Site was identified at concentrations that exceeded the Title 6 New York Codes, Rules, and Regulation Part 375 (6 NYCRR Part 375) PAH SVOCs and metals are characteristic of historic fill material containing trace amounts of brick, coal, and ash. SVOCs exceeding their respective SCOs, including PAHs, were detected in a number of soil samples collected from the Site. Fill placement appears to have been widespread in the area, which was historically common practice. At the Site, fill extended to a depth of approximately 8 feet bgs.
- Petroleum-related impacted soil was identified in the southern portion of the Site at concentrations exceeding its respective SCOs and contained measureable concentrations of TPH-GRO. Petroleum-impacted soils were related to an inactive USTs, associated piping, and historical retail petroleum operations.

As stated above, the Site was excavated to the property boundary, and to a depth below the fill material. Therefore the fill material, within the property boundary, has been removed from the Site. The end-point samples achieved the unrestricted and impact to groundwater soil cleanup objectives (SCOs). The side-wall samples (on the property boundary did not achieved the unrestricted use or impact to groundwater soil cleanup objectives (SCOs), however, these soils are technically not on the Site and are indicative of off-site contamination.

**Table 3** presents a summary of the Part 375 Unrestricted Use SCOs listed compounds that were detected in Site soils; these data are also depicted in Error! Reference



source not found..

### 2.5.2 Groundwater

On-Site groundwater samples collected during the RI showed no detectable concentrations of SVOCs, pesticides, herbicides, PCBs, Cr<sup>6+</sup>, or cyanide. The dissolved metals including iron, magnesium, manganese, and sodium were detected above their respective GQSs. Eight VOCs, including benzene, ethyl benzene, isopropylbenzene, toluene, cis-1,2-dichloroethene, PCE, trans-1,2-dichloroethene, and TCE were detected above their corresponding GQSs in groundwater. PCE was detected at a maximum concentration of 490 µg/l and TCE was detected to a maximum value of 160 µg/l. Off-Site groundwater samples collected during the RI contained dissolved concentrations of VOCs, including cis-1,2-dichloroethene, PCE, trans-1,2-dichloroethene, and TCE above GQSs: PCE was detected at concentrations above 490 µg/l. Results from off-Site investigations indicate a potential up-gradient source of the chlorinated VOC exceedances. An additional off-Site investigation further up-gradient of the Site, detected PCE at concentrations as high as 3,100 ug/l. It is reasonable to assume that groundwater will continue to contain concentrations of dissolved chlorinated compounds, emanating from off-Site sources, in the future until such sources are remediated.

**Table 4** summarizes the results of all samples of groundwater that exceed the GQSs. Please refer to **Figure 6** for a depiction of the distribution of groundwater impacts relative to the Site.

### 2.5.3 Soil Vapor

Soil vapor samples collected during the RI showed several petroleum-related compounds and chlorinated VOCs. PCE was identified in all five samples; however, only one sample fell within the monitoring level range of the NYSDOH soil vapor guidance matrix concentration of 183 µg/m<sup>3</sup>. TCE was identified in two samples at a maximum concentration of 4.89 µg/m<sup>3</sup>, which is below the NYSDOH soil vapor guidance matrix. Neither PCE nor TCE were detected within any of the soil samples collected at the Site. The Site's history and groundwater sample results for PCE and TCE suggest an off-Site origin. It is reasonable to assume that soil vapor will continue to contain concentrations of



chlorinated compounds, emanating from off-Site sources, in the future until such sources are remediated.

**Table 5 and Figure 7** summarize the results of the samples of soil vapor that exceed the NYSDOH guidance criteria prior to completion of the remedial action. Please note that the entire footprint of the property has been excavated to below the water table and the basement ventilation system has been designed to accommodate parking in accordance with NYCDOB code.



### **3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN**

#### **3.1 General**

Since remaining contamination exists at the Site, ICs and ECs are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of IC/ECs at the site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of IC/ECs on the site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review; and
- Any other provisions necessary to identify or establish methods for implementing the IC/ECs required by the site remedy, as determined by the NYSDEC.

#### **3.2 Institutional Controls**

A series of ICs is required by the RAWP and the record of decision to: (1) implement, maintain and monitor ECs; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the Site to restricted residential, commercial, or industrial. Adherence to these ICs on the Site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries are shown on Error! Reference source not found.. These ICs are:

- The property may be used for restricted residential, commercial or industrial use;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;



- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP; and
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.

### **3.3 Engineering Controls**

There are no Site ECs associated with the remedy as unrestricted track one SCOs were achieved. However, the proposed underground parking structure will be designed to meet ventilation requirements of the NYC Building Codes. In the event that a sump is placed in the basement area to address an influx of groundwater, the sump shall be sealed and vented to the outside of the building to address the potential for exposure to vapors generated from contaminated groundwater.



## 4.0 MONITORING AND SAMPLING PLAN

### 4.1 General

This Monitoring and Sampling Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC. Details regarding the sampling procedures, data quality usability objectives, analytical methods, etc. for all samples collected as part of site management for the site are included in the Field Sampling Procedures / Quality Assurance Project Plan provided in **Appendix D**.

- This Monitoring and Sampling Plan describes the methods to be used for Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance (SCGs), particularly groundwater standards and Part 375 SCOs for soil; and
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment.

To adequately address these issues, this Monitoring and Sampling Plan provides information on:

- Sampling locations, protocol and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

### 4.2 Post-Remediation Media Monitoring and Sampling

Samples shall be collected from the proposed monitoring wells on a routine basis. Sampling locations, required analytical parameters and schedule are provided in **Table 7** –



**Post Remediation Sampling Requirements and Schedule** below. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

**Table 7 – Post Remediation Sampling Requirements and Schedule**

<b>Sampling Location</b>	<b>Analytical Parameters</b>				<b>Schedule</b>
	VOCs (EPA Method 624)	TAL Metals (EPA Method 6010B)	pH (EPA Method 9040)	VOC (Method TO-15)	
Monitoring Well #7, 8 and 9	X				Quarterly

Detailed sample collection and analytical procedures and protocols are provided in Appendix D –Field Sampling Procedures /Quality Assurance Project Plan.

Upon opening each monitoring well, the headspace will be measured using a PID and water level measurements will be recorded using an electronic water level meter or oil-water interface probe, as appropriate. The depth to product (if present), depth to water, and the total depth will be measured from the top of the marked PVC casings to an accuracy of 0.01 feet. Before sampling, the wells will be purged utilizing a low-flow submersible stainless steel pump with dedicated Teflon® or Teflon®-lined polyethylene tubing connected to a transparent flow cell. Very low purging rates are proposed, on the order of 100 ml/minute to 500 ml/minute, to minimize suspension of particulate matter in the well.

Groundwater from each well will be purged until turbidity, pH, temperature, dissolved oxygen and specific conductivity have stabilized in accordance with the USEPA Low Flow Sampling Procedures Guidance. As practical, all field measurements will be taken from the flow cell and will be recorded in the field logbook during and after purging, and before sampling.



Purging will be performed with the pump intake placed at the midpoint of the well screen or the midpoint of the water column (to be determined based on the depth and length of the screen interval) to insure that all stagnant water in the well is removed, while not stirring up sediment that may have accumulated on the bottom of the well. Equipment will be lowered into the well very carefully to limit suspension of bottom sediment and subsequent entrainment onto sampling equipment. Surging will be avoided. Dedicated tubing will be used for each well. Pumps will be carefully cleaned between wells. Ideally, pumping rates will be at a rate so that no drawdown of the groundwater level occurs (i.e., pumping rate is less than recharge rate). During purging, the sampler will actively monitor and track the volume of water purged and the field parameter readings. Data will be recorded in the field logbook or well purge data sheet. Sampling personnel will wear phthalate-free gloves such as nitrile (no latex will be used) and will avoid contact of the gloves with the sample. Only clean instruments will be allowed to touch the sample.

The samples will be collected in laboratory prepared sample bottles (pre-preserved, if appropriate), placed in iced coolers and removed from light immediately after collection. In addition, all sample bottles must be filled to the top so that no aeration of the samples occurs during transport. All bottles will be filled to avoid cascading and aeration of the samples, the goal being to minimize any precipitation of colloidal matter.

#### 4.2.1 Groundwater Sampling

Groundwater monitoring will be performed on a quarterly basis to assess the performance of the remedy. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

The network of monitoring wells will be installed to monitor downgradient groundwater conditions at the site. The network of on-site wells have been designed to evaluate the effectiveness of the remedy (excavation and application of oxygen release compound on the reduction of dissolved petroleum constituents on the downgradient side of the Site below the building slab.



**Table 8** summarizes the proposed wells identification number, as well as the purpose, location, depths, diameter and screened intervals of the wells. As part of the groundwater monitoring, 3 downgradient wells are sampled to evaluate the effectiveness of the remedy.

**Table 8 – Proposed Monitoring Well Construction Details**

Monitoring Well ID	Well Location	Coordinates (longitude/latitude)	Well Diameter (inches)	Elevation (above mean sea level)			
				Casing	Surface	Screen Top	Screen Bottom
MW-7	Downgradient	N40° 45' 07.85" W73° 55' 41.56"	2	26.63	27.13	12.88	2.88
MW-8	Downgradient	N40° 45' 07.85" W73° 55' 41.07"	2	26.63	27.13	12.88	2.88
MW-9	Downgradient	N40° 45' 07.85" W73° 55' 40.50"	2	26.63	27.13	12.88	2.88

Monitoring wells were placed on the downgradient side of the remedial excavation at the downgradient property boundary. As the entire Site will be developed with a 12 story building with a “bath-tub” type foundation, the monitoring wells were installed between the foundation wall and the support of excavation just within the property boundary. A 5 foot diameter New Your City Sewer and a New York City Subway station



are located immediately south of the property line. The wellheads will be completed within the finished first floor of the proposed building.

The wells will be screened within the upper glacial aquifer in the first water bearing unit. The screens will extend from immediately beneath the basement bottom slab to 10 feet below the basement bottom slab to evaluate the effectiveness of soil excavation and ORC application on decreasing the mass of dissolved petroleum beneath the building foundation.

Groundwater elevations and flow patterns were discussed in Section 2.0. Proposed monitoring well construction details are included in **Appendix E**.

If biofouling or silt accumulation occurs in the on-site monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced, if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of any monitoring well for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent Periodic Review Report. Well decommissioning without replacement will be done only with the prior approval of the NYSDEC. Well abandonment will be performed in accordance with NYSDEC's guidance entitled "CP-43: Groundwater Monitoring Well Decommissioning Procedures" Or other method approved by the Department prior to well abandonment. Monitoring wells that are decommissioned because they have been rendered unusable will be replaced in kind in the nearest available location, unless otherwise approved by the NYSDEC.

The sampling frequency may only be modified with the approval of the NYSDEC. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC.

Deliverables for the groundwater monitoring program are specified in Section 7.0 – Reporting Requirements.



#### 4.2.2 Monitoring and Sampling Protocol

All sampling activities will be recorded in a field book and associated sampling log as provided in Appendix F - Site Management Forms. Other observations (e.g., groundwater monitoring well integrity, etc.) will be noted on the sampling log. The sampling log will serve as the inspection form for the monitoring network. Additional detail regarding monitoring and sampling protocols are provided in the site-specific Quality Assurance Plan provided as **Appendix D** of this document.



## **5.0 OPERATION AND MAINTENANCE PLAN**

### **5.1 General**

The Site remedy does not rely on any mechanical systems, such as groundwater treatment systems, sub-slab depressurization systems, or air sparge/soil vapor extraction systems to protect public health and the environment. Therefore, the operation and maintenance of such components is not included in this SMP.



## **6.0 PERIODIC ASSESSMENTS/EVALUATIONS**

### **6.1 Climate Change Vulnerability Assessment**

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a remedial system in the event a storm/weather event impacts such system. Vulnerability assessments provide information so that the site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

A vulnerability assessment will not be performed for the Site for the following reasons:

- According to Federal Emergency Management Agency Flood Map Service, the Site is not located in a flood plain, low-lying, or low-groundwater recharge area;
- Site drainage and stormwater management will be connected to New York City municipal systems;
- There are no exposed soils on the Site; therefore, the Site is not susceptible to erosion during severe rain events;
- Because there are no active remedial systems, the Site is not susceptible to damage from the wind itself or falling objects, such as trees or utility structures during periods of high wind; and
- Because there are no active remedial systems, the Site is not susceptible to a spill or containment release due to storm-related damage caused by flooding, erosion, high winds, loss of power etc.

### **6.2 Green Remediation Evaluation**

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including Site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. There are no active remedial systems or imported fill, therefore a Green Remediation Evaluation is not included here.







## 7.0 REPORTING REQUIREMENTS

### 7.1 Site Management Reports

All Site management inspection, maintenance, and monitoring events observed will be recorded on the appropriate site management forms. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the Site during a reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table 9 and summarized in the Periodic Review Report.

**Table 9 Schedule of Interim Monitoring/Inspection Reports**

<b>Task/Report</b>	<b>Reporting Frequency*</b>
Inspection Report	Quarterly
Periodic Review Report	Annually

\* The frequency of events will be conducted as specified until otherwise approved by the NYSDEC.

Inspection Reports will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting activities;
- Description of activities performed;
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;



- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

Analytical data will be reported in digital format as determined by the NYSDEC. Currently, data is to be supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link <http://www.dec.ny.gov/chemical/62440.html>. Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the Department twelve months after the Certificate of Completion is issued. After submittal of the initial Periodic Review Report, the next PRR shall be submitted on an annual basis to the Department or at another frequency as may be required by the Department. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in the Environmental Easement. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period. Groundwater sampling results will also be incorporated into the Periodic Review Report and submitted in electronic format as described in **Section 7.1** above. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site.
- Results of the required Site inspections and severe condition inspections, if applicable.
- All applicable Site Management Forms and other records generated for the Site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor, etc.), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends.



- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link: <http://www.dec.ny.gov/chemical/62440.html>.
- A Site evaluation, includes the following:
  - The compliance of the remedy with the requirements of the site-specific RAWP, ROD or Decision Document;
  - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;
  - Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan; and
  - Trends in contaminant levels in the affected media will be evaluated to determine if the remedy continues to be effective in achieving remedial goals as specified by the Decision Document. The overall performance and effectiveness of the remedy.

#### 7.1.1 Certification of Institutional and Engineering Controls

Following the Periodic Review Report, a qualified environmental professional will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

*“For each institutional or engineering control identified for the site, I certify that all of the following statements are true:*

- *The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;*

The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;

- *Nothing has occurred that would impair the ability of the control to protect the public health and environment;*



- *Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control;*
- *Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;*
- *If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;*
- *Use of the Site is compliant with the environmental easement;*
- *The engineering control systems are performing as designed and are effective;*
- *To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and*
- *The information presented in this report is accurate and complete.*

*I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner/Remedial Party or Owner's/Remedial Party's Designated Site Representative] (and if the site consists of multiple properties): [I have been authorized and designated by all site owners/remedial parties to sign this certification] for the site."*

For BCP projects which the Department has determined do not represent a significant threat to public health or the environment, but where contaminants in groundwater exceed drinking water standards, the following should also be included:

- No new information has come to my attention, including groundwater monitoring data from wells located at the Site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-Site contamination are no longer valid.

For BCP projects, every five years the following certification will be added:

- The assumptions made in the qualitative exposure assessment remain valid.

The signed certification will be included in the Periodic Review Report.



The Periodic Review Report will be submitted, in electronic format, to the NYSDEC Project Manager, in the Central Office, and the Regional Office in which the Site is located and the NYSDOH Bureau of Environmental Exposure Investigation. The Periodic Review Report may need to be submitted in hard-copy format, as requested by the NYSDEC project manager.

## **7.2 Corrective Measures Work Plan**

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an IC or EC, a Corrective Measures Work Plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Work Plan until it has been approved by the NYSDEC.



## 8.0 REFERENCES

*Phase I Environmental Site Assessment, 37-14 36<sup>th</sup> Street*, Prepared by GZA GeoEnvironmental, November 2011.

*Remedial Investigation Report, 37-14 36<sup>th</sup> Street, E-Designation Site Number: 2EHAZ333Q*, Prepared by GZA GeoEnvironmental, December 2012.

*Soil Waste Characterization Letter Report, 37-14 36<sup>th</sup> Street*, Prepared by GZA GeoEnvironmental, December 2013.

*Remedial Investigation Addendum Letter Report, 37-14 36<sup>th</sup> Street, NYSDEC Site Number: C241156*, Prepared by GZA GeoEnvironmental, June 2014.

*Remedial Action Work Plan, 37-14 36<sup>th</sup> Street, NYCDEC Site Number: C241156*, Prepared by GZA GeoEnvironmental, June 2014.

*Addendum to the Remedial Action Work Plan, 37-14 36<sup>th</sup> Street, NYCDEC Site Number: C241156*, Prepared by GZA GeoEnvironmental, December 2014.

6 NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

NYSDEC DER-10 – “Technical Guidance for Site Investigation and Remediation”.

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).





## **TABLES**



**TABLE 2 - Groundwater Elevation Data**  
**NYSDEC Site No. C241156**  
**37-14 36th Street**  
**Long Island City, NY**

Monitoring Wells	Monitoring Well ID	Date of Installation	Total Depth, (feet)	Groundwater Measurement Date	Relative Ground Surface Elevation <sup>1</sup> (feet)	Relative Top of Casing Elevation (feet)	Screened Interval (feet, bgs)	Construction Material	Depth to Water Below Top of Casing (feet)	Groundwater Elevation (feet)
Temporary Wells	W-1	4/2/2012	24	4/3/2012	---	---	14-24	PVC	13.3	N/A
	W-2	4/2/2012	24	4/3/2012	---	---	14-24	PVC	13.2	N/A
	GP-3	8/1/2012	20	8/1/2012	---	---	0-19.7	PVC	13.2	N/A
	GP-4	8/1/2012	16	8/1/2012	---	---	0-16.33	PVC	14.5	N/A
	GP-6	8/1/2012	19	8/1/2012	---	---	9-19	PVC	13.7	N/A
	GP-7	7/31/2012	16	7/31/2012	---	---	6-16	PVC	14.7	N/A
	GP-8	8/10/2012	17	8/10/2012	---	---	13-17	Steel Screen	13.5	N/A
	GP-9	8/10/2012	17	8/10/2012	---	---	13-17	Steel Screen	14.0	N/A
	GP-10	8/10/2012	17	8/10/2012	---	---	13-17	Steel Screen	13.5	N/A
	GP-11	8/10/2012	17	8/10/2012	---	---	13-17	Steel Screen	13.5	N/A
	GP-12	9/7/2012	27	9/7/2012	---	---	16-20, 23-27	Steel Screen	N/A	N/A
	GP-13	9/7/2012	27	9/7/2012	---	---	16-20, 23-27	Steel Screen	N/A	N/A
	GP-14	9/7/2012	27	9/7/2012	---	---	16-20, 23-27	Steel Screen	N/A	N/A
Monitoring Wells	MW-1	5/7/2012	22	4/15/2014	28.66	28.34	7-22	PVC	11.97	16.37
	MW-2	5/7/2012	22	4/15/2014	27.91	27.6	7-22	PVC	11.16	16.44
	MW-3	5/7/2012	22	4/15/2014	26.91	26.72	7-22	PVC	10.5	16.22
	MW-4	4/30/2014	29	5/15/2014	30.53	29.98	23-28	PVC	12.91	17.07
	MW-5	4/30/2014	29	5/15/2014	30.84	30.31	23-28	PVC	13.19	17.12
	MW-6	4/30/2014	29	5/15/2014	31.43	31.13	23-28	PVC	13.98	17.15



**Table 3: Summary of Soil Exceedances**

LOCATION	SAMPLING DATE	NY- UNRES	Units	EP-1 5/21/2015 L1511267-01	EP-2 5/28/2015 L1511735-01	EP-3 6/3/2015 L1512439-01	EP-4 (BOTTOM) 6/5/2015 L1512600-01	EP-4A (BOTTOM)* 6/30/2015 L1514938-01			
LAB SAMPLE ID				Results	Qual	Results	Qual	Results	Qual	Results	Qual
Metals											
Aluminum, Total			mg/kg	4000		2500		7200		9700	
Antimony, Total			mg/kg	4	U	1.1	J	5.1	U	2.9	J
Arsenic, Total	13		mg/kg	0.81	U	0.91	J	5.8		5.8	2.4
Barium, Total	350		mg/kg	26		17		57		94	56
Beryllium, Total	7.2		mg/kg	0.14	J	0.5	U	0.34	J	0.37	J
Cadmium, Total	2.5		mg/kg	0.81	U	1	U	1	U	0.89	U
Calcium, Total			mg/kg	1300		7000		3900		3300	
Chromium, Hexavalent	1		mg/kg	0.85	U	1	U	0.24	J	0.92	U
Chromium, Trivalent	30		mg/kg	9.8		12		18	J	16	14
Chromium, Total			mg/kg	9.8		12		18		16	15
Cobalt, Total			mg/kg	4.6		2.5		7.6		6.9	
Copper, Total	50		mg/kg	13		9.3		23		44	31
Cyanide, Total	27		mg/kg	0.77	U	9.3		1.2	U	1	1.2
Iron, Total			mg/kg	8900		8600		15000		18000	
Lead, Total	63		mg/kg	2.6	J	6.7		22		110	31
Magnesium, Total			mg/kg	2600		2800		3300		2800	
Manganese, Total	1600		mg/kg	190		100		150		370	290
Mercury, Total	0.18		mg/kg	0.07	U	0.09	U	0.07	J	0.63	0.04
Nickel, Total	30		mg/kg	8.3		4.8		14		13	12
Potassium, Total			mg/kg	660		370		1000		980	
Selenium, Total	3.9		mg/kg	1.6	U	2	U	2	U	1.8	U
Silver, Total	2		mg/kg	0.81	U	1	U	1	U	0.89	U
Sodium, Total			mg/kg	71	J	110	J	95	J	130	J
Thallium, Total			mg/kg	1.6	U	2	U	2	U	1.8	U
Vanadium, Total			mg/kg	14		16		26		22	
Zinc, Total	109		mg/kg	24		20		49		100	53
Pesticides											
2,4,5-T			mg/kg	0.176	U	-	-	0.217	U	0.189	U
2,4,5-TP (Silvex)	3.8		mg/kg	0.176	U	0.209	U	0.217	U	0.189	U
2,4-D			mg/kg	0.176	U	-	-	0.217	U	0.189	U
4,4'-DDD	0.0033		mg/kg	0.00168	U	0.00196	U	0.00205	U	0.00176	U
4,4'-DDE	0.0033		mg/kg	0.00168	U	0.00196	U	0.00205	U	0.00176	U
4,4'-DDT	0.0033		mg/kg	0.00314	U	0.00368	U	0.00385	U	0.0033	U
Aldrin	0.005		mg/kg	0.00168	U	0.00196	U	0.00205	U	0.00176	U
Alpha-BHC	0.02		mg/kg	0.000699	U	0.000819	U	0.000856	U	0.000734	U
Beta-BHC	0.036		mg/kg	0.00168	U	0.00196	U	0.00205	U	0.00176	U
Chlordane			mg/kg	0.0136	U	0.0162	U	0.0167	U	0.0143	U
cis-Chlordane (alpha)	0.094		mg/kg	0.0021	U	0.00125	J	0.00257	U	0.0022	U
Delta-BHC	0.04		mg/kg	0.00168	U	0.00196	U	0.00205	U	0.00176	U
Dieldrin	0.005		mg/kg	0.00105	U	0.00123	U	0.00128	U	0.0011	U
Endosulfan I	2.4		mg/kg	0.00168	U	0.00196	U	0.00205	U	0.00176	U
Endosulfan II	2.4		mg/kg	0.00168	U	0.00196	U	0.00205	U	0.00176	U
Endosulfan sulfate	2.4		mg/kg	0.000699	U	0.000819	U	0.000856	U	0.000734	U
Endrin	0.014		mg/kg	0.000699	U	0.000819	U	0.000856	U	0.000734	U
Endrin ketone			mg/kg	0.00168	U	0.00196	U	0.00205	U	0.00176	U
Heptachlor	0.042		mg/kg	0.000838	U	0.00107	U	0.00103	U	0.000881	U
Heptachlor epoxide			mg/kg	0.00314	U	0.00368	U	0.00385	U	0.0033	U
Lindane	0.1		mg/kg	0.000699	U	0.000819	U	0.000856	U	0.000734	U
Methoxychlor			mg/kg	0.00314	U	0.00368	U	0.00385	U	0.0033	U
Toxaphene			mg/kg	0.0314	U	0.0368	U	0.0385	U	0.033	U
trans-Chlordane			mg/kg	0.0021	U	0.000876	J	0.00257	U	0.0022	U
PCBs											
No Detections											
Aroclor 1016	0.1		mg/kg	0.035	U	0.0407	U	0.0425	U	0.0365	U
Aroclor 1221	0.1		mg/kg	0.035	U	0.0407	U	0.0425	U	0.0365	U
Aroclor 1232	0.1		mg/kg	0.035	U	0.0407	U	0.0425	U	0.0365	U
Aroclor 1242	0.1		mg/kg	0.035	U	0.0407	U	0.0425	U	0.0365	U
Aroclor 1248	0.1		mg/kg	0.035	U	0.0407	U	0.0425	U	0.0365	U
Aroclor 1254	0.1		mg/kg	0.035	U	0.0407	U	0.0425	U	0.0365	U
Aroclor 1260	0.1		mg/kg	0.035	U	0.0407	U	0.0425	U	0.0365	U
Aroclor 1262	0.1		mg/kg	0.035	U	0.0407	U	0.0425	U	0.0365	U
Aroclor 1268	0.1		mg/kg	0.035	U	0.0407	U	0.0425	U	0.0365	U
PCBs, Total			mg/kg	0.035	U	0.0407	U	0.0425	U	0.0365	U
Notes											
NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007											
mg/kg - milligram per kilogram											
U - Result is not detected at the reported detection limit for the sample.											
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.											
RL - Reporting Limit											
MDL - Method Detection Limit											
0.057 - The analyte was detected at concentrations above the 2200 Criteria											
* - Over-excavation sample point											



Table 3: Summary of Soil Exceedances

LOCATION			EP-1		EP-2		EP-3		EP-4 (BOTTOM)		EP-4A (BOTTOM)*	
SAMPLING DATE	NY-UNRES	Units	5/21/2015		5/28/2015		6/3/2015		6/5/2015		6/30/2015	
LAB SAMPLE ID			L1511267-01		L1511735-01		L1512439-01		L1512600-01		L1514938-01	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
SVOCs												
1,2,4,5-Tetrachlorobenzene		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
1,2,4-Trichlorobenzene		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
1,2-Dichlorobenzene	1.1	mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
1,3-Dichlorobenzene	2.4	mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
1,4-Dichlorobenzene	1.8	mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
2,4,5-Trichlorophenol		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
2,4,6-Trichlorophenol		mg/kg	0.1	U	0.13	U	0.13	U	0.23	U	0.13	U
2,4-Dichlorophenol		mg/kg	0.16	U	0.19	U	0.19	U	0.34	U	0.19	U
2,4-Dimethylphenol		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
2,4-Dinitrophenol		mg/kg	0.83	U	1	U	1	U	1.8	U	1	U
2,4-Dinitrotoluene		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
2,6-Dinitrotoluene		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
2-Chloronaphthalene		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
2-Chlorophenol		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
2-Methylnaphthalene		mg/kg	0.21	U	0.25	U	0.26	U	0.12	J	0.26	U
Methylphenol (o-Cresol)	0.33	mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
2-Nitroaniline		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
2-Nitrophenol		mg/kg	0.37	U	0.46	U	0.47	U	0.82	U	0.46	U
3,3'-Dichlorobenzidine		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
3-Methylphenol/4-Methylphenol (p-Cresol)	0.33	mg/kg	0.25	U	0.3	U	0.31	U	0.55	U	0.31	U
3-Nitroaniline		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
4,6-Dinitro-o-cresol		mg/kg	0.45	U	0.55	U	0.56	U	0.99	U	0.56	U
4-Bromophenyl phenyl ether		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
4-Chloroaniline		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
4-Chlorophenyl phenyl ether		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
4-Nitroaniline		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
4-Nitrophenol		mg/kg	0.24	U	0.3	U	0.3	U	0.53	U	0.3	U
Acenaphthene	20	mg/kg	0.14	U	0.17	U	0.17	U	0.75	U	0.17	U
Acenaphthylene	100	mg/kg	0.14	U	0.17	U	0.17	U	0.3	U	0.17	U
Acetophenone		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Anthracene	100	mg/kg	0.1	U	0.13	U	0.13	U	1.4	U	0.13	U
Benzo(a)anthracene	1	mg/kg	0.1	U	0.13	U	0.13	U	2.2	U	0.13	U
Benzo(a)pyrene	1	mg/kg	0.14	U	0.17	U	0.17	U	1.7	U	0.17	U
Benzo(b)fluoranthene	1	mg/kg	0.1	U	0.13	U	0.13	U	2.3	U	0.13	U
Benzo(g,h,i)perylene	100	mg/kg	0.14	U	0.17	U	0.17	U	1.1	U	0.17	U
Benzo(k)fluoranthene	0.8	mg/kg	0.1	U	0.13	U	0.13	U	0.89	U	0.13	U
Benzoic Acid		mg/kg	0.56	U	0.69	U	0.7	U	1.2	U	0.69	U
Benzyl Alcohol		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Biphenyl		mg/kg	0.39	U	0.48	U	0.49	U	0.87	U	0.49	U
Bis(2-chloroethoxy)methane		mg/kg	0.19	U	0.23	U	0.23	U	0.41	U	0.23	U
Bis(2-chloroethyl)ether		mg/kg	0.16	U	0.19	U	0.19	U	0.34	U	0.19	U
Bis(2-chloroisopropyl)ether		mg/kg	0.21	U	0.25	U	0.26	U	0.46	U	0.26	U
Bis(2-Ethylhexyl)phthalate		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Butyl benzyl phthalate		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Carbazole		mg/kg	0.17	U	0.21	U	0.22	U	0.56	U	0.21	U
Chrysene	1	mg/kg	0.1	U	0.13	U	0.13	U	2.2	U	0.13	U
Di-n-butylphthalate		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Di-n-octylphthalate		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.1	U	0.13	U	0.13	U	0.3	U	0.13	U
Dibenzofuran	7	mg/kg	0.17	U	0.21	U	0.22	U	0.41	U	0.21	U
Diethyl phthalate		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Dimethyl phthalate		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Fluoranthene	100	mg/kg	0.1	U	0.13	U	0.13	U	5.9	U	0.065	J
Fluorene	30	mg/kg	0.17	U	0.21	U	0.22	U	0.64	U	0.21	U
Hexachlorobenzene	0.33	mg/kg	0.1	U	0.13	U	0.13	U	0.23	U	0.13	U
Hexachlorobutadiene		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Hexachlorocyclopentadiene		mg/kg	0.49	U	0.61	U	0.62	U	1.1	U	0.61	U
Hexachloroethane		mg/kg	0.14	U	0.17	U	0.17	U	0.3	U	0.17	U
Indeno(1,2,3-cd)Pyrene	0.5	mg/kg	0.14	U	0.17	U	0.17	U	1.2	U	0.17	U
Isophorone		mg/kg	0.16	U	0.19	U	0.19	U	0.34	U	0.19	U
n-Nitrosodi-n-propylamine		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Naphthalene	12	mg/kg	0.17	U	0.21	U	0.22	U	0.14	J	0.21	U
Nitrobenzene		mg/kg	0.16	U	0.19	U	0.19	U	0.34	U	0.19	U
NitrosodiPhenylAmine (NDPA)/DPA		mg/kg	0.14	U	0.17	U	0.17	U	0.3	U	0.17	U
P-Chloro-M-Cresol		mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Pentachlorophenol	0.8	mg/kg	0.14	U	0.17	U	0.17	U	0.3	U	0.17	U
Phenanthrene	100	mg/kg	0.1	U	0.13	U	0.13	U	5.8	U	0.13	U
Phenol	0.33	mg/kg	0.17	U	0.21	U	0.22	U	0.38	U	0.21	U
Pyrene	100	mg/kg	0.1	U	0.13	U	0.13	U	4.5	U	0.059	J
VOCs												
1,1,1,2-Tetrachloroethane		mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
1,1,1-Trichloroethane	0.68	mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
1,1,2,2-Tetrachloroethane		mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
1,1,2-Trichloroethane		mg/kg	0.0018	U	0.003	U	0.0022	U	0.0017	U		
1,1-Dichloroethane	0.27	mg/kg	0.0018	U	0.003	U	0.0022	U	0.0017	U		
1,1-Dichloroethene	0.33	mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
1,1-Dichloropropene		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
1,2,3-Trichlorobenzene		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
1,2,3-Trichloropropane		mg/kg	0.012	U	0.02	U	0.015	U	0.011	U		
1,2,4,5-Tetramethylbenzene		mg/kg	0.0048	U	0.008	U	0.0058	U	0.0045	U		
1,2,4-Trichlorobenzene		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
1,2,4-Trimethylbenzene	3.6	mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
1,2-Dibromo-3-chloropropane		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
1,2-Dibromoethane		mg/kg	0.0048	U	0.008	U	0.0058	U	0.0045	U		
1,2-Dichlorobenzene	1.1	mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
1,2-Dichloroethane	0.02	mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
1,2-Dichloroethene, Total		mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		



**Table 3: Summary of Soil Exceedances**

LOCATION	NY- UNRES	Units	EP-1		EP-2		EP-3		EP-4 (BOTTOM)		EP-4A (BOTTOM)*	
SAMPLING DATE			5/21/2015		5/28/2015		6/3/2015		6/5/2015		6/30/2015	
LAB SAMPLE ID			L1511267-01		L1511735-01		L1512439-01		L1512600-01		L1514938-01	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,2-Dichloropropane		mg/kg	0.0042	U	0.007	U	0.0051	U	0.0039	U		
1,3,5-Trimethylbenzene	8.4	mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		



**Table 3: Summary of Soil Exceedances**

LOCATION	NY-UNRES	Units	EP-1 5/21/2015 L1511267-01		EP-2 5/28/2015 L1511735-01		EP-3 6/3/2015 L1512439-01		EP-4 (BOTTOM) 6/5/2015 L1512600-01		EP-4A (BOTTOM)* 6/30/2015 L1514938-01	
SAMPLING DATE			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
LAB SAMPLE ID												
1,3-Dichlorobenzene	2.4	mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
1,3-Dichloropropene		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
1,3-Dichloropropene, Total		mg/kg	0.0012	U	0.002	U	0.0015	U	0.001	U		
1,4-Dichlorobenzene	1.8	mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
1,4-Dioxane	0.1	mg/kg	0.12	U	0.2	U	0.15	U	0.11	U		
2,2-Dichloropropane		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.012	U	0.02	U	0.015	U	0.011	U		
2-Hexanone		mg/kg	0.012	U	0.02	U	0.015	U	0.011	U		
4-Methyl-2-pentanone		mg/kg	0.012	U	0.02	U	0.015	U	0.011	U		
Acetone	0.05	mg/kg	0.012	U	0.02	U	0.015	U	0.011	U		
Acrylonitrile		mg/kg	0.012	U	0.02	U	0.015	U	0.011	U		
Benzene	0.06	mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
Bromobenzene		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
Bromochloromethane		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
Bromodichloromethane		mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
Bromoform		mg/kg	0.0048	U	0.008	U	0.0058	U	0.0045	U		
Bromomethane		mg/kg	0.0024	U	0.004	U	0.0029	U	0.0022	U		
Carbon disulfide		mg/kg	0.012	U	0.02	U	0.015	U	0.011	U		
Carbon tetrachloride	0.76	mg/kg	0.0012	U	0.002	U	0.0015	U	0.00025	J		
Chlorobenzene	1.1	mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
Chloroethane		mg/kg	0.0024	U	0.004	U	0.0029	U	0.0022	U		
Chloroform	0.37	mg/kg	0.0018	U	0.003	U	0.0022	U	0.00064	J		
Chloromethane		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
cis-1,2-Dichloroethene	0.25	mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
cis-1,3-Dichloropropene		mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
Dibromochloromethane		mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
Dibromomethane		mg/kg	0.012	U	0.02	U	0.015	U	0.011	U		
Dichlorodifluoromethane		mg/kg	0.012	U	0.02	U	0.015	U	0.011	U		
Ethyl ether		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
Ethylbenzene	1	mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
Hexachlorobutadiene		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
Isopropylbenzene		mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
Methyl tert butyl ether	0.93	mg/kg	0.0024	U	0.004	U	0.0029	U	0.0022	U		
Methylene chloride	0.05	mg/kg	0.012	U	0.02	U	0.015	U	0.011	U		
n-Butylbenzene	12	mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
n-Propylbenzene	3.9	mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
Naphthalene	12	mg/kg	0.006	U	0.01	U	0.0073	U	0.00035	J		
o-Chlorotoluene		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
o-Xylene		mg/kg	0.0024	U	0.004	U	0.0029	U	0.0022	U		
p-Chlorotoluene		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
p-Diethylbenzene		mg/kg	0.0048	U	0.008	U	0.0058	U	0.0045	U		
p-Ethyltoluene		mg/kg	0.0048	U	0.008	U	0.0058	U	0.0045	U		
p-Isopropyltoluene		mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
p-m-Xylene		mg/kg	0.0024	U	0.004	U	0.0029	U	0.0022	U		
sec-Butylbenzene	11	mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
Styrene		mg/kg	0.0024	U	0.004	U	0.0029	U	0.0022	U		
tert-Butylbenzene	5.9	mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
Tetrachloroethene	1.3	mg/kg	0.0012	U	0.002	U	0.0021	U	0.021	U		
Toluene	0.7	mg/kg	0.0018	U	0.003	U	0.0022	U	0.0017	U		
trans-1,2-Dichloroethene	0.19	mg/kg	0.0018	U	0.003	U	0.0022	U	0.0017	U		
trans-1,3-Dichloropropene		mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
trans-1,4-Dichloro-2-butene		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
Trichloroethene	0.47	mg/kg	0.0012	U	0.002	U	0.0015	U	0.0011	U		
Trichlorofluoromethane		mg/kg	0.006	U	0.01	U	0.0073	U	0.0056	U		
Vinyl acetate		mg/kg	0.012	U	0.02	U	0.015	U	0.011	U		
Vinyl chloride	0.02	mg/kg	0.0024	U	0.004	U	0.0029	U	0.0022	U		
Xylenes, Total	0.26	mg/kg	0.0024	U	0.004	U	0.0029	U	0.0022	U		

Notes

NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007

mg/kg - milligram per kilogram

U - Result is not detected at the reported detection limit for the sample.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

RL - Reporting Limit

MDL - Method Detection Limit

0.057 - The analyte was detected at concentrations above the 2200 Criteria

\* - Over-excavation sample point



**Table 3: Summary of Soil Exceedances**

LOCATION	NY-UNRES	Units	EP-5 6/30/2015 L1514935-01		EP-6 7/7/2015 L1515477-01		EP-7 7/7/2015 L1515477-02		EP-8 7/7/2015 L1515477-03		EP-9 7/7/2015 L1515477-04		EP-10 7/7/2015 L1515477-05		EP-11 8/19/2015 L1520087-01	
SAMPLING DATE	LAB SAMPLE ID		Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>Metals</b>																
Aluminum, Total		mg/kg	7400		7500		7800		4400		6700		6400		5500	
Antimony, Total		mg/kg	5.1	U	4.4	U	4.3	U	4.2	U	4.4	U	4.3	U	4.8	U
Arsenic, Total	13	mg/kg	0.71	J	7.8		9.8		4.2		17		7.6			
Barium, Total	350	mg/kg	42		69		85		30		79		75		47	
Beryllium, Total	7.2	mg/kg	0.27	J	0.29	J	0.32	J	0.17	J	0.26	J	0.38	J	0.16	J
Cadmium, Total	2.5	mg/kg	1	U	0.12	J	0.31	J	0.85	U	20		0.11	J	0.97	U
Calcium, Total		mg/kg	1500		5200		18000		2000		8100		2800		13000	
Chromium, Hexavalent	1	mg/kg	0.98	J	0.22	J	0.9	U	0.34	J	0.22	J	0.22	J	0.25	J
Chromium, Trivalent	30	mg/kg	27		18	J	17		11	J	14	J	16	J	16	J
Chromium, Total		mg/kg	28		18		17		11		14		16		16	
Cobalt, Total		mg/kg	5.5		6.3		5.3		3.9		5.8		6.2		6	
Copper, Total	50	mg/kg	18		37		61		14		120		30		14	
Cyanide, Total	27	mg/kg	1.3	U	1.1	U	1.1	U	1	U	1	U	1.1	U	1.2	U
Iron, Total		mg/kg	11000		14000		13000		8600		37000		13000		11000	
Lead, Total	63	mg/kg	0.9	J	62		92		3.3	J	310		47		4.8	U
Magnesium, Total		mg/kg	1900		3800		6000		2600		2600		2500		9300	
Manganese, Total	1600	mg/kg	46		230		280		280		380		230		210	
Mercury, Total	0.18	mg/kg	0.03	J	0.13		0.11		0.02	J	0.82		0.15		0.08	U
Nickel, Total	30	mg/kg	11		12		12		9.6		12		13		10	
Potassium, Total		mg/kg	1000		1300		1200		530		1000		2000		1300	
Selenium, Total	3.9	mg/kg	2	U	1.8	U	1.7	U	1.7	U	1.8	U	1.7	U	1.9	U
Silver, Total	2	mg/kg	1	U	0.89	U	0.86	U	0.85	U	0.88	U	0.87	U	0.97	U
Sodium, Total		mg/kg	170	J	110	J	120	J	83	J	120	J	100	J	120	J
Thallium, Total		mg/kg	2	U	1.8	U	1.7	U	1.7	U	1.8	U	1.7	U	1.9	U
Vanadium, Total		mg/kg	28		25		22		13		21		17		22	
Zinc, Total	109	mg/kg	26		76		140		20		5100		96		31	
<b>Pesticides</b>																
2,4,5-T		mg/kg	0.214	U	0.187	U	0.186	U	0.177	U	0.183	U	0.185	U	0.204	U
2,4,5-TP (Silvex)	3.8	mg/kg	0.214	U	0.187	U	0.186	U	0.177	U	0.183	U	0.185	U	0.204	U
2,4-D		mg/kg	0.214	U	0.187	U	0.186	U	0.177	U	0.183	U	0.185	U	0.204	U
4,4'-DDD	0.0033	mg/kg	0.00203	U	0.00175	U	0.00175	U	0.00163	U	0.00169	U	0.00174	U	0.00192	U
4,4'-DDE	0.0033	mg/kg	0.00203	U	0.00175	U	0.00175	U	0.00163	U	0.00169	U	0.00174	U	0.00192	U
4,4'-DDT	0.0033	mg/kg	0.00381	U	0.00328	U	0.00328	U	0.00306	U	0.00317	U	0.00327	U	0.00361	U
4,4'-DDT	0.0033	mg/kg	0.00381	U	0.00328	U	0.00328	U	0.00306	U	0.00317	U	0.00327	U	0.00361	U
Aldrin	0.005	mg/kg	0.00203	U	0.00175	U	0.00175	U	0.00163	U	0.00169	U	0.00174	U	0.00192	U
Alpha-BHC	0.02	mg/kg	0.000847	U	0.000729	U	0.00073	U	0.000681	U	0.000704	U	0.000726	U	0.000802	U
Beta-BHC	0.036	mg/kg	0.00203	U	0.00175	U	0.00175	U	0.00163	U	0.00169	U	0.00174	U	0.00192	U
Chlordane		mg/kg	0.0165	U	0.0142	U	0.0142	U	0.0133	U	0.0137	U	0.0142	U	0.0156	U
cis-Chlordane (alpha)	0.094	mg/kg	0.00254	U	0.00219	U	0.00219	U	0.00204	U	0.00211	U	0.00218	U	0.0024	U
Delta-BHC	0.04	mg/kg	0.00203	U	0.00175	U	0.00175	U	0.00163	U	0.00169	U	0.00174	U	0.00192	U
Dieldrin	0.005	mg/kg	0.00127	U	0.00109	U	0.00109	U	0.00102	U	0.00106	U	0.00109	U	0.0012	U
Endosulfan I	2.4	mg/kg	0.00203	U	0.00175	U	0.00175	U	0.00163	U	0.00169	U	0.00174	U	0.00192	U
Endosulfan II	2.4	mg/kg	0.00203	U	0.00175	U	0.00175	U	0.00163	U	0.00169	U	0.00174	U	0.00192	U
Endosulfan sulfate	2.4	mg/kg	0.000847	U	0.000729	U	0.00073	U	0.000681	U	0.000704	U	0.000726	U	0.000802	U
Endrin	0.014	mg/kg	0.000847	U	0.000729	U	0.00073	U	0.000681	U	0.000704	U	0.000726	U	0.000802	U
Endrin ketone		mg/kg	0.00203	U	0.00175	U	0.00175	U	0.00163	U	0.00169	U	0.00174	U	0.00192	U
Heptachlor	0.042	mg/kg	0.00102	U	0.000875	U	0.000876	U	0.000817	U	0.000845	U	0.000872	U	0.000962	U
Heptachlor epoxide		mg/kg	0.00381	U	0.00328	U	0.00328	U	0.00306	U	0.00317	U	0.00327	U	0.00361	U
Lindane	0.1	mg/kg	0.000847	U	0.000729	U	0.00073	U	0.000681	U	0.000704	U	0.000726	U	0.000802	U
Methoxychlor		mg/kg	0.00381	U	0.00328	U	0.00328	U	0.00306	U	0.00317	U	0.00327	U	0.00361	U
Toxaphene		mg/kg	0.0381	U	0.0328	U	0.0328	U	0.0306	U	0.0317	U	0.0327	U	0.0361	U
trans-Chlordane		mg/kg	0.00254	U	0.00219	U	0.00219	U	0.00204	U	0.00211	U	0.00218	U	0.0024	U
<b>PCBs</b>																
No Detections																
Aroclor 1016	0.1	mg/kg	0.0421	U	0.0371	U	0.0358	U	0.0357	U	0.0362	U	0.0357	U	0.0392	U
Aroclor 1221	0.1	mg/kg	0.0421	U	0.0371	U	0.0358	U	0.0357	U	0.0362	U	0.0357	U	0.0392	U
Aroclor 1232	0.1	mg/kg	0.0421	U	0.0371	U	0.0358	U	0.0357	U	0.0362	U	0.0357	U	0.0392	U
Aroclor 1242	0.1	mg/kg	0.0421	U	0.0371	U	0.0358	U	0.0357	U	0.0362	U	0.0357	U	0.0392	U
Aroclor 1248	0.1	mg/kg	0.0421	U	0.0371	U	0.0358	U	0.0357	U	0.0362	U	0.0357	U	0.0392	U
Aroclor 1254	0.1	mg/kg	0.0421	U	0.0371	U	0.0358	U	0.0357	U	0.0362	U	0.0357	U	0.0392	U
Aroclor 1260	0.1	mg/kg	0.0421	U	0.0371	U	0.0358	U	0.0357	U	0.0362	U	0.0357	U	0.0392	U
Aroclor 1262	0.1	mg/kg	0.0421	U	0.0371	U	0.0358	U	0.0357	U	0.0362	U	0.0357	U	0.0392	U
Aroclor 1268	0.1	mg/kg	0.0421	U	0.0371	U	0.0358	U	0.0357	U	0.0362	U	0.0357	U	0.0392	U
PCBs, Total		mg/kg	0.0421	U	0.0371	U	0.0358	U	0.0357	U	0.0362	U	0.0357	U	0.0392	U
<b>Notes</b> <b>NY-UNRES</b> - New York Unrestricted Use Criteria current as of 5/2007 mg/kg - milligram per kilogram U - Result is not detected at the reported detection limit for the sample. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. RL - Reporting Limit MDL - Method Detection Limit 0.057 - The analyte was detected at concentrations above the 2200 Criteria * - Over-excavation sample point																



Table 3: Summary of Soil Exceedances

LOCATION			EP-5		EP-6		EP-7		EP-8		EP-9		EP-10		EP-11	
SAMPLING DATE	NY-UNRES	Units	6/30/2015		7/7/2015		7/7/2015		7/7/2015		7/7/2015		7/7/2015		8/19/2015	
LAB SAMPLE ID			L1514935-01		L1515477-01		L1515477-02		L1515477-03		L1515477-04		L1515477-05		L1520087-01	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
SVOCs																
1,2,4,5-Tetrachlorobenzene		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
1,2,4-Trichlorobenzene		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
1,2-Dichlorobenzene	1.1	mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
1,3-Dichlorobenzene	2.4	mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
1,4-Dichlorobenzene	1.8	mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
2,4,5-Trichlorophenol		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
2,4,6-Trichlorophenol		mg/kg	0.13	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.12	U
2,4-Dichlorophenol		mg/kg	0.19	U	0.17	U	0.17	U	0.16	U	0.16	U	0.17	U	0.18	U
2,4-Dimethylphenol		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
2,4-Dinitrophenol		mg/kg	1	U	0.89	U	0.9	U	0.85	U	0.88	U	0.88	U	0.96	U
2,4-Dinitrotoluene		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
2-Chloronaphthalene		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
2-Chlorophenol		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
2-Methylnaphthalene		mg/kg	0.25	U	0.22	U	0.22	U	0.21	U	0.22	U	0.22	U	0.24	U
2-Methylphenol (o-Cresol)	0.33	mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
2-Nitroaniline		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
2-Nitrophenol		mg/kg	0.45	U	0.4	U	0.4	U	0.38	U	0.4	U	0.4	U	0.43	U
3,3'-Dichlorobenzidine		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
3-Methylphenol/4-Methylphenol	0.33	mg/kg	0.3	U	0.27	U	0.27	U	0.26	U	0.26	U	0.26	U	0.29	U
3-Nitroaniline		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
4,6-Dinitro-o-cresol		mg/kg	0.55	U	0.48	U	0.49	U	0.46	U	0.48	U	0.48	U	0.52	U
4-Bromophenyl phenyl ether		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
4-Chloroaniline		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
4-Chlorophenyl phenyl ether		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
4-Nitroaniline		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
4-Nitrophenol		mg/kg	0.29	U	0.26	U	0.26	U	0.25	U	0.26	U	0.26	U	0.28	U
Acenaphthene	20	mg/kg	0.17	U	0.15	U	0.15	U	0.14	U	0.15	U	0.15	U	0.16	U
Acenaphthylene	100	mg/kg	0.17	U	0.15	U	0.15	U	0.14	U	0.061	J	0.15	U	0.16	U
Acetophenone		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Anthracene	100	mg/kg	0.13	U	0.046	J	0.059	J	0.11	U	0.13	U	0.052	J	0.12	U
Benzo(a)anthracene	1	mg/kg	0.13	U	0.22	U	0.26	U	0.049	J	0.45	U	0.19	U	0.12	U
Benzo(a)pyrene	1	mg/kg	0.17	U	0.21	U	0.25	U	0.14	U	0.4	U	0.2	U	0.16	U
Benzo(b)fluoranthene	1	mg/kg	0.13	U	0.29	U	0.35	U	0.056	J	0.51	U	0.27	U	0.12	U
Benzo(g,h,i)perylene	100	mg/kg	0.17	U	0.14	J	0.16	U	0.14	U	0.24	U	0.13	J	0.16	U
Benzo(k)fluoranthene	0.8	mg/kg	0.13	U	0.094	J	0.12	U	0.11	U	0.18	U	0.11	U	0.12	U
Benzoic Acid		mg/kg	0.68	U	0.6	U	0.61	U	0.57	U	0.6	U	0.6	U	0.65	U
Benzyl Alcohol		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Biphenyl		mg/kg	0.48	U	0.42	U	0.43	U	0.4	U	0.42	U	0.42	U	0.46	U
Bis(2-chloroethoxy)methane		mg/kg	0.23	U	0.2	U	0.2	U	0.19	U	0.2	U	0.2	U	0.22	U
Bis(2-chloroethyl)ether		mg/kg	0.19	U	0.17	U	0.17	U	0.16	U	0.16	U	0.17	U	0.18	U
Bis(2-chloroisopropyl)ether		mg/kg	0.25	U	0.22	U	0.22	U	0.21	U	0.22	U	0.22	U	0.24	U
Bis(2-Ethylhexyl)phthalate		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.09	J	0.2	U
Butyl benzyl phthalate		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Carbazole		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.042	J	0.18	U	0.2	U
Chrysene	1	mg/kg	0.13	U	0.25	U	0.29	U	0.048	J	0.48	U	0.23	U	0.12	U
Di-n-butylphthalate		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Di-n-octylphthalate		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.13	U	0.036	J	0.042	J	0.11	U	0.063	J	0.036	J	0.12	U
Dibenzofuran	7	mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Diethyl phthalate		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Dimethyl phthalate		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Fluoranthene	100	mg/kg	0.13	U	0.41	U	0.49	U	0.098	J	0.83	U	0.35	U	0.12	U
Fluorene	30	mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Hexachlorobenzene	0.33	mg/kg	0.13	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.12	U
Hexachlorobutadiene		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Hexachlorocyclopentadiene		mg/kg	0.6	U	0.53	U	0.54	U	0.51	U	0.53	U	0.53	U	0.57	U
Hexachloroethane		mg/kg	0.17	U	0.15	U	0.15	U	0.14	U	0.15	U	0.15	U	0.16	U
Indeno(1,2,3-cd)Pyrene	0.5	mg/kg	0.17	U	0.15	U	0.18	U	0.14	U	0.26	U	0.14	J	0.16	U
Isophorone		mg/kg	0.19	U	0.17	U	0.17	U	0.16	U	0.16	U	0.17	U	0.18	U
n-Nitrosodi-n-propylamine		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Naphthalene	12	mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Nitrobenzene		mg/kg	0.19	U	0.17	U	0.17	U	0.16	U	0.16	U	0.17	U	0.18	U
NitrosodiPhenylAmine(NDPA)/DPA		mg/kg	0.17	U	0.15	U	0.15	U	0.14	U	0.15	U	0.15	U	0.16	U
p-Chloro-M-Cresol		mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Pentachlorophenol	0.8	mg/kg	0.17	U	0.15	U	0.15	U	0.14	U	0.15	U	0.15	U	0.16	U
Phenanthrene	100	mg/kg	0.13	U	0.21	U	0.31	U	0.075	J	0.58	U	0.17	U	0.12	U
Phenol	0.33	mg/kg	0.21	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.2	U
Pyrene	100	mg/kg	0.13	U	0.39	U	0.45	U	0.086	J	0.8	U	0.41	U	0.12	U
VOCs																
1,1,1,2-Tetrachloroethane		mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
1,1,1-Trichloroethane	0.68	mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
1,1,2-Trichloroethane		mg/kg	0.0018	U	0.0017	U	0.0016	U	0.0014	U	0.0017	U	0.084	U	0.0018	U
1,1-Dichloroethane	0.27	mg/kg	0.0018	U	0.0017	U	0.0016	U	0.0014	U	0.0017	U	0.084	U	0.0018	U
1,1-Dichloroethene	0.33	mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
1,1-Dichloropropene		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
1,2,3-Trichlorobenzene		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
1,2,3-Trichloropropene		mg/kg	0.012	U	0.012	U	0.01	U	0.0094	U	0.011	U	0.56	U	0.012	U



**Table 3: Summary of Soil Exceedances**

LOCATION	NY-	Units	EP-5		EP-6		EP-7		EP-8		EP-9		EP-10		EP-11	
SAMPLING DATE	UNRES		6/30/2015		7/7/2015		7/7/2015		7/7/2015		7/7/2015		7/7/2015		8/19/2015	
LAB SAMPLE ID			L1514935-01		L1515477-01		L1515477-02		L1515477-03		L1515477-04		L1515477-05		L1520087-01	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,2-Dichloropropane		mg/kg	0.0042	U	0.004	U	0.0036	U	0.0033	U	0.0039	U	0.2	U	0.0042	U
1,3,5-Trimethylbenzene	8.4	mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U



Table 3: Summary of Soil Exceedances

LOCATION	NY-UNRES	Units	EP-5 6/30/2015 L1514935-01		EP-6 7/7/2015 L1515477-01		EP-7 7/7/2015 L1515477-02		EP-8 7/7/2015 L1515477-03		EP-9 7/7/2015 L1515477-04		EP-10 7/7/2015 L1515477-05		EP-11 8/19/2015 L1520087-01	
SAMPLING DATE			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,3-Dichlorobenzene	2.4	mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
1,3-Dichloropropane		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
1,3-Dichloropropane, Total		mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
1,4-Dichlorobenzene	1.8	mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
1,4-Dioxane	0.1	mg/kg	0.12	U	0.12	U	0.1	U	0.094	U	0.11	U	5.6	U	0.12	U
2,2-Dichloropropane		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.012	U	0.0013	J	0.0011	J	0.0021	J	0.00099	J	0.56	U	0.012	U
2-Hexanone		mg/kg	0.012	U	0.012	U	0.01	U	0.0094	U	0.011	U	0.56	U	0.012	U
4-Methyl-2-pentanone		mg/kg	0.012	U	0.012	U	0.01	U	0.0094	U	0.011	U	0.56	U	0.012	U
Acetone	0.05	mg/kg	0.0033	J	0.0044	J	0.0025	J	0.0036	J	0.0019	J	0.56	U	0.012	U
Acrylonitrile		mg/kg	0.012	U	0.012	U	0.01	U	0.0094	U	0.011	U	0.56	U	0.012	U
Benzene	0.06	mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
Bromobenzene		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
Bromochloromethane		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
Bromodichloromethane		mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
Bromoforn		mg/kg	0.0048	U	0.0046	U	0.0042	U	0.0038	U	0.0044	U	0.22	U	0.0048	U
Bromomethane		mg/kg	0.0024	U	0.0023	U	0.0021	U	0.0019	U	0.0022	U	0.11	U	0.0024	U
Carbon disulfide		mg/kg	0.012	U	0.012	U	0.01	U	0.0094	U	0.011	U	0.56	U	0.012	U
Carbon tetrachloride	0.76	mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
Chlorobenzene	1.1	mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
Chloroethane		mg/kg	0.0024	U	0.0023	U	0.0021	U	0.0019	U	0.0022	U	0.11	U	0.0024	U
Chloroform	0.37	mg/kg	0.0018	U	0.0017	U	0.0016	U	0.0014	U	0.0017	U	0.084	U	0.0018	U
Chloromethane		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
cis-1,2-Dichloroethene	0.25	mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0026	U
cis-1,3-Dichloropropene		mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
Dibromochloromethane		mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
Dibromomethane		mg/kg	0.012	U	0.012	U	0.01	U	0.0094	U	0.011	U	0.56	U	0.012	U
Dichlorodifluoromethane		mg/kg	0.012	U	0.012	U	0.01	U	0.0094	U	0.011	U	0.56	U	0.012	U
Ethyl ether		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
Ethylbenzene	1	mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
Hexachlorobutadiene		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
Isopropylbenzene		mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
Methyl tert butyl ether	0.93	mg/kg	0.0024	U	0.0023	U	0.0021	U	0.0019	U	0.0022	U	0.11	U	0.0024	U
Methylene chloride	0.05	mg/kg	0.012	U	0.012	U	0.01	U	0.0094	U	0.011	U	0.56	U	0.012	U
n-Butylbenzene	12	mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
n-Propylbenzene	3.9	mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
Naphthalene	12	mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
o-Chlorotoluene		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
o-Xylene		mg/kg	0.0024	U	0.0023	U	0.0021	U	0.0019	U	0.0022	U	0.11	U	0.0024	U
p-Chlorotoluene		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
p-Diethylbenzene		mg/kg	0.0048	U	0.0046	U	0.0042	U	0.0038	U	0.0044	U	0.016	J	0.0048	U
p-Ethyltoluene		mg/kg	0.0048	U	0.0046	U	0.0042	U	0.0038	U	0.0044	U	0.22	U	0.0048	U
p-Isopropyltoluene		mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
p-m-Xylene		mg/kg	0.0024	U	0.0023	U	0.0021	U	0.0019	U	0.0022	U	0.11	U	0.0024	U
sec-Butylbenzene	11	mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
Styrene		mg/kg	0.0024	U	0.0023	U	0.0021	U	0.0019	U	0.0022	U	0.11	U	0.0024	U
tert-Butylbenzene	5.9	mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
Tetrachloroethene	1.3	mg/kg	0.0012	U	0.0039	U	0.0024	U	0.00094	U	0.001	J	0.049	J	0.0037	U
Toluene	0.7	mg/kg	0.0018	U	0.0017	U	0.0016	U	0.0014	U	0.0017	U	0.084	U	0.0018	U
trans-1,2-Dichloroethene	0.19	mg/kg	0.0018	U	0.0017	U	0.0016	U	0.0014	U	0.0017	U	0.084	U	0.0018	U
trans-1,3-Dichloropropene		mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.0012	U
trans-1,4-Dichloro-2-butene		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
Trichloroethene	0.47	mg/kg	0.0012	U	0.0012	U	0.001	U	0.00094	U	0.0011	U	0.056	U	0.00079	J
Trichlorofluoromethane		mg/kg	0.006	U	0.0058	U	0.0052	U	0.0047	U	0.0056	U	0.28	U	0.006	U
Vinyl acetate		mg/kg	0.012	U	0.012	U	0.01	U	0.0094	U	0.011	U	0.56	U	0.012	U
Vinyl chloride	0.02	mg/kg	0.0024	U	0.0023	U	0.0021	U	0.0019	U	0.0022	U	0.11	U	0.0024	U
Xylenes, Total	0.26	mg/kg	0.0024	U	0.0023	U	0.0021	U	0.0019	U	0.0022	U	0.11	U	0.0024	U

Notes  
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 MDL - Method Detection Limit  
 0.057 - The analyte was detected at concentrations above the 2200 Criteria  
 \* - Over-excavation sample point



### Table 3: Summary of Soil Exceedances

LOCATION SAMPLING DATE LAB SAMPLE ID	NY- UNRES	Units	EP-12B 9/22/2015 L1523488-01 Results Qual	EP-13A 9/22/2015 L1523488-02 Results Qual	EP-14 9/22/2015 L1523488-03 Results Qual	EP-14 (DUP) 9/22/2015 L1523488-04 Results Qual	EP-15 9/23/2015 L1523924-01 Results Qual	EP-16 9/23/2015 L1523924-02 Results Qual
<b>Metals</b>								
Aluminum, Total		mg/kg	4700	4700	1800	2500	3800	4300
Antimony, Total		mg/kg	4.2	4	4.9	4.6	4.4	4.3
Arsenic, Total	13	mg/kg	4.4	5.7	2.2	2.5	0.63	1.1
Barium, Total	350	mg/kg	46	43	13	22	32	55
Beryllium, Total	7.2	mg/kg	0.23	0.21	0.49	0.11	0.1	0.15
Cadmium, Total	2.5	mg/kg	0.84	0.8	0.98	0.92	0.87	0.86
Calcium, Total		mg/kg	4000	3500	3300	2800	11000	9700
Chromium, Hexavalent	1	mg/kg	0.86	0.86	0.37	0.98	0.9	0.88
Chromium, Trivalent	30	mg/kg	14	14	5.5	8.8	10	9.8
Chromium, Total		mg/kg	14	14	5.9	8.8	10	9.8
Cobalt, Total		mg/kg	4.6	5	2.5	3	3.8	3.2
Copper, Total	50	mg/kg	17	20	12	18	14	11
Cyanide, Total	27	mg/kg	1	1.1	1.3	1.1	0.43	1
Iron, Total		mg/kg	11000	12000	5800	7000	9100	9800
Lead, Total	63	mg/kg	8.8	1.6	4.9	4.6	0.26	4.3
Magnesium, Total		mg/kg	3700	3000	2400	2300	5800	5600
Manganese, Total	1600	mg/kg	210	270	65	100	130	300
Mercury, Total	0.18	mg/kg	0.02	0.03	0.08	0.02	0.07	0.07
Nickel, Total	30	mg/kg	11	11	4.6	5.9	7.8	7.5
Potassium, Total		mg/kg	1000	750	270	410	980	1000
Selenium, Total	3.9	mg/kg	1.7	1.6	2	1.8	1.7	1.7
Silver, Total	2	mg/kg	0.84	0.8	0.98	0.92	0.87	0.86
Sodium, Total		mg/kg	110	110	61	66	140	120
Thallium, Total		mg/kg	1.7	1.6	2	1.8	1.7	1.7
Vanadium, Total		mg/kg	18	18	9.4	11	17	15
Zinc, Total	109	mg/kg	38	35	12	16	18	21
<b>Pesticides</b>								
2,4,5-T		mg/kg	0.178	0.178	0.21	0.202	0.185	0.18
2,4,5-TP (Silvex)	3.8	mg/kg	0.178	0.178	0.21	0.202	0.185	0.18
2,4-D		mg/kg	0.178	0.178	0.21	0.202	0.185	0.18
4,4'-DDD	0.0033	mg/kg	0.00169	0.00167	0.00193	0.00192	0.00178	0.00171
4,4'-DDE	0.0033	mg/kg	0.00169	0.00167	0.00193	0.00192	0.00178	0.00171
4,4'-DDT	0.0033	mg/kg	0.00316	0.00314	0.00362	0.0036	0.00334	0.00321
Aldrin	0.005	mg/kg	0.00169	0.00167	0.00193	0.00192	0.00178	0.00171
Alpha-BHC	0.02	mg/kg	0.000703	0.000697	0.000804	0.0008	0.000743	0.000713
Beta-BHC	0.036	mg/kg	0.00169	0.00167	0.00193	0.00192	0.00178	0.00171
Chlordane		mg/kg	0.0137	0.0136	0.0157	0.0156	0.0373	0.0139
cis-Chlordane (alpha)	0.094	mg/kg	0.00211	0.00209	0.00241	0.0024	0.00239	0.00214
Delta-BHC	0.04	mg/kg	0.00169	0.00167	0.00193	0.00192	0.00178	0.00171
Dieldrin	0.005	mg/kg	0.00105	0.00104	0.00121	0.0012	0.00111	0.00107
Endosulfan I	2.4	mg/kg	0.00169	0.00167	0.00193	0.00192	0.00178	0.00171
Endosulfan II	2.4	mg/kg	0.00339	0.00167	0.00193	0.00192	0.00178	0.00171
Endosulfan sulfate	2.4	mg/kg	0.000703	0.000697	0.000804	0.0008	0.000743	0.000713
Endrin	0.014	mg/kg	0.000703	0.000697	0.000804	0.0008	0.000743	0.000713
Endrin ketone		mg/kg	0.00169	0.00167	0.00193	0.00192	0.00178	0.00171
Heptachlor	0.042	mg/kg	0.000844	0.000837	0.000965	0.00096	0.000583	0.000856
Heptachlor epoxide		mg/kg	0.00316	0.00314	0.00362	0.0036	0.00173	0.00321
Lindane	0.1	mg/kg	0.000703	0.000697	0.000804	0.0008	0.000743	0.000713
Methoxychlor		mg/kg	0.00316	0.00314	0.00362	0.0036	0.00334	0.00321
Toxaphene		mg/kg	0.0316	0.0314	0.0362	0.036	0.0334	0.0321
trans-Chlordane		mg/kg	0.00211	0.00209	0.00241	0.0024	0.00246	0.00214
<b>PCBs</b>								
No Detections								
Aroclor 1016	0.1	mg/kg	0.0354	0.0352	0.0416	0.0404	0.0368	0.0355
Aroclor 1221	0.1	mg/kg	0.0354	0.0352	0.0416	0.0404	0.0368	0.0355
Aroclor 1232	0.1	mg/kg	0.0354	0.0352	0.0416	0.0404	0.0368	0.0355
Aroclor 1242	0.1	mg/kg	0.0354	0.0352	0.0416	0.0404	0.0368	0.0355
Aroclor 1248	0.1	mg/kg	0.0354	0.0352	0.0416	0.0404	0.0368	0.0355
Aroclor 1254	0.1	mg/kg	0.0354	0.0352	0.0416	0.0404	0.0368	0.0355
Aroclor 1260	0.1	mg/kg	0.0354	0.0352	0.0416	0.0404	0.0368	0.0355
Aroclor 1262	0.1	mg/kg	0.0354	0.0352	0.0416	0.0404	0.0368	0.0355
Aroclor 1268	0.1	mg/kg	0.0354	0.0352	0.0416	0.0404	0.0368	0.0355
PCBs, Total		mg/kg	0.0354	0.0352	0.0416	0.0404	0.0368	0.0355

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Table 3: Summary of Soil Exceedances

LOCATION	NY-UNRES	Units	EP-12B 9/22/2015 L1523488-01	EP-13A 9/22/2015 L1523488-02	EP-14 9/22/2015 L1523488-03	EP-14 (DUP) 9/22/2015 L1523488-04	EP-15 9/23/2015 L1523924-01	EP-16 9/23/2015 L1523924-02
SAMPLING DATE			Results	Qual	Results	Qual	Results	Qual
LAB SAMPLE ID			Results	Qual	Results	Qual	Results	Qual
<b>SVOCs</b>								
1,2,4,5-Tetrachlorobenzene		mg/kg	0.18	U	0.18	U	0.21	U
1,2,4-Trichlorobenzene		mg/kg	0.18	U	0.18	U	0.21	U
1,2-Dichlorobenzene	1.1	mg/kg	0.18	U	0.18	U	0.21	U
1,3-Dichlorobenzene	2.4	mg/kg	0.18	U	0.18	U	0.21	U
1,4-Dichlorobenzene	1.8	mg/kg	0.18	U	0.18	U	0.21	U
2,4,5-Trichlorophenol		mg/kg	0.18	U	0.18	U	0.21	U
2,4,6-Trichlorophenol		mg/kg	0.11	U	0.11	U	0.13	U
2,4-Dichlorophenol		mg/kg	0.16	U	0.16	U	0.19	U
2,4-Dimethylphenol		mg/kg	0.18	U	0.18	U	0.21	U
2,4-Dinitrophenol		mg/kg	0.86	U	0.86	U	1	U
2,4-Dinitrotoluene		mg/kg	0.18	U	0.18	U	0.21	U
2,6-Dinitrotoluene		mg/kg	0.18	U	0.18	U	0.21	U
2-Chloronaphthalene		mg/kg	0.18	U	0.18	U	0.21	U
2-Chlorophenol		mg/kg	0.18	U	0.18	U	0.21	U
2-Methylnaphthalene		mg/kg	0.21	U	0.22	U	0.25	U
2-Methylphenol (o-Cresol)	0.35	mg/kg	0.18	U	0.18	U	0.21	U
2-Nitroaniline		mg/kg	0.18	U	0.18	U	0.21	U
2-Nitrophenol		mg/kg	0.39	U	0.39	U	0.46	U
3,3'-Dichlorobenzidine		mg/kg	0.18	U	0.18	U	0.21	U
3-Methylphenol/4-Methylphenol (m-/p-)	0.33	mg/kg	0.26	U	0.26	U	0.3	U
3-Nitroaniline		mg/kg	0.18	U	0.18	U	0.21	U
4,6-Dinitro-o-cresol		mg/kg	0.46	U	0.47	U	0.55	U
4-Bromophenyl phenyl ether		mg/kg	0.18	U	0.18	U	0.21	U
4-Chloroaniline		mg/kg	0.18	U	0.18	U	0.21	U
4-Chlorophenyl phenyl ether		mg/kg	0.18	U	0.18	U	0.21	U
4-Nitroaniline		mg/kg	0.18	U	0.18	U	0.21	U
4-Nitrophenol		mg/kg	0.25	U	0.25	U	0.3	U
Acenaphthene	20	mg/kg	0.14	U	0.14	U	0.17	U
Acenaphthylene	100	mg/kg	0.14	U	0.14	U	0.17	U
Acetophenone		mg/kg	0.18	U	0.18	U	0.21	U
Anthracene	100	mg/kg	0.11	U	0.11	U	0.13	U
Benzo(a)anthracene	1	mg/kg	0.046	J	0.11	U	0.13	U
Benzo(a)pyrene	1	mg/kg	0.14	U	0.14	U	0.17	U
Benzo(b)fluoranthene	1	mg/kg	0.054	J	0.038	J	0.13	U
Benzo(ghi)perylene	100	mg/kg	0.14	U	0.14	U	0.17	U
Benzo(k)fluoranthene	0.8	mg/kg	0.11	U	0.11	U	0.13	U
Benzoic Acid		mg/kg	0.58	U	0.58	U	0.68	U
Benzyl Alcohol		mg/kg	0.18	U	0.18	U	0.21	U
Biphenyl		mg/kg	0.41	U	0.41	U	0.48	U
Bis(2-chloroethoxy)methane		mg/kg	0.19	U	0.19	U	0.23	U
Bis(2-chloroethyl)ether		mg/kg	0.16	U	0.16	U	0.19	U
Bis(2-chloroisopropyl)ether		mg/kg	0.21	U	0.22	U	0.25	U
Bis(2-Ethylhexyl)phthalate		mg/kg	0.18	U	0.18	U	0.21	U
Butyl benzyl phthalate		mg/kg	0.18	U	0.18	U	0.21	U
Carbazole		mg/kg	0.18	U	0.18	U	0.21	U
Chrysene	1	mg/kg	0.046	J	0.11	U	0.13	U
Di-n-butylphthalate		mg/kg	0.18	U	0.18	U	0.21	U
Di-n-octylphthalate		mg/kg	0.18	U	0.18	U	0.21	U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.11	U	0.11	U	0.13	U
Dibenzofuran	7	mg/kg	0.18	U	0.18	U	0.21	U
Diethyl phthalate		mg/kg	0.18	U	0.18	U	0.21	U
Dimethyl phthalate		mg/kg	0.18	U	0.18	U	0.21	U
Fluoranthene	100	mg/kg	0.078	J	0.066	J	0.13	U
Fluorene	30	mg/kg	0.18	U	0.18	U	0.21	U
Hexachlorobenzene	0.33	mg/kg	0.11	U	0.11	U	0.13	U
Hexachlorobutadiene		mg/kg	0.18	U	0.18	U	0.21	U
Hexachlorocyclopentadiene		mg/kg	0.51	U	0.51	U	0.6	U
Hexachloroethane		mg/kg	0.14	U	0.14	U	0.17	U
Indeno(1,2,3-cd)Pyrene	0.5	mg/kg	0.14	U	0.14	U	0.17	U
Isophorone		mg/kg	0.16	U	0.16	U	0.19	U
n-Nitrosodi-n-propylamine		mg/kg	0.18	U	0.18	U	0.21	U
Naphthalene	12	mg/kg	0.18	U	0.18	U	0.21	U
Nitrobenzene		mg/kg	0.16	U	0.16	U	0.19	U
NitrosoDiPhenylAmine(NDPA)/DPA		mg/kg	0.14	U	0.14	U	0.17	U
P-Chloro-M-Cresol		mg/kg	0.18	U	0.18	U	0.21	U
Pentachlorophenol	0.8	mg/kg	0.14	U	0.14	U	0.17	U
Phenanthrene	100	mg/kg	0.042	J	0.038	J	0.13	U
Phenol	0.33	mg/kg	0.18	U	0.18	U	0.21	U
Pyrene	100	mg/kg	0.077	J	0.06	J	0.13	U
<b>VOCs</b>								
1,1,1,2-Tetrachloroethane		mg/kg	0.00097	U	0.001	U	0.0014	U
1,1,1-Trichloroethane	0.68	mg/kg	0.00097	U	0.001	U	0.0014	U
1,1,2,2-Tetrachloroethane		mg/kg	0.00097	U	0.001	U	0.0014	U
1,1,2-Trichloroethane		mg/kg	0.0014	U	0.0015	U	0.0021	U
1,1-Dichloroethane	0.27	mg/kg	0.0014	U	0.0015	U	0.0021	U
1,1-Dichloroethene	0.33	mg/kg	0.00097	U	0.001	U	0.0014	U
1,1-Dichloropropene		mg/kg	0.0048	U	0.0051	U	0.0071	U
1,2,3-Trichlorobenzene		mg/kg	0.0048	U	0.0051	U	0.0071	U
1,2,3-Trichloroethylene		mg/kg	0.0057	U	0.01	U	0.014	U
1,2,4,5-Tetramethylbenzene		mg/kg	0.0039	U	0.0041	U	0.0057	U
1,2,4-Trichlorobenzene		mg/kg	0.0048	U	0.0051	U	0.0071	U
1,2,4-Trimethylbenzene	3.6	mg/kg	0.0048	U	0.0051	U	0.0071	U
1,2-Dibromo-3-chloropropane		mg/kg	0.0048	U	0.0051	U	0.0071	U
1,2-Dibromoethane		mg/kg	0.0039	U	0.0041	U	0.0057	U
1,2-Dichlorobenzene	1.1	mg/kg	0.0048	U	0.0051	U	0.0071	U
1,2-Dichloroethane	0.02	mg/kg	0.00097	U	0.001	U	0.0014	U
1,2-Dichloroethene, Total		mg/kg	0.00097	U	0.001	U	0.0014	U



**Table 3: Summary of Soil Exceedances**

LOCATION	NY- UNRES	Units	EP-12B		EP-13A		EP-14		EP-14 (DUP)		EP-15		EP-16	
SAMPLING DATE			9/22/2015		9/22/2015		9/22/2015		9/22/2015		9/23/2015		9/23/2015	
LAB SAMPLE ID			L1523488-01		L1523488-02		L1523488-03		L1523488-04		L1523924-01		L1523924-02	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,2-Dichloropropane		mg/kg	0.0034	U	0.0036	U	0.005	U	0.0055	U	0.0032	U	0.0031	U
1,3,5-Trimethylbenzene	8.4	mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U



**Table 3: Summary of Soil Exceedances**

LOCATION SAMPLING DATE LAB SAMPLE ID	NY- UNRES	Units	EP-12B 9/22/2015 L1523488-01		EP-13A 9/22/2015 L1523488-02		EP-14 9/22/2015 L1523488-03		EP-14 (DUP) 9/22/2015 L1523488-04		EP-15 9/23/2015 L1523924-01		EP-16 9/23/2015 L1523924-02	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,3-Dichlorobenzene	2.4	:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
1,3-Dichloropropane		:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
1,3-Dichloropropane, Total		:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
1,4-Dichlorobenzene	1.8	:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
1,4-Dioxane	0.1	:mg/kg	0.0097	U	0.1	U	0.14	U	0.16	U	0.09	U	0.088	U
2,2-Dichloropropane		:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
2-Butanone (Methyl ethyl ketone)	0.12	:mg/kg	0.0097	U	0.01	U	0.0029	J	0.002	J	0.009	U	0.0088	U
2-Hexanone		:mg/kg	0.0097	U	0.01	U	0.014	U	0.016	U	0.009	U	0.0088	U
4-Methyl-2-pentanone		:mg/kg	0.0097	U	0.01	U	0.014	U	0.016	U	0.009	U	0.0088	U
Acetone	0.05	:mg/kg	0.0076	J	0.006	J	0.01	J	0.01	J	0.0025	J	0.0036	J
Acrylonitrile		:mg/kg	0.0097	U	0.01	U	0.014	U	0.016	U	0.009	U	0.0088	U
Benzene	0.06	:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Bromobenzene		:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
Bromochloromethane		:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
Bromodichloromethane		:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Bromoform		:mg/kg	0.0039	U	0.0041	U	0.0057	U	0.0063	U	0.0036	U	0.0035	U
Bromomethane		:mg/kg	0.0019	U	0.002	U	0.0028	U	0.0032	U	0.0018	U	0.0018	U
Carbon disulfide		:mg/kg	0.0097	U	0.01	U	0.014	U	0.016	U	0.009	U	0.0088	U
Carbon tetrachloride	0.76	:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Chlorobenzene	1.1	:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Chloroethane		:mg/kg	0.0019	U	0.002	U	0.0028	U	0.0032	U	0.0018	U	0.0018	U
Chloroform	0.37	:mg/kg	0.0014	U	0.0015	U	0.0021	U	0.0024	U	0.0014	U	0.0013	U
Chloromethane		:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
cis-1,2-Dichloroethene	0.25	:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
cis-1,3-Dichloropropene		:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Dibromochloromethane		:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Dibromomethane		:mg/kg	0.0097	U	0.01	U	0.014	U	0.016	U	0.009	U	0.0088	U
Dichlorodifluoromethane		:mg/kg	0.0097	U	0.01	U	0.014	U	0.016	U	0.009	U	0.0088	U
Ethyl ether		:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
Ethylbenzene	1	:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Hexachlorobutadiene		:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
Isopropylbenzene		:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Methyl tert butyl ether	0.93	:mg/kg	0.0019	U	0.002	U	0.0028	U	0.0032	U	0.0018	U	0.0018	U
Methylene chloride	0.05	:mg/kg	0.0097	U	0.01	U	0.014	U	0.016	U	0.009	U	0.0088	U
n-Butylbenzene	12	:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
n-Propylbenzene	3.9	:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Naphthalene	12	:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
p-Chlorotoluene		:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
p-Xylene		:mg/kg	0.0019	U	0.002	U	0.0028	U	0.0032	U	0.0018	U	0.0018	U
p-Chlorotoluene		:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
p-Diethylbenzene		:mg/kg	0.0039	U	0.0041	U	0.0057	U	0.0063	U	0.0036	U	0.0035	U
p-Ethyltoluene		:mg/kg	0.0039	U	0.0041	U	0.0057	U	0.0063	U	0.0036	U	0.0035	U
p-Isopropyltoluene		:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
p-m-Xylene		:mg/kg	0.0019	U	0.002	U	0.0028	U	0.0032	U	0.0018	U	0.0018	U
sec-Butylbenzene	11	:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Styrene		:mg/kg	0.0019	U	0.002	U	0.0028	U	0.0032	U	0.0018	U	0.0018	U
tert-Butylbenzene	5.9	:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
Tetrachloroethene	1.3	:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Toluene	0.7	:mg/kg	0.00023	J	0.0015	U	0.0021	U	0.0024	U	0.0014	U	0.0013	U
trans-1,2-Dichloroethene	0.19	:mg/kg	0.0014	U	0.0015	U	0.0021	U	0.0024	U	0.0014	U	0.0013	U
trans-1,3-Dichloropropene		:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
trans-1,4-Dichloro-2-butene		:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
Trichloroethene	0.47	:mg/kg	0.00097	U	0.001	U	0.0014	U	0.0016	U	0.0009	U	0.00088	U
Trichlorofluoromethane		:mg/kg	0.0048	U	0.0051	U	0.0071	U	0.0079	U	0.0045	U	0.0044	U
Vinyl acetate		:mg/kg	0.0097	U	0.01	U	0.014	U	0.016	U	0.009	U	0.0088	U
Vinyl chloride	0.02	:mg/kg	0.0019	U	0.002	U	0.0028	U	0.0032	U	0.0018	U	0.0018	U
Xylenes, Total	0.26	:mg/kg	0.0019	U	0.002	U	0.0028	U	0.0032	U	0.0018	U	0.0018	U

Notes

NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007

mg/kg - milligram per kilogram

U - Result is not detected at the reported detection limit for the sample.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

RL - Reporting Limit

MDL - Method Detection Limit

0.0057 - The analyte was detected at concentrations above the 2200 Criteria

\* - Over-excavation sample point



**Table 3: Summary of Soil Exceedances**

LOCATION	NY-UNRES	Units	EP-10C 8/18/2015 L1519853-01		EP-17 9/25/2015 L1524055-01		EP-18C 9/28/2015 L1524313-01		EP-19 9/30/2015 L1524565-01		EP-19 DUP 9/30/2015 L1524565-03		EP-25C 10/9/2015 L1525694-01		EP-26C 10/9/2015 L1525694-02	
SAMPLING DATE			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
LAB SAMPLE ID																
<b>Metals</b>																
Aluminum, Total		mg/kg	6200		3300		3400		1800		3400		5100		3200	
Antimony, Total		mg/kg	5	U	42	U	4.5	U	4.3	U	4.2	U	4.4	U	1.6	J
Arsenic, Total	13	mg/kg	2.5		1.2		4.9		0.78	J	0.55	J	1.6		0.55	J
Barium, Total	350	mg/kg	57		29		38		24		50		50		33	
Beryllium, Total	7.2	mg/kg	0.21	J	0.12	J	0.12	J	0.16	J	0.14	J	0.18	J	0.41	U
Cadmium, Total	2.5	mg/kg	1	U	0.83	U	0.89	U	0.86	U	0.84	U	0.88	U	0.83	U
Calcium, Total		mg/kg	8100		2900		4300		1700		870		9900		11000	
Chromium, Hexavalent	1	mg/kg	1	U	0.84	U	0.93	U	0.88	U	0.88	U	0.93	U	0.86	U
Chromium, Trivalent	30	mg/kg	15		12		9.7		30		14		13		9.4	
Chromium, Total		mg/kg	15		12		9.7		30		14		13		9.4	
Cobalt, Total		mg/kg	5.3		3.4		4.9		2		3.9		4.8		3.7	
Copper, Total	50	mg/kg	27		11		19		9.4		18		20		15	
Cyanide, Total	27	mg/kg	1.2	U	1	U	1.1	U	1	U	1.1	U	1.1	U	1	U
Iron, Total		mg/kg	11000		6400		12000		2400		5600		11000		9500	
Lead, Total	63	mg/kg	40		1.6	J	4.5	U	0.72	J	0.85	J	13		0.75	J
Magnesium, Total		mg/kg	5300		2400		3000		660		1600		4400		5700	
Manganese, Total	1600	mg/kg	190		140		250		27		73		210		240	
Mercury, Total	0.18	mg/kg	0.07	J	0.07	U	0.08	U	0.02	J	0.08	U	0.04	J	0.02	J
Nickel, Total	30	mg/kg	11		5.4		9.6		2.6		7.6		10		7.6	
Potassium, Total		mg/kg	1100		480		790		130	J	390		1100		690	
Selenium, Total	3.9	mg/kg	2	U	1.7	U	1.8	U	0.53	J	1.7	U	1.8	U	1.6	U
Silver, Total	2	mg/kg	1	U	0.83	U	0.89	U	0.86	U	0.84	U	0.88	U	0.83	U
Sodium, Total		mg/kg	93	J	92	J	89	J	40	J	47	J	200		150	J
Thallium, Total		mg/kg	2	U	1.7	U	1.8	U	1.7	U	1.7	U	1.8	U	1.6	U
Vanadium, Total		mg/kg	19		18		19		7.9		8.1		19		16	
Zinc, Total	109	mg/kg	63		18		26		9.1		24		36		18	
<b>Pesticides</b>																
2,4,5-T		mg/kg	0.209	U	0.172	U	0.192	U	0.182	U	0.182	U	0.192	U	0.179	U
2,4,5-TP (Silvex)	3.8	mg/kg	0.209	U	0.172	U	0.192	U	0.182	U	0.182	U	0.192	U	0.179	U
2,4-D		mg/kg	0.209	U	0.172	U	0.192	U	0.182	U	0.182	U	0.192	U	0.179	U
4,4'-DDD	0.0033	mg/kg	0.00198	U	0.00166	U	0.0018	U	0.00172	U	0.00172	U	0.00185	U	0.00167	U
4,4'-DDE	0.0033	mg/kg	0.00198	U	0.00166	U	0.0018	U	0.00172	U	0.00172	U	0.00185	U	0.00167	U
4,4'-DDT	0.0033	mg/kg	0.00371	U	0.00311	U	0.00338	U	0.00322	U	0.00322	U	0.00346	U	0.00313	U
4,4'-DDT	0.0033	mg/kg	0.00371	U	0.00311	U	0.00338	U	0.00322	U	0.00322	U	0.00346	U	0.00313	U
Aldrin	0.005	mg/kg	0.00198	U	0.00166	U	0.0018	U	0.00172	U	0.00172	U	0.00185	U	0.00167	U
Alpha-BHC	0.02	mg/kg	0.000825	U	0.000691	U	0.000752	U	0.000715	U	0.000716	U	0.00077	U	0.000696	U
Beta-BHC	0.036	mg/kg	0.00198	U	0.00166	U	0.0018	U	0.00172	U	0.00172	U	0.00185	U	0.00167	U
Chlordane		mg/kg	0.0101	J	0.0135	U	0.00601	J	0.0139	U	0.014	U	0.0227	PI	0.0136	U
cis-Chlordane (alpha)	0.094	mg/kg	0.00248	U	0.00207	U	0.00226	U	0.00214	U	0.00215	U	0.00249	U	0.00209	U
Delta-BHC	0.04	mg/kg	0.00198	U	0.00166	U	0.0018	U	0.00172	U	0.00172	U	0.00185	U	0.00167	U
Dieldrin	0.005	mg/kg	0.00124	U	0.00104	U	0.00113	U	0.00107	U	0.00107	U	0.00115	U	0.00104	U
Endosulfan I	2.4	mg/kg	0.00198	U	0.00166	U	0.0018	U	0.00172	U	0.00172	U	0.00185	U	0.00167	U
Endosulfan II	2.4	mg/kg	0.00166	J	0.00166	U	0.0154		0.00172	U	0.00172	U	0.00185	U	0.00167	U
Endosulfan sulfate	2.4	mg/kg	0.000825	U	0.000691	U	0.000752	U	0.000715	U	0.000716	U	0.00077	U	0.000696	U
Endrin	0.014	mg/kg	0.000825	U	0.000691	U	0.000752	U	0.000715	U	0.000716	U	0.00077	U	0.000696	U
Endrin ketone		mg/kg	0.00198	U	0.00166	U	0.0018	U	0.00172	U	0.00172	U	0.00185	U	0.00167	U
Heptachlor	0.042	mg/kg	0.00099	U	0.000829	U	0.000902	U	0.000858	U	0.000859	U	0.000924	U	0.000836	U
Heptachlor epoxide		mg/kg	0.00371	U	0.00311	U	0.00338	U	0.00322	U	0.00322	U	0.00346	U	0.00313	U
Lindane	0.1	mg/kg	0.000825	U	0.000691	U	0.000752	U	0.000715	U	0.000716	U	0.00077	U	0.000696	U
Methoxychlor		mg/kg	0.00371	U	0.00311	U	0.00338	U	0.00322	U	0.00322	U	0.00346	U	0.00313	U
Toxaphene		mg/kg	0.0371	U	0.0311	U	0.0338	U	0.0322	U	0.0322	U	0.0346	U	0.0313	U
trans-Chlordane		mg/kg	0.00146	J	0.00207	U	0.00226	U	0.00214	U	0.00215	U	0.00349	PI	0.00209	U
<b>PCBs</b>																
Aroclor 1016	0.1	mg/kg	0.042	U	0.0334	U	0.0378	U	0.0355	U	0.0364	U	0.0383	U	0.0346	U
Aroclor 1221	0.1	mg/kg	0.042	U	0.0334	U	0.0378	U	0.0355	U	0.0364	U	0.0383	U	0.0346	U
Aroclor 1232	0.1	mg/kg	0.042	U	0.0334	U	0.0378	U	0.0355	U	0.0364	U	0.0383	U	0.0346	U
Aroclor 1242	0.1	mg/kg	0.042	U	0.0334	U	0.0378	U	0.0355	U	0.0364	U	0.0383	U	0.0346	U
Aroclor 1248	0.1	mg/kg	0.042	U	0.0334	U	0.0378	U	0.0355	U	0.0364	U	0.0383	U	0.0346	U
Aroclor 1254	0.1	mg/kg	0.042	U	0.0334	U	0.0378	U	0.0355	U	0.0364	U	0.0383	U	0.0346	U
Aroclor 1260	0.1	mg/kg	0.042	U	0.0334	U	0.0378	U	0.0355	U	0.0364	U	0.0383	U	0.0346	U
Aroclor 1262	0.1	mg/kg	0.042	U	0.0334	U	0.0378	U	0.0355	U	0.0364	U	0.0383	U	0.0346	U
Aroclor 1268	0.1	mg/kg	0.042	U	0.0334	U	0.0378	U	0.0355	U	0.0364	U	0.0383	U	0.0346	U
PCBs, Total		mg/kg	0.042	U	0.0334	U	0.0378	U	0.0355	U	0.0364	U	0.0383	U	0.0346	U
<b>Notes</b> NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007 mg/kg - milligram per kilogram U - Result is not detected at the reported detection limit for the sample. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. RL - Reporting Limit MDL - Method Detection Limit 0.057 - The analyte was detected at concentrations above the 2200 Criteria * - Over-excavation sample point																



Table 3: Summary of Soil Exceedances

LOCATION			EP-10C		EP-17		EP-18C		EP-19		EP-19 DUP		EP-25C		EP-26C		
SAMPLING DATE		NY-UNRES	8/18/2015		9/25/2015		9/28/2015		9/30/2015		9/30/2015		10/9/2015		10/9/2015		
LAB SAMPLE ID			L1519853-01		L1524055-01		L1524313-01		L1524565-01		L1524565-03		L1525694-01		L1525694-02		
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	
SVOCs																	
1,2,4,5-Tetrachlorobenzene			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
1,2,4-Trichlorobenzene			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
1,2-Dichlorobenzene	1.1		mg/kg	0.071	J	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
1,3-Dichlorobenzene	2.4		mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
1,4-Dichlorobenzene	1.8		mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
2,4,5-Trichlorophenol			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
2,4,6-Trichlorophenol			mg/kg	0.12	U	0.1	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
2,4-Dichlorophenol			mg/kg	0.19	U	0.16	U	0.17	U	0.16	U	0.16	U	0.17	U	0.16	U
2,4-Dimethylphenol			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.067	J
2,4-Dinitrophenol			mg/kg	1	U	0.84	U	0.91	U	0.87	U	0.86	U	0.92	U	0.85	U
2,4-Dinitrotoluene			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
2,6-Dinitrotoluene			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
2-Chloronaphthalene			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
2-Chlorophenol			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
2-Methylnaphthalene			mg/kg	0.082	J	0.21	U	0.23	U	0.22	U	0.21	U	0.23	U	0.21	U
2-Methylphenol (o-Cresol)	0.33		mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.064	J
2-Nitroaniline			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
2-Nitrophenol			mg/kg	0.45	U	0.38	U	0.41	U	0.39	U	0.39	U	0.41	U	0.38	U
3,3'-Dichlorobenzidine			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
3-Methylphenol/4-Methylphenol	0.33		mg/kg	0.3	U	0.25	U	0.27	U	0.26	U	0.26	U	0.28	U	0.18	J
3-Nitroaniline			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
4,6-Dinitro-o-cresol			mg/kg	0.54	U	0.45	U	0.49	U	0.47	U	0.46	U	0.5	U	0.46	U
4-Bromophenyl phenyl ether			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
4-Chloroaniline			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
4-Chlorophenyl phenyl ether			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
4-Nitroaniline			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
4-Nitrophenol			mg/kg	0.29	U	0.24	U	0.27	U	0.25	U	0.25	U	0.27	U	0.25	U
Acenaphthene	20		mg/kg	0.18	U	0.14	U	0.15	U	0.14	U	0.14	U	0.15	U	0.14	U
Acenaphthylene	100		mg/kg	0.17	U	0.14	U	0.15	U	0.14	U	0.14	U	0.15	U	0.14	U
Acetophenone			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Anthracene	100		mg/kg	0.45	U	0.1	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Benzo(a)anthracene	1		mg/kg	1.1	U	0.1	U	0.11	U	0.11	U	0.11	U	0.06	J	0.11	U
Benzo(a)pyrene	1		mg/kg	0.72	U	0.14	U	0.15	U	0.14	U	0.14	U	0.055	J	0.14	U
Benzo(b)fluoranthene	1		mg/kg	1.1	U	0.1	U	0.11	U	0.11	U	0.11	U	0.071	J	0.11	U
Benzo(g,h,i)perylene	100		mg/kg	0.48	U	0.14	U	0.15	U	0.14	U	0.14	U	0.15	U	0.14	U
Benzo(k)fluoranthene	0.8		mg/kg	0.37	U	0.1	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Benzoic Acid			mg/kg	0.68	U	0.57	U	0.62	U	0.59	U	0.58	U	0.62	U	0.58	U
Benzyl Alcohol			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Biphenyl			mg/kg	0.48	U	0.4	U	0.43	U	0.41	U	0.41	U	0.44	U	0.4	U
Bis(2-chloroethoxy)methane			mg/kg	0.23	U	0.19	U	0.2	U	0.2	U	0.19	U	0.21	U	0.19	U
Bis(2-chloroethoxy)ether			mg/kg	0.19	U	0.16	U	0.17	U	0.16	U	0.16	U	0.17	U	0.16	U
Bis(2-chloroisopropyl)ether			mg/kg	0.25	U	0.21	U	0.23	U	0.22	U	0.21	U	0.23	U	0.21	U
Bis(2-Ethylhexyl)phthalate			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.086	J	0.072	J	0.18	U
Butyl benzyl phthalate			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Carbazole			mg/kg	0.27	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Chrysene	1		mg/kg	1.1	U	0.1	U	0.11	U	0.11	U	0.11	U	0.066	J	0.11	U
Di-n-butylphthalate			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Di-n-octylphthalate			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Dibenzo(a,h)anthracene	0.33		mg/kg	0.13	U	0.1	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Dibenzofuran	7		mg/kg	0.14	J	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Diethyl phthalate			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Dimethyl phthalate			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Fluoranthene	100		mg/kg	2.6	U	0.1	U	0.11	U	0.11	U	0.11	U	0.12	U	0.033	J
Fluorene	30		mg/kg	0.19	J	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Hexachlorobenzene	0.33		mg/kg	0.12	U	0.1	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Hexachlorobutadiene			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Hexachlorocyclopentadiene			mg/kg	0.6	U	0.5	U	0.54	U	0.52	U	0.51	U	0.55	U	0.51	U
Hexachloroethane			mg/kg	0.17	U	0.14	U	0.15	U	0.14	U	0.14	U	0.15	U	0.14	U
Indeno(1,2,3-cd)Pyrene	0.5		mg/kg	0.48	U	0.14	U	0.15	U	0.14	U	0.14	U	0.15	U	0.14	U
Isophorone			mg/kg	0.19	U	0.16	U	0.17	U	0.16	U	0.16	U	0.17	U	0.16	U
n-Nitrosodi-n-propylamine			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Naphthalene	12		mg/kg	0.099	J	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Nitrobenzene			mg/kg	0.19	U	0.16	U	0.17	U	0.16	U	0.16	U	0.17	U	0.16	U
NitrosodiPhenylAmine(NDPA)/DPA			mg/kg	0.17	U	0.14	U	0.15	U	0.14	U	0.14	U	0.15	U	0.14	U
P-Chloro-M-Cresol			mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Pentachlorophenol	0.8		mg/kg	0.17	U	0.14	U	0.15	U	0.14	U	0.14	U	0.15	U	0.14	U
Phenanthrene	100		mg/kg	3.2	U	0.1	U	0.11	U	0.11	U	0.11	U	0.092	J	0.11	U
Phenol	0.33		mg/kg	0.21	U	0.17	U	0.19	U	0.18	U	0.18	U	0.19	U	0.18	U
Pyrene	100		mg/kg	2.1	U	0.1	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
VOCs																	
1,1,1,2-Tetrachloroethane			mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
1,1,1-Trichloroethane	0.68		mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
1,1,2,2-Tetrachloroethane			mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
1,1,2-Trichloroethane			mg/kg	0.0019	U	0.0014	U	0.0016	U	0.0016	U	0.0016	U	0.0014	U	0.0013	U
1,1-Dichloroethane	0.27		mg/kg	0.0019	U	0.0014	U	0.0016	U	0.0016	U	0.0016	U	0.0014	U	0.0013	U&gt



**Table 3: Summary of Soil Exceedances**

LOCATION	NY- UNRES	Units	EP-10C		EP-17		EP-18C		EP-19		EP-19 DUP		EP-25C		EP-26C	
SAMPLING DATE			8/18/2015		9/25/2015		9/28/2015		9/30/2015		9/30/2015		10/9/2015		10/9/2015	
LAB SAMPLE ID			L1519853-01		L1524055-01		L1524313-01		L1524565-01		L1524565-03		L1525694-01		L1525694-02	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,2-Dichloropropane		mg/kg	0.0045	U	0.0032	U	0.0038	U	0.0039	U	0.0038	U	0.0032	U	0.0031	U
1,3,5-Trimethylbenzene	8.4	mg/kg	0.0064	U	0.00025	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U



Table 3: Summary of Soil Exceedances

LOCATION	NY-UNRES	Units	EP-10C 8/18/2015 L1519853-01		EP-17 9/25/2015 L1524055-01		EP-18C 9/28/2015 L1524313-01		EP-19 9/30/2015 L1524565-01		EP-19 DUP 9/30/2015 L1524565-03		EP-25C 10/9/2015 L1525694-01		EP-26C 10/9/2015 L1525694-02	
SAMPLING DATE			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,3-Dichlorobenzene	2.4	mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
1,3-Dichloropropene		mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
1,3-Dichloropropene, Total		mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
1,4-Dichlorobenzene	1.8	mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
1,4-Dioxane	0.1	mg/kg	0.13	U	0.091	U	0.11	U	0.11	U	0.11	U	0.092	U	0.089	U
2,2-Dichloropropane		mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.013	U	0.00091	J	0.0018	J	0.0053	J	0.0044	J	0.0092	U	0.0089	U
2-Hexanone		mg/kg	0.013	U	0.0091	U	0.011	U	0.011	U	0.011	U	0.0092	U	0.0089	U
4-Methyl-2-pentanone		mg/kg	0.013	U	0.0091	U	0.011	U	0.011	U	0.011	U	0.0092	U	0.0089	U
Acetone	0.05	mg/kg	0.0054	J	0.0042	J	0.0092	J	0.018	U	0.015	U	0.0092	U	0.0042	J
Acrylonitrile		mg/kg	0.013	U	0.0091	U	0.011	U	0.011	U	0.011	U	0.0092	U	0.0089	U
Benzene	0.06	mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Bromobenzene		mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
Bromochloromethane		mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
Bromodichloromethane		mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Bromoform		mg/kg	0.0051	U	0.0036	U	0.0043	U	0.0044	U	0.0043	U	0.0037	U	0.0035	U
Bromomethane		mg/kg	0.0026	U	0.0018	U	0.0022	U	0.0022	U	0.0022	U	0.0018	U	0.0018	U
Carbon disulfide		mg/kg	0.013	U	0.0091	U	0.011	U	0.011	U	0.011	U	0.0092	U	0.0089	U
Carbon tetrachloride	0.76	mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Chlorobenzene	1.1	mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Chloroethane		mg/kg	0.0026	U	0.0018	U	0.0022	U	0.0022	U	0.0022	U	0.0018	U	0.0018	U
Chloroform	0.37	mg/kg	0.0019	U	0.0014	U	0.0016	U	0.0016	U	0.0016	U	0.0014	U	0.0013	U
Chloromethane		mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
cis-1,2-Dichloroethene	0.25	mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
cis-1,3-Dichloropropene		mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Dibromochloromethane		mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Dibromomethane		mg/kg	0.013	U	0.0091	U	0.011	U	0.011	U	0.011	U	0.0092	U	0.0089	U
Dichlorodifluoromethane		mg/kg	0.013	U	0.0091	U	0.011	U	0.011	U	0.011	U	0.0092	U	0.0089	U
Ethyl ether		mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
Ethylbenzene	1	mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Hexachlorobutadiene		mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
Isopropylbenzene		mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Methyl tert butyl ether	0.93	mg/kg	0.0026	U	0.0018	U	0.0022	U	0.0022	U	0.0022	U	0.0018	U	0.0018	U
Methylene chloride	0.05	mg/kg	0.013	U	0.0091	U	0.011	U	0.011	U	0.011	U	0.0092	U	0.0089	U
n-Butylbenzene	12	mg/kg	0.0013	U	0.0003	J	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
n-Propylbenzene	3.9	mg/kg	0.0013	U	0.00025	J	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Naphthalene	12	mg/kg	0.0064	U	0.001	J	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
o-Chlorotoluene		mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
o-Xylene		mg/kg	0.0026	U	0.0018	U	0.0022	U	0.0022	U	0.0022	U	0.0018	U	0.0018	U
p-Chlorotoluene		mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
p-Diethylbenzene		mg/kg	0.0051	U	0.00068	J	0.0043	U	0.0044	U	0.0043	U	0.0014	J	0.0018	J
p-Ethyltoluene		mg/kg	0.0051	U	0.00081	J	0.0043	U	0.0044	U	0.0043	U	0.00025	J	0.00031	J
p-Isopropyltoluene		mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
p,m-Xylene		mg/kg	0.0026	U	0.00022	J	0.0022	U	0.0022	U	0.0022	U	0.0018	U	0.0018	U
sec-Butylbenzene	11	mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Styrene		mg/kg	0.0026	U	0.0018	U	0.0022	U	0.0022	U	0.0022	U	0.0018	U	0.0018	U
tert-Butylbenzene	5.9	mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
Tetrachloroethene	1.3	mg/kg	0.00078	J	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Toluene	0.7	mg/kg	0.0019	U	0.0014	U	0.0016	U	0.0016	U	0.0016	U	0.0014	U	0.0013	U
trans-1,2-Dichloroethene	0.19	mg/kg	0.0019	U	0.0014	U	0.0016	U	0.0016	U	0.0016	U	0.0014	U	0.0013	U
trans-1,3-Dichloropropene		mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
trans-1,4-Dichloro-2-butene		mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
Trichloroethene	0.47	mg/kg	0.0013	U	0.00091	U	0.0011	U	0.0011	U	0.0011	U	0.00092	U	0.00089	U
Trichlorofluoromethane		mg/kg	0.0064	U	0.0046	U	0.0054	U	0.0055	U	0.0054	U	0.0046	U	0.0044	U
Vinyl acetate		mg/kg	0.013	U	0.0091	U	0.011	U	0.011	U	0.011	U	0.0092	U	0.0089	U
Vinyl chloride	0.02	mg/kg	0.0026	U	0.0018	U	0.0022	U	0.0022	U	0.0022	U	0.0018	U	0.0018	U
Xylenes, Total	0.26	mg/kg	0.0026	U	0.00022	J	0.0022	U	0.0022	U	0.0022	U	0.0018	U	0.0018	U

## Notes

NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007

mg/kg - milligram per kilogram

U - Result is not detected at the reported detection limit for the sample.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

RL - Reporting Limit

MDL - Method Detection Limit

0.057 - The analyte was detected at concentrations above the 2200 Criteria

\* - Over-excavation sample point



**Table 3: Summary of Soil Exceedances**

LOCATION SAMPLING DATE LAB SAMPLE ID	NY- UNRES	Units	EP-20 10/6/2015 L1525164-01		EP-21 10/6/2015 L1525164-02		ELP-27 10/12/2015 L1525813-01		EP-28B 10/12/2015 L1525813-02	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>Metals</b>										
Aluminum, Total		mg/kg	5300		2700		2200		5900	
Antimony, Total		mg/kg	4.4	U	4.3	U	5	U	0.95	J
Arsenic, Total	13	mg/kg	4.7		2.6		0.37	J	1.1	
Barium, Total	350	mg/kg	56		20		17		140	
Beryllium, Total	7.2	mg/kg	0.25	J	0.13	J	0.5	U	0.22	J
Cadmium, Total	2.5	mg/kg	0.89	U	0.86	U	1	U	0.86	U
Calcium, Total		mg/kg	5200		3400		3700		5500	
Chromium, Hexavalent	1	mg/kg	0.91	U	0.89	U	1	U	0.23	J
Chromium, Trivalent	30	mg/kg	14		7.7		4.9		15	J
Chromium, Total		mg/kg	14		7.7		4.9		15	
Cobalt, Total		mg/kg	4.6		3.4		2.2		5.4	
Copper, Total	50	mg/kg	25		12		6.4		24	
Cyanide, Total	27	mg/kg	1	U	1.1	U	1.3	U	1.1	U
Iron, Total		mg/kg	11000		6700		5600		11000	
Lead, Total	63	mg/kg	34		3	J	0.21	J	23	
Magnesium, Total		mg/kg	3600		3200		2500		3900	
Manganese, Total	1600	mg/kg	190		92		150		300	
Mercury, Total	0.18	mg/kg	0.05	J	0.08	U	0.03	J	0.14	
Nickel, Total	30	mg/kg	10		9.6		4.9		12	
Potassium, Total		mg/kg	780		490		300		1100	
Selenium, Total	3.9	mg/kg	1.8	U	1.7	U	0.3	J	1.7	U
Silver, Total	2	mg/kg	0.89	U	0.86	U	1	U	0.86	U
Sodium, Total		mg/kg	99	J	70	J	94	J	130	J
Thallium, Total		mg/kg	1.8	U	1.7	U	2	U	1.7	U
Vanadium, Total		mg/kg	18		11		9		18	
Zinc, Total	109	mg/kg	80		21		11		53	
<b>Pesticides</b>										
2,4,5-T		mg/kg	0.187	U	0.185	U	0.209	U	0.188	U
2,4,5-TP (Silvex)	3.8	mg/kg	0.187	U	0.185	U	0.209	U	0.188	U
2,4-D		mg/kg	0.187	U	0.185	U	0.209	U	0.188	U
4,4'-DDD	0.0033	mg/kg	0.00178	U	0.00172	U	0.00196	U	0.00179	U
4,4'-DDE	0.0033	mg/kg	0.00178	U	0.00172	U	0.00196	U	0.00179	U
4,4'-DDT	0.0033	mg/kg	0.00333	U	0.00324	U	0.00367	U	0.00335	U
Aldrin	0.005	mg/kg	0.00178	U	0.00172	U	0.00196	U	0.00179	U
Alpha-BHC	0.02	mg/kg	0.00074	U	0.000719	U	0.000816	U	0.000744	U
Beta-BHC	0.036	mg/kg	0.00178	U	0.00172	U	0.00196	U	0.00179	U
Chlordane		mg/kg	0.00824	J	0.00787	J	0.0159	U	0.0145	U
cis-Chlordane (alpha)	0.094	mg/kg	0.00222	U	0.00216	U	0.00245	U	0.00223	U
Delta-BHC	0.04	mg/kg	0.00178	U	0.00172	U	0.00196	U	0.00179	U
Dieldrin	0.005	mg/kg	0.00111	U	0.00108	U	0.00122	U	0.00112	U
Endosulfan I	2.4	mg/kg	0.00178	U	0.00172	U	0.00196	U	0.00179	U
Endosulfan II	2.4	mg/kg	0.0014	J	0.00172	U	0.00196	U	0.00179	U
Endosulfan sulfate	2.4	mg/kg	0.00074	U	0.000719	U	0.000816	U	0.000744	U
Endrin	0.014	mg/kg	0.00074	U	0.000719	U	0.000816	U	0.000744	U
Endrin ketone		mg/kg	0.00178	U	0.00172	U	0.00196	U	0.00179	U
Heptachlor	0.042	mg/kg	0.000888	U	0.000863	U	0.000979	U	0.000893	U
Heptachlor epoxide		mg/kg	0.00333	U	0.00324	U	0.00367	U	0.00335	U
Lindane	0.1	mg/kg	0.00074	U	0.000719	U	0.000816	U	0.000744	U
Methoxychlor		mg/kg	0.00333	U	0.00324	U	0.00367	U	0.00335	U
Toxaphene		mg/kg	0.0333	U	0.0324	U	0.0367	U	0.0335	U
trans-Chlordane		mg/kg	0.00222	U	0.00216	U	0.00245	U	0.00223	U
<b>PCBs</b>										
Aroclor 1016	0.1	mg/kg	0.0367	U	0.0354	U	0.042	U	0.0359	U
Aroclor 1221	0.1	mg/kg	0.0367	U	0.0354	U	0.042	U	0.0359	U
Aroclor 1232	0.1	mg/kg	0.0367	U	0.0354	U	0.042	U	0.0359	U
Aroclor 1242	0.1	mg/kg	0.0367	U	0.0354	U	0.042	U	0.0359	U
Aroclor 1248	0.1	mg/kg	0.0367	U	0.0354	U	0.042	U	0.0359	U
Aroclor 1254	0.1	mg/kg	0.0367	U	0.0354	U	0.042	U	0.0359	U
Aroclor 1260	0.1	mg/kg	0.0367	U	0.0354	U	0.042	U	0.0359	U
Aroclor 1262	0.1	mg/kg	0.0367	U	0.0354	U	0.042	U	0.0359	U
Aroclor 1268	0.1	mg/kg	0.0367	U	0.0354	U	0.042	U	0.0359	U
PCBs, Total		mg/kg	0.0367	U	0.0354	U	0.042	U	0.0359	U
<b>Notes</b> <b>NY-UNRES</b> - New York Unrestricted Use Criteria current as of 5/2007 mg/kg - milligram per kilogram U - Result is not detected at the reported detection limit for the sample. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. RL - Reporting Limit MDL - Method Detection Limit 0.057 } - The analyte was detected at concentrations above the 2200 Criteria * - Over-excavation sample point										



Table 3: Summary of Soil Exceedances

LOCATION	NY-UNRES	Units	EP-20 10/6/2015 L1525164-01		EP-21 10/6/2015 L1525164-02		ELP-27 10/12/2015 L1525813-01		EP-28B 10/12/2015 L1525813-02	
SAMPLING DATE			Results	Qual	Results	Qual	Results	Qual	Results	Qual
LAB SAMPLE ID										
<b>SVOCs</b>										
1,2,4,5-Tetrachlorobenzene		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
1,2,4-Trichlorobenzene		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
1,2-Dichlorobenzene	1.1	mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
1,3-Dichlorobenzene	2.4	mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
1,4-Dichlorobenzene	1.8	mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
2,4,5-Trichlorophenol		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
2,4,6-Trichlorophenol		mg/kg	0.11	U	0.11	U	0.12	U	0.11	U
2,4-Dichlorophenol		mg/kg	0.17	U	0.16	U	0.19	U	0.17	U
2,4-Dimethylphenol		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
2,4-Dinitrophenol		mg/kg	0.91	U	0.88	U	1	U	0.91	U
2,4-Dinitrotoluene		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
2,6-Dinitrotoluene		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
2-Chloronaphthalene		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
2-Chlorophenol		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
2-Methylnaphthalene		mg/kg	0.23	U	0.22	U	0.15	J	0.23	U
2-Methylphenol (o-Cresol)	0.33	mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
2-Nitroaniline		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
2-Nitrophenol		mg/kg	0.41	U	0.4	U	0.45	U	0.41	U
3,3'-Dichlorobenzidine		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
3-Methylphenol/4-Methylphenol (	0.33	mg/kg	0.27	U	0.26	U	0.3	U	0.27	U
3-Nitroaniline		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
4,6-Dinitro-o-cresol		mg/kg	0.49	U	0.48	U	0.54	U	0.49	U
4-Bromophenyl phenyl ether		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
4-Chloroaniline		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
4-Chlorophenyl phenyl ether		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
4-Nitroaniline		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
4-Nitrophenol		mg/kg	0.26	U	0.26	U	0.29	U	0.26	U
Acenaphthene	20	mg/kg	0.15	U	0.15	U	0.17	U	0.15	U
Acenaphthylene	100	mg/kg	0.15	U	0.15	U	0.17	U	0.15	U
Acetophenone		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Anthracene	100	mg/kg	0.11	U	0.11	U	0.12	U	0.11	U
Benzo(a)anthracene	1	mg/kg	0.11	U	0.11	U	0.12	U	0.13	U
Benzo(a)pyrene	1	mg/kg	0.15	U	0.15	U	0.17	U	0.13	J
Benzo(b)fluoranthene	1	mg/kg	0.043	J	0.11	U	0.12	U	0.15	U
Benzo(ghi)perylene	100	mg/kg	0.15	U	0.15	U	0.17	U	0.078	J
Benzo(k)fluoranthene	0.8	mg/kg	0.11	U	0.11	U	0.12	U	0.066	J
Benzoic Acid		mg/kg	0.61	U	0.59	U	0.67	U	0.61	U
Benzyl Alcohol		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Biphenyl		mg/kg	0.43	U	0.42	U	0.47	U	0.43	U
Bis(2-chloroethoxy)methane		mg/kg	0.2	U	0.2	U	0.22	U	0.2	U
Bis(2-chloroethyl)ether		mg/kg	0.17	U	0.16	U	0.19	U	0.17	U
Bis(2-chloroisopropyl)ether		mg/kg	0.23	U	0.22	U	0.25	U	0.23	U
Bis(2-Ethylhexyl)phthalate		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Butyl benzyl phthalate		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Carbazole		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Chrysene	1	mg/kg	0.041	J	0.11	U	0.12	U	0.14	U
Di-n-butylphthalate		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Di-n-octylphthalate		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.11	U	0.11	U	0.12	U	0.11	U
Dibenzofuran	7	mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Diethyl phthalate		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Dimethyl phthalate		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Fluoranthene	100	mg/kg	0.077	J	0.11	U	0.12	U	0.24	U
Fluorene	30	mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Hexachlorobenzene	0.33	mg/kg	0.11	U	0.11	U	0.12	U	0.11	U
Hexachlorobutadiene		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Hexachlorocyclopentadiene		mg/kg	0.54	U	0.52	U	0.6	U	0.54	U
Hexachloroethane		mg/kg	0.15	U	0.15	U	0.17	U	0.15	U
Indeno(1,2,3-cd)Pyrene	0.5	mg/kg	0.15	U	0.15	U	0.17	U	0.086	J
Isophorone		mg/kg	0.17	U	0.16	U	0.19	U	0.17	U
n-Nitrosodi-n-propylamine		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Naphthalene	12	mg/kg	0.19	U	0.18	U	0.15	J	0.19	U
Nitrobenzene		mg/kg	0.17	U	0.16	U	0.19	U	0.17	U
NitrosoDiPhenylAmine(NDPA)/DPA		mg/kg	0.15	U	0.15	U	0.17	U	0.15	U
P-Chloro-M-Cresol		mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Pentachlorophenol	0.8	mg/kg	0.15	U	0.15	U	0.17	U	0.15	U
Phenanthrene	100	mg/kg	0.052	J	0.11	U	0.12	U	0.11	U
Phenol	0.33	mg/kg	0.19	U	0.18	U	0.21	U	0.19	U
Pyrene	100	mg/kg	0.071	J	0.11	U	0.12	U	0.23	U
<b>VOCs</b>										
1,1,1,2-Tetrachloroethane		mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
1,1,1-Trichloroethane	0.68	mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
1,1,2,2-Tetrachloroethane		mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
1,1,2-Trichloroethane		mg/kg	0.0013	U	0.0017	U	0.11	U	0.0013	U
1,1-Dichloroethane	0.27	mg/kg	0.0013	U	0.0017	U	0.11	U	0.0013	U
1,1-Dichloroethene	0.33	mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
1,1-Dichloropropene		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
1,2,3-Trichlorobenzene		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
1,2,3-Trichlorobenzene		mg/kg	0.0088	U	0.012	U	0.74	U	0.0088	U
1,2,4,5-Tetramethylbenzene		mg/kg	0.00064	J	0.0046	U	0.36	U	0.0023	J
1,2,4-Trichlorobenzene		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
1,2,4-Trimethylbenzene	3.6	mg/kg	0.00038	J	0.0058	U	0.14	J	0.0024	J
1,2-Dibromo-3-chloropropane		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
1,2-Dibromoethane		mg/kg	0.0035	U	0.0046	U	0.3	U	0.0035	U
1,2-Dichlorobenzene	1.1	mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
1,2-Dichloroethane	0.02	mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
1,2-Dichloroethene, Total		mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U



**Table 3: Summary of Soil Exceedances**

LOCATION	NY-		EP-20	EP-21	ELP-27	EP-28B
SAMPLING DATE	UNRES	Units	10/6/2015	10/6/2015	10/12/2015	10/12/2015
LAB SAMPLE ID			L1525164-01	L1525164-02	L1525813-01	L1525813-02
			Results Qual	Results Qual	Results Qual	Results Qual
1,2-Dichloropropane		mg/kg	0.0031 U	0.004 U	0.26 U	0.0031 U
1,3,5-Trimethylbenzene	8.4	mg/kg	0.0044 U	0.0058 U	0.13 J	0.0016 J



**Table 3: Summary of Soil Exceedances**

LOCATION SAMPLING DATE LAB SAMPLE ID	NY- UNRES	Units	EP-20 10/6/2015 L1525164-01		EP-21 10/6/2015 L1525164-02		ELP-27 10/12/2015 L1525813-01		EP-28B 10/12/2015 L1525813-02	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,3-Dichlorobenzene	2.4	mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
1,3-Dichloropropene		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
1,3-Dichloropropene, Total		mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
1,4-Dichlorobenzene	1.8	mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
1,4-Dioxane	0.1	mg/kg	0.088	U	0.12	U	7.4	U	0.088	U
2,2-Dichloropropane		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.0088	U	0.012	U	0.74	U	0.0088	U
2-Hexanone		mg/kg	0.0088	U	0.012	U	0.74	U	0.0088	U
4-Methyl-2-pentanone		mg/kg	0.0088	U	0.012	U	0.74	U	0.0088	U
Acetone	0.05	mg/kg	0.0052	J	0.012	U	0.74	U	0.011	U
Acrylonitrile		mg/kg	0.0088	U	0.012	U	0.74	U	0.0088	U
Benzene	0.06	mg/kg	0.0088	U	0.0012	U	0.074	U	0.00088	U
Bromobenzene		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
Bromochloromethane		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
Bromodichloromethane		mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
Bromoform		mg/kg	0.0035	U	0.0046	U	0.3	U	0.0035	U
Bromomethane		mg/kg	0.0018	U	0.0023	U	0.15	U	0.0018	U
Carbon disulfide		mg/kg	0.0088	U	0.012	U	0.74	U	0.0088	U
Carbon tetrachloride	0.76	mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
Chlorobenzene	1.1	mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
Chloroethane		mg/kg	0.0018	U	0.0023	U	0.15	U	0.0018	U
Chloroform	0.37	mg/kg	0.0013	U	0.0017	U	0.11	U	0.0013	U
Chloromethane		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
cis-1,2-Dichloroethene	0.25	mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
cis-1,3-Dichloropropene		mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
Dibromochloromethane		mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
Dibromomethane		mg/kg	0.0088	U	0.012	U	0.74	U	0.0088	U
Dichlorodifluoromethane		mg/kg	0.0088	U	0.012	U	0.74	U	0.0088	U
Ethyl ether		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
Ethylbenzene	1	mg/kg	0.00088	U	0.0012	U	0.29	J	0.00027	J
Hexachlorobutadiene		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
Isopropylbenzene		mg/kg	0.00088	U	0.0012	U	0.14	U	0.00035	J
Methyl tert butyl ether	0.93	mg/kg	0.0018	U	0.0023	U	0.15	U	0.0018	U
Methylene chloride	0.05	mg/kg	0.0088	U	0.012	U	0.74	U	0.0088	U
n-Butylbenzene	12	mg/kg	0.00026	J	0.0012	U	0.21	U	0.00061	J
n-Propylbenzene	3.9	mg/kg	0.00019	J	0.0012	U	0.34	U	0.00076	J
Naphthalene	12	mg/kg	0.0044	U	0.0058	U	0.26	J	0.0044	U
o-Chlorotoluene		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
o-Xylene		mg/kg	0.0018	U	0.0023	U	0.15	U	0.00028	J
p-Chlorotoluene		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
p-Diethylbenzene		mg/kg	0.00046	J	0.0046	U	0.15	J	0.003	J
p-Ethyltoluene		mg/kg	0.00028	J	0.0046	U	0.17	J	0.0016	J
p-Isopropyltoluene		mg/kg	0.00088	U	0.0012	U	0.098	U	0.00044	J
p,m-Xylene		mg/kg	0.0018	U	0.0023	U	0.096	J	0.00053	J
sec-Butylbenzene	11	mg/kg	0.00088	U	0.0012	U	0.095	U	0.00032	J
Styrene		mg/kg	0.0018	U	0.0023	U	0.15	U	0.0018	U
tert-Butylbenzene	5.9	mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
Tetrachloroethene	1.3	mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
Toluene	0.7	mg/kg	0.0013	U	0.0017	U	0.11	U	0.0013	U
trans-1,2-Dichloroethene	0.19	mg/kg	0.0013	U	0.0017	U	0.11	U	0.0013	U
trans-1,3-Dichloropropene		mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
trans-1,4-Dichloro-2-butene		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
Trichloroethene	0.47	mg/kg	0.00088	U	0.0012	U	0.074	U	0.00088	U
Trichlorofluoromethane		mg/kg	0.0044	U	0.0058	U	0.37	U	0.0044	U
Vinyl acetate		mg/kg	0.0088	U	0.012	U	0.74	U	0.0088	U
Vinyl chloride	0.02	mg/kg	0.0018	U	0.0023	U	0.15	U	0.0018	U
Xylenes, Total	0.26	mg/kg	0.0018	U	0.0023	U	0.096	J	0.00081	J

Notes

NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007

mg/kg - milligram per kilogram

U - Result is not detected at the reported detection limit for the sample.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

RL - Reporting Limit

MDL - Method Detection Limit

0.057 - The analyte was detected at concentrations above the 2200 Criteria

\* - Over-excavation sample point



Table 3: Summary of Soil Exceedances

LOCATION SAMPLING DATE LAB SAMPLE ID	NY- UNRES	Units	EP-22 10/7/2015 L1525380-01		EP-22 (DUP) 10/7/2015 L1525380-02		EP-29C 10/16/2015 L1526384-01		EP-30B 10/16/2015 L1526384-02		EP-30B (DUP) 10/16/2015 L1526384-03		EP-31C 10/16/2015 L1526384-04	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>Metals</b>														
Aluminum, Total		mg/kg	7200		7100		4700		4900		4900		6400	
Antimony, Total		mg/kg	5.5	U	6.6	U	1.3	J	2.7	J	4.6	U	4.8	U
Arsenic, Total	13	mg/kg	5.9		4.5		3.6		3.2		2.7		3.5	
Barium, Total	350	mg/kg	76		64		50		54		44		75	
Beryllium, Total	7.2	mg/kg	0.22	J	0.24	J	0.2	J	0.18	J	0.19	J	0.25	J
Cadmium, Total	2.5	mg/kg	1.1	U	1.3	U	0.91	U	0.91	U	0.92	U	0.97	U
Calcium, Total		mg/kg	3100		4600		9700		10000		6300		8300	
Chromium, Hexavalent	1	mg/kg	1.2	U	1.4	U	0.94	U	0.93	U	0.92	U	0.98	U
Chromium, Trivalent	30	mg/kg	16		17		12		12		12		18	
Chromium, Total		mg/kg	16		17		12		12		12		18	
Cobalt, Total		mg/kg	7.1		6.7		4.6		4.7		4.4		5.2	
Copper, Total	50	mg/kg	21		21		18		19		19		26	
Cyanide, Total	27	mg/kg	1.4	U	1.6	U	1.1	U	1.1	U	1.1	U	1.2	U
Iron, Total		mg/kg	15000		14000		11000		11000		10000		12000	
Lead, Total	63	mg/kg	29		18		16		28		13		29	
Magnesium, Total		mg/kg	2900		3400		5800		5800		4200		5400	
Manganese, Total	1600	mg/kg	290		320		210		240		220		220	
Mercury, Total	0.18	mg/kg	0.11		0.11	U	0.03	J	0.02	J	0.03	J	0.12	
Nickel, Total	30	mg/kg	12		16		9.4		9.8		9.2		11	
Potassium, Total		mg/kg	940		1100		910		970		820		1100	
Selenium, Total	3.9	mg/kg	2.2	U	0.56	J	1.5	J	0.43	J	1.8	U	1.9	U
Silver, Total	2	mg/kg	1.1	U	1.3	U	0.91	U	0.91	U	0.92	U	0.97	U
Sodium, Total		mg/kg	1100		1400		90	J	91	J	84	J	130	J
Thallium, Total		mg/kg	2.2	U	2.6	U	1.8	U	1.8	U	1.8	U	1.9	U
Vanadium, Total		mg/kg	30		24		16		17		16		19	
Zinc, Total	109	mg/kg	49		40		72		39		55		61	
<b>Pesticides</b>														
2,4,5-T		mg/kg	0.243	U	0.285	U	0.194	U	0.193	U	0.189	U	0.201	U
2,4,5-TP (Silvex)	3.8	mg/kg	0.243	U	0.285	U	0.194	U	0.193	U	0.189	U	0.201	U
2,4-D		mg/kg	0.243	U	0.285	U	0.194	U	0.193	U	0.189	U	0.201	U
4,4'-DDD	0.0033	mg/kg	0.00228	U	0.00271	U	0.00184	U	0.00184	U	0.00181	U	0.00194	U
4,4'-DDE	0.0033	mg/kg	0.00228	U	0.00271	U	0.00184	U	0.00184	U	0.00181	U	0.00194	U
4,4'-DDT	0.0033	mg/kg	0.00427	U	0.00508	U	0.00345	U	0.00344	U	0.00339	U	0.00363	U
Aldrin	0.005	mg/kg	0.00228	U	0.00271	U	0.00184	U	0.00184	U	0.00181	U	0.00194	U
Alpha-BHC	0.02	mg/kg	0.000948	U	0.00113	U	0.000767	U	0.000765	U	0.000754	U	0.000807	U
Beta-BHC	0.036	mg/kg	0.00228	U	0.00271	U	0.00184	U	0.00184	U	0.00181	U	0.00194	U
Chlordane		mg/kg	0.0185	U	0.022	U	0.015	U	0.0149	U	0.0147	U	0.0157	U
cis-Chlordane (alpha)	0.094	mg/kg	0.00284	U	0.00338	U	0.0023	U	0.0023	U	0.00226	U	0.00242	U
Delta-BHC	0.04	mg/kg	0.00228	U	0.00271	U	0.00184	U	0.00184	U	0.00181	U	0.00194	U
Dieldrin	0.005	mg/kg	0.00142	U	0.00169	U	0.00115	U	0.00115	U	0.00113	U	0.00121	U
Endosulfan I	2.4	mg/kg	0.00228	U	0.00271	U	0.00184	U	0.00184	U	0.00181	U	0.00194	U
Endosulfan II	2.4	mg/kg	0.00228	U	0.00271	U	0.00184	U	0.00184	U	0.00181	U	0.00194	U
Endosulfan sulfate	2.4	mg/kg	0.000948	U	0.00113	U	0.000767	U	0.000765	U	0.000754	U	0.000807	U
Endrin	0.014	mg/kg	0.000948	U	0.00113	U	0.000767	U	0.000765	U	0.000754	U	0.000807	U
Endrin ketone		mg/kg	0.00228	U	0.00271	U	0.00184	U	0.00184	U	0.00181	U	0.00194	U
Heptachlor	0.042	mg/kg	0.00114	U	0.00135	U	0.00092	U	0.000918	U	0.000905	U	0.000968	U
Heptachlor epoxide		mg/kg	0.00427	U	0.00508	U	0.00345	U	0.00344	U	0.00339	U	0.00363	U
Lindane	0.1	mg/kg	0.000948	U	0.00113	U	0.000767	U	0.000765	U	0.000754	U	0.000807	U
Methoxychlor		mg/kg	0.00427	U	0.00508	U	0.00345	U	0.00344	U	0.00339	U	0.00363	U
Toxaphene		mg/kg	0.0427	U	0.0508	U	0.0345	U	0.0344	U	0.0339	U	0.0363	U
trans-Chlordane		mg/kg	0.00284	U	0.00338	U	0.00102	J	0.0023	U	0.00226	U	0.00242	U
<b>PCBs</b>														
Aroclor 1016	0.1	mg/kg	0.0483	U	0.056	U	0.0375	U	0.0377	U	0.0374	U	0.0404	U
Aroclor 1221	0.1	mg/kg	0.0483	U	0.056	U	0.0375	U	0.0377	U	0.0374	U	0.0404	U
Aroclor 1232	0.1	mg/kg	0.0483	U	0.056	U	0.0375	U	0.0377	U	0.0374	U	0.0404	U
Aroclor 1242	0.1	mg/kg	0.0483	U	0.056	U	0.0375	U	0.0377	U	0.0374	U	0.0404	U
Aroclor 1248	0.1	mg/kg	0.0483	U	0.056	U	0.0375	U	0.0377	U	0.0374	U	0.0404	U
Aroclor 1254	0.1	mg/kg	0.0483	U	0.056	U	0.0375	U	0.0377	U	0.0374	U	0.0404	U
Aroclor 1260	0.1	mg/kg	0.0483	U	0.056	U	0.0375	U	0.0377	U	0.0374	U	0.0404	U
Aroclor 1262	0.1	mg/kg	0.0483	U	0.056	U	0.0375	U	0.0377	U	0.0374	U	0.0404	U
Aroclor 1268	0.1	mg/kg	0.0483	U	0.056	U	0.0375	U	0.0377	U	0.0374	U	0.0404	U
PCBs, Total		mg/kg	0.0483	U	0.056	U	0.0375	U	0.0377	U	0.0374	U	0.0404	U
<b>Notes</b> <b>NY-UNRES</b> - New York Unrestricted Use Criteria current as of 5/2007 mg/kg - milligram per kilogram U - Result is not detected at the reported detection limit for the sample. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. RL - Reporting Limit MDL - Method Detection Limit 0.057 - The analyte was detected at concentrations above the 2200 Criteria * - Over-excavation sample point														



Table 3: Summary of Soil Exceedances

LOCATION	NY-UNRES	Units	EP-22 10/7/2015 L1525380-01	EP-22 (DUP) 10/7/2015 L1525380-02	EP-29C 10/16/2015 L1526384-01	EP-30B 10/16/2015 L1526384-02	EP-30B (DUP) 10/16/2015 L1526384-03	EP-31C 10/16/2015 L1526384-04
SAMPLING DATE			Results	Qual	Results	Qual	Results	Qual
LAB SAMPLE ID								
<b>SVOCs</b>								
1,2,4,5-Tetrachlorobenzene		mg/kg	0.24	U	0.28	U	0.19	U
1,2,4-Trichlorobenzene		mg/kg	0.24	U	0.28	U	0.19	U
1,2-Dichlorobenzene	1.1	mg/kg	0.24	U	0.28	U	0.19	U
1,3-Dichlorobenzene	2.4	mg/kg	0.24	U	0.28	U	0.19	U
1,4-Dichlorobenzene	1.8	mg/kg	0.24	U	0.28	U	0.19	U
2,4,5-Trichlorophenol		mg/kg	0.24	U	0.28	U	0.19	U
2,4,6-Trichlorophenol		mg/kg	0.14	U	0.17	U	0.12	U
2,4-Dichlorophenol		mg/kg	0.22	U	0.25	U	0.17	U
2,4-Dimethylphenol		mg/kg	0.24	U	0.28	U	0.19	U
2,4-Dinitrophenol		mg/kg	1.2	U	1.4	U	0.93	U
2,4-Dinitrotoluene		mg/kg	0.24	U	0.28	U	0.19	U
2,6-Dinitrotoluene		mg/kg	0.24	U	0.28	U	0.19	U
2-Chloronaphthalene		mg/kg	0.24	U	0.28	U	0.19	U
2-Chlorophenol		mg/kg	0.24	U	0.28	U	0.19	U
2-Methylnaphthalene		mg/kg	0.29	U	0.34	U	0.23	U
2-Methylphenol (o-Cresol)	0.33	mg/kg	0.24	U	0.28	U	0.19	U
2-Nitroaniline		mg/kg	0.24	U	0.28	U	0.19	U
2-Nitrophenol		mg/kg	0.52	U	0.61	U	0.42	U
3,3'-Dichlorobenzidine		mg/kg	0.24	U	0.28	U	0.19	U
3-Methylphenol/4-Methylphenol	0.33	mg/kg	0.35	U	0.41	U	0.28	U
3-Nitroaniline		mg/kg	0.24	U	0.28	U	0.19	U
4,6-Dinitro-o-cresol		mg/kg	0.62	U	0.74	U	0.5	U
4-Bromophenyl phenyl ether		mg/kg	0.24	U	0.28	U	0.19	U
4-Chloroaniline		mg/kg	0.24	U	0.28	U	0.19	U
4-Chlorophenyl phenyl ether		mg/kg	0.24	U	0.28	U	0.19	U
4-Nitroaniline		mg/kg	0.24	U	0.28	U	0.19	U
4-Nitrophenol		mg/kg	0.34	U	0.4	U	0.27	U
Acenaphthene	20	mg/kg	0.19	U	0.23	U	0.16	U
Acenaphthylene	100	mg/kg	0.19	U	0.23	U	0.16	U
Acetophenone		mg/kg	0.24	U	0.28	U	0.19	U
Anthracene	100	mg/kg	0.14	U	0.17	U	0.12	U
Benzo(a)anthracene	1	mg/kg	0.14	U	0.17	U	0.12	U
Benzo(a)pyrene	1	mg/kg	0.19	U	0.23	U	0.16	U
Benzo(b)fluoranthene	1	mg/kg	0.14	U	0.17	U	0.12	U
Benzo(g,h,i)perylene	100	mg/kg	0.19	U	0.23	U	0.16	U
Benzo(k)fluoranthene	0.8	mg/kg	0.14	U	0.17	U	0.12	U
Benzoic Acid		mg/kg	0.78	U	0.92	U	0.63	U
Benzyl Alcohol		mg/kg	0.24	U	0.28	U	0.19	U
Biphenyl		mg/kg	0.55	U	0.64	U	0.44	U
Bis(2-chloroethoxy)methane		mg/kg	0.26	U	0.3	U	0.21	U
Bis(2-chloroethyl)ether		mg/kg	0.22	U	0.25	U	0.17	U
Bis(2-chloroisopropyl)ether		mg/kg	0.29	U	0.34	U	0.23	U
Bis(2-Ethylhexyl)phthalate		mg/kg	0.24	U	0.28	U	0.19	U
Butyl benzyl phthalate		mg/kg	0.24	U	0.28	U	0.19	U
Carbazole		mg/kg	0.24	U	0.28	U	0.19	U
Chrysene	1	mg/kg	0.14	U	0.17	U	0.12	U
Di-n-butylphthalate		mg/kg	0.24	U	0.28	U	0.19	U
Di-n-octylphthalate		mg/kg	0.24	U	0.28	U	0.19	U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.14	U	0.17	U	0.12	U
Dibenzofuran	7	mg/kg	0.24	U	0.28	U	0.19	U
Diethyl phthalate		mg/kg	0.24	U	0.28	U	0.19	U
Dimethyl phthalate		mg/kg	0.24	U	0.28	U	0.19	U
Fluoranthene	100	mg/kg	0.14	U	0.17	U	0.12	U
Fluorene	30	mg/kg	0.24	U	0.28	U	0.19	U
Hexachlorobenzene	0.33	mg/kg	0.14	U	0.17	U	0.12	U
Hexachlorobutadiene		mg/kg	0.24	U	0.28	U	0.19	U
Hexachlorocyclopentadiene		mg/kg	0.69	U	0.81	U	0.55	U
Hexachloroethane		mg/kg	0.19	U	0.23	U	0.16	U
Indeno(1,2,3-cd)Pyrene	0.5	mg/kg	0.19	U	0.23	U	0.16	U
Isophorone		mg/kg	0.22	U	0.25	U	0.17	U
n-Nitrosodi-n-propylamine		mg/kg	0.24	U	0.28	U	0.19	U
Naphthalene	12	mg/kg	0.24	U	0.28	U	0.19	U
Nitrobenzene		mg/kg	0.22	U	0.25	U	0.17	U
NitrosoDiPhenylAmine(NDPA)/DPA		mg/kg	0.19	U	0.23	U	0.16	U
P-Chloro-M-Cresol		mg/kg	0.24	U	0.28	U	0.19	U
Pentachlorophenol	0.8	mg/kg	0.19	U	0.23	U	0.16	U
Phenanthrene	100	mg/kg	0.14	U	0.17	U	0.12	U
Phenol	0.33	mg/kg	0.24	U	0.28	U	0.19	U
Pyrene	100	mg/kg	0.14	U	0.17	U	0.12	U
<b>VOCs</b>								
1,1,1,2-Tetrachloroethane		mg/kg	0.0014	U	0.0017	U	0.061	U
1,1,1-Trichloroethane	0.68	mg/kg	0.0014	U	0.0017	U	0.061	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0014	U	0.0017	U	0.061	U
1,1,2-Trichloroethane		mg/kg	0.0021	U	0.0025	U	0.091	U
1,1-Dichloroethane	0.27	mg/kg	0.0021	U	0.0025	U	0.091	U
1,1-Dichloroethene	0.33	mg/kg	0.0014	U	0.0017	U	0.061	U
1,1-Dichloropropene		mg/kg	0.0071	U	0.0084	U	0.3	U
1,2,3-Trichlorobenzene		mg/kg	0.0071	U	0.0084	U	0.3	U
1,2,3-Trichloropropene		mg/kg	0.014	U	0.017	U	0.61	U
1,2,4,5-Tetramethylbenzene		mg/kg	0.0012	U	0.0067	U	0.25	U
1,2,4-Trichlorobenzene		mg/kg	0.0071	U	0.0084	U	0.3	U
1,2,4-Trinitroethylbenzene	3.6	mg/kg	0.00094	U	0.0004	U	0.3	U
1,2-Dibromo-3-chloropropane		mg/kg	0.0071	U	0.0084	U	0.3	U
1,2-Dibromoethane		mg/kg	0.0057	U	0.0067	U	0.24	U
1,2-Dichlorobenzene	1.1	mg/kg	0.0071	U	0.0084	U	0.3	U
1,2-Dichloroethane	0.02	mg/kg	0.0014	U	0.0017	U	0.061	U
1,2-Dichloroethene, Total		mg/kg	0.0014	U	0.0017	U	0.061	U



**Table 3: Summary of Soil Exceedances**

LOCATION	NY- UNRES	Units	EP-22		EP-22 (DUP)		EP-29C		EP-30B		EP-30B (DUP)		EP-31C	
SAMPLING DATE			10/7/2015		10/7/2015		10/16/2015		10/16/2015		10/16/2015		10/16/2015	
LAB SAMPLE ID			L1525380-01		L1525380-02		L1526384-01		L1526384-02		L1526384-03		L1526384-04	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,2-Dichloropropane		mg/kg	0.005	U	0.0059	U	0.21	U	0.81	U	0.19	U	0.94	U
1,3,5-Trimethylbenzene	8.4	mg/kg	0.00032	J	0.0084	U	0.04	J	0.25	J	0.13	J	1.3	U



**Table 3: Summary of Soil Exceedances**

LOCATION	NY-UNRES	Units	EP-22 10/7/2015 L1525380-01		EP-22 (DUP) 10/7/2015 L1525380-02		EP-29C 10/16/2015 L1526384-01		EP-30B 10/16/2015 L1526384-02		EP-30B (DUP) 10/16/2015 L1526384-03		EP-31C 10/16/2015 L1526384-04	
SAMPLING DATE			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,3-Dichlorobenzene	2.4	mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
1,3-Dichloropropane		mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
1,3-Dichloropropane, Total		mg/kg	0.0014	U	0.0017	U	0.061	U	0.23	U	0.055	U	0.27	U
1,4-Dichlorobenzene	1.8	mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
1,4-Dioxane	0.1	mg/kg	0.14	U	0.17	U	6.1	U	23	U	5.5	U	27	U
2,2-Dichloropropane		mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.014	U	0.017	U	0.61	U	2.3	U	0.55	U	2.7	U
2-Hexanone		mg/kg	0.014	U	0.017	U	0.61	U	2.3	U	0.55	U	2.7	U
4-Methyl-2-pentanone		mg/kg	0.014	U	0.017	U	0.61	U	2.3	U	0.55	U	2.7	U
Acetone	0.05	mg/kg	0.0074	J	0.017	U	0.61	U	2.3	U	0.55	U	2.7	U
Acrylonitrile		mg/kg	0.014	U	0.017	U	0.61	U	2.3	U	0.55	U	2.7	U
Benzene	0.06	mg/kg	0.0014	U	0.0017	U	0.061	U	0.23	U	0.055	U	0.27	U
Bromobenzene		mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
Bromochloromethane		mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
Bromodichloromethane		mg/kg	0.0014	U	0.0017	U	0.061	U	0.23	U	0.055	U	0.27	U
Bromoform		mg/kg	0.0057	U	0.0067	U	0.24	U	0.92	U	0.22	U	1.1	U
Bromomethane		mg/kg	0.0028	U	0.0034	U	0.12	U	0.46	U	0.11	U	0.54	U
Carbon disulfide		mg/kg	0.014	U	0.017	U	0.61	U	2.3	U	0.55	U	2.7	U
Carbon tetrachloride	0.76	mg/kg	0.0014	U	0.0017	U	0.061	U	0.23	U	0.055	U	0.27	U
Chlorobenzene	1.1	mg/kg	0.0014	U	0.0017	U	0.061	U	0.23	U	0.055	U	0.27	U
Chloroethane		mg/kg	0.0028	U	0.0034	U	0.12	U	0.46	U	0.11	U	0.54	U
Chloroform	0.37	mg/kg	0.0021	U	0.0025	U	0.091	U	0.35	U	0.083	U	0.4	U
Chloromethane		mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
cis-1,2-Dichloroethene	0.25	mg/kg	0.0014	U	0.0017	U	0.061	U	0.23	U	0.055	U	0.27	U
cis-1,3-Dichloropropene		mg/kg	0.0014	U	0.0017	U	0.061	U	0.23	U	0.055	U	0.27	U
Dibromochloromethane		mg/kg	0.0014	U	0.0017	U	0.061	U	0.23	U	0.055	U	0.27	U
Dibromomethane		mg/kg	0.014	U	0.017	U	0.61	U	2.3	U	0.55	U	2.7	U
Dichlorodifluoromethane		mg/kg	0.014	U	0.017	U	0.61	U	2.3	U	0.55	U	2.7	U
Ethyl ether		mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
Ethylbenzene	1	mg/kg	0.0014	U	0.0017	U	0.061	U	0.19	J	0.041	J	0.27	U
Hexachlorobutadiene		mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
Isopropylbenzene		mg/kg	0.0036	J	0.0044	U	0.061	U	0.51	U	0.063	U	2.5	U
Methyl tert butyl ether	0.93	mg/kg	0.0028	U	0.0034	U	0.12	U	0.46	U	0.11	U	0.54	U
Methylene chloride	0.05	mg/kg	0.014	U	0.017	U	0.61	U	2.3	U	0.55	U	2.7	U
n-Butylbenzene	12	mg/kg	0.00046	J	0.0017	U	0.061	U	0.84	U	0.15	U	3.9	U
n-Propylbenzene	3.9	mg/kg	0.0009	J	0.0017	U	0.061	U	1.2	U	0.11	U	7	U
Naphthalene	12	mg/kg	0.00028	J	0.0084	U	0.059	J	0.32	J	0.11	J	1.3	U
o-Chlorotoluene		mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
p-Xylene		mg/kg	0.0028	U	0.0034	U	0.12	U	0.46	U	0.11	U	0.54	U
p-Chlorotoluene		mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
p-Diethylbenzene		mg/kg	0.00059	J	0.0067	U	0.069	J	0.82	J	0.48	J	4.1	U
p-Ethyltoluene		mg/kg	0.0057	U	0.0067	U	0.033	J	0.34	J	0.14	J	0.44	J
p-Isopropyltoluene		mg/kg	0.0014	U	0.0017	U	0.061	U	0.24	U	0.063	U	0.63	U
p-m-Xylene		mg/kg	0.0028	U	0.0034	U	0.12	U	0.24	J	0.071	J	0.54	U
sec-Butylbenzene	11	mg/kg	0.0014	U	0.0017	U	0.061	U	0.35	U	0.061	U	1.5	U
Styrene		mg/kg	0.0028	U	0.0034	U	0.12	U	0.46	U	0.11	U	0.54	U
tert-Butylbenzene	5.9	mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	0.2	J
Tetrachloroethene	1.3	mg/kg	0.0013	J	0.0014	J	0.061	U	0.23	U	0.055	U	0.27	U
Toluene	0.7	mg/kg	0.0021	U	0.0025	U	0.091	U	0.35	U	0.083	U	0.4	U
trans-1,2-Dichloroethene	0.19	mg/kg	0.0021	U	0.0025	U	0.091	U	0.35	U	0.083	U	0.4	U
trans-1,3-Dichloropropene		mg/kg	0.0014	U	0.0017	U	0.061	U	0.23	U	0.055	U	0.27	U
trans-1,4-Dichloro-2-butene		mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
Trichloroethene	0.47	mg/kg	0.0014	U	0.0017	U	0.061	U	0.23	U	0.055	U	0.27	U
Trichlorofluoromethane		mg/kg	0.0071	U	0.0084	U	0.3	U	1.2	U	0.28	U	1.3	U
Vinyl acetate		mg/kg	0.014	U	0.017	U	0.61	U	2.3	U	0.55	U	2.7	U
Vinyl chloride	0.02	mg/kg	0.0028	U	0.0034	U	0.12	U	0.46	U	0.11	U	0.54	U
Xylenes, Total	0.26	mg/kg	0.0028	U	0.0034	U	0.12	U	0.24	J	0.071	J	0.54	U

Notes

NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007

mg/kg - milligram per kilogram

U - Result is not detected at the reported detection limit for the sample.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

RL - Reporting Limit

MDL - Method Detection Limit

0.057 - The analyte was detected at concentrations above the 2200 Criteria

\* - Over-excavation sample point



Table 3: Summary of Soil Exceedances

LOCATION	NY-UNRES	Units	EP-31CB 10/20/2015 L1526697-01	EP-31CC 10/20/2015 L1526697-02	EP-35A 10/20/2015 L1526697-03	EP-36A 10/20/2015 L1526697-04	EP-37B 10/20/2015 L1526697-05 - D	EP-37B 10/20/2015 L1526697-05 R1	EP-37B (DUP) 10/20/2015 L1526697-06	
SAMPLING DATE	LAB SAMPLE ID		Results	Qual	Results	Qual	Results	Qual	Results	Qual
Metals										
Aluminum, Total		mg/kg	4800		3200		5000		5300	
Antimony, Total		mg/kg	4.3	U	4.5	U	4.4	U	4.2	U
Arsenic, Total	13	mg/kg	1.7		0.59	J	1.2		1.1	
Barium, Total	350	mg/kg	44		35		57		57	
Beryllium, Total	7.2	mg/kg	0.18	J	0.12	J	0.2	J	0.18	J
Cadmium, Total	2.5	mg/kg	0.86	U	0.91	U	0.89	U	0.84	U
Calcium, Total		mg/kg	9100		18000		6800		6900	
Chromium, Hexavalent	1	mg/kg	0.88	U	0.92	U	0.9	U	0.86	U
Chromium, Trivalent	30	mg/kg	13		6.6		13		13	
Chromium, Total		mg/kg	13		6.6		13		13	
Cobalt, Total		mg/kg	4.2		4		4.8		4.7	
Copper, Total	50	mg/kg	17		11		17		19	
Cyanide, Total	27	mg/kg	1	U	1.1	U	1	U	1	U
Iron, Total		mg/kg	10000		7600		11000		11000	
Lead, Total	63	mg/kg	17		2.8	J	11		12	
Magnesium, Total		mg/kg	5400		8600		4700		4400	
Manganese, Total	1600	mg/kg	220		230		270		250	
Mercury, Total	0.18	mg/kg	0.08		0.05	J	0.06	J	0.13	
Nickel, Total	30	mg/kg	8.2		7.6		10		9.6	
Potassium, Total		mg/kg	890		760		1100		1100	
Selenium, Total	3.9	mg/kg	1.7	U	1.8	U	1.8	U	1.7	U
Silver, Total	2	mg/kg	0.86	U	0.91	U	0.89	U	0.84	U
Sodium, Total		mg/kg	130	J	86	J	170	J	160	J
Thallium, Total		mg/kg	1.7	U	1.8	U	1.8	U	1.7	U
Vanadium, Total		mg/kg	16		9		20		18	
Zinc, Total	109	mg/kg	35		17		37		34	
Pesticides										
2,4,5-T		mg/kg	0.182	U	0.188	U	0.187	U	0.177	U
2,4,5-TP (Silvex)	3.8	mg/kg	0.182	U	0.188	U	0.187	U	0.177	U
2,4-D		mg/kg	0.182	U	0.188	U	0.187	U	0.177	U
4,4'-DDD	0.0033	mg/kg	0.00174	U	0.00179	U	0.00179	U	0.00172	U
4,4'-DDE	0.0033	mg/kg	0.00174	U	0.00179	U	0.00179	U	0.00172	U
4,4'-DDT	0.0033	mg/kg	0.00326	U	0.00336	U	0.00336	U	0.00322	U
Aldrin	0.005	mg/kg	0.00174	U	0.00179	U	0.00179	U	0.00172	U
Alpha-BHC	0.02	mg/kg	0.000725	U	0.000746	U	0.000748	U	0.000716	U
Beta-BHC	0.036	mg/kg	0.00174	U	0.00179	U	0.00179	U	0.00172	U
Chlordane		mg/kg	0.0141	U	0.0145	U	0.0146	U	0.014	U
cis-Chlordane (alpha)	0.094	mg/kg	0.00217	U	0.00224	U	0.00224	U	0.00215	U
Delta-BHC	0.04	mg/kg	0.00174	U	0.00179	U	0.00179	U	0.00172	U
Dieldrin	0.005	mg/kg	0.00109	U	0.00112	U	0.00112	U	0.00107	U
Endosulfan I	2.4	mg/kg	0.00174	U	0.00179	U	0.00179	U	0.00172	U
Endosulfan II	2.4	mg/kg	0.00174	U	0.00179	U	0.00179	U	0.00172	U
Endosulfan sulfate	2.4	mg/kg	0.000725	U	0.000746	U	0.000748	U	0.000716	U
Endrin	0.014	mg/kg	0.000725	U	0.000746	U	0.000748	U	0.000716	U
Endrin ketone		mg/kg	0.00174	U	0.00179	U	0.00179	U	0.00172	U
Heptachlor	0.042	mg/kg	0.00087	U	0.000895	U	0.000897	U	0.000859	U
Heptachlor epoxide		mg/kg	0.00326	U	0.00336	U	0.00336	U	0.00322	U
Lindane	0.1	mg/kg	0.000725	U	0.000746	U	0.000748	U	0.000716	U
Methoxychlor		mg/kg	0.00326	U	0.00336	U	0.00336	U	0.00322	U
Toxaphene		mg/kg	0.0326	U	0.0336	U	0.0336	U	0.0322	U
trans-Chlordane		mg/kg	0.00217	U	0.00224	U	0.00224	U	0.00215	U
PCBs										
Aroclor 1016	0.1	mg/kg	0.0362	U	0.037	U	0.0362	U	0.0354	U
Aroclor 1221	0.1	mg/kg	0.0362	U	0.037	U	0.0362	U	0.0354	U
Aroclor 1232	0.1	mg/kg	0.0362	U	0.037	U	0.0362	U	0.0354	U
Aroclor 1242	0.1	mg/kg	0.0362	U	0.037	U	0.0362	U	0.0354	U
Aroclor 1248	0.1	mg/kg	0.0362	U	0.037	U	0.0362	U	0.0354	U
Aroclor 1254	0.1	mg/kg	0.0362	U	0.037	U	0.0362	U	0.0354	U
Aroclor 1260	0.1	mg/kg	0.0362	U	0.037	U	0.0362	U	0.0354	U
Aroclor 1262	0.1	mg/kg	0.0362	U	0.037	U	0.0362	U	0.0354	U
Aroclor 1268	0.1	mg/kg	0.0362	U	0.037	U	0.0362	U	0.0354	U
PCBs, Total		mg/kg	0.0362	U	0.037	U	0.0362	U	0.0354	U
Notes										
NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007										
mg/kg - milligram per kilogram										
U - Result is not detected at the reported detection limit for the sample.										
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.										
RL - Reporting Limit										
MDL - Method Detection Limit										
{ 0.057 - The analyte was detected at concentrations above the 2200 Criteria										
* - Over-excavation sample point										



Table 3: Summary of Soil Exceedances

LOCATION	NY-UNRES	Units	EP-31CB 10/20/2015 L1526697-01	EP-31CC 10/20/2015 L1526697-02	EP-35A 10/20/2015 L1526697-03	EP-36A 10/20/2015 L1526697-04	EP-37B 10/20/2015 L1526697-05 - D	EP-37B 10/20/2015 L1526697-05 R1	EP-37B (DUP) 10/20/2015 L1526697-06	
SAMPLING DATE	LAB SAMPLE ID		Results	Qual	Results	Qual	Results	Qual	Results	Qual
SVOCs										
1,2,4,5-Tetrachlorobenzene		mg/kg	0.18	U	0.19	U	0.19	U	0.18	U
1,2,4-Trichlorobenzene		mg/kg	0.18	U	0.19	U	0.19	U	0.18	U
1,2-Dichlorobenzene	1.1	mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
1,3-Dichlorobenzene	2.4	mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
1,4-Dichlorobenzene	1.8	mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
2,4,5-Trichlorophenol		mg/kg	0.18	U	0.19	U	0.19	U	0.18	U
2,4,6-Trichlorophenol		mg/kg	0.11	U	0.11	U	0.11	U	0.11	U
2,4-Dichlorophenol		mg/kg	0.16	U	0.17	U	0.17	U	0.16	U
2,4-Dimethylphenol		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
2,4-Dinitrophenol		mg/kg	0.87	U	0.9	U	0.88	U	0.86	U
2,4-Dinitrotoluene		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
2,6-Dinitrotoluene		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
2-Chloronaphthalene		mg/kg	0.18	U	0.19	U	0.19	U	0.18	U
2-Chlorophenol		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
2-Methylnaphthalene		mg/kg	0.22	U	0.22	U	0.17	J	0.52	0.6
2-Methylphenol (o-Cresol)	0.33	mg/kg	0.18	U	0.19	U	0.19	U	0.18	U
2-Nitroaniline		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
2-Nitrophenol		mg/kg	0.39	U	0.41	U	0.4	U	0.39	U
3,3'-Dichlorobenzidine		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
3-Methylphenol/4-Methylphenol (o-Cresol)	0.33	mg/kg	0.26	U	0.27	U	0.26	U	0.26	U
3-Nitroaniline		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
4,6-Dinitro-o-cresol		mg/kg	0.47	U	0.49	U	0.48	U	0.46	U
4-Bromophenyl phenyl ether		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
4-Chloroaniline		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
4-Chlorophenyl phenyl ether		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
4-Nitroaniline		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
4-Nitrophenol		mg/kg	0.25	U	0.26	U	0.26	U	0.25	U
Acenaphthene	20	mg/kg	0.14	U	0.15	U	0.15	U	0.062	J
Acenaphthylene	100	mg/kg	0.14	U	0.15	U	0.15	U	0.14	U
Acetophenone		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Anthracene	100	mg/kg	0.11	U	0.11	U	0.11	U	0.034	J
Benzo(a)anthracene	1	mg/kg	0.11	U	0.11	U	0.047	J	0.17	U
Benzo(a)pyrene	1	mg/kg	0.14	U	0.15	U	0.15	U	0.18	U
Benzo(b)fluoranthene	1	mg/kg	0.038	J	0.11	U	0.051	J	0.23	U
Benzo(g,h,i)perylene	100	mg/kg	0.14	U	0.15	U	0.15	U	0.13	J
Benzo(k)fluoranthene	0.8	mg/kg	0.11	U	0.11	U	0.11	U	0.083	J
Benzoic Acid		mg/kg	0.58	U	0.61	U	0.6	U	0.58	U
Benzyl Alcohol		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Biphenyl		mg/kg	0.41	U	0.43	U	0.43	U	0.41	U
Bis(2-chloroethoxy)methane		mg/kg	0.2	U	0.2	U	0.2	U	0.19	U
Bis(2-chloroethyl)ether		mg/kg	0.16	U	0.17	U	0.17	U	0.16	U
Bis(2-chloroisopropyl)ether		mg/kg	0.22	U	0.22	U	0.22	U	0.21	U
Bis(2-Ethylhexyl)phthalate		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Butyl benzyl phthalate		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Carbazole		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Chrysene	1	mg/kg	0.037	J	0.11	U	0.042	J	0.21	U
Di-n-butylphthalate		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Di-n-octylphthalate		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.11	U	0.11	U	0.11	U	0.11	U
Dibenzofuran	7	mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Diethyl phthalate		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Dimethyl phthalate		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Fluoranthene	100	mg/kg	0.069	J	0.11	U	0.1	J	0.47	U
Fluorene	30	mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Hexachlorobenzene	0.33	mg/kg	0.11	U	0.11	U	0.11	U	0.11	U
Hexachlorobutadiene		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Hexachlorocyclopentadiene		mg/kg	0.52	U	0.54	U	0.54	U	0.51	U
Hexachloroethane		mg/kg	0.14	U	0.15	U	0.15	U	0.14	U
Indeno(1,2,3-cd)Pyrene	0.5	mg/kg	0.14	U	0.15	U	0.15	U	0.13	J
Isophorone		mg/kg	0.16	U	0.17	U	0.17	U	0.16	U
n-Nitrosodi-n-propylamine		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Naphthalene	12	mg/kg	0.18	U	0.19	U	0.18	U	0.58	U
Nitrobenzene		mg/kg	0.16	U	0.17	U	0.16	U	0.16	U
NitrosodiPhenylAmine(NDPA)/DPA		mg/kg	0.14	U	0.15	U	0.15	U	0.14	U
p-Chloro-M-Cresol		mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Pentachlorophenol	0.8	mg/kg	0.14	U	0.15	U	0.15	U	0.14	U
Phenanthrene	100	mg/kg	0.035	J	0.11	U	0.042	J	0.42	U
Phenol	0.33	mg/kg	0.18	U	0.19	U	0.18	U	0.18	U
Pyrene	100	mg/kg	0.071	J	0.11	U	0.11	U	0.39	U
VOCs										
1,1,1,2-Tetrachloroethane		mg/kg	0.057	U	6	U	0.056	U	0.1	U
1,1,1-Trichloroethane	0.68	mg/kg	0.057	U	6	U	0.056	U	0.1	U
1,1,2,2-Tetrachloroethane		mg/kg	0.057	U	6	U	0.056	U	0.1	U
1,1,2-Trichloroethane		mg/kg	0.086	U	9.1	U	0.084	U	0.15	U
1,1-Dichloroethane	0.27	mg/kg	0.086	U	9.1	U	0.084	U	0.15	U
1,1-Dichloroethene	0.33	mg/kg	0.057	U	6	U	0.056	U	0.1	U
1,1-Dichloropropene		mg/kg	0.28	U	30	U	0.28	U	0.5	U
1,2,3-Trichlorobenzene		mg/kg	0.28	U	30	U	0.28	U	0.5	U
1,2,3-Trichloropropene		mg/kg	0.57	U	60	U	0.56	U	1	U
1,2,4,5-Tetramethylbenzene		mg/kg	1.5	U	59	U	1.2	U	6.1	U
1,2,4-Trichlorobenzene		mg/kg	0.28	U	30	U	0.28	U	0.5	U
1,2,4-Trimethylbenzene	3.6	mg/kg	0.069	J	30	U	0.11	J	50	E
1,2-Dibromo-3-chloropropane		mg/kg	0.28	U	30	U	0.28	U	0.5	U
1,2-Dibromoethane		mg/kg	0.23	U	24	U	0.23	U	0.4	U
1,2-Dichlorobenzene	1.1	mg/kg	0.28	U	30	U	0.28	U	0.5	U
1,2-Dichloroethane	0.02	mg/kg	0.057	U	6	U	0.056	U	0.1	U
1,2-Dichloroethene, Total		mg/kg	0.057	U	6	U	0.056	U	0.1	U



**Table 3: Summary of Soil Exceedances**

LOCATION	NY-	Units	EP-31CB	EP-31CC	EP-35A	EP-36A	EP-37B	EP-37B	EP-37B (DUP)
SAMPLING DATE	UNRES		10/20/2015	10/20/2015	10/20/2015	10/20/2015	10/20/2015	10/20/2015	10/20/2015
LAB SAMPLE ID			L1526697-01	L1526697-02	L1526697-03	L1526697-04	L1526697-05 - D	L1526697-05 R1	L1526697-06
			Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual	Results Qual
1,2-Dichloropropane		mg/kg	0.2 U	21 U	0.2 U	0.2 U	-	0.35 U	0.19 U
1,3,5-Trimethylbenzene	8.4	mg/kg	0.28 U	30 U	0.2 J	0.64	-	19	3



Table 3: Summary of Soil Exceedances

LOCATION	NY-UNRES	Units	EP-31CB 10/20/2015 L1526697-01	EP-31CC 10/20/2015 L1526697-02	EP-35A 10/20/2015 L1526697-03	EP-36A 10/20/2015 L1526697-04	EP-37B 10/20/2015 L1526697-05 - D	EP-37B 10/20/2015 L1526697-05 R1	EP-37B (DUP) 10/20/2015 L1526697-06	
SAMPLING DATE			Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,3-Dichlorobenzene	2.4	mg/kg	0.28	U	30	U	0.28	U	0.5	U
1,3-Dichloropropane		mg/kg	0.28	U	30	U	0.28	U	0.5	U
1,3-Dichloropropane, Total		mg/kg	0.057	U	6	U	0.056	U	0.1	U
1,4-Dichlorobenzene	1.8	mg/kg	0.28	U	30	U	0.28	U	0.5	U
1,4-Dioxane	0.1	mg/kg	5.7	U	600	U	5.6	U	10	U
2,2-Dichloropropane		mg/kg	0.28	U	30	U	0.28	U	0.5	U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.57	U	60	U	0.56	U	1	U
2-Hexanone		mg/kg	0.57	U	60	U	0.56	U	1	U
4-Methyl-2-pentanone		mg/kg	0.57	U	60	U	0.56	U	1	U
Acetone	0.05	mg/kg	0.077	J	60	U	0.076	J	0.13	J
Acrylonitrile		mg/kg	0.57	U	60	U	0.57	U	1	U
Benzene	0.06	mg/kg	0.057	U	6	U	0.057	U	0.1	U
Bromobenzene		mg/kg	0.28	U	30	U	0.28	U	0.5	U
Bromochloromethane		mg/kg	0.28	U	30	U	0.28	U	0.5	U
Bromodichloromethane		mg/kg	0.057	U	6	U	0.057	U	0.1	U
Bromoform		mg/kg	0.23	U	24	U	0.23	U	0.4	U
Bromomethane		mg/kg	0.11	U	12	U	0.11	U	0.2	U
Carbon disulfide		mg/kg	0.57	U	7.4	J	0.57	U	1	U
Carbon tetrachloride	0.76	mg/kg	0.057	U	6	U	0.057	U	0.1	U
Chlorobenzene	1.1	mg/kg	0.057	U	6	U	0.057	U	0.1	U
Chloroethane		mg/kg	0.11	U	12	U	0.11	U	0.2	U
Chloroform	0.37	mg/kg	0.086	U	9.1	U	0.086	U	0.15	U
Chloromethane		mg/kg	0.28	U	30	U	0.28	U	0.5	U
cis-1,2-Dichloroethene	0.25	mg/kg	0.057	U	6	U	0.057	U	0.1	U
cis-1,3-Dichloropropene		mg/kg	0.057	U	6	U	0.057	U	0.1	U
Dibromochloromethane		mg/kg	0.057	U	6	U	0.057	U	0.1	U
Dibromomethane		mg/kg	0.57	U	60	U	0.57	U	1	U
Dichlorodifluoromethane		mg/kg	0.57	U	60	U	0.57	U	1	U
Ethyl ether		mg/kg	0.28	U	30	U	0.28	U	0.5	U
Ethylbenzene	1	mg/kg	0.057	U	6	U	0.056	U	14	1.1
Hexachlorobutadiene		mg/kg	0.28	U	30	U	0.28	U	0.5	U
Isopropylbenzene		mg/kg	0.089	U	22	U	0.086	U	0.13	U
Methyl tert butyl ether	0.93	mg/kg	0.11	U	12	U	0.11	U	0.2	U
Methylene chloride	0.05	mg/kg	0.57	U	60	U	0.57	U	1	U
n-Butylbenzene	12	mg/kg	0.5	J	27	J	0.091	J	3.1	J
n-Propylbenzene	3.9	mg/kg	0.29	J	55	J	0.04	J	7.6	J
Naphthalene	12	mg/kg	0.11	J	30	U	0.036	J	9	0.24
o-Chlorotoluene		mg/kg	0.28	U	30	U	0.28	U	0.5	U
o-Xylene		mg/kg	0.11	U	12	U	0.037	J	5.2	0.85
p-Chlorotoluene		mg/kg	0.28	U	30	U	0.28	U	0.5	U
p-Diethylbenzene		mg/kg	0.68	U	29	U	0.64	U	0.4	6.2
p-Ethyltoluene		mg/kg	0.075	J	4	J	0.18	J	22	4.1
p-Isopropyltoluene		mg/kg	0.14	U	14	U	0.056	J	1.8	0.47
p-m-Xylene		mg/kg	0.11	U	12	U	0.044	J	24	3.3
sec-Butylbenzene	11	mg/kg	0.16	J	11	J	0.038	J	1.1	0.38
Styrene		mg/kg	0.11	U	12	U	0.11	U	0.2	0.11
tert-Butylbenzene	5.9	mg/kg	0.28	U	30	U	0.28	U	0.5	0.051
Tetrachloroethene	1.3	mg/kg	0.057	U	6	U	0.057	U	0.1	0.055
Toluene	0.7	mg/kg	0.086	U	9.1	U	0.084	U	0.29	0.097
trans-1,2-Dichloroethene	0.19	mg/kg	0.086	U	9.1	U	0.084	U	0.15	0.083
trans-1,3-Dichloropropene		mg/kg	0.057	U	6	U	0.057	U	0.1	0.055
trans-1,4-Dichloro-2-butene		mg/kg	0.28	U	30	U	0.28	U	0.5	0.28
Trichloroethene	0.47	mg/kg	0.057	U	6	U	0.057	U	0.1	0.055
Trichlorofluoromethane		mg/kg	0.28	U	30	U	0.28	U	0.5	0.28
Vinyl acetate		mg/kg	0.57	U	60	U	0.57	U	1	0.55
Vinyl chloride	0.02	mg/kg	0.11	U	12	U	0.11	U	0.2	0.11
Xylenes, Total	0.26	mg/kg	0.11	U	12	U	0.081	J	0.68	4.2

Notes

NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007

mg/kg - milligram per kilogram

U - Result is not detected at the reported detection limit for the sample.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

RL - Reporting Limit

MDL - Method Detection Limit

0.057 - The analyte was detected at concentrations above the 2200 Criteria

8 - Over-excavation sample point

## Notes

NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007

mg/kg - milligram per kilogram

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RL - Reporting Limit

MDL - Method Detection Limit

0.057 - The analyte was detected at concentrations above the 2200 Criteria

\* - Over-excavation sample point



### Table 3: Summary of Soil Exceedances

LOCATION SAMPLING DATE LAB SAMPLE ID	NY- UNRES	Units	EP-31CD 10/22/2015 L1527000-01		EP-37BB 10/22/2015 L1527000-02		EP-32 10/19/2015 L1526520-01		EP-33 10/19/2015 L1526520-02		EP-34 10/19/2015 L1526520-03	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>Metals</b>												
Aluminum, Total		mg/kg	4700		2500		3200		6500		7400	
Antimony, Total		mg/kg	4.2	U	2.3	J	4.6	U	2.5	J	5	U
Arsenic, Total	13	mg/kg	0.99		0.7	J	1.6		1.2		0.9	J
Barium, Total	350	mg/kg	68		24		80		61		48	
Beryllium, Total	7.2	mg/kg	0.16	J	0.13	J	0.13	J	0.38	J	0.27	J
Cadmium, Total	2.5	mg/kg	0.85	U	0.99	U	0.93	U	1	U	1	U
Calcium, Total		mg/kg	10000		3700		2800		3200		2500	
Chromium, Hexavalent	1	mg/kg	0.88	U	1	U	0.99	U	1	U	1.1	U
Chromium, Trivalent	30	mg/kg	11		5.9		8.9		53		18	
Chromium, Total		mg/kg	11		5.9		8.9		53		18	
Cobalt, Total		mg/kg	4.8		2.7		3.5		4		6.4	
Copper, Total	50	mg/kg	17		8.2		8.1		19		17	
Cyanide, Total	27	mg/kg	1	U	1.2	U	1.2	U	1.2	U	1.2	U
Iron, Total		mg/kg	10000		6100		10000		9600		15000	
Lead, Total	63	mg/kg	4.4		5	U	4.6	U	4.5	J	0.25	J
Magnesium, Total		mg/kg	5800		2700		2200		2200		4400	
Manganese, Total	1600	mg/kg	320		130		750		150		270	
Mercury, Total	0.18	mg/kg	0.07	U	0.08	U	0.02	J	0.05	J	0.02	J
Nickel, Total	30	mg/kg	9.8		6.3		7.1		10		14	
Potassium, Total		mg/kg	1100		380		530		660		2300	
Selenium, Total	3.9	mg/kg	1.7	U	2	U	1.8	U	1.3	J	2	U
Silver, Total	2	mg/kg	0.85	U	0.99	U	0.93	U	1	U	1	U
Sodium, Total		mg/kg	180		94	J	93	J	150	J	400	
Thallium, Total		mg/kg	1.7	U	2	U	1.8	U	2	U	2	U
Vanadium, Total		mg/kg	17		7.8		14		15		25	
Zinc, Total	109	mg/kg	22		11		16		25		42	
<b>Pesticides</b>												
2,4,5-T		mg/kg	0.182	U	0.21	U	0.203	U	0.214	U	0.22	U
2,4,5-TP (Silvex)	3.8	mg/kg	0.182	U	0.21	U	0.203	U	0.214	U	0.22	U
2,4-D		mg/kg	0.182	U	0.21	U	0.203	U	0.214	U	0.22	U
4,4'-DDD	0.0033	mg/kg	0.00172	U	0.00202	U	0.00197	U	0.00201	U	0.00204	U
4,4'-DDE	0.0033	mg/kg	0.00172	U	0.00202	U	0.00197	U	0.00201	U	0.00204	U
4,4'-DDT	0.0033	mg/kg	0.00204	J	0.00378	U	0.00369	U	0.00377	U	0.00383	U
Aldrin	0.005	mg/kg	0.00172	U	0.00202	U	0.00197	U	0.00201	U	0.00204	U
Alpha-BHC	0.02	mg/kg	0.000715	U	0.00084	U	0.000819	U	0.000837	U	0.000852	U
Beta-BHC	0.036	mg/kg	0.00172	U	0.00202	U	0.00197	U	0.00201	U	0.00204	U
Chlordane		mg/kg	0.0139	U	0.0164	U	0.016	U	0.0163	U	0.0166	U
cis-Chlordane (alpha)	0.094	mg/kg	0.00214	U	0.00252	U	0.00246	U	0.00251	U	0.00256	U
Delta-BHC	0.04	mg/kg	0.00172	U	0.00202	U	0.00197	U	0.00201	U	0.00204	U
Dieldrin	0.005	mg/kg	0.00107	U	0.00126	U	0.00123	U	0.00126	U	0.00128	U
Endosulfan I	2.4	mg/kg	0.00172	U	0.00202	U	0.00197	U	0.00201	U	0.00204	U
Endosulfan II	2.4	mg/kg	0.00172	U	0.00202	U	0.00197	U	0.00201	U	0.00204	U
Endosulfan sulfate	2.4	mg/kg	0.000715	U	0.00084	U	0.000819	U	0.000837	U	0.000852	U
Endrin	0.014	mg/kg	0.000715	U	0.00084	U	0.000819	U	0.000837	U	0.000852	U
Endrin ketone		mg/kg	0.00172	U	0.00202	U	0.00197	U	0.00201	U	0.00204	U
Heptachlor	0.042	mg/kg	0.000858	U	0.00101	U	0.000983	U	0.001	U	0.00102	U
Heptachlor epoxide		mg/kg	0.00322	U	0.00378	U	0.00369	U	0.00377	U	0.00383	U
Lindane	0.1	mg/kg	0.000715	U	0.00084	U	0.000819	U	0.000837	U	0.000852	U
Methoxychlor		mg/kg	0.00322	U	0.00378	U	0.00369	U	0.00377	U	0.00383	U
Toxaphene		mg/kg	0.0322	U	0.0378	U	0.0369	U	0.0377	U	0.0383	U
trans-Chlordane		mg/kg	0.00214	U	0.00252	U	0.00246	U	0.000964	J	0.00256	U
<b>PCBs</b>												
Aroclor 1016	0.1	mg/kg	0.0361	U	0.0413	U	0.0393	U	0.0412	U	0.0432	U
Aroclor 1221	0.1	mg/kg	0.0361	U	0.0413	U	0.0393	U	0.0412	U	0.0432	U
Aroclor 1232	0.1	mg/kg	0.0361	U	0.0413	U	0.0393	U	0.0412	U	0.0432	U
Aroclor 1242	0.1	mg/kg	0.0361	U	0.0413	U	0.0393	U	0.0412	U	0.0432	U
Aroclor 1248	0.1	mg/kg	0.0361	U	0.0413	U	0.0393	U	0.0412	U	0.0432	U
Aroclor 1254	0.1	mg/kg	0.0361	U	0.0413	U	0.0393	U	0.0412	U	0.0432	U
Aroclor 1260	0.1	mg/kg	0.0361	U	0.0413	U	0.0393	U	0.0412	U	0.0432	U
Aroclor 1262	0.1	mg/kg	0.0361	U	0.0413	U	0.0393	U	0.0412	U	0.0432	U
Aroclor 1268	0.1	mg/kg	0.0361	U	0.0413	U	0.0393	U	0.0412	U	0.0432	U
PCBs, Total		mg/kg	0.0361	U	0.0413	U	0.0393	U	0.0412	U	0.0432	U
<b>Notes</b> <b>NY-UNRES</b> - New York Unrestricted Use Criteria current as of 5/2007 mg/kg - milligram per kilogram U - Result is not detected at the reported detection limit for the sample. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. RL - Reporting Limit MDL - Method Detection Limit 0.057 - The analyte was detected at concentrations above the 2200 Criteria * - Over-excavation sample point												



Table 3: Summary of Soil Exceedances

LOCATION	NY- UNRES	Units	EP-31CD 10/22/2015 L1527000-01		EP-37BB 10/22/2015 L1527000-02		EP-32 10/19/2015 L1526520-01		EP-33 10/19/2015 L1526520-02		EP-34 10/19/2015 L1526520-03	
SAMPLING DATE			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
LAB SAMPLE ID												
SVOCs												
1,2,4,5-Tetrachlorobenzene		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
1,2,4-Trichlorobenzene		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
1,2-Dichlorobenzene	1.1	mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
1,3-Dichlorobenzene	2.4	mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
1,4-Dichlorobenzene	1.8	mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
2,4,5-Trichlorophenol		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
2,4,6-Trichlorophenol		mg/kg	0.11	U	0.12	U	0.12	U	0.13	U	0.13	U
2,4-Dichlorophenol		mg/kg	0.16	U	0.18	U	0.18	U	0.19	U	0.2	U
2,4-Dimethylphenol		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
2,4-Dinitrophenol		mg/kg	0.86	U	0.99	U	0.99	U	1	U	1.1	U
2,4-Dinitrotoluene		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
2,6-Dinitrotoluene		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
2-Chloronaphthalene		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
2-Chlorophenol		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
2-Methylnaphthalene		mg/kg	0.22	U	0.25	U	0.25	U	0.25	U	0.27	U
2-Methylphenol (o-Cresol)	0.33	mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
2-Nitroaniline		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
2-Nitrophenol		mg/kg	0.39	U	0.45	U	0.44	U	0.46	U	0.48	U
3,3'-Dichlorobenzidine		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
3-Methylphenol/4-Methylphenol	0.33	mg/kg	0.26	U	0.3	U	0.3	U	0.3	U	0.32	U
3-Nitroaniline		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
4,6-Dinitro-o-cresol		mg/kg	0.47	U	0.54	U	0.54	U	0.55	U	0.58	U
4-Bromophenyl phenyl ether		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
4-Chloroaniline		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
4-Chlorophenyl phenyl ether		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
4-Nitroaniline		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
4-Nitrophenol		mg/kg	0.25	U	0.29	U	0.29	U	0.3	U	0.31	U
Acenaphthene	20	mg/kg	0.14	U	0.16	U	0.16	U	0.17	U	0.18	U
Acenaphthylene	100	mg/kg	0.14	U	0.16	U	0.16	U	0.17	U	0.18	U
Acetophenone		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Anthracene	100	mg/kg	0.11	U	0.12	U	0.12	U	0.13	U	0.13	U
Benzo(a)anthracene	1	mg/kg	0.11	U	0.12	U	0.12	U	0.068	J	0.13	U
Benzo(a)pyrene	1	mg/kg	0.14	U	0.16	U	0.16	U	0.065	J	0.18	U
Benzo(b)fluoranthene	1	mg/kg	0.11	U	0.12	U	0.12	U	0.081	J	0.13	U
Benzo(g,h,i)perylene	100	mg/kg	0.14	U	0.16	U	0.16	U	0.052	J	0.18	U
Benzo(k)fluoranthene	0.8	mg/kg	0.11	U	0.12	U	0.12	U	0.13	U	0.13	U
Benzoic Acid		mg/kg	0.58	U	0.67	U	0.67	U	0.68	U	0.72	U
Benzyl Alcohol		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Biphenyl		mg/kg	0.41	U	0.47	U	0.47	U	0.48	U	0.5	U
Bis(2-chloroethoxy)methane		mg/kg	0.19	U	0.22	U	0.22	U	0.23	U	0.24	U
Bis(2-chloroethyl)ether		mg/kg	0.16	U	0.18	U	0.18	U	0.19	U	0.2	U
Bis(2-chloroisopropyl)ether		mg/kg	0.22	U	0.25	U	0.25	U	0.25	U	0.27	U
Bis(2-Ethylhexyl)phthalate		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Butyl benzyl phthalate		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Carbazole		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Chrysene	1	mg/kg	0.11	U	0.12	U	0.12	U	0.064	J	0.13	U
Di-n-butylphthalate		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Di-n-octylphthalate		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.11	U	0.12	U	0.12	U	0.13	U	0.13	U
Dibenzofuran	7	mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Diethyl phthalate		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Dimethyl phthalate		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Fluoranthene	100	mg/kg	0.11	U	0.12	U	0.12	U	0.15	U	0.13	U
Fluorene	30	mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Hexachlorobenzene	0.33	mg/kg	0.11	U	0.12	U	0.12	U	0.13	U	0.13	U
Hexachlorobutadiene		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Hexachlorocyclopentadiene		mg/kg	0.51	U	0.59	U	0.59	U	0.6	U	0.63	U
Hexachloroethane		mg/kg	0.14	U	0.16	U	0.16	U	0.17	U	0.18	U
Indeno(1,2,3-cd)Pyrene	0.5	mg/kg	0.14	U	0.16	U	0.16	U	0.053	J	0.18	U
Isophorone		mg/kg	0.16	U	0.18	U	0.18	U	0.19	U	0.2	U
n-Nitrosodi-n-propylamine		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Naphthalene	12	mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Nitrobenzene		mg/kg	0.16	U	0.18	U	0.18	U	0.19	U	0.2	U
NitrosoDiPhenylAmine(NDPA)/DPA		mg/kg	0.14	U	0.16	U	0.16	U	0.17	U	0.18	U
p-Chloro-M-Cresol		mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Pentachlorophenol	0.8	mg/kg	0.14	U	0.16	U	0.16	U	0.17	U	0.18	U
Phenanthrene	100	mg/kg	0.11	U	0.12	U	0.12	U	0.052	J	0.13	U
Phenol	0.33	mg/kg	0.18	U	0.21	U	0.2	U	0.21	U	0.22	U
Pyrene	100	mg/kg	0.11	U	0.12	U	0.12	U	0.12	J	0.13	U
VOCs												
1,1,1,2-Tetrachloroethane		mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
1,1,1-Trichloroethane	0.68	mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
1,1,2-Trichloroethane		mg/kg	0.0013	U	0.002	U	0.0017	U	0.0017	U	0.002	U
1,1-Dichloroethane	0.27	mg/kg	0.0013	U	0.002	U	0.0017	U	0.0017	U	0.002	U
1,1-Dichloroethene	0.33	mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
1,1-Dichloropropene		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
1,2,3-Trichlorobenzene		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
1,2,3-Trichloropropane		mg/kg	0.009	U	0.013	U	0.011	U	0.011	U	0.013	U
1,2,4,5-Tetramethylbenzene		mg/kg	0.00033	J	0.01	U	0.0044	U	0.00035	J	0.0052	U
1,2,4-Trichlorobenzene		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
1,2,4-Trimethylbenzene	3.6	mg/kg	0.00056	J	0.075	U	0.0055	U	0.0057	U	0.0065	U
1,2-Dibromo-3-chloropropane		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
1,2-Dibromoethane		mg/kg	0.0036	U	0.0053	U	0.0044	U	0.0045	U	0.0052	U
1,2-Dichlorobenzene	1.1	mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
1,2-Dichloroethane	0.02	mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
1,2-Dichloroethene, Total		mg/kg	0.0009	U	0.0028	J	0.0011	U	0.0011	U	0.0013	U



**Table 3: Summary of Soil Exceedances**

LOCATION			EP-31CD	EP-37BB	EP-32	EP-33	EP-34
SAMPLING DATE	NY-	Units	10/22/2015	10/22/2015	10/19/2015	10/19/2015	10/19/2015
LAB SAMPLE ID	UNRES		L1527000-01	L1527000-02	L1526520-01	L1526520-02	L1526520-03
			Results Qual	Results Qual	Results Qual	Results Qual	Results Qual
1,2-Dichloropropane		mg/kg	0.0031 U	0.0046 U	0.0039 U	0.004 U	0.0046 U
1,2,4-Trimethylbenzene	8.4	mg/kg	0.00018 J	0.028	0.0055 U	0.0057 U	0.0065 U



Table 3: Summary of Soil Exceedances

LOCATION	NY-UNRES	Units	EP-31CD 10/22/2015 L1527000-01		EP-37BB 10/22/2015 L1527000-02		EP-32 10/19/2015 L1526520-01		EP-33 10/19/2015 L1526520-02		EP-34 10/19/2015 L1526520-03	
SAMPLING DATE			Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
LAB SAMPLE ID												
1,3-Dichlorobenzene	2.4	mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
1,3-Dichloropropane		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
1,3-Dichloropropene, Total		mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
1,4-Dichlorobenzene	1.8	mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
1,4-Dioxane	0.1	mg/kg	0.09	U	0.13	U	0.11	U	0.11	U	0.13	U
2,2-Dichloropropane		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.009	U	0.013	U	0.011	U	0.011	U	0.013	U
2-Hexanone		mg/kg	0.009	U	0.013	U	0.011	U	0.011	U	0.013	U
4-Methyl-2-pentanone		mg/kg	0.009	U	0.013	U	0.011	U	0.011	U	0.013	U
Acetone	0.05	mg/kg	0.0093	U	0.013	U	0.0045	J	0.0037	J	0.0042	J
Acrylonitrile		mg/kg	0.009	U	0.013	U	0.011	U	0.011	U	0.013	U
Benzene	0.06	mg/kg	0.0009	U	0.0047	U	0.0011	U	0.0011	U	0.0013	U
Bromobenzene		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
Bromochloromethane		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
Bromodichloromethane		mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
Bromoform		mg/kg	0.0036	U	0.0053	U	0.0044	U	0.0045	U	0.0052	U
Bromomethane		mg/kg	0.0018	U	0.0026	U	0.0022	U	0.0023	U	0.0026	U
Carbon disulfide		mg/kg	0.009	U	0.013	U	0.011	U	0.011	U	0.013	U
Carbon tetrachloride	0.76	mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
Chlorobenzene	1.1	mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
Chloroethane		mg/kg	0.0018	U	0.0026	U	0.0022	U	0.0023	U	0.0026	U
Chloroform	0.37	mg/kg	0.0013	U	0.002	U	0.0017	U	0.0017	U	0.002	U
Chloromethane		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
cis-1,2-Dichloroethene	0.25	mg/kg	0.0009	U	0.0023	U	0.0011	U	0.0011	U	0.0013	U
cis-1,3-Dichloropropene		mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
Dibromochloromethane		mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
Dibromomethane		mg/kg	0.009	U	0.013	U	0.011	U	0.011	U	0.013	U
Dichlorodifluoromethane		mg/kg	0.009	U	0.013	U	0.011	U	0.011	U	0.013	U
Ethyl ether		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
Ethylbenzene	1	mg/kg	0.0009	U	0.028	U	0.0011	U	0.0011	U	0.0013	U
Hexachlorobutadiene		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
Isopropylbenzene		mg/kg	0.0009	U	0.004	U	0.0011	U	0.0011	U	0.0013	U
Methyl tert butyl ether	0.93	mg/kg	0.0018	U	0.0026	U	0.0022	U	0.0023	U	0.0026	U
Methylene chloride	0.05	mg/kg	0.009	U	0.013	U	0.011	U	0.011	U	0.013	U
n-Butylbenzene	12	mg/kg	0.0009	U	0.0046	U	0.0011	U	0.0011	U	0.0013	U
n-Propylbenzene	3.9	mg/kg	0.0009	U	0.0091	U	0.0011	U	0.0011	U	0.0013	U
Naphthalene	12	mg/kg	0.0065	J	0.015	U	0.0055	U	0.0057	U	0.0065	U
n-Chlorotoluene		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
p-Xylene		mg/kg	0.0018	U	0.044	U	0.0022	U	0.0023	U	0.0026	U
p-Chlorotoluene		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
p-Diethylbenzene		mg/kg	0.00067	J	0.04	U	0.0044	U	0.0045	U	0.0052	U
p-Ethyltoluene		mg/kg	0.0025	J	0.059	U	0.0044	U	0.0045	U	0.0052	U
p-Isopropyltoluene		mg/kg	0.0009	U	0.0024	U	0.0011	U	0.0011	U	0.0013	U
p-m-Xylene		mg/kg	0.00028	J	0.11	U	0.0022	U	0.0023	U	0.0026	U
sec-Butylbenzene	11	mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
Styrene		mg/kg	0.0018	U	0.0026	U	0.0022	U	0.0023	U	0.0026	U
tert-Butylbenzene	5.9	mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
Tetrachloroethene	1.3	mg/kg	0.0009	U	0.0012	J	0.0011	U	0.0011	U	0.0013	U
Toluene	0.7	mg/kg	0.0013	U	0.038	U	0.0017	U	0.0017	U	0.002	U
trans-1,2-Dichloroethene	0.19	mg/kg	0.0013	U	0.00048	J	0.0017	U	0.0017	U	0.002	U
trans-1,3-Dichloropropene		mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
trans-1,4-Dichloro-2-butene		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
Trichloroethene	0.47	mg/kg	0.0009	U	0.0013	U	0.0011	U	0.0011	U	0.0013	U
Trichlorofluoromethane		mg/kg	0.0045	U	0.0066	U	0.0055	U	0.0057	U	0.0065	U
Vinyl acetate		mg/kg	0.009	U	0.013	U	0.011	U	0.011	U	0.013	U
Vinyl chloride	0.02	mg/kg	0.0018	U	0.00084	J	0.0022	U	0.0023	U	0.0026	U
Xylenes, Total	0.26	mg/kg	0.00028	J	0.15	U	0.0022	U	0.0023	U	0.0026	U

## Notes

NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007

mg/kg - milligram per kilogram

U - Result is not detected at the reported detection limit for the sample.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

RL - Reporting Limit

MDL - Method Detection Limit

0.057 - The analyte was detected at concentrations above the 2200 Criteria

\* - Over-excavation sample point



**Table 3: Summary of Soil Exceedances**

LOCATION SAMPLING DATE LAB SAMPLE ID	NY- UNRES	Units	EP-23 10/8/2015 L1525523-01		EP-23 (DUP) 10/8/2015 L1525523-02		EP-24 10/8/2015 L1525523-04		EP-36AB 10/28/2015 L1527646-01	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>Metals</b>										
Aluminum, Total		mg/kg	6700		7500		7300		3300	
Antimony, Total		mg/kg	4.9	U	4.9	U	4.5	U	5.1	U
Arsenic, Total	13	mg/kg	0.63	J	0.6	J	0.53	J	1.3	
Barium, Total	350	mg/kg	59		58		79		38	
Beryllium, Total	7.2	mg/kg	0.2	J	0.24	J	0.26	J	0.16	J
Cadmium, Total	2.5	mg/kg	0.98	U	0.97	U	0.9	U	1	U
Calcium, Total		mg/kg	7400		9600		2100		5200	
Chromium, Hexavalent	1	mg/kg	1	U	1	U	0.96	U	1	U
Chromium, Trivalent	30	mg/kg	17		19		28		7.6	
Chromium, Total		mg/kg	17		19		28		7.6	
Cobalt, Total		mg/kg	6		6.8		8.1		3.7	
Copper, Total	50	mg/kg	20		20		22		11	
Cyanide, Total	27	mg/kg	1.2	U	1.2	U	1.2	U	1.2	J
Iron, Total		mg/kg	13000		14000		13000		7700	
Lead, Total	63	mg/kg	4.9	U	1.2	J	4.5	U	5.1	U
Magnesium, Total		mg/kg	6800		8100		3600		4000	
Manganese, Total	1600	mg/kg	160		140		96		110	
Mercury, Total	0.18	mg/kg	0.08	U	0.09	U	0.08	U	0.06	J
Nickel, Total	30	mg/kg	14		15		16		6.9	
Potassium, Total		mg/kg	1400		1600		2100		680	
Selenium, Total	3.9	mg/kg	2	U	1.9	U	1.8	U	2	U
Silver, Total	2	mg/kg	0.98	U	0.97	U	0.9	U	1	U
Sodium, Total		mg/kg	240		260		150	J	130	J
Thallium, Total		mg/kg	2	U	1.9	U	1.8	U	2	U
Vanadium, Total		mg/kg	22		26		34		10	
Zinc, Total	109	mg/kg	36		40		37		15	
<b>Pesticides</b>										
2,4,5-T		mg/kg	0.208	U	0.206	U	0.195	U	0.215	U
2,4,5-TP (Silvex)	3.8	mg/kg	0.208	U	0.206	U	0.195	U	0.215	U
2,4-D		mg/kg	0.208	U	0.206	U	0.195	U	0.215	U
4,4'-DDD	0.0033	mg/kg	0.002	U	0.00197	U	0.00186	U	0.00202	U
4'-DDE	0.0033	mg/kg	0.002	U	0.00197	U	0.00186	U	0.00202	U
4,4'-DDT	0.0033	mg/kg	0.00375	U	0.00369	U	0.0035	U	0.00379	U
Aldrin	0.005	mg/kg	0.002	U	0.00197	U	0.00186	U	0.00202	U
Alpha-BHC	0.02	mg/kg	0.000833	U	0.000819	U	0.000777	U	0.000842	U
Beta-BHC	0.036	mg/kg	0.002	U	0.00197	U	0.00186	U	0.00202	U
Chlordane		mg/kg	0.0162	U	0.016	U	0.0152	U	0.0164	U
cis-Chlordane (alpha)	0.094	mg/kg	0.0025	U	0.00246	U	0.00233	U	0.00252	U
Delta-BHC	0.04	mg/kg	0.002	U	0.00197	U	0.00186	U	0.00202	U
Dieldrin	0.005	mg/kg	0.00125	U	0.00123	U	0.00116	U	0.00126	U
Endosulfan I	2.4	mg/kg	0.002	U	0.00197	U	0.00186	U	0.00202	U
Endosulfan II	2.4	mg/kg	0.002	U	0.00197	U	0.00186	U	0.00202	U
Endosulfan sulfate	2.4	mg/kg	0.000833	U	0.000819	U	0.000777	U	0.000842	U
Endrin	0.014	mg/kg	0.000833	U	0.000819	U	0.000777	U	0.000842	U
Endrin ketone		mg/kg	0.002	U	0.00197	U	0.00186	U	0.00202	U
Heptachlor	0.042	mg/kg	0.000999	U	0.000983	U	0.000933	U	0.00101	U
Heptachlor epoxide		mg/kg	0.00375	U	0.00369	U	0.0035	U	0.00379	U
Lindane	0.1	mg/kg	0.000833	U	0.000819	U	0.000777	U	0.000842	U
Methoxychlor		mg/kg	0.00375	U	0.00369	U	0.0035	U	0.00379	U
Toxaphene		mg/kg	0.0375	U	0.0369	U	0.035	U	0.0379	U
trans-Chlordane		mg/kg	0.0025	U	0.00246	U	0.00233	U	0.00252	U
<b>PCBs</b>										
Aroclor 1016	0.1	mg/kg	0.0405	U	0.0402	U	0.0388	U	0.0416	U
Aroclor 1221	0.1	mg/kg	0.0405	U	0.0402	U	0.0388	U	0.0416	U
Aroclor 1232	0.1	mg/kg	0.0405	U	0.0402	U	0.0388	U	0.0416	U
Aroclor 1242	0.1	mg/kg	0.0405	U	0.0402	U	0.0388	U	0.0416	U
Aroclor 1248	0.1	mg/kg	0.0405	U	0.0402	U	0.0388	U	0.0416	U
Aroclor 1254	0.1	mg/kg	0.0405	U	0.0402	U	0.0388	U	0.0416	U
Aroclor 1260	0.1	mg/kg	0.0405	U	0.0402	U	0.0388	U	0.0416	U
Aroclor 1262	0.1	mg/kg	0.0405	U	0.0402	U	0.0388	U	0.0416	U
Aroclor 1268	0.1	mg/kg	0.0405	U	0.0402	U	0.0388	U	0.0416	U
PCBs, Total		mg/kg	0.0405	U	0.0402	U	0.0388	U	0.0416	U
<b>Notes</b> NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007 mg/kg - milligram per kilogram U - Result is not detected at the reported detection limit for the sample. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. RL - Reporting Limit MDL - Method Detection Limit 0.057 - The analyte was detected at concentrations above the 2200 Criteria * - Over-excavation sample point										



Table 3: Summary of Soil Exceedances

LOCATION SAMPLING DATE LAB SAMPLE ID	NY- UNRES	Units	EP-23 10/8/2015 L1525523-01		EP-23 (DUP) 10/8/2015 L1525523-02		EP-24 10/8/2015 L1525523-04		EP-36AB 10/28/2015 L1527646-01	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual
			SVOCs							
1,2,4,5-Tetrachlorobenzene		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
1,2,4-Trichlorobenzene		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
1,2-Dichlorobenzene	1.1	mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
1,3-Dichlorobenzene	2.4	mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
1,4-Dichlorobenzene	1.8	mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
2,4,5-Trichlorophenol		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
2,4,6-Trichlorophenol		mg/kg	0.12	U	0.12	U	0.12	U	0.13	U
2,4-Dichlorophenol		mg/kg	0.19	U	0.18	U	0.18	U	0.19	U
2,4-Dimethylphenol		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
2,4-Dinitrophenol		mg/kg	1	U	0.98	U	0.95	U	1	U
2,4-Dinitrotoluene		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
2,6-Dinitrotoluene		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
2-Chloronaphthalene		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
2-Chlorophenol		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
2-Methylnaphthalene		mg/kg	0.25	U	0.24	U	0.24	U	0.26	U
2-Methylphenol (o-Cresol)	0.33	mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
2-Nitroaniline		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
2-Nitrophenol		mg/kg	0.45	U	0.44	U	0.43	U	0.47	U
3,3'-Dichlorobenzidine		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
3-Methylphenol/4-Methylphenol	0.33	mg/kg	0.3	U	0.29	U	0.28	U	0.31	U
3-Nitroaniline		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
4,6-Dinitro-o-cresol		mg/kg	0.54	U	0.53	U	0.51	U	0.56	U
4-Bromophenyl phenyl ether		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
4-Chloroaniline		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
4-Chlorophenyl phenyl ether		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
4-Nitroaniline		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
4-Nitrophenol		mg/kg	0.29	U	0.29	U	0.28	U	0.3	U
Acenaphthene	20	mg/kg	0.17	U	0.16	U	0.16	U	0.17	U
Acenaphthylene	100	mg/kg	0.17	U	0.16	U	0.16	U	0.17	U
Acetophenone		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Anthracene	100	mg/kg	0.12	U	0.12	U	0.12	U	0.13	U
Benzo(a)anthracene	1	mg/kg	0.12	U	0.12	U	0.12	U	0.13	U
Benzo(a)pyrene	1	mg/kg	0.17	U	0.16	U	0.16	U	0.17	U
Benzo(b)fluoranthene	1	mg/kg	0.12	U	0.12	U	0.12	U	0.13	U
Benzo(ghi)perylene	100	mg/kg	0.17	U	0.16	U	0.16	U	0.17	U
Benzo(k)fluoranthene	0.8	mg/kg	0.12	U	0.12	U	0.12	U	0.13	U
Benzoic Acid		mg/kg	0.67	U	0.66	U	0.64	U	0.7	U
Benzyl Alcohol		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Biphenyl		mg/kg	0.47	U	0.47	U	0.45	U	0.49	U
Bis(2-chloroethoxy)methane		mg/kg	0.22	U	0.22	U	0.21	U	0.23	U
Bis(2-chloroethyl)ether		mg/kg	0.19	U	0.18	U	0.18	U	0.19	U
Bis(2-chloroisopropyl)ether		mg/kg	0.25	U	0.24	U	0.24	U	0.26	U
Bis(2-Ethylhexyl)phthalate		mg/kg	0.21	U	0.08	J	0.2	U	0.22	U
Butyl benzyl phthalate		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Carbazole		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Chrysene	1	mg/kg	0.12	U	0.12	U	0.12	U	0.13	U
Di-n-butylphthalate		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Di-n-octylphthalate		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Dibenzo(a,h)anthracene	0.33	mg/kg	0.12	U	0.12	U	0.12	U	0.13	U
Dibenzofuran	7	mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Diethyl phthalate		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Dimethyl phthalate		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Fluoranthene	100	mg/kg	0.12	U	0.12	U	0.12	U	0.13	U
Fluorene	30	mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Hexachlorobenzene	0.33	mg/kg	0.12	U	0.12	U	0.12	U	0.13	U
Hexachlorobutadiene		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Hexachlorocyclopentadiene		mg/kg	0.6	U	0.58	U	0.56	U	0.62	U
Hexachloroethane		mg/kg	0.17	U	0.16	U	0.16	U	0.17	U
Indeno(1,2,3-cd)Pyrene	0.5	mg/kg	0.17	U	0.16	U	0.16	U	0.17	U
Isophorone		mg/kg	0.19	U	0.18	U	0.18	U	0.19	U
n-Nitrosodi-n-propylamine		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Naphthalene	12	mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Nitrobenzene		mg/kg	0.19	U	0.18	U	0.18	U	0.19	U
NitrosoDiPhenylAmine(NDPA)/DPA		mg/kg	0.17	U	0.16	U	0.16	U	0.17	U
p-Chloro-M-Cresol		mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Pentachlorophenol	0.8	mg/kg	0.17	U	0.16	U	0.16	U	0.17	U
Phenanthrene	100	mg/kg	0.12	U	0.12	U	0.12	U	0.13	U
Phenol	0.33	mg/kg	0.21	U	0.2	U	0.2	U	0.22	U
Pyrene	100	mg/kg	0.12	U	0.12	U	0.12	U	0.13	U
VOCs										
1,1,1,2-Tetrachloroethane		mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
1,1,1-Trichloroethane	0.68	mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
1,1,2-Trichloroethane		mg/kg	0.0017	U	0.0016	U	0.0018	U	0.0019	U
1,1-Dichloroethane	0.27	mg/kg	0.0017	U	0.0016	U	0.0018	U	0.0019	U
1,1-Dichloroethene	0.33	mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
1,1-Dichloropropene		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
1,2,3-Trichlorobenzene		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
1,2,3-Trichloropropene		mg/kg	0.011	U	0.011	U	0.012	U	0.013	U
1,2,4,5-Tetramethylbenzene		mg/kg	0.0045	U	0.0044	U	0.01	U	0.0051	U
1,2,4-Trichlorobenzene		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
1,2,4-Trimethylbenzene	3.6	mg/kg	0.0056	U	0.00048	J	0.00073	J	0.0064	U
1,2-Dibromo-3-chloropropane		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
1,2-Dibromoethane		mg/kg	0.0045	U	0.0044	U	0.0048	U	0.0051	U
1,2-Dichlorobenzene	1.1	mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
1,2-Dichloroethane	0.02	mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
1,2-Dichloroethene, Total		mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0078	J



**Table 3: Summary of Soil Exceedances**

LOCATION	NY- UNRES	Units	EP-23		EP-23 (DUP)		EP-24		EP-36AB	
SAMPLING DATE			10/8/2015		10/8/2015		10/8/2015		10/28/2015	
LAB SAMPLE ID			L1525523-01		L1525523-02		L1525523-04		L1527646-01	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,2-Dichloropropane		mg/kg	0.004	U	0.0038	U	0.0042	U	0.0044	U
1,3,5-Trimethylbenzene	8.4	mg/kg	0.0056	U	0.00024	J	0.00044	J	0.0064	U



**Table 3: Summary of Soil Exceedances**

LOCATION SAMPLING DATE LAB SAMPLE ID	NY- UNRES	Units	EP-23 10/8/2015 L1525523-01		EP-23 (DUP) 10/8/2015 L1525523-02		EP-24 10/8/2015 L1525523-04		EP-36AB 10/28/2015 L1527646-01	
			Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,3-Dichlorobenzene	2.4	mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
1,3-Dichloropropane		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
1,3-Dichloropropane, Total		mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
1,4-Dichlorobenzene	1.8	mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
1,4-Dioxane	0.1	mg/kg	0.11	U	0.11	U	0.12	U	0.13	U
2,2-Dichloropropane		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
2-Butanone (Methyl ethyl ketone)	0.12	mg/kg	0.011	U	0.034	U	0.012	U	0.013	U
2-Hexanone		mg/kg	0.011	U	0.011	U	0.012	U	0.013	U
4-Methyl-2-pentanone		mg/kg	0.011	U	0.011	U	0.012	U	0.013	U
Acetone	0.05	mg/kg	0.015	U	0.094	U	0.0094	J	0.013	U
Acrylonitrile		mg/kg	0.011	U	0.011	U	0.012	U	0.013	U
Benzene	0.06	mg/kg	0.0011	U	0.0011	U	0.0003	J	0.0013	U
Bromobenzene		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
Bromochloromethane		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
Bromodichloromethane		mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
Bromoform		mg/kg	0.0045	U	0.0044	U	0.0048	U	0.0051	U
Bromomethane		mg/kg	0.0023	U	0.0022	U	0.0024	U	0.0025	U
Carbon disulfide		mg/kg	0.011	U	0.011	U	0.0026	J	0.013	U
Carbon tetrachloride	0.76	mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
Chlorobenzene	1.1	mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
Chloroethane		mg/kg	0.0023	U	0.0022	U	0.0024	U	0.0025	U
Chloroform	0.37	mg/kg	0.0017	U	0.0016	U	0.0018	U	0.0019	U
Chloromethane		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
cis-1,2-Dichloroethene	0.25	mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0067	U
cis-1,3-Dichloropropene		mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
Dibromochloromethane		mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
Dibromomethane		mg/kg	0.011	U	0.011	U	0.012	U	0.013	U
Dichlorodifluoromethane		mg/kg	0.011	U	0.011	U	0.012	U	0.013	U
Ethyl ether		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
Ethylbenzene	1	mg/kg	0.0011	U	0.0011	U	0.0015	U	0.0013	U
Hexachlorobutadiene		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
Isopropylbenzene		mg/kg	0.0011	U	0.0034	U	0.0059	U	0.0013	U
Methyl tert butyl ether	0.93	mg/kg	0.0023	U	0.0022	U	0.0024	U	0.0025	U
Methylene chloride	0.05	mg/kg	0.011	U	0.011	U	0.012	U	0.013	U
n-Butylbenzene	12	mg/kg	0.0011	U	0.005	U	0.0053	U	0.0013	U
n-Propylbenzene	3.9	mg/kg	0.0011	U	0.0064	U	0.014	U	0.0013	U
Naphthalene	12	mg/kg	0.0056	U	0.0021	J	0.0011	J	0.0064	U
p-Chlorotoluene		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
p-Xylene		mg/kg	0.0023	U	0.0022	U	0.0024	U	0.0025	U
p-Chlorotoluene		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
p-Diethylbenzene		mg/kg	0.0045	U	0.013	U	0.0062	U	0.0051	U
p-Ethyltoluene		mg/kg	0.0045	U	0.00074	J	0.00091	J	0.0051	U
p-Isopropyltoluene		mg/kg	0.0011	U	0.0011	U	0.0011	J	0.0013	U
p-m-Xylene		mg/kg	0.0023	U	0.00066	J	0.00048	J	0.0025	U
sec-Butylbenzene	11	mg/kg	0.0011	U	0.0046	U	0.0027	U	0.0013	U
Styrene		mg/kg	0.0023	U	0.0022	U	0.0024	U	0.0025	U
tert-Butylbenzene	5.9	mg/kg	0.0056	U	0.0013	J	0.006	U	0.0064	U
Tetrachloroethene	1.3	mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0037	U
Toluene	0.7	mg/kg	0.0017	U	0.00023	J	0.00029	J	0.0019	U
trans-1,2-Dichloroethene	0.19	mg/kg	0.0017	U	0.0016	U	0.0018	U	0.0011	J
trans-1,3-Dichloropropene		mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0013	U
trans-1,4-Dichloro-2-butene		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
Trichloroethene	0.47	mg/kg	0.0011	U	0.0011	U	0.0012	U	0.0025	U
Trichlorofluoromethane		mg/kg	0.0056	U	0.0055	U	0.006	U	0.0064	U
Vinyl acetate		mg/kg	0.011	U	0.011	U	0.012	U	0.013	U
Vinyl chloride	0.02	mg/kg	0.0023	U	0.0022	U	0.0024	U	0.00084	J
Xylenes, Total	0.26	mg/kg	0.0023	U	0.00066	J	0.00048	J	0.0025	U

Notes

NY-UNRES - New York Unrestricted Use Criteria current as of 5/2007

mg/kg - milligram per kilogram

U - Result is not detected at the reported detection limit for the sample.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

RL - Reporting Limit

MDL - Method Detection Limit

0.0057 - The analyte was detected at concentrations above the 2200 Criteria

\* - Over-excavation sample point



TABLE 4 - Summary of Groundwater Exceedances  
NYSDEC Site No. C241156  
37-14 36th Street  
Long Island City, NY

Sample ID	NYSDEC AWQS	W-1		W-1DL		W-2		MW-1		MW-2		MW-3		MW-3DL		MW-4		MW-5		MW-6		TRIPBLANK	
Lab Sample Number		D2070-02		D2070-02DL		D2070-03		D2695-02		D2695-03		D2695-05		D2695-05DL		F2352-01		F2352-02		F2352-03		F2352-04	
Sampling Date		4/3/2012		4/3/2012		4/3/2012		4/3/2012		4/3/2012		4/3/2012		5/11/2012		5/15/2014		5/15/2014		5/15/2014		5/15/2014	
Units		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
		Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal
VOCs																							
1,2-Dibromoethane	0.0006	0.5	UQ	50	U	0.5	UQ	0.5	U	0.5	U	0.5	U	4.1	U								
Benzene	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	19		18	D	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	5	140		100	D	13		4.6		1.1		3.4		3.5	U	250	D	170		83.3		1	U
Ethyl Benzene	5	0.5	U	0.5	U	0.5	U	0.5	U	2.9		220	E	230	D	1	U	1	U	1	U	1	U
Isopropylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.72	J	140		130	D								
Tetrachloroethene	5	490	E	300	D	84		18		5.1		0.71	J	2.7	U	3100	D	810	D	110		1	U
Toluene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.56	J	72		65	D	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	5	12		0.5	U	2.8		1.4		0.5	U	0.5	U	4.1	U	4.6		130		100		1	U
Trichloroethene	5	82		66	JD	27		4		1.2		0.5	U	2.8	U	120		170		53.9		1	U
Vinyl Chloride	2	0.5	U	50	U	0.5	U	0.5	U	0.5	U	0.5	U	3.4	U	8.6		3.4		7.6		1	U
SVOCs		No Exceedances												NA									
PESTICIDES		No Detections												NA									
PCBs		No Detections												NA									
METALS - TOTAL																							
Chromium	50	5.9		NA		2.92	J	207		1.9	J	2.62	J	NA									
Copper	200	5.85	J	NA		5	U	231		3.1	J	2	U	NA									
Iron	300	1800		NA		395		158000		1960		17800		NA									
Lead	25	3.66	J	NA		3	U	67.5		4.25	J	12.2		NA									
Magnesium	35000	32700		NA		27600		54900		57700		34500		NA									
Manganese	300	830		NA		693		2840		1410		1950		NA									
Nickel	100	6.07	J	NA		4.8	J	152		6.81	J	4.2	U	NA									
Sodium	20000	90600		NA		111000		113000		40600		70100		NA									
METALS - DISSOLVED																							
Iron	300	61.9		NA		54.2		47.8	J	250		672		NA									
Magnesium	35000	32500		NA		26600		28700		56700		35000		NA									
Manganese	300	638		NA		643		582		1400		1920		NA									
Mercury	0.7	21.5	D	NA		25	D	0.092	UN	0.092	UN	0.092	UN	NA									
Sodium	20000	92000		NA		110000		124000		40400		72300		NA									

Notes:

This value exceeds New York State Department of Environmental Conservation Ambient Ground Water Standards.

D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

E - Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.

U - The compound was not detected at the indicated concentration.

N - Presumptive evidence of a compound

ug/L - Micrograms per liter.

Q - Indicates Laboratory Control Sample control criteria did not meet requirements.

Qal - Laboratory data qualifier.

NA - Not analyzed

NS - No standard


ND - Non-Detect



**TABLE 4 - Summary of Groundwater Exceedances**  
**NYSDEC Site No. C241156**  
**37-14 36th Street**  
**Long Island City, NY**

Sample ID	NYSDEC AWQS	GP-3		GP-4		GP-6		GP-7		GP-8		GP-9		GP-10		GP-11	
Lab Sample Number		D3625-03		D3625-07		D3625-04		D3625-01		D3781-01		D3781-03		D3781-04		D3781-02	
Sampling Date		8/1/2012		8/1/2012		8/1/2012		8/1/2012		8/10/2012		8/10/2012		8/10/2012		8/10/2012	
Units		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
		Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal
VOCs																	
cis-1,2-Dichloroethene	5	0.5	U	2.1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	3	
Tetrachloroethene	5	2.2		1.3		0.5	U	3.5		0.5	U	0.65	J	0.5	U	12	
Toluene	5	0.5	U	0.75	J	23		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	5	2.4		2.6		0.5	U	0.81	J	0.5	U	0.5	U	0.5	U	1.6	
SVOCs																	
2-Methylnaphthalene	NS	NA		0.22	U	NA											
Naphthalene	NS	NA		0.22	U	NA											

Notes:

-  This value exceeds New York State Department of Environmental Conservation Ambient Ground Water Standards.
- D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
- E - Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
- J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.
- U - The compound was not detected at the indicated concentration.
- N - Presumptive evidence of a compound
- ug/L - Micrograms per liter.
- Q - Indicates Laboratory Control Sample control criteria did not meet requirements.
- Qal - Laboratory data qualifier.
- NA - Not analyzed
- NS - No standard
- ND - Non-Detect



**TABLE 4 - Summary of Groundwater Exceedances**  
**NYSDEC Site No. C241156**  
**37-14 36th Street**  
**Long Island City, NY**

Sample ID	NYSDEC AWQS	GP-12 (16-20)*		DUP*		GP-12 (23-27)		GP-13 (16-20)		GP-13 (23-27)		GP-14 (16-20)		GP-14 (23-27)	
Lab Sample Number		L1216015-01		L1216015-02		L1216015-03		L1216015-07		L1216015-08		L1216015-04		L1216015-05	
Sampling Date		9/7/2012		9/7/2012		9/7/2012		9/7/2012		9/7/2012		9/7/2012		9/7/2012	
Units		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
		Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal	Result	Qal
VOCs															
cis-1,2-Dichloroethene	5	110		100		4		32		290		2.5		45	
Tetrachloroethene	5	490		460		59		54		510		27		250	
Toluene	5	25	U	25	U	2.5	U	2.5	U	25	U	2.5	U	12	U
Trichloroethene	5	110		100		8.7		15		160		4.2		49	
SVOCs															
2-Methylnaphthalene	NS	NA													
Naphthalene	NS	NA													

Notes:


-  This value exceeds New York State Department of Environmental Conservation Ambient Ground Water Standards.
- D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
- E - Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
- J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.
- U - The compound was not detected at the indicated concentration.
- N - Presumptive evidence of a compound
- ug/L - Micrograms per liter.
- Q - Indicates Laboratory Control Sample control criteria did not meet requirements.
- Qal - Laboratory data qualifier.
- NA - Not analyzed
- NS - No standard
- ND - Non-Detect



TABLE 5 - Summary of Soil Vapor Exceedaces  
NYSDEC Site No. C241156  
37-14 36th Street  
Long Island City, NY

Sample ID	NYSDOH Fuel Oil 2003 Upper Fence Limit	USEPA BASE Data 90th Percentile	HEI RIOPA 2005 95th Percentile Value (2)	NYSDOH Air Guidance Value	SG-1		SG-1DL		SG-2		SG-2DL		SG-3		SG-3DL		SG-4		SG-4DL		SG-5		SG-5DL	
Lab Sample Number					D2072-02		D2072-02DL		D2072-01		D2072-01DL		D2072-03		D2072-03DL		D2110-01		D2110-01DL		D2110-02		D2110-02DL	
Sampling Date					4/3/2012		4/3/2012		4/3/2012		4/3/2012		4/3/2012		4/3/2012		4/4/2012		4/4/2012		4/4/2012		4/4/2012	
Units	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>		µg/m <sup>3</sup>		µg/m <sup>3</sup>		µg/m <sup>3</sup>		µg/m <sup>3</sup>		µg/m <sup>3</sup>		µg/m <sup>3</sup>		µg/m <sup>3</sup>		µg/m <sup>3</sup>		µg/m <sup>3</sup>	
Dilution Factor					1	Qal	10	Qal	1	Qal	10	Qal	1	Qal	10	Qal	1	Qal	10	Qal	1	Qal	10	Qal
VOCs																								
1,1,1-Trichloroethane	2.5	20.6	-	-	60		65.5	D	44.2		43.6	D	1.47	J	13.6	U	0.93	J	13.6	U	1.31	J	13.6	U
1,1,2-Trichlorotrifluoroethane	2.5	3.5	-	-	0.46	J	19.2	U	0.46	J	19.2	U	0.46	J	19.2	U	0.46	J	19.2	U	0.84	J	19.2	U
1,2,4-Trimethylbenzene	9.8	9.5	-	-	40.3		54.1	DQ	28.5		12.3	UQ	8.85		12.3	UQ	12.8		12.3	U	24.6		12.3	U
1,2-Dichloroethane	0.4	<0.9	-	-	16.2		10.1	U	20.2		10.1	U	5.26		10.1	U	1.01	U	10.1	U	1.01	U	10.1	U
1,2-Dichloropropane	0.4	<1.6	-	-	3.05		11.6	U	3.24		11.6	U	1.11	J	11.6	U	1.16	U	11.6	U	1.16	U	11.6	U
1,3,5-Trimethylbenzene	3.9	3.7	-	-	10.8		11.8	JDQ	7.37		12.3	UQ	2.26	J	12.3	UQ	4.23		12.3	U	6.88		12.3	U
1,3-Dichlorobenzene	0.5	<2.4	-	-	8.42		15	U	5.29		15	U	1.14	J	15	U	6.01		15	U	6.61		15	U
2,2,4-Trimethylpentane	5	-	-	-	10.7		11.7	U	12.1		11.7	U	4.67		11.7	U	5.6		11.7	U	13.6		11.7	U
2-Butanone	16	12	-	-	7.37		7.37	U	12.1		7.37	U	2.89		7.37	U	15.6		7.37	U	14.2		7.37	U
4-Ethyltoluene	-	3.6	-	-	13.3		14.3	JD	9.34		12.3	U	2.9		12.3	U	4.52		12.3	U	7.87		12.3	U
4-Methyl-2-Pentanone	1.9	6	-	-	1.02	U	10.2	U	1.02	U	10.2	U	1.02	U	10.2	U	2.05	J	10.2	U	1.56	J	10.2	U
Acetone	115	98.9	45.8	-	15.7	Q	30.9	D	28.5	Q	49.9	D	0.59	U	5.94	U	178	E	285	D	159	E	261	D
Benzene	13	9.4	10	-	7.35		7.99	U	9.26		7.99	U	3.83		7.99	U	2.08		7.99	U	6.39		7.99	U
Carbon Disulfide	-	4.2	-	-	1.28	J	7.79	U	6.23		7.79	U	0.75	J	7.79	U	0.72	J	7.79	U	2.9		7.79	U
Carbon Tetrachloride	1.3	<1.3	1.1	-	39		44.7	D	2.33	J	15.7	U	0.5	J	15.7	U	0.25	J	15.7	U	0.25	J	15.7	U
Chlorobenzene	0.4	<0.9	-	-	1.11	J	11.5	U	0.92	J	11.5	U	1.15	U	11.5	U	1.15	U	11.5	U	1.15	U	11.5	U
Chloroform	1.2	1.1	6.34	-	10.7		12.2	U	4.69		12.2	U	1.22	U	12.2	U	0.54	J	12.2	U	1.03	J	12.2	U
Chloromethane	4.2	3.7	-	-	0.52	U	5.16	U	0.21	J	5.16	U	1.24		5.16	U	0.91	J	5.16	U	0.7	J	5.16	U
Cyclohexane	6.3	-	-	-	3.44		8.61	U	8.26		8.61	U	0.86	U	8.61	U	1.1	J	8.61	U	10.3		8.61	U
Dichlorodifluoromethane	10	16.5	-	-	2.67		12.4	U	2.13	J	12.4	U	1.58	J	12.4	U	1.53	J	12.4	U	0.79	J	12.4	U
Ethyl Benzene	6.4	5.7	7.62	-	43.4		38.2	D	35.6		10.9	U	11.3		10.9	U	10.4		10.9	U	19.1		10.9	U
Heptane	18	-	-	-	10.2		10.2	U	10.7		10.2	U	26.6		10.2	U	2.83		10.2	U	6.97		10.2	U
Methylene Chloride	16	10	7.5	60	1.63	J	8.69	U	2.01		8.69	U	2.26		8.69	U	7.3		8.69	U	1.53	J	8.69	U
Hexane	14	10.2	-	-	8.81		8.81	U	29.2		8.81	U	130	E	123	D	0.88	U	8.81	U	0.88	U	8.81	U
o-Xylene	7.1	7.9	7.24	-	41.7		43.4	D	33		10.9	U	10.4		10.9	U	13.5		10.9	U	22.6		10.9	U
m/p-Xylene	11	22.2	22.2	-	108		130	D	91.2		86.9	D	30		21.7	U	34.3		21.7	U	56.5		21.7	U
Methyl Methacrylate	-	-	-	-	13.5		10.2	U	10.2		10.2	U	4.05		10.2	U	2.42		10.2	U	5.32		10.2	U
Styrene	1.4	1.9	5.13	-	3.87		10.6	U	2.55		10.6	U	0.64	JQ	10.6	U	0.89	JQ	10.6	U	1.75	JQ	10.6	U
tert-butyl alcohol	-	-	-	-	1.18	J	7.58	U	1.3	J	7.58	U	0.76	U	7.58	U	6.06		7.58	U	3.94		7.58	U
Tetrachloroethylene	2.5	15.9	6.01	30	183	E	183	D	19.7		16.3	JD	10.2		17	U	4.27		17	U	4.81		17	U
Tetrahydrofuran	0.8	-	-	-	2.77		7.37	U	0.74	U	7.37	U	0.74	U	7.37	U	1.09	J	7.37	U	1.59		7.37	U
Toluene	57	43	39.8	-	143	E	165	D	128	E	131	D	52.8		37.7	D	98	E	71.6	D	199	E	184	D
trans-1,2-Dichloroethene	-	-	-	-	2.1		9.91	U	2.82		9.91	U	0.67	J	9.91	U	0.99	U	9.91	U	0.99	U	9.91	U
Trichloroethylene	0.5	4.2	1.36	5	4.89		13.4	U	1.18	J	13.4	U	0.54	J	13.4	U	1.34	U	13.4	U	1.34	U	13.4	U
Trichlorofluoromethane	12	18.1	-	-	1.46	J	14	U	1.46	J	14	U	1.07	J	14	U	1.12	J	14	U	1.35	J	14	U
Vinyl Chloride	0.4	<1.9	-	-	0.64	U	6.39	U	0.64	U	6.39	U	0.64	U	6.39	U	0.64	U	6.39	U	0.18	J	6.39	U
Total BTEX					343.45		384.59		297.06		247.69		108.33		89.19		158.28		123.09		303.59		235.49	

Notes:

183	Exceeds NYSDOH AGV Standards
60	Exceeds Typical Background Range

ug/m<sup>3</sup> - Micrograms per cubic meter.

ASTM - American Society of Testing and Materials.

D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

E - Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.

HEI RIOPA - Health Effects Institute established Relationships of Indoor, Outdoor and Personal Air.

J - Data indicates the presence of a compound that meets the identification criteria; although, the result is less than the quantitation limit and the concentration given is approximate.

NYSDOH AGV - New York State Department of Health Air Guidance Value.

Q - Indicates Laboratory Control Sample control criteria did not meet requirements.

Qal - Laboratory data qualifier.

U - The compound was not detected at the indicated concentration.

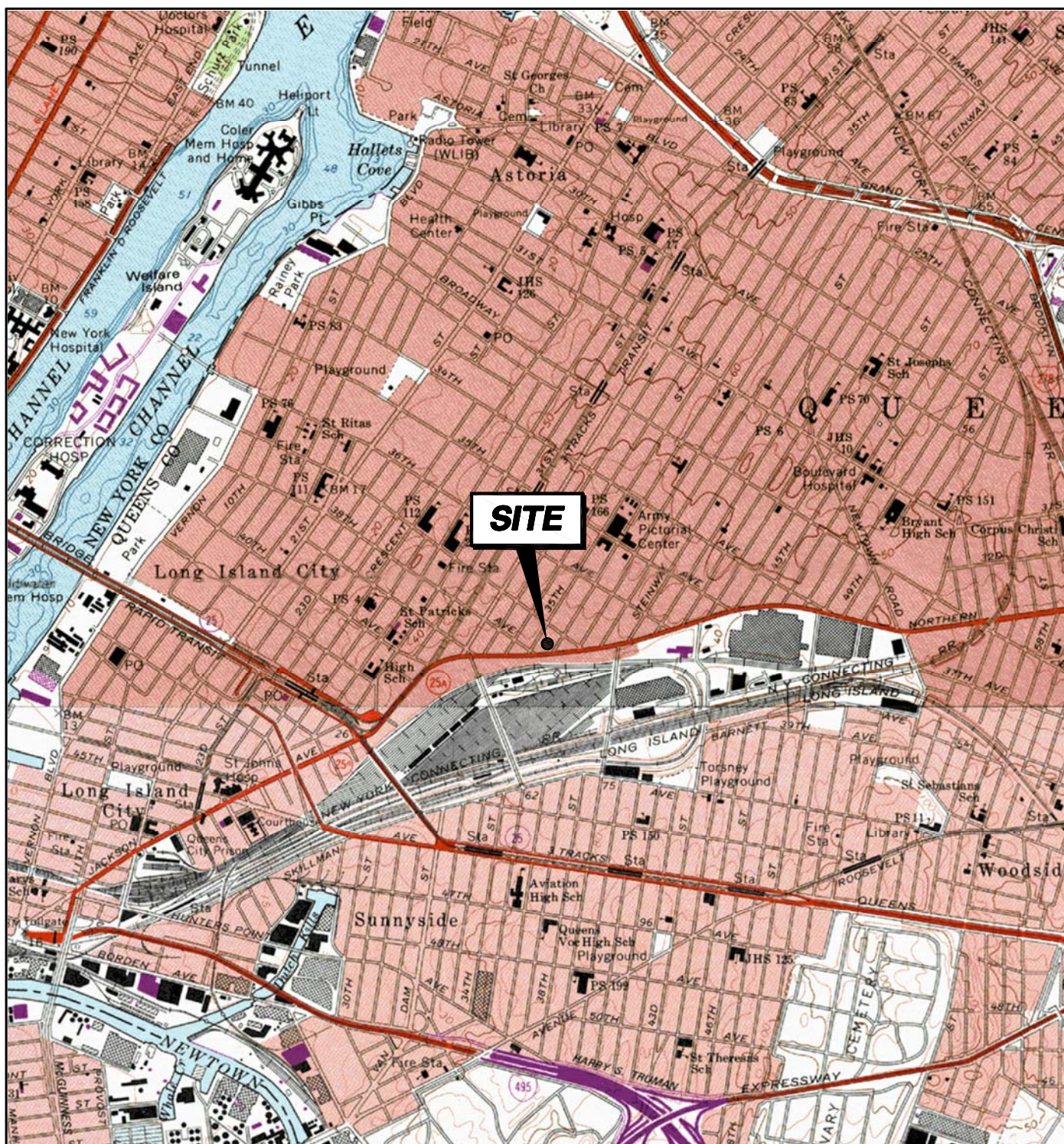
USEPA BASE - United States Environmental Protection Agency established background indoor air concentrations.





## FIGURES





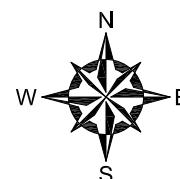
NEW YORK



QUADRANGLE LOCATION

# SOURCE:

USGS TOPOGRAPHIC MAPS: CENTRAL PARK, NY-NJ (1979) & BROOKLYN, NY (1979). CONTOUR INTERVAL 10 FT., ORIGINAL SCALE 1:24,000 (1"=2,000 FT.).



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37-14 36TH STREET  
QUEENS, NEW YORK

PREPARED BY:



GZA GeoEnvironmental  
of New York  
Engineers and Scientists  
104 WEST 29TH STREET, 10TH FLOOR  
NEW YORK, NEW YORK 10001

PREPARED FOR:

36 STREET QDP, LLC

## **SITE MANAGEMENT PLAN SITE LOCATION MAP**

PROJ MGR: BE

REVIEWED BY: DW

CHECKED BY: BE

DESIGNED BY: BE

DRAWN BY: MT

SCALE: 1" = 2000'

DATE: JULY 2015

PROJECT NO. 12.0076158.01

REVISION NO.

FIGURE

1

SHEET NO.

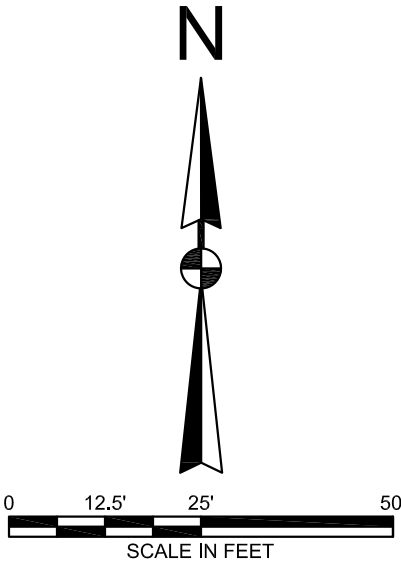


©2015- GZA GeoEnvironmental, Inc. GZA-A-1781005-A-12.0076158.00 Figures\GEO\Total g\SMW\Figure 2.dwg [2] July 31, 2015 - 1:27pm mjpustorres



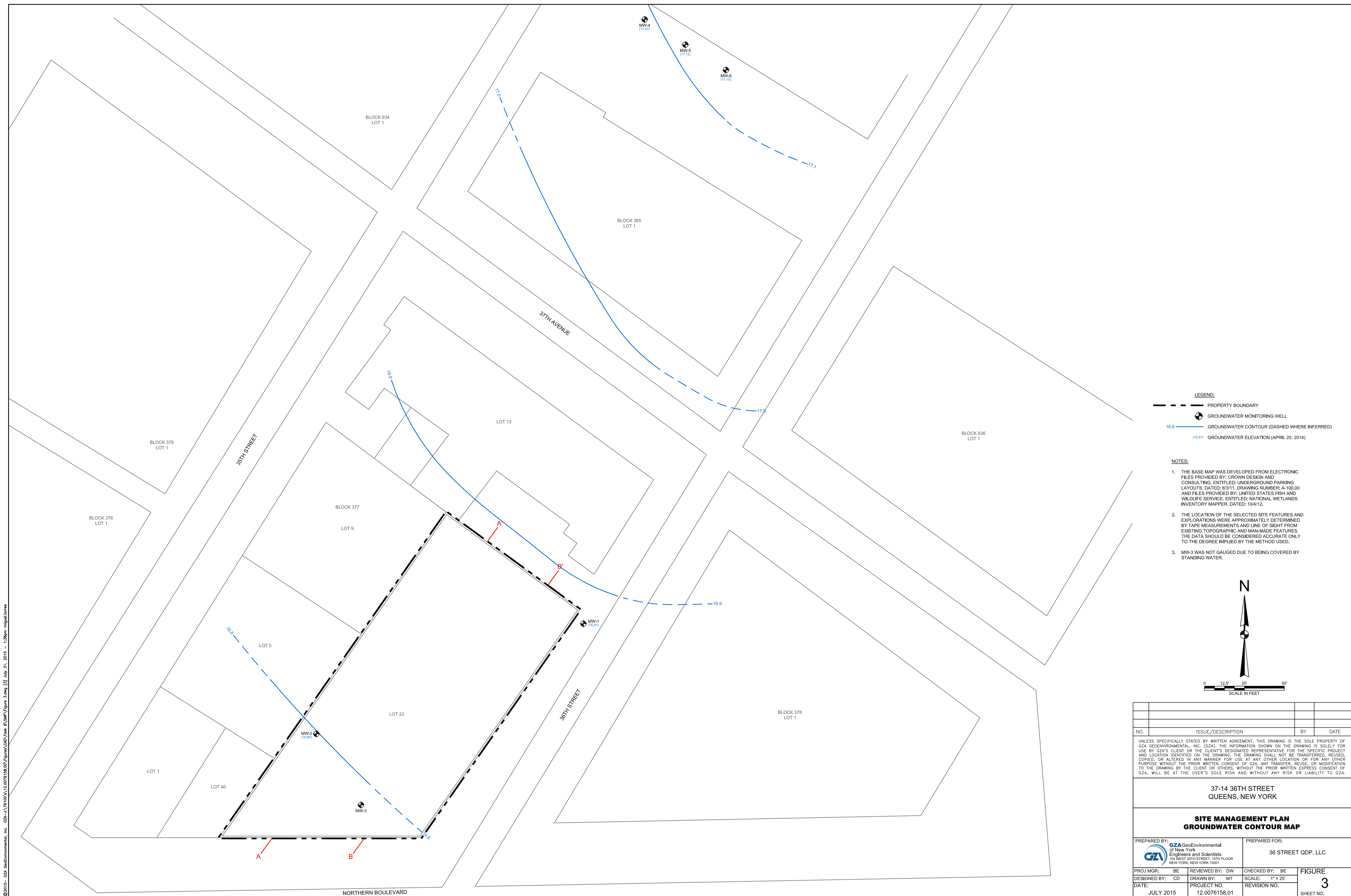
- LEGEND:**
- PROPERTY BOUNDARY
  - ⊙ SOIL GAS POINT
  - ⊕ SOIL BORING
  - ⊕ SOIL BORING WITH SOIL GAS POINT
  - ✕ GEOTECHNICAL BORING
  - TEMPORARY WELL POINT
  - ⊕ GROUNDWATER MONITORING WELL
  - ⊕ SOIL AND TEMPORARY WELL SAMPLE
  - GROUNDWATER HYDROPUNCH SAMPLE
  - ⊗ NO SAMPLING COMPLETED
  - A A' CROSS SECTION

- NOTES:**
1. THE BASE MAP WAS DEVELOPED FROM ELECTRONIC FILES PROVIDED BY: CROWN DESIGN AND CONSULTING, ENTITLED: UNDERGROUND PARKING LAYOUTS, DATED: 8/3/11, DRAWING NUMBER: A-100.00 AND FILES PROVIDED BY: UNITED STATES FISH AND WILDLIFE SERVICE, ENTITLED: NATIONAL WETLANDS INVENTORY MAPPER, DATED: 10/4/12.
  2. THE LOCATION OF THE SELECTED SITE FEATURES AND EXPLORATIONS WERE APPROXIMATELY DETERMINED BY TAPE MEASUREMENTS AND LINE OF SIGHT FROM EXISTING TOPOGRAPHIC AND MAN-MADE FEATURES. THE DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.



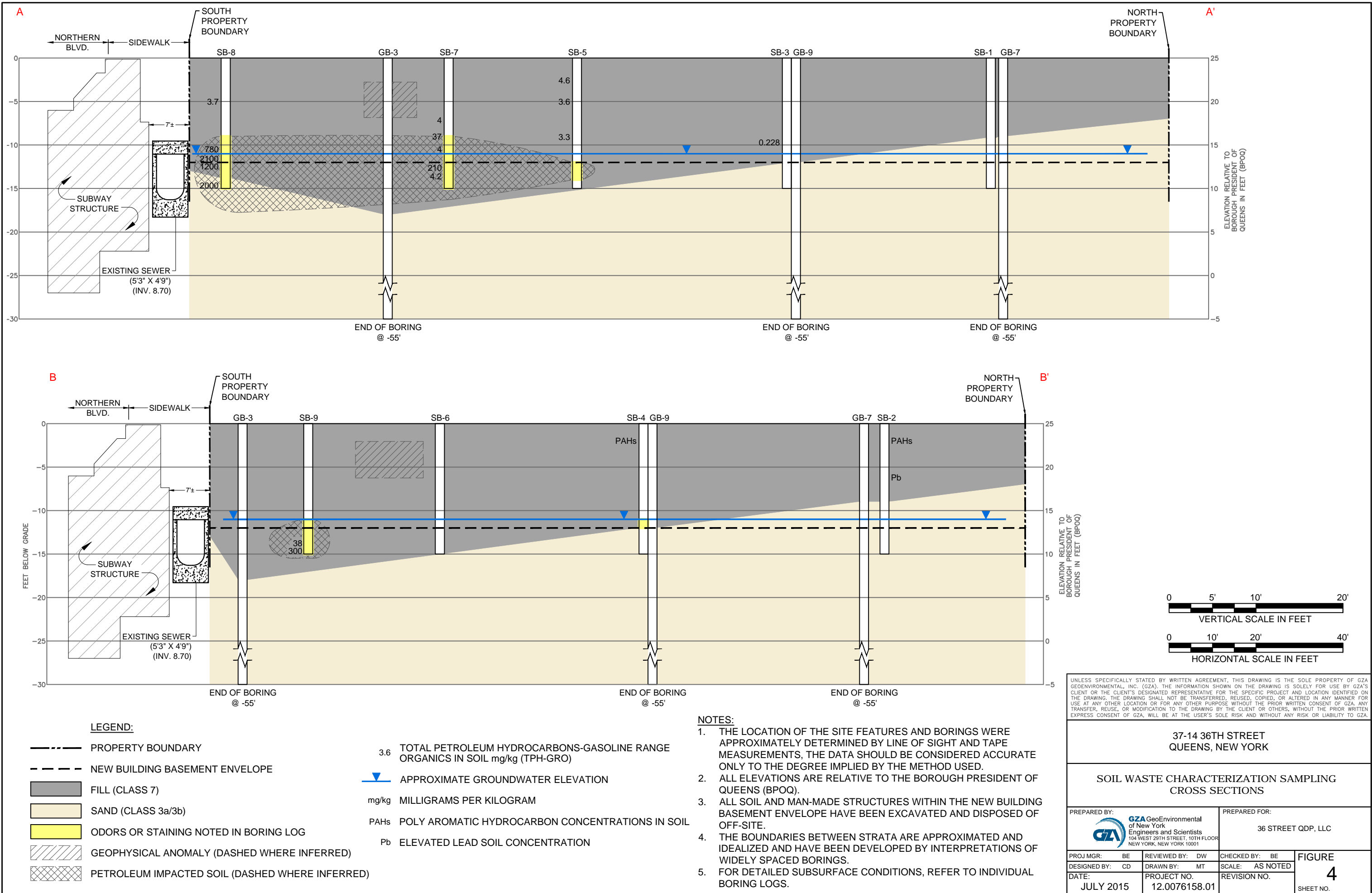
NO.	ISSUE/DESCRIPTION	BY	DATE
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37-14 36TH STREET QUEENS, NEW YORK			
<b>SITE MANAGEMENT PLAN SITE LAYOUT MAP</b>			
PREPARED BY:  <b>GZA</b> GeoEnvironmental of New York Engineers and Scientists 104 WEST 29TH STREET, 10TH FLOOR NEW YORK, NEW YORK 10001		PREPARED FOR:  36 STREET QDP, LLC	
PROJ MGR: BE	DESIGNED BY: CD	REVIEWED BY: MT	CHECKED BY: BE
DATE: JULY 2015	PROJECT NO. 12.0076158.01	SCALE: 1" = 25'	REVISION NO.
			<b>FIGURE</b> <b>2</b> SHEET NO.







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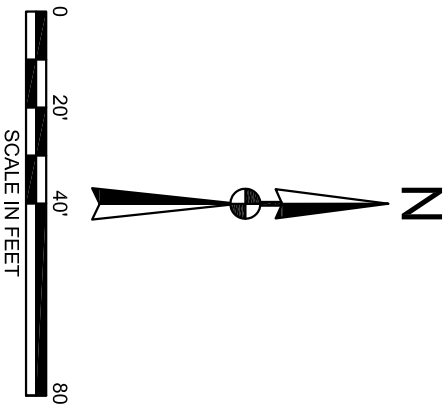
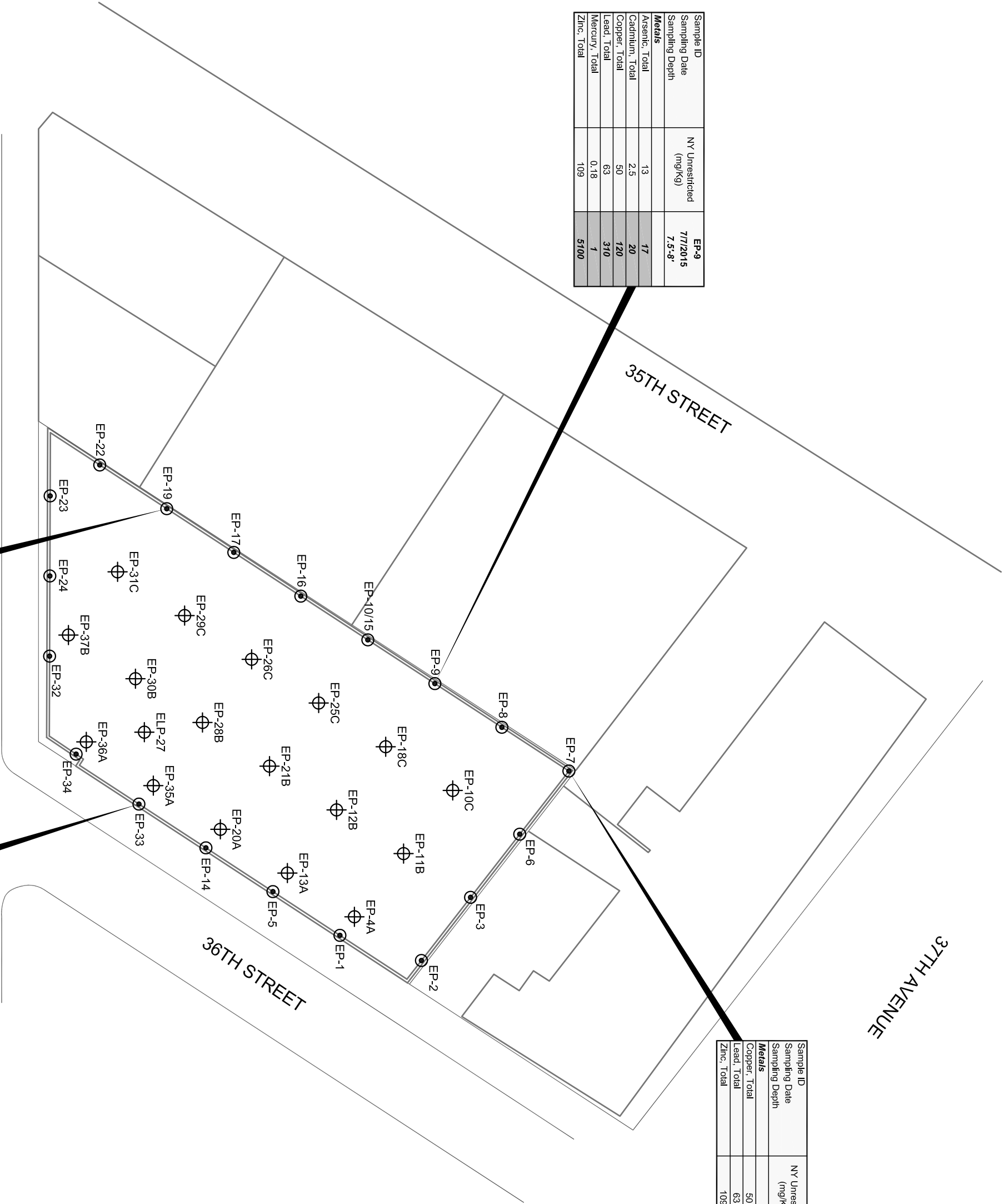
Sample ID	NY Unrestricted	EP-9
Sampling Date	(mg/Kg)	7/7/2015
Sampling Depth		7.5'-8'
Metals		
Arsenic, Total	13	17
Cadmium, Total	2.5	20
Copper, Total	50	120
Lead, Total	63	310
Mercury, Total	0.18	1
Zinc, Total	109	5100

Sample ID	NY Unrestricted	EP-7
Sampling Date	(mg/Kg)	7/7/2015
Sampling Depth		7.5'-8'
Metals		
Copper, Total	50	61
Lead, Total	63	92
Zinc, Total	109	140

LEGEND:

- EXCAVATION BOUNDARY
- ENDPOINT SOIL SAMPLE LOCATION
- BOTTOM SOIL SAMPLE LOCATION

- NOTES:
- THE BASE MAP WAS DEVELOPED FROM ELECTRONIC FILES PROVIDED BY: CROWN DESIGN AND CONSULTING, ENTITLED: UNDERGROUND PARKING LAYOUTS, DATED: 8/3/11, DRAWING NUMBER: A-100.00 AND FILES PROVIDED BY: UNITED STATES FISH AND WILDLIFE SERVICE, ENTITLED: NATIONAL WETLANDS INVENTORY MAPPER, DATED: 10/4/12.




NO.	ISSUE/DESCRIPTION	BY	DATE

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37-14 36TH STREET  
QUEENS, NEW YORK

SITE MANAGEMENT PLAN  
POST REMEDY EXCEEDANCES  
OF UNRESTRICTED SCO's

PREPARED BY:	 <b>GZA GeoEnvironmental</b> New York Environmental Scientists 100 WEST 29TH STREET, 10TH FLOOR NEW YORK, NEW YORK 10001				PREPARED FOR:	36 STREET ODP, LLC	
PROJ MGR:	DW	REVIEWED BY:	LE	CHECKED BY:	DW	FIGURE	
DESIGNED BY:	LE	DRAWN BY:	MT	SCALE:	1" = 40'	5	
DATE:	OCTOBER 2015	PROJECT NO.	12.0076158.01	REVISION NO.		SHEET NO.	



©2015- GZA GeoEnvironmental, Inc. GZA-A-1781005-A 12.0076158 QDP Figure 6.dwg [6] July 31, 2015 - 2:17pm mjpauk@ore.com

Sample ID	(5/15/14)			MW-4
Volatile Organic Compounds		NYSDEC AWQS	Units	Result
cis-1,2-Dichloroethene		5	ug/L	250
Tetrachloroethene		5	ug/L	3100
Trichloroethene		5	ug/L	120
Vinyl Chloride		2	ug/L	8.6

Sample ID	(5/15/14)			MW-5
Volatile Organic Compounds		NYSDEC AWQS	Units	Result
cis-1,2-Dichloroethene		5	ug/L	170
Tetrachloroethene		5	ug/L	810
trans-1,2-Dichloroethene		5	ug/L	130
Trichloroethene		5	ug/L	170
Vinyl Chloride		2	ug/L	3.4

Sample ID	(5/15/14)			MW-6
Volatile Organic Compounds		NYSDEC AWQS	Units	Result
cis-1,2-Dichloroethene		5	ug/L	83.3
Tetrachloroethene		5	ug/L	110
trans-1,2-Dichloroethene		5	ug/L	100
Trichloroethene		5	ug/L	53.9
Vinyl Chloride		2	ug/L	7.6

Sample ID	(9/7/12)			GP-12 (16-20)	GP-12 (23-27)	DUP (16-20)
Volatile Organic Compounds		NYSDEC AWQS	Units	Result	Qal	Result
cis-1,2-Dichloroethene		5	ug/L	110	4	100
Tetrachloroethene		5	ug/L	490	59	460
Trichloroethene		5	ug/L	110	8.7	100

Sample ID	(8/10/12)			GP-11
Volatile Organic Compounds		NYSDEC AWQS	Units	Result
Tetrachloroethene		5	ug/L	12

Sample ID	(9/7/12)			GP-14 (16-20)	GP-14 (23-27)
Volatile Organic Compounds		NYSDEC AWQS	Units	Result	Qal
cis-1,2-Dichloroethene		5	ug/L	2.5	45
Tetrachloroethene		5	ug/L	27	250
Trichloroethene		5	ug/L	4.2	49

Sample ID	(4/7/12)			GP-13 (16-20)	GP-13 (23-27)
Volatile Organic Compounds		NYSDEC AWQS	Units	Result	Qal
cis-1,2-Dichloroethene		5	ug/L	32	290
Tetrachloroethene		5	ug/L	54	510
trans-1,2-Dichloroethene		5	ug/L	4.3	86
Trichloroethene		5	ug/L	15	160

Sample ID	(4/3/12)			W-1
Volatile Organic Compounds		NYSDEC AWQS	Units	Result
cis-1,2-Dichloroethene		5	ug/L	140
Tetrachloroethene		5	ug/L	490
trans-1,2-Dichloroethene		5	ug/L	12
Trichloroethene		5	ug/L	82
Metals				
Iron		300	ug/L	1800
Manganese		300	ug/L	830
Sodium		20000	ug/L	90600
Dissolved Metals				
Manganese		300	ug/L	638
Mercury		0.7	ug/L	21.5
Sodium		20000	ug/L	92000

Sample ID	(4/3/12)			MW-2
Volatile Organic Compounds		NYSDEC AWQS	Units	Result
Tetrachloroethene		5	ug/L	5.1
Metals				
Iron		300	ug/L	1960
Magnesium		35000	ug/L	57700
Manganese		300	ug/L	1410
Sodium		20000	ug/L	40600
Dissolved Metals				
Magnesium		35000	ug/L	56700
Manganese		300	ug/L	1400
Sodium		20000	ug/L	40400

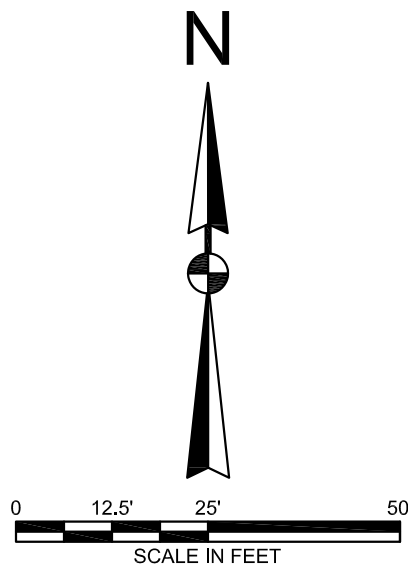
Sample ID	(4/3/12)			MW-3
Volatile Organic Compounds		NYSDEC AWQS	Units	Result
Benzene		1	ug/L	19
Ethyl Benzene		5	ug/L	220
Isopropylbenzene		5	ug/L	140
Toluene		5	ug/L	72
Metals				
Iron		300	ug/L	17800
Manganese		300	ug/L	1950
Sodium		20000	ug/L	70100
Dissolved Metals				
Iron		300	ug/L	672
Manganese		300	ug/L	1920
Sodium		20000	ug/L	72300

Sample ID	(4/3/12)			W-2
Volatile Organic Compounds		NYSDEC AWQS	Units	Result
cis-1,2-Dichloroethene		5	ug/L	13
Tetrachloroethene		5	ug/L	84
Trichloroethene		5	ug/L	27
Metals				
Iron		300	ug/L	395
Manganese		300	ug/L	693
Sodium		20000	ug/L	111000
Dissolved Metals				
Manganese		300	ug/L	643
Mercury		0.7	ug/L	25
Sodium		20000	ug/L	110000

Sample ID	(4/3/12)			MW-1
Volatile Organic Compounds		NYSDEC AWQS	Units	Result
Tetrachloroethene		5	ug/L	18
Metals				
Copper		200	ug/L	231
Chromium		50	ug/L	207
Iron		300	ug/L	158000
Lead		25	ug/L	67.5
Magnesium		35000	ug/L	54900
Manganese		300	ug/L	2840
Nickel		100	ug/L	152
Sodium		20000	ug/L	113000
Dissolved Metals				
Manganese		300	ug/L	582
Sodium		20000	ug/L	24000

- LEGEND:
- PROPERTY BOUNDARY
  - TEMPORARY WELL POINT
  - GROUNDWATER MONITORING WELL
  - SOIL AND TEMPORARY WELL SAMPLE
  - GROUNDWATER HYDROPUNCH SAMPLE
  - INDICATES THE ANALYTE'S CONCENTRATION EXCEEDS THE CALIBRATED RANGE OF THE INSTRUMENT FOR THAT SPECIFIC ANALYSIS
  - NO EXCEEDANCES
  - mg/L MICROGRAMS PER LITER

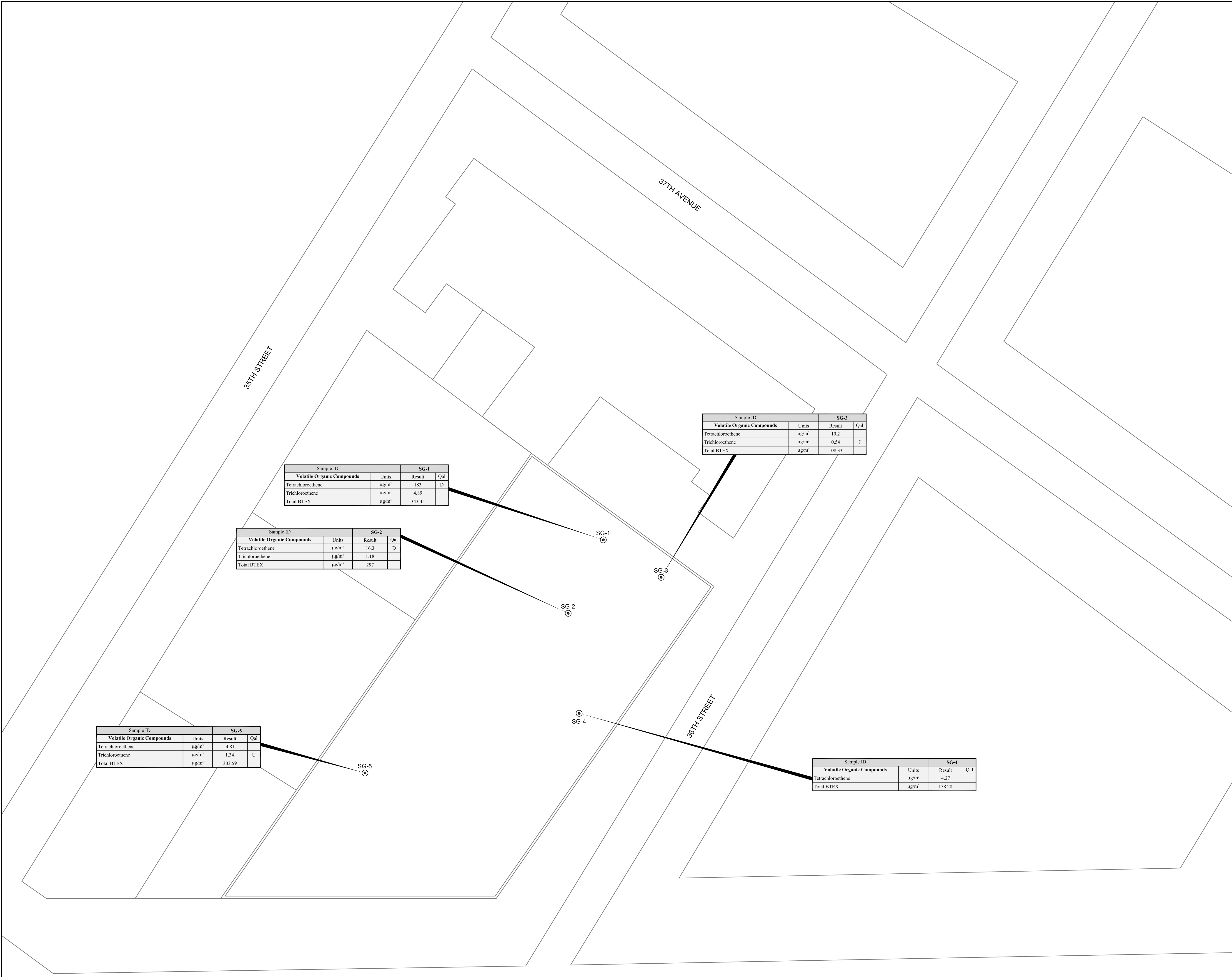
- NOTES:
- THE BASE MAP WAS DEVELOPED FROM ELECTRONIC FILES PROVIDED BY: CROWN DESIGN AND CONSULTING, ENTITLED: UNDERGROUND PARKING LAYOUTS, DATED: 8/3/11, DRAWING NUMBER: A-100.00 AND FILES PROVIDED BY: UNITED STATES FISH AND WILDLIFE SERVICE, ENTITLED: NATIONAL WETLANDS INVENTORY MAPPER, DATED: 10/4/12.
  - THE LOCATION OF THE SELECTED SITE FEATURES AND EXPLORATIONS WERE APPROXIMATELY DETERMINED BY TAPE MEASUREMENTS AND LINE OF SIGHT FROM EXISTING TOPOGRAPHIC AND MAN-MADE FEATURES. THE DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.



NO.	ISSUE/DESCRIPTION	BY	DATE
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37-14 36TH STREET QUEENS, NEW YORK			
SITE MANAGEMENT PLAN GROUNDWATER SAMPLE EXCEEDANCES			
PREPARED BY: GZA GeoEnvironmental of New York Engineers and Scientists 104 WEST 29TH STREET, 10TH FLOOR NEW YORK, NEW YORK 10001	PREPARED FOR: 36 STREET QDP, LLC		
PROJ MGR: BE DESIGNED BY: CD DATE: JULY 2015	REVIEWED BY: DW DRAWN BY: MT PROJECT NO. 12.0076158.01	CHECKED BY: BE SCALE: 1" = 25' REVISION NO.	FIGURE 6 SHEET NO.



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LEGEND:

— PROPERTY BOUNDARY

⊙ SOIL GAS POINT

D THE REPORTED VALUE IS FROM A SECONDARY ANALYSIS WITH A DILUTION FACTOR. THE ORIGINAL ANALYSIS EXCEEDED THE CALIBRATION RANGE

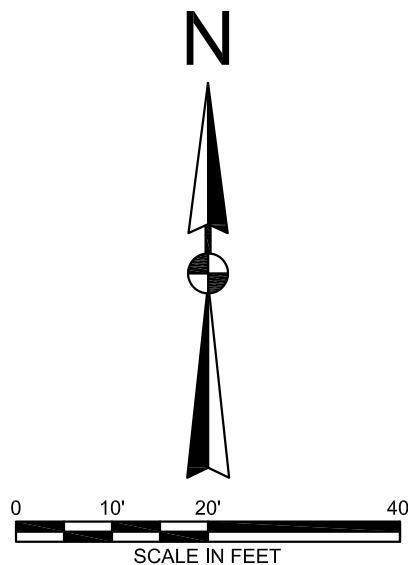
J DATA INDICATES THE PRESENCE OF A COMPOUND THAT MEETS THE IDENTIFICATION CRITERIA. THE RESULT IS LESS THAN THE QUANTITATION LIMIT BUT GREATER THAN MDL. THE CONCENTRATION GIVEN IS AN APPROXIMATE VALUE

mg/m³ MICROGRAMS PER CUBIC METER

NOTES:

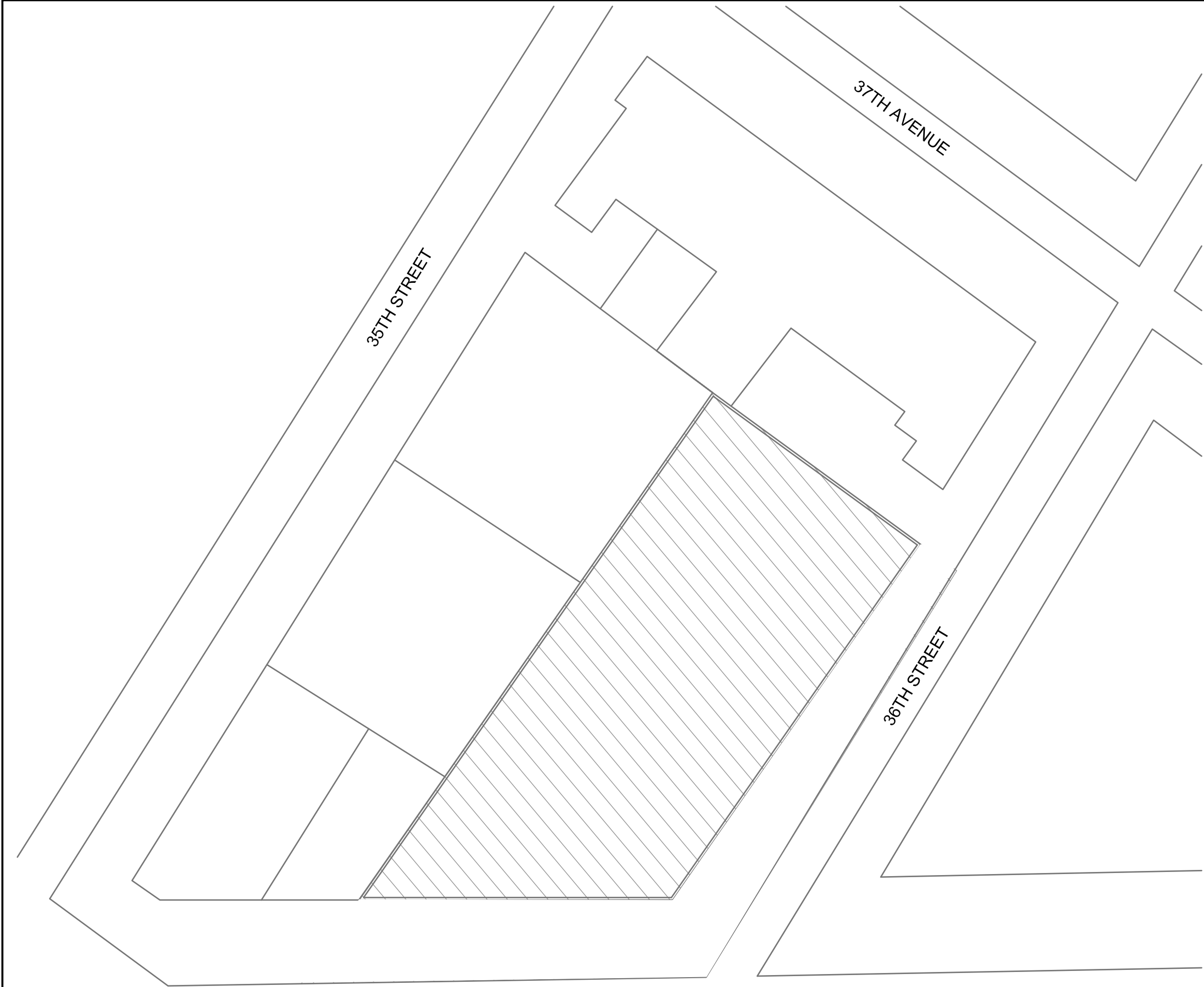
1. THE BASE MAP WAS DEVELOPED FROM ELECTRONIC FILES PROVIDED BY: CROWN DESIGN AND CONSULTING, ENTITLED: UNDERGROUND PARKING LAYOUTS, DATED: 8/3/11, DRAWING NUMBER: A-100.00 AND FILES PROVIDED BY: UNITED STATES FISH AND WILDLIFE SERVICE, ENTITLED: NATIONAL WETLANDS INVENTORY MAPPER, DATED: 10/4/12.

2. THE LOCATION OF THE SELECTED SITE FEATURES AND EXPLORATIONS WERE APPROXIMATELY DETERMINED BY TAPE MEASUREMENTS AND LINE OF SIGHT FROM EXISTING TOPOGRAPHIC AND MAN-MADE FEATURES. THE DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.



NO.	ISSUE/DESCRIPTION	BY	DATE
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37-14 36TH STREET QUEENS, NEW YORK			
SITE MANAGEMENT PLAN SOIL VAPOR SAMPLE DETECTIONS			
PREPARED BY: GZA GeoEnvironmental of New York Engineers and Scientists 104 WEST 29TH STREET, 10TH FLOOR NEW YORK, NEW YORK 10001		PREPARED FOR: 36 STREET QDP, LLC	
PROJ MGR:	BE	REVIEWED BY:	DW
DESIGNED BY:	CD	DRAWN BY:	MT
DATE:	JULY 2015	PROJECT NO.	12.0076158.01
		CHECKED BY:	BE
		SCALE:	1" = 20'
		REVISION NO.	
		FIGURE	7
		SHEET NO.	





LEGEND:

- PROPERTY BOUNDARY
- ENGINEERING AND INSTITUTIONAL CONTROL BOUNDARY

NOTES:

- THE BASE MAP WAS DEVELOPED FROM ELECTRONIC FILES PROVIDED BY: CROWN DESIGN AND CONSULTING, ENTITLED: UNDERGROUND PARKING LAYOUTS, DATED: 8/3/11, DRAWING NUMBER: A-100.00 AND FILES PROVIDED BY: UNITED STATES FISH AND WILDLIFE SERVICE, ENTITLED: NATIONAL WETLANDS INVENTORY MAPPER, DATED: 10/4/12.

N



NO.	ISSUE/DESCRIPTION	BY	DATE
UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEORENIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.			
37-14 36TH STREET QUEENS, NEW YORK			
SITE MANAGEMENT PLAN INSTITUTIONAL AND ENGINEERING CONTROL BOUNDARIES			
PREPARED BY:  <b>GZA</b> GeoEnvironmental of New York Engineers and Scientists 104 WEST 29TH STREET, 10TH FLOOR NEW YORK, NEW YORK 10001		PREPARED FOR:  36 STREET QDP, LLC	
PROJ MGR: DW	REVIEWED BY: BE	CHECKED BY: DW	FIGURE <b>8</b> SHEET NO.
DESIGNED BY: BE	DRAWN BY: MT	SCALE: 1" = 40'	
DATE: JULY 2015	PROJECT NO. 12.0076158.01	REVISION NO.	





## **Appendix A – Environmental Easement**



## OFFICE OF GENERAL COUNSEL

New York State Department of Environmental Conservation  
625 Broadway, 14th Floor, Albany, New York 12233-1500  
Phone: (518) 402-9185 • Fax: (518) 402-9018  
[www.dec.ny.gov](http://www.dec.ny.gov)

July 20, 2015

### SENT VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Ms. Linda R. Shaw, Esq.  
Knauf Shaw, LLP  
1400 Crossroads Building  
2 State St.  
Rochester, NY 14614

**RE: Environmental Easement Package**  
**Site Name: Silver Star Motors**  
**Site No.: C241156**

Dear Ms. Shaw:

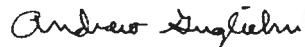
Enclosed, please find the fully executed Environmental Easement, TP 584 and NYC-RPT form referencing the Silver Star Motors Site located at 37-14 36<sup>th</sup> St., New York, NY.

Once the Environmental Easement is recorded, the local municipality will need to be notified via Certified Mail, Return Receipt Requested.

Please return a copy of the recorded easement marked by the County Clerk's Office with the date and location of recording, and a certified copy of the municipal notice. The information from the recorded easement and notices are necessary to process the Certificate of Completion.

If you have any further questions or concerns relating to this matter, please contact our office at 518-402-9510.

Sincerely,



Andrew Guglielmi  
Associate Attorney  
Bureau of Remediation



Department of  
Environmental  
Conservation



**ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36  
OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW**

**THIS INDENTURE** made this 14<sup>th</sup> day of July, 2015, between Owner(s) Jans Realty, L.P., having an office at 49 Rolling Hill Lane, Old Westbury, New York 11568, County of Nassau, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

**WHEREAS**, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

**WHEREAS**, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

**WHEREAS**, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

**WHEREAS**, Grantor, is the owner of real property located at the address of 37-14 36th Street in the City of New York, County of Queens and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 377 Lot 23, being the same as that property conveyed to Grantor by deed dated July 1, 2002 and recorded in the City Register of the City of New York in Liber and Page 6524/1751. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.4698 +/- acres, and is hereinafter more fully described in the Land Title Survey dated May 13, 2015 prepared by Richard Tom, NYSPLS of Perfect Point Land Surveying, RT, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

**WHEREAS**, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is



extinguished pursuant to ECL Article 71, Title 36; and

**NOW THEREFORE**, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C241156-03-14, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. **Purposes.** Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. **Institutional and Engineering Controls.** The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

**Residential as described in 6 NYCRR Part 375-1.8(g)(2)(i), Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)**

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;



(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for raising livestock or producing animal products for human consumption, and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, New York 12233  
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

**This property is subject to an Environmental Easement held  
by the New York State Department of Environmental Conservation**



**pursuant to Title 36 of Article 71 of the Environmental Conservation Law.**

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

- (i) are in-place;
- (ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;



5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:      Site Number: C241156  
Office of General Counsel  
NYSDEC  
625 Broadway  
Albany New York 12233-5500

With a copy to:      Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail



and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

**Remainder of Page Intentionally Left Blank**

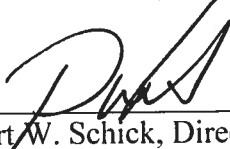






**THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK**, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

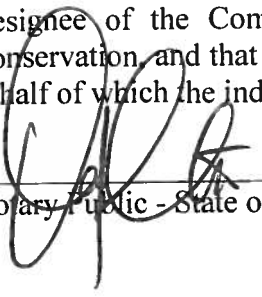
By:

  
Robert W. Schick, Director  
Division of Environmental Remediation

**Grantee's Acknowledgment**

STATE OF NEW YORK     )  
  ) ss:  
COUNTY OF ALBANY     )

On the 14<sup>th</sup> day of July, in the year 2015, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

  
Notary Public - State of New York

**David J. Chiusano**  
**Notary Public, State of New York**  
**No. 01CH5032146**  
**Qualified in Schenectady County**  
**Commission Expires August 22, 2018**



**SCHEDULE "A" PROPERTY DESCRIPTION**

**ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE FIRST WARD OF THE BOROUGH AND COUNTY OF QUEENS, CITY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:**

**BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE NORTHERLY SIDE OF NORTHERN BOULEVARD, FORMERLY JACKSON AVENUE, WITH THE WESTERLY SIDE OF 36TH STREET, FORMERLY 7<sup>TH</sup> AVENUE:**

**RUNNING THENCE NORTHERLY ALONG THE WESTERLY SIDE OF 36TH STREET 165.98 FEET;**

**THENCE WESTERLY ALONG A LINE FORMING INTERIOR ANGLE OF 94°45'50" WITH THE WESTERLY SIDE OF 36TH STREET, 101.57;**

**THENCE SOUTHERLY ALONG LINE FORMING AN INTERIOR ANGLE OF 85°14'10" WITH THE PRECEDING COURSE AND PART OF THE DISTANCE THROUGH A PARTY WALL. 74.50 FEET;**

**THENCE EASTERLY AT RIGHT ANGLES TO THE PRECEDING COURSE, 0.50 FEET;**

**THENCE SOUTHERLY ALONG A LINE FORMING AN EXTERIOR ANGLE OF 122°55'43" WITH THE NORTHERLY SIDE OF NORTHERN BOULEVARD AND AT RIGHT ANGLES TO THE PRECEDING COURSE, 165.14 FEET TO THE NORTHERLY SIDE OF NORTHERN BOULEVARD;**

**THENCE EASTERLY ALONG THE NORTHERLY SIDE OF NORTHERN BOULEVARD, 120 FEET TO THE CORNER AT THE POINT OR PLACE OF BEGINNING,**

**Containing 0.4698 acres.**



# REAL PROPERTY TRANSFER TAX RETURN

(Pursuant to Title 11, Chapter 21, NYC Administrative Code)

▲ DO NOT WRITE IN THIS SPACE ▲  
FOR OFFICE USE ONLY

## GRANTOR

● Name **36 STREET QDP LLC**

● Grantor is a(n): ☐ individual ☐ partnership ☐ corporation  
(check one) ☒ single member LLC ☐ multiple member LLC ☐ other

● Permanent mailing address after transfer (number and street) **49 ROLLING HILL LANE**

● City and State **OLD WESTBURY, NY**

● Single member's name if grantor is a single member LLC  
**MICHAEL COHEN**

Telephone Number **718-361-2332**

Zip Code **11568**

SOCIAL SECURITY NUMBER

OR

EMPLOYER IDENTIFICATION NUMBER

**4 6 4 2 7 5 7 9 5**

SINGLE MEMBER EIN OR SSN

**125-36-2181**

## GRANTEE

● Name **PEOPLE OF STATE OF NY THRU COMMISSIONER OF NYSDEC**

● Grantee is a(n): ☐ individual ☐ partnership ☐ corporation  
(check one) ☐ single member LLC ☐ multiple member LLC ☒ other

● Permanent mailing address after transfer (number and street) **625 BROADWAY, 14TH FLOOR**

● City and State **ALBANY, NY**

● Single member's name if grantee is a single member LLC

Telephone Number **518-402-9518**

Zip Code **12233-1500**

SOCIAL SECURITY NUMBER

OR

EMPLOYER IDENTIFICATION NUMBER

**1 4 6 0 1 3 2 0 0**

SINGLE MEMBER EIN OR SSN

## PROPERTY LOCATION

LIST EACH LOT SEPARATELY. ATTACH A RIDER IF ADDITIONAL SPACE IS REQUIRED

Address (number and street)	Apt. No.	Borough	Block	Lot	# of Floors	Square Feet	Assessed Value of Property
37-14 36TH STREET		QUEENS	377	23	1	6,500	334,800.00

● DATE OF TRANSFER TO GRANTEE: **6/4/2015** ● PERCENTAGE OF INTEREST TRANSFERRED: **100** %

## CONDITION OF TRANSFER. See Instructions

● Check (✓) all of the conditions that apply and fill out the appropriate schedules on pages 5-11 of this return. Additionally, Schedules 1 and 2 must be completed for all transfers.

- |  |  |
|--|--|
| <p>a. <input type="checkbox"/> .....Arms length transfer</p> <p>b. <input type="checkbox"/> .....Transfer in exercise of option to purchase</p> <p>c. <input type="checkbox"/> .....Transfer from cooperative sponsor to cooperative corporation</p> <p>d. <input type="checkbox"/> .....Transfer by referee or receiver (complete Schedule A, page 5)</p> <p>e. <input type="checkbox"/> .....Transfer pursuant to marital settlement agreement or divorce decree (complete Schedule I, page 9)</p> <p>f. <input type="checkbox"/> .....Deed in lieu of foreclosure (complete Schedule C, page 6)</p> <p>g. <input type="checkbox"/> .....Transfer pursuant to liquidation of an entity (complete Schedule D, page 6)</p> <p>h. <input type="checkbox"/> .....Transfer from principal to agent, dummy, strawman or conduit or vice versa (complete Schedule E, page 7)</p> <p>i. <input type="checkbox"/> .....Transfer pursuant to trust agreement or will (attach a copy of trust agreement or will)</p> <p>j. <input type="checkbox"/> .....Gift transfer not subject to indebtedness</p> <p>k. <input type="checkbox"/> .....Gift transfer subject to indebtedness</p> <p>l. <input type="checkbox"/> .....Transfer to a business entity in exchange for an interest in the business entity (complete Schedule F, page 7)</p> <p>m. <input type="checkbox"/> .....Transfer to a governmental body</p> | <p>n. <input type="checkbox"/> .....Correction deed</p> <p>o. <input type="checkbox"/> .....Transfer by or to a tax exempt organization (complete Schedule G, page 8)</p> <p>p. <input type="checkbox"/> .....Transfer of property partly within and partly without NYC</p> <p>q. <input type="checkbox"/> .....Transfer of successful bid pursuant to foreclosure</p> <p>r. <input type="checkbox"/> .....Transfer by borrower solely as security for a debt or a transfer by lender solely to return such security</p> <p>s. <input type="checkbox"/> .....Transfer wholly or partly exempt as a mere change of identity or form of ownership. Complete Schedule M, page 9)</p> <p>t. <input type="checkbox"/> .....Transfer to a REIT or to a corporation or partnership controlled by a REIT. (Complete Schedule R, pages 10 and 11)</p> <p>u. <input type="checkbox"/> .....Other transfer in connection with financing (describe): _____</p> <p>v. <input type="checkbox"/> .....A grant or assignment of a leasehold interest in a tax-free NY area</p> <p>w. <input checked="" type="checkbox"/> .....Other (describe): <b>ENVIRONMENTAL EASEMENT TO STATE OF NY THRU NYSDEC</b></p> |
|--|--|



● TYPE OF PROPERTY (✓)	● TYPE OF INTEREST (✓)																				
a. <input type="checkbox"/> ..... 1-3 family house b. <input type="checkbox"/> ..... Individual residential condominium unit c. <input type="checkbox"/> ..... Individual cooperative apartment d. <input type="checkbox"/> ..... Commercial condominium unit e. <input type="checkbox"/> ..... Commercial cooperative f. <input type="checkbox"/> ..... Apartment building g. <input type="checkbox"/> ..... Office building h. <input type="checkbox"/> ..... Industrial building i. <input type="checkbox"/> ..... Utility j. <input checked="" type="checkbox"/> ..... OTHER. (describe): <u>COMMERCIAL REAL ESTATE</u>	Check box at LEFT if you intend to record a document related to this transfer. Check box at RIGHT if you do not intend to record a document related to this transfer. <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: left;">REC.</th> <th style="width: 50%; text-align: left;">NON REC.</th> </tr> </thead> <tbody> <tr> <td>a. <input type="checkbox"/> ..... Fee .....</td> <td><input type="checkbox"/></td> </tr> <tr> <td>b. <input type="checkbox"/> ..... Leasehold Grant .....</td> <td><input type="checkbox"/></td> </tr> <tr> <td>c. <input type="checkbox"/> ..... Leasehold Assignment or Surrender .....</td> <td><input type="checkbox"/></td> </tr> <tr> <td>d. <input checked="" type="checkbox"/> ..... Easement .....</td> <td><input type="checkbox"/></td> </tr> <tr> <td>e. <input type="checkbox"/> ..... Subterranean Rights .....</td> <td><input type="checkbox"/></td> </tr> <tr> <td>f. <input type="checkbox"/> ..... Development Rights .....</td> <td><input type="checkbox"/></td> </tr> <tr> <td>g. <input type="checkbox"/> ..... Stock .....</td> <td><input type="checkbox"/></td> </tr> <tr> <td>h. <input type="checkbox"/> ..... Partnership Interest .....</td> <td><input type="checkbox"/></td> </tr> <tr> <td>i. <input type="checkbox"/> ..... OTHER. (describe): .....</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	REC.	NON REC.	a. <input type="checkbox"/> ..... Fee .....	<input type="checkbox"/>	b. <input type="checkbox"/> ..... Leasehold Grant .....	<input type="checkbox"/>	c. <input type="checkbox"/> ..... Leasehold Assignment or Surrender .....	<input type="checkbox"/>	d. <input checked="" type="checkbox"/> ..... Easement .....	<input type="checkbox"/>	e. <input type="checkbox"/> ..... Subterranean Rights .....	<input type="checkbox"/>	f. <input type="checkbox"/> ..... Development Rights .....	<input type="checkbox"/>	g. <input type="checkbox"/> ..... Stock .....	<input type="checkbox"/>	h. <input type="checkbox"/> ..... Partnership Interest .....	<input type="checkbox"/>	i. <input type="checkbox"/> ..... OTHER. (describe): .....	<input type="checkbox"/>
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h. <input type="checkbox"/> ..... Partnership Interest .....	<input type="checkbox"/>																				
i. <input type="checkbox"/> ..... OTHER. (describe): .....	<input type="checkbox"/>																				

**SCHEDULE 1 - DETAILS OF CONSIDERATION**

COMPLETE THIS SCHEDULE FOR ALL TRANSFERS AFTER COMPLETING THE APPROPRIATE SCHEDULES ON PAGES 5 THROUGH 11.  
 ENTER "ZERO" ON LINE 11 IF THE TRANSFER REPORTED WAS WITHOUT CONSIDERATION.

1. Cash.....● 1.	0	00
2. Purchase money mortgage.....● 2.	0	00
3. Unpaid principal of pre-existing mortgage(s).....● 3.	0	00
4. Accrued interest on pre-existing mortgage(s).....● 4.	0	00
5. Accrued real estate taxes.....● 5.	0	00
6. Amounts of other liens on property.....● 6.	0	00
7. Value of shares of stock or of partnership interest received.....● 7.	0	00
8. Value of real or personal property received in exchange.....● 8.	0	00
9. Amount of Real Property Transfer Tax and/or other taxes or expenses of the grantor which are paid by the grantee.....● 9.	0	00
10. Other (describe):.....● 10.	0	00
11. <b>TOTAL CONSIDERATION</b> (add lines 1 through 10 - must equal amount entered on line 1 of Schedule 2) (see instructions).....● 11.	\$	0 00

**See instructions for special rules relating to transfers of cooperative units, liquidations, marital settlements and transfers of property to a business entity in return for an interest in the entity.**

**SCHEDULE 2 - COMPUTATION OF TAX**

A. Payment	Pay amount shown on line 12 - See Instructions	Payment Enclosed
1. Total Consideration (from line 11, above).....● 1.		0 00
2. Excludable liens (see instructions).....● 2.		0 00
3. Consideration (Line 1 less line 2).....● 3.		0 00
4. Tax Rate (see instructions).....● 4.		0 %
5. Percentage change in beneficial ownership (see instructions).....● 5.		100 %
6. Taxable consideration (multiply line 3 by line 5).....● 6.		0 00
7. Tax (multiply line 6 by line 4).....● 7.		0 00
8. Credit (see instructions).....● 8.		0 00
9. Tax due (line 7 less line 8) (if the result is negative, enter zero).....● 9.		0 00
10. Interest (see instructions).....● 10.		0 00
11. Penalty (see instructions).....● 11.		0 00
12. <b>Total Tax Due</b> (add lines 9, 10 and 11).....● 12.	\$	0 00



**SCHEDULE 3 - TRANSFERS INVOLVING MULTIPLE GRANTORS AND/OR GRANTEES****NOTE** If additional space is needed, attach copies of this schedule or an addendum listing all of the information required below.**GRANTOR(S)**

● Name <b>JANS REALTY L.P.</b>		SOCIAL SECURITY NUMBER <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto;"></div>	
● Grantor is a(n): <input type="checkbox"/> individual <input checked="" type="checkbox"/> partnership <input type="checkbox"/> corporation (check one) <input type="checkbox"/> single member LLC <input type="checkbox"/> multiple member LLC <input type="checkbox"/> other		Telephone Number <b>718-361-2332</b>	
● Permanent mailing address <u>after</u> transfer (number and street) <b>49 ROLLING HILL LANE</b>			
● City and State <b>OLD WESTBURY, NY</b>		Zip Code <b>11568</b>	
● Single member's name if grantor is a single member LLC			

● Name		SOCIAL SECURITY NUMBER <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto;"></div>	
● Grantor is a(n): <input type="checkbox"/> individual <input type="checkbox"/> partnership <input type="checkbox"/> corporation (check one) <input type="checkbox"/> single member LLC <input type="checkbox"/> multiple member LLC <input type="checkbox"/> other		Telephone Number	
● Permanent mailing address <u>after</u> transfer (number and street)			
● City and State		Zip Code	
● Single member's name if grantor is a single member LLC			

**GRANTEE(S)**

● Name		SOCIAL SECURITY NUMBER <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto;"></div>	
● Grantee is a(n): <input type="checkbox"/> individual <input type="checkbox"/> partnership <input type="checkbox"/> corporation (check one) <input type="checkbox"/> single member LLC <input type="checkbox"/> multiple member LLC <input type="checkbox"/> other		Telephone Number	
● Permanent mailing address <u>after</u> transfer (number and street)			
● City and State		Zip Code	
● Single member's name if grantee is a single member LLC			

● Name		SOCIAL SECURITY NUMBER <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto;"></div>	
● Grantee is a(n): <input type="checkbox"/> individual <input type="checkbox"/> partnership <input type="checkbox"/> corporation (check one) <input type="checkbox"/> single member LLC <input type="checkbox"/> multiple member LLC <input type="checkbox"/> other		Telephone Number	
● Permanent mailing address <u>after</u> transfer (number and street)			
● City and State		Zip Code	
● Single member's name if grantee is a single member LLC			



**GRANTOR'S ATTORNEY ▼**

Name of Attorney		Telephone Number (     )	
Address (number and street)		City and State	Zip Code
EMPLOYER IDENTIFICATION NUMBER	<input type="text"/> - <input type="text"/>	OR	SOCIAL SECURITY NUMBER
			<input type="text"/> - <input type="text"/> - <input type="text"/>

**GRANTEE'S ATTORNEY ▼**


Name of Attorney		Telephone Number (     )	
Address (number and street)		City and State	Zip Code
EMPLOYER IDENTIFICATION NUMBER	<input type="text"/> - <input type="text"/>	OR	SOCIAL SECURITY NUMBER
			<input type="text"/> - <input type="text"/> - <input type="text"/>

**CERTIFICATION ▼**

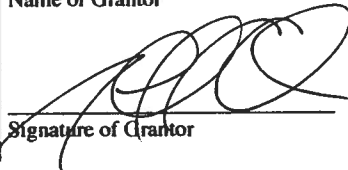
I swear or affirm that this return, including any accompanying schedules, affidavits and attachments, has been examined by me and is, to the best of my knowledge, a true and complete return made in good faith, pursuant to Title 11, Chapter 21 of the Administrative Code and the regulations issued thereunder.

**GRANTOR**

Sworn to and subscribed to

before me on this 3<sup>rd</sup> dayof June, 2015.


Signature of Notary

46-4275795EMPLOYER IDENTIFICATION NUMBER OR  
SOCIAL SECURITY NUMBER36 STREET QDP LLCMichael Cohen  
Name of Grantor


Signature of Grantor

**GRANTEE**

Sworn to and subscribed to

before me on this 10<sup>th</sup> dayof JULY, 2015.


Signature of Notary

14-6013200EMPLOYER IDENTIFICATION NUMBER OR  
SOCIAL SECURITY NUMBERPEOPLE OF STATE OF NY  
THRU COMMISSIONEROF NYSDEC  
Name of GranteeAndrew Guglielmi


Signature of Grantee



**CARMELA T. MORELLO**  
Notary Public, State of New York  
No. 4969878  
Qualified in Westchester County  
Commission Expires July 30, 2018



**PATRICK EUGENE FOSTER**  
NOTARY PUBLIC, STATE OF NEW YORK  
QUALIFIED IN KINGS COUNTY  
NO. 02FO6278032  
COMMISSION EXPIRES 03/18/2017



**CERTIFICATION**

I swear or affirm that this return, including any accompanying schedules, affidavits and attachments, has been examined by me and is, to the best of my knowledge, a true and complete return made in good faith, pursuant to Title 11, Chapter 21 of the Administrative Code and the regulations issued thereunder.

**GRANTORS**

36-4499178

JANS REALTY L.P.

EIN/SSN

Name of Grantor

Signature of Grantor

EIN/SSN

Name of Grantor

Signature of Grantor

EIN/SSN

Name of Grantor

Signature of Grantor

EIN/SSN

Name of Grantor

Signature of Grantor

EIN/SSN

Name of Grantor

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Name of Grantee

Signature of Grantee

EIN/SSN

Name of Grantee

Signature of Grantee



**Supporting Document to NYC-RPT**

**Partnership List**

**Grantor:** JANS REALTY L.P., EIN 36-4499178

**General Partner of Grantor:** JNS REALTY CORP., EIN 03-0473521





**Combined Real Estate  
Transfer Tax Return,  
Credit Line Mortgage Certificate, and  
Certification of Exemption from the  
Payment of Estimated Personal Income Tax**

See Form TP-584-I, Instructions for Form TP-584, before completing this form. Print or type.

**Schedule A — Information relating to conveyance**

<b>Grantor/Transferor</b> <input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Estate/Trust <input checked="" type="checkbox"/> Single member LLC <input type="checkbox"/> Other	Name (if individual, last, first, middle initial) ( <input checked="" type="checkbox"/> check if more than one grantor )		Social security number
	36 STREET QDP LLC		
	Mailing address 49 ROLLING HILL LANE		Social security number
	City	State	ZIP code
	OLD WESTBURY	NY	11568
	Single member's name if grantor is a single member LLC (see instructions)		Federal EIN
	COHEN, MICHAEL		46   4275795
	Single member's name if grantor is a single member LLC (see instructions)		Single member EIN or SSN
			125-36-2181
<b>Grantee/Transferee</b> <input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Estate/Trust <input type="checkbox"/> Single member LLC <input checked="" type="checkbox"/> Other	Name (if individual, last, first, middle initial) ( <input type="checkbox"/> check if more than one grantee )		Social security number
	PEOPLE OF STATE OF NY THRU COMMISSIONER OF NYSDEC		
	Mailing address 625 BROADWAY, 14TH FLOOR		Social security number
	City	State	ZIP code
	ALBANY	NY	12233-1500
	Single member's name if grantee is a single member LLC (see instructions)		Federal EIN
			14   6013200
	Single member's name if grantee is a single member LLC (see instructions)		Single member EIN or SSN

Location and description of property conveyed

Tax map designation - Section, block & lot (include dots and dashes)	SWIS code (six digits)	Street address	City, town, or village	County
4 - 377 - 23	650000	37-14 36TH STREET	NEW YORK	QUEENS

Type of property conveyed (check applicable box)

1 <input type="checkbox"/> One- to three-family house	5 <input checked="" type="checkbox"/> Commercial/Industrial	Date of conveyance <table border="1"> <tr> <td>month</td> <td>day</td> <td>year</td> </tr> <tr> <td></td> <td></td> <td>2015</td> </tr> </table>	month	day	year			2015	Percentage of real property conveyed which is residential real property <u>100.00</u> % (see instructions)
month	day		year						
			2015						
2 <input type="checkbox"/> Residential cooperative	6 <input type="checkbox"/> Apartment building								
3 <input type="checkbox"/> Residential condominium	7 <input type="checkbox"/> Office building								
4 <input type="checkbox"/> Vacant land	8 <input type="checkbox"/> Other _____								

Condition of conveyance (check all that apply) f.

a. <input type="checkbox"/> Conveyance of fee interest	b. <input type="checkbox"/> Acquisition of a controlling interest (state percentage acquired _____%)	c. <input type="checkbox"/> Transfer of a controlling interest (state percentage transferred _____%)	d. <input type="checkbox"/> Conveyance to cooperative housing corporation	e. <input type="checkbox"/> Conveyance pursuant to or in lieu of foreclosure or enforcement of security interest (attach Form TP-584.1, Schedule E)	f. <input type="checkbox"/> Conveyance which consists of a mere change of identity or form of ownership or organization (attach Form TP-584.1, Schedule F)	g. <input type="checkbox"/> Conveyance for which credit for tax previously paid will be claimed (attach Form TP-584.1, Schedule G)	h. <input type="checkbox"/> Conveyance of cooperative apartment(s)	i. <input type="checkbox"/> Syndication	j. <input type="checkbox"/> Conveyance of air rights or development rights	k. <input type="checkbox"/> Contract assignment	l. <input type="checkbox"/> Option assignment or surrender	m. <input type="checkbox"/> Leasehold assignment or surrender	n. <input type="checkbox"/> Leasehold grant	o. <input checked="" type="checkbox"/> Conveyance of an easement	p. <input checked="" type="checkbox"/> Conveyance for which exemption from transfer tax claimed (complete Schedule B, Part III)	q. <input type="checkbox"/> Conveyance of property partly within and partly outside the state	r. <input type="checkbox"/> Conveyance pursuant to divorce or separation	s. <input type="checkbox"/> Other (describe) _____
--	--	--	---	---	--	--	--	---	--	---	--	---	---	--	---	---	--	--

For recording officer's use	Amount received	Date received	Transaction number
	Schedule B., Part I \$ Schedule B., Part II \$		

201506020048730105



**Schedule B — Real estate transfer tax return (Tax Law, Article 31)****Part I — Computation of tax due**

- 1 Enter amount of consideration for the conveyance (if you are claiming a total exemption from tax, check the exemption claimed box, enter consideration and proceed to Part III) ☒ **Exemption claimed**
- 2 Continuing lien deduction (see instructions if property is taken subject to mortgage or lien)
- 3 Taxable consideration (subtract line 2 from line 1)
- 4 Tax: \$2 for each \$500, or fractional part thereof, of consideration on line 3
- 5 Amount of credit claimed for tax previously paid (see instructions and attach Form TP-584.1, Schedule G)
- 6 Total tax due\* (subtract line 5 from line 4)

1.		0 00
2.		0 00
3.		0 00
4.		0 00
5.		0 00
6.		0 00

**Part II — Computation of additional tax due on the conveyance of residential real property for \$1 million or more**

- 1 Enter amount of consideration for conveyance (from Part I, line 1)
- 2 Taxable consideration (multiply line 1 by the percentage of the premises which is residential real property, as shown in Schedule A)
- 3 Total additional transfer tax due\* (multiply line 2 by 1% (.01))

1.		0 00
2.		0 00
3.		0 00

**Part III — Explanation of exemption claimed on Part I, line 1 (check any boxes that apply)**

The conveyance of real property is exempt from the real estate transfer tax for the following reason:

- a. Conveyance is to the United Nations, the United States of America, the state of New York, or any of their instrumentalities, agencies, or political subdivisions (or any public corporation, including a public corporation created pursuant to agreement or compact with another state or Canada) ..... a ☒
- b. Conveyance is to secure a debt or other obligation ..... b ☐
- c. Conveyance is without additional consideration to confirm, correct, modify, or supplement a prior conveyance ..... c ☐
- d. Conveyance of real property is without consideration and not in connection with a sale, including conveyances conveying realty as bona fide gifts ..... d ☐
- e. Conveyance is given in connection with a tax sale ..... e ☐
- f. Conveyance is a mere change of identity or form of ownership or organization where there is no change in beneficial ownership. (This exemption cannot be claimed for a conveyance to a cooperative housing corporation of real property comprising the cooperative dwelling or dwellings.) Attach Form TP-584.1, Schedule F ..... f ☐
- g. Conveyance consists of deed of partition ..... g ☐
- h. Conveyance is given pursuant to the federal Bankruptcy Act ..... h ☐
- i. Conveyance consists of the execution of a contract to sell real property, without the use or occupancy of such property, or the granting of an option to purchase real property, without the use or occupancy of such property ..... i ☐
- j. Conveyance of an option or contract to purchase real property with the use or occupancy of such property where the consideration is less than \$200,000 and such property was used solely by the grantor as the grantor's personal residence and consists of a one-, two-, or three-family house, an individual residential condominium unit, or the sale of stock in a cooperative housing corporation in connection with the grant or transfer of a proprietary leasehold covering an individual residential cooperative apartment ..... j ☐
- k. Conveyance is not a conveyance within the meaning of Tax Law, Article 31, section 1401(e) (attach documents supporting such claim) ..... k ☐

\*The total tax (from Part I, line 6 and Part II, line 3 above) is due within 15 days from the date conveyance. Please make check(s) payable to the county clerk where the recording is to take place. If the recording is to take place in the New York City boroughs of Manhattan, Bronx, Brooklyn, or Queens, make check(s) payable to the **NYC Department of Finance**. If a recording is not required, send this return and your check(s) made payable to the **NYS Department of Taxation and Finance**, directly to the NYS Tax Department, RETT Return Processing, PO Box 5045, Albany NY 12205-5045.

201506020048730105



**Schedule C — Credit Line Mortgage Certificate (Tax Law, Article 11)****Complete the following only if the interest being transferred is a fee simple interest.**

I (we) certify that: (check the appropriate box)

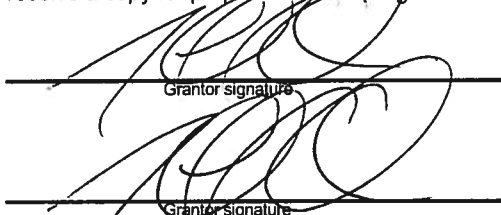
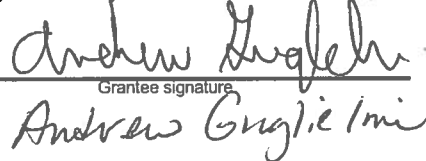

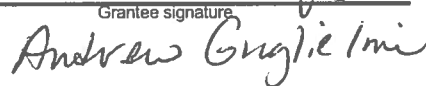
1. ☐ The real property being sold or transferred is not subject to an outstanding credit line mortgage.
2. ☐ The real property being sold or transferred is subject to an outstanding credit line mortgage. However, an exemption from the tax is claimed for the following reason:
- ☐ The transfer of real property is a transfer of a fee simple interest to a person or persons who held a fee simple interest in the real property (whether as a joint tenant, a tenant in common or otherwise) immediately before the transfer.
- ☐ The transfer of real property is (A) to a person or persons related by blood, marriage or adoption to the original obligor or to one or more of the original obligors or (B) to a person or entity where 50% or more of the beneficial interest in such real property after the transfer is held by the transferor or such related person or persons (as in the case of a transfer to a trustee for the benefit of a minor or the transfer to a trust for the benefit of the transferor).
- ☐ The transfer of real property is a transfer to a trustee in bankruptcy, a receiver, assignee, or other officer of a court.
- ☐ The maximum principal amount secured by the credit line mortgage is \$3,000,000 or more, and the real property being sold or transferred is **not** principally improved nor will it be improved by a one- to six-family owner-occupied residence or dwelling.

**Please note:** for purposes of determining whether the maximum principal amount secured is \$3,000,000 or more as described above, the amounts secured by two or more credit line mortgages may be aggregated under certain circumstances. See TSB-M-96(6)-R for more information regarding these aggregation requirements.

- ☐ Other (attach detailed explanation).
3. ☐ The real property being transferred is presently subject to an outstanding credit line mortgage. However, no tax is due for the following reason:
- ☐ A certificate of discharge of the credit line mortgage is being offered at the time of recording the deed.
- ☐ A check has been drawn payable for transmission to the credit line mortgagee or his agent for the balance due, and a satisfaction of such mortgage will be recorded as soon as it is available.
4. ☐ The real property being transferred is subject to an outstanding credit line mortgage recorded in \_\_\_\_\_ (insert liber and page or reel or other identification of the mortgage). The maximum principal amount of debt or obligation secured by the mortgage is \_\_\_\_\_. No exemption from tax is claimed and the tax of \_\_\_\_\_ is being paid herewith. (Make check payable to county clerk where deed will be recorded or, if the recording is to take place in New York City but not in Richmond County, make check payable to the **NYC Department of Finance**.)

**Signature (both the grantor(s) and grantee(s) must sign)**

The undersigned certify that the above information contained in schedules A, B, and C, including any return, certification, schedule, or attachment, is to the best of his/her knowledge, true and complete, and authorize the person(s) submitting such form on their behalf to receive a copy for purposes of recording the deed or other instrument effecting the conveyance.

	<u>Member</u> Title		<u>Attorney</u> Title
Grantor signature		Grantee signature	
	<u>Member</u> Title		
Grantor signature		Grantee signature	Title

**Reminder:** Did you complete all of the required information in Schedules A, B, and C? Are you required to complete Schedule D? If you checked e, f, or g in Schedule A, did you complete Form TP-584.1? Have you attached your check(s) made payable to the county clerk where recording will take place or, if the recording is in the New York City boroughs of Manhattan, Bronx, Brooklyn, or Queens, to the **NYC Department of Finance**? If no recording is required, send your check(s), made payable to the **Department of Taxation and Finance**, directly to the NYS Tax Department, RETT Return Processing, PO Box 5045, Albany NY 12205-5045.

2015060200487301



**Schedule D - Certification of exemption from the payment of estimated personal income tax (Tax Law, Article 22, section 663)**

Complete the following only if a fee simple interest or a cooperative unit is being transferred by an individual or estate or trust.

If the property is being conveyed by a referee pursuant to a foreclosure proceeding, proceed to Part II, and check the second box under Exemptions for nonresident transferor(s)/seller(s) and sign at bottom.

**Part I - New York State residents**

If you are a New York State resident transferor(s)/seller(s) listed in Schedule A of Form TP-584 (or an attachment to Form TP-584), you must sign the certification below. If one or more transferors/sellers of the real property or cooperative unit is a resident of New York State, each resident transferor/seller must sign in the space provided. If more space is needed, please photocopy this Schedule D and submit as many schedules as necessary to accommodate all resident transferors/sellers.

**Certification of resident transferor(s)/seller(s)**

This is to certify that at the time of the sale or transfer of the real property or cooperative unit, the transferor(s)/seller(s) as signed below was a resident of New York State, and therefore is not required to pay estimated personal income tax under Tax Law, section 663(a) upon the sale or transfer of this real property or cooperative unit.

Signature	Print full name	Date
Signature	Print full name	Date
Signature	Print full name	Date
Signature	Print full name	Date

**Note:** A resident of New York State may still be required to pay estimated tax under Tax Law, section 685(c), but not as a condition of recording a deed.

**Part II - Nonresidents of New York State**

If you are a nonresident of New York State listed as a transferor/seller in Schedule A of Form TP-584 (or an attachment to Form TP-584) but are not required to pay estimated personal income tax because one of the exemptions below applies under Tax Law, section 663(c), check the box of the appropriate exemption below. If any one of the exemptions below applies to the transferor(s)/seller(s), that transferor(s)/seller(s) is not required to pay estimated personal income tax to New York State under Tax Law, section 663. Each nonresident transferor/seller who qualifies under one of the exemptions below must sign in the space provided. If more space is needed, please photocopy this Schedule D and submit as many schedules as necessary to accommodate all nonresident transferors/sellers.

If none of these exemption statements apply, you must complete Form IT-2663, *Nonresident Real Property Estimated Income Tax Payment Form*, or Form IT-2664, *Nonresident Cooperative Unit Estimated Income Tax Payment Form*. For more information, see *Payment of estimated personal income tax*, on page 1 of Form TP-584-I.

**Exemption for nonresident transferor(s)/seller(s)**

This is to certify that at the time of the sale or transfer of the real property or cooperative unit, the transferor(s)/seller(s) (grantor) of this real property or cooperative unit was a nonresident of New York State, but is not required to pay estimated personal income tax under Tax Law, section 663 due to one of the following exemptions:

- ☐ The real property or cooperative unit being sold or transferred qualifies in total as the transferor's/seller's principal residence (within the meaning of Internal Revenue Code, section 121) from \_\_\_\_\_ to \_\_\_\_\_ (see instructions).
- ☐ The transferor/seller is a mortgagor conveying the mortgaged property to a mortgagee in foreclosure, or in lieu of foreclosure with no additional consideration.
- ☐ The transferor or transferee is an agency or authority of the United States of America, an agency or authority of the state of New York, the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Government National Mortgage Association, or a private mortgage insurance company.

Signature	Print full name	Date
Signature	Print full name	Date
Signature	Print full name	Date
Signature	Print full name	Date



**Certification of resident transferor(s)/seller(s)**

This is to certify that at the time of the sale or transfer of the real property or cooperative unit, the transferor(s)/seller(s) as signed below was a resident of New York State, and therefore is not required to pay estimated personal income tax under Tax Law, section 663(a) upon the sale or transfer of this real property or cooperative unit.

Signature	Print full name	Date
Signature	Print full name	Date
Signature	Print full name	Date
Signature	Print full name	Date

**Exemption for nonresident transferor(s)/seller(s)**

This is to certify that at the time of the sale or transfer of the real property or cooperative unit, the transferor(s)/seller(s) (grantor) of this real property or cooperative unit was a nonresident of New York State, but is not required to pay estimated personal income tax under Tax Law, section 663 due to one of the following exemptions:

- ☐ The real property or cooperative unit being sold or transferred qualifies in total as the transferor's/seller's principal residence (within the meaning of Internal Revenue Code, section 121) from \_\_\_\_\_ to \_\_\_\_\_ (see instructions).  
Date Date
- ☐ The transferor/seller is a mortgagor conveying the mortgaged property to a mortgagee in foreclosure, or in lieu of foreclosure with no additional consideration.
- ☐ The transferor or transferee is an agency or authority of the United States of America, an agency or authority of the state of New York, the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Government National Mortgage Association, or a private mortgage insurance company.

Signature	Print full name	Date
Signature	Print full name	Date
Signature	Print full name	Date
Signature	Print full name	Date



## TRANSFERS INVOLVING MULTIPLE GRANTORS AND/OR GRANTEES

**NOTE** If additional space is needed, attach copies of this schedule or an addendum listing all of the information required below.

<b>Grantor/Transferor</b> <input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input checked="" type="checkbox"/> Partnership <input type="checkbox"/> Estate/Trust <input type="checkbox"/> Single member LLC <input type="checkbox"/> Other	Name (if individual, last, first, middle initial) JANS REALTY L.P.	Social security number
	Mailing address 49 ROLLING HILL LANE	Social security number
	City OLD WESTBURY State NY ZIP code 11568	Federal EIN 36 4499178
	Country	
	Single member's name if grantor/grantee is a single member LLC	Single member EIN or SSN
<input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Estate/Trust <input type="checkbox"/> Single member LLC <input type="checkbox"/> Other	Name (if individual, last, first, middle initial)	Social security number
	Mailing address	Social security number
	City State ZIP code	Federal EIN
	Country	
	Single member's name if grantor/grantee is a single member LLC	Single member EIN or SSN
<input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Estate/Trust <input type="checkbox"/> Single member LLC <input type="checkbox"/> Other	Name (if individual, last, first, middle initial)	Social security number
	Mailing address	Social security number
	City State ZIP code	Federal EIN
	Country	
	Single member's name if grantor/grantee is a single member LLC	Single member EIN or SSN
<input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Estate/Trust <input type="checkbox"/> Single member LLC <input type="checkbox"/> Other	Name (if individual, last, first, middle initial)	Social security number
	Mailing address	Social security number
	City State ZIP code	Federal EIN
	Country	
	Single member's name if grantor/grantee is a single member LLC	Single member EIN or SSN
<input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Estate/Trust <input type="checkbox"/> Single member LLC <input type="checkbox"/> Other	Name (if individual, last, first, middle initial)	Social security number
	Mailing address	Social security number
	City State ZIP code	Federal EIN
	Country	
	Single member's name if grantor/grantee is a single member LLC	Single member EIN or SSN



## **Appendix B– List of Site Contacts**

<b>Name</b>	<b>Phone/Email Address</b>
Site Owner, 36 Street QDP, LLC	Michael Cohen: (718) 361-2332
Remedial Party, 36 Street QDP, LLC	mcohen@silverstarny.com
Qualified Environmental Professional, David Winslow, Ph.D., P.G	973-774-3300, david.winslow@gza.com
NYSDEC Project Manager, Charles Post	518-402-9768, charles.post@dec.ny.gov
NYSDEC Regional 2 Hazardous Waste Engineer, Jane O’Connell	718-482-4996, jane.oconnell@dec.ny.gov
NYSDEC Site Control, Kelly Lewandowski	518-402-9553, kelly.lewandowski@dec.gov
Remedial Party Attorney, Linda Shaw	lashaw@nyenvlaw.com





## **Appendix C– Boring Logs**





**April & May 2012**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
Engineers and Scientists

Silver Star Mercedes  
37-14 36th Street  
Queens, NY

EXPLORATION NO.: GZA-01  
SHEET: 1 of 1  
PROJECT NO: 41.0162002.00  
REVIEWED BY: D. Winslow

**Logged By:** C. Benmergui  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** D. Cook

**Geoprobe Location:** See Plan  
**Ground Surface Elev. (ft.):** 26  
**Final Geoprobe Depth (ft.):** 14  
**Date Start - Finish:** 4/3/2012 - 4/3/2012

**H. Datum:**  
**V. Datum:** BPQ

**Type of Rig:** Geoprobe  
**Rig Model:** 54 LT  
**Drilling Method:** Direct Push

**Sampler Type:** Macrocore  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 48  
**Rock Core Size:** NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
NA	NA	NA	NA

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-1	0-4	48	21	0	S-1: 8": Concrete slab Top 15": Brown, medium to fine SAND and SILT, trace cobbles. Bottom 6": Dark brown, medium to fine SAND, some Silt, some cobble fragments.	1			
2					0					
3					0					
4					0					
5	S-2	4-8	48	24	0	S-2: Brown, medium to fine SAND, some cobble fragments, some Silt, trace glass fragments.				
6					0					
7					0					
8					0					
9	S-3	8-12	48	22	0	S-3: Top 8": Dark brown, medium to fine SAND, some cobble, some Silt. Middle 8"-12": Brown, medium to fine SAND, trace Silt. Bottom 2": Brown, medium to fine SAND and SILT.		18.0		8
10					0					
11					0					
12					0					
13	S-4	12-14	24	20	0	S-4: Top 8": Brown, medium to fine SAND, some cobble, some Silt. Bottom 12": Grayish brown, medium to fine SAND and cobble, some Silt.	2			
14					0		3			
15						End of Exploration at 14 feet bgs.		12.0		14
16										
17										
18										
19										
20										

- REMARKS**
- 1 - Collected soil sample GZA-1 (0'-2') for VOCS, SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
  - 2 - Collected soil sample GZA-1 (12'-14') VOCS, SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
  - 3 - Groundwater encountered at approximately 13 feet below top of concrete slab.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**GZA-01**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
Engineers and Scientists

Silver Star Mercedes  
37-14 36th Street  
Queens, NY

EXPLORATION NO.: GZA-02  
SHEET: 1 of 1  
PROJECT NO: 41.0162002.00  
REVIEWED BY: D. Winslow

Logged By: C. Benmergui  
Drilling Co.: Craig Geotechnical  
Foreman: D. Cook

Geoprobe Location: See Plan  
Ground Surface Elev. (ft.): 26  
Final Geoprobe Depth (ft.): 14  
Date Start - Finish: 4/3/2012 - 4/3/2012

H. Datum:  
V. Datum: BPQ

Type of Rig: Geoprobe  
Rig Model: 54 LT  
Drilling Method: Direct Push

Sampler Type: Macrocore  
Sampler O.D. (in.): 2.0  
Sampler Length (in.): 48  
Rock Core Size: NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
NA	NA	NA	NA

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-1	0-4	48	12	0	S-1: Top 8": Concrete slab Brown, medium to fine SAND, some cobble, trace Silt.	1			
2					0					
3										
4	S-2	4-8	48	24	0	S-2: Top 12": Brown, medium to fine SAND, trace Silt.				
5					0	Bottom 12": Dark brown, medium to fine SAND, some Silt,				
6					0	some cobble.				
7					0					
8	S-3	8-12	48	32	0	S-3: Top 8": Dark brown, medium to fine SAND, some Silt,				
9					0	some cobble.				
10					0	8"-14": Brown, fine to coarse SAND, some Silt, some cobble.		16.3		9.66
11					0	14"-20": Brown, medium to fine SAND and SILT, some cobble.				
12					0	Bottom 12": Grayish brown SILT, some medium to fine Sand.		15.3	SILT	10.66
13	S-4	12-14	24	12	0	S-4: Grayish brown, medium to fine SAND, some Silt, some	2			
14					0	cobble.				
15						End of Exploration at 14 feet bgs.		12.0		14
16										
17										
18										
19										
20										

**REMARKS**  
1 - Collected soil sample GZA-2 (0'-2') for VOCS, SVOCS, PCBS, Pesticides and Herbicides.  
2 - Collected soil sample GZA-2 (12'-14') metals, CN, Cr+3, Cr+6.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**GZA-02**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
Engineers and Scientists

Silver Star Mercedes  
37-14 36th Street  
Queens, NY

EXPLORATION NO.: GZA-03  
SHEET: 1 of 1  
PROJECT NO: 41.0162002.00  
REVIEWED BY: D. Winslow

Logged By: C. Benmergui  
Drilling Co.: Craig Geotechnical  
Foreman: D. Cook

Geoprobe Location: See Plan  
Ground Surface Elev. (ft.): 26  
Final Geoprobe Depth (ft.): 14  
Date Start - Finish: 4/3/2012 - 4/3/2012

H. Datum:  
V. Datum: BPQ

Type of Rig: Geoprobe  
Rig Model: 54 LT  
Drilling Method: Direct Push

Sampler Type: Macrocore  
Sampler O.D. (in.): 2.0  
Sampler Length (in.): 48  
Rock Core Size: NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
NA	NA	NA	NA

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-1	0-4	48	19	0	S-1: 8": Concrete Slab Top 10": Brown, medium to fine SAND, some Silt, trace cobble. Bottom 9": Dark brown, fine to coarse SAND, some cobble, some Silt.	1			
2					0					
3					0					
4	S-2	4-8	48	26	0	S-2: Brown, medium to fine SAND, some Silt, some Gravel.				
5					0					
6					0					
7					0					
8	S-3	8-12	48	33	0	S-3: Top 12": Brown, medium to fine SAND and GRAVEL, some Silt. 12"-24": Brown, medium to fine SAND and GRAVEL. 24"-33": Brown, medium to fine to medium SAND, some Silt.		18.0		8
9					0					
10					0					
11					0					
12	S-4	12-14	24	3	0	S-4: Brown, medium to fine SAND, some Silt, trace Gravel.	2	14.0		12
13										
14								12.0		14
15						End of Exploration at 14 feet bgs.				
16										
17										
18										
19										
20										

**REMARKS**  
1 - Collected soil sample GZA-3 (0'-2') for VOCS, SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.  
2 - Collected soil sample GZA-3 (12'-14') VOCS, SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**GZA-03**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
Engineers and Scientists

Silver Star Mercedes  
37-14 36th Street  
Queens, NY

EXPLORATION NO.: GZA-04  
SHEET: 1 of 1  
PROJECT NO: 41.0162002.00  
REVIEWED BY: D. Winslow

Logged By: C. Benmergui  
Drilling Co.: Craig Geotechnical  
Foreman: D. Cook

Geoprobe Location: See Plan  
Ground Surface Elev. (ft.): 25  
Final Geoprobe Depth (ft.): 14  
Date Start - Finish: 4/4/2012 - 4/4/2012

H. Datum:  
V. Datum: BPQ

Type of Rig: Geoprobe  
Rig Model: 54 LT  
Drilling Method: Direct Push

Sampler Type: Macrocore  
Sampler O.D. (in.): 2.0  
Sampler Length (in.): 48  
Rock Core Size: NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
NA	NA	NA	NA

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-01	0-4	48	20	0	S-01: 4": Concrete sidewalk Top 8": Brown, coarse to fine SAND and GRAVEL (Asphalt), some cobble and brick, trace Silt. Bottom 12": Dark brown, coarse to fine SAND, trace Silt, some Gravel.	1			
2					0					
3					0					
4	S-02	4-8	48	24	0	S-02: Top 4": Brown, medium to fine SAND and SILT, some Gravel. Bottom 20": Brown, medium to fine SAND, some Silt, trace Gravel.				
5					0					
6					0					
7					0					
8	S-03	8-12	48	28	0	S-03: Top 4": Brown, medium to fine SAND, some Silt, trace Gravel. 9"-14": Brown, medium to fine SAND and SILT, some cobble. 14"-18": Blackish-dark brown PEAT. 18"-28": Medium to fine SAND and SILT, some Gravel.		17.0		8
9					0					
10					0					
11					0					
12	S-04	12-14	24	24	0	S-04: Brown, coarse to fine SAND, trace Silt. moist.	2			
13					0		3			
14					0			11.0		14
15						End of Exploration at 14 feet bgs.				
16										
17										
18										
19										
20										

**REMARKS**

1 - Collected soil sample GZA-4 (0'-2') for VOCS , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.  
2 - Collected soil sample GZA-4 (12'-14') VOCS , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.  
3 - Groundwater encountered at approximately 12 feet below ground surface.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**GZA-04**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
Engineers and Scientists

Silver Star Mercedes  
37-14 36th Street  
Queens, NY

EXPLORATION NO.: GZA-05  
SHEET: 1 of 1  
PROJECT NO: 41.0162002.00  
REVIEWED BY: D. Winslow

Logged By: C. Benmergui  
Drilling Co.: Craig Geotechnical  
Foreman: D. Cook

Geoprobe Location: See Plan  
Ground Surface Elev. (ft.): 25  
Final Geoprobe Depth (ft.): 14  
Date Start - Finish: 4/4/2012 - 4/4/2012

H. Datum:  
V. Datum: BPQ

Type of Rig: Geoprobe  
Rig Model: 54 LT  
Drilling Method: Direct Push

Sampler Type: Macrocore  
Sampler O.D. (in.): 2.0  
Sampler Length (in.): 48  
Rock Core Size: NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
NA	NA	NA	NA

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-1	0-4	48	19	0	S-1: 2": Asphalt cover Top 10": Dark brown, fine to coarse SAND and GRAVEL, trace Silt. 10"-13": GRAVEL (concrete and cobble) 13"-19": Brown, medium to fine SAND, trace Silt, trace cobble.	1			
2					0					
3					0					
4	S-2	4-8	48	6	0	S-2: Brown, medium to fine SAND, some Silt, some cobble and brick fragments.				
5										
6										
7										
8	S-3	8-12	48	24	0	S-3: Top 12": Dark brown, coarse to fine SAND, some Gravel, trace Silt. 12"-16": Brown, coarse to fine SAND, trace Silt. 16"-24": Dark gray, medium to fine SAND and SILT, some Gravel.	4	17.0		8
9					0					
10					0					
11					0					
12	S-4	12-14	24	18	0	S-4: Top 11": Dark brown, coarse to fine SAND, some Gravel, trace Silt, moist. Bottom 7": Brown, coarse to fine SAND and COBBLE, trace Silt, moist.	2 3			
13					0					
14					0			11.0		14
15						End of Exploration at 14 feet bgs.				
16										
17										
18										
19										
20										

## REMARKS

- 1 - Collected soil sample GZA-5 (0'-2') for VOCS , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
- 4 - Encountered refusal at approximately 9 feet below ground surface; moved 10 feet north.
- 2 - Collected soil sample GZA-5 (12'-14') VOCS , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
- 3 - Groundwater encountered at approximately 12 feet below ground surface.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**GZA-05**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
Engineers and Scientists

Silver Star Mercedes  
37-14 36th Street  
Queens, NY

EXPLORATION NO.: GZA-06  
SHEET: 1 of 1  
PROJECT NO: 41.0162002.00  
REVIEWED BY: D. Winslow

Logged By: C. Benmergui  
Drilling Co.: Craig Geotechnical  
Foreman: D. Cook

Geoprobe Location: See Plan  
Ground Surface Elev. (ft.): 25  
Final Geoprobe Depth (ft.): 14  
Date Start - Finish: 4/4/2012 - 4/4/2012

H. Datum:  
V. Datum: BPQ

Type of Rig: Geoprobe  
Rig Model: 54 LT  
Drilling Method: Direct Push

Sampler Type: Macrocore  
Sampler O.D. (in.): 2.0  
Sampler Length (in.): 48  
Rock Core Size: NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
NA	NA	NA	NA

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-1	0-4	48	26	0	S-1: 8": Concrete Slab Top 6": ASPHALT 6"-13": Light gray, coarse to fine SAND and GRAVEL. 13"-26": Light gray SILT and CLAY, trace Sand, trace Gravel.	1	24.5	ASPHALT	0.5
2					0					
3					0					
4					0					
5	S-2	4-8	48	28	0	S-2: Top 12": Light gray SILT, some medium to coarse SAND, some Gravel. Bottom 16": Light gray SILT, some medium to fine Sand, trace Clay.				
6					0					
7					0					
8					0					
9	S-3	8-12	48	29	0	S-3: Top 12": Light gray SILT, some Clay, some Gravel. 12"-23": Light gray SILT and CLAY, heavy petroleum-like staining, some petroleum-like odor. Bottom 6": Gray SILT, some Clay, some petroleum-like staining.	2	14.5		10.5
10					53.9					
11					36.6					
12										
13	S-4	12-14	24	18	0	S-4: Top 5": Gray. medium to fine SAND and SILT, some Gravel. 5"-9": Gray SILT, some medium to fine SAND, some petroleum-like staining, faint odor. 9"-18": Gray, coarse to fine SAND, trace Silt, moist.	3	11.0	SAND	14
14					4.8					
15					0					
16						End of Exploration at 14 feet bgs.				
17										
18										
19										
20										

- REMARKS**
- 1 - Collected soil sample GZA-6 (0'-2') for VOCS , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
  - 2 - Collected soil sample GZA-6 (10'-12') VOCS , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
  - 3 - Groundwater encountered at approximately 13 feet bgs.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**GZA-06**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
Engineers and Scientists

Silver Star Mercedes  
37-14 36th Street  
Queens, NY

EXPLORATION NO.: GZA-07  
SHEET: 1 of 1  
PROJECT NO: 41.0162002.00  
REVIEWED BY: D. Winslow

**Logged By:** C. Benmergui  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** D. Cook

**Geoprobe Location:** See Plan  
**Ground Surface Elev. (ft.):** 25  
**Final Geoprobe Depth (ft.):** 14  
**Date Start - Finish:** 4/4/2012 - 4/4/2012

**H. Datum:**  
**V. Datum:** BPQ

**Type of Rig:** Geoprobe  
**Rig Model:** 54 LT  
**Drilling Method:** Direct Push

**Sampler Type:** Macrocore  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 48  
**Rock Core Size:** NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
NA	NA	NA	NA

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-1	0-4	48	2		S-1: 8": Concrete Slab Dark gray, coarse to fine SAND and GRAVEL, trace Silt.	1			
2										
3										
4	S-2	4-8	48	15	0	S-2: Top 4": Dark brown, coarse to fine SAND and GRAVEL, some Silt.				
5					0	Bottom 11": Reddish brown, medium to fine SAND and SILT, some Gravel.				
6					0					
7										
8	S-3	8-12	48	18	0	S-3: Top 7": Dark brown, medium to fine SAND, some Silt, some cobble, slight petroleum-like staining.				
9					0	Bottom 11": CONCRETE and COBBLE, some medium to fine Sand.				
10					0					
11										
12	S-4	12-14	24	24	0	S-4: Top 3": Dark brown. medium to fine SAND and SILT, petroleum-like staining.	2	13.0		12
13					0	3"-6": Brown, medium to fine SAND, some Silt, some Gravel, moist.	3		SILTY SAND	
14					0	6"-24": Gray, coarse to fine SAND and SILT, some petroleum-like staining, moist.		11.0		14
15						End of Exploration at 14 feet bgs.				
16										
17										
18										
19										
20										

**REMARKS**

1 - Collected soil sample GZA-7 (0'-2') for VOCS , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.  
2 - Collected soil sample GZA-7 (12'-14') VOCS , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.  
3 - Groundwater encountered at 12.25 feet below ground surface.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**GZA-07**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
Engineers and Scientists

Silver Star Mercedes  
37-14 36th Street  
Queens, NY

EXPLORATION NO.: GZA-08  
SHEET: 1 of 1  
PROJECT NO: 41.0162002.00  
REVIEWED BY: D. Winslow

Logged By: C. Benmergui  
Drilling Co.: Craig Geotechnical  
Foreman: D. Cook

Geoprobe Location: See Plan  
Ground Surface Elev. (ft.): 25  
Final Geoprobe Depth (ft.): 14  
Date Start - Finish: 4/4/2012 - 4/4/2012

H. Datum:  
V. Datum: BPQ

Type of Rig: Geoprobe  
Rig Model: 54 LT  
Drilling Method: Direct Push

Sampler Type: Macrocore  
Sampler O.D. (in.): 2.0  
Sampler Length (in.): 48  
Rock Core Size: NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
NA	NA	NA	NA

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-1	0-4	48	16	0	S-1: Top 7": ASPHALT and GRAVEL, some brown, coarse to fine Sand, trace Silt.	1	21.0	SILTY SAND	4
2					0	Bottom 9": Brown, medium to fine SAND and SILT, some Gravel.				
3					0					
4										
5	S-2	4-8	48	0		S-2: No recovery.	2 3	17.0	NO RECOVERY	8
6										
7										
8										
9	S-3	8-12	48	34	0	S-3: Top 12": Brown, coarse to fine SAND, some Silt, trace Cobble.				
10					0	12"-22": Dark brown SILT, trace Clay.				
11					0	Bottom 12": Light grayish brown SILT, some coarse to fine SAND, some cobbles, moist.				
12					0					
13	S-4	12-14	24	24	0	S-4: Top 8": Light grayish brown SILT, some cobbles, saturated.		12.3	SAND	12.7
14					0	Bottom 16": Light gray, coarse to fine SAND, trace Silt, faint petroleum-like odor.				
15					0	End of Exploration at 14 feet bgs.		11.0		14
16										
17										
18										
19										
20										

- REMARKS**
- 1 - Collected soil sample GZA-8 (0'-2') for VOCS , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
  - 2 - Collected soil sample GZA-8 (12'-14') for VOCS , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
  - 3 - Groundwater encountered at 12 feet below ground surface.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**GZA-08**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
Engineers and Scientists

Silver Star Mercedes  
37-14 36th Street  
Queens, NY

EXPLORATION NO.: GZA-09  
SHEET: 1 of 1  
PROJECT NO: 41.0162002.00  
REVIEWED BY: D. Winslow

Logged By: C. Benmergui  
Drilling Co.: Craig Geotechnical  
Foreman: D. Cook

Geoprobe Location: See Plan  
Ground Surface Elev. (ft.): 25  
Final Geoprobe Depth (ft.): 14  
Date Start - Finish: 4/5/2012 - 4/5/2012

H. Datum:  
V. Datum: BPQ

Type of Rig: Geoprobe  
Rig Model: 54 LT  
Drilling Method: Direct Push

Sampler Type: Macrocore  
Sampler O.D. (in.): 2.0  
Sampler Length (in.): 48  
Rock Core Size: NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
NA	NA	NA	NA

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-1	0-4	48	24	0	S-1: Top 7": Brown, medium to fine SAND and SILT, trace Gravel.	1		FILL	
2					0	Bottom 17": Brown, medium to fine SAND, some Silt, some Gravel, trace brick fragments.				
3					0					
4					0					
5	S-2	4-8	48	2	0	S-2: Brown, medium to fine SAND, some Gravel, trace Silt, trace brick fragments.				
6										
7										
8										
9	S-3	8-12	48	16	0	S-3: Top 4": Blackish dark brown, medium to fine SAND, trace Silt, trace Gravel.		17.0		8
10					0	Bottom 12": Blackish dark brown, medium to fine SAND and SILT.				
11					0					
12										
13	S-4	12-14	24	18	0	S-4: Top 10": Blackish brown, medium to fine SAND, trace Silt, trace Gravel.	2			
14					0	Bottom 8": Brown, coarse to fine SAND, some Cobble, trace Silt, moist.				
15						End of Exploration at 14 feet bgs.	3	11.0		14
16										
17										
18										
19										
20										

- REMARKS**
- 1 - Collected soil sample GZA-9 (0'-2') for VOCS, SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
  - 2 - Collected soil sample GZA-09 (12'-14') VOCS, SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
  - 3 - Groundwater encountered at 12.8 feet below ground surface.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**GZA-09**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
*Engineers and Scientists*

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GZA-10  
**SHEET:** 1 of 1  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** C. Benmergui  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** D. Cook

**Geoprobe Location:** See Plan  
**Ground Surface Elev. (ft.):** 25  
**Final Geoprobe Depth (ft.):** 14  
**Date Start - Finish:** 4/5/2012 - 4/5/2012

**H. Datum:**  
**V. Datum:** BPQ

**Type of Rig:** Geoprobe  
**Rig Model:** 54 LT  
**Drilling Method:** Direct Push

**Sampler Type:** Macrocore  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 48  
**Rock Core Size:** NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
NA	NA	NA	NA

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-1	0-4	48	30	0	S-1: 4": Asphalt cover Top 18": Dark brown GRAVEL, some medium to fine Sand. Bottom 12": Brown, medium to fine SAND and GRAVEL, trace Asphalt fragments, trace Silt.	1	22.0	FILL	3
2					0					
3					0					
4					0					
5	S-2	4-8	48	26	0	S-2: Brown SILT, some medium to fine Sand, trace Gravel.				
6					0					
7					0					
8					0					
9	S-3	8-12	48	18	0	S-3: Brown SILT. some medium to fine Sand, trace Gravel.			SILT	
10					0					
11					0					
12					0					
13	S-4	12-14	24	24	0	S-4: Top 6": Brown SILT. some medium to fine Sand. 6"-12": Brown SILT, some medium to fine Sand, some Gravel, moist. Bottom 12": Gray. medium to fine SAND and SILT, slight petroleum-like odor.	2 3	12.0	SILTY SAND	13
14					0					
15					0					
16					0					
17						End of Exploration at 14 feet bgs.		11.0		14
18										
19										
20										

- REMARKS**
- 1 - Collected soil sample GZA-10 (0'-2') for VOCs , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
  - 2 - Collected soil sample GZA-10 (12'-14') VOCs , SVOCS, PCBS, Pesticides, Herbicides, metals, CN, Cr +3, Cr+6.
  - 3 - Groundwater encountered at approximately 12 feet below ground surface.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**GZA-10**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
 Engineers and Scientists

Silver Star Mercedes  
 37-14 36th Street  
 Queens, NY

EXPLORATION NO.: W-01  
 SHEET: 1 of 2  
 PROJECT NO: 41.0162002.00  
 REVIEWED BY: D. Winslow

Logged By: C. Benmergui  
 Drilling Co.: Craig Geotechnical  
 Foreman: D. Cook

Geoprobe Location: See Plan  
 Ground Surface Elev. (ft.): 26  
 Final Geoprobe Depth (ft.): 20  
 Date Start - Finish: 4/2/2012 - 4/2/2012

H. Datum:  
 V. Datum: BPQ

Type of Rig: Geoprobe  
 Rig Model: 54 LT  
 Drilling Method: Direct Push

Sampler Type: Macrocore  
 Sampler O.D. (in.): 2.0  
 Sampler Length (in.): 48  
 Rock Core Size: NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
4/3/12	09:15	12.99	24 hrs

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-1	0-4	48	18	0	S-1: 8": Concrete cover Top 6": Dark brown, medium to fine SAND, some Silt, trace Gravel. Bottom 12": Brown, medium to fine SAND, some Gravel, trace Silt.				
2					0					
3					0					
4	S-2	4-8	48	18	0	S-2: Top 6": Dark brown, medium to fine SAND, some Gravel and brick fragments, trace Silt. Bottom 8": Dark brown, medium to fine SAND and GRAVEL, some concrete and brick fragments, trace Silt.				
5					0					
6					0					
7										
8	S-3	8-12	48	48	0	S-3: Top 6": Brown, medium to fine SAND and GRAVEL, some Silt. Middle 6"-36": Brown, medium to fine SAND, some Silt. Bottom 12": Brown, medium to fine SAND and SILT.		18.0		8
9					0					
10					0					
11					0					
12	S-4	12-16	48	48	0	S-4: Top 30": Brown, medium to fine SAND and SILT, moist. Bottom 18": Brown, medium to fine SAND and SILT, saturated.				
13					0					
14					0					
15					0					
16	S-5	16-20	48	48	0	S-5: Brown, medium to fine SAND and SILT,saturated.	1			
17					0					
18					0					
19					0					
20					0			6.0		20

End of Exploration at 20 feet bgs.

- REMARKS**
- 1 - Encountered groundwater at 14.5 feet bgs.
  - 2 - Installed temporary well point TD-24 feet bgs. 10 foot screen (14'-24') 14 foot riser (0'-14')

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**W-01**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
*Engineers and Scientists*

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** W-01  
**SHEET:** 2 of 2  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** C. Benmergui  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** D. Cook

**Geoprobe Location:** See Plan  
**Ground Surface Elev. (ft.):** 26  
**Final Geoprobe Depth (ft.):** 20  
**Date Start - Finish:** 4/2/2012 - 4/2/2012

**H. Datum:**  
**V. Datum:** BPQ

**Type of Rig:** Geoprobe  
**Rig Model:** 54 LT  
**Drilling Method:** Direct Push

**Sampler Type:** Macrocore  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 48  
**Rock Core Size:** NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
4/3/12	09:15	12.99	24 hrs

Depth (ft)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
21							2			
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										

## REMARKS

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**W-01**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental, Inc.**  
Engineers and Scientists

Silver Star Mercedes  
37-14 36th Street  
Queens, NY

**EXPLORATION NO.:** W-02  
**SHEET:** 1 of 1  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** C. Benmergui  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** D. Cook

**Geoprobe Location:** See Plan  
**Ground Surface Elev. (ft.):**  
**Final Geoprobe Depth (ft.):** 17  
**Date Start - Finish:** 4/3/2012 - 4/3/2012

**H. Datum:**  
**V. Datum:** BPQ

**Type of Rig:** Geoprobe  
**Rig Model:** 54 LT  
**Drilling Method:** Direct Push

**Sampler Type:** Macrocore  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 48  
**Rock Core Size:** NA

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
4/3/12	12:45	13.00	3 hrs

Depth (ft.)	Sample					Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)					
1	S-1	0-4	48	21	0	S-1: 8" Concrete cover Top 6": Dark brown, medium to fine SAND, trace Silt. 6"-9": Brown, medium to fine SAND and GRAVEL, trace Silt. 9"-21": Brown, medium to fine SAND, trace Silt.				
2					0					
3					0					
4					0					
5	S-2	4-8	48	12	0	S-2: Dark brown, medium to fine SAND, some Gravel, trace Silt.				
6					0					
7										
8										
9	S-3	8-12	48	38	0	S-3: Top 8": Dark brown, medium to fine SAND, trace Gravel, trace Silt.				
10					0	8"-13": Dark brown, medium to fine SAND, some Silt.				
11					0	13"-18": Dark brown, medium to fine SAND, some Silt, trace Clay.				
12					0	18"-38": Brown, medium to fine SAND, some Silt, trace Gravel.				
13	S-4	12-16	48	40	0	S-4: Top 22": Dark brown, medium to fine SAND and GRAVEL, trace Silt.	1			12
14					0	Bottom 18": Brown, medium to fine SAND, some Silt, saturated.				
15					0					14.2
16					0					
17	S-5	16-17	12	0	0	S-5: No recovery.				
18							2			17
19							3			
20						End of Exploration at 17 feet bgs.				

- REMARKS**
- 1 - Encountered groundwater at 14.2 feet bgs.
  - 2 - Installed temporary well W-2 TD 24 feet bgs. 10 foot screen 14'-24' bgs, 14 foot riser 0'-14' bgs.
  - 3 - Encountered refusal at 17 feet below the concrete slab, moved east approximately 10 feet ; continued to 24 feet bgs.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**W-02**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
Engineers and Scientists

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GB-01  
**SHEET:** 1 of 4  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** R. Dollar

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 26.7  
**Final Boring Depth (ft.):** 102  
**Date Start - Finish:** 4/30/2012 - 4/30/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value						
		S-1	0-2	24	10	7 4 3 4	7	S-1 : Loose, red-brown, fine to coarse SAND, little Clay and Silt, trace Gravel, Asphalt, Brick.	1				
		S-2	2-4	24	6	3 4 2 1	6	S-2 : Loose, brown, fine to medium SAND, some Clay, little Silt, trace Gravel, Asphalt, Brick.					
5		S-3	4-6	24	12	2 2 1 1	3	S-3 : Soft, brown CLAY, some Silt and Sand, trace Gravel, trace Brick.	2			FILL (7)	
		S-4	6-8	24	8	3 4 4 3	8	S-4 : Loose, orange, fine to coarse SAND, trace Gravel, trace Silt and Clay. (SP)					
10		S-5	8-10	24	13	4 3 2 3	5	S-5 : Top 7": Loose, orange, fine to coarse SAND, trace Gravel, trace Silt and Clay. (SP)			9		17.7
		S-6	10-12	24	12	4 5 8 6	13	Bottom 6": Medium stiff, dark brown CLAY, some Silt, trace Sand. (CL) S-6 : Top 6": Stiff, olive CLAY, some Silt, little Sand. Bottom 6": Medium dense, olive, fine to medium SAND, trace Gravel, trace Silt. (CL to SP)			11	CLAY (6)	15.7
15		S-7	15-17	24	14	7 8 10 9	18	S-7 : Medium dense, brown, fine to coarse SAND, little Clay and Silt, trace Gravel. (SP/SC)					
20		S-8	20-22	24	18	16 20 23 20	43	S-8 : Dense, orange-brown, fine to coarse SAND, little Clay, trace Gravel (rock fragments). (SP/SC)				SAND (3b)	
25		S-9	25-27	24	10	20 11 10 9	21	S-9 : Medium dense, brown, fine to medium SAND, trace Silt, trace Gravel. (SP)					
30													

**REMARKS**  
1 - 3" Concrete Slab.  
2 - Sample S-3 and those thereafter were moist.  
3 - Gravel in tip (5-10).

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-01**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
*Engineers and Scientists*

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GB-01  
**SHEET:** 2 of 4  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** R. Dollar

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 26.7  
**Final Boring Depth (ft.):** 102  
**Date Start - Finish:** 4/30/2012 - 4/30/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value						
35		S-10	30-32	24	6	16 15 13 9	28	S-10 : Medium dense, brown, fine to medium SAND, trace Silt, trace and Gravel. (SP)	3			SAND (3b)	
											33.5		-6.8
40		S-11	35-37	24	13	12 13 18 22	31	S-11 : Dense, brown, fine to medium SAND, little Gravel, trace Silt. (SP)					
45		S-12	40-42	24	18	15 20 25 18	45	S-12 : Dense, brown, fine to medium SAND, little Gravel, trace Silt. (SP)					
50		S-13	45-47	24	18	24 22 28 27	50	S-13 : Very dense, brown, fine to medium SAND, trace Silt, trace Gravel. (SP)				SAND (3a)	
55		S-14	50-52	24	18	20 25 23 22	48	S-14 : Dense, brown, fine to medium SAND, trace Gravel, trace Silt.					
60		S-15	55-57	24	10	62 72 52 32	R	S-15 : Very dense, brown, fine to medium SAND, little Gravel (Rock fragments), trace Silt. (SP)					

## REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-01**



# TEST BORING LOG



**GZA**  
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Engineers and Scientists

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GB-01  
**SHEET:** 3 of 4  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** R. Dollar

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 26.7  
**Final Boring Depth (ft.):** 102  
**Date Start - Finish:** 4/30/2012 - 4/30/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value						
65		S-16	60-62	24	22	10 16 24 25	40	S-16 : Top 10": dense, brown, fine to medium SAND, trace Gravel, trace Silt and Clay. Bottom 12": Hard, brown CLAY, some Sand and Silt, trace Gravel. (SP to CL)			61		-34.3
65		S-17	65-67	24	16	16 22 27 31	49	S-17 : Hard, brown CLAY, some fine to medium Sand, some Silt, little Gravel. (CL)			68.5	CLAY (4)	-41.8
70		S-18	70-72	24	13	21 28 31 27	59	S-18 : Very dense, orange-brown, fine to coarse SAND, trace Gravel, trace Silt and Clay.					
75		S-19	75-77	24	22	26 29 32 28	61	S-19 : Very dense, orange-brown, fine to coarse SAND, trace Gravel, trace Silt and Clay.					
80		S-20	80-82	24	12	21 35 35 30	70	S-20 : Very dense, orange-brown, fine to medium SAND, trace Silt. (SP)					
85		S-21	85-87	24	16	30 32 39 32	71	S-21 : Very dense, brown, fine to coarse SAND, trace Gravel, trace Silt. (SP)			88.5	SAND (3a)	-61.8
90												SILT (5a)	

## REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-01**



# TEST BORING LOG



**GZA**  
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*Engineers and Scientists*

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GB-01  
**SHEET:** 4 of 4  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** R. Dollar

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 26.7  
**Final Boring Depth (ft.):** 102  
**Date Start - Finish:** 4/30/2012 - 4/30/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Stratum	
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value				Depth (ft.)	Description Elev. (ft.)
95		S-22	90-92	24	23	14 20 26 21	46	S-22 : Dense, brown SILT, some Clay, little Sand, trace Gravel. (ML)			93.5	SILT (5a) -66.8
100		S-23	95- 95.75	9	8	75 60/3"	R	S-23 : Hard, dark gray CLAY, some fine to medium Sand, some Silt, little Gravel. (CL)	4			CLAY (4a)
		S-24	100- 102	24	20	24 24 41 25	65	S-24 : Hard, white CLAY, some fine to medium Sand, some Silt, little Gravel. (CL)			102	-75.3
105								End of exploration at 102 feet.				
110												
115												
120												

## REMARKS

4 - Fractured rock in tip.

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-01**



[illegible]

GZA TEMPLATE TEST BORING; 6/14/2012; 10:31:05 AM



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
*Engineers and Scientists*

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GB-02  
**SHEET:** 2 of 4  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** R. Dollar

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 25.9  
**Final Boring Depth (ft.):** 102  
**Date Start - Finish:** 5/2/2012 - 5/2/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value						
35		S-10	30-32	24	9	12 10 11 9	21	S-10 : Medium dense, brown, fine to medium SAND, trace Silt. (SP)					
40		S-11	35-37	24	20	21 51 46 36	97	S-11 : Very dense, brown, fine to coarse SAND, trace Gravel, trace Silt. (SP)					
45		S-12	40-42	24	16	20 25 24 27	49	S-12 : Dense, brown, fine to medium SAND, trace Gravel, trace Silt. (SP)					
50		S-13	45-47	24	16	15 27 42 27	69	S-13 : Very dense, brown, fine to medium SAND, little Gravel, trace Silt. (SP)				SAND (3a)	
55		S-14	50-52	24	18	15 24 38 40	62	S-14 : Very dense, brown, fine to medium SAND, some Silt, little Clay, little Gravel. (SP)					
60		S-15	55-57	24	16	18 28 30 30	58	S-15 : Very dense, olive brown, fine to coarse SAND, some Clay and Silt, little Gravel. (SC/SP)					
60											60		-34.1

## REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-02**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
*Engineers and Scientists*

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GB-02  
**SHEET:** 3 of 4  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** R. Dollar

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 25.9  
**Final Boring Depth (ft.):** 102  
**Date Start - Finish:** 5/2/2012 - 5/2/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value						
65		S-16	60-62	24	20	28 32 31 27	63	S-16 : Very dense, orange-brown, fine to medium SAND, trace Silt and Gravel. (SP)					
70		S-17	65-67	24	20	23 34 26 29	60	S-17 : Very dense, orange-brown, fine to medium SAND, trace Silt and Gravel. (SP)					
75		S-18	70-72	24	16	20 29 30 36	59	S-18 : Very dense, brown, fine to medium SAND, trace Silt and Gravel. (SP)					
80		S-19	75-77	24	16	19 25 34 31	59	S-19 : Very dense, brown, fine to medium SAND, trace Silt and Gravel. (SP)				SAND (3a)	
85		S-20	80-82	24	16	36 37 32 35	69	S-20 : Very dense, orange-brown, fine to coarse SAND, some Gravel, trace Silt. (SP)					
90		S-21	85-87	24	6	16 39 31 30	70	S-21 : Very dense, brown, fine to coarse SAND, some Clay and Silt, little Gravel. (SC/SP)	3				
											90		-64.1

**REMARKS** 3 - Gravel in tip.

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-02**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
*Engineers and Scientists*

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GB-02  
**SHEET:** 4 of 4  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** R. Dollar

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 25.9  
**Final Boring Depth (ft.):** 102  
**Date Start - Finish:** 5/2/2012 - 5/2/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value						
95		S-22	90-92	24	20	17 27 28 30	55	S-22 : Very dense, brown SILT, little fine Sand, trace Clay and Gravel. (ML)					
		S-23	95-97	24	20	16 20 23 25	43	S-23 : Dense, gray, fine to medium SAND, some Silt and Clay, trace Gravel. (SM)				SAND AND SILT (3a,5a)	
100		S-24	100-102	24	23	9 26 30 28	56	S-24 : Very dense, Clayey SILT, some Clay and Sand, trace Gravel. (ML)			102		-76.1
105								End of exploration at 102 feet.					
110													
115													
120													

## REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-02**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
Engineers and Scientists

**Silver Star Mercedes**  
37-14 36th Street  
Queens, NY

**EXPLORATION NO.:** GB-03  
**SHEET:** 1 of 2  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** K. Parent

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 25.1  
**Final Boring Depth (ft.):** 52  
**Date Start - Finish:** 5/4/2012 - 5/4/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft.)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)		Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value							
		S-1	0-2	24	10	23 29 17 5	46	S-1 : Dense, brown, fine to medium SAND, some Silt, little Clay and Gravel, trace Concrete, Brick, trace Asphalt.		1				
		S-2	2-4	24	6	2 3 3 5	6	S-2 : Loose, brown and black, fine to coarse SAND, some Silt, little Gravel, trace Clay, Asphalt, Concrete, trace Brick.						
5		S-3	4-6	24	16	3 3 1 2	4	S-3 : Very loose, orange brown SILT, little Clay, fine Sand and Gravel, trace Asphalt, trace Brick.						
		S-4	6-8	24	8	2 3 4 3	7	S-4 : Top 2": Very loose, orange brown SILT, little Clay, fine Sand and Gravel, trace Asphalt and Brick.						
		S-5	8-10	24	12	4 29 12 6	41	Bottom 6": Loose, brown and black, fine to coarse SAND, little Silt and Gravel, trace Brick.		2				
10		S-6	10-12	24	8	4 2 3 6	5	S-5 : Dense, brown, fine to medium SAND, some Silt, little Gravel and Clay.						
								S-6 : Loose, brown and black, fine to coarse SAND, some Silt, little Clay and Gravel, trace Brick.		3				
15		S-7	15-17	24	12	13 14 16 16	30	S-7 : Dense, gray, fine to medium SAND, some Silt, little Gravel and Clay, trace Brick.						
												18.5		6.6
20		S-8	20-22	24	14	12 12 16 15	28	S-8 : Medium dense, gray, fine to coarse SAND, little Gravel, little Silt. (SP)						
25		S-9	25-27	24	6	12 13 12 10	25	S-9 : Medium dense, brown, fine to coarse SAND, some Gravel, trace Silt. (SP)						
30												28.5		-3.4
													GRAVEL (2a)	

**REMARKS**  
1 - 1" Asphalt ground cover. Started sampling below asphalt.  
2 - Gravel in tip of spoon of sample S-4.  
3 - Petroleum-like odor; sample S-5 moist.

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-03**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
Engineers and Scientists

Silver Star Mercedes  
37-14 36th Street  
Queens, NY

EXPLORATION NO.: GB-03  
SHEET: 2 of 2  
PROJECT NO: 41.0162002.00  
REVIEWED BY: D. Winslow

Logged By: J. Hirashima  
Drilling Co.: Craig Geotechnical  
Foreman: K. Parent

Type of Rig: Truck  
Rig Model: CME-75  
Drilling Method: MR

Boring Location: See Plan  
Ground Surface Elev. (ft.): 25.1  
Final Boring Depth (ft.): 52  
Date Start - Finish: 5/4/2012 - 5/4/2012

H. Datum:  
V. Datum: BPQ

Hammer Type: Automatic Hammer  
Hammer Weight (lb.): 140  
Hammer Fall (in.): 30  
Auger or Casing O.D./I.D Dia (in.): 3.75

Sampler Type: Split Spoon  
Sampler O.D. (in.): 2.0  
Sampler Length (in.): 24  
Rock Core Size: N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value						
35		S-10	30-32	24	2	15 14 17 24	31	S-10 : Dense, brown, fine GRAVEL, trace Sand, trace Silt. (GP)			33.5	GRAVEL (2a)	-8.4
40		S-11	35-37	24	16	6 11 13 22	24	S-11 : Medium dense, brown, fine to medium SAND, trace Silt, trace Gravel. (SP)					
45		S-12	40-42	24	14	14 17 19 24	36	S-12 : Dense, brown, fine to coarse SAND, little Gravel, trace Silt. (SP)					
50		S-13	45-47	24	19	14 20 25 30	45	S-13 : Dense, brown, fine to coarse SAND, little Gravel, trace Silt. (SP)					
55		S-14	50-52	24	15	15 14 21 49	35	S-14 : Dense, brown, fine to coarse SAND, little Gravel, trace Silt. (SP)			52	SAND (3a)	-26.9
60								End of exploration at 52 feet.	4				

**REMARKS** 4 - Apparent Cobble boulder blocked casing at 52 feet. Borehole began caving and could not be stabilized. Borehole abandoned at 52 feet and offset to GB-03a.

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-03**



## TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
*Engineers and Scientists*

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GB-03a  
**SHEET:** 1 of 4  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** K. Parent

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 25.1  
**Final Boring Depth (ft.):** 102  
**Date Start - Finish:** 5/4/2012 - 5/7/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

### Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value						
5									1				
10													
15													
20													
25													
30													

<b>REMARKS</b>	1 - GB-03 drilled and sampled to 52 feet. GB-03a offset and drilled ahead. Sampling begins at 55 feet.
----------------	--

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-03a**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
*Engineers and Scientists*

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GB-03a  
**SHEET:** 2 of 4  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** K. Parent

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 25.1  
**Final Boring Depth (ft.):** 102  
**Date Start - Finish:** 5/4/2012 - 5/7/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value						
35													
40													
45													
50													
55		S-1	55- 55.9	11	10	24 70/5"	R	S-1 : Very dense, brown, fine to coarse SAND, some Silt, little Gravel, trace Clay. (SP)			52		-26.9
60												SAND (3a)	

## REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-03a**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
*Engineers and Scientists*

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GB-03a  
**SHEET:** 3 of 4  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** K. Parent

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 25.1  
**Final Boring Depth (ft.):** 102  
**Date Start - Finish:** 5/4/2012 - 5/7/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value						
65		S-2	60-62	24	22	25 20 26 30	46	S-2 : Dense, orange-brown, fine to coarse SAND, trace Gravel, trace Silt. (SP)					
		S-3	65-67	24	18	21 22 24 30	46	S-3 : Dense, brown, fine to medium SAND, trace Gravel, trace Silt. (SP)					
70		S-4	70-72	24	18	25 24 30 36	54	S-4 : Very dense, brown, fine to medium SAND, trace Gravel, trace Silt. (SP)					
75		S-5	75-77	24	18	21 21 27 37	48	S-5 : Dense, brown, fine to coarse SAND, trace Gravel, trace Silt. (SP)					
80		S-6	80- 81.75	21	3	33 30 49 51/5"	79	S-6 : Very dense, brown, fine to coarse SAND, some Clay and Silt, trace Gravel. (SC)					
85		S-7	85-87	24	20	33 43 37 42	80	S-7 : Very dense, gray, fine to medium SAND, some Silt, trace Gravel and Clay. (SM/SP)					
90											88.5		-63.4
												SILT (5a)	

## REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-03a**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
*Engineers and Scientists*

**Silver Star Mercedes**  
**37-14 36th Street**  
**Queens, NY**

**EXPLORATION NO.:** GB-03a  
**SHEET:** 4 of 4  
**PROJECT NO:** 41.0162002.00  
**REVIEWED BY:** D. Winslow

**Logged By:** J. Hirashima  
**Drilling Co.:** Craig Geotechnical  
**Foreman:** K. Parent

**Type of Rig:** Truck  
**Rig Model:** CME-75  
**Drilling Method:** MR

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):** 25.1  
**Final Boring Depth (ft.):** 102  
**Date Start - Finish:** 5/4/2012 - 5/7/2012

**H. Datum:**  
**V. Datum:** BPQ

**Hammer Type:** Automatic Hammer  
**Hammer Weight (lb.):** 140  
**Hammer Fall (in.):** 30  
**Auger or Casing O.D./I.D Dia (in.):** 3.75

**Sampler Type:** Split Spoon  
**Sampler O.D. (in.):** 2.0  
**Sampler Length (in.):** 24  
**Rock Core Size:** N/A

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value						
95		S-8	90-92	24	24	23 20 22 29	42	S-8 : Dense, gray SILT, some fine Sand. (ML)				SILT (5a)	
											93.5		-68.4
100		S-9	95-97	24	22	33 50 54 57	R	S-9 : Hard, gray CLAY, some Silt and Sand, trace Gravel. (CL)				CLAY (4a)	
											99		-73.9
		S-10	100- 101.6	19	19	53 41 60 30/1	R	S-10 : Very dense, gray, fine to coarse SAND, some Clay and Silt, trace Gravel. (SC)				SAND (3a)	
											102		-76.9
105								End of exploration at 102 feet.					
110													
115													
120													

## REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**GB-03a**





**August 2012**





Project 37-14 36th Street Silver Star Mercedes			Location 37-14 36th St. Queens, NY		
Project No. 41.0162002.00 Task 03			Client Crown Design and Consulting		
Drilling Company Craig Test Boring			Elevation and Datum Approx.		
Drilling Equipment 54-TR	Drilling Method Direct-Push GeoProbe		Date Started 8/1/12	Date Finished 8/1/12	
Sampler Emily Snead			Final Boring Depth 15.5 ft	Depth to Rock	
Sampler Hammer	Weight (lbs)	Drop (in)	Groundwater Depth (ft)	Initial $\nabla$	Completion $\nabla$ 24 Hours $\nabla$
Drilling Foreman Craig Cohen			GZA Inspector		Checked By

Depth (ft)	Sample Description	PID Reading (ppm)	Elev. (ft)	MATERIAL SYMBOL	Sample Data				Remarks
					Number	Type	Recov. (in)	Penetr. resist Bl/min	
0	Gray, CONCRETE, dry.	0			S-0	CORE	6		
1	Dark brown, fine to medium SAND, dry.	0							
	Light brown, fine to medium SAND, trace coarse sand, moist.	0							
2	Brown, medium to coarse SAND, trace rounded gravel, moist.	0							
	No recovery.				S-1	PUSH	17		
3									
4									
5	SAA.	0							
	Brown, fine to medium SAND with coarse gravel, dry.	0							
6	Orange-brown, BRICK and CONCRETE fragments, trace brown fine to medium sand, dry.	0							
	No recovery.				S-2	PUSH	16		
7									
8									
9	Brown, fine to coarse SAND, some coarse gravel, dry.	0							
	Dark brown-black, fine SAND, trace coarse sand, dry.	0							
	Tan gray-brown, fine SAND and CLAY, trace small gravel, moist.	0							
10	Light brown-tan, fine SAND, trace medium sand, moist.	0							
11		0			S-3	PUSH	48		
12		0							
13	Brown, fine to medium SAND and CLAY, trace coarse sand and small gravel, moist	0							
	Brown, fine to medium SAND, saturated.	0			S-4	PUSH	36		
14		0							
15		0							
16		0							
17									
18									
19									
20									

Soil sample GP-1 collected at 12:00 between 13.5-15.5 ft bgs for VOC analysis.

End of boring at 15.5 ft bgs.





Project 37-14 36th Street Silver Star Mercedes			Location 37-14 36th St. Queens, NY		
Project No. 41.0162002.00 Task 03			Client Crown Design and Consulting		
Drilling Company Trinity Environmental			Elevation and Datum Approx.		
Drilling Equipment 7720-DT	Drilling Method HydroPunch GeoProbe		Date Started 8/10/12	Date Finished 8/10/12	
Sampler Emily Snead			Final Boring Depth 17 ft	Depth to Rock	
Sampler Hammer	Weight (lbs)	Drop (in)	Groundwater Depth (ft)	Initial $\nabla$	Completion $\nabla$ 13.5 24 Hours $\nabla$
Drilling Foreman Joseph Sakellis			GZA Inspector		Checked By

Depth (ft)	Sample Description	Elev. (ft)	MATERIAL SYMBOL	Sample Data				Well Diagram	Remarks
				Number	Type	Recov. (in)	Penetr. resist Bl/6in		
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

J:\GINT PROJECT DATABASES\41.0162002.00 SILVER STAR MERCEDES.GPJ ... 8/24/2012 11:02:44 AM ... Report: Log - NJ-GZA\_ENVIRONMENTAL ... Template TEMPLATE.GDT

Groundwater sample GP-10 collected at 12:25 for VOC analysis.

Hydropunch GP-10 installed to a depth of 17 ft bgs.

Depth to water table on 8/10/2012 prior to sampling recorded at 13.5 ft bgs.

4 ft screen installed from 13-17 ft bgs.

End of boring at 17 ft bgs.





Project 37-14 36th Street Silver Star Mercedes			Location 37-14 36th St. Queens, NY		
Project No. 41.0162002.00 Task 03			Client Crown Design and Consulting		
Drilling Company Trinity Environmental			Elevation and Datum Approx.		
Drilling Equipment 7720-DT	Drilling Method HydroPunch GeoProbe		Date Started 8/10/12	Date Finished 8/10/12	
Sampler Emily Snead			Final Boring Depth 17 ft	Depth to Rock	
Sampler Hammer	Weight (lbs)	Drop (in)	Groundwater Depth (ft)	Initial $\nabla$	Completion $\nabla$ 13.5 24 Hours $\nabla$
Drilling Foreman Joseph Sakellis			GZA Inspector		Checked By

J:\GINT PROJECT DATABASES\41.0162002.00 SILVER STAR MERCEDES.GPJ ... 8/24/2012 11:02:47 AM ... Report: Log - NJ-GZA\_ENVIRONMENTAL ... Template TEMPLATE.GDT

Depth (ft)	Sample Description	Elev. (ft)	MATERIAL SYMBOL	Sample Data					Well Diagram	Remarks
				Number	Type	Recov. (in)	Penetr. resist Bl/6m			
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

Groundwater sample GP-11 collected at 10:57 for VOC analysis.

Hydropunch GP-11 installed to a depth of 17 ft bgs.

Depth to water table on 8/10/2012 prior to sampling recorded at 13.5 ft bgs.

4 ft screen installed from 13-17 ft bgs.

End of boring at 17 ft bgs.





Project	37-14 36th Street Silver Star Mercedes			Location	37-14 36th St. Queens, NY		
Project No.	41.0162002.00 Task 03			Client	Crown Design and Consulting		
Drilling Company	Craig Test Boring			Elevation and Datum	Approx.		
Drilling Equipment	54-TR	Drilling Method	Direct-Push GeoProbe	Date Started	8/1/12	Date Finished	8/1/12
Sampler	Emily Snead			Final Boring Depth	19.7 ft	Depth to Rock	
Sampler Hammer		Weight (lbs)	Drop (in)	Groundwater Depth (ft)	Initial ▽	Completion ▼13.2	24 Hours ▼
Drilling Foreman	Craig Cohen			GZA Inspector	Checked By		

J:\GINT PROJECT DATABASES\41.0162002.00 SILVER STAR MERCEDES.GPJ ... 8/24/2012 11:02:51 AM ... Report: Log - NJ-GZA\_ENVIRONMENTAL ... Template TEMPLATE.GDT

Depth (ft)	Sample Description	PID Reading (ppm)	Elev. (ft)	MATERIAL SYMBOL	Sample Data				Well Diagram	Remarks
					Number	Type	Recov. (in)	Penetr. resist. Bl/6m		
0	Gray, CONCRETE, dry.	0			S-0	CORE	9.96			
1	Brown, fine to medium SAND, some gravel, dry.	0								
2	No recovery.	0								
3					S-1	PUSH	12			
4										
5	Brown-black fine to medium SAND, some gravel, dry. Brown, fine SAND, dry.	.8								
6	No recovery.	0								
7					S-2	PUSH	16			
8										
9	Dark brown, fine to coarse SAND, dry.	3.8								
10	Dark black-brown, fine to coarse SAND and GRAVEL, dry.	0								
11	Light brown-gray, fine SAND and CLAY, damp. Light brown-tan, fine to medium SAND, damp. Brown, fine SAND and CLAY, damp. Light gray, fine SAND with CLAY, damp.	4.1 5.2 0 0			S-3	PUSH	36			
12	No recovery.	0								
13	Brown-gray-orange, fine to medium SAND with CLAY, trace coarse sand, damp.	0								
14	Light brown, fine SAND with CLAY, trace rounded gravel, damp.	1.4			S-4	PUSH	20			
15	Light brown, fine to coarse SAND with CLAY, some coarse sand and gravel, damp.	0								
16										
17										
18										
19										
20										

Temporary well GP-3 installed to a depth of 19.7 ft bgs.

Soil sample GP-3 collected at 9:20 between 11-12 ft bgs for VOC analysis.

Depth to water table on 8/1/2012 prior to sampling recorded at 13.2 ft bgs at 9:40.

Groundwater sample GP-3 collected at 9:52 for VOC analysis.

End of boring at 14.5 ft bgs.





Project	37-14 36th Street Silver Star Mercedes			Location	37-14 36th St. Queens, NY		
Project No.	41.0162002.00 Task 03			Client	Crown Design and Consulting		
Drilling Company	Craig Test Boring			Elevation and Datum	Approx.		
Drilling Equipment	54-TR	Drilling Method	Direct-Push GeoProbe	Date Started	8/1/12	Date Finished	8/1/12
Sampler	Emily Snead			Final Boring Depth	16.33 ft	Depth to Rock	
Sampler Hammer		Weight (lbs)	Drop (in)	Groundwater Depth (ft)	Initial ▽	Completion ▼14.4	24 Hours ▼
Drilling Foreman	Craig Cohen			GZA Inspector	Checked By		

J:\GINT PROJECT DATABASES\41.0162002.00 SILVER STAR MERCEDES.GPJ ... 8/24/2012 11:02:54 AM ... Report: Log - NJ-GZA\_ENVIRONMENTAL ... Template TEMPLATE.GDT

Depth (ft)	Sample Description	PID Reading (ppm)	Elev. (ft)	MATERIAL SYMBOL	Sample Data	Well Diagram	Remarks
					Number Type Recov. (in) Penetr. resist Bl/6m		
0	Gray, CONCRETE, dry.				S-0 CORE 6		
1	Gray-brown, fine to medium SAND, some coarse sand, trace gravel, dry.	0					
	Orange-brown, fine to medium SAND and CLAY, trace coarse sand, moist.	0					
2		0					
	Orange-brown, BRICK fragments, dry.	0			S-1 PUSH 31		
3	Dark brown, medium SAND, some gravel, dry.	0					
	No recovery.	0					
4		0					
	Black-brown, fine SAND and GRAVEL, dry.	0					
5		0					
	Orange-brown, fine to medium SAND, dry.	0					
6	Brown-tan, fine to coarse SAND and CLAY, some brick and gravel, moist.	0			S-2 PUSH 32		
7		0					
	No recovery.	0					
8		0					
	Brown-orange, fine to coarse SAND and CLAY, trace gravel, moist.	0					
9		0					
	Gray-tan-brown, CLAY, wet.	0					
10		0					
	Black-gray, CLAY with fine SAND, wet.	0			S-3 PUSH 42		
11		0					
	No recovery.	0					
12	Gray-brown, fine SAND and CLAY, wet.	0					
		0					
13	Gray, fine SAND, some rounded gravel, saturated.	0			S-4 PUSH 24		
14	Tan-brown, fine to medium SAND, saturated.	0					
15		0					
16							
17							
18							
19							
20							

Temporary monitoring well TW-1 installed to a depth of 16.33 ft bgs.

Soil sample GP-4 collected at 13:00 between 11-12 ft bgs for VOC and SVOC analysis.

Groundwater sample GP-4 collected at 13:20 for VOC analysis.

Depth to water table on 8/1/2012 prior to sampling recorded at 14.41 ft bgs. End of boring at 14.5 ft bgs.





Project 37-14 36th Street Silver Star Mercedes			Location 37-14 36th St. Queens, NY		
Project No. 41.0162002.00 Task 03			Client Crown Design and Consulting		
Drilling Company Craig Test Boring			Elevation and Datum Approx.		
Drilling Equipment 54-TR	Drilling Method Direct Push GeoProbe		Date Started 8/1/12	Date Finished 8/1/12	
Sampler Emily Snead			Final Boring Depth 9 ft	Depth to Rock	
Sampler Hammer	Weight (lbs)	Drop (in)	Groundwater Depth (ft)	Initial ▽	Completion ▼ 24 Hours ▼
Drilling Foreman Craig Cohen			GZA Inspector		Checked By

J:\GINT PROJECT DATABASES\41.0162002.00 SILVER STAR MERCEDES.GPJ ... 8/24/2012 11:02:58 AM ... Report: Log - NJ-GZA\_ENVIRONMENTAL...Template TEMPLATE.GDT

Depth (ft)	Sample Description	PID Reading (ppm)	Elev. (ft)	MATERIAL SYMBOL	Sample Data				Remarks
					Number	Type	Recov. (in)	Penetr. resist Bl/6in	
0	Gray, CONCRETE, dry.				S-0	CORE	6		
1	Light tan, fine to coarse SAND with GRAVEL, dry.	0							
	Brown, fine to medium SAND, trace rounded gravel, dry.	0							
2		0							
3	No recovery.	0			S-1	PUSH	26		
4									
5	Dark tan, fine to coarse SAND, some gravel, dry.	0							
6	Brown, fine to medium SAND, trace gravel, dry.	0							
7	No recovery.	0			S-2	PUSH	21		
8									
9	Brown, fine to medium SAND with CLAY, moist.	0			S-3	PUSH	6		
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

Soil sample GP-5 collected at 15:05 between 8-9 ft bgs for VOC and SVOC analysis.

Refusal, end of boring at 9 ft bgs.





Project	37-14 36th Street Silver Star Mercedes			Location	37-14 36th St. Queens, NY		
Project No.	41.0162002.00 Task 03			Client	Crown Design and Consulting		
Drilling Company	Craig Test Boring			Elevation and Datum	Approx.		
Drilling Equipment	54-TR	Drilling Method	Direct Push GeoProbe	Date Started	8/1/12	Date Finished	8/1/12
Sampler	Emily Snead			Final Boring Depth	19 ft	Depth to Rock	
Sampler Hammer		Weight (lbs)	Drop (in)	Groundwater Depth (ft)	Initial ▽	Completion ▼13.6	24 Hours ▼
Drilling Foreman	Craig Cohen			GZA Inspector	Checked By		

Depth (ft)	Sample Description	Elev. (ft)	MATERIAL SYMBOL	Sample Data				Well Diagram	Remarks
				Number	Type	Recov. (in)	Penetr. resist Bl/6in		
0	Gray, CONCRETE, dry.			S-1	CORE	6			
1									
2									
3									Groundwater sample GP-6 collected at 10:12 for VOC analysis.
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									Depth to water table on 8/1/2012 prior to sampling recorded at 13.65 ft bgs.
15									
16									
17									
18									
19									End of boring at 19 ft bgs.
20									

J:\GINT PROJECT DATABASES\41.0162002.00 SILVER STAR MERCEDES.GPJ ... 8/24/2012 11:03:00 AM ... Report: Log - NJ-GZA\_ENVIRONMENTAL ... Template TEMPLATE.GDT





Project	37-14 36th Street Silver Star Mercedes			Location	37-14 36th St. Queens, NY		
Project No.	41.0162002.00 Task 03			Client	Crown Design and Consulting		
Drilling Company	Craig Test Boring			Elevation and Datum	Approx.		
Drilling Equipment	54-TR	Drilling Method	Direct-Push GeoProbe	Date Started	7/31/12	Date Finished	7/31/12
Sampler	Emily Snead			Final Boring Depth	16 ft	Depth to Rock	
Sampler Hammer		Weight (lbs)	Drop (in)	Groundwater Depth (ft)	Initial <u>▽</u>	Completion <u>▽</u> 14.6	24 Hours <u>▽</u>
Drilling Foreman	Craig Cohen			GZA Inspector		Checked By	

[illegible]





Project	37-14 36th Street Silver Star Mercedes				Location	37-14 36th St. Queens, NY			
Project No.	41.0162002.00 Task 03				Client	Crown Design and Consulting			
Drilling Company	Trinity Environmental		Direct-Push & HydroPunch GeoProbe		Elevation and Datum	Approx.			
Drilling Equipment	7720-DT	Drilling Method			Date Started	8/10/12	Date Finished	8/10/12	
Sampler	Emily Snead				Final Boring Depth	15 ft		Depth to Rock	
Sampler Hammer		Weight (lbs)	Drop (in)		Groundwater Depth (ft)	Initial $\nabla$	Completion $\nabla$ 13.5	24 Hours $\nabla$	
Drilling Foreman	Joseph Sakellis				GZA Inspector			Checked By	

J:\GINT PROJECT DATABASES\41.0162002.00 SILVER STAR MERCEDES.GPJ... 8/24/2012 11:03:05 AM ... Report: Log - NJ-GZA\_ENVIRONMENTAL...Template TEMPLATE.GDT

Depth (ft)	Sample Description	Elev. (ft)	MATERIAL SYMBOL	Sample Data				Well Diagram	Remarks
				Number	Type	Recov. (in)	Penetr. resist Bl/6in		
0	Light gray-tan CONCRETE, dry.								
1	Orange-brown, fine to coarse SAND, trace gravel, dry.								
2	Orange-brown, medium to coarse SAND with GRAVEL, dry.								
3	No recovery.								
4									
5	SAA.								
6	Light tan-brown fine to coarse SAND with GRAVEL, dry.								
7	Brown-orange, fine to medium SAND, trace gravel, moist.								
8	No recovery.								
9									
10	SAA.								
11	Brown-tan, fine to coarse SAND, trace gravel, dry.								
12	Gray-green, CLAY, wet.								
13	Tan-gray, medium to coarse SAND with GRAVEL, moist.								
14	Tan-brown, CLAY with fine SAND, moist.								
15	Orange-brown, fine to medium SAND and GRAVEL, wet.								
16	Light brown, fine SAND, trace medium sand, saturated.								
17									
18									
19									
20									

Hydropunch GP-8 installed to a depth of 17 ft bgs.

Groundwater sample GP-8 collected at 9:43 for VOC analysis.

Depth to water table on 8/10/2012 prior to sampling recorded at 13.5 ft bgs.

4 ft screen installed from 13-17 ft bgs.

End of boring at 15 ft bgs.





Project 37-14 36th Street Silver Star Mercedes			Location 37-14 36th St. Queens, NY		
Project No. 41.0162002.00 Task 03			Client Crown Design and Consulting		
Drilling Company Trinity Environmental			Elevation and Datum Approx.		
Drilling Equipment 7720-DT	Drilling Method HydroPunch GeoProbe		Date Started 8/10/12	Date Finished 8/10/12	
Sampler Emily Snead			Final Boring Depth 17 ft	Depth to Rock	
Sampler Hammer	Weight (lbs)	Drop (in)	Groundwater Depth (ft)	Initial $\nabla$	Completion $\nabla$ 14 24 Hours $\nabla$
Drilling Foreman Joseph Sakellis			GZA Inspector		Checked By

J:\GINT PROJECT DATABASES\41.0162002.00 SILVER STAR MERCEDES.GPJ ... 8/24/2012 11:03:07 AM ... Report: Log - NJ-GZA\_ENVIRONMENTAL ... Template TEMPLATE.GDT

Depth (ft)	Sample Description	Elev. (ft)	MATERIAL SYMBOL	Sample Data					Well Diagram	Remarks
				Number	Type	Recov. (in)	Penetr. resist Bl/6in			
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

Groundwater sample GP-9 collected at 11:40 for VOC analysis.

Hydropunch GP-9 installed to a depth of 17 ft bgs.

Depth to water table on 8/10/2012 prior to sampling recorded at 14 ft bgs.

4 ft screen installed from 13-17 ft bgs.





**October 2013**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental of New York**  
*Engineers and Scientists*

**Silver Star Motors**  
**37-14 36th Street**  
**Queens, New York**

BORING NO.: SB-1  
 SHEET: 1 of 1  
 PROJECT NO: 12.0076158.01  
 CHECKED BY:

GZA Inspector: S.Singh  
 Drilling Co.: Trinity Environmental  
 Foreman: J. Sakellis  
 Type of Drill Rig:

Drilling Method: Direct Push  
 Auger/Casing:  
 O.D./I.D Dia (in.):

Boring Location (Lat./Long.): See Plan  
 Ground Surface Elev. (ft.): Datum:  
 Final Boring Depth (ft.): 15  
 Date Start/Finish: 10/17/2013 - 10/17/2013

Sampler Type: SS  
 Sampler O.D. (in.): 2.0  
 Sampler Length (in.): 60

Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time

Sampler used throughout unless otherwise noted on the log.

Depth (ft)	Sample				Sample Description Modified Burmister	USCS	Remark	Elev. (ft.)	Profile Description (NYCBC)	Depth (ft.)
	No.	Depth (ft.)	Pen./ Rec.	PID (ppm)						
1	S-1	0-5	60/		S-1: Concrete					
2		0.5-2	/		: Dark brown, fine to medium SAND, trace Silt, some Gravel, dry					
3		2-5	/		: Brown, fine to coarse SAND, Brick, some Gravel, dry					
4										
5	S-2	5-10	60/		S-2: Brown, fine to coarse SAND, Brick fragment, some Gravel, Silt, trace Clay, dry					
6										
7										
8										
9	S-3	10-13	60/		S-3: Brown to grayish brown, fine to medium silky SAND, trace Clay, wet					
10										
11										
12										
13		13-15	/		: Gray, SILT, saturated					
14										
15					End of exploration at 15 feet.					
16										
17										
18										
19										
20										

## REMARKS

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.  
 All depth measurements are approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated.  
 Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

**SB-1**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental of New York**  
*Engineers and Scientists*

**Silver Star Motors**  
**37-14 36th Street**  
**Queens, New York**

BORING NO.: SB-2  
 SHEET: 1 of 1  
 PROJECT NO: 12.0076158.01  
 CHECKED BY:

GZA Inspector: S.Singh  
 Drilling Co.: Trinity Environmental  
 Foreman: J. Sakellis  
 Type of Drill Rig:

Drilling Method: Direct Push  
 Auger/Casing:  
 O.D./I.D Dia (in.):

Boring Location (Lat./Long.): See Plan  
 Ground Surface Elev. (ft.): Datum:  
 Final Boring Depth (ft.): 15  
 Date Start/Finish: 10/12/2013 - 10/12/2013

Sampler Type: SS  
 Sampler O.D. (in.): 2.0  
 Sampler Length (in.): 60

Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time

Sampler used throughout unless otherwise noted on the log.

Depth (ft)	Sample				Sample Description Modified Burmister	USCS	Remark	Elev. (ft.)	Profile Description (NYCBC)	Depth (ft.)
	No.	Depth (ft.)	Pen./ Rec.	PID (ppm)						
1	S-1	0-0.5	60/		S-1: Concrete					
2		0.5-2.5	/		: Red-brown, fine to medium SAND, some Gravel, trace Silt, dry					
3		2.5-5	/		: Brown, fine to medium SAND, some Silt, trace Gravel					
4	S-2									
5		5-10	60/		S-2: Dark-brown, fine to medium SAND, some Silt, some Cobble, dry					
6										
7	S-3									
8		10-12	60/		S-3: Dark-brown, fine to medium SAND, some Silt, some Cobble and Gravel, dry					
9										
10		12-13.5	/		: Brown to dark grayish SILT, trace Clay					
11										
12		13.5-14.5	/		: Brown, medium to coarse SAND, some Silt, some Gravel, moist					
13		14.5-15	/		: Dark brown-grayish SILT, wet					
14										
15					End of exploration at 15 feet.					
16										
17										
18										
19										
20										

## REMARKS

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.  
 All depth measurements are approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated.  
 Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

**SB-2**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental of New York**  
*Engineers and Scientists*

**Silver Star Motors**  
**37-14 36th Street**  
**Queens, New York**

BORING NO.: SB-3  
 SHEET: 1 of 1  
 PROJECT NO: 12.0076158.01  
 CHECKED BY:

GZA Inspector: S.Singh  
 Drilling Co.: Trinity Environmental  
 Foreman: J. Sakellis  
 Type of Drill Rig:

Drilling Method: Direct Push  
 Auger/Casing:  
 O.D./I.D Dia (in.):

Boring Location (Lat./Long.): See Plan  
 Ground Surface Elev. (ft.): Datum:  
 Final Boring Depth (ft.): 15  
 Date Start/Finish: 10/16/2013 - 10/16/2013

Sampler Type: SS  
 Sampler O.D. (in.): 2.0  
 Sampler Length (in.): 60

Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time

Sampler used throughout unless otherwise noted on the log.

Depth (ft)	Sample				Sample Description Modified Burmister	USCS	Remark	Elev. (ft.)	Profile Description (NYCBC)	Depth (ft.)
	No.	Depth (ft.)	Pen./ Rec.	PID (ppm)						
1	S-1	0-5	60/		S-1: Asphalt					
2		0.5-2.5	/	0	: Brown, fine to medium SAND, trace Gravel, dry					
3		2.5-4	/	0	: Brown, fine to medium SAND, trace Clay, trace Gravel, trace coarse Sand, dry					
4		4-5	/		: Dark brown, medium SAND, some Gravel, trace Clay, dry					
5	S-2	5-8	60/		S-2: Tan brown, fine to medium SAND, some Gravel, dry					
6				0						
7				0						
8		8-10	/		: Brown-orange, fine to coarse SAND, trace Clay, some Gravel, Cobbles @ 10' bgs.					
9	S-3	10-12	60/	0	S-3: Brown-orange, fine to coarse SAND, trace Clay, some Gravel, Cobbles @ 10' bgs.					
10				0						
11		12-13.5	/		: Brown to black grayish, fine SAND, trace Clay, moist					
12		13.5-15	/		: Tan-brown, fine to medium SAND, some Silt, saturated @ 14.5'					
13										
14										
15					End of exploration at 15 feet.					
16										
17										
18										
19										
20										

**REMARKS**

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.  
 All depth measurements are approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated.  
 Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

**SB-3**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental of New York**  
*Engineers and Scientists*

**Silver Star Motors**  
**37-14 36th Street**  
**Queens, New York**

BORING NO.: SB-4  
 SHEET: 1 of 1  
 PROJECT NO: 12.0076158.01  
 CHECKED BY:

GZA Inspector: S.Singh  
 Drilling Co.: Trinity Environmental  
 Foreman: J. Sakellis  
 Type of Drill Rig:

Drilling Method: Direct Push  
 Auger/Casing:  
 O.D./I.D Dia (in.):

Boring Location (Lat./Long.): See Plan  
 Ground Surface Elev. (ft.): Datum:  
 Final Boring Depth (ft.): 15  
 Date Start/Finish: 10/16/2013 - 10/16/2013

Sampler Type: SS  
 Sampler O.D. (in.): 2.0  
 Sampler Length (in.): 60

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time

Sampler used throughout unless otherwise noted on the log.

Depth (ft)	Sample				Sample Description Modified Burmister	USCS	Remark	Elev. (ft.)	Profile Description (NYCBC)	Depth (ft.)
	No.	Depth (ft.)	Pen./ Rec.	PID (ppm)						
1	S-1	0-.25	60/		S-1: Asphalt					
		0.25-1	/	0	: Dark brown, fine to medium SAND, trace Silt, trace Gravel, dry					
		1-2	/		: FILL (white Concrete and Brick fragment, dry)					
2				0						
3		2-5	/		: Red brown, fine to medium SAND, some Silt, some Gravel, trace Brick fragment, dry					
4				0						
5				0						
6	60	5-9	24/	0	60: Brown, fine to medium SAND, some Gravel, trace Silt, dry					
7				0						
8										
9										
10		9-10	/		: Brown, medium to coarse SAND, some Silt, trace Gravel, some staining, moist					
11	60	10-11	54/	0	60: Brown, medium to coarse SAND, some Silt, trace Gravel, some staining, moist					
12		11-15	/		: Dark brown, fine to coarse SAND, Silt, some Gravel, wet					
13				0						
14										
15										
16					End of exploration at 15 feet.					
17										
18										
19										
20										

## REMARKS

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.  
 All depth measurements are approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated.  
 Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

**SB-4**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental of New York**  
*Engineers and Scientists*

**Silver Star Motors**  
**37-14 36th Street**  
**Queens, New York**

BORING NO.: SB-5  
 SHEET: 1 of 1  
 PROJECT NO: 12.0076158.01  
 CHECKED BY:

GZA Inspector: S.Singh  
 Drilling Co.: Trinity Environmental  
 Foreman: J. Sakellis  
 Type of Drill Rig:

Drilling Method: Direct Push  
 Auger/Casing:  
 O.D./I.D Dia (in.):

Boring Location (Lat./Long.): See Plan  
 Ground Surface Elev. (ft.): Datum:  
 Final Boring Depth (ft.): 15  
 Date Start/Finish: 10/16/2013 - 10/16/2013

Sampler Type: SS  
 Sampler O.D. (in.): 2.0  
 Sampler Length (in.): 60

Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time

Sampler used throughout unless otherwise noted on the log.

Depth (ft)	Sample				Sample Description Modified Burmister	USCS	Remark	Elev. (ft.)	Profile Description (NYCBC)	Depth (ft.)
	No.	Depth (ft.)	Pen./ Rec.	PID (ppm)						
1	S-1	0-.25	60/	0	S-1: Asphalt					
2		0.25-2.5	/	0	: Dark brown, fine to coarse SAND, trace Silt, trace Asphalt, trace Gravel, dry					
3		2.5-5	/	0	: Red brown, fine to medium SAND, some Silt, some Cobbles and Gravel, dry					
4	S-2	5-8.5	60/	0	S-2: Red brown, medium SAND, some Silt, trace Gravel, dry					
5		8.5-10	/		: Brown orange SILT, little fine SAND, trace Gravel, dry					
6		10-12	60/		S-3: Brown orange, fine SAND, some Silt, dry					
7	S-3	12-12.5	/		: Organic matter (wood chips), Brown orange, fine SAND, some Silt, wet					
8		12.5-14	/		: Dark brown SILT, trace Clay, black ash staining observed, slight odor, saturated @ 12.5'					
9		14-15	/		: Brown, fine SAND, Brick fragment, trace Silt, saturated					
10					End of exploration at 15 feet.					
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

**REMARKS**

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.  
 All depth measurements are approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated.  
 Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

**SB-5**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental of New York**  
*Engineers and Scientists*

**Silver Star Motors**  
**37-14 36th Street**  
**Queens, New York**

BORING NO.: SB-6  
 SHEET: 1 of 1  
 PROJECT NO: 12.0076158.01  
 CHECKED BY:

GZA Inspector: S.Singh  
 Drilling Co.: Trinity Environmental  
 Foreman: J. Sakellis  
 Type of Drill Rig:

Drilling Method: Direct Push  
 Auger/Casing:  
 O.D./I.D Dia (in.):

Boring Location (Lat./Long.): See Plan  
 Ground Surface Elev. (ft.): Datum:  
 Final Boring Depth (ft.): 15  
 Date Start/Finish: 10/16/2013 - 10/16/2013

Sampler Type: SS  
 Sampler O.D. (in.): 2.0  
 Sampler Length (in.): 60

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time

Sampler used throughout unless otherwise noted on the log.

Depth (ft)	Sample				Sample Description Modified Burmister	USCS	Remark	Elev. (ft.)	Profile Description (NYCBC)	Depth (ft.)
	No.	Depth (ft.)	Pen./ Rec.	PID (ppm)						
1	S-1	0-0.25	60/	0	S-1: Asphalt					
		0.25-1.5	/		: Concrete					
2		1.5-3	/	0	: Red Brown, fine to medium SAND, trace Gravel, dry					
3				0						
4	S-2	3-5	/	0	: Dark tan, fine to coarse SAND, some Gravel, dry					
5										
6		5-8	60/	2	S-2: Color changes from dark tan to grayish brown, fine to coarse SAND, some Gravel, dry					
7				2						
8	S-3	8-8.5	/		: Dark black grayish, fine to medium SAND, some Cobbles, moist					
9		8.5-10	/		: Brown, fine to medium SAND, trace Clay, moist					
10										
11		10-12	60/	0	S-3: Brown, fine to medium SAND, trace Clay, moist					
12				0						
13		12-14	/	0	: Dark brown, SILT, wet					
14										
15		14-15	/		: Black brown, SILT, saturated					
16	End of exploration at 15 feet.									
17										
18										
19										
20										

## REMARKS

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.  
 All depth measurements are approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated.  
 Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

**SB-6**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental of New York**  
*Engineers and Scientists*

**Silver Star Motors**  
**37-14 36th Street**  
**Queens, New York**

BORING NO.: SB-7  
 SHEET: 1 of 1  
 PROJECT NO: 12.0076158.01  
 CHECKED BY:

GZA Inspector: S.Singh  
 Drilling Co.: Trinity Environmental  
 Foreman: J. Sakellis  
 Type of Drill Rig:

Drilling Method: Direct Push  
 Auger/Casing:  
 O.D./I.D Dia (in.):

Boring Location (Lat./Long.): See Plan  
 Ground Surface Elev. (ft.): Datum:  
 Final Boring Depth (ft.): 15  
 Date Start/Finish: 10/16/2013 - 10/16/2013

Sampler Type: SS  
 Sampler O.D. (in.): 2.0  
 Sampler Length (in.): 60

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time

Sampler used throughout unless otherwise noted on the log.

Depth (ft)	Sample				Sample Description Modified Burmister	USCS	Remark	Elev. (ft.)	Profile Description (NYCBC)	Depth (ft.)
	No.	Depth (ft.)	Pen./ Rec.	PID (ppm)						
1	S-1	0-5	60/	0	S-1: Asphalt					
2		0.5-2.5	/	0	: Dark brown, medium to coarse SAND, some Gravel, Concrete, fill material, dry					
3		2.5-5	/	0	: Brown, fine to medium SAND, some Gravel, trace Silt, dry					
4										
5	S-2	5-6.5	60/	0	S-2: Brown, fine to medium SAND, some Gravel, trace Silt, dry					
6										
7		6.5-7	/	0	: Red brown, silty SAND, Brick fragment					
8		7-8.5	/	0	: Red brown, silty SAND, brick, Concrete, dry					
9		8.5-10	/	0	: Black, stained, fine to medium SAND, some Silt, organic matter observed @ 9' bgs, moist					
10	S-3	10-13	60/	59	S-3: Brown, fine to medium SAND, some Silt, some Gravel, staining, petroleum odor observed, wet					
11				108						
12				61						
13		13-15	/	3	: Dark grayish, medium to coarse SAND, some Silt, heavy staining, petroleum odor, saturated					
14				2						
15				136						
16				1						
17				0						
18					End of exploration at 15 feet.					
19										
20										

## REMARKS

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard. All depth measurements are approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

**SB-7**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental of New York**  
*Engineers and Scientists*

**Silver Star Motors**  
**37-14 36th Street**  
**Queens, New York**

BORING NO.: SB-8  
SHEET: 1 of 1  
PROJECT NO: 12.0076158.01  
CHECKED BY:

GZA Inspector: S.Singh  
Drilling Co.: Trinity Environmental  
Foreman: J. Sakellis  
Type of Drill Rig:

Drilling Method: Direct Push  
Auger/Casing:  
O.D./I.D Dia (in.):

Boring Location (Lat./Long.): See Plan  
Ground Surface Elev. (ft.): Datum:  
Final Boring Depth (ft.): 15  
Date Start/Finish: 10/16/2013 - 10/16/2013

Sampler Type: SS  
Sampler O.D. (in.): 2.0  
Sampler Length (in.): 60

Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time

Sampler used throughout unless otherwise noted on the log.

Depth (ft)	Sample				Sample Description Modified Burmister	USCS	Remark	Elev. (ft.)	Profile Description (NYCBC)	Depth (ft.)
	No.	Depth (ft.)	Pen./ Rec.	PID (ppm)						
1	S-1	0-5	60/	0	S-1: Asphalt					
		0.5-1.5	/	0	: Concrete and trace Asphalt					
2		1.5-5	/	0	: Dark brown, fine to medium SAND, some Gravel, Brick fragment,					
3				0	Cobbles @ 4.5-5', dry					
4										
5	S-2	5-8	60/	23	S-2: Dark brown, fine to medium SAND, mix Brick and Cobbles					
6				1.7	fragment, dry					
7				521						
8				637						
9		8-10	/		: Dark brown, fine to coarse SAND, some Silt, some staining					
10					observed @ 9.5', dry					
11	S-3	10-12	60/	151	S-3: Tan brown, coarse SAND, trace Brick fragment @ 10', staining					
12				472	observed, wet					
13				776						
14				812						
15		12-15	/	614	: Grayish brown, silty SAND, staining, petroleum odor, saturated					
16				215						
17				875						
18				1532						
19				900						
20				772						
					End of exploration at 15 feet.					

## REMARKS

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.  
All depth measurements are approximate. Stratification lines represent approximate boundary between soil types,  
transitions may be gradual. Water level readings have been made at times and under conditions stated.  
Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

**SB-8**



# GEOPROBE LOG



**GZA**  
**GeoEnvironmental of New York**  
*Engineers and Scientists*

**Silver Star Motors**  
**37-14 36th Street**  
**Queens, New York**

BORING NO.: SB-9  
 SHEET: 1 of 1  
 PROJECT NO: 12.0076158.01  
 CHECKED BY:

GZA Inspector: S.Singh  
 Drilling Co.: Trinity Environmental  
 Foreman: J. Sakellis  
 Type of Drill Rig:

Drilling Method: Direct Push  
 Auger/Casing:  
 O.D./I.D Dia (in.):

Boring Location (Lat./Long.): See Plan  
 Ground Surface Elev. (ft.): Datum:  
 Final Boring Depth (ft.): 15  
 Date Start/Finish: 10/17/2013 - 10/17/2013

Sampler Type: SS  
 Sampler O.D. (in.): 2.0  
 Sampler Length (in.): 60

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time

Sampler used throughout unless otherwise noted on the log.

Depth (ft)	Sample				Sample Description Modified Burmister	USCS	Remark	Elev. (ft.)	Profile Description (NYCBC)	Depth (ft.)
	No.	Depth (ft.)	Pen./ Rec.	PID (ppm)						
1	S-1	0-5	60/		S-1: Asphalt					
2		0.5-5	/		: Brown, fine to medium SAND, some Silt, some Gravel, Concrete layer @ 1.5-2' bgs., dry					
3										
4										
5	S-2	5-10	60/		S-2: Dark brown, fine to coarse SAND, some Silt, trace Gravel, moist @ 10' bgs.					
6										
7										
8										
9										
10	S-3	10-15	60/		S-3: Dark brown to grayish SILT, some Gravel, light petroleum odor					
11										
12										
13										
14										
15										
16					End of exploration at 15 feet.					
17										
18										
19										
20										

## REMARKS

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.  
 All depth measurements are approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated.  
 Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

**SB-9**





**April 2014**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
*Engineers and Scientists*

36th Street QDP  
37-1436th Street  
Long Island City, NY

**EXPLORATION NO.:** MW-4  
**SHEET:** 1 of 1  
**PROJECT NO:** 12.0076158.05  
**REVIEWED BY:**

**Logged By:** B. Engard  
**Drilling Co.:** Soil Mechanics  
**Foreman:** Glenn

**Type of Rig:** CME  
**Rig Model:** 45C  
**Drilling Method:** HSA

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):**  
**Final Boring Depth (ft.):** 29  
**Date Start - Finish:** 4/30/2014 - 4/30/2014

**H. Datum:**  
**V. Datum:**

**Hammer Type:**  
**Hammer Weight (lb.):**  
**Hammer Fall (in.):**  
**Auger or Casing O.D./I.D Dia (in.):** 6

**Sampler Type:** Cuttings  
**Sampler O.D. (in.):**  
**Sampler Length (in.):**  
**Rock Core Size:**

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
5/1/14	08:55	13.22	

Depth (ft)	Casing Blows/ Core Rate	Sample					SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)							
		S-1	0-5					S-1 : Brown Sand, some Silt, dry to moist.				SAND	
5		S-2	5-10					S-2 : Brown Sand with Silt.			5	SAND AND SILT	
10		S-3	10-21					S-3 : Brown Sand with Silt, becoming wet.			10		
15												SAND	
20		S-4	20-29					S-4 : 21-22': Gravel 23-24": Gravel 26-27": Cobbles			21	GRAVEL WITH SAND	
											22	SAND	
											23	SAND	
											25	COBBLES WITH SAND	
25											26		
												SAND	
30								End of exploration at 29 feet.			29		

## REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**MW-4**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
*Engineers and Scientists*

36th Street QDP  
37-1436th Street  
Long Island City, NY

**EXPLORATION NO.:** MW-5  
**SHEET:** 1 of 1  
**PROJECT NO:** 12.0076158.05  
**REVIEWED BY:**

**Logged By:** B. Engard  
**Drilling Co.:** Soil Mechanics  
**Foreman:** Glenn

**Type of Rig:** CME  
**Rig Model:** 45C  
**Drilling Method:** HSA

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):**  
**Final Boring Depth (ft.):** 29  
**Date Start - Finish:** 4/30/2014 - 4/30/2014

**H. Datum:**  
**V. Datum:**

**Hammer Type:**  
**Hammer Weight (lb.):**  
**Hammer Fall (in.):**  
**Auger or Casing O.D./I.D Dia (in.):** 6

**Sampler Type:** Cuttings  
**Sampler O.D. (in.):**  
**Sampler Length (in.):**  
**Rock Core Size:**

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time

Depth (ft)	Casing Blows/ Core Rate	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
5		S-1	0-7					S-1 : Fill, dark brown Sand with Gravel and brick fragments, dry.				FILL	
10		S-2	7-22					S-2 : Yellowish brown Sand, some Silt, medium grained.			7		
15													
20													
25													
27		S-3	27-29					S-3 : Gravel and cobbles.			27		
29												COBBLES/GRAVEL/SAND	
30								End of exploration at 29 feet.			29		

## REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**MW-5**



# TEST BORING LOG



**GZA**  
**GeoEnvironmental, Inc**  
*Engineers and Scientists*

36th Street QDP  
37-1436th Street  
Long Island City, NY

**EXPLORATION NO.:** MW-6  
**SHEET:** 1 of 1  
**PROJECT NO:** 12.0076158.05  
**REVIEWED BY:**

**Logged By:** B. Engard  
**Drilling Co.:** Soil Mechanics  
**Foreman:** Glenn

**Type of Rig:** CME  
**Rig Model:** 45C  
**Drilling Method:** HSA

**Boring Location:** See Plan  
**Ground Surface Elev. (ft.):**  
**Final Boring Depth (ft.):** 29  
**Date Start - Finish:** 4/30/2014 - 4/30/2014

**H. Datum:**  
**V. Datum:**

**Hammer Type:**  
**Hammer Weight (lb.):**  
**Hammer Fall (in.):**  
**Auger or Casing O.D./I.D Dia (in.):** 6

**Sampler Type:** Cuttings  
**Sampler O.D. (in.):**  
**Sampler Length (in.):**  
**Rock Core Size:**

## Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time

--	--	--	--

Depth (ft)	Casing Blows/ Core Rate	Sample					SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)							
		S-1	0-4					S-1 : Brown Sand with Gravel and brick fragments.				FILL	
5		S-2	4-29					S-2 : Brown to yellowish brown Sand with some Silt.			4	-----	
10													
15													
20												SAND	
25													
29													
30								End of exploration at 29 feet.			29		

## REMARKS

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

**Exploration No.:**  
**MW-6**





## **Appendix D – Field Sampling Procedures / Quality Assurance Plan**



**FIELD SAMPLING PROCEDURES/ QUALITY  
ASSURANCE PROJECT PLAN**

**37-14 36<sup>TH</sup> STREET  
QUEENS COUNTY  
LONG ISLAND CITY, NEW YORK  
NYSDEC Site Number C241156**

**PREPARED FOR:**

BCP Volunteer 36 Street QDP LLC  
37-14 36<sup>th</sup> Street, Queens, New York

**PREPARED BY:**

Goldberg-Zoino Associates of New York P.C.  
d/b/a GZA GeoEnvironmental of New York (GZA)  
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New York, NY 10001  
212-594-8140

November 2015  
File No. 12.0076158.00



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## **1.00 INTRODUCTION**

GZA GeoEnvironmental of New York (GZA) has developed this Quality Assurance Project Plan (QAPP) to establish the procedures for sample collection, analysis and quality assurance for Post Remediation Groundwater Monitoring (Monitoring) activities performed at 37-14 36<sup>th</sup> Street, Long Island City, New York (the Site). Sampling and analytical activities will be conducted in accordance with this QAPP, and the applicable requirements of the New York State Department of Environmental Conservation (NYSDEC).

### **1.10 PROJECT SCOPE**

This QAPP describes field, analytical and reporting standard operating procedures (SOPs) that will be utilized during Monitoring. The information and data collected will be utilized to assess the environmental conditions at the Site. These procedures generally apply to the following activities:

- Groundwater monitoring well installation
- Monitoring well sampling
- Monitoring well gauging
- Laboratory analysis
- Report preparation

### **1.20 PROJECT OBJECTIVES**

This QAPP was prepared to ensure that field sampling procedures, selected analytical methods, and chemical analytical data are of sufficient quality to meet the intended usage. As specific conditions and additional information warrant, this QAPP may be amended or revised to include Site-specific quality assurance/quality control (QA/QC) procedures. The information/data collected during Monitoring will be used to evaluate the effectiveness of soil removal and oxygen release compound application on decreasing the mass of dissolved petroleum compounds in groundwater beneath the Site and to evaluate groundwater flow direction.

### **1.30 SAMPLE DESIGN AND RATIONALE**

The Monitoring sampling program has been designed to evaluate groundwater conditions on the downgradient side of the Site following soil removal activities.



## **2.00 PROJECT ORGANIZATION AND RESPONSIBILITIES**

A description of specific roles and responsibilities is provided below.

The Project Manager will be responsible for:

- Initiating project activities;
- Identifying project staff, equipment, and other resource requirements;
- Interfacing with client concerning technical matters and project progress;
- Monitoring task activities, and adjusting efforts or resources, as required to help ensure that established quality objectives are maintained;
- Internal project administration; and
- Oversight of report preparation.

The Field Team Leader/Site Supervisor will be responsible for:

- Supervising the technical performance of the project staff and field subcontractors;
- Ensuring compliance with the work plan;
- Coordinating data validation and quality assurance;
- Report preparation; and
- Working with the Project Manager in coordinating overall project quality assurance including preparation of work plans and review of data.

The field team will be comprised of various members of GZA staff based on their availability.

The Health and Safety Coordinator will be responsible for working with the Project Manager and Field Team Leader/Site Supervisor in formulation of a Site-specific Health and Safety Plan.

Quality Assurance will be accomplished through the GZA Consultant Reviewer project review process.

## **3.00 QUALITY ASSURANCE OBJECTIVES FOR MEASUREMENT DATA**

### **3.10 DATA QUALITY PROTOCOLS**

New York State Department of Health Environmental Laboratory Accreditation Program (ELAP)-certified laboratories will provide analytical services for the Monitoring program. Groundwater samples will be analyzed for one or more compound classes using the following analytical methods:

- CLP-51 Volatile Organic Compounds by EPA Method 8260B



Sample containers, preservation, holding times and volumes will be in accordance with the particular EPA method.

### 3.20 ACCURACY

Accuracy is defined as the degree of agreement of a measurement or average of measurements with an accepted reference or true value. Accuracy will be evaluated by use of calibration and calibration verification procedures, laboratory control samples, and surrogate, matrix, and analytical spikes at the frequencies specified in Section 4.60. Not all accuracy checks are incorporated into each analytical method.

### 3.30 PRECISION

Precision is defined as a measure of mutual agreement among individual measurements of the sample property. Precision will be evaluated by the analysis of laboratory and matrix spike duplicate samples at the rate specified in Section 4.60. We will also collect 5% duplicate samples in the field for comparison purposes.

### 3.40 DATA REPRESENTATIVENESS

Samples will be collected in a standardized manner designed to produce representative samples. This QAPP and the RI are designed so that the samples collected will present an accurate representation of actual Site conditions.

### 3.50 DATA COMPARABILITY

Data comparability will be ensured by control of sample collection methodology, analytical methodology, and data reporting and by the usage of USEPA-approved methodologies. The QAPP and sampling methodologies are designed so that comparability questions are minimized. Standardized sampling techniques and analytical methods will be used to attain stated project objectives. The required level of laboratory deliverables will maximize comparability of analytical results.

### 3.60 DATA COMPLETENESS

The number of samples to be collected is based on the need for data completeness. Data gaps will be addressed when/if they occur by systematic re-sampling and/or increasing the number of sampling points.



## **4.00 SAMPLING PROCEDURES**

Environmental sampling will include groundwater sampling. Additionally, wastes generated during well installation and development will be sampled and tested for characterization for disposal, as needed. Groundwater samples will be collected using bladder pumps, submersible pumps or bailers. Grab or composite sampling using appropriate hand-held sampling equipment will be the preferred method for waste characterization sampling.

### **4.10 GRAB/COMPOSITE SAMPLING**

Grab soil samples will be collected from the material or interval in question by retrieving a volume for analysis using a clean stainless steel, aluminum, or mild steel scoop, trowel, spoon, or bucket auger and placing the soil in the applicable sample bottle. Samples collected for analysis for volatile organic compounds will be collected before any other parameters and placed in 5 gram Encore™ samplers. VOC soil samples should be collected at a depth of six inches or below. Samples collected for VOC soil duplicates will not be composited. Sampling personnel will wear phthalate-free gloves such as nitrile (no latex will be used) and will avoid contact of the gloves with the sample. Only clean instruments will be allowed to touch the sample.

Composite samples will be collected in the same manner described above, except that the discrete sample volumes will be placed in a clean stainless steel pan and mixed to form the composite. Composite sampling will be performed for the following objectives:

- Waste characterization;

Soils will be screened for organic vapors using a photoionization detector (PID) and will be logged utilizing a modified Bermister classification system. The samples will be examined for staining, discoloration, odors, and debris indicative of contamination (ash, coal fragments, wood chips, cinders, petroleum staining, etc.). All field observations will be recorded in a field logbook.

Soil samples will be placed in laboratory provided containers and transported to a ELAP certified laboratory, under proper chain of custody procedures for analysis. Once the sample containers are filled, they will be immediately placed in the cooler with ice (in Ziploc plastic bags to prevent leaking) or synthetic ice packs to maintain the samples at below 4°C.



#### 4.20 GROUNDWATER SAMPLING (PERMANENT WELL)

Groundwater sampling of permanent monitoring wells is described according to the following distinct phases of this work: well installation/construction, well development, well purging, and well sampling.

##### 4.2.1 Well Installation/Construction

Groundwater monitoring wells will be constructed of threaded two-inch diameter PVC well casing and 10-slot well screen. Clean silica sand (No. 1 sand) will be placed in the annular space around the well to a minimum of one foot above the top of the well screen, two feet being optimal. Solid PVC riser, attached to the well screen, will extend to grade or above if the well is a stick-up. For a two-inch diameter well, the annular space for the filter pack should be between 2 to 4 inches thick. (The 4 ¼ inch inside diameter hollow stem augers will be retracted as the filter pack is installed to yield the required annular space.) A two-foot thick bentonite seal will be placed above the sand pack and moistened with potable water for a minimum of 15 minutes before backfilling the remaining space with a cement-bentonite grout. If warranted by depth, filling will be completed using a tremie pipe placed below the surface of the grout. A stick-up or flush-mount protective casing with a locking well cap will be installed and a measuring point marked on each PVC well riser. Soils will be logged utilizing a modified Bernier classification system. Boring logs/well construction diagrams will be prepared for each well.

##### 4.2.2 Well Development

Following installation, the groundwater monitoring wells will be developed using a two-inch diameter submersible pump(s) (or equivalent) until the water is reasonably free of turbidity. Fifty nephelometric turbidity units (NTUs) or less will be the turbidity goal but not an absolute value. The wells will be developed aggressively to remove fines from the formation and sand pack. The wells will be allowed to equilibrate for 14 days prior to sampling. The volume of water removed, the well development time, and field instrument readings will be recorded in the field logbook.

##### 4.2.3 Low Flow Well Sampling

Upon opening each monitoring well, the headspace will be measured using a PID and water level measurements will be recorded using an electronic water level meter or oil-water interface probe, as appropriate. The depth to product (if present), depth to water, and the total depth will be measured from the top of the marked PVC casings to an accuracy of 0.01 feet. Before sampling, the wells will be purged utilizing a low-flow submersible stainless steel pump with dedicated Teflon® or Teflon®-lined polyethylene tubing connected to a transparent flow cell. Very low purging rates are proposed, on the order of 100 ml/minute to 500 ml/minute, to minimize suspension of particulate matter in the well.



Groundwater from each well will be purged until turbidity, pH, temperature, dissolved oxygen and specific conductivity have stabilized. As practical, all field measurements will be taken from the flow cell and will be recorded in the field logbook during and after purging, and before sampling.

Purging will be performed with the pump intake placed at the midpoint of the well screen or the midpoint of the water column (to be determined based on the depth and length of the screen interval) to insure that all stagnant water in the well is removed, while not stirring up sediment that may have accumulated on the bottom of the well. Equipment will be lowered into the well very carefully to prevent suspension of bottom sediment and subsequent entrainment onto sampling equipment. Surging will be avoided. Dedicated tubing will be used for each well. Pumps will be carefully cleaned between wells according to the procedures specified in **Section 4.60**. Ideally, pumping rates will be at a rate so that no drawdown of the groundwater level occurs (i.e., pumping rate is less than recharge rate). During purging, the sampler will actively monitor and track the volume of water purged and the field parameter readings. Data will be recorded in the field logbook or well purge data sheet. Sampling personnel will wear phthalate-free gloves such as nitrile (no latex will be used) and will avoid contact of the gloves with the sample. Only clean instruments will be allowed to touch the sample.

The samples will be collected in laboratory prepared sample bottles (pre-preserved, if appropriate), placed in iced coolers and removed from light immediately after collection. In addition, all sample bottles must be filled to the top so that no aeration of the samples occurs during transport. All bottles will be filled to avoid cascading and aeration of the samples, the goal being to minimize any precipitation of colloidal matter.

#### 4.30 FIELD DATA COLLECTION

Data to be collected in the field may include:

- Groundwater level and/or free product level measurements via electronic water level indicator, oil/water interface probe and/or pressure-based water level data loggers;
- Pumping rates (calculated based on gallons pumped in a measured time);
- Water quality parameters including temperature, pH, oxidation-reduction potential, dissolved oxygen, specific conductivity, turbidity, etc. via water quality field meter, and
- Volatile organic compound screening for soils and well headspace via PID.

Field data will be recorded in the field logbook, boring log forms and/or well purge datasheets.

#### 4.40 QC SAMPLE COLLECTION

QC samples may include equipment rinsate/field blanks, trip blanks, sample duplicates and matrix spike/matrix spike duplicates (MS/MSDs).



**Equipment Rinsate/Field Blanks** will be used to check for potential contamination from ambient air and/or field sampling equipment. Equipment rinsate/field blanks will be collected in the field by pouring laboratory-supplied deionized water over/through decontaminated sampling equipment prior to sample collection. Equipment rinsate/field blanks will be submitted to the laboratory at a frequency of one per 10 soil samples. For groundwater samples, an equipment/rinsate blank will be collected for each sampling day when more than one groundwater sample is collected. Equipment rinsate/field blank analytical parameters will match sample analytical parameters. Equipment rinsate/field blanks will not be collected for samples associated with waste disposal.

**Trip Blanks** will be used to assess the potential for volatile organic compound contamination of groundwater samples due to contaminant migration during sample shipment and storage. Trip blanks will consist of laboratory-supplied deionized water. Trip blanks are never opened and travel to and from the Site with the empty and full sample bottles. Trip blanks are stored with the investigative samples and kept closed until analyzed by the laboratory. Trip blanks will be submitted to the laboratory at a frequency of one per cooler that contains groundwater samples for VOC analysis only.

**Sample Duplicates** are an additional aliquot of the same sample submitted for the same parameters as the original sample. Sample duplicates will be used to assess sampling and analytical reproducibility. Duplicate samples consist of an actual sample taken in the field that has been split into two identical aliquots and put into two separate sampling containers. Each duplicate of a soil sample (except for the VOC fraction) will be homogenized in a dedicated stainless steel pan prior to alternately filling the sample containers. The volatile fraction for soils will be collected directly from the sampling device without homogenization. Sample duplicates will be analyzed as two separate samples and submitted at a frequency of one per 20 samples for all matrices and all parameters with the exception of parameters collected for waste characterization purposes.

**MSs and MSDs** are two additional aliquots of the same sample submitted for the same parameters as the original sample. However, the additional aliquots are spiked with the compounds of concern. Matrix spikes provide information about the effect of the sample matrix on the measurement methodology. MS/MSDs samples will be selected by the laboratory at a frequency of one per 20 investigative samples per matrix for organic parameters. MSs will be submitted at a frequency of one per 20 investigative samples per matrix for inorganic parameters.

#### 4.50 SAMPLE PRESERVATION AND CONTAINERIZATION

The analytical laboratory will supply the sample containers for the applicable samples. These containers will be cleaned by the manufacturer to meet or exceed all analyte specifications established in the latest U.S. EPA's *Specifications and Guidance for*



*Contaminant-Free Sample Containers.* The containers will be pre-preserved, as required by the analytical method.

#### 4.60 EQUIPMENT DECONTAMINATION

Stainless steel, and aluminum sampling equipment will be cleaned between each use in the following manner:

- Wash/scrub with a biodegradable degreaser (“Simple Green”) if there is oily residue on equipment surface
- Tap water rinse
- Wash and scrub with Alconox and water mixture
- Tap water rinse
- 10 percent HNO<sub>3</sub> rinse for non-dedicated, stainless steel groundwater sampling equipment for metals analysis only (excludes submersible pump and flow cell) and 1 percent HNO<sub>3</sub> rinse for non-dedicated, non-stainless steel equipment.
- Hexane rinse (optional, only if required to remove heavy petroleum coating)
- Distilled/deionized water rinse
- Air dry

Cleaned equipment will be wrapped in aluminum foil if not used immediately after air-drying.

Groundwater sampling pumps (whale pumps) will be cleaned by washing and scrubbing with an Alconox/water mixture, rinsing with tap water and irrigating with distilled/deionized water.

Bladder pumps will utilize dedicated bladders, o-rings and grab plates. Bladder pumps will be cleaned by taking apart the pump and washing and scrubbing with an Alconox/water mixture, rinsing with tap water and irrigating with distilled/deionized water. Once the pump is clean, new dedicated parts (bladder, o-rings and grab plate) will be installed.

Disposable, dedicated equipment (e.g. bailers, tubing, etc.) will be used to the extent feasible.



## 5.00 DOCUMENTATION AND CHAIN-OF-CUSTODY

### 5.10 SAMPLE COLLECTION DOCUMENTATION

#### 5.1.1 Field Data Documentation/Field Logs

A system of logging pertinent data collected during sampling operations will be maintained using bound field logbooks. Each page will be numbered, dated, and initialed or signed by the person making the entry. Entries will be made in ink. Errors will be crossed out with a single line, initialed, and dated. At the completion of the day, if a page is not complete, a diagonal line will be drawn through the remainder of the page with the signature at the bottom.

Sample locations will be recorded and referenced to the Site map so that each location is permanently established. Samples will be tagged or labeled with pertinent Site information at the time of sampling. **Section 5.1.3** describes sample identification. Pertinent Site information to be supplied in the field log for each task is listed below:

- Initials or Signature of note taker
- Name and location of investigation
- Date and time of arrival and departure
- Names of all personnel on-Site and their affiliation
- Purpose of the visit
- Field instruments used, date and time of calibration and calibration checks, method of calibration, standards used
- Field measurement results
- Date, time, and location of all sampling points
- Method of sample collection
- Factors that could affect sample integrity
- Name of sampler(s)
- Sample identification and sample description
- Documentation of conversations with the client, regulatory personnel, field decisions, and approval
- Sample locations intervals
- Weather conditions
- Inventory of drum contents and storage location for each drum of waste material generated.

Field notebooks should contain only factual information entered as real-time notes, which will enable the user to recreate events on-Site. Drilling/boring logs and monitoring well construction details will be recorded in the field notebook and/or on a separate boring log/well construction form for each boring/monitoring well. Soil descriptions will be based on a modified Burmister soil classification system, where minor components and relative soil density will not be specified. Strata not sampled will be so indicated.



Groundwater sampling field data will be recorded in the field notebook and/or on separate purge data sheet for each monitoring well sampled.

#### 5.1.2 Chain-of-Custody Records

Sample custody is discussed in detail in **Sections 5.1.4 through 5.1.6** of this Plan. Chain-of-custody records are initiated by the samplers in the field. The field portion of the custody documentation should include: (1) the project name; (2) signature(s) of sampler(s); (3) the sample number, date and time of collection, and whether the sample is grab or composite; and (4) if applicable, air bill or other shipping number. Sample receipt and log-in procedures at the laboratory are described in **Section 5.1.6** of this Plan.

Samples will be transferred to the custody of the respective laboratories via third-party commercial carriers or via laboratory courier service within timeframes required by NJDEP field sampling procedures.

#### 5.1.3 Sample Labeling

Immediately upon collection, each sample will be labeled with an adhesive label, which includes the date and time of collection, sampler's initials, tests to be performed, preservative (if applicable), and a unique identifier. The following identification scheme will be used:

A. The sample ID number will include the soil, soil gas, sediment, wastewater, or monitoring well location, along with the sample depth, sample interval, and the depth interval at which it was collected.

##### Example:

Sample P-9(5-5.5') indicates the sample was taken at boring location P-9, from the 6-inch interval in the spoon beginning at 5.0 feet below grade and ending at 5.5 feet below grade.

Duplicate samples will be labeled as blind duplicates by giving them sample numbers indistinguishable from a normal sample.

Blanks should be spelled out and identify the associated matrix, e.g. Field Blank

MS/MSDs will be noted in the Comments column of the COC.

B. The analysis required will be indicated for each sample.

##### Example: SVOC



C. Date taken will be the date the sample was collected, using the format: MM-DD-YY.

Example: 03-22-12

D. Time will be the time the sample was collected, using military time.

Example: 14:30

E. The sampler's name will be printed in the "Sampled By" section.

F. Other information relevant to the sample.

Example: Equipment Blank

A sample label will contain the following information:

Job No.

Client:

Sample Number

Date \_\_\_\_\_ Sample Time

Sample Matrix

Grab or Composite (explain)

Preservatives

Analyses

Sampler Signature

An example sample label is presented below:

Job No:	XXXXXXXXXX
Client:	Name
Sample No:	OU1-B22(5-5.5')
Matrix:	Soil
Date Taken:	3/22/12
Time Taken:	14:30
Sampler:	B. Smith
Analysis:	SVOC

This sample label contains the authoritative information for the sample. Inconsistencies with other documents will be settled in favor of the vial or container label unless otherwise corrected in writing from the field personnel collecting samples.

#### 5.1.4 Sample Custody

A sample is considered to be under a person's custody if:



- the item is in the actual possession of a person
- the item is in the view of the person after being in actual possession of the person
- the item was in the actual physical possession of the person but is locked up to prevent tampering
- the item is in a designated and identified secure area

#### 5.1.5 Field Custody Procedures

Samples will be collected following the sampling procedures documented in **Section 4.00** of this Plan. Documentation of sample collection is described in **Section 5.1.1** of this Plan. Sample chain-of-custody and packaging procedures are summarized below. These procedures are intended to ensure that the samples will arrive at the laboratory with the chain-of-custody intact.

- The field sampler is personally responsible for the care and custody of the samples until they are transferred or dispatched properly. Field procedures have been designed such that as few people as possible will handle the samples.
- All bottles will be identified by the use of sample labels with sample numbers, sampling locations, date/time of collection, and type of analysis. The sample labeling system is presented in **Section 5.1.3** of this Plan.
- Sample labels will be completed for each sample using waterproof ink unless prohibited by weather conditions. For example, a logbook notation would explain that a pencil was used to fill out the sample label because the pen would not function in wet weather.
- Samples will be accompanied by a properly completed chain-of-custody form. The sample numbers and locations will be listed on the chain-of-custody form. When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the record. This record documents the transfer of custody of samples from the sampler to another person, to the analytical laboratory courier, or to/from a secure storage location.
- All shipments will be accompanied by the chain-of-custody record identifying the contents. The original record will accompany the shipment, and copies will be retained by the sampler and placed in the project files.
- Samples will be properly packaged for shipment and dispatched to the appropriate laboratory for analysis, with a separate signed custody record enclosed in and/or secured to the inside top of each sample box or cooler. If using a commercial carrier service to ship sample containers to the laboratory, the containers will be secured with strapping tape and custody seals. The custody seals will be attached to the front right



and back left of the cooler and covered with clear plastic tape after being signed by field personnel. The cooler will be strapped shut with strapping tape in at least two locations.

- If the samples are sent by commercial carrier, the air bill will be used. Air bills will be retained as part of the permanent documentation. Commercial carriers are not required to sign off on the custody forms since the custody forms will be sealed inside the sample cooler and the custody seals will remain intact.
- Samples remain in the custody of the sampler until transfer of custody is completed. This consists of delivery of samples to the laboratory sample custodian or laboratory courier, and signature of the laboratory sample custodian or courier on the chain-of-custody document as receiving the samples and signature of sampler as relinquishing samples.

#### 5.1.6 Laboratory Custody Procedures

Samples will be received and logged in by a designated sample custodian or his/her designee. Upon sample receipt, the sample custodian will:

- Examine the shipping containers to verify that the custody tape is intact, if applicable,
- Examine all sample containers for damage,
- Determine if the temperature required for the requested testing program has been maintained during shipment and document the temperature on the chain-of-custody records,
- Compare samples received against those listed on the chain-of-custody,
- Verify that sample holding times have not been exceeded,
- Examine all shipping records for accuracy and completeness,
- Determine sample pH (if applicable) and record on chain-of-custody forms
- Sign and date the chain-of-custody immediately (if shipment is accepted) and attach the air bill,
- Note any problems associated with the coolers and/or samples on the cooler receipt form and notify the Laboratory Project Manager, who will be responsible for contacting GZA,



- Attach laboratory sample container labels with unique laboratory identification and test, and
- Place the samples in the proper laboratory storage.

Following receipt, samples will be logged in according to the following procedure:

- The samples will be entered into the laboratory tracking system. At a minimum, the following information will be entered: project name or identification, unique sample numbers (both client and internal laboratory), type of sample, required tests, date and time of laboratory receipt of samples, and field ID provided by field personnel.
- The Laboratory Project Manager will be notified of sample arrival.
- The completed chain-of-custody, air bills, and any additional documentation will be placed in the final evidence file.

## 5.20 SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

No field analyses are anticipated for this program. If site conditions were to warrant field analysis, the responsible contractor will prepare an addendum establishing the field analytical procedures. Analyses of all soil, groundwater, and waste classification samples will be performed by a New Jersey ELAP Certified laboratory, certified for the specific analyses to be performed (e.g. TestAmerica Laboratories of Edison, NJ or Aqua Pro-Tech Laboratories in Fairfield, NJ or equivalent laboratory).

## 5.30 SAMPLE PRESERVATION

### 5.3.1 Soil Samples

VOC samples will be collected in 5 gram VOA Encore™ samplers and placed immediately in the sample cooler to be maintained at 4°C. Soil samples for SVOCs, metals, hexavalent chromium and PCB analyses will be collected in wide-mouth flint glass jars and kept at 4°C +/- 2°C until analyzed.

### 5.3.2 Groundwater Samples

Samples collected for non-VOC analyses will be collected in 1000-ml amber glass containers with Teflon lined caps. VOC samples will be collected in 40 ml VOA vials with Teflon septum caps. All samples will be placed immediately in the sample cooler to be maintained at 4°C.



#### 5.40 INVESTIGATION-DERIVED WASTE

Drill cuttings and purged well water will be containerized in DOT-approved or equivalent 55-gallon drums and stored on-Site pending analysis and proper off-Site disposal.

### **6.00 CALIBRATION/ANALYTICAL PROCEDURES**

#### 6.10 LABORATORY CALIBRATION

Calibration procedures for a specific laboratory instrument will consist of initial calibrations, initial calibration verifications, and/or continuing calibration verification. Detailed descriptions of the calibration procedures for a specific laboratory instrument are included in the laboratory's standard operating procedures (SOPs), which describe the calibration procedures, their frequency, acceptance criteria, and the conditions that will require recalibration. These procedures are as required in the respective analytical methodologies. The initial calibration associated with all analyses must contain a low-level calibration standard which is less than or equal to the quantitation limit.

#### 6.20 LABORATORY PREVENTIVE MAINTENANCE

Preventative maintenance and periodic maintenance will be performed as needed and documented in laboratory notebooks, instrument maintenance logbooks, or work orders as appropriate in accordance with method-specific requirements.

#### 6.30 FIELD CALIBRATION

Field calibration and measurement results will be maintained in bound logbooks assigned to the specific instrument and/or field logbooks. Qualified personnel shall perform initial calibrations of field instruments prior to mobilization of equipment to the Site.

Electronic water level indicators will be calibrated when new, damaged, or repaired. The electronic water level indicator will be calibrated against a calibrated steel surveyor's tape to within 0.01 (one hundredth) of a foot per 10 feet of length.

Water quality meters used, including pH, dissolved oxygen, and conductivity probes, will be calibrated in accordance with the manufacturer's specifications in the field at the start of each day's sampling activities and throughout the day as required by NJDEP sampling requirements.

PID screening instruments will be calibrated daily prior to field activities according to the instrument manufacturer's specifications using certified calibration gases. Sampling personnel shall perform battery checks daily. The recorded calibration information includes date of calibration, standards used, and calibration results.



#### **6.40 FIELD PREVENTIVE MAINTENANCE**

Field instruments will be checked prior to use in the field according to the procedures and frequencies specified by the manufacturer. GZA utilizes a commercial instrument rental company (e.g. Pine Environmental) to provide field instrumentation. Records of factory calibrations and instrument maintenance will be maintained by the instrument rental company. Field maintenance will be performed as needed and recorded in the field logbook.

### **7.00 DATA REPORTING AND VALIDATION**

Laboratory deliverables will include, at a minimum:

1. A cover page, including facility name and address, laboratory name and address, laboratory certification number, date of analytical report preparation, and signature of laboratory director.
2. A contents page.
3. A non-conformance summary
3. A listing of all field sample identification numbers and corresponding laboratory sample identification numbers
3. A listing of the analytical methods used
4. Detection limits for each analyte
5. Tabulated sample results, including date of analysis
6. Method blank results
7. Chain-of-custody documents
8. Temperature of sample at receipt










Errors in reporting identified during the data review process must be corrected by the reporting laboratory.





## **Appendix E – Proposed Monitoring Well Construction Details**



<b>GZA GEOENVIRONMENTAL INC.</b> 55 LANE ROAD, FAIRFIELD, NEW JERSEY 07004						PROJECT 36-11 36th Street		Monitoring Well. 7,8 and 9 SHEET 1 FILE NO. 0076158.01 CHKD BY dw							
GEOTECH/GEOHYDROLOGICAL CONSULTANTS															
BORING CO. MW-7, 8 and 9						BORING LOCATION									
FOREMAN						GROUND SURFACE ELEV. 12.88				DATUM MSL					
GZA ENGINEER						DATE START				DATE END					
SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 IN						GROUNDWATER READINGS									
						DATE		TIME		WATER		CASING		STABILIZATION TIME	
CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 LB HAMMER FALLING 24 IN.															
CASING SIZE: OTHER 3 3/4" HSA															
DPTH (FT)	CASING BLOWS	SPOON NO	PEN/REC	DEPTH (FT)	BLOWS/6"	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION		STRATUM DESCRIPTION		EQUIPMENT INSTALLED	FIELD TESTING	R K			
5		1						Flowable Fill		CAP					
10		2								13.75 FEET PVC CASING					
15		3													
20		4						f-m SANDS							
25		5								10 FEET SPLIT SCREEN					
30		6													
35		7													
GRANULAR SOILS BLOWS/FT. DENSITY						REMARKS:  Static Water Level									
0-4 VERY LOOSE															
4-10 LOOSE															
13-30 MEDIUM DENSE															
30-50 VERY DENSE															
COHESIVE SOILS BLOWS/FT. DENSITY						NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES; TRANSITIONS MAY BE GRADUAL. 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED; FLUCTUATIONS OF GROUNDWATER TABLE MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.									
<2 VERY SOFT															
2-4 SOFT															
4-8 MEDIUM STIFF															
8-15 STIFF															
15-30 VERY STIFF															
>30 HARD						BORING NO.									





## **Appendix F– Site Management Forms**



<b>Inspection Forms</b>  <b>37-14 36<sup>th</sup> Street</b> <b>Queens, New York</b>	
Inspector's Name:	Weather Conditions:
Inspection Date:	Air Temperature:
Inspection Time:	
Comments:	
<b>Cover System – Bottom Floor Inspection:</b>	
<b>1. Walk all of the bottom floors.</b>	
<ul style="list-style-type: none"> <li>Any visible cracks or depressions in the ground floors?</li> </ul>	
<ul style="list-style-type: none"> <li>Any other visible openings (unintended) in the ground floors?</li> </ul>	
<ul style="list-style-type: none"> <li>Draw approximate location of floor cracks/openings on site map.</li> </ul>	
<ul style="list-style-type: none"> <li>Note the length of the crack/opening.</li> </ul>	
<ul style="list-style-type: none"> <li>Comments:</li> </ul>	
<b>Cover System – Exterior Inspection:</b>	
<b>1. Walk and inspect the entire perimeter of the Site.</b>	
<b>2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.</b>	
<ul style="list-style-type: none"> <li>Are there any signs of significant cracks, settlement, or deterioration of the paved areas?</li> </ul>	
<ul style="list-style-type: none"> <li>Has any of the pavement material been removed?</li> </ul>	
<ul style="list-style-type: none"> <li>Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)?</li> </ul>	
<ul style="list-style-type: none"> <li>Comments:</li> </ul>	



**Vapor Barrier Inspection:****1. Walk all of the bottom floors.**

- Identify and review any/all cracks or other openings found in ground floors during cover barrier inspections.
- Conduct smoke test at each identified crack/opening/depression using environmentally safe smoke.
- Draw approximate location of floor cracks/openings that appear to have potential leak through vapor barrier.
- Identify sources of potential impact to smoke test (i.e., HVAC vent nearby).
- Redo smoke test at location of potential vapor barrier leak after sealing off sources of potential impact.
- Comments:

**Repair****Summarize needed/completed repairs to Engineering Controls:****Inspector's Signature:**



# LOW-FLOW SAMPLING DATA SHEET

SITE _____						CONSULTING FIRM _____ GZA GeoEnvironmental, Inc.					
DATE _____						PROJECT NUMBER _____					
WEATHER _____						FIELD PERSONNEL _____					

MONITORING WELL # _____		WELL DEPTH _____ (feet below TOC)		SCREENED/OPEN INTERVAL (ft) _____	
WELL PERMIT # _____		WELL DIAMETER _____ (inches)			

PID/FID READINGS (ppm)										<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Gallons per foot</th> </tr> <tr> <td>2 inch</td> <td>0.163</td> </tr> <tr> <td>4 inch</td> <td>0.653</td> </tr> <tr> <td>6 inch</td> <td>1.469</td> </tr> </table>		Well Diameter	Gallons per foot	2 inch	0.163	4 inch	0.653	6 inch	1.469
Well Diameter	Gallons per foot																		
2 inch	0.163																		
4 inch	0.653																		
6 inch	1.469																		
BACKGROUND _____				PUMP PLACEMENT DEPTH: _____ (ft. below TOC)															
BENEATH OUTER CAP _____				DEPTH TO WATER BEFORE PUMP INSTALLATION: _____ (feet below TOC)															
BENEATH INNER CAP _____																			

TIME	PURGING	SAMPLING	pH		TEMPERATURE (degrees C)		SPECIFIC CONDUCTIVITY (mS/cm)		DISSOLVED OXYGEN (mg/L)		TURBIDITY (NTU)		REDOX POTENTIAL (mV)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)	OBSERVATIONS
			units	(pH)	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change			
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change			

**COMMENTS**

INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: +/- 0.1 for pH; +/-3% for Specific Conductivity and Temperature; +/-10 mV for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity.





## **Appendix G – Responsibilities of Owner and Remedial Party**



## **G – Responsibilities of Owner and Remedial Party**

### **G-1 Responsibilities**

The responsibilities for implementing the SMP for the Silver Star BCP Site No. C241156 are divided between the Site owner(s) and a Remedial Party (RP), as defined below. The owner(s) and RP are currently listed as:

Jans Realty L.P (Owner) Partner – Michael Cohen and 36 Street QDP, LLC (RP),  
Member - Michael Cohen, 37-14 36<sup>th</sup> Street, Long Island City, NY 11101 .

### **G-2 Site Owner's Responsibilities:**

- 1) The Owner shall follow the provisions of the SMP as they relate to future construction and excavation at the Site.
- 2) In accordance with a periodic time frame determined by the NYSDEC, the Owner shall periodically certify, in writing, that all ICs set forth in the Environmental Easement remain in place and continue to be complied with. The Owner shall provide a written certification to the RP, upon the RP's request, in order to allow the RP to include the certification in the Site's Periodic Review Report (PRR) certification to the NYSDEC.
- 3) In the event the Site is delisted, the Owner remains bound by the Environmental Easement and shall submit, upon request by the NYSDEC, a written certification that the Environmental Easement is still in place and has been complied with.
- 4) The Owner shall grant access to the Site to the RP and the NYSDEC and its agents for the purposes of performing activities required under the SMP and assuring compliance with the SMP.
- 5) The Owner is responsible for assuring the security of the remedial components located on its property to the best of its ability. In the event that damage to the remedial components or vandalism is evident, the Owner shall notify the Site's RP and the NYSDEC in accordance with the timeframes indicated in Section **1.3** of this SMP.
- 6) In the event some action or inaction by the Owner adversely impacts the Site, the Owner must notify the Site's RP and the NYSDEC in accordance with the time frame indicated in Section **1.3** and (ii) coordinate the performance of necessary corrective actions with the RP.
- 7) The Owner must notify the RP and the NYSDEC of any change in ownership of the Site property (identifying the tax map numbers in any correspondence)



and provide contact information for the new owner of the Site property. 6 NYCRR Part 375 contains notification requirements applicable to any construction or activity changes and changes in ownership. Among the notification requirements is the following: Sixty days prior written notification must be made to the NYSDEC. Notification is to be submitted to the NYSDEC Division of Environmental Remediation's Site Control Section. Notification requirements for a change in use are detailed in **Section 2.4** of the SMP. A 60-Day Advance Notification Form and Instructions are found at <http://www.dec.ny.gov/chemical/76250.html>.

- 8) The RP remains ultimately responsible for maintaining the ECs.
- 9) In accordance with the tenant notification law, within 15 days of receipt, the Owner must supply a copy of any vapor intrusion data, that is produced with respect to structures and that exceeds NYSDOH or Occupational, Safety, and Health Administration guidelines on the Site, whether produced by the NYSDEC, RP, or Owner, to the tenants on the property. The Owner must otherwise comply with the tenant and occupant notification provisions of Environmental Conservation Law Article 27, Title 24.

### **G-3 Remedial Party Responsibilities**

- 1) The RP must follow the SMP provisions regarding any construction and/or excavation it undertakes at the Site.
- 2) The RP shall report to the NYSDEC all activities required for remediation, operation, maintenance, monitoring, and reporting. Such reporting includes, but is not limited to, periodic review reports and certifications, electronic data deliverables, corrective action work plans and reports, and updated SMPs.
- 3) Before accessing the Site property to undertake a specific activity, the RP shall provide the Owner advance notification that shall include an explanation of the work expected to be completed. The RP shall provide to (i) the Owner, upon the Owner's request, (ii) the NYSDEC, and (iii) other entities, if required by the SMP, a copy of any data generated during the Site visit and/or any final report produced.
- 4) If the NYSDEC determines that an update of the SMP is necessary, the RP shall update the SMP and obtain final approval from the NYSDEC. Within five business days after NYSDEC approval, the RP shall submit a copy of the approved SMP to the Owner(s).
- 5) The RP shall notify the NYSDEC and the Owner of any changes in RP ownership and/or control and of any changes in the party/entity responsible for the operation, maintenance, and monitoring of and reporting with respect to any remedial system (Engineering Controls). The RP shall provide contact information for the new party/entity. Such activity constitutes a Change of Use pursuant to 375-1.11(d) and requires 60-days prior notice to the NYSDEC. A



60-Day Advance Notification Form and Instructions are found at <http://www.dec.ny.gov/chemical/76250.html>.

- 6) The RP shall notify the NYSDEC of any damage to or modification of the systems as required under Section 1.3 of the SMP.
- 7) The RP is responsible for the proper maintenance of any installed vapor intrusion mitigation systems associated with the Site, as required in Section 4.0.
- 8) Prior to a change in use that impacts the responsibilities for implementing the SMP, the RP shall submit to the NYSDEC for approval an amended SMP.
- 9) Any change in use, change in ownership, change in Site classification (*e.g.*, delisting), reduction or expansion of remediation, and other significant changes related to the Site may result in a change in responsibilities and, therefore, necessitate an update to the SMP and/or updated legal documents. The RP shall contact the Department to discuss the need to update such documents.

Change in RP ownership and/or control and/or Site ownership does not affect the RP's obligations with respect to the Site unless a legally binding document executed by the NYSDEC releases the RP of its obligations.

Future Site owners and RPs and their successors and assigns are required to carry out the activities set forth above.





## **Appendix H- Health and Safety Plan**



CONSTRUCTION  
HEALTH AND SAFETY PLAN  
37-14 36th Street  
Queens, NEW YORK  
NYS DCE Site No. C241156

Prepared For:  
36 Street QDP LLC  
49 Rolling Hill Lane  
Old Westbury, NY

Prepared By:  
Goldberg-Zoino Associates of New York P.C.  
d/b/a GZA GeoEnvironmental of New York (GZA)  
104 West 29th Street, 10th Floor  
New York, NY 10001  
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## APPENDICES

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## 1.0 INTRODUCTION

### 1.1 Overview

This project-specific Health and Safety Plan (HASP) has been developed by GZA GeoEnvironmental of New York (GZA) on behalf of 36 Street QDP, LLC (Client) to establish the procedures necessary for protection from potential contaminated soils resulting from the excavation of soils at 37-14 36th Street Queens, New York (Site) due to re-development plans. This HASP is intended to supplement the Client's Corporate Safety Management Program (CSMP). The procedures in this plan have been developed based on current knowledge regarding the hazards which are known or anticipated for the operations to be conducted at this Site.

### 1.2 Site Hazards

This HASP covers only the hazards associated with potential chemical exposures. Physical hazards such as injuries from typical excavation field work activities, including the operation of heavy equipment, noise exposure, heat and cold stress, electrical hazards, fire hazards, excavation hazards and general safety hazards associated with walking on working surfaces (trip and fall) are covered by the Client's CSMP.

Site activities may pose chemical exposure hazards. Potential chemical exposure hazards include skin contact, ingestion and inhalation hazards which may result from the presence of volatile organic compounds, semi-volatile organic compounds, and inorganic metallic elements (metals) on-Site. The potential adverse health effects from these detected contaminants are diverse. Many of these compounds are known or suspected to result in chronic illness from long-term exposures. However, due to the limited nature of the proposed construction, only acute effects are a potential concern. See Section 2.0 for detailed chemical hazard information.

### 1.3 Project Team

The organizational structure established for the implementation of health and safety requirements established by this HASP are outlined in the CSMP. Personnel who have been assigned specific authority to implement and enforce the provisions of this HASP are identified below.

Name	Project Title/Assigned Role	Phone Numbers
	Project Manager	Work: Mobile:
	Site Supervisor	Work: Mobile:
	Site Health and Safety Officer	Work: Mobile:

The control of Site hazards is dependent upon the degree to which management enforces compliance and employees cooperate with the specified health and safety requirements.



Therefore, personnel at all levels of the organization must recognize their individual responsibility to comply. All activities covered by this HASP must be conducted in compliance with this HASP and with applicable federal, state, and local health and safety regulations, including 29 CFR 1910.120. Personnel covered by this HASP who cannot or will not comply must be excluded from Site activities by the Project Superintendent, as defined in the CSMP.

## 2.0 HAZARD ASSESSMENT

The following hazard assessment applies only to the activities within the specified scope of this HASP.

### 2.1 Chemical Hazards and Known/ Suspect Chemicals of Concern

The chemical hazard information provided below is based on data provided in the Phase 1/Phase 2 Environmental Site Assessment Report, Remedial Investigation Report, and the Final Remedial Action Work Plan, dated October 2012 and December 2012, respectively. Both reports were prepared by GZA GeoEnvironmental of New York (GZANY). During the investigations, representative Site soils and groundwater were sampled for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), priority pollutant metals, pesticides, polychlorinated biphenyl (PCBs) and cyanide. Elevated concentrations of VOCs, SVOCs, and metal compounds were detected in the soil and groundwater. Constituents with exceeding concentrations and their respective health effects are listed below for reference. Information presented is based upon established Occupational Safety and Health Administration (OSHA) permissible exposure limits (PEL) and The National Institute for Occupational Safety and Health (NIOSH) recommended exposure limits (RELs). All other analytical parameters were reported within acceptable levels for Site urban residential land use. See **Section 4.0** for a description of the PPE that should be used for this Site.

Chemicals	REL/PEL/STEL (ppm)	Health Hazards
Benzene	PEL = 1 ppm REL = 0.1 ppm STEL = 5 ppm	Irritation eyes, skin, nose, respiratory system; dizziness; headache, nausea, staggered gait; anorexia, lassitude, dermatitis; bone marrow depression, potential occupational carcinogen.
Benzo(a)anthracene	PEL = 0.2 mg/m <sup>3</sup> TWA REL = 0.1 mg/m <sup>3</sup> TWA	Irritation to respiratory system, bladder, kidneys, skin; dermatitis, bronchitis, cumulative lung damage; suspect human carcinogen.
Benzo(a)pyrene	PEL = 0.2 mg/m <sup>3</sup> TWA REL = 0.1 mg/m <sup>3</sup> TWA	Irritation to respiratory system, bladder, kidneys, skin; dermatitis, bronchitis, cumulative lung damage; suspect human carcinogen.



<b>Chemicals</b>	<b>REL/PEL/STEL (ppm)</b>	<b>Health Hazards</b>
Benzo(b)fluoranthene	PEL = 0.2 mg/m <sup>3</sup> TWA REL = 0.1 mg/m <sup>3</sup> TWA	No signs or symptoms of acute or chronic exposure have been reported in humans; suspect human carcinogen.
Chromium	PEL = 0.005 mg/m <sup>3</sup> REL = 0.001 mg Cr(VI)/m <sup>3</sup> 10-hr TWA	Irritation of respiratory system; bronchitis, asthma, nosebleeds, nasal septum ulceration and perforation; liver, kidney damage; leukocytosis (increased blood leukocytes), leukopenia (reduced blood leukocytes), eosinophilia; eye injury, conjunctivitis; skin ulcer, irritant and allergic contact dermatitis; potential occupational carcinogen.
Chrysene	PEL = 0.2 mg/m <sup>3</sup> TWA REL = 0.1 mg/m <sup>3</sup> TWA	Irritation to respiratory system, bladder, kidneys, skin; dermatitis, bronchitis, cumulative lung damage; suspect human carcinogen.
Cis-1,2-dichloroethene	PEL = 200 ppm REL = 200 ppm	Irritation mucous membranes, skin; central nervous system depression, nausea, vomiting, weakness, tremor, epigastric cramps, burning of the eyes, vertigo, and narcosis.
Copper	PEL = 0.1 mg/m <sup>3</sup> REL = 0.1 mg/m <sup>3</sup>	Irritation eyes, upper respiratory system; metal fume fever: chills, muscle ache, nausea, fever, dry throat, cough, lassitude (weakness, exhaustion); metallic or sweet taste; discoloration skin, hair.
Ethylbenzene	PEL = 100 ppm REL = 100 ppm	Irritation eyes, skin, mucous membrane; headache; dermatitis; narcosis, coma.
Fuel Oil	PEL = 400 ppm REL = 350 mg/m <sup>3</sup>	Nausea, irritation – eyes, hypertension, headache, lightheadedness, loss of appetite, poor coordination; long-term exposure – kidney damage, blood clotting problems; potential carcinogen.
Iron (ferric oxide dust)	PEL = 10 mg/m <sup>3</sup> TWA REL = 5 mg/m <sup>3</sup> TWA	Irritation of eyes, skin, respiratory system, cough; metal fume fever; siderosis (iron staining of the eyes); respiratory system.



<b>Chemicals</b>	<b>REL/PEL/STEL (ppm)</b>	<b>Health Hazards</b>
Isopropylbenzene	PEL = 50 ppm REL = 50 ppm	Eye, mucous membrane irritation; headaches; dry skin, dermatitis; dizziness, ataxia, drowsiness, narcosis; coma. NOTE: 1) Above 31°C, explosive vapor/air mixtures may be formed. 2) Unconsciousness may occur at levels of 4,000 ppm or greater. 3) Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis.
Lead	PEL = 0.05 mg/m <sup>3</sup> REL = 0.05 mg/m <sup>3</sup>	Lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypertension.
Magnesium	PEL = N/A	N/A
Manganese (fume)	PEL: 5 mg/m <sup>3</sup> REL: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	Parkinson's, asthenia, insomnia, mental confusion; hypersomnia, anorexia; headache; metal fume fever: dry throat; cough, chest tightness, dyspnea, rales, flu-like fever; low-back pain; vomiting; malaise; lassitude (weakness, exhaustion); kidney damage; bronchitis, pneumonitis; lung and cumulative CNS damage.
Mercury	PEL = 0.05 mg/m <sup>3</sup> REL = 0.1 mg/m <sup>3</sup>	Irritation eyes, skin; cough, chest pain, dyspnea (breathing difficulty), bronchitis, pneumonitis; tremor, insomnia, irritability, indecision, headache, lassitude (weakness, exhaustion); stomatitis, salivation; gastrointestinal disturbance, anorexia, weight loss; proteinuria.
Nickel	PEL = 1 mg/m <sup>3</sup> REL = 0.015 mg/m <sup>3</sup>	Sensitization dermatitis, allergic asthma, cough, shortness of breath, pneumonitis; decreased sense of smell; Affects nasal cavities, lungs, skin; potential occupational carcinogen.



<b>Chemicals</b>	<b>REL/PEL/STEL (ppm)</b>	<b>Health Hazards</b>
Tetrachloroethene	PEL = 100 ppm REL = 50 ppm TWA	Affects the central nervous system and liver; Prolonged exposure to 200 ppm causes dizziness, headache, confusion, nausea, and eye and mucous membrane irritation, reversible changes to the liver; headaches, vertigo, tremors, nausea with vomiting, fatigue, intoxication, unconsciousness, and even death.
Trichloroethene	PEL = 100 ppm REL = 25 ppm TWA	Irritation of eyes, skin; headache; visual disturbance; lassitude (weakness, exhaustion), dizziness; tremor; drowsiness, nausea; vomiting; dermatitis; cardiac arrhythmias; paresthesia; liver injury; potential male reproductive toxin; affects Kidneys, liver, eyes, skin, CNS, cardiovascular system; potential occupational carcinogen.
Toluene	REL = 100 ppm PEL = 200 ppm STEL = 300 ppm	Irritation eyes, nose; lassitude, confusion, euphoria, dizziness, headache; dilated pupils, lacrimation (discharge of tears); anxiety, muscle fatigue, insomnia; paresthesia; dermatitis; liver, kidney damage.
Zinc (oxide dust)	PEL = 15 mg/m <sup>3</sup> REL = 5 mg/m <sup>3</sup>	Exposure to zinc oxide can occur through inhalation, ingestion, and eye or skin contact; affects the respiratory system; Acute exposure to zinc oxide can result in coughing, substernal pain, upper respiratory tract irritation, rales, chills, fever, nausea, and vomiting; Chronic exposure to zinc oxide by skin contact may result in papular-pustular skin eruptions in the axilla, inner thigh, inner arm, scrotum and pubic areas.

## 2.2 Volatile Organic Compounds (VOCs)

VOCs including acetone were detected in soil sample GP-4 (11-12') and GZA-6 (10-12') at concentrations exceeding their regulatory criteria. Laboratory analytical results indicate that tetrachloroethene, isopropylbenzene, toluene, trichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, benzene and ethylbenzene were detected above NYSDEC Aqueous Water Quality Standards (AWQS) groundwater criteria. The odor threshold for benzene is higher



than the PEL and employees may be overexposed to benzene without sensing its presence, therefore, detector tubes must be utilized to evaluate airborne concentrations.

The vapor pressures of these compounds are high enough to generate significant quantities of airborne vapor. On sites where high concentrations of these compounds are present, a potential inhalation hazard to the field team during subsurface investigations can result. However, if the site is open and the anticipated quantities of BTEX contamination are small (i.e., part per million concentrations in the soil or groundwater), overexposure potential will also be small. Air quality monitoring for VOC concentrations will be implemented throughout the Site during all phases of excavation, and dust management will be in place to ensure minimal exposure to soil and groundwater VOCs.

### **2.3 Semi-Volatile Organic Compounds (SVOCs)**

Elevated levels of SVOC compounds identified in the soils at the Site exceeded the New York State Department of Environmental Conservation (NYSDEC) standards promulgated in the Part 375 Unrestricted Residential criteria. SVOC compounds with exceedences on Site include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene. However, due to the relatively low vapor pressure of SVOC compounds, vapor hazards at ambient temperatures are not expected to occur. However, if Site conditions are dry, the generation of contaminated dusts may pose a potential inhalation hazard. Therefore, dust levels should be controlled with wetting if necessary, as described in **Section 3.2**. In addition, repeated contact with certain SVOCs compounds have been associated with the development of skin cancer. Contact of SVOC compounds with the skin may cause photosensitization of the skin, producing skin burns after subsequent exposure to ultraviolet radiation. Protective measures, such as the wearing of chemically resistant gloves, are appropriate when handling SVOC contaminated materials.

### **2.4 Metals**

Various metals including copper, chromium, iron, magnesium, manganese, mercury, nickel, sodium, and zinc were detected in concentrations exceeding NYSDEC Part 375 Unrestricted Residential criteria in soil samples collected and are attributed to historic fill materials present throughout the Site, and the Site's former use as a gasoline refueling station. Overexposure to metal compounds has been associated with a variety of local and systemic health hazards, both acute and chronic in nature, including lung damage, neurological effects, gastrointestinal effects, kidney and liver damage, allergic dermatitis and other skin disorders. Exposure to metals is most commonly through inhalation and ingestion of dust. Metallic mercury is unique among metals, as it releases toxic vapors at normal room temperatures, and can be absorbed through the skin.

To estimate health risk, GZA calculated the airborne mercury exposure through dust. The basis of comparison used was the more conservative nuisance dust standard of the ACGIH Threshold Limit Value, 8-hour time-weighted average of 10 milligram per cubic meter of air ( $\text{mg}/\text{m}^3$ ). This nuisance dust is a general rule of thumb for the dust allowed before preventive measures, such as soil wetting of exposed soil, are used.



Based on the maximum concentration of mercury detected in soil of 0.418 mg/kg, GZA converted the units for better comparison:

$$\frac{0.418 \text{ mg}}{1 \text{ kg}} \times \frac{1 \text{ kg}}{1000 \text{ g}} \times \frac{1 \text{ g}}{1000 \text{ mg}} = \frac{0.0000004 \text{ mg mercury}}{10 \text{ mg soil (dust)}}$$

Since the maximum dust in air concentration is anticipated to be 10 mg/m<sup>3</sup>, the maximum mercury concentration is anticipated to be 0.000004 mg/m<sup>3</sup>. The OSHA Permissible Exposure Level (PEL) for mercury is a ceiling concentration of 0.1 mg/m<sup>3</sup>. When compared, the expected mercury in air concentration is a full six orders of magnitude less than the OSHA PEL.

GZA believes that airborne mercury and additional listed metals are not a significant risk to Site workers. GZA understands that mercury is a volatile element. GZA does not anticipate measurable mercury vapor concentrations, given the relatively low soil concentrations.

### 3.0 AIR MONITORING

Air monitoring falls into two separate categories: direct reading/environmental monitoring, and personal exposure monitoring. The following Sections summarize the types of environmental monitoring as well as the appropriate response actions applicable to the Site.

#### 3.1 Organic Vapor Monitoring

Volatile organic vapor hazards have been identified for the Site (see **Section 2.0**). Therefore, organic vapor monitoring with a photoionization detector (PID) is expected to be required for the Site.

#### **AIR MONITORING INSTRUMENTS AND ACTION LEVELS: PHOTO-IONIZATION DETECTOR**

##### Organic Vapor Detector (H-Nu, OVM, OVA) - Breathing Zone Readings

<u>0 to 10 ppm</u>	Remain in Level D. Use colorimetric tubes or other chemical specific device to verify PID readings do not contain low PEL toxic materials (Benzene, Vinyl Chloride, etc.) where applicable. If benzene is present above 1 ppm withdraw from excavation and proceed to level C.
<u>10 to 250 ppm</u>	Withdraw from work area and contact Project Management. Proceed to Level C protection for re-entry, or discontinue operation
<u>&gt; 250 ppm</u>	Secure operations, withdraw from work area, and discontinue work at that location until contaminants can be evaluated, and detailed (SSHP) plan implemented.



### 3.2 Total Particulates

Due to the presence of SVOCs, VOCs and metals in soils and groundwater on-Site, total respirable particulates may be a concern. Dust levels should be visually monitored and if levels become noticeable, soils should be wetted down to control dusty conditions. Wetting may be accomplished using various methods, including a hose connected to a fire hydrant or other on-Site source of water. The Client's Project Superintendent shall be responsible for determining when the wetting of soils is needed and the most appropriate method to use. In addition, recommended measurements for particulate monitoring are detailed below.

Upwind concentrations should be measured at the start of each work day during active handling of excavated materials (including stockpiling and truck loading) and periodically thereafter to establish background conditions. The particulate air monitoring work will be conducted using a pDR-1200 personal airborne particulate monitor (or approved equivalent) calibrated daily.

The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers ( $\mu\text{m}$ ) in size (PM-10) and capable of integrating over a period of 5-minutes or less for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate excess of the action level.

Dust migration will be visually assessed during all work activities, and at no time will the downwind perimeter particulate levels be allowed to exceed a total standard of  $10 \text{ mg/m}^3$  (or "nuisance" dust levels).

If the downwind PM-10 particulate level is  $100 \text{ micrograms per cubic meter (ug/m}^3\text{)}$  greater than the background (upwind perimeter) for a 5-minute period, or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques (e.g., soil wetting) provided the downwind PM-10 particulate levels do not exceed  $150 \text{ ug/m}^3$  above the upwind level and no visible dust is migrating from the work area.

If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than  $150 \text{ ug/m}^3$  above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentrations to within  $150 \text{ ug/m}^3$  of the upwind level and in preventing visible dust migration.



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

Parameter	Monitoring Instrument	Response Levels (above background)	Actions	Conditions for Continuing Work Activities
Particulates < 10 um (PM-10)	Dust Meter	Fugitive dust migration	1. implement dust suppression techniques	dust suppression techniques are in place
		>100 ug/m <sup>3</sup> but <150 ug/m <sup>3</sup>	1. implement dust suppression techniques	levels must not exceed 150 ug/m <sup>3</sup> with dust suppression techniques in place
		>150 ug/m <sup>3</sup>	1. halt activity 2. re-evaluate activities	levels decrease below 150 ug/m <sup>3</sup> and fugitive dust migration is prevented

### 3.4 Personal Exposure Monitoring

No asbestos, no lead-based paint, and no radiological hazards have been identified within the vicinity of the proposed excavation area at the Site (see Section 2.0). Therefore, personal exposure monitoring is not required during soil excavations.

## 4.0 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) will be donned as described below for the activities covered by this HASP. Based on available analytical data and the proposed intrusive activities, the China Perfect Construction Corp. (Contractor), anticipates that all activities will require Level D or Modified Level D PPE.

### 4.1 General Site Work

General Site work conducted outside the excavation areas, operators of heavy equipment, and non-intrusive activities which do not generate dust will require Level D protective equipment. Level D is defined as:

- Hardhat
- Eye protection
- Hearing protection (with site workers at all times and donned when appropriate)
- Steel-toed work boots
- Work clothes

Workers shall wear appropriate hearing protection during designated hearing protection-



required tasks (such as, jack hammering, pile driving etc.). To reduce the exposure to noise, personnel working in areas of excessive noise must use hearing protectors (earplugs or earmuffs) in accordance with the CSMP. Rule-of-Thumb: Wherever actual data from sound level meters or noise dosimeters is unavailable, if it is necessary to raise one's voice above a normal conversational level to communicate with others within 3 to 5 feet away, hearing protection should be worn.

#### **4.2 Excavation Areas and Other Soil Handling**

Personnel working in the areas of active excavation, but not operating heavy equipment, and any other personnel potentially contacting contaminated materials will be required to wear Modified Level D PPE. Modified Level D is defined as:

- Hardhat
- Eye protection
- Hearing protection (as warranted see above)
- Steel-toed work boots
- Tyvek Coveralls
- Disposable nitrile chemically resistant gloves

Level C PPE and Level B are not expected to be required.

### **5.0 SITE CONTROL**

To prevent both exposure of unprotected personnel and migration of contamination due to tracking by personnel or equipment, work areas along with personal protective equipment requirements will be clearly identified with signage. Pedestrian traffic will be managed to the extent possible by the Contractor's Traffic and Pedestrian Control Plan.

The Contractor will designate a work zone and support zone as defined below.

#### **5.1 Work Zone**

Work zones on Site will be temporary or dynamic, encompassing the work area(s) actively being worked in on that particular day(s). Site personnel will be advised of the current work area(s) as part of site safety meetings.

#### **5.2 Support Zone**

The support zone will consist of an area outside the areas of active excavation and soil handling, where equipment and support vehicles will be located. Eating, drinking and smoking will be permitted only in this area. Sanitary facilities will be located on Site. In addition, potable water and water and soap for hand washing will be available at the Site.



### **5.3 Other Site Control and Safety Measures**

The following measures are designed to augment the specific health and safety guidelines provided in this plan. These issues will form the basis of the Site ordination and daily safety meetings discussed in Section 7.4, below.

- The Site hazards will be evaluated by the Client's Project Superintendent using the Site Safety Checklist as defined by the CSMP.
- No one is to perform field work alone. Team members must be intimately familiar with the procedures for initiating an emergency response.
- Avoidance of contamination is of the utmost importance. Whenever possible, avoid contact with contaminated (or potentially contaminated) surfaces or materials. Walk around (not through) puddles and dis-colored surfaces. Do not kneel on the ground or set equipment on the ground.
- Eating, drinking, chewing gum or tobacco, smoking or any practice that increases the probability of hand-to-mouth transfer and ingestion of materials is prohibited except in the support zone after proper decontamination as defined in Section 6.0.
- The use of alcohol or drugs is prohibited during the conduct or field operations.
- Safety equipment (PPE) will be required for all field personnel unless otherwise approved by the subcontractor's health and safety representatives and/or the Project Superintendent.

### **5.4 Site Security**

The Site shall be unoccupied during Site work accept for Contractor personnel and subcontractors. If possible, access to the work areas during field work will be limited by closing site gates to reduce unauthorized pedestrian traffic. The Client's Project Superintendent is responsible for identifying the presence of all employees on Site.

Equipment left on Site during off hours must be locked, immobilized and/or otherwise secured to prevent theft or unauthorized use or access. The Contractor and subcontractors' employees will not be permitted on Site during off-hours without specific client approval.

## **6.0 DECONTAMINATION**

Proper decontamination will be performed for personnel and equipment before leaving the Site. All solid waste generated during decontamination will be bagged by the Contractor personnel and stored on Site for disposal. Water will be disposed of by on-Site infiltration into soil within an exclusion zone.



## **6.1 Personal Decontamination**

Personal decontamination will be accomplished by following a systematic procedure of cleaning and removal of personal protective equipment (PPE). The Contractor will supply decontamination equipment to allow PPE to be brushed to remove gross contamination and then scrubbed clean in a detergent solution and then rinsed clean. To facilitate this, a three-basin wash system will be set up on site by the Contractor.

Disposable PPE, such as Tyvek coveralls, gloves, and hearing protection, etc. will be placed in trash bags in an on-Site container pending a disposal. Alternative chemical decontamination procedures, such as steam-cleaning reusable rubber outer boots, may be used if necessary.

Steps required in a decontamination sequence will depend on the level of protection worn in accordance with Section 4.0:

1. Remove and wipe clean hard hat
2. Brush boots and gloves of gross contamination
3. Scrub boots and gloves clean
4. Rinse boots and gloves
5. Dry non-disposable equipment with paper towels
6. Remove Tyvek coveralls
7. Remove eye protection
8. Remove chemically resistant gloves

## **6.2 Equipment Decontamination**

Hand tools and portable equipment will be decontaminated upon leaving the active excavation areas using the same procedures for personal decontamination. Wooden tools are difficult to decontaminate because they absorb chemicals. Wooden hand tools will be kept on Site for the project duration and handled only by protected workers. At the end of the Site activities, wooden tools will be discarded if they cannot be decontaminated properly.

Large Equipment will be decontaminated in an area near the entrance to the Site. Decontamination of large equipment will mitigate the risk of spreading potentially-contaminated soil off-Site. The Contractor will use a combination of long-handled brushed, rods and shovels for general exterior cleaning and dislodging contaminated soil caught in tires and the undersides of vehicles and equipment.

Prior to leaving the Site, large equipment will be inspected to assure that excess material has not adhered to the equipment. If needed, the Contractor will clean the large equipment, including washing tires and undercarriages with a hose to remove excess adhered soil prior to leaving the Site.

Exposed excavated material will be covered on each truck after loading. The cover will be secured and remain in place until the container has reached the disposal facility.



## **7.0 MEDICAL MONITORING AND TRAINING REQUIREMENTS**

Training records for Site personnel and subcontractors shall be provided by the Contractor prior to on-Site work, and will be maintained on Site.

### **7.1 Medical Monitoring**

Respiratory protection is not required by the levels of soil contamination. Therefore, no medical monitoring requirements will be instituted for this project.

### **7.2 Training**

All personnel covered by this HASP must have completed the appropriate training requirements specified in 29 CFR 1910.1200 Hazard Communication and 29 CFR 1910.120(e).

Workers requiring access to the excavation (laborers and operators) prior to completion of soil remedial activities will require 40-hour HAZWOPER training due to the presence of gasoline contaminated soils and underground storage tanks.

Also, at least one Contractor employee must be on Site during all activities to act as the Site Foreman and will be responsible for identifying existing and predictable hazards in surroundings or working conditions that are unsanitary, hazardous, or dangerous to Site workers and or the community, and will have the authorization to take prompt corrective measures to eliminate them. This individual must have documentation of at least three days of supervised field experience as well as completion of the specified 8-hour training course for managers and supervisors. Records of certifications and training should be kept by the Contractor.

### **7.3 Subcontractors**

Subcontractors will be required to provide to the Contractor Project (Site) Manager specific written documentation that each individual assigned to this project has completed the medical monitoring and training requirements specified above. This information must be provided prior to their performing any work on site.

### **7.4 Site Safety Meetings**

Prior to the commencement of on-Site investigative activities, a Site safety meeting will be held to review the specific requirements of this HASP. Sign-off sheets will be collected at this meeting (see Appendix A). Short safety refresher meetings will be conducted daily or as conditions or work activates change. In addition, the Project Superintendent will document that Site visitors have had the required training in accordance with 29 CFR 1910.120 and will provide documented pre-entry safety briefings.



## **8.0 EMERGENCY ACTION PLAN**

OSHA defines emergency response as any "response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual-aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result in an uncontrolled release of a hazardous substance." The Contractor personnel covered by this HASP may not participate in any emergency response where there are potential safety or health hazards (i.e., fire, explosion, or chemical exposure). The Contractor response actions will be limited to evacuation and medical/first aid as described within this section below.

The basic elements of an emergency evacuation plan include employee training, alarm systems, escape routes, escape procedures, critical operations or equipment, rescue and medical duty assignments, designation of responsible parties, emergency reporting procedures, and methods to account for all employees after evacuation.

### **8.1 Employee Information**

General training regarding emergency evacuation procedures are included in the Contractor initial and refresher training courses. Also as described, employees must be instructed in the specific aspects of emergency evacuation applicable to the Site as part of the site safety meeting prior to the commencement of all on-site activities. On-Site refresher or update training is required anytime escape routes or procedures are modified or personnel assignments are changed. This information will be provided during the Site safety meetings (see **Section 7.4**) will be documented by the Contractor.

### **8.2 Emergency Signal and Alarm Systems**

An emergency communication system must be in effect at all sites. The most simple and effective emergency communication system in many situations will be direct verbal communications. Each site must be assessed at the time of initial Site activity and periodically as the work progresses. Verbal communications must be supplemented anytime voices cannot be clearly perceived above ambient noise levels (i.e., noise from heavy equipment, trucks, etc.) and anytime a clear line-of-sight cannot be easily maintained amongst all personnel because of distance, terrain or other obstructions. The Contractor will maintain an air horn (or whistle) on-Site that will be used to signal an emergency so that it can be heard over other construction noises on-Site.

### **8.3 Emergency Contacts**

Police:	911
Fire:	911
Ambulance:	911
St. John's Hospital:	(718) 558-1000



## **8.4 Hospital Location**

St. John's Hospital is located at 190-02 Queens Boulevard, Elmhurst, New York. The most direct route to the hospital from the Site is to go east onto Northern Boulevard, turn right onto 39th Street go 0.6 miles, turn left on Queens Boulevard, go 2.4 miles, take the exit for Grand Ave/Hoodhaven Blvd, go 0.5 miles and arrive at the hospital. **Appendix B** presents a hospital route map.

## **8.5 Incident Reporting Procedures**

Any incident (other than minor first aid treatment) resulting in injury, illness or property damage requires an accident investigation and report. The investigation should be initiated as soon as emergency conditions are under control. The purpose of this investigation is not to attribute blame but to determine the pertinent facts so that repeat or similar occurrences can be avoided.

The investigation should begin while details are still fresh in the mind of anyone involved. The person administering first aid may be able to start the fact gathering process if the injured are able to speak. Pertinent facts must be determined. Questions beginning with who, what, when, where, and how are usually most effective to discover ways to improve job performance in terms of efficiency and quality of work, as well as safety and health concerns.



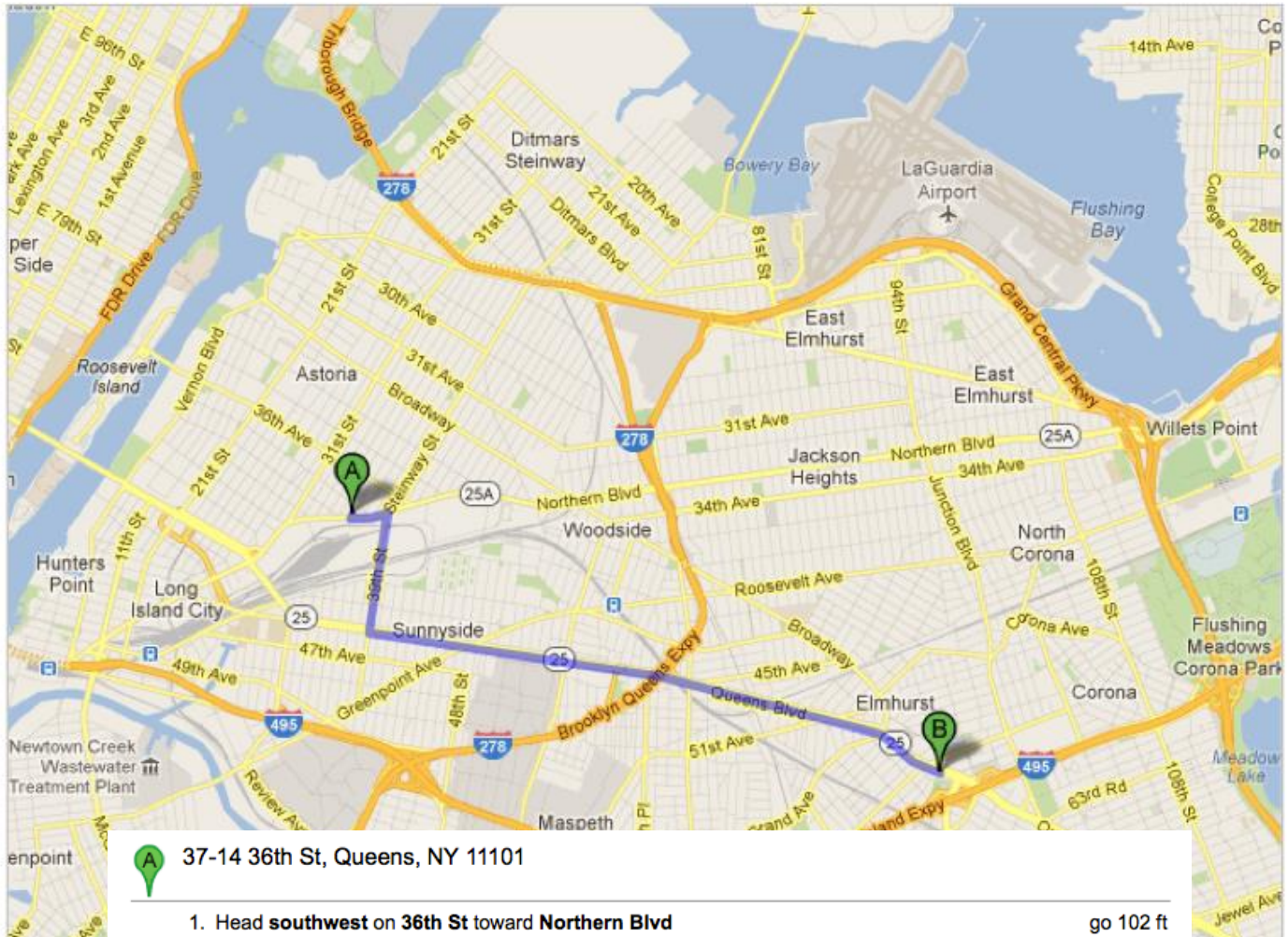
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## APPENDIX B ROUTE TO HOSPITAL



**Directions to St. Johns Hospital**  
90-02 Queens Boulevard, Elmhurst, NY 11373  
**3.7 mi – about 12 mins**



**A** 37-14 36th St, Queens, NY 11101

1. Head **southwest** on **36th St** toward **Northern Blvd** go 102 ft  
total 102 ft
2. Turn left onto **Northern Blvd** go 0.2 mi  
About 2 mins total 0.2 mi
3. Turn right onto **39th St** go 0.6 mi  
About 2 mins total 0.8 mi
4. Turn left onto **Queens Blvd** go 2.4 mi  
About 6 mins total 3.2 mi
5. Take the exit toward **Grand Ave/Woodhaven Blvd** go 269 ft  
total 3.2 mi
6. Merge onto **Queens Blvd** go 0.5 mi  
Destination will be on the left  
About 2 mins total 3.7 mi

**B** **St. Johns Hospital**  
90-02 Queens Boulevard, Elmhurst, NY 11373



**APPENDIX C**  
**MATERIAL SAFETY DATA SHEETS**





# Safety Data Sheet

**Material Name: Diesel Fuel, All Types**

**SDS No. 9909**  
US GHS

**Synonyms:** Ultra Low Sulfur Diesel; Low Sulfur Diesel; No. 2 Diesel; Motor Vehicle Diesel Fuel; Non-Road Diesel Fuel; Locomotive/Marine Diesel Fuel

## \*\*\* Section 1 - Product and Company Identification \*\*\*

### Manufacturer Information

Hess Corporation  
1 Hess Plaza  
Woodbridge, NJ 07095-0961

Phone: 732-750-6000 Corporate EHS  
Emergency # 800-424-9300 CHEMTREC  
[www.hess.com](http://www.hess.com) (Environment, Health, Safety Internet Website)

## \*\*\* Section 2 - Hazards Identification \*\*\*

### GHS Classification:

Flammable Liquids - Category 3  
Skin Corrosion/Irritation – Category 2  
Germ Cell Mutagenicity – Category 2  
Carcinogenicity - Category 2  
Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)  
Aspiration Hazard – Category 1  
Hazardous to the Aquatic Environment, Acute Hazard – Category 3

### GHS LABEL ELEMENTS

#### Symbol(s)



#### Signal Word

DANGER

#### Hazard Statements

Flammable liquid and vapor.  
Causes skin irritation.  
Suspected of causing genetic defects.  
Suspected of causing cancer.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
May be fatal if swallowed and enters airways.  
Harmful to aquatic life.

#### Precautionary Statements

##### Prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking  
Keep container tightly closed.  
Ground/bond container and receiving equipment.



# Safety Data Sheet

**Material Name: Diesel Fuel, All Types**

**SDS No. 9909**

Use explosion-proof electrical/ventilating/lighting/equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Wash hands and forearms thoroughly after handling.  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Avoid breathing fume/mist/vapours/spray.

## Response

In case of fire: Use water spray, fog or foam to extinguish.  
IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.  
If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting.  
IF exposed or concerned: Get medical advice/attention.

## Storage

Store in a well-ventilated place. Keep cool.  
Keep container tightly closed.  
Store locked up.

## Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

## \* \* \* Section 3 - Composition / Information on Ingredients \* \* \*

CAS #	Component	Percent
68476-34-6	Fuels, diesel, no. 2	100
91-20-3	Naphthalene	<0.1

A complex mixture of hydrocarbons with carbon numbers in the range C9 and higher.

## \* \* \* Section 4 - First Aid Measures \* \* \*

### First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

### First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops. Thermal burns require immediate medical attention depending on the severity and the area of the body burned.

### First Aid: Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.



# Safety Data Sheet

Material Name: Diesel Fuel, All Types

SDS No. 9909

## First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

## \* \* \* Section 5 - Fire Fighting Measures \* \* \*

### General Fire Hazards

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

### Hazardous Combustion Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

### Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO<sub>2</sub>, water spray, fire fighting foam, and other gaseous agents.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

### Unsuitable Extinguishing Media

None

### Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

## \* \* \* Section 6 - Accidental Release Measures \* \* \*

### Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

### Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

### Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.



# Safety Data Sheet

Material Name: Diesel Fuel, All Types

SDS No. 9909

## Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

## Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

## Prevention of Secondary Hazards

None

## \*\*\* Section 7 - Handling and Storage \*\*\*

### Handling Procedures

Handle as a combustible liquid. Keep away from heat, sparks, excessive temperatures and open flame! No smoking or open flame in storage, use or handling areas. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

### Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks."

### Incompatibilities

Keep away from strong oxidizers.

## \*\*\* Section 8 - Exposure Controls / Personal Protection \*\*\*

### Component Exposure Limits

#### Fuels, diesel, no. 2 (68476-34-6)

ACGIH: 100 mg/m3 TWA (inhalable fraction and vapor, as total hydrocarbons, listed under Diesel fuel)  
Skin - potential significant contribution to overall exposure by the cutaneous route (listed under Diesel fuel)



# Safety Data Sheet

Material Name: Diesel Fuel, All Types

SDS No. 9909

## Naphthalene (91-20-3)

ACGIH: 10 ppm TWA  
15 ppm STEL  
Skin - potential significant contribution to overall exposure by the cutaneous route  
OSHA: 10 ppm TWA; 50 mg/m3 TWA  
NIOSH: 10 ppm TWA; 50 mg/m3 TWA  
15 ppm STEL; 75 mg/m3 STEL

## Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

## Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

## Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

## Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

## Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

## \* \* \* Section 9 - Physical & Chemical Properties \* \* \*

<b>Appearance:</b>	Clear, straw-yellow.	<b>Odor:</b>	Mild, petroleum distillate odor
<b>Physical State:</b>	Liquid	<b>pH:</b>	ND
<b>Vapor Pressure:</b>	0.009 psia @ 70 °F (21 °C)	<b>Vapor Density:</b>	>1.0
<b>Boiling Point:</b>	320 to 690 °F (160 to 366 °C)	<b>Melting Point:</b>	ND
<b>Solubility (H2O):</b>	Negligible	<b>Specific Gravity:</b>	0.83-0.876 @ 60°F (16°C)
<b>Evaporation Rate:</b>	Slow; varies with conditions	<b>VOC:</b>	ND
<b>Percent Volatile:</b>	100%	<b>Octanol/H2O Coeff.:</b>	ND
<b>Flash Point:</b>	>125 °F (>52 °C) minimum	<b>Flash Point Method:</b>	PMCC
<b>Upper Flammability Limit (UFL):</b>	7.5	<b>Lower Flammability Limit (LFL):</b>	0.6
<b>Burning Rate:</b>	ND	<b>Auto Ignition:</b>	494°F (257°C)

## \* \* \* Section 10 - Chemical Stability & Reactivity Information \* \* \*

### Chemical Stability

This is a stable material.

### Hazardous Reaction Potential

Will not occur.



# Safety Data Sheet

Material Name: Diesel Fuel, All Types

SDS No. 9909

## Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

## Incompatible Products

Keep away from strong oxidizers.

## Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

## \* \* \* Section 11 - Toxicological Information \* \* \*

### Acute Toxicity

#### A: General Product Information

Harmful if swallowed.

#### B: Component Analysis - LD50/LC50

##### Naphthalene (91-20-3)

Inhalation LC50 Rat >340 mg/m<sup>3</sup> 1 h; Oral LD50 Rat 490 mg/kg; Dermal LD50 Rat >2500 mg/kg; Dermal LD50 Rabbit >20 g/kg

### Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

### Potential Health Effects: Eye Critical Damage/ Stimulativeness

Contact with eyes may cause mild irritation.

### Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

### Potential Health Effects: Inhalation

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

### Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

### Generative Cell Mutagenicity

This material has been positive in a mutagenicity study.

### Carcinogenicity

#### A: General Product Information

Suspected of causing cancer.



# Safety Data Sheet

**Material Name: Diesel Fuel, All Types**

**SDS No. 9909**

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

## B: Component Carcinogenicity

### Fuels, diesel, no. 2 (68476-34-6)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Diesel fuel)

### Naphthalene (91-20-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

NTP: Reasonably Anticipated To Be A Human Carcinogen (Possible Select Carcinogen)

IARC: Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

## Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

## Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ general toxicity single exposure effects.

## Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any specific target organ general toxicity repeat exposure effects.

## Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

## \*\*\* Section 12 - Ecological Information \*\*\*

## Ecotoxicity

### A: General Product Information

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

#### Fuels, diesel, no. 2 (68476-34-6)

##### Test & Species

96 Hr LC50 Pimephales promelas 35 mg/L [flow-through]

##### Conditions

#### Naphthalene (91-20-3)

##### Test & Species

96 Hr LC50 Pimephales promelas 5.74-6.44 mg/L [flow-through]  
96 Hr LC50 Oncorhynchus mykiss 1.6 mg/L [flow-through]  
96 Hr LC50 Oncorhynchus mykiss 0.91-2.82 mg/L [static]  
96 Hr LC50 Pimephales promelas 1.99 mg/L [static]

##### Conditions



# Safety Data Sheet

**Material Name: Diesel Fuel, All Types**

**SDS No. 9909**

96 Hr LC50 Lepomis macrochirus	31.0265 mg/L [static]
72 Hr EC50 Skeletonema costatum	0.4 mg/L
48 Hr LC50 Daphnia magna	2.16 mg/L
48 Hr EC50 Daphnia magna	1.96 mg/L [Flow through]
48 Hr EC50 Daphnia magna	1.09 - 3.4 mg/L [Static]

## Persistence/Degradability

No information available.

## Bioaccumulation

No information available.

## Mobility in Soil

No information available.

## \*\*\* Section 13 - Disposal Considerations \*\*\*

### Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

### Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

## \*\*\* Section 14 - Transportation Information \*\*\*

### DOT Information

**Shipping Name:** Diesel Fuel

**NA #:** 1993 **Hazard Class:** 3 **Packing Group:** III

**Placard:**



## \*\*\* Section 15 - Regulatory Information \*\*\*

### Regulatory Information

#### Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

#### Naphthalene (91-20-3)

CERCLA: 100 lb final RQ; 45.4 kg final RQ

#### SARA Section 311/312 – Hazard Classes

Acute Health  
X

Chronic Health  
X

Fire  
X

Sudden Release of Pressure  
--

Reactive  
--



# Safety Data Sheet

Material Name: Diesel Fuel, All Types

SDS No. 9909

## SARA SECTION 313 - SUPPLIER NOTIFICATION

This product may contain listed chemicals below the de minimis levels which therefore are not subject to the supplier notification requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372. If you may be required to report releases of chemicals listed in 40 CFR 372.28, you may contact Hess Corporate Safety if you require additional information regarding this product.

## State Regulations

### Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Fuels, diesel, no. 2	68476-34-6	No	No	No	Yes	No	No
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

### Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

### Additional Regulatory Information

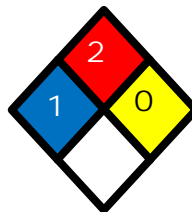
### Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Fuels, diesel, no. 2	68476-34-6	Yes	DSL	EINECS
Naphthalene	91-20-3	Yes	DSL	EINECS

## \* \* \* Section 16 - Other Information \* \* \*

**NFPA® Hazard Rating**

Health	1
Fire	2
Reactivity	0



**HMIS® Hazard Rating**

Health	1*	Slight
Fire	2	Moderate
Physical	0	Minimal

\*Chronic



# Safety Data Sheet

**Material Name: Diesel Fuel, All Types**

**SDS No. 9909**

## Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

## Literature References

None

## Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

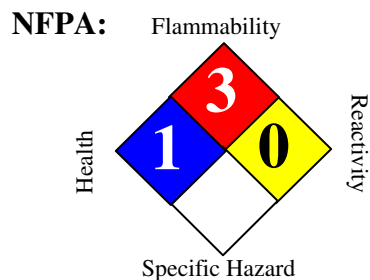
Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet



# Material Safety Data Sheet

## Gasoline, Unleaded Carb



### HMIS III:

HEALTH	1
FLAMMABILITY	3
PHYSICAL	0

0 = Insignificant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name</b>	:	Gasoline, Unleaded Carb			
<b>Synonyms</b>	:	Blend of Petroleum distillates, highly flammable, Carbob, Carb Gasoline, 888100005482			
<b>MSDS Number</b>	:	888100005482	<b>Version</b>	:	2.17
<b>Product Use Description</b>	:	Fuel			
<b>Company</b>	:	For: Tesoro Refining & Marketing Co. 19100 Ridgewood Parkway, San Antonio, TX 78259			
<b>Tesoro Call Center</b>	:	(877) 783-7676	<b>Chemtrec (Emergency Contact)</b>	:	(800) 424-9300

## SECTION 2. HAZARDS IDENTIFICATION

### Emergency Overview

<b>Regulatory status</b>	: This material is considered hazardous by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200).
<b>Hazard Summary</b>	: Extremely flammable. Irritating to eyes and respiratory system. Affects central nervous system. Harmful or fatal if swallowed. Aspiration Hazard.

### Potential Health Effects

<b>Eyes</b>	: Causes eye irritation.
<b>Skin</b>	: May cause skin irritation. Can be absorbed through skin.
<b>Ingestion</b>	: Aspiration hazard if liquid is inhaled into lungs, particularly from vomiting after ingestion. Aspiration may result in chemical pneumonia, severe lung damage, respiratory failure and even death. Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death may occur.
<b>Chronic Exposure</b>	: Long-term exposure may cause effects to specific organs, such as to the liver, kidneys, blood, nervous system, and skin. Contains benzene, which can cause blood disease, including anemia and leukemia.
<b>Target Organs</b>	: Eyes, Skin, Central nervous system, Liver, Kidney, Blood



**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS-No.	Weight %
Gasoline, natural; Low boiling point naphtha	8006-61-9	10 - 30%
Toluene	108-88-3	10 - 30%
Xylene	1330-20-7	10 - 30%
Ethanol; ethyl alcohol (Carbob has no ethanol)	64-17-5	5.7 - 10%
Trimethylbenzene	25551-13-7	1 - 5%
Isopentane; 2-methylbutane	78-78-4	1 - 5%
Naphthalene	91-20-3	1 - 5%
Benzene	71-43-2	Less than 1.3%
Pentane	109-66-0	1 - 5%
Cyclohexane	110-82-7	1 - 5%
Ethylbenzene	100-41-4	1 - 5%
Butane	106-97-8	1 - 20%
Heptane [and isomers]	142-82-5	0.5 - 0.75%
N-hexane	110-54-3	0.5 - 0.75%

**SECTION 4. FIRST AID MEASURES**

<b>Inhalation</b>	: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.
<b>Skin contact</b>	: In case of contact, immediately flush skin with plenty of water. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Contaminated leather, particularly footwear, must be discarded. Note that contaminated clothing may be a fire hazard. Seek medical advice if symptoms persist or develop.
<b>Eye contact</b>	: Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical advice if symptoms persist or develop.
<b>Ingestion</b>	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Obtain medical attention.
<b>Notes to physician</b>	: Symptoms: Dizziness, Discomfort, Headache, Nausea, Kidney disorders, Liver disorders, Aspiration may cause pulmonary edema and pneumonitis. Lung edema.

**SECTION 5. FIRE-FIGHTING MEASURES**



<b>Form</b>	: Liquid
<b>Flash point</b>	: -45 °C (-49 °F)
<b>Auto Ignition temperature</b>	: 257.22 °C (495.00 °F)
<b>Lower explosive limit</b>	: 1.3 %(V)
<b>Upper explosive limit</b>	: 7.6 %(V)
<b>Suitable extinguishing media</b>	: SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO <sub>2</sub> , water spray, fire fighting foam, or Halon. LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers., Keep containers and surroundings cool with water spray.
<b>Specific hazards during fire fighting</b>	: Extremely flammable liquid and vapor. This material is combustible/flammable and is sensitive to fire, heat, and static discharge.
<b>Special protective equipment for fire-fighters</b>	: Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing.
<b>Further information</b>	: Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam. Exposure to decomposition products may be a hazard to health. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	: Evacuate personnel to safe areas. Ventilate the area. Remove all sources of ignition. Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).
<b>Environmental precautions</b>	: Discharge into the environment must be avoided. If the product contaminates rivers and lakes or drains inform respective authorities.
<b>Methods for cleaning up</b>	: Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

## SECTION 7. HANDLING AND STORAGE

<b>Handling</b>	: Keep away from fire, sparks and heated surfaces. No smoking near areas where material is stored or handled. The product should only be stored and handled in areas with intrinsically safe electrical classification.
<b>Advice on protection against fire and explosion</b>	: Hydrocarbon liquids including this product can act as a non-conductive flammable liquid (or static accumulators), and may form ignitable vapor-air mixtures in storage



tanks or other containers. Precautions to prevent static-initiated fire or explosion during transfer, storage or handling, include but are not limited to these examples:

- (1) Ground and bond containers during product transfers. Grounding and bonding may not be adequate protection to prevent ignition or explosion of hydrocarbon liquids and vapors that are static accumulators.
- (2) Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such as gasoline or naphtha).
- (3) Storage tank level floats must be effectively bonded.

For more information on precautions to prevent static-initiated fire or explosion, see NFPA 77, Recommended Practice on Static Electricity (2007), and API Recommended Practice 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents (2008).

**Dust explosion class** : Not applicable

**Requirements for storage areas and containers** : Keep away from flame, sparks, excessive temperatures and open flame. Use approved containers. Keep containers closed and clearly labeled. Empty or partially full product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose containers to sources of ignition. Store in a well-ventilated area. The storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

**Advice on common storage** : Keep away from food, drink and animal feed. Incompatible with oxidizing agents. Incompatible with acids.

**Other data** : No decomposition if stored and applied as directed. Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

List	Components	CAS-No.	Type:	Value
OSHA	Benzene	71-43-2	TWA	1 ppm
		71-43-2	STEL	5 ppm
		71-43-2	OSHA_ACT	0.5 ppm
OSHA Z1	Xylene	1330-20-7	PEL	100 ppm    435 mg/m3
	Ethanol; Ethyl alcohol	64-17-5	PEL	1,000 ppm    1,900 mg/m3
	Naphthalene	91-20-3	PEL	10 ppm    50 mg/m3
	Cyclohexane	110-82-7	PEL	300 ppm    1,050 mg/m3
	Ethylbenzene	100-41-4	PEL	100 ppm    435 mg/m3
	Heptane [and isomers]	142-82-5	PEL	500 ppm    2,000 mg/m3
	N-hexane	110-54-3	PEL	500 ppm    1,800 mg/m3
ACGIH	Toluene	108-88-3	TWA	50 ppm



	Xylene	1330-20-7	TWA	100 ppm
		1330-20-7	STEL	150 ppm
	Ethanol; Ethyl alcohol	64-17-5	TWA	1,000 ppm
	Trimethylbenzene	25551-13-7	TWA	25 ppm
	Isopentane; 2-Methylbutane	78-78-4	TWA	600 ppm
	Naphthalene	91-20-3	TWA	10 ppm
		91-20-3	STEL	15 ppm
	Benzene	71-43-2	TWA	0.5 ppm
		71-43-2	STEL	2.5 ppm
	Pentane	109-66-0	TWA	600 ppm
	Cyclohexane	110-82-7	TWA	100 ppm
	Ethylbenzene	100-41-4	TWA	100 ppm
		100-41-4	STEL	125 ppm
	Heptane [and isomers]	142-82-5	TWA	400 ppm
		142-82-5	STEL	500 ppm
	N-hexane	110-54-3	TWA	50 ppm

<b>Engineering measures</b>	: Use adequate ventilation to keep gas and vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Use only intrinsically safe electrical equipment approved for use in classified areas.
<b>Eye protection</b>	: Safety glasses or goggles are recommended where there is a possibility of splashing or spraying. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Hand protection</b>	: Gloves constructed of nitrile or neoprene are recommended. Consult manufacturer specifications for further information.
<b>Skin and body protection</b>	: If needed to prevent skin contact, chemical protective clothing such as of DuPont TyChem®, Saranex or equivalent recommended based on degree of exposure. Flame resistant clothing such as Nomex ® is recommended in areas where material is stored or handled.
<b>Respiratory protection</b>	: A NIOSH/ MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-1992, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection. Use a NIOSH/ MSHA-approved positive-pressure supplied-air respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.



**Work / Hygiene practices** : Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form</b>	: Liquid
<b>Appearance</b>	: Clear, straw colored
<b>Odor</b>	: Characteristic hydrocarbon-like
<b>Flash point</b>	: -45 °C (-49 °F)
<b>Auto Ignition temperature</b>	: 257.22 °C (495.00 °F)
<b>Thermal decomposition</b>	: No decomposition if stored and applied as directed.
<b>Lower explosive limit</b>	: 1.3 %(V)
<b>Upper explosive limit</b>	: 7.6 %(V)
<b>pH</b>	: Not applicable
<b>Freezing point</b>	: No data available
<b>Boiling point</b>	: 85 to 437 °F (39 to 200 °C)
<b>Vapor Pressure</b>	: 345 - 1,034 hPa at 37.8 °C (100.0 °F)
<b>Relative Vapor Density</b>	: Approximately 3 to 4
<b>Density</b>	: 0.8 g/cm3
<b>Water solubility</b>	: Negligible
<b>Viscosity, dynamic</b>	: No data available
<b>Viscosity, kinematic</b>	: No data available
<b>Percent Volatiles</b>	: 100 %
<b>Conductivity (conductivity can be reduced by environmental factors such as a decrease in temperature)</b>	Hydrocarbon liquids without static dissipater additive may have conductivity below 1 picoSiemens per meter (pS/m). The highest electro-static ignition risks are associated with "ultra-low conductivities" below 5 pS/m. See Section 7 for sources of information on defining safe loading and handling procedures for low conductivity products.

## SECTION 10. STABILITY AND REACTIVITY

**Conditions to avoid** : Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.



<b>Materials to avoid</b>	: Strong oxidizing agents. Peroxides. Strong acids.
<b>Hazardous decomposition products</b>	: Carbon monoxide, carbon dioxide and noncombusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.
<b>Thermal decomposition</b>	: No decomposition if stored and applied as directed.
<b>Hazardous reactions</b>	: Keep away from oxidizing agents, and acidic or alkaline products. Hazardous polymerization does not occur.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Carcinogenicity

<b>NTP</b>	: Naphthalene (CAS-No.: 91-20-3) Benzene (CAS-No.: 71-43-2)
<b>IARC</b>	: Gasoline, natural; Low boiling point naphtha (CAS-No.: 8006-61-9) Naphthalene (CAS-No.: 91-20-3) Benzene (CAS-No.: 71-43-2) Ethylbenzene (CAS-No.: 100-41-4)
<b>OSHA</b>	: Benzene (CAS-No.: 71-43-2)
<b>CA Prop 65</b>	: WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Toluene (CAS-No.: 108-88-3) Benzene (CAS-No.: 71-43-2)
<b>Acute oral toxicity</b>	: LD50 rat Dose: 18.8 mg/kg
<b>Acute inhalation toxicity</b>	: LC50 rat Dose: 20.7 mg/l Exposure time: 4 h
<b>Skin irritation</b>	: Irritating to skin.
<b>Eye irritation</b>	: Irritating to eyes.
<b>Further information</b>	: Liver and kidney injuries may occur. Components of the product may affect the nervous system. IARC has determined that gasoline and gasoline exhaust are possibly carcinogenic in humans. Inhalation exposure to completely vaporized unleaded gasoline caused kidney cancers in male rats and liver tumors in female mice. The U.S. EPA has determined that the male kidney tumors are species-specific and are irrelevant for human health risk assessment. The significance of the tumors seen in female mice is not known. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with effects to the central and peripheral nervous systems, liver, and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain. This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH. Acute toxicity of benzene results primarily from depression of the central nervous system (CNS). Inhalation of concentrations over 50 ppm can produce headache, lassitude, weariness, dizziness, drowsiness, over excitation.



Exposure to very high levels can result in unconsciousness and death.

**Component:**

**Gasoline, natural; Low boiling point naphtha** 8006-61-9

Acute oral toxicity: LD50 rat  
Dose: 18.8 mg/kg

Acute inhalation toxicity: LC50 rat  
Dose: 20.7 mg/l  
Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.  
Result: Mild skin irritation

Eye irritation: Classification: Irritating to eyes.  
Result: Moderate eye irritation

**Toluene** 108-88-3

Acute oral toxicity: LD50 rat  
Dose: 636 mg/kg

Acute dermal toxicity: LD50 rabbit  
Dose: 12,124 mg/kg

Acute inhalation toxicity: LC50 rat  
Dose: 49 mg/l  
Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.  
Result: Mild skin irritation  
Prolonged skin contact may defat the skin and produce dermatitis.  
Eye irritation: Classification: Irritating to eyes.  
Result: Mild eye irritation

**Xylene** 1330-20-7

Acute oral toxicity: LD50 rat  
Dose: 2,840 mg/kg

Acute dermal toxicity: LD50 rabbit  
Dose: ca. 4,500 mg/kg

Acute inhalation toxicity: LC50 rat  
Dose: 6,350 mg/l  
Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.  
Result: Mild skin irritation  
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.  
Eye irritation: Classification: Irritating to eyes.  
Result: Mild eye irritation

**Ethanol; Ethyl alcohol** 64-17-5

Acute oral toxicity: LD50 rat  
Dose: 6,200 mg/kg

Acute dermal toxicity: LD50 rabbit  
Dose: 19,999 mg/kg

Acute inhalation toxicity: LC50 rat  
Dose: 8,001 mg/l  
Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.  
Result: Mild skin irritation  
Prolonged skin contact may cause skin irritation and/or dermatitis.  
Eye irritation: Classification: Irritating to eyes.  
Result: Mild eye irritation  
Mild eye irritation

**Naphthalene** 91-20-3

Acute oral toxicity: LD50 rat  
Dose: 2,001 mg/kg

Acute dermal toxicity: LD50 rat



Dose: 2,501 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 101 mg/l

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.

Result: Mild skin irritation

Eye irritation: Classification: Irritating to eyes.

Result: Mild eye irritation

Carcinogenicity: N11.00422130

**Benzene**

71-43-2

Acute oral toxicity: LD50 rat

Dose: 930 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 44 mg/l

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.

Result: Mild skin irritation

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Eye irritation: Classification: Irritating to eyes.

Result: Risk of serious damage to eyes.

**Pentane**

109-66-0

Acute oral toxicity: LD50 rat

Dose: 2,001 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 364 mg/l

Exposure time: 4 h

Skin irritation: Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Eye irritation: Classification: Irritating to eyes.

Result: Mild eye irritation

**Cyclohexane**

110-82-7

Acute dermal toxicity: LD50 rabbit

Dose: 2,001 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 14 mg/l

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.

Result: Skin irritation

Eye irritation: Classification: Irritating to eyes.

Result: Mild eye irritation

**Ethylbenzene**

100-41-4

Acute oral toxicity: LD50 rat

Dose: 3,500 mg/kg

Acute dermal toxicity: LD50 rabbit

Dose: 15,500 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 18 mg/l

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.

Result: Mild skin irritation

Eye irritation: Classification: Irritating to eyes.

Result: Risk of serious damage to eyes.

**Heptane [and isomers]**

142-82-5

Acute oral toxicity: LD50 rat

Dose: 15,001 mg/kg



Acute inhalation toxicity: LC50 rat

Dose: 103 g/m<sup>3</sup>

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.

Result: Skin irritation

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Eye irritation: Classification: Irritating to eyes.

Result: Mild eye irritation

**N-hexane**

110-54-3

Acute oral toxicity: LD50 rat

Dose: 25,000 mg/kg

Acute dermal toxicity: LD50 rabbit

Dose: 2,001 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 171.6 mg/l

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.

Result: Skin irritation

Eye irritation: Classification: Irritating to eyes.

Result: Mild eye irritation

Teratogenicity: N11.00418960

**SECTION 12. ECOLOGICAL INFORMATION****Additional ecological information**

: Keep out of sewers, drainage areas, and waterways. Report spills and releases, as applicable, under Federal and State regulations.

**Component:****Toluene**

108-88-3

Toxicity to fish:

LC50

Species: Carassius auratus (goldfish)

Dose: 13 mg/l

Exposure time: 96 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 11.5 mg/l

Exposure time: 48 h

Toxicity to algae:

IC50

Species: Selenastrum capricornutum (green algae)

Dose: 12 mg/l

Exposure time: 72 h

**Ethanol; Ethyl alcohol**

64-17-5

Toxicity to fish:

LC50

Species: Leuciscus idus (Golden orfe)

Dose: 8,140 mg/l

Exposure time: 48 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 9,268 - 14,221 mg/l

Exposure time: 48 h



Isopentane; 2-Methylbutane	78-78-4	<u>Toxicity to fish:</u> LC50 Species: Oncorhynchus mykiss (rainbow trout) Dose: 3.1 mg/l Exposure time: 96 h  <u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 2.3 mg/l Exposure time: 96 h
Naphthalene	91-20-3	<u>Toxicity to algae:</u> EC50 Species: Dose: 33 mg/l Exposure time: 24 h
Pentane	109-66-0	<u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 9.74 mg/l Exposure time: 48 h
Cyclohexane	110-82-7	<u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 3.78 mg/l Exposure time: 48 h
Heptane [and isomers]	142-82-5	<u>Toxicity to fish:</u> LC50 Species: Carassius auratus (goldfish) Dose: 4 mg/l Exposure time: 24 h  <u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 1.5 mg/l Exposure time: 48 h
N-hexane	110-54-3	<u>Toxicity to fish:</u> LC50 Species: Pimephales promelas (fathead minnow) Dose: 2.5 mg/l Exposure time: 96 h  <u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 2.1 mg/l Exposure time: 48 h

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal** : Dispose of container and unused contents in accordance with federal, state and local requirements.

## SECTION 14. TRANSPORT INFORMATION

### CFR

Proper shipping name : Petrol  
UN-No. : 1203  
Class : 3



	Packing group	: II
<b>TDG</b>	Proper shipping name	: Gasoline
	UN-No.	: UN1203
	Class	: 3
	Packing group	: II

**IATA Cargo Transport**

UN UN-No.	: UN1203
Description of the goods	: Gasoline
Class	: 3
Packaging group	: II
ICAO-Labels	: 3
Packing instruction (cargo aircraft)	: 364
Packing instruction (cargo aircraft)	: Y341

**IATA Passenger Transport**

UN UN-No.	: UN1203
Description of the goods	: Gasoline
Class	: 3
Packaging group	: II
ICAO-Labels	: 3
Packing instruction (passenger aircraft)	: 353
Packing instruction (passenger aircraft)	: Y341

**IMDG-Code**

UN-No.	: UN 1203
Description of the goods	: Gasoline
Class	: 3
Packaging group	: II
IMDG-Labels	: 3
EmS Number	: F-E S-E
Marine pollutant	: No

**SECTION 15. REGULATORY INFORMATION**

OSHA Hazards	: Flammable liquid Highly toxic by ingestion Moderate skin irritant Severe eye irritant Carcinogen
TSCA Status	: On TSCA Inventory
DSL Status	: . All components are on the Canadian DSL list.
SARA 311/312 Hazards	: Fire Hazard Acute Health Hazard Chronic Health Hazard



**CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)**

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil. Fractions of crude oil, and products (both finished and intermediate) from the crude oil refining process and any indigenous components of such from the CERCLA Section 103 reporting requirements. However, other federal reporting requirements, including SARA Section 304, as well as the Clean Water Act may still apply.

California Prop. 65 : WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Toluene 108-88-3

Benzene 71-43-2

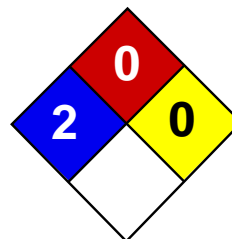
**SECTION 16. OTHER INFORMATION**Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Template** : GWU mbH  
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02/02/2011

11, 13, 15, 82, 1150, 1151, 1152, 1286, 1288, 1407, 1416, 1417, 1419, 1707, 1708





Health	2
Fire	0
Reactivity	0
Personal Protection	G

## Material Safety Data Sheet Tetrachloroethylene MSDS

### Section 1: Chemical Product and Company Identification

**Product Name:** Tetrachloroethylene

**Catalog Codes:** SLT3220

**CAS#:** 127-18-4

**RTECS:** KX3850000

**TSCA:** TSCA 8(b) inventory: Tetrachloroethylene

**CI#:** Not available.

**Synonym:** Perchloroethylene; 1,1,2,2-Tetrachloroethylene; Carbon bichloride; Carbon dichloride; Ankilostin; Didakene; Dilatin PT; Ethene, tetrachloro-; Ethylene tetrachloride; Perawin; Perchlor; Perclene; Perclene D; Percosolve; Tetrachloroethene; Tetraleno; Tetralen; Tetralex; Tetravec; Tetrogue; Tetropil

**Chemical Name:** Ethylene, tetrachloro-

**Chemical Formula:** C<sub>2</sub>-Cl<sub>4</sub>

#### Contact Information:

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**  
1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

### Section 2: Composition and Information on Ingredients

#### Composition:

Name	CAS #	% by Weight
Tetrachloroethylene	127-18-4	100

**Toxicological Data on Ingredients:** Tetrachloroethylene: ORAL (LD<sub>50</sub>): Acute: 2629 mg/kg [Rat]. DERMAL (LD): Acute: >3228 mg/kg [Rabbit]. MIST(LC<sub>50</sub>): Acute: 34200 mg/m 8 hours [Rat]. VAPOR (LC<sub>50</sub>): Acute: 5200 ppm 4 hours [Mouse].

### Section 3: Hazards Identification

#### Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator), of eye contact (irritant), of ingestion.

#### Potential Chronic Health Effects:

**CARCINOGENIC EFFECTS:** Classified A3 (Proven for animal.) by ACGIH. Classified 2A (Probable for human.) by IARC, 2 (anticipated carcinogen) by NTP. **MUTAGENIC EFFECTS:** Mutagenic for bacteria and/or yeast. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance may be toxic to kidneys, liver, peripheral nervous system, respiratory tract, skin, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.



## Section 4: First Aid Measures

### Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

### Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

### Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

### Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

### Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** Non-flammable.

**Auto-Ignition Temperature:** Not applicable.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

### Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:** Not applicable.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## Section 6: Accidental Release Measures

**Small Spill:** Absorb with an inert material and put the spilled material in an appropriate waste disposal.

### Large Spill:

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## Section 7: Handling and Storage



**Precautions:**

Do not ingest. Do not breathe gas/fumes/ vapor/spray. Avoid contact with skin. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, metals, acids, alkalis.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

## Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

**Personal Protection:**

Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:**

TWA: 25 (ppm) from OSHA (PEL) [United States] TWA: 25 STEL: 100 (ppm) from ACGIH (TLV) [United States] TWA: 170 (mg/m3) from OSHA (PEL) [United States] Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Liquid.

**Odor:** Ethereal.

**Taste:** Not available.

**Molecular Weight:** 165.83 g/mole

**Color:** Clear Colorless.

**pH (1% soln/water):** Not available.

**Boiling Point:** 121.3°C (250.3°F)

**Melting Point:** -22.3°C (-8.1°F)

**Critical Temperature:** 347.1°C (656.8°F)

**Specific Gravity:** 1.6227 (Water = 1)

**Vapor Pressure:** 1.7 kPa (@ 20°C)

**Vapor Density:** 5.7 (Air = 1)

**Volatility:** Not available.

**Odor Threshold:** 5 - 50 ppm

**Water/Oil Dist. Coeff.:** The product is more soluble in oil; log(oil/water) = 3.4

**Ionicity (in Water):** Not available.

**Dispersion Properties:** Not available.

**Solubility:**

Miscible with alcohol, ether, chloroform, benzene, hexane. It dissolves in most of the fixed and volatile oils. Solubility in water: 0.015 g/100 ml @ 25 deg. C It slowly decomposes in water to yield Trichloroacetic and Hydrochloric acids.



## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Incompatible materials

**Incompatibility with various substances:** Reactive with oxidizing agents, metals, acids, alkalis.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:**

Oxidized by strong oxidizing agents. Incompatible with sodium hydroxide, finely divided or powdered metals such as zinc, aluminum, magnesium, potassium, chemically active metals such as lithium, beryllium, barium. Protect from light.

**Special Remarks on Corrosivity:** Slowly corrodes aluminum, iron, and zinc.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:**

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 2629 mg/kg [Rat]. Acute dermal toxicity (LD50): >3228 mg/kg [Rabbit]. Acute toxicity of the vapor (LC50): 5200 4 hours [Mouse].

**Chronic Effects on Humans:**

CARCINOGENIC EFFECTS: Classified A3 (Proven for animal.) by ACGIH. Classified 2A (Probable for human.) by IARC, 2 (Some evidence.) by NTP. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. May cause damage to the following organs: kidneys, liver, peripheral nervous system, upper respiratory tract, skin, central nervous system (CNS).

**Other Toxic Effects on Humans:**

Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator), of ingestion.

**Special Remarks on Toxicity to Animals:**

Lowest Published Lethal Dose/Conc: LDL [Rabbit] - Route: Oral; Dose: 5000 mg/kg LDL [Dog] - Route: Oral; Dose: 4000 mg/kg LDL [Cat] - Route: Oral; Dose: 4000 mg/kg

**Special Remarks on Chronic Effects on Humans:**

May cause adverse reproductive effects and birth defects (teratogenic). May affect genetic material (mutagenic). May cause cancer.

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Skin: Causes skin irritation with possible dermal blistering or burns. Symptoms may include redness, itching, pain, and possible dermal blistering or burns. It may be absorbed through the skin with possible systemic effects. A single prolonged skin exposure is not likely to result in the material being absorbed in harmful amounts. Eyes: Contact causes transient eye irritation, lacrimation. Vapors cause eye/conjunctival irritation. Symptoms may include redness and pain. Inhalation: The main route to occupational exposure is by inhalation since it is readily absorbed through the lungs. It causes respiratory tract irritation, . It can affect behavior/central nervous system (CNS depressant and anesthesia ranging from slight inebriation to death, vertigo, somnolence, anxiety, headache, excitement, hallucinations, muscle incoordination, dizziness, lightheadness, disorientation, seizures, emotional instability, stupor, coma). It may cause pulmonary edema. Ingestion: It can cause nausea, vomiting, anorexia, diarrhea, bloody stool. It may affect the liver, urinary system (proteinuria, hematuria, renal failure, renal tubular disorder), heart (arrhythmias). It may affect behavior/central nervous system with symptoms similar to that of inhalation. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may result in excessive drying of the skin, and irritation. Ingestion/Inhalation: Chronic exposure can affect the liver (hepatitis, fatty liver degeneration), kidneys, spleen, and heart (irregular heartbeat/arrhythmias, cardiomyopathy, abnormal EEG), brain, behavior/central nervous system/peripheral nervous system (impaired memory, numbness of extremities, peripheral neuropathy and other



## Section 12: Ecological Information

**Ecotoxicity:**

Ecotoxicity in water (LC50): 18.4 mg/l 96 hours [Fish (Fathead Minnow)]. 18 mg/l 48 hours [Daphnia (daphnia)]. 5 mg/l 96 hours [Fish (Rainbow Trout)]. 13 mg/l 96 hours [Fish (Bluegill sunfish)].

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14: Transport Information

**DOT Classification:** CLASS 6.1: Poisonous material.

**Identification:** : Tetrachloroethylene UNNA: 1897 PG: III

**Special Provisions for Transport:** Marine Pollutant

## Section 15: Other Regulatory Information

**Federal and State Regulations:**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Tetrachloroethylene California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Tetrachloroethylene Connecticut hazardous material survey.: Tetrachloroethylene Illinois toxic substances disclosure to employee act: Tetrachloroethylene Illinois chemical safety act: Tetrachloroethylene New York release reporting list: Tetrachloroethylene Rhode Island RTK hazardous substances: Tetrachloroethylene Pennsylvania RTK: Tetrachloroethylene Minnesota: Tetrachloroethylene Michigan critical material: Tetrachloroethylene Massachusetts RTK: Tetrachloroethylene Massachusetts spill list: Tetrachloroethylene New Jersey: Tetrachloroethylene New Jersey spill list: Tetrachloroethylene Louisiana spill reporting: Tetrachloroethylene California Director's List of Hazardous Substances: Tetrachloroethylene TSCA 8(b) inventory: Tetrachloroethylene TSCA 8(d) H and S data reporting: Tetrachloroethylene: Effective date: 6/1/87; Sunset date: 6/1/97 SARA 313 toxic chemical notification and release reporting: Tetrachloroethylene CERCLA: Hazardous substances.: Tetrachloroethylene: 100 lbs. (45.36 kg)

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications:****WHMIS (Canada):**

CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

**DSCL (EEC):**

R40- Possible risks of irreversible effects. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. S23- Do not breathe gas/fumes/vapour/spray S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37- Wear suitable gloves. S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.



**HMIS (U.S.A.):****Health Hazard:** 2**Fire Hazard:** 0**Reactivity:** 0**Personal Protection:** g**National Fire Protection Association (U.S.A.):****Health:** 2**Flammability:** 0**Reactivity:** 0**Specific hazard:****Protective Equipment:**

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

**Section 16: Other Information****References:** Not available.**Other Special Considerations:** Not available.**Created:** 10/10/2005 08:29 PM**Last Updated:** 06/09/2012 12:00 PM

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall ScienceLab.com be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if ScienceLab.com has been advised of the possibility of such damages.*





Colonial Chemical Solutions, Inc.

## Material Safety Data Sheet – Perchloroethylene

### SECTION I • PRODUCT IDENTIFICATION

**Manufacturers Address:**  
916 West Lathrop Avenue  
Savannah, Georgia 31415

**CHEMTREC – 24HR Emergency Telephone 1-800-424-9300**

**Information Phone:** (912) 443-6702

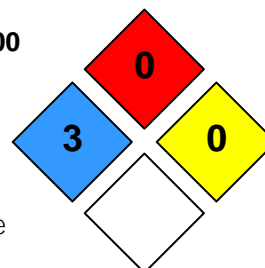
**Date Prepared:** 26 Sept 08

**Preparer:** F.Spaeth

**Synonym:** PERC, Tetrachloroethylene  
**Chemical Family:** Chlorinated Aliphatic

**NFPA Rating**

0- Minimal 1- Slight 2- Moderate  
3- Serious 4- Extreme



### SECTION II • HAZARDOUS INGREDIENTS

CHEMICAL NAME	CAS Number	%WT	TLV	PEL
Tetrachloroethylene	127-18-4	100	25ppm	100 ppm

### SECTION III • HAZARDOUS IDENTIFICATION

**Potential Acute Health Effects:** Irritating to skin and eye tissue. Slightly toxic by inhalation.

**Potential Chronic Health Effects:** Repeated abuse of high levels produces adverse effects on the liver and to a lesser extent on the kidneys

### SECTION IV • PHYSICAL and CHEMICAL PROPERTIES

**Boiling Point Range:** 250°F

**pH:** NA

**Solubility In Water:** Insoluble

**Appearance/Odor:** Clear colorless liquid with sweet odor.

**Melting Point/Freezing Point:** No available data.

**Vapor Density (Air=1):** 5.8

**Vapor Pressure (mmHg):** 14

**VOC %:** No available data.

**Specific Gravity (H<sub>2</sub>O=1):** 1.46

### SECTION V • FIRE FIGHTING MEASURES

**Flash Point:** None

**Auto Ignition:** No Data

**Extinguishing Media:** As apparent to surrounding fire.

**Flammable Limits:** Lower: None Upper: None

**Fire Fighting Procedures:** Evacuate the area and fight from a safe distance. Cool fire-exposed containers with water spray to prevent container weakening and possible rupture. Do not enter fire zone without self-contained breathing apparatus (SCBA) and structural firefighter's protective clothing.

**Unusual Fire and Explosion Hazards:** Explosive mixtures of tetrachloroethylene and air can be formed, but are difficult to ignite and require high intensity sources of heat.

### SECTION VI • STABILITY AND REACTIVITY

**Stability:** Stable.

**Conditions to Avoid:** Red hot surfaces and Open Flames

**Incompatibility:** Avoid contact with powdered metals and strong alkalis.

**Hazardous Decomposition Products:** Oxides of Carbon, hydrogen chloride and phosgene.

**Hazardous Polymerization:** Will not occur.





Colonial Chemical Solutions, Inc.

## SECTION VII - STORAGE AND HANDLING

**Precautions To Be Taken In Handling and Storage:** Do not use in confined spaces. Always store in tightly sealed, properly labeled, original container. Store in a cool, dry well ventilated area.

**Other Precautions:** DO NOT get in eyes, on skin, or on clothing. DO NOT breath vapors, mist, or fumes. DO NOT swallow. May be aspirated into the lungs which could be fatal.

## SECTION VIII - HEALTH AND FIRST AID

**Skin:** Slight/Mildly irritating. Can be absorbed through the skin.

**Eyes:** Vapors may be irritating. Irritation accompanied by redness.

**Inhalation:** High vapor concentrations may be irritating to respiratory system. Breathing of vapor may cause headaches, irritation of throat and may cause central nervous system depression.

**Ingestion:** May cause gastric distress, diarrhea and vomiting.

### FIRST AID PROCEDURES:

**Eyes:** Flush with large amounts of cool running water for at least 15 minutes. If irritation persists get medical attention.

**Skin:** Wash skin with soap and water. If irritation persists seek medical attention.

**Inhalation:** For excessive inhalation remove to fresh air. If breathing is difficult seek medical attention.

**Ingestion:** DO NOT induce vomiting. Drink large amounts of water or milk. Seek medical attention immediately.

## SECTION IX - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Eye Protection:** Eye Protection when pouring. Goggles, safety glasses with side shields are recommended.

**Respiratory Protection:** Where adequate ventilation is not available an approved NIOSH respirator must be worn. In confined areas, use a self-contained breathing apparatus.

**Skin Protection:** Use suitable chemically resistant gloves, and clothing.

**Ventilation:** General Mechanical ventilation to prevent TLV from exceeding control limits.

**Protective Clothing:** Selection of protective clothing depends on potential exposure conditions and may include gloves, and other protective items.

**Other Equipment:** Eye wash station and shower in close proximity to use are advised

## SECTION X - ACCIDENTAL RELEASE MEASURES

**Small Spill:** Isolate and stop source of spill provided it is safe to do so. Absorb on inert media and collect into suitable container. Wear necessary PPE.

**Large Spill:** Shut off or plug source of spill provided it is safe to do so. Dike area to contain spill. Salvage as much liquid as possible into a suitable container. Absorb residual on inert media and collect into suitable container. Do not allow material to enter drains, sewers or waterways.

**Personal Protection in Case of Large Spill:** Wear protective equipment and/or garments as described in Section IX as conditions warrant.

## SECTION XI - DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Dispose of in accordance with U.S. EPA 40 CFR 262 for concentrations at or above 0.7 mg/L. Avoid contaminating ground and surface water. Do not flush to drain. Follow local, state and federal applicable regulations for disposal.





Colonial Chemical Solutions, Inc.

## SECTION XII • TRANSPORTATION

**Proper Shipping Name:** Tetrachloroethylene  
**Hazard Class:** 6.1  
**UN Number:** 1879  
**Packaging Group:** III

## SECTION XIII • TOXICOLOGY

**Carcinogenicity:** Tetrachloroethylene is listed by NTP as 'reasonably anticipated to be a human carcinogen' and by IARC as a Group 2A carcinogen.  
**Mutagenicity:** Data suggest this to be a Mutagenic.  
**Reproductive:** Data suggest this to have reproductive effects.  
**Sensitization:** No sensitizer data found.

## SECTION XIV • REGULATORY

**RMP/PSM:** Not Listed  
**CERCLA-RQ:** 100 LBS  
**EPCRA 311/312:** Yes, See Sections III and VIII  
**EPCRA 313:** Yes  
**FIFRA:** No documented information available.  
**RCRA-CODE:** U210; D039  
**TSCA:** Listed

## SECTION XV • OTHER INFORMATION

The information contained on this Material Safety Data Sheet is considered accurate as of the date of publication. It is not necessarily all inclusive nor fully adequate in every circumstance. The suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements. No warranty, express or implied, of merchantability, fitness, accuracy of data, or the results to be obtained from the use thereof is made. The vendor assumes no responsibility for injury or damages resulting from the inappropriate use of this product.