2477 Third Avenue

NEW YORK, NEW YORK

Remedial Investigation Report

BCP Site No. C203047

AKRF Project Number: 11160

Prepared for:

Jiten, LLC 30 Byrd Avenue Carle Place, NY 11514



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1.0 INTRODUCTION

AKRF, Inc. (AKRF) conducted a Remedial Investigation (RI) on behalf of Jiten LLC (the Volunteer) for the 2477 Third Avenue site in the Bronx, New York (BCP Site No. C203047). The site is also defined as Tax Block 2320, Lot 11. It should be noted that the applicant currently owns Block 2320, Lots 5 and 7 through 11 on the same block; however, only Lot 11 was entered into the Brownfield Cleanup Program (BCP). The site location is shown on Figure 1, and the detailed site layout is provided on Figure 2.

The RI was conducted in accordance with AKRF's March 2010 Remedial Investigation Work Plan (RIWP), which was approved by the New York State Department of Environmental Conservation (NYSDEC) in a letter dated March 16, 2010. The scope of the investigation is described in Section 4.0 and consisted of: a geophysical survey; the advancement of soil borings and the collection of soil samples for laboratory analysis; a soil vapor investigation; the installation and sampling of three deep monitoring wells; the collection and laboratory analysis of groundwater samples from the nine existing on-site shallow wells; and the collection of one surface soil sample from the site.

The scope of work was based on the findings of previous investigations conducted at the property as described in Section 3.0. This Remedial Investigation Report (RIR) describes the methods and results of the investigation.

2.0 SITE DESCRIPTION

2.1 Site and Vicinity Characteristics

The site is located at 2477 Third Avenue in the Bronx, New York and is defined as Tax Block 2320, Lot 11. The site is an approximately 0.214-acre parcel comprising the eastern portion of the city block bound to the north by East 136th Street, to the east by Third Avenue, to the south by East 135th Street and the Major Deegan Expressway, and to the west by vacant Lot 10. The site is currently vacant and is located in a commercial and industrial area characterized by a variety of warehouse, trucking, auto repair, and manufacturing businesses. It is zoned as MX-13 – Mixed Use-13 (Lower Concourse, BX). A New York City Housing complex is located two blocks east of the site. The nearest environmental receptor is the Harlem River, which is located 800 feet west-southwest of the site.

The Volunteer also owns Tax Block 2320, Lots 5, 7, 8, 9, and 10, which are vacant and primarily unpaved, though some areas of the lots are paved with asphalt. It should be noted that Tax Block 2320, Lot 6 is not owned by Jiten LLC and comprises a partially paved lot with a highway advertising sign. A hazardous materials E-designation (E 227) was assigned to all of the lots on Block 2320 in June 2009 as part of the Lower Concourse Rezoning.

2.2 Site Geology, Hydrogeology and Subsurface Characteristics

The surface topography at the site is generally level. According to a survey performed by Montrose Surveying Co., LLP, the outdoor portions of the site are generally at an elevation of 8.5 to 10 feet above the Bronx Topographical Bureau datum, which is 2.608 feet above mean sea level. On-site investigations indicated that surficial soil beneath the site consists of fill materials underlain by sand with varying amounts of silt and gravel (possibly native) starting at approximately 8 to 12 feet below grade. The water table is approximately 7 to 10 feet below grade and was determined by the elevation survey conducted for this study to flow in a south-southwesterly direction towards the Harlem River, approximately 800 feet west-southwest of the site (discussed in Section 4.8). Water in the Harlem River is tidally influenced and brackish,

which may affect the salinity of groundwater beneath the project site. The site lies within the 500-year flood plain and the northwestern corner of the site lies within the 100-year flood plain.

A geotechnical investigation was conducted by D.K. Drilling of Bayside, New York in February 2009 over the entire block that included the advancement of six borings, two of which were on Lot 11. Bedrock was not encountered by D.K. Drilling in the two borings on Lot 11, which were advanced to a maximum depths of 82 feet below grade. Bedrock was encountered at a depth of approximately 58 feet below grade on Lot 10 and approximately 70 feet below grade on Lot 7. This investigation found presumed bedrock beneath Lot 11 at depths ranging from 55 to 150 feet below surface grade.

2.3 Site History and Background

Historic Sanborn fire insurance maps indicate that the site was occupied by a portion of the Drain Pipes and Fireproof Materials Company in 1898 and a wagon yard in 1908. From 1951 through 1989, the site comprised a gasoline filling station. Throughout the development history of the site, the surrounding area was predominantly commercial and industrial with some residential properties. Several auto repair shops, factories, garages and filling stations were noted north of the site in the 1951 through 2006 maps.

Measurable free product was reported in several on-site monitoring wells between 1984 and 1986. The field observations and analytical data of subsequent investigations indicated that widespread hydrocarbon contamination existed throughout the site. Volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and metals were detected in soil and groundwater samples at concentrations that exceeded the New York State Department of Environmental Conservation (NYSDEC) Recommended Soil Cleanup Objectives (RSCOs). Gasoline-related hydrocarbons [including benzene, toluene, ethylbenzene and xylene and methyl tert butyl ether (MTBE)] were detected in soil and groundwater. A plume consisting of gasoline-related hydrocarbons was identified migrating southeast from the former on-site gasoline station. Regulatory records identified three 4,000-gallon gasoline underground storage tanks (USTs), one 4,000-gallon diesel UST, and three 12,000-gallon gasoline USTs at the site. These tanks were registered as closed and removed; however, based on AKRF's field observations, the 4,000-gallon USTs remained in place. Up to seven additional 550-gallon gasoline USTs are suspected to have been present at the site; however, these tanks were never registered with the NYSDEC.

A gasoline spill (Spill No. 0230034) was reported for the site to the NYSDEC on January 31, 2002. The spill was attributed to releases from on-site gasoline USTs; however, the exact location of where the spill originated was not known. Previous investigations at the property have delineated the extent of gasoline-related contamination in soil and groundwater at the site and in adjacent areas to the south and southeast. The spill record remains open under a Stipulation Agreement. Previous investigations are more thoroughly discussed in Section 3.0.

2.4 Planned Development and Contemplated Future Use

The proposed development of the project site would involve excavation of Lots 7 through 10 to approximately 12 feet below existing grade for the construction of a four-story hotel with subgrade parking/basement levels. Lot 11 will not be excavated for subgrade levels; however, the first floor of the portion of the building on Lot 11 will be an open driveway exposed to the exterior atmosphere with the second through fourth floors of the hotel overhanging Lot 11. Given the reported depth to groundwater, dewatering may be required for the proposed construction. Development of Lot 5 will include paving the entire lot and installing a sign for the newly

constructed hotel. Since the lots are vacant, no demolition will be required for development of the site. Proposed architectural plans are provided in Appendix A.

3.0 PREVIOUS INVESTIGATIONS

Multiple investigations have been performed on the site to identify and further evaluate environmental conditions. A summary of the findings of these investigations is presented below.

3.1 Field Notes and Product Recovery Data from 1984 to 1986

A request for information under the Freedom of Information Law (FOIL) from the New York State Department of Environmental Conservation (NYSDEC) identified documents from Soil Mechanics of Seaford, New York relating to the gauging and recovery of petroleum product from 15 groundwater monitoring/recovery wells at the site. Product gauging and recovery logs indicated that measurable product was detected in approximately half of the on-site wells. According to the reviewed data, periodic bailing of the wells between 1984 and 1986 reduced the product thickness from a maximum of approximately 16 inches to "trace" levels. Field notes from March 21, 1986 stated that six 550-gallon underground gasoline tanks were removed from the site and oily water from inside one of the tanks was released onto the ground surface during the removal activities (no spill was called into the NYSDEC for this release). Furthermore, petroleum-contaminated soil noted around the tanks was left in the tank excavation. Monitoring/recovery wells were reported to have been destroyed during the tank removal activities.

The information received from the FOIL request included a plan indicating the locations of nine soil borings advanced by Soil Mechanics in April 1984 and the results of a gas chromatograph analysis of soil samples collected from the borings. The plan also indicated the location of seven gasoline USTs. Results of the soil analysis identified total concentrations of compounds ranging from 40 to 1,240 parts per million (ppm), though the type of compounds detected were not reported with the obtained data. No further information about the soil analysis was provided.

3.2 Baseline Acquisition Assessment Report (2002)

A Baseline Acquisition Assessment Report for the 2477 Third Avenue Gaseteria property was completed by Delta Environmental Consultants, Inc. (Delta) in January 2002 (report dated October 2002). The assessment included a regulatory file review and the advancement of five soil borings, four of which were located on the site (Lot 11). Four soil samples and four groundwater samples were collected from the site and submitted for laboratory analysis. Soil samples were collected from a depth of 6 to 10 feet below surface grade.

NYSDEC records identified three 4,000-gallon gasoline and one 4,000-gallon diesel underground storage tanks (USTs) registered for Lot 11. Soil samples, obtained from Lot 11 only, contained elevated gasoline-related compounds, including concentrations of methyl tert butyl ether (MTBE) above NYSDEC Technical and Administrative Guidance Memorandum (TAGM) No. 4046 Recommended Soil Cleanup Objectives. Four groundwater samples were obtained from Lot 11 for laboratory analysis. Groundwater analytical results identified elevated levels of benzene, toluene, ethylbenzene, and xylenes (BTEX), MTBE and other petroleum-related compounds in the samples.

Based on the results of the investigation, Delta reported a spill to the NYSDEC on January 31, 2002 (Spill No. 0230034).

3.3 Phase I Environmental Site Assessment (2007)

AKRF performed a Phase I Environmental Site Assessment (ESA) at the site (Lot 11) and eastadjacent tax lots (Block 2320, Lots 5 through 10) in October 2007. Environmental conditions related to Lot 11 noted in the report included: one on-site active gasoline spill reported on January 31, 2002 (Spill No. 0230034); petroleum-related contamination to soil and groundwater identified during previous investigations at the site; the presence of current and former underground storage tanks; the former use of the site as a gasoline station; and a long history of industrial, manufacturing, and commercial operations on surrounding properties, including auto-related uses.

3.4 Investigation Summary Report and Updated Investigation Summary Report (2007 and 2008)

On behalf of Gaseteria Oil Corp., Advanced Site Restoration, LLC (ASR) installed four groundwater monitoring wells on and off the site in November 2007 and collected soil and groundwater samples for laboratory analysis, as described in a report dated December 2007. Laboratory results indicated elevated levels of volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, and xylenes (BTEX), and MTBE, and semivolatile organic compounds (SVOCs) in soil and groundwater samples. ASR recommended quarterly groundwater monitoring and additional monitoring well installations to further delineate subsurface contamination following NYSDEC approval of an investigation work plan.

Based on the findings of their 2007 subsurface investigation, ASR installed and sampled four additional on-site and two off-site groundwater monitoring wells between March and August 2008 after consultation with the NYSDEC. In a report dated September 2008, ASR reported that laboratory analytical results revealed elevated VOCs concentrations in on- and off-site soil. On- and off-site groundwater samples contained elevated levels of VOCs including BTEX (and MTBE in an on-site monitoring well). Soil samples were collected from directly above the soil-groundwater interface.

A survey of water table elevations was conducted and groundwater was determined to be flowing in a south-southwesterly direction. ASR determined that a dissolved hydrocarbon plume was migrating southward from the southeastern corner of the site (Lot 11). Based on the data collected by ASR, the plume did not appear to have migrated beyond East 134th Street, located approximately 200 feet to the south. ASR recommended additional quarterly groundwater monitoring and consultation with the NYSDEC to determine whether additional downgradient monitoring well installations were required to further delineate off-site contamination. A Remedial Action Plan (RAP) for future site development was also recommended by ASR.

3.5 Interview with the NYSDEC Division of Environmental Remediation Representative (2008)

AKRF personnel attended a meeting at the NYSDEC Region 2 Division of Environmental Remediation on December 1, 2008. The meeting was held to discuss the potential for the subject site to enter into the BCP. Mr. Andre Obligado, Division of Environmental Remediation Region 2 Project Manager for the active spill at the site, provided information regarding the remediation history at the site. Mr. Obligado indicated that a pump and treat groundwater remediation system was installed at the site in 1986, which had since been abandoned. No further details about the system were provided. No additional information was available through a FOIL request or database searched. Remnants of the system were observed by AKRF at the property during AKRF's 2009 Limited Subsurface (Phase II) Investigation discussed in Section 3.7.

3.6 Phase I Environmental Site Assessment (2009)

AKRF conducted a Phase I Environmental Site Assessment for the site and east-adjacent tax lots (Lots 5 through 10) in January 2009 to update the 2007 Phase I ESA. In addition to the environmental conditions identified by AKRF's October 2007 Phase I ESA for the site, AKRF's 2009 Phase I ESA reported that contamination was identified at the site (Lot 11) by ASR in November 2007 and between March and August 2008, as detailed in Section 3.4.

3.7 Limited Subsurface (Phase II) Investigation (2009)

In February 2009, AKRF conducted a subsurface (Phase II) investigation that included gauging existing on-site monitoring wells for potential non-aqueous phase liquid (NAPL). Although no measurable LNAPL (floating petroleum product) was detected in the on-site wells during gauging, petroleum-like odors were noted in monitoring wells ASR/MW-1 and ASR/MW-8, located in the southern portion of the site. No soil or groundwater sampling was conducted on Lot 11 as part of AKRF's February 2009 investigation.

4.0 FIELD ACTIVITIES

4.1 Field Program Summary

This RI was conducted in accordance with AKRF's NYSDEC-approved March 2010 RIWP, which included a Quality Assurance Project Plan (QAPP) and the Health and Safety Plan (HASP). The scope of work consisted of:

- A geophysical survey to search for, and delineate, on-site USTs;
- Advancement of five soil borings and the collection of soil samples for laboratory analysis, including from the bedrock surface;
- A soil vapor sampling plan including the collection of soil gas samples from the five soil boring locations;
- Installation of three deep monitoring wells at three of the soil boring locations to triangulate the deep aquifer and obtain groundwater flow direction, and the collection and laboratory analysis of deep aquifer groundwater samples;
- Collection and laboratory analysis of groundwater samples from the nine existing on-site shallow wells installed by ASR; and
- Collection of one soil surface sample from the unpaved/uncapped area of the site to evaluate the potential exposure from contaminants in surface soil.

Soil borings SB/SG/MW-101, SB -102, SB/SG-103, SB/SG/MW-104 and SB/SG/MW-105 were advanced to characterize and field-screen subsurface materials. Figure 2 depicts these boring locations and the previously installed monitoring wells (by ASR). A summary of the soil boring locations and sample types is provided in the following table:

Boring ID Number	Sample Types
SB/SG/MW-101	Soil, Soil Gas, and Deep Aquifer Groundwater Samples
SB-102	Soil and Soil Gas Samples
SB/SG-103	Soil and Soil Gas Samples
SB/SG/MW-104	Soil and Deep Aquifer Groundwater Samples
SB/SG/MW-105	Soil, Soil Gas, and Deep Aquifer Groundwater Samples

Summary of Borings and Sample Types

The collection of a soil gas sample from soil boring location SB-102 was proposed in the approved RIWP. Soil gas sample collection was attempted and submitted to the laboratory in accordance with the RIWP; however, no sample was present in the canister when received by the laboratory. The canister appeared to be properly pressurized and the valve was noted to be working properly. However, the pressure gauge or other element of the sampling equipment may have been defective. The Soil Gas Sampling Logs are provided in Appendix B.

4.2 Field Observations

Soil screening for this investigation indicated that subsurface soil beneath the site consists of urban fill materials to approximately 6 to 10 feet below grade. The urban fill comprised sand, silt and fine gravel with ash, asphalt concrete, brick, ceramic tile and wood. The fill is underlain by sand and silt with a trace of fine gravel, and is possibly native. Groundwater was encountered at approximately 7 to 10 feet below grade. Presumed bedrock was encountered during advancement of the deep soil borings SB/SG/MW-101, SB/SG/MW-104 and SB/SG/MW-105 at depths of approximately 150, 89 and 55 feet below surface grade, respectively.

Significant photoionization detector (PID) readings were detected during advancement of soil boring SB/SG/MW-105 only. Soil directly above the water table in this boring detected a PID reading of 1,064 parts per million (ppm). Soil beneath the water table at this location ranged in concentration from 3.7 ppm to 426 ppm to a depth of approximately 25 feet below grade. These detections are attributable to the gasoline-related contaminant plume in the groundwater previously delineated by ASR in this area of the property.

Petroleum-like odors were noted at the water table in borings SB-102 and SB/SG/MW-105. Staining of soil at the water table was noted in soil boring SB/SG/MW-105. The odors and staining are also attributable to the gasoline-related contaminant plume in the groundwater previously delineated by ASR. Petroleum-like odors have been detected by AKRF during this investigation in groundwater from shallow monitoring wells MW-1 and MW-8.

4.3 Geophysical Survey

A geophysical investigation was conducted on June 2, 2010 to map out known USTs and determine whether unknown USTs are present beneath the project site. In particular, seven 550-gallon USTs are suspected to be located in the eastern portion of the site; the removal of these tanks could not be confirmed. The geophysical investigation comprised a ground-penetrating radar (GPR) survey and a magnetometer survey. The survey was conducted throughout the entire property.

The geophysical survey delineated the four previously identified USTs; no unexpected anomalies consistent with the presence of USTs were detected by the geophysical survey. Therefore, the seven 550-gallon USTs and any other USTs suspected at the property were likely removed.

4.4 Soil Vapor Sampling

A Geoprobe® direct push probe (DPP) unit was used to collect soil gas samples from all five boring locations to adequately evaluate on-site soil vapor and the potential for off-site vapor migration. Soil gas samples were collected from approximately six feet below grade, which is approximately one foot above the water table surface. Samples were collected using one-liter stainless steel Summa canisters over a 15-minute time period.

The samples were analyzed for VOCs by EPA Method TO-15. All sample analyses were performed in a New York State Department of Health Environmental Laboratory Approval Program (NYSDOH-ELAP) laboratory certified to perform NYSDEC Analytical Services Protocol (ASP).

As noted in Section 4.1, no sample was present in the canister used to collect a soil gas sample from soil boring location SB-102 when evaluated by the laboratory. As such, analytical results for four soil gas samples are presented in this RIR.

4.5 Soil Borings

A hollow-stem auger (HSA) rotary rig was used to advance soil borings at the three deep well locations (SB/SG/MW-101, SB/SG/MW-104 and SB/SG/MW 105) and a Geoprobe direct-push drill rig was used to advance soil borings at locations SB-102 and SB/SG-103. Continuous soil samples were collected to approximately 10 feet (approximately 2 to 3 feet below the water table). Each split spoon sample was logged and screened for organic vapors with a photoionization detector (PID). Soil boring logs are provided in Appendix C.

At the three deep well locations (SB/SG/MW-101, SB/SG/MW-104 and SB/SG/MW-105), the soil borings were further advanced via the HSA rig to the bedrock surface and deep monitoring wells were installed. Starting at 12 feet below grade, two-foot split spoon samplers were advanced into the subsurface every five feet to characterize the soil and screen for potential contamination. In some cases, no soil was recovered and the samplers were advanced at 10 foot intervals. After these three borings were advanced, the augers were removed and 2-inch PVC casing was installed into the borehole down to the assumed bedrock surface. A 10-foot screen was installed at the base of the well. Installation of the deep wells was conducted in accordance with the RIWP. The monitoring well construction details are provided in Appendix D.

The soil samples were analyzed by a New York State Department of Health Environmental Laboratory Approval Program (NYSDOH-ELAP) laboratory certified to perform NYSDEC Analytical Services Protocol (ASP) for volatile organic compounds (VOCs) using EPA Method 8260, semi-volatile organic compounds (SVOCs) using EPA Method 8270, pesticides using EPA Method 8081, polychlorinated biphenyls (PCBs) using EPA Method 8082, and Target Analyte List (TAL) metals (6000/7000 series).

4.6 Groundwater Sampling

4.6.1 Shallow Wells

Existing monitoring wells installed on Lot 11 by ASR were sampled by AKRF on June 3, 2010. ASR installed nine monitoring wells at the property: ASR/MW-1, ASR/MW-2, ASR/MW-3, ASR/MW-4, ASR/MW-5, ASR/MW-6, ASR/MW-8, ASR/MW-9, and ASR/MW-10. However, at the time of AKRF's sampling event, ASR/MW-5 could not be located. Site work associated with the demolition of the former gasoline station canopy had left some concrete and metal debris on site that covered the well; the debris

has since been removed. However, all of ASR's monitoring wells (including ASR/MW-5) were sampled by AKRF in October 2009 as part of the quarterly groundwater sampling required by the NYSDEC Region 2 Division of Environmental Remediation for the active spill associated with the site. A discussion of the quarterly sampling data is provided in Section 5.4. Locations of all on-site wells are depicted on Figure 2.

Groundwater samples were collected using the low flow sampling techniques, as described in AKRF's approved RIWP. Water quality indicators were measured during the purging (e.g., turbidity, pH, temperature, dissolved oxygen, reduction-oxidation potential, and specific conductivity) and samples were collected when the turbidity was less than 50 NTU and water quality indicators stabilized to the extent practicable. Well Sampling Logs are provided in Appendix E.

4.6.2 Deep Wells

The new deep monitoring wells were developed via over-pumping until at least three well volumes have been evacuated. The purge water was monitored for turbidity and water quality indicators (i.e., pH, dissolved oxygen, oxidation-reduction potential, temperature, and specific conductivity) with measurements collected approximately every five minutes. Development continued until water quality indicators had stabilized. Deep monitoring SB/SG/MW-101, SB/SG/MW-104 and SB/SG/MW 105 were sampled following the required 2 week well stabilization period on June 15 and 16, 2010. The locations of the wells are depicted on Figure 2.

Groundwater samples were collected using the low flow sampling techniques, as described in AKRF's approved RIWP. Water quality indicators were measured during the purging (e.g., turbidity, pH, temperature, dissolved oxygen, reduction-oxidation potential, and specific conductivity) and samples were collected when the turbidity was less than 50 Nephelometric Turbidity Units (NTU) and water quality indicators stabilized to the extent practicable. Well Sampling Logs are provided in Appendix E.

4.6.3 Groundwater Laboratory Analysis

Groundwater samples were collected using dedicated tubing and placed directly into laboratory-supplied sample bottles. The samples were analyzed in a laboratory following NYSDEC ASP Category B deliverables. Groundwater samples were analyzed for VOCs using EPA Method 8260, SVOCs using EPA Method 8270, pesticides using EPA Method 8081, PCBs using EPA Method 8082, and total and filtered TAL metals (6000/7000 series). None of the deep or shallow monitoring wells contained measurable free-phase product; therefore, no sample of product was collected for fingerprint analysis.

4.7 Surface Soil Sampling

The RIWP proposed the collection and laboratory analysis of one surface soil/fill sample from the center of an approximately 25 foot by 25-foot portion of the site thought to be unpaved. Upon further inspection, this area was determined to be capped with concrete pavement covered with up to one foot of soil. The soil appeared to comprise urban fill with sand, silt and gravel, and included fragments of concrete, brick and asphalt. The source of the soil is likely from past on-site excavation/demolition work, though this could not be confirmed. Nonetheless, a sample of this soil was collected for laboratory analysis. A dedicated stainless steel hand trowel or stainless steel spoon was used to collect a representative sample. The representative sample was screened

with a PID, and characterized for impacts via visual and olfactory observations. No PID reading, staining or odors were noted on the soil. The sample was transferred to laboratory-supplied, precleaned sample containers for laboratory analysis for VOCs using EPA Method 8260, SVOCs using EPA Method 8270, pesticides using EPA Method 8081, PCBs using EPA Method 8082, and total and filtered TAL metals (6000/7000 series).

4.8 Elevation Survey

All borings and monitoring wells (shallow and deep) were surveyed by Montrose Surveying Company, LLP, a New York State-licensed surveyor. Two elevation measurements were taken at each well location: the flush-to-grade manhole cover; and the top of PVC casing. The elevations were used to establish the elevation of the water table throughout the site and determine the groundwater flow direction.

A contour map of the water table elevation determined from the shallow wells is provided as Figure 3. Shallow groundwater appears to flow in a south-southwesterly direction. This only somewhat concurs with the results of the ASR's previous investigations, which suggested that groundwater flowed in a south-southeasterly direction. Because of the tidal influence on the water table at this location, such variations in the groundwater flow direction are not unexpected. A general southerly trend in groundwater flow direction is expected.

A contour map of the elevation measurements taken from the deep aquifer wells is provided as Figure 4. The data suggests water in the deeper aquifer flows in a southeasterly direction. However, actual groundwater flow in the deeper aquifer may be affected by the variable depth of presumed bedrock at the site. Presumed bedrock was encountered during advancement of the deep soil borings SB/SG/MW-101, SB/SG/MW-104 and SB/SG/MW 105 at depths of approximately 150, 89 and 55 feet below surface grade, respectively. Coring of the presumed bedrock surface was not conducted to confirm the depth of bedrock. A geotechnical investigation was conducted by D.K. Drilling of Bayside, New York in February 2009 on Tax Lots 7, 9, 10 and 11 of the subject block (Block 2320). Two of the borings were advanced at the subject property (Lot 11). Bedrock was encountered at a depth of approximately 58 feet below grade on Lot 7. Bedrock was not encountered in the remaining four geotechnical borings, which were advanced to depths ranging between approximately 60 and 82 feet below grade. These results are further indication of the significant variability of the depth of bedrock in the area, which may be affecting deeper groundwater flow patterns.

4.9 Monitored Natural Attenuation Analysis

In addition to the aforementioned groundwater analysis, the groundwater samples from select monitoring wells (MW-1, MW-2, MW-3, MW-6 and MW-10) were also analyzed for natural attenuation indicator parameters, including total alkalinity, nitrogen/nitrate, sulfate, sulfide and dissolved methane. The specific wells were selected to provide a spectrum of samples from throughout the property, including from both known contaminated areas and areas with apparently unaffected wells.

5.0 ANALYTICAL RESULTS

5.1 Soil Analytical Results

Fourteen discrete soil samples and one surface soil sample were collected for laboratory analysis as part of this investigation. Soil sample analytical results were compared to the New York State Department of Environmental Conservation (NYSDEC) 6 NYCRR Part 375 Remedial Program Soil Cleanup Objectives (SCOs) for Unrestricted and Commercial Use. Soil descriptions, observations, and PID readings were recorded on the soil boring logs provided in Appendix C. The soil sample laboratory analytical data is included in Appendix F. The Data Usability Summary Reports (DUSRs) for the laboratory analytical results are provided in Appendix G.

5.1.1 Subsurface soil samples

<u>VOCs</u>

Soil analytical results for VOCs are presented in Table 1a. VOCs were detected in 4 of the 14 soil samples analyzed [SB -102 (9.5'), SB/SG/MW-105 (3'), SB/SG/MW-105 (9.5'), and SB/SG/MW-105 (24')]. VOCs were detected above the Unrestricted SCOs in only one sample, SB/SG/MW-105 (9.5'), including, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, naphthalene, n-butylbenzene, n-propylbenzene, xylenes, sec-butylbenzene, and toluene. Only 1,2,4-trimethylbenzene and xylenes were detected above the Commercial SCOs. The individual concentrations of these compounds ranged from 12 parts per million (ppm) to 700 ppm. The distributions of VOCs in the soil samples analyzed are presented on Figure 5.

The VOCs detected in soil sample SB/SG/MW-105 (9.5') are associated with gasoline. Elevated PID readings, petroleum-like odors and staining were noted in soil at the water table. This soil sample was collected from directly above the water table in the area where previous investigations by ASR detected the gasoline-related contaminant plume. Similarly, trace levels of gasoline-related VOCs ranging in concentrations from 0.0074 ppm to 1.073 ppm were detected in soil sample SB/SG-102 (9.5'), also collected from directly above the water table. The analytical results of soil samples SB/SG-102 (9.5') and SB/SG/MW-105 are, therefore, most likely reflective of contamination to groundwater.

<u>SVOCs</u>

Soil analytical results for SVOCs are presented in Table 1b. Twenty SVOCs were detected in 11 of the 14 samples analyzed. Seven SVOCs were detected above the Unrestricted SCOs in five of the samples: SB/SG/MW-101 (0-4'), SB/SG-103 (0-5'); SB/SG-103 (5'-10'), SB/SG/MW-104 (0-4'), and SB/SG/MW-105 (0-4'). SVOCs exceeding the SCOs included benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. The individual concentrations of these compounds ranged from 0.56 ppm to 7.2 ppm.

The polycyclic aromatic hydrocarbons (PAH) portions of the SVOC samples were reanalyzed by EPA Method 8270-SIM to attain detection limits below the SCOs. The majority of the detected compounds, particularly those exceeding the SCOs, are from the group of SVOCs known as PAHs. As noted on the soil boring logs, samples with elevated SVOCs/PAHs were collected from the upper 10 feet of soil, which included urban fill. The urban fill was noted to comprise PAH-containing materials, specifically ash and asphalt. Based on the levels and distribution detected, the SVOCs are attributable to the urban fill and not to a release or spill.

<u>Metals</u>

Soil analytical results for SVOCs are presented in Table 1c. Metals were detected in all of the soil samples analyzed, the majority of which were at concentrations below their respective Unrestricted SCOs and within the Eastern United States background levels published in NYSDEC's Technical and Administrative Guidance Memorandum No. 4046 (TAGM) Eastern United States background levels. Metals exceeding the Unrestricted SCOs included barium, chromium, copper, lead, mercury, and zinc. Only lead and mercury in SB/SG-103 (0-5') and mercury in SB/SG-103 (5'-10') exceeded the Commercial SCOs. Lead concentrations in the samples ranged from below detection limits to 1,200 ppm in SB/SG-103 (0-5'); the Commercial SCO for lead is 1,000 ppm. Mercury concentrations in the samples ranged from below detection limits to 3.6 ppm in SB/SG-103 (5'-10'); the Commercial SCO for mercury is 2.8 ppb.

Based on the levels and distribution detected, the metals concentration, including those exceeding the SCOs, are attributable to the urban fill or are naturally occurring.

<u>PCBs</u>

No PCBs were detected in any of the soil samples analyzed.

<u>Pesticides</u>

Heptachlor epoxide was detected in soil sample SB/SG/MW-104 (0-4') at a concentration of 0.0209 ppm, below the Unrestricted SCO of 0.10 ppm. No other pesticides were detected in the samples.

5.1.2 Surface Soil Sample

Analytical results of the surface soil sample (SS-101) is presented in Tables 1a through 1d. No VOCs or PCBs were detected in SS-101. Five SVOCs were detected in the sample, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(ghi)perylene, chrysene, fluoranthene, and pyrene. The concentrations ranged from 0.16 ppm to 0.32 ppm, below their respective Unrestricted SCOs.

Eighteen metals were detected in the sample. Mercury was detected at a concentration of 0.4 ppm, above the Unrestricted SCO of 0.18 ppm but below commercial SCO of 2.8 ppm. All other metals were below their respective Unrestricted SCOs.

The pesticide 4,4'-DDE was detected in SS-101 at a concentration of 0.0241 ppm, above the Unrestricted SCO of 0.0033 ppm. No other pesticides were detected in the sample.

Based on the concentrations of compounds and metals detected, the surface soil sampled is likely urban fill, possibly excavated from the site. No staining, odors or elevated PID readings were detected on the surficial soil in this area.

5.2 Soil Gas Analytical Results

Concentrations of VOCs detected in the soil gas samples were compared to the EPA Building Assessment and Survey Evaluation (BASE) 90th percentile value, the NYSDOH 2003 Soil Vapor Intrusion Guidance 2003 Indoor Air Guidance Upper Fence Values, and the NYSDOH Guidance for Evaluating Soil Vapor Intrusion air guideline values. These values provide a means of comparison to background conditions; however, since these values reflect indoor air conditions,

the comparison assumes that any soil vapor detected would completely penetrate into the building, a condition that does not typically occur, nor would be present in the proposed new construction. The soil gas laboratory analytical data is included in Appendix F.

Soil gas analytical results are presented in Table 2 and on Figure 6. Twelve VOCs were detected in the soil gas samples analyzed, ten of which were at concentrations above the EPA and NYSDOH guidance values. VOCs detected were either associated with petroleum/gasoline (2,2,4-trimethylpentane, benzene, methyl tert butyl ether (MTBE), n-hexane, propylene, and toluene) or with solvents (2-butanone, acetone, carbon disulfide, cyclohexane, heptane, and isopropanol). Concentrations of detected petroleum/gasoline-related VOCs ranged from 31.5 micrograms per meter cubed (μ g/m³) to 31,600 μ g/m³. Concentrations of detected solvent-related VOCs ranged from 18.2 μ g/m³ to 4,800 μ g/m³. The concentrations were observed to be randomly dispersed throughout the subsurface; no specific on-site source area of the vapors could be ascertained from the soil gas data.

The concentrations of detected petroleum/gasoline-related VOCs detected in the soil gas were generally higher than those of other VOCs detected, suggesting an on-site source (i.e., the gasoline contamination detected in the shallow groundwater monitoring well samples analyzed, as discussed in Section 5.3). Solvent-related VOCs were detected at significantly lower concentrations and may be related to past on-site manufacturing operations.

5.3 Shallow Groundwater Analytical Results

Eight groundwater samples (MW-1, MW-2, MW-3, MW-4, MW-6, MW-8, MW-9, and MW-10) were collected for laboratory analysis from ASR's shallow monitoring wells. At the time of the sampling event, ASR/MW-5 could not be located. Groundwater sample analytical results were compared to the NYSDEC Class GA Ambient Water Quality Standards (drinking water standards), although groundwater is not used as a potable source in the Bronx. The groundwater sample laboratory analytical data is included in Appendix F.

VOCs

Shallow groundwater analytical results for VOCs are presented in Table 3a. Concentrations of VOCs detected above the Class GA standards are provided on Figure 7. The concentrations of VOCs exceeding Class GA standards detected in the October 2009 quarterly groundwater sampling event required by the NYSDEC for the active spill associated with the site (discussed further in Section 5.4) are included on Figure 7. Contour lines of the VOC concentrations are provided on the figure.

VOCs were not detected in samples MW-6 and MW-10. Four VOCs (acetone, benzene, ethyl benzene, and MTBE) were detected in MW-9, but at concentrations below Class GA standards. VOCs were detected above Class GA standards in six of the groundwater samples analyzed (MW-1, MW-2, MW-3, MW-4, and MW-8). Fourteen compounds were detected above Class standards, including 1,2,4,5-tetramethylbenzene, 1,2,4-trimethylbenzene, 1.3.5-GA trimethylbenzene, benzene, ethylbenzene, isopropylbenzene, MTBE, naphthalene, nbutylbenzene, n-propylbenzene p-isopropyltoluene, sec-butylbenzene, toluene, and xylenes). All of these compounds are typically associated with gasoline. Concentrations of these compounds ranged from below detection limits to 2,520 parts per billion (ppb) of xylenes in MW-8. VOC concentrations were generally higher in the samples collected from the southern portion of the site, which concurs with the results of the previous investigations conducted by ASR in connection with the reported spill for the site. Petroleum-like odors were detected in groundwater from monitoring wells MW-1 and MW-8, the southernmost wells.

<u>SVOCs</u>

Shallow groundwater analytical results for SVOCs are presented in Table 3b. SVOCs were detected in four of the eight groundwater samples (MW-1, MW-3, MW-4, and MW-8). Hexachloroethane was detected in MW-4 at a concentration of 9.9 ppb, above the Class GA standard of 5 ppb. 2-methylnaphthalene was detected in MW-1, MW-3, MW-4, and MW-8 at concentration ranging from 1.4 ppb to 8.4 ppb; there is no Class GA standard for 2-methylnaphthalene. No other SVOCs were detected in the samples analyzed.

Naphthalene and 2-methylnaphthalene is associated with petroleum and was detected in the wells located on the southern portion of the property. It is attributable to the gasoline related contamination detected in that area of the site. Hexachloroethane is associated with aluminum foundries and is likely attributable to general groundwater quality in the area. However, the majority of the SVOC detections are most likely due to suspended sediments. Since samples for SVOC analysis were not filtered, particles in the surrounding soil, agitated by the sampling process, become entrained in the groundwater sample.

Total and Dissolved Metals

Shallow groundwater analytical results for metals are presented in Table 3c. Eleven metals were detected in the groundwater samples in the unfiltered (total) analysis. The total metals exceeding the Class GA standards included arsenic, iron, manganese, and sodium. Eight metals were detected in the groundwater samples in the filtered (dissolved) analysis. The dissolved metals exceeding the Class GA standards included iron, manganese, and sodium.

The analytical results suggest that a portion of the metals detections in the total (unfiltered) analyses are due to suspended sediments entrained in the groundwater sample. The metals detected by both analyses may be attributable to historic industrial activities in the area; however, based on the type and distribution of metals detected, they are most likely from the sediment in the fill materials, naturally occurring in the surrounding native soil, or from naturally occurring metals in brackish water (manganese and sodium).

PCBs

No PCBs were detected in the groundwater samples.

Pesticides

Shallow groundwater analytical results for pesticides are presented in Table 3d. Heptachlor epoxide was detected in samples MW-1, MW-2, MW-3, MW-4, MW-8 and MW-9 at concentrations ranging from 0.024 ppb to 0.804 ppb. The concentrations were above the Class GA standard of 0.03 ppb in all but MW-2. Heptachlor epoxide was detected in soil sample SB/SG/MW-104 (0-4'), which may be from past landscaping activities but may also be attributable to the urban fill. No other pesticides were detected in the samples analyzed.

5.4 NYSDEC Quarterly Groundwater Sampling Analytical Data from October 2009

Nine groundwater samples (MW-1, MW-2, MW-3, MW 4, MW-5, MW-6, MW-8, MW-9, and MW-10) were collected by AKRF for laboratory analysis from ASR's shallow monitoring wells as part of the October 2009 quarterly groundwater sampling event required by the NYSDEC. The samples were analyzed for VOCs by EPA Method 8260 STARS List only. Groundwater sample analytical results were compared to the NYSDEC Class GA Ambient Water Quality Standards (drinking water standards), although groundwater is not used as a potable source in the Bronx.

Results of the quarterly groundwater sampling event are provided in Table 4. Concentrations of VOCs exceeding Class GA standards are presented on Figure 7 and were detected in groundwater samples MW-1, MW-2, MW-3, MW-5 and MW-8. The concentrations of VOCs in these samples ranged from below detection limits to 3,300 ppb. As with the results of June 2010 RI sampling event, detected VOCs were more elevated in the samples collected from the southern portion of the site where the known gasoline-contaminant plume was previously delineated by ASR. The groundwater sample laboratory analytical data is included in Appendix F.

5.5 Deep Aquifer Groundwater Analytical Results

Three deep aquifer groundwater samples (MW-101, MW-104, and MW-105) were collected for laboratory analysis from the deep monitoring wells installed to presumed bedrock. Groundwater sample analytical results were compared to the NYSDEC Class GA Ambient Water Quality Standards (drinking water standards), although groundwater is not used as a potable source in the Bronx. The laboratory analytical data is included in Appendix F.

VOCs

Deep aquifer groundwater analytical results for VOCs are presented in Table 4a and on Figure 8.

Chloroform was detected in all three samples at concentration ranging from 0.8 ppb to 2.6 ppb, below the Class GA standard of 7 ppb. No other VOCs were detected in MW-101, which was installed to a depth of 150 feet below grade.

Cis-1,2-dichloroethene, MTBE and tetrachloroethene were detected in MW-104 at concentrations of 0.78 ppb, 3 ppb and 1.1 ppb, respectively, below the Class GA standards of 5 ppb, 10 ppb and 5 ppb, respectively. No other VOCs were detected in MW-104.

1,2,4-trimethylbenzene, xylenes and cis-1,2-dichloroethene were detected in MW-105 at concentrations of 6.2 ppb, 19.2 ppb and 14 ppb, respectively, above the Class GA standards of 5 ppb for each compound. Additionally, 4-ethyltoluene, chloroethane, ethylbenzene, and MTBE were detected in MW-105 at concentrations ranging from 0.8 ppb to 5.1 ppb, below Class GA standards.

1,2,4-trimethylbenzene, ethylbenzene, MTBE and xylenes are associated with the presence of gasoline. The concentrations of these compounds is higher in MW-105, which is the shallowest deep well (55 feet below grade) and is located in the area where gasoline-related compounds were detected in the shallow wells. The MTBE detected in MW-104 (89 feet below grade) may also be attributable to the on-site gasoline contamination, though off-site sources cannot be ruled out.

4-ethyltoluene, chloroform, cis-1,2-dichloroethene and tetrachloroethene were detected in MW-105 at individual concentrations ranging from 0.8 ppb to 5.1 ppb, below Class GA standards. These compounds are typically associated with industrial activities, including the use of solvents. 4-ethyltoluene was detected in soil samples SB-102 (9.5'), SB/SG/MW-105 (3'), and SB/SG/MW-105 (9.5') and shallow groundwater samples MW-1, MW-3, MW-4 and MW-8 (there is no SCO or Class GA standard for 4-ethyltoluene). The other compounds were not detected in soil or groundwater samples analyzed as part of this RI. 4-ethyltoluene was not detected in the soil and groundwater samples analyzed from Lots 5 though 10 during AKRF's February 2009 Limited Subsurface (Phase II) Investigation, suggesting it may be from an on-site source. Nonetheless, the low levels of 4-ethyltoluene in the deep aquifer samples, as well as the chloroform, cis-1,2-dichloroethene and tetrachloroethene levels, are typical for areas of the Bronx with an industrial/manufacturing history.

<u>SVOCs</u>

No SVOCs were detected in the three deep aquifer groundwater samples analyzed.

Total and Dissolved Metals

Deep aquifer groundwater analytical results for metals are presented in Table 4b. Twelve metals were detected in the groundwater samples in the unfiltered (total) analysis. The total metals exceeding the Class GA standards included arsenic, iron, manganese, and sodium. Eight metals were detected in the groundwater samples in the filtered (dissolved) analysis. The dissolved metals exceeding the Class GA standards included magnesium, manganese, and sodium.

The analytical results suggest that a portion of the metals detections in the total analyses are due to suspended sediments entrained in the groundwater sample. The metals detected by both analyses may be attributable to historic industrial activities in the area; however, since these metals were also detected in the shallow groundwater samples at similar concentrations, they are most likely naturally occurring in the surrounding native soil or from naturally occurring metals in brackish water (magnesium, manganese and sodium).

<u>PCBs</u>

No PCBs were detected in the deep aquifer groundwater samples.

<u>Pesticides</u>

No pesticides were detected in the deep aquifer groundwater samples.

5.6 Analytical Laboratory Sample Dilutions

Some of the analytical data of the soil and groundwater samples analyzed had elevated detection limits due to the dilutions required by the laboratory to compensate for elevated concentrations of target compounds in the samples. As such, other target and/or non-target VOCs may be present in the samples at concentrations below the elevated detection limit. The factor by which each sample was diluted is provided within the sample identification cells along the top of each table. Based on the analytical results obtained, it is AKRF's opinion that the dilutions conducted by the laboratory do not materially affect the conclusions of this report.

5.7 Monitored Natural Attenuation Evaluation

Analytical results of the general chemistry analysis (methane, nitrate, sulfate, sulfide, and alkalinity) conducted to evaluate the subsurface conditions for natural attenuation are provided in Table 6. The analyses were conducted on samples from monitoring wells MW-1, MW-2, MW-3, MW-6 and MW-10. Contaminants may naturally degrade to reduce the concentrations of contaminants before they pose unacceptable levels of risk to human health or the environment. Data was reviewed to determine whether the groundwater conditions are favorable to the natural biodegradation of the contaminants and their breakdown products. The field measurement of oxidation-reduction potential (ORP) conducted during purging and sampling of the wells, coupled with the reported concentrations of methane, sulfate, sulfide, and nitrate concentration are all related to the potential breakdown of petroleum-related hydrocarbons through biodegradation.

Groundwater quality parameters were recorded for all shallow monitoring wells during purging at a frequency of once per approximately five minutes of purging. Once stabilized, the water quality parameters were reviewed to determine if the subsurface environment was likely to sustain natural attenuation. Immediately prior to sample collection, the oxidation-reduction potential (ORP) ranged from -55 millivolts (mV) to -148 mV, the dissolved oxygen (DO) ranged

from not detected (ND) to 2.55 milligrams per liter (mg/L), and the pH ranged from 6.38 to 6.76. The combination of an ORP below -50mV and a pH between 5 and 9 are typically acceptable ranges for a natural attenuation environment. Levels of dissolved oxygen can suggest the presence of anaerobic degradation (<1.0 mg/L) or aerobic degradation (>1.0 to 2.0 mg/L).

NYSDEC Class GA groundwater criteria are not applicable for the natural attenuation indicator parameters analyzed. These additional parameters were analyzed and compared to the following ranges to determine if site conditions are favorable to support anaerobic biodegradation of petroleum-related hydrocarbons and its breakdown compounds:

- Nitrate < 1 mg/L, as it may compete with the reductive pathway;
- Sulfate < 20 mg/L, as it may compete with the reductive pathway;
- Sulfide > 1 mg/L indicating reductive pathway possible; and
- Methane > 0.1 mg/L when sulfate is not elevated, indicating oxidation of VOCs.

The analytical results showed that nitrate was below the aforementioned criteria, sulfate was below the criteria, and methane was within the criteria for all five groundwater samples selected for analysis of natural attenuation indicator parameters. Since sulfate was present at levels below 20 mg/L (ranging from ND to 19 mg/L) and methane was above 0.1 mg/L (ranging from 0.61 mg/L to 5.37 mg/L), the conditions are even more favorable to reduction. Natural attenuation is further enhanced by relatively high natural alkalinity (66 mg/L to 160 mg/L) detected in the analyzed samples in combination with the suitable natural pH range.

This data, supported with the field measurement for dissolved oxygen, ORP, and pH, suggests that reducing conditions exist that will naturally biodegrade the petroleum-related hydrocarbons in groundwater.

6.0 SUMMARY AND CONCLUSIONS

<u>Summary</u>

AKRF, Inc. (AKRF) conducted a Remedial Investigation (RI) at the 2477 Third Avenue site, which included a geophysical survey, the advancement of five soil borings, the installation of three deep monitoring wells, and the sampling of shallow monitoring wells previously installed at the property. Fourteen soil samples, one surface soil sample, four soil vapor samples, eight shallow groundwater samples, and three deep aquifer groundwater samples were submitted for laboratory analysis. In addition, monitoring well elevations were surveyed to determine groundwater flow direction(s).

Soil beneath the site consisted of urban fill comprising sand, silt and fine gravel with ash, asphalt concrete, brick, ceramic tile and wood. The fill was observed to depths of approximately 6 to 10 feet below grade and was underlain by sand and silt with some fine gravel (possibly native). The water table was encountered at approximately 7 to 10 feet below grade and shallow groundwater was determined to flow in a south-southwesterly direction. Presumed bedrock was encountered during advancement of the deep soil borings SB/SG/MW-101, SB/SG/MW-104 and SB/SG/MW 105 at depths of approximately 150, 89 and 55 feet below surface grade, respectively. The deep aquifer groundwater elevation data suggests that the deeper aquifer flows in a south-asterly direction.

Elevated PID readings were detected during advancement of soil boring SB/SG/MW-105 only in soil at and below the water table. These detections are attributable to a gasoline-related contaminant plume in the groundwater previously delineated by ASR in this area of the property and were not likely reflective of actual soil conditions. Petroleum-like odors were detected at the water table in borings SB-102 and SB/SG/MW-105 and in shallow monitoring wells MW-1 and MW-8. Staining of soil at the water table was noted in soil boring SB/SG/MW-105. The odors and staining are also attributable to the gasoline-related contaminant plume in the groundwater previously delineated by ASR and no such observations of staining or odors were noted in soil above the water table.

The geophysical survey delineated the four previously identified USTs; no additional anomalies consistent with the presence of USTs were detected by the geophysical survey. Therefore, the seven 550-gallon USTs previously documented on-site and any other USTs suspected at the property were apparently removed.

Significant results of the soil sample analyses are as follows:

- VOCs were detected above the Unrestricted SCOs in only one sample, SB/SG/MW-105; only two of those VOCs were detected above the Commercial SCOs. The detections were in soil samples collected from directly above the water table and are attributable to the gasoline-related contamination to groundwater in the southern portion of the site.
- Based on their nature, concentrations and distribution, the semivolatile organic compounds (SVOCs) and metals detected in soil samples analyzed are attributable to the urban fill and not to a specific release or spill.
- No PCBs were detected in any of the soil samples analyzed.
- The pesticide heptachlor epoxide was detected in soil sample SB/SG/MW-104 (0-4') below the Unrestricted SCO. No other pesticides were detected in the samples. The detection may be due to past landscaping activities or may be attributable to the urban fill.
- One surface soil sample for laboratory analysis was collected from loose soil stored on the concrete pavement on the eastern portion of the site. The soil comprised urban fill with sand, silt and gravel,

and included fragments of concrete, brick and asphalt. The concentrations of compounds and metals detected in the surficial soil sample are attributable to the urban fill and not to a spill or leak.

Significant results of the soil vapor analysis are as follows:

- The concentrations of petroleum/gasoline-related VOCs [2,2,4-trimethylpentane, benzene, methyl tert butyl ether (MTBE), n-hexane, propylene, and toluene] were detected in the soil gas samples analyzed at concentrations suggesting an on-site source. The detections are attributable to the gasoline contamination detected in the shallow groundwater.
- Concentrations of solvent-related VOCs (2-butanone, acetone, carbon disulfide, cyclohexane, heptane, and isopropanol) were detected in the soil gas samples analyzed, but at concentrations considered to be typical background conditions for an area with past industrial/manufacturing history. No significant on-site source of these solvent-related VOCs were detected in the soil and groundwater samples analyzed; therefore, the solvent-related VOCs are likely from an off-site source.

Significant results of the shallow and deep groundwater sample analyses are as follows:

- Gasoline-related VOCs above Class GA standards were detected in shallow monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-8 and in deep aquifer well SB/SG/MW-105. These wells were generally located in the southern portion of the site.
- Low levels (below Class GA standards) of gasoline and solvent-related VOCs were detected in all three deep wells, which are likely indicative of general groundwater conditions in this area of the Bronx and are attributable to a long history of industrial/manufacturing activities.
- SVOCs were detected in the shallow groundwater samples which, based on the analytical results and the fact that the samples are not filtered, are attributable to the particles of urban fill entrained in the samples.
- No SVOCs were detected in the deep groundwater samples.
- Metals detected in the shallow and deep groundwater samples, including those at concentrations above the Class GA standards, are primarily attributable to the presence of urban fill or are naturally occurring. Some influence from past industrial/manufacturing operations in this area of the Bronx cannot be ruled out.
- No PCBs were detected in the shallow or deep groundwater samples analyzed.
- Pesticides were only detected in shallow groundwater samples and are attributable to past on-site landscaping activities or the urban fill.

Conclusions

In general, the predominant environmental issue identified for the subject property by this RI is the elevated levels of gasoline-related VOCs detected in the shallow groundwater aquifer. Figure 9 compares the total VOCs detected in the shallow monitoring wells by ASR in 2007-2008 to the total VOCs detected in the same wells by AKRF in October 2009 (i.e., the NYSDEC quarterly groundwater sampling event). Contour lines of the VOC concentrations are provided on the figure. AKRF's quarterly groundwater sampling data is used for comparison instead of the data obtained during this RI because the list of VOCs analyzed by those investigations was consistent (i.e., VOCs were analyzed by EPA Method 8260 STARS list, which are petroleum-related compounds only). The comparison shows that elevated levels of petroleum-related VOCs are concentrated in the southern half of the site. Shallow monitoring well samples with total VOCs exceeding 1,000 ppm included those from MW-1, MW-3 and MW-5.

Concentrations of VOCs in groundwater decrease northward and were not detected in the northernmost wells (MW-6 and MW-10).

The results of the shallow groundwater analytical results of this RI revealed similar results. Total VOC concentrations for the monitoring wells as analyzed for this RI are provided in the following table:

Sample ID	Total VOC Concentration (ppb)				
MW-1	2,224				
MW-2	280				
MW-3	3,313				
MW-4	570				
MW-6	Not Detected				
MW-8	5,349				
MW-9	12				
MW-10	Not Detected				

Total VOCs in Shallow Groundwater Samples Detected by RI

The results show that more elevated concentrations of VOCs were detected in the wells on the southern portion of the site (MW-1, MW-3 and MW-8). No VOCs were detected on the northernmost wells (MW-6 and MW-10). As discussed in Section 5.3, the VOCs detected above the Class GA standards are associated with gasoline.

In addition to the on-site investigations conducted, ASR installed and sampled four off-site wells to delineate the southern extent of the gasoline-related contaminant plume. The location of these wells (MW-7, MW-11, MW-12, and MW-13) and the total VOC analytical results of ASR's quarterly groundwater monitoring are provided on Figure 9. Total VOCs in MW-7, located approximately 50 feet south of the project site (downgradient), were detected at a concentration of 628 ppb. No VOCs were detected in MW-12, located approximately 30 feet east of the project site, or in MW-11, located approximately 170 feet downgradient of the site along East 134th Street. The total VOC concentration in MW-13, approximately 220 feet downgradient of the site, was 9 ppb. These results indicate that the contaminant plume does not appear to have migrated beyond East 134th Street.

Overall, contamination detected by this remedial investigation at the subject property appears to be from VOCs related to releases from gasoline tanks located in the southern half of the site. As shown on Figure 2, this is where the current gasoline tanks are located, and where seven former 550-gallon USTs were suspected to have been previously located. The contamination has affected shallow groundwater in the southern portion of the site and soil vapor throughout the site. A few gasoline-related compounds were detected in the groundwater sample from deep well SB/SG/MW-105, suggesting that the contamination has migrated downward in the water column.

The groundwater analytical results generally concur with those of the previous investigations conducted at the property. Even the VOCs detected by this study in the soil samples analyzed are attributable to contamination from the underlying groundwater; no significant source of VOCs was detected in the overlying soil. As a result of the gasoline-related VOCs present in the shallow groundwater, soil vapors at the property exhibit elevated levels of the same types of VOCs.

7.0 CERTIFICATION

I, Michelle Lapin, certify that I am currently a NYS registered professional engineer and that this Remedial Investigation Report (RIR) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.



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9.0 GLOSSARY OF TERMS

AKRF - AKRF, Inc.

DER - NYSDEC Division of Environmental Remediation

- EPA United States Environmental Protection Agency
- HASP Health and Safety Plan
- MW monitoring well
- NYSDEC New York State Department of Environmental Conservation

NYSDOH - New York State Department of Health

- OSHA Occupational Safety and Health Administration
- PCB Polychlorinated Biphenyl
- PID photoionization detector
- PPE personal protective equipment
- ppm parts per million
- RAO Remedial Action Objectives
- RI Remedial Investigation
- RIR Remedial Investigation Report
- SCG Standards Criteria and Guidance
- SCO Soil Cleanup Objective
- SMP Site Management Plan
- SSDS Sub-Slab Depressurization System
- SVOC semivolatile organic compound
- UST underground storage tank
- $\mu g/m^3$ micrograms per cubic meter
- µg/l micrograms per liter
- VOC volatile organic compound

FIGURES





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LEGEND:

PROJECT SITE BOUNDARY

SOIL BORING AND SOIL VAPOR SAMPLING LOCATION

SOIL BORING, SOIL VAPOR SAMPLING AND DEEP WELL LOCATION

SURFACE SOIL SAMPLE

SHALLOW MONITORING WELLS INSTALLED BY ADVANCED SITE RESTORATION, LLC (ASR) FROM 2007 TO 2008

4,000 GALLON UST (EXISTING)

SUSPECTED LOCATION OF 7 FORMER 550 GALLON GASOLINE USTs (from Soil Mechanics, 1984)

ASPHALT PATCH; SUSPECTED LOCATION OF THREE 12,000 GASOLINE USTs (REMOVED)



2477 THIRD AVENUE BRONX, NEW YORK BRONX, NEW YORK BRONX, NEW YORK BRONX, NEW YORK BRONX, NEW YORK SCAFE as showu LIQUE SCAFE S	DAKRF	Environmental Consultants 440 Park Avenue South, New York, NY 10016
DATE 8.23.10 PROJECT NO. 11160 SCALE as shown FIGURE 2	2477 THIRD AVENUE BRONX NEW YORK	SITE PLAN
PROJECT NO. 11160 SCALE as shown FIGURE 2	B.23	^{те} 3.10
SCALE as shown FIGURE 2	PROJ 111	IECT NO.
FIGURE 2	as sh	nown
	FIG	URE 2







(MW-105

LEGEND:

PROJECT SITE BOUNDARY

-0.6 ____ GROUNDWATER ELEVATION CONTOUR (BRONX TOPOGRAPHICAL BUREAU DATUM)

DEEP AQUIFER MONITORING WELL

GROUNDWATER FLOW DIRECTION



QAKRF	Environmental Consultants 440 Park Avenue South, New York, NY 10016
2477 THIRD AVENUE BRONX. NEW YORK	DEEP AQUIFER WATER ELEVATIONS
B.19	E .10
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LEGEND:

PROJECT SITE BOUNDARY

SOIL BORING AND SOIL VAPOR SAMPLING LOCATION

SOIL BORING, SOIL VAPOR SAMPLING AND DEEP WELL LOCATION

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SURFACE SOIL SAMPLE

SHALLOW MONITORING WELLS INSTALLED BY ADVANCED SITE RESTORATION, LLC (ASR) FROM 2007 TO 2008

4,000 GALLON UST (EXISTING)

SUSPECTED LOCATION OF 7 FORMER 550 GALLON GASOLINE USTs (from Soil Mechanics, 1984)

ASPHALT PATCH; SUSPECTED LOCATION OF THREE 12,000 GASOLINE USTs (REMOVED)

PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOCS) CONTOUR LINE IN (PPB) (BASED ON AKRF OCTOBER 2009 DATA)





TABLES

Table 1a2477 Third AvenueBronx, NYSoil Analytical ResultsVolatile Organic Compounds

Client ID	NYSDEC	NYSDEC	SS-101	SB/MW-101 (2.5)	SB/MW-101 (8.5)	SB/MW-101 (128.5)	SB/MW-101 (149)	SB-102 (4)
Lab Sample ID	Part 375	Part 375	L1008075-01	L1008075-10	L1008075-12	L1008075-14	L1008075-16	L1008218-03
Date Sampled	Unrestricted	Commercial	5/25/2010	5/26/2010	5/26/2010	5/27/2010	5/27/2010	6/2/2010
Dilution			1	1	1	1	1	1
mg/Kg	mg/Kg	mg/Kg						
1,1,1,2-Tetrachloroethane	NS	NS	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
1,1,1-Trichloroethane	0.68	500	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
1,1,2-Trichloroethane	NS	NS	0.0041 U	0.0042 U	0.0048 U	0.006 U	0.0045 U	0.0044 U
1,1-Dichloroethane	0.27	240	0.0041 U	0.0042 U	0.0048 U	0.006 U	0.0045 U	0.0044 U
1,1-Dichloroethene	0.33	500	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
1,1-Dichloropropene	NS	NS	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
1,2,3-Trichlorobenzene	NS	NS	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
1,2,3-Trichloropropane	NS	NS	0.027 U	0.028 U	0.032 U	0.04 U	0.03 U	0.029 U
1,2,4,5-Tetramethylbenzene	NS	NS	0.011 U	0.011 U	0.013 U	0.016 U	0.012 U	0.012 U
1,2,4-1 richlorobenzene	NS 0.6	NS 100	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
1,2,4-1 nmethylbenzene	3.0	190	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
1,2-Dibromosthano	NS	NS	0.014 0	0.014 0	0.018 U	0.02 0	0.013 U	0.013 U
1,2-Diplomoethane	11	500	0.011 U	0.011 U	0.015 U	0.010 0	0.012 0	0.012 0
1 2-Dichloroethane	0.02	30	0.014 0	0.014 0	0.010 0	0.02.0	0.013 U	0.013 0
1.2-Dichloropropane	NS	NS	0.0096 U	0.0098 U	0.011 U	0.014 U	0.01 U	0.01 U
1.3.5-Trimethylbenzene	8.4	190	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
1,3-Dichlorobenzene	2.4	280	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
1,3-Dichloropropane	NS	NS	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
1,4-Dichlorobenzene	1.8	130	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
1,4-Diethylbenzene	NS	NS	0.011 U	0.011 U	0.013 U	0.016 U	0.012 U	0.012 U
2,2-Dichloropropane	NS	NS	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
2-Butanone	0.12	500	0.027 U	0.028 U	0.032 U	0.04 U	0.03 U	0.029 U
2-Hexanone	NS	NS	0.027 U	0.028 U	0.032 U	0.04 U	0.03 U	0.029 U
4-Ethyltoluene	NS	NS	0.011 U	0.011 U	0.013 U	0.016 U	0.012 U	1.012 U
4-Methyl-2-pentanone	NS	NS	0.027 U	0.028 U	0.032 U	0.04 U	0.03 U	0.029 U
Acetone	0.05	500	0.099 U	0.1 U	0.12 U	0.14 U	0.11 U	0.1 U
Acrylonitrile	NS	NS	0.027 U	0.028 U	0.032 U	0.04 U	0.03 U	0.029 U
Benzene	0.06	44	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
Bromobenzene	NS	NS	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
Bromocniorometnane	NS	NS	0.014 0	0.014 0	0.016 U	0.02 U	0.015 0	0.015 0
Bromodicnioromethane	NS	NS	0.0027 0	0.0028 0	0.0032 U	0.004 0	0.003 U	0.0029 U
Bromomothano	NS	NS	0.011 0	0.011 0	0.013 0	0.016 U	0.012 0	0.012 0
Carbon disulfide	NS	NS	0.0035 0	0.0030 0	0.0004 0	0.0079-0	0.000 0	0.0039 U
Carbon tetrachloride	0.76	22	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
Chlorobenzene	1.1	500	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
Chloroethane	NS	NS	0.0055 U	0.0056 U	0.0064 U	0.0079 U	0.006 U	0.0059 U
Chloroform	0.37	350	0.0041 U	0.0042 U	0.0048 U	0.006 U	0.0045 U	0.0044 U
Chloromethane	NS	NS	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
cis-1,2-Dichloroethene	0.25	500	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
cis-1,3-Dichloropropene	NS	NS	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
Dibromochloromethane	NS	NS	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
Dibromomethane	NS	NS	0.027 U	0.028 U	0.032 U	0.04 U	0.03 U	0.029 U
Dichlorodifluoromethane	NS	NS	0.027 U	0.028 U	0.032 U	0.04 U	0.03 U	0.029 U
Ethyl ether	NS	NS	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
Etnylbenzene	1	390	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
	NS	NS	0.014 0	0.014 0	0.010 U	0.02 0	0.015 U	0.015 U
Methyl tert butyl ether	0.93	500	0.0027 0	0.0028-0	0.0052 0	0.004 0	0.005 0	0.0029 0
Methylene chloride	0.05	500	0.027 U	0.028 U	0.032 U	0.04 U	0.03 U	0.029 U
Naphthalene	12	500	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
n-Butylbenzene	12	500	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
n-Propylbenzene	3.9	500	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
o-Chlorotoluene	NS	NS	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
o-Xylene	0.26	500	0.0055 U	0.0056 U	0.0064 U	0.0079 U	0.006 U	0.0059 U
p/m-Xylene	0.26	500	0.0055 U	0.0056 U	0.0064 U	0.0079 U	0.006 U	0.0059 U
p-Chlorotoluene	NS	NS	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
p-Isopropyltoluene	NS	NS	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
sec-Butylbenzene	11	500	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
Styrene	NS	NS	0.0055 U	0.0056 U	0.0064 U	0.0079 U	0.006 U	0.0059 U
tert-Butylbenzene	5.9	500	0.014 U	0.014 U	0.016 U	0.02 U	0.015 U	0.015 U
I etrachloroethene	1.3	150	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
I oluene	0.7	500	0.0041 U	0.0042 U	0.0048 U	0.006 U	0.0045 U	0.0044 U
trans-1,2-Dichloroethene	0.19	500	0.0041 U	0.0042 U	0.0048 U	0.006 U	0.0045 U	0.00044 U
trans-1,3-Dichloro 2 butcho	NS NC	NO	0.0027 U	0.0028 U	0.0032 U	0.004 U	0.003 U	0.0029 U
Trichloroethene	0.47	200	0.014 0	0.014 0	0.010 0	0.02 0	0.013 0	0.015 0
Trichlorofluoromethane	NS	NS	0.0027 0	0.0020 0	0.002.0	0.004 0	0.015 U	0.015
Vinvl acetate	NS	NS	0 027 11	0.028.11	0.032 11	0.02.0	0.03.11	0.029.11
Vinyl chloride	0.02	13	0.0055 U	0.0056 U	0.0064 U	0.0079 U	0.006 U	0.0059 U
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Table 1a 2477 Third Avenue Bronx, NY Soil Analytical Results Volatile Organic Compounds

Client ID	NYSDEC	NYSDEC	SB-102 (9.5)	SB-103 (4)	SB-103 (9)	SB-104 (3)	SB-104 (8)
Lab Sample ID	Part 375	Part 375	L1008218-05	L1008218-07	L1008218-09	L1008075-02	L1008075-04
Date Sampled	Unrestricted	Commercial	6/2/2010	6/2/2010	6/2/2010	5/25/2010	5/25/2010
Dilution			1	1	1	1	1
mg/Kg	mg/Kg	mg/Kg	0.000.11	0.0000.11	0.000.11	0.0000.11	0.0004.11
1,1,1,2-Tetrachioroethane	0.68	NS 500	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
1 1 2 2-Tetrachloroethane	NS	NS	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
1.1.2-Trichloroethane	NS	NS	0.0045 U	0.0048 U	0.0046 U	0.0048 U	0.0047 U
1.1-Dichloroethane	0.27	240	0.0045 U	0.0048 U	0.0046 U	0.0048 U	0.0047 U
1,1-Dichloroethene	0.33	500	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
1,1-Dichloropropene	NS	NS	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
1,2,3-Trichlorobenzene	NS	NS	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
1,2,3-Trichloropropane	NS	NS	0.03 U	0.032 U	0.03 U	0.032 U	0.031 U
1,2,4,5-Tetramethylbenzene	NS	NS	0.062	0.013 U	0.012 U	0.013 U	0.012 U
1,2,4-Trichlorobenzene	NS	NS	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
1,2,4-Trimethylbenzene	3.6	190	1.073	1.016 U	1.015 U	0.016 U	0.016 U
1,2-Dibromo-3-chloropropane	NS	NS	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
1,2-Dibromoethane	NS	NS	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
1,2-Dichlorobenzene	1.1	500	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
1,2-Dichloroethane	0.02	30	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
1.3.5-Trimethylbonzono	0 /I	100	0.01 0		0.011 U		
1.3-Dichlorobenzene	0.4 2.4	280	0.017	0.016 0	0.015 0	0.016 0	0.016 U
1.3-Dichloropropane	NS	NS	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
1.4-Dichlorobenzene	1.8	130	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
1.4-Diethylbenzene	NS	NS	0.056	0.013 U	0.012 U	0.013 U	0.012 U
2,2-Dichloropropane	NS	NS	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
2-Butanone	0.12	500	0.03 U	0.032 U	0.03 U	0.032 U	0.031 U
2-Hexanone	NS	NS	0.03 U	0.032 U	0.03 U	0.032 U	0.031 U
4-Ethyltoluene	NS	NS	0.029	0.013 U	1.012 U	0.013 U	0.012 U
4-Methyl-2-pentanone	NS	NS	0.03 U	0.032 U	0.03 U	0.032 U	0.031 U
Acetone	0.05	500	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U
Acrylonitrile	NS	NS	0.03 U	0.032 U	0.03 U	0.032 U	0.031 U
Benzene	0.06	44	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
Bromobenzene	NS	NS	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
Bromochioromethane	INS NC	INS NC	0.015 U	0.016 U	0.015 U	0.010 U	0.016 U
Bromotorm	NS	NS	0.003 0	0.0032 0	0.003 0	0.0032 0	0.0031 0
Bromomethane	NS	NS	0.012 0	0.013 0	0.012 0	0.0064 []	0.012 0
Carbon disulfide	NS	NS	0.03 U	0.032 U	0.03 U	0.032 U	0.031 U
Carbon tetrachloride	0.76	22	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
Chlorobenzene	1.1	500	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
Chloroethane	NS	NS	0.006 U	0.0064 U	0.0061 U	0.0064 U	0.0062 U
Chloroform	0.37	350	0.0045 U	0.0048 U	0.0046 U	0.0048 U	0.0047 U
Chloromethane	NS	NS	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
cis-1,2-Dichloroethene	0.25	500	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
cis-1,3-Dichloropropene	NS	NS	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
Dibromochloromethane	NS	NS	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
Dichlorodifluoromethane	NS	NS	0.03 U	0.032 U	0.03 U	0.032 U	0.031 U
Ethyl ether	NS	NS	0.05 0	0.052 0	0.05 0	0.032 0	0.031 0
Ethylbenzene	1	390	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
Hexachlorobutadiene	NS	NS	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
Isopropylbenzene	NS	NS	0.003	0.0032 U	0.003 U	0.0032 U	0.0031 U
Methyl tert butyl ether	0.93	500	0.006 U	0.0064 U	0.0061 U	0.0064 U	0.0062 U
Methylene chloride	0.05	500	0.03 U	0.032 U	0.03 U	0.032 U	0.031 U
Naphthalene	12	500	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
n-Butylbenzene	12	500	0.026	0.0032 U	0.003 U	0.0032 U	0.0031 U
n-Propylbenzene	3.9	500	0.019	0.0032 U	0.003 U	0.0032 U	0.0031 U
o-Chlorotoluene	NS	NS 500	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
o-Xylene	0.26	500	0.006 U	0.0064 U	0.0061 U	0.0064 U	0.0062 U
p/m-Aylene	0.20 NS	500	0.006 U	0.0064 U	0.0061 U	0.0064 U	0.0062 0
p-cmorotoluene	NS	NS	0.013 0	0.010 0	0.013 U	0.010 0	0.010 0
sec-Butvlbenzene	11	500	0.016	0.0032 U	0.003 U	0.0032 U	0.0031 U
Styrene	NS	NS	0.006 U	0.0064 U	0.0061 U	0.0064 U	0.0062 U
tert-Butylbenzene	5.9	500	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
Tetrachloroethene	1.3	150	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
Toluene	0.7	500	0.0045 U	0.0048 U	0.0046 U	0.0048 U	0.0047 U
trans-1,2-Dichloroethene	0.19	500	0.0045 U	0.0048 U	0.0046 U	0.0048 U	0.0047 U
trans-1,3-Dichloropropene	NS	NS	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
trans-1,4-Dichloro-2-butene	NS	NS	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
Trichloroethene	0.47	200	0.003 U	0.0032 U	0.003 U	0.0032 U	0.0031 U
I richlorotluoromethane	NS	NS	0.015 U	0.016 U	0.015 U	0.016 U	0.016 U
VINYI ACETATE	NS	NS 10	0.03 U	0.032 U	0.03 U	0.032 U	0.031 U
мпут спютае	0.02	13	U.UU6 U	0.0064 U	0.0061 U	0.0064 U	0.0062 U

Table 1a 2477 Third Avenue Bronx, NY Soil Analytical Results Volatile Organic Compounds

Client ID	NYSDEC	NYSDEC	SB-104 (88)	SB/MW-105 (3)	SB/MW-105 (9.5)	SB/MW-105 (24)	SB/MW-105 (S5)
Lab Sample ID	Part 375	Part 375	L1008075-07	L1008075-18	L1008075-20	L1008075-22	L1008218-01
Date Sampled	Unrestricted	Commercial	5/25/2010	5/28/2010	5/28/2010	5/28/2010	5/28/2010
Dilution			1	1	400	10	1
mg/Kg	mg/Kg	mg/Kg	0.0004.11	0.0007.11	1011	0.000.11	0.0000 11
1,1,1,2-1 etrachioroethane	NS 0.69	NS 500	0.0031 U	0.0027 U	1.2 U	0.003 U	0.0028 U
1,1,2,2 Totrachloroothano	0.00 NS	500	0.0031 U	0.0027 0	1.2 U	0.003 U	0.0028 U
1 1 2-Trichloroethane	NS	NS	0.0031 0	0.0027 0	1.2 0	0.003 0	0.0028 0
1 1-Dichloroethane	0.27	240	0.0047 U	0.004 U	1.0 0	0.0045 U	0.0042 U
1 1-Dichloroethene	0.33	500	0.0047 0	0.007 U	1.0 0	0.0043 U	0.0042 0
1.1-Dichloropropene	NS	NS	0.016 U	0.013 U	61.0	0.015 U	0.014 U
1.2.3-Trichlorobenzene	NS	NS	0.016 U	0.013 U	611	0.015 U	0.014 U
1.2.3-Trichloropropane	NS	NS	0.031 U	0.027 U	12 U	0.03 U	0.028 U
1.2.4.5-Tetramethylbenzene	NS	NS	0.012 U	0.011	34	0.055	0.011 U
1,2,4-Trichlorobenzene	NS	NS	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
1,2,4-Trimethylbenzene	3.6	190	0.016 U	0.32	480	0.37	1.014 U
1,2-Dibromo-3-chloropropane	NS	NS	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
1,2-Dibromoethane	NS	NS	0.012 U	0.011 U	4.9 U	0.012 U	0.011 U
1,2-Dichlorobenzene	1.1	500	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
1,2-Dichloroethane	0.02	30	0.0031 U	0.0027 U	1.2 U	0.003 U	0.0028 U
1,2-Dichloropropane	NS	NS	0.011 U	0.0094 U	4.3 U	0.01 U	0.0098 U
1,3,5-Trimethylbenzene	8.4	190	0.016 U	0.13	110	0.1	0.014 U
1,3-Dichlorobenzene	2.4	280	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
1,3-Dichloropropane	NS	NS	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
1,4-Dichlorobenzene	1.8	130	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
1,4-Diethylbenzene	NS	NS	0.012 U	0.058	130	0.2	0.011 U
2,2-Dichloropropane	NS	NS	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
2-Butanone	0.12	500	0.031 U	0.027 U	12 U	0.03 U	0.028 U
2-nexanone	NS NC	NS	0.031 0	0.027 0	12 U	0.03 U	1.011.11
4-Ethylloluene 4-Methyl-2-pentanone	NS	NS	0.012 0	0.007	12	0.012 0	0.028 []
	0.05	500	0.001.0	0.027 0	44 11	0.00 0	0.020 0
Acrylonitrile	NS	NS	0.031 U	0.027 U	12	0.03 U	0.028 U
Benzene	0.06	44	0.0031 U	0.0046	1.2 U	0.003 U	0.0028 U
Bromobenzene	NS	NS	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
Bromochloromethane	NS	NS	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
Bromodichloromethane	NS	NS	0.0031 U	0.0027 U	1.2 U	0.003 U	0.0028 U
Bromoform	NS	NS	0.012 U	0.011 U	4.9 U	0.012 U	0.011 U
Bromomethane	NS	NS	0.0062 U	0.0054 U	2.4 U	0.006 U	0.0056 U
Carbon disulfide	NS	NS	0.031 U	0.027 U	12 U	0.03 U	0.028 U
Carbon tetrachloride	0.76	22	0.0031 U	0.0027 U	1.2 U	0.003 U	0.0028 U
Chlorobenzene	1.1	500	0.0031 U	0.0027 U	1.2 U	0.003 U	0.0028 U
Chloroethane	NS	NS	0.0062 U	0.0054 U	2.4 U	0.006 U	0.0056 U
Chloroform	0.37	350	0.0047 U	0.004 U	1.8 U	0.0045 U	0.0042 U
Chloromethane	NS	NS	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
cis-1,2-Dichloroethene	0.25	500	0.0031 U	0.0027 U	1.2 U	0.003 U	0.0028 U
Dibromochloromothano	INS NS	NS	0.0031 U	0.0027 U	1.2 U	0.003 U	0.0028 U
Dibromomethane	NS	NS	0.031 U	0.0027 0	1.2 0	0.03 U	0.0028 U
Dichlorodifluoromethane	NS	NS	0.031 U	0.027 U	12 U	0.03 U	0.028 U
Ethvl ether	NS	NS	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
Ethylbenzene	1	390	0.0031 U	0.06	150	0.028	0.0028 U
Hexachlorobutadiene	NS	NS	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
lsopropylbenzene	NS	NS	0.0031 U	0.021	22	0.01	0.0028 U
Methyl tert butyl ether	0.93	500	0.0062 U	0.0054 U	2.4 U	0.006 U	0.0056 U
Methylene chloride	0.05	500	0.031 U	0.027 U	12 U	0.03 U	0.028 U
Naphthalene	12	500	0.016 U	0.013 U	17	0.026	0.014 U
n-Butylbenzene	12	500	0.0031 U	0.0027 U	37	0.053	0.0028 U
n-Propylbenzene	3.9	500	0.0031 U	0.042	81	0.057	0.0028 U
o-Chiorotoluene	0.26	500	0.016 U	0.013 0	6.1 U 170	0.015 0	0.014 0
	0.20	500	0.0002 0	0.0082	700 E	0.001	0.0056 U
p-Chlorotoluene	NS	NS	0.0002 0	0.013	61.11	0.15	0.0030 0
p-lsopropyltoluene	NS	NS	0.0031 U	0.0027 U	5.8	0.0073	0.0028 U
sec-Butvlbenzene	11	500	0.0031 U	0.0083	12	0.015	0.0028 U
Styrene	NS	NS	0.0062 U	0.0054 U	2.4 U	0.006 U	0.0056 U
tert-Butylbenzene	5.9	500	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
Tetrachloroethene	1.3	150	0.0031 U	0.0027 U	1.2 U	0.003 U	0.0028 U
Toluene	0.7	500	0.0047 U	0.0051	12	0.0045 U	0.0042 U
trans-1,2-Dichloroethene	0.19	500	0.0047 U	0.004 U	1.8 U	0.0045 U	0.0042 U
trans-1,3-Dichloropropene	NS	NS	0.0031 U	0.0027 U	1.2 U	0.003 U	0.0028 U
trans-1,4-Dichloro-2-butene	NS	NS	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
Trichloroethene	0.47	200	0.0031 U	0.0027 U	1.2 U	0.003 U	0.0028 U
I richlorotluoromethane	NS	NS	0.016 U	0.013 U	6.1 U	0.015 U	0.014 U
vinyi acetate	NS	NS 10	0.031 U	0.027 U	12 U	0.03 U	0.028 U
vinyi chioriae	0.02	13	0.0062 U	0.0054 U	2.4 U	0.006 U	U.UU56 U

Client ID	NYSDEC	NYSDEC	SS-101	SB/MW-101 (0-4)	SB/MW-101 (6-9)	SB/MW-101 (128-130)	SB/MW-101 (148-150)
Lab Sample ID	Part 375	Part 375	L1008075-01	L1008075-11	L1008075-13	L1008075-15	L1008075-17
Date Sampled	Unrestricted	Commercial	5/25/2010	5/26/2010	5/26/2010	5/27/2010	5/27/2010
Dilution			1	20	1	1	1
mg/Kg	mg/Kg	mg/Kg					
1.2.4.5-Tetrachlorobenzene	NS	NS	1.4 U	1.5 U	1.4 U	1.6 U	1.7 U
1,2,4-Trichlorobenzene	NS	NS	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
1.2-Dichlorobenzene	1.1	500	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
1.3-Dichlorobenzene	2.4	280	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
1.4-Dichlorobenzene	1.8	130	0.35 U	0.37 U	0.36 []	04U	0.42 U
2.4.5-Trichlorophenol	NS	NS	0.35 U	0.37 U	0.36 []	04U	0.42 U
2.4.6-Trichlorophenol	NS	NS	0.35 U	0.37 U	0.36 U	04U	0.42 U
2 4-Dichlorophenol	NS	NS	0711	0 74 11	0.72 []	0811	0.84 []
2 4-Dimethylphenol	NS	NS	0.35 []	0.37 []	0.36 []	0.00	0.04 0
2 4-Dinitrophenol	NS	NS	1411	1511	1411	1611	1711
2.4-Dinitrophenol	NS	NS	0.35 []	0.37 []	0.36 []	0.4 U	0.42 []
2.6-Dinitrotoluene	NS	NS	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
2-Chlorophenol	NS	NS	0.00 0	0.44 11	0.44 []	0.48 U	0.42 0
2-Methylphenol	0.33	500	0.42 U	0.44 U	0.44 U	0.48 U	0.5 0
2-Mitroanilino	NS	NS	0.42 0	0.27 U	0.26 []	0.40	0.3 0
2-Nitrophonol	NS	NS	1411	151	1.4 []	161	1.7.1
2 2'-Dichlorobonzidino	NS	NS	0.7.11	0.74 11	0.72.11	0.8.11	0.84 11
3-Methylphenol/4-Methylphonol	0.33	500	0.7 0	0.74 0	0.72 0	0.00	0.04 0
3-Nitroaniline	0.00 NC	Ne	0.42 0	0.44 0	0.44 0	0.40 U	0.0 0
4 6-Dinitro-o-crosol	NC	NC	1 4 11	1 = 11	1 4 11	1.4 U	1711
4-Bromonberry phonyl other	NO	NO	1.4 U 0.25 II	1.5 U	1.4 U	1.0 U	0.40.11
4-Bromophenyi phenyi ether	NC	NC	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
4-Chlorophanyl phonyl other	NC	NC	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
4-Chlorophenyr phenyr ether	NC	NC	0.35 0	0.37 U	0.36 U	0.4 0	0.42 0
4-Nitrophonol	NC	NC	0.49 0	0.32 0	0.31 0	0.36 U	0.36 U
Acetophonono	NC	NC	0.7 0	1.5 U	0.72 0	1.6 U	1711
Acetophenone Bonzoio Aoid	NC	NC	1.4 U	1.5 U	1.4 0	1.6 U	1.7 0
Benzul Aleebel	NC	NC	3.5 0	0.74 U	0.70 U	40	4.2 0
Binhonyl	NC	NC	0.7 0	0.74 U	0.72 0	0.8 U	0.64 0
Biplienyl Biplio ablorosthovu)methene	NC	NC	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
Bis(2-chloroethoxy)methane	NC	NC	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
Bis(2-chloroicopropy() athor	NC	NC	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
Bis(2-Chioroisopropyi)ether	NC	NO NO	0.35 0	0.37 U	0.30 U	0.4 U	0.42 0
Bis(2-Ethylnexyl)phthalate	NS NC	INS NC	0.7 0	0.74 0	0.72 U	0.8 U	0.84 0
Corbozolo	NC	NC	0.35 U	0.37 0	0.36 U	0.4 U	0.42 U
Dihonzofuron	113	250	0.35 U	0.99	0.36 U	0.4 U	0.42 U
Didenzoluran Diathul abthalata		350	0.35 U	0.64	0.36 U	0.4 U	0.42 U
Directly philiplate	NC	NC	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
Dimetriyi primatate	NC	NC	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
Di-n-butyiphthalate	NC	NC	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
Hexaehlereevelepentediepe	NC	NC	0.35 0	0.37 U	0.30 U	0.4 0	0.42 0
Isophoropo	NS	NS	0.7 0	0.74 0	0.72 0	0.8 0	0.04 0
Nitrobonzono	NS	NS	0.35 U	0.37 U	0.36 U	0.4 0	0.42 U
NitrosoDiBhony(Amino(NDBA)/DBA	NS	NS	0.33 0	111	1.11	1.2	1.2
n-Nitrosodi-n-propylamine	NS	NS	0 35 11	0.37 []	0.36 U	0.4 U	0.42 11
P-Chloro-M-Cresol	NS	NS	0.35 U	0.37 U	0.36 U	0.4 U	0.42 U
Phenol	0.33	500	0.00 0	0.52 []	0.50 0	0.56 U	0.58 []
Semivolatile Organics by GC/MS-SI	0.00	500	0.43 0	0.52 0	0.01 0	0.00 0	0.50 0
2-Chloronaphthalene	NS	NS	0 14 U	0311	0.014 []	0.018 U	0.017 U
2-Methylnaphthalene	NS	NS	0.14 U	0.38	0.014 []	0.018 U	0.017 U
Acenaphthene	20	500	0 14 11	12	0.014	0.018	0.017 U
Acenaphthylene	100	500	0.14 U	0.3 U	0.014 U	0.018 U	0.017 U
Anthracene	100	500	0.14 U	3.2	0.014 U	0.018 U	0.017 U
Benzo(a)anthracene	1	5.6	0.19	6.2	0.04	0.018 U	0.017 U
Benzo(a)pyrene	1	1	0.27	5	0.044	0.018 U	0.017 U
Benzo(b)fluoranthene	1	5.6	0.29	7.3	0.059	0.018 U	0.017 U
Benzo(ghi)perylene	100	500	0.16	3.1	0.026	0.018 U	0.017 U
Benzo(k)fluoranthene	0.8	56	0.14 U	2.8	0.02	0.018 U	0.017 U
Chrysene	1	56	0.2	6	0.041	0.018 U	0.017 U
Dibenzo(a,h)anthracene	0.33	0.56	0.14 U	0.84	0.014 U	0.018 U	0.017 U
Fluoranthene	100	500	0.32	14	0.077	0.018 U	0.017 U
Fluorene	30	500	0.14 U	1.2	0.014 U	0.018 U	0.017 U
Hexachlorobenzene	0.33	6	0.56 U	1.2 U	0.058 U	0.07 U	0.067 U
Hexachlorobutadiene	NS	NS	0.35 U	0.74 U	0.036 U	0.044 U	0.042 U
Hexachloroethane	NS	NS	0.56 U	1.2 U	0.058 U	0.07 U	0.067 U
Indeno(1,2,3-cd)Pvrene	0.5	5.6	0.14 U	2.8	0.022	0.018 U	0.017 U
Naphthalene	12	500	0.14 U	0.49	0.014 U	0.018 U	0.017 U
Pentachlorophenol	0.8	6.7	0.56 U	1.2 U	0.058 U	0.07 U	0.067 U
Phenanthrene	100	500	0.14 U	13	0.048	0.018 U	0.017 U
Pyrene	100	500	0.28	12	0.071	0.018 U	0.017 U

Client ID	NYSDEC	NYSDEC	SB-102 (0-5)	SB-102 (5-10)	SB-103 (0-5)	SB-103 (5-10)	SB-104 (0-4)
Lab Sample ID	Part 275	Part 275	1008218-04	1 1008218-06	L 1008218-08	1 1008218-10	1 1008075-03
Data Sampled	Unrostricted	Commorcial	6/2/2010	6/2/2010	6/2/2010	6/0/2010	E/05/0010
Dilution	Unrestricted	Commercial	0/2/2010	0/2/2010	0/2/2010	0/2/2010	5/25/2010
Dilution			1	1	1	1	10
mg/Kg	mg/Kg	mg/Kg					
1,2,4,5-Tetrachlorobenzene	NS	NS	1.6 U	1.5 U	1.6 U	1.7 U	1.9 U
1,2,4-Trichlorobenzene	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
1.2-Dichlorobenzene	1.1	500	0411	0.38 []	0.41 []	0 42 11	0.48 []
1 3-Dichlorobenzene	2.4	280	0.1 U	0.38 []	0.41 U	0.12 0	0.18 U
1.4 Dichlerebenzene	1.0	100	0.4 U	0.00 U	0.41 U	0.42 U	0.40 U
1,4-Dichlorobenzene	1.8	130	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
2,4,5-Trichlorophenol	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
2,4,6-Trichlorophenol	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
2,4-Dichlorophenol	NS	NS	0.79 U	0.75 U	0.82 U	0.84 U	0.97 U
2.4-Dimethylphenol	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
2.4-Dinitrophenol	NS	NS	1611	15 U	161	1711	1911
2 4-Dinitrotoluono	NS	NS	0.4.11	0.38 []	0.41 U	0.42.11	0.49.11
2,4-Dimitrotoluene	NG	NC	0.4 U	0.38 U	0.41 U	0.42 0	0.40 U
2,6-Dinitrotoluene	INS NO	INS	0.4 0	0.38 U	0.41 0	0.42 0	0.48 U
2-Chlorophenol	NS	NS	0.48 U	0.45 U	0.49 U	0.51 U	0.58 U
2-Methylphenol	0.33	500	0.48 U	0.45 U	0.49 U	0.51 U	0.58 U
2-Nitroaniline	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
2-Nitrophenol	NS	NS	1.6 U	1.5 U	1.6 U	1.7 U	1.9 U
3,3'-Dichlorobenzidine	NS	NS	0.79 U	0.75 U	0.82 U	0.84 LJ	0.97 U
3-Methylphenol/4-Methylphenol	0.33	500	0.48 []	0.45 []	0 49 11	0.51 U	0.58 []
3-Nitroaniline	NS	NS	0.10	0.38 11	0.41 []	0.01 0	0.00 0
	NO	NC	0.4 0	0.00 0	1.410	171	10.40
	NS NC		1.6 U	1.5 U	1.6 U	I./ U	1.9 U
4-Bromophenyl phenyl ether	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
4-Chloroaniline	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
4-Chlorophenyl phenyl ether	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
4-Nitroaniline	NS	NS	0.55 U	0.53 U	0.57 U	0.59 U	0.68 U
4-Nitrophenol	NS	NS	0.79 U	0.75 U	0.82 U	0.84 U	0.97 U
Acetophenone	NS	NS	1.6 U	1.5 U	1.6 U	1.7 U	1.9 U
Benzoic Acid	NS	NS	4 []	3811	4111	4211	4811
Benzyl Alcohol	NS	NS	0.70.11	0.75 11	0.82.11	0.84.11	0.07.11
Binkenvi	NG	NG	0.79 0	0.75 0	0.02 0	0.04 0	0.97 0
	NS NO	NS NO	0.4 0	0.38 U	0.41 U	0.42 U	0.48 U
Bis(2-chloroethoxy)methane	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
Bis(2-chloroethyl)ether	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
Bis(2-chloroisopropyl)ether	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.79 U	0.75 U	0.82 U	0.84 U	0.97 U
Butyl benzyl phthalate	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
Carbazole	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
Dibenzofuran	7	350	0411	0.38 []	0.41 []	0.42 []	0.48 []
District and Distr	NS	NS	0.4 U	0.00.0	0.41 U	0.42 U	0.48 U
Directly philliplate	NG	NC	0.4 U	0.38 U	0.41 U	0.42 0	0.40 U
	NS NO	NS NO	0.4 0	0.38 U	0.41 U	0.42 U	0.48 U
Di-n-butyiphthalate	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
Di-n-octylphthalate	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
Hexachlorocyclopentadiene	NS	NS	0.79 U	0.75 U	0.82 U	0.84 U	0.97 U
Isophorone	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
Nitrobenzene	NS	NS	0.4 U	0.38 U	0.41 U	0.42 U	0.48 U
NitrosoDiPhenyIAmine(NDPA)/DPA	NS	NS	1.2 U	1.1 U	1.2 U	1.3 U	1.4 U
n-Nitrosodi-n-propylamine	NS	NS	0411	0.38 U	0 41 11	0 42 11	0 48 11
P-Chloro-M-Cresol	NS	NS	0411	0.38.11	0 41 11	0 42 11	0.48.11
Phenol	0.22	500	0.7 0	0.00 0	0.57 11	0.50.11	0.07.0
Semivolatile Organice by CC/MC CM	0.55	500	0.55 0	0.55 0	0.57 0	0.55 0	0.00 0
Chlerenen hitel			0.010.11	0.045.11	0.4011	A 47 U	0.40.11
2-Chioronaphthalene	NS NS	NS	U.U16 U	0.015 U	U.16 U	U.1/ U	U.19 U
2-methylnaphthalene	NS	NS	0.016	0.015 U	1.16 U	1.17 U	0.19 U
Acenaphthene	20	500	0.016 U	0.015 U	0.32	0.17 U	0.42
Acenaphthylene	100	500	0.016 U	0.015 U	0.52	0.4	0.34
Anthracene	100	500	0.016 U	0.015 U	1.2	0.46	1.2
Benzo(a)anthracene	1	5.6	0.039	0.015 U	4.8	2.8	2.4
Benzo(a)pyrene	1	1	0.049	0.015 U	4.1	3	1.9
Benzo(b)fluoranthene	1	5.6	0.066	0.015 U	6.9	4	2.8
Benzo(ghi)pervlene	100	500	0.000	0.015	3.0	10	1 1
Benzo (gill) per yiene	100	500	0.001	0.015 U	0.2	1.5	1.1
	0.8	90	0.026	0.015 0	2.3	1.0	1
Chrysene	1	56	0.043	0.015 U	5	2.6	2.2
Dibenzo(a,h)anthracene	0.33	0.56	0.016 U	0.015 U	0.84	0.48	0.32
Fluoranthene	100	500	0.062	0.015 U	10	4.4	5.4
Fluorene	30	500	0.016 U	0.015 U	0.32	0.17 U	0.58
Hexachlorobenzene	0.33	6	0.063 U	0.06 U	0.65 U	0.68 U	0.78 U
Hexachlorobutadiene	NS	NS	0.04 U	0.038 U	0.41 U	0.42 U	0.48 U
Hexachloroethane	NS	NS	U 230 0	11 20 0	0.65.11	11 89.0	0.78.11
Indeno/1 2 3-od/Durono	0.5	56	0.000 0	0.00 0	0.00 0	10	0.70 0
Neghthelene	0.0	5.0	0.03	0.015 0	2.0	1.0	1
	12	500	0.026	0.015 U	U./4	0.38	0.3
Pentachlorophenol	0.8	6.7	0.063 U	0.06 U	0.65 U	0.68 U	0.78 U
Phenanthrene	100	500	0.035	0.015 U	5.4	1.1	4.8
Pyrene	100	500	0.047	0.015 U	9	4.6	4.5

Client ID	NYSDEC	NYSDEC	SB-104 (8-9)	SB-104 (80-89)	SB/MW-105 (0-4)
Lab Sample ID	Part 375	Part 375	L1008075-05	L1008075-08	L1008075-19
Date Sampled	Unrestricted	Commercial	5/25/2010	5/25/2010	5/28/2010
Dilution	0		1	1	20
			•	•	20
ma/Ka	ma/Ka	ma/Ka			
1.2.4.5-Totrachlorobonzono	NS NS	NS	1911	211	7
1,2,4,5-Tetracillorobenzene	NS	NS	0.45 U	2.0	101
1,2,4-Thenlorobenzene	11	N3	0.45 U	0.49 0	1.0 U
1,2-Dichlorobenzene	1.1	500	0.45 U	0.49 0	1.8 U
1,3-Dichlorobenzene	2.4	280	0.45 U	0.49 U	1.8 U
1,4-Dichlorobenzene	1.8	130	0.45 U	0.49 U	1.8 U
2,4,5-Trichlorophenol	NS	NS	0.45 U	0.49 U	1.8 U
2,4,6-Trichlorophenol	NS	NS	0.45 U	0.49 U	1.8 U
2,4-Dichlorophenol	NS	NS	0.9 U	0.98 U	3.5 U
2,4-Dimethylphenol	NS	NS	0.45 U	0.49 U	1.8 U
2,4-Dinitrophenol	NS	NS	1.8 U	2 U	7 U
2,4-Dinitrotoluene	NS	NS	0.45 U	0.49 U	1.8 U
2,6-Dinitrotoluene	NS	NS	0.45 U	0.49 U	1.8 U
2-Chlorophenol	NS	NS	0.54 U	0.59 U	2.1 U
2-Methylphenol	0.33	500	0.54 U	0.59 U	2.1 U
2-Nitroaniline	NS	NS	0.45 U	0.49 U	1.8 U
2-Nitrophenol	NS	NS	181	211	7 []
3.3'-Dichlorobenzidine	NS	NS	0011	0.08.11	2511
3-Methylphenol/4-Methylphenol	0.22	500	0.50	0.50 0	0.00
2-Nitroanilino	0.00	Ne	0.04 0	0.09 0	1011
	NO	NO	U.45 U	0.49 0	1.8 U
4,0-Dinitro-o-cresol	INS NO	INS NO	1.8 U	2 U	/ U
4-bromopnenyi phenyi ether	NS NS	NS NS	0.45 U	0.49 U	1.8 U
4-Chloroaniline	NS	NS	0.45 U	0.49 U	1.8 U
4-Chiorophenyl phenyl ether	NS	NS	0.45 U	0.49 U	1.8 U
4-Nitroaniline	NS	NS	0.63 U	0.68 U	2.5 U
4-Nitrophenol	NS	NS	0.9 U	0.98 U	3.5 U
Acetophenone	NS	NS	1.8 U	2 U	7 U
Benzoic Acid	NS	NS	4.5 U	4.9 U	18 U
Benzyl Alcohol	NS	NS	0.9 U	0.98 U	3.5 U
Biphenyl	NS	NS	0.45 U	0.49 U	1.8 U
Bis(2-chloroethoxy)methane	NS	NS	0.45 U	0.49 U	1.8 U
Bis(2-chloroethyl)ether	NS	NS	0.45 U	0.49 U	1.8 U
Bis(2-chloroisopropyl)ether	NS	NS	0.45 U	0.49 U	1.8 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.9 U	0.98 U	3.5 U
Butyl benzyl phthalate	NS	NS	0.45 U	0.49 U	1.8 U
Carbazole	NS	NS	0.45 U	0.49 U	1.8 U
Dibenzofuran	7	350	0.45 U	0.49 U	1.8 U
Diethyl phthalate	NS	NS	0.45 U	0.49 U	1.8 U
Dimethyl phthalate	NS	NS	0.45 U	0.49 U	1.8 U
Di-n-butylphthalate	NS	NS	0.45 U	0 49 11	1811
Di-n-octylphthalate	NS	NS	0.45 U	0 49 11	1811
Hexachlorocyclopentadiene	NS	NS	0.010	0.98 []	3511
Isophorope	NS	NS	0.45 []	0.49 []	1811
Nitrobenzene	NS	NS	0.45 U	0.49.11	1.0 0
	NS	NS	1411	1511	5.2 []
n-Nitrosodi-n-propylamino	NS	NS	0.45 U	0.49.11	1.0 U
B Chloro M Crocol	NG	NG	0.45 U	0.49 U	1.0 U
Phenol	0.22	500	0.40 U	0.49 U	1.0 U
Semivolatile Organice by CO/MC CI	0.55	300	0.03 0	0.00 0	2.0 0
2-Chloropaphthalana	Ne	Ne	0.010.11	0.00.11	0.00 11
2 Mothylpontthelere	NO	NO	0.018 U	0.02 U	0.28 0
	GNI	145	0.010 U	0.02 U	0.28 0
Acenaphthene	20	500	0.018 U	0.02 U	0.35
Acenaphthylene	100	500	0.018 U	0.02 U	0.32
Anthracene	100	500	0.018 U	0.02 U	1.1
Benzo(a)anthracene	1	5.6	0.018 U	0.02 U	3.3
Benzo(a)pyrene	1	1	0.018 U	0.02 U	3.3
Benzo(b)fluoranthene	1	5.6	0.018 U	0.02 U	4.7
Benzo(ghi)perylene	100	500	0.018 U	0.02 U	2.3
Benzo(k)fluoranthene	0.8	56	0.018 U	0.02 U	1.8
Chrysene	1	56	0.018 U	0.02 U	3.2
Dibenzo(a,h)anthracene	0.33	0.56	0.018 U	0.02 U	0.56
Fluoranthene	100	500	0.018 U	0.02 U	6.7
Fluorene	30	500	0.018 U	0.02 U	0.4
Hexachlorobenzene	0.33	6	0.072 U	0.078 U	1.1 U
Hexachlorobutadiene	NS	NS	0.045 U	0.049 U	0.7 U
Hexachloroethane	NS	NS	0.072 U	0.078 U	1.1 U
Indeno(1,2,3-cd)Pyrene	0.5	5.6	0.018 U	0.02 U	2.1
Naphthalene	12	500	0.018 U	0.02 U	0.36
Pentachlorophenol	0.8	6.7	0.072 U	0.078 U	1.1 U
Phenanthrene	100	500	0.018 U	0.02 U	4.1
Pyrene	100	500	0.018 U	0.02 U	5.9
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Client ID	NYSDEC	NYSDEC	SB/MW-105 (8-9 5)	SB/MW-105 (23-24 5)	SB/MW-105 (S3-S5)
Lab Sample ID	Part 375	Part 375	L 1008075-21	L 1008075-23	L 1008218-02
Date Sampled	Unrestricted	Commercial	5/28/2010	5/28/2010	5/28/2010
Dilution	onrestricted	Commercial	10	1	1
Dilation			10	•	'
ma/Ka	ma/Ka	ma/Ka			
	IIIg/Kg	iiig/Kg	1511	1.0.11	15.11
1,2,4,5-Tetrachlorobenzene	NS NC	NS NC	1.5 U	1.0 U	1.5 U
1,2,4-Trichlorobenzene	11	115	0.38 U	0.41 U	0.38 U
1,2-Dichlorobenzene	1.1	500	0.38 U	0.41 U	0.38 U
1,3-Dichlorobenzene	2.4	280	0.38 U	0.41 U	0.38 U
1,4-Dichlorobenzene	1.8	130	0.38 U	0.41 U	0.38 U
2,4,5-Trichlorophenol	NS	NS	0.38 U	0.41 U	0.38 U
2,4,6-Trichlorophenol	NS	NS	0.38 U	0.41 U	0.38 U
2,4-Dichlorophenol	NS	NS	0.76 U	0.82 U	0.76 U
2,4-Dimethylphenol	NS	NS	0.38 U	0.41 U	0.38 U
2,4-Dinitrophenol	NS	NS	1.5 U	1.6 U	1.5 U
2,4-Dinitrotoluene	NS	NS	0.38 U	0.41 U	0.38 U
2,6-Dinitrotoluene	NS	NS	0.38 U	0.41 U	0.38 U
2-Chlorophenol	NS	NS	0.46 U	0.49 U	0.45 U
2-Methylphenol	0.33	500	0.46 U	0.49 U	0.45 U
2-Nitroaniline	NS	NS	0.38 U	0.41 U	0.38 U
2-Nitrophenol	NS	NS	1.5 U	1.6 U	1.5 U
3,3'-Dichlorobenzidine	NS	NS	0.76 U	0.82 U	0.76 U
3-Methylphenol/4-Methylphenol	0.33	500	0.46 U	0.49 U	0.45 U
3-Nitroaniline	NS	NS	0.38 U	0.41 U	0.38 U
4,6-Dinitro-o-cresol	NS	NS	1.5 U	1.6 U	1.5 U
4-Bromophenyl phenyl ether	NS	NS	0.38 U	0.41 U	0.38 U
4-Chloroaniline	NS	NS	0.38 U	0.41 U	0.38 U
4-Chlorophenyl phenyl ether	NS	NS	0.38 U	0.41 U	0.38 U
4-Nitroaniline	NS	NS	0.53 U	0.57 U	0.53 U
4-Nitrophenol	NS	NS	0.76 U	0.82 U	0.76 U
Acetophenone	NS	NS	1.5 U	1.6 U	1.5 U
Benzoic Acid	NS	NS	3.8 U	4.1 U	3.8 U
Benzyl Alcohol	NS	NS	0.76 U	0.82 U	0.76 U
Biphenyl	NS	NS	0.38 U	0.41 U	0.38 U
Bis(2-chloroethoxy)methane	NS	NS	0.38 U	0.41 U	0.38 U
Bis(2-chloroethyl)ether	NS	NS	0.38 U	0.41 U	0.38 U
Bis(2-chloroisopropyl)ether	NS	NS	0.38 U	0.41 U	0.38 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.76 U	0.82 U	0.76 U
Butyl benzyl phthalate	NS	NS	0.38 U	0.41 U	0.38 U
Carbazole	NS	NS	0.38 U	0.41 U	0.38 U
Dibenzofuran	7	350	0.38 U	0.41 U	0.38 U
Diethyl phthalate	NS	NS	0.38 U	0.41 U	0.38 U
Dimethyl phthalate	NS	NS	0.38 U	0.41 U	0.38 U
Di-n-butylphthalate	NS	NS	0.38 U	0.41 U	0.38 U
Di-n-octylphthalate	NS	NS	0.38 U	0.41 U	0.38 U
Hexachlorocyclopentadiene	NS	NS	0.76 U	0.82 U	0.76 U
Isophorone	NS	NS	0.38 U	0.41 U	0.38 U
Nitrobenzene	NS	NS	0.38 U	0.41 U	0.38 U
NitrosoDiPhenylAmine(NDPA)/DPA	NS	NS	1.1 U	1.2 U	1.1 U
n-Nitrosodi-n-propylamine	NS	NS	0.38 U	0.41 U	0.38 U
P-Chloro-M-Cresol	NS	NS	0.38 U	0.41 U	0.38 U
Phenol	0.33	500	0.53 U	0.57 U	0.53 U
Semivolatile Organics by GC/MS-SI	N				
2-Chloronaphthalene	NS	NS	0.015 U	0.016 U	0.015 U
2-Methylnaphthalene	NS	NS	2.1 E	0.083	1.015 U
Acenaphthene	20	500	0.024	0.033	0.015 U
Acenaphthylene	100	500	0.018	0.057	0.015 U
Anthracene	100	500	0.045	0.1	0.015 U
Benzo(a)anthracene	1	5.6	0.2	0.7	0.015 U
Benzo(a)pyrene	1	1	0.19	0.77	0.015 U
Benzo(b)fluoranthene	1	5.6	0.29	1.1	0.015 U
Benzo(ghi)perylene	100	500	0.13	0.52	0.015 U
Benzo(k)fluoranthene	0.8	56	0.1	0.43	0.015 U
Chrysene	1	56	0.19	0.65	0.015 U
Dibenzo(a,h)anthracene	0.33	0.56	0.033	0.13	0.015 U
Fluoranthene	100	500	0.38	1	0.015 U
Fluorene	30	500	0.028	0.055	0.015 U
Hexachlorobenzene	0.33	6	0.061 U	0.066 U	0.06 U
Hexachlorobutadiene	NS	NS	0.038 U	0.041 U	0.038 U
Hexachloroethane	NS	NS	0.061 U	0.29	0.06 U
Indeno(1,2,3-cd)Pyrene	0.5	5.6	0.12	0.49	0.015 U
Naphthalene	12	500	6.7 E	0.21	1.015 U
Pentachlorophenol	0.8	6.7	0.061 U	0.066 U	0.06 U
Phenanthrene	100	500	0.21	0.38	0.015 U
Pyrene	100	500	0.34	1	0.015 U

Table 1c 2477 Third Avenue Bronx, NY Soil Analytical Results *Metals*

Client ID	Eastern USA	NYSDEC	NYSDEC	SS-101	SB/MW-101 (6-9)) SB/MW-101 (128-130) SB/MW-101 (148-150)		SB-102 (0-5)	SB-102 (5-10)
Lab Sample ID	ioil Backgroun	Part 375	Part 375	L1008075-01	L1008075-13	L1008075-15	L1008075-17	L1008218-04	L1008218-06
Date Sampled		Unrestricted	Commercial	5/25/2010	5/26/2010	5/27/2010	5/27/2010	6/2/2010	6/2/2010
mg/Kg	mg/Kg	mg/Kg	mg/Kg						
Aluminum	33000	NS	NS	8100	6300	32000	30000	7100	8000
Antimony	NS	NS	NS	2.2 U	2.2 U	25 U	27 U	2.4	2.1 U
Arsenic	3 – 12	13	16	4.3	2.7	6	5.4 U	5.3	2.4
Barium	15 – 600	350	400	73	36	16	19	94	28
Beryllium	0 – 1.75	7.2	590	0.48	0.4	2.5 U	2.7 U	0.71	0.59
Cadmium	0.1 – 1	2.5	9.3	0.44 U	0.43 U	5 U	5.4 U	0.44 U	0.43 U
Calcium	130 – 35,000	NS	NS	9500	1500	2500	6600	13000	930
Chromium	1.5 – 40	30	1500	13	11	120	140	12	12
Cobalt	2.5 – 60	NS	NS	5.2	4.5	9.9 U	11 U	5.7	6.2
Copper	1 – 50	50	270	27	22	13	23	18	13
Iron	2,000 – 550,000	NS	NS	14000	11000	100000	120000	14000	14000
Lead	200 – 500 (2)	63	1000	60	49	25 U	27 U	120	12
Magnesium	100 – 5,000	NS	NS	3500	2300	3000	4800	8800	3200
Manganese	50 – 5,000	1600	10000	410	170	200	640	260	290
Mercury	0.001 – 0.2	0.18	2.8	0.4	0.09 U	0.1 U	0.11 U	1	0.08 U
Nickel	0.5 – 25	30	310	12	13	12 U	16	14	13
Potassium	8,500 - 43,000	NS	NS	970	780	1200 U	1400 U	1600	1200
Selenium	0.1 – 3.9	3.9	1500	0.88 U	0.87 U	9.9 U	11 U	0.87 U	0.86 U
Silver	NS	2	1500	0.44 U	0.43 U	5 U	5.4 U	0.44 U	0.43 U
Sodium	6,000 - 8,000	NS	NS	190	100	990 U	1100 U	170	86 U
Thallium	NS	NS	NS	0.88 U	0.87 U	9.9 U	11 U	0.87 U	0.86 U
Vanadium	1 – 300	NS	NS	25	13	220	220	16	15
Zinc	9 – 50	109	10000	67	160	82	120	48	34

Table 1c 2477 Third Avenue Bronx, NY Soil Analytical Results *Metals*

Client ID	Eastern USA	NYSDEC	NYSDEC	SB-103 (0-5)	SB-103 (5-10)	SB-104 (0-4)	SB-104 (8-9)	SB-104 (80-89)
Lab Sample ID	ioil Backgroun	Part 375	Part 375	L1008218-08	L1008218-10	L1008075-03	L1008075-05	L1008075-08
Date Sampled		Unrestricted	Commercial	6/2/2010	6/2/2010	5/25/2010	5/25/2010	5/25/2010
mg/Kg	mg/Kg	mg/Kg	mg/Kg					
Aluminum	33000	NS	NS	6200	11000	8900	9300	2800
Antimony	NS	NS	NS	2.9	2.4 U	2.7 U	2.7 U	3 U
Arsenic	3 – 12	13	16	11	6	3.9	2.8	1
Barium	15 – 600	350	400	390	140	120	21	43
Beryllium	0 – 1.75	7.2	590	0.79	0.71	0.52	0.6	0.59
Cadmium	0.1 – 1	2.5	9.3	1.4	0.64	0.54 U	0.54 U	0.93
Calcium	130 – 35,000	NS	NS	13000	8100	11000	700	180000
Chromium	1.5 – 40	30	1500	25	18	13	12	6
Cobalt	2.5 – 60	NS	NS	8.6	7.7	4.4	7.5	5.2
Copper	1 – 50	50	270	180	59	32	11	5
Iron	2,000 – 550,000	NS	NS	37000	23000	13000	17000	5400
Lead	200 – 500 (2)	63	1000	1200	540	250	8.7	5.3
Magnesium	100 – 5,000	NS	NS	2200	4200	2100	3000	54000
Manganese	50 – 5,000	1600	10000	320	360	180	110	460
Mercury	0.001 – 0.2	0.18	2.8	3	3.6	1.8	0.09 U	0.12 U
Nickel	0.5 – 25	30	310	19	16	14	15	6.1
Potassium	8,500 - 43,000	NS	NS	960	1600	780	810	960
Selenium	0.1 – 3.9	3.9	1500	1.2	0.96 U	1.1 U	1.1 U	1.2 U
Silver	NS	2	1500	0.87	0.48 U	0.54 U	0.54 U	0.6 U
Sodium	6,000 - 8,000	NS	NS	880	450	280	110 U	210
Thallium	NS	NS	NS	0.97 U	0.96 U	1.1 U	1.1 U	1.2 U
Vanadium	1 – 300	NS	NS	41	22	16	20	9
Zinc	9 – 50	109	10000	850	710	680	52	31

Table 1c 2477 Third Avenue Bronx, NY Soil Analytical Results *Metals*

Client ID	Eastern USA	NYSDEC	NYSDEC	SB/MW-101 (0-4)	SB/MW-105 (0-4)	SB/MW-105 (8-9.5)	SB/MW-105 (23-24.5)	SB/MW-105 (S3-S5)
Lab Sample ID	oil Backgroun	Part 375	Part 375	L1008075-11	L1008075-19	L1008075-21	L1008075-23	L1008218-02
Date Sampled		Unrestricted	Commercial	5/26/2010	5/28/2010	5/28/2010	5/28/2010	5/28/2010
mg/Kg	mg/Kg	mg/Kg	mg/Kg					
Aluminum	33000	NS	NS	5400	4900	6300	6000	6300
Antimony	NS	NS	NS	2.2 U	2.1 U	2.4 U	2.4 U	2.3 U
Arsenic	3 – 12	13	16	4.2	3.7	2.2	1.8	0.64
Barium	15 – 600	350	400	110	91	25	26	40
Beryllium	0 – 1.75	7.2	590	0.46	0.35	0.4	0.36	0.98
Cadmium	0.1 – 1	2.5	9.3	2	0.54	0.47 U	0.47 U	0.46 U
Calcium	130 – 35,000	NS	NS	13000	23000	1100	1300	52000
Chromium	1.5 – 40	30	1500	9.4	9.4	10	10	11
Cobalt	2.5 – 60	NS	NS	6	3.8	5.4	4.8	9.5
Copper	1 – 50	50	270	240	65	13	140	11
Iron	2,000 - 550,000	NS	NS	12000	8800	12000	11000	8700
Lead	200 - 500 (2)	63	1000	210	170	10	60	6
Magnesium	100 – 5,000	NS	NS	6400	5700	2300	2400	26000
Manganese	50 – 5,000	1600	10000	270	190	400	140	150
Mercury	0.001 – 0.2	0.18	2.8	0.71	0.42	0.09 U	0.09	0.08 U
Nickel	0.5 – 25	30	310	23	11	12	13	9.5
Potassium	8,500 - 43,000	NS	NS	880	740	870	680	3800
Selenium	0.1 – 3.9	3.9	1500	1	0.85 U	0.94 U	0.95 U	0.93 U
Silver	NS	2	1500	0.44 U	0.72	0.47 U	0.47 U	0.46 U
Sodium	6,000 - 8,000	NS	NS	220	150	94 U	96	93 U
Thallium	NS	NS	NS	0.89 U	0.85 U	0.94 U	0.95 U	0.93 U
Vanadium	1 – 300	NS	NS	16	13	12	12	16
Zinc	9 – 50	109	10000	1200	190	44	98	38

Table 1d 2477 Third Avenue Bronx, NY Soil Analytical Results *Pesticides*

Client ID	NYSDEC	NYSDEC	SS-101	SB-104 (0-4)	SB-104 (8-9)	SB-104 (80-89)	SB/MW-101 (0-4)
Lab Sample ID	Part 375	Part 375	L1008075-01	L1008075-03	L1008075-05	L1008075-08	L1008075-11
Date Sampled	Unrestricted	Commercial	5/25/2010	5/25/2010	5/25/2010	5/25/2010	5/26/2010
Dilution			5	1	1	1	1
mg/Kg	mg/Kg	mg/Kg					
4,4'-DDD	0.0033	92	0.00866 U	0.0112 U	0.0109 U	0.0115 U	0.0449 U
4,4'-DDE	0.0033	62	0.0241	0.0112 U	0.0109 U	0.0115 U	0.0449 U
4,4'-DDT	0.0033	47	0.0162 U	0.0211 U	0.0205 U	0.0216 U	0.0843 U
Aldrin	0.005	0.68	0.00866 U	0.0112 U	0.0109 U	0.0115 U	0.0449 U
Alpha-BHC	0.02	3.4	0.00361 U	0.00469 U	0.00455 U	0.00481 U	0.0187 U
Beta-BHC	0.036	3	0.00866 U	0.0112 U	0.0109 U	0.0115 U	0.0449 U
Chlordane	0.094	24	0.0704 U	0.0914 U	0.0887 U	0.0938 U	0.365 U
Delta-BHC	0.04	500	0.00866 U	0.0112 U	0.0109 U	0.0115 U	0.0449 U
Dieldrin	0.005	1.4	0.00542 U	0.00703 U	0.00682 U	0.00722 U	0.0281 U
Endosulfan I	2.4	See Totals	0.00866 U	0.0112 U	0.0109 U	0.0115 U	0.0449 U
Endosulfan II	2.4	See Totals	0.00866 U	0.0112 U	0.0109 U	0.0115 U	0.0449 U
Endosulfan sulfate	2.4	See Totals	0.00361 U	0.00469 U	0.00455 U	0.00481 U	0.0187 U
Endrin	0.014	89	0.00361 U	0.00469 U	0.00455 U	0.00481 U	0.0187 U
Endrin ketone	NS	NS	0.00866 U	0.0112 U	0.0109 U	0.0115 U	0.0449 U
Heptachlor	0.042	15	0.00433 U	0.00562 U	0.00546 U	0.00577 U	0.0225 U
Heptachlor epoxide	NS	NS	0.0162 U	0.0211 U	0.0205 U	0.0216 U	0.0843 U
Lindane	0.1	9.2	0.00361 U	0.0209	0.00455 U	0.00481 U	0.0187 U
Methoxychlor	NS	NS	0.0162 U	0.0211 U	0.0205 U	0.0216 U	0.0843 U
Toxaphene	NS	NS	0.162 U	0.211 U	0.205 U	0.216 U	0.843 U
trans-Chlordane	NS	NS	0.0108 U	0.0141 U	0.0136 U	0.0144 U	0.0562 U

Table 1d2477 Third AvenueBronx, NYSoil Analytical ResultsPesticides

Client ID	NYSDEC	NYSDEC	SB/MW-101 (6-9)	SB/MW-101 (128-130)	SB/MW-101 (148-150)	SB/MW-105 (0-4)	SB/MW-105 (8-9.5)	SB/MW-105 (23-24.5)
Lab Sample ID	Part 375	Part 375	L1008075-13	L1008075-15	L1008075-17	L1008075-19	L1008075-21	L1008075-23
Date Sampled	Unrestricted	Commercial	5/26/2010	5/27/2010	5/27/2010	5/28/2010	5/28/2010	5/28/2010
Dilution			1	1	1	1	1	1
mg/Kg	mg/Kg	mg/Kg						
4,4'-DDD	0.0033	92	0.0088 U	1.0109 U	1.0105 U	0.00845 U	0.00978 U	0.0094 U
4,4'-DDE	0.0033	62	0.0088 U	1.0109 U	1.0105 U	0.00845 U	0.00978 U	0.0094 U
4,4'-DDT	0.0033	47	0.0165 U	1.0204 U	1.0197 U	0.0158 U	0.0183 U	0.0176 U
Aldrin	0.005	0.68	0.0088 U	1.0109 U	1.0105 U	0.00845 U	0.00978 U	0.0094 U
Alpha-BHC	0.02	3.4	0.00366 U	1.00455 U	1.00439 U	0.00352 U	0.00408 U	0.00392 U
Beta-BHC	0.036	3	0.0088 U	1.0109 U	1.0105 U	0.00845 U	0.00978 U	0.0094 U
Chlordane	0.094	24	0.0714 U	1.0886 U	1.0856 U	0.0686 U	0.0795 U	0.0764 U
Delta-BHC	0.04	500	0.0088 U	1.0109 U	1.0105 U	0.00845 U	0.00978 U	0.0094 U
Dieldrin	0.005	1.4	0.0055 U	1.00682 U	1.00701 U	0.00528 U	0.00611 U	0.00588 U
Endosulfan I	2.4	See Totals	0.0088 U	1.0109 U	1.0105 U	0.00845 U	0.00978 U	0.0094 U
Endosulfan II	2.4	See Totals	0.0088 U	1.0109 U	1.0105 U	0.00845 U	0.00978 U	0.0094 U
Endosulfan sulfate	2.4	See Totals	0.00366 U	1.00455 U	1.00439 U	0.00352 U	0.00408 U	0.00392 U
Endrin	0.014	89	0.00366 U	1.00455 U	1.00439 U	0.00352 U	0.00408 U	0.00392 U
Endrin ketone	NS	NS	0.0088 U	1.0109 U	1.0105 U	0.00845 U	0.00978 U	0.0094 U
Heptachlor	0.042	15	0.0044 U	1.00546 U	1.00527 U	0.00422 U	0.00489 U	0.0047 U
Heptachlor epoxide	NS	NS	0.0165 U	1.0204 U	1.0197 U	0.0158 U	0.0183 U	0.0176 U
Lindane	0.1	9.2	0.00366 U	1.00455 U	1.00439 U	0.00352 U	0.00408 U	0.00392 U
Methoxychlor	NS	NS	0.0165 U	1.0204 U	1.0197 U	0.0158 U	0.0183 U	0.0176 U
Toxaphene	NS	NS	0.165 U	1.204 U	1.197 U	0.158 U	0.183 U	0.176 U
trans-Chlordane	NS	NS	0.011 U	1.0136 U	1.0132 U	0.0106 U	0.0122 U	0.0118 U

Table 1d2477 Third AvenueBronx, NYSoil Analytical ResultsPesticides

Client ID	NYSDEC	NYSDEC	SB/MW-105 (S3-S5)	SB-102 (0-5)	SB-102 (5-10)	SB-103 (0-5)	SB-103 (5-10)
Lab Sample ID	Part 375	Part 375	L1008218-02	L1008218-04	L1008218-06	L1008218-08	L1008218-10
Date Sampled	Unrestricted	Commercial	5/28/2010	6/2/2010	6/2/2010	6/2/2010	6/2/2010
Dilution			1	1	1	1	1
mg/Kg	mg/Kg	mg/Kg					
4,4'-DDD	0.0033	92	0.00903 U	0.00877 U	0.00874 U	0.0471 U	0.00953 U
4,4'-DDE	0.0033	62	0.00903 U	0.00877 U	0.00874 U	0.0471 U	0.00953 U
4,4'-DDT	0.0033	47	0.0169 U	0.0164 U	0.0164 U	0.0882 U	0.0179 U
Aldrin	0.005	0.68	0.00903 U	0.00877 U	0.00874 U	0.0471 U	0.00953 U
Alpha-BHC	0.02	3.4	0.00376 U	0.00366 U	0.00364 U	0.0196 U	0.00397 U
Beta-BHC	0.036	3	0.00903 U	0.00877 U	0.00874 U	0.0471 U	0.00953 U
Chlordane	0.094	24	0.0734 U	0.0713 U	0.071 U	0.382 U	0.0774 U
Delta-BHC	0.04	500	0.00903 U	0.00877 U	0.00874 U	0.0471 U	0.00953 U
Dieldrin	0.005	1.4	0.00564 U	0.00548 U	0.00546 U	0.0294 U	0.00595 U
Endosulfan I	2.4	See Totals	0.00903 U	0.00877 U	0.00874 U	0.0471 U	0.00953 U
Endosulfan II	2.4	See Totals	0.00903 U	0.00877 U	0.00874 U	0.0471 U	0.00953 U
Endosulfan sulfate	2.4	See Totals	0.00376 U	0.00366 U	0.00364 U	0.0196 U	0.00397 U
Endrin	0.014	89	0.00376 U	0.00366 U	0.00364 U	0.0196 U	0.00397 U
Endrin ketone	NS	NS	0.00903 U	0.00877 U	0.00874 U	0.0471 U	0.00953 U
Heptachlor	0.042	15	0.00452 U	0.00439 U	0.00437 U	0.0235 U	0.00476 U
Heptachlor epoxide	NS	NS	0.0169 U	0.0164 U	0.0164 U	0.0882 U	0.0179 U
Lindane	0.1	9.2	0.00376 U	0.00366 U	0.00364 U	0.0196 U	0.00397 U
Methoxychlor	NS	NS	0.0169 U	0.0164 U	0.0164 U	0.0882 U	0.0179 U
Toxaphene	NS	NS	0.169 U	0.164 U	0.164 U	0.882 U	0.179 U
trans-Chlordane	NS	NS	0.0113 U	0.011 U	0.0109 U	0.0588 U	0.0119 U

Tables 1a-d 2477 Third Avenue Bronx, NY Soil Analytical Results *Notes*

GENERAL

- NS: No soil cleanup objective listed.
- ND : No Detect
- ${\boldsymbol{\mathsf{U}}}$: The analyte was not detected at the indicated concentration.
- E: The concentration given is an estimated value

Exceedences are highlighted in bold font.

SOIL

Eastern USA Background	:	For heavy metals, Eastern US Soil Background values may be used as soil cleanup objectives.
Part 375 Soil Cleanup Objectives	:	Soil Clean-up Objectives listed in NYSDEC (New York State Department of Environmental Conservation) "Part 375" Regulations (6 NYCRR Park 375).
µg/kg	:	micrograms per kilogram = parts per billion (ppb)

mg/kg : milligrams per kilogram = parts per million (ppm)

Table 22477 Third AvenueBronx, New YorkSoil Vapor Analytical ResultsVolatile Organic Compounds

Client ID	EPA 2001	NYSDOH 2003	NYSDOH 2003	SG-101	SG-103	SG-104	SG-105	TRIP
Lab Sample ID	BASE	Soil Vapor	Soil Vapor	L1008224-05	L1008224-02	L1008224-03	L1008224-06	L1008224-01
Date Sampled	90th percentile	Intrusion	Indoor Upper	6/2/2010	6/2/2010	6/2/2010	6/2/2010	6/2/2010
Dilution		Air Guideline	Fence	27.46	26.25	29.08	42.37	1
ug/m ³	ug/m ³	Value	ug/m ³					
1 1 1-Trichloroethane	μg/m 20.6	µg/m NS	μg/m 2.5	29.9.11	28.6.11	31 7 11	46.2.11	1.09.11
1,1,2,2-Tetrachloroethane	NS	NS	0.4	37.7 U	36 U	39.9 U	58.1 U	1.37 U
1,1,2-Trichloroethane	<1.5	NS	0.4	29.9 U	28.6 U	31.7 U	46.2 U	1.09 U
1,1-Dichloroethane	<0.7	NS	0.4	22.2 U	21.2 U	23.5 U	34.3 U	0.809 U
1,1-Dichloroethene	<1.4	NS	0.4	21.8 U	20.8 U	23 U	33.6 U	0.792 U
1,2,4-Trichlorobenzene	<6.8	NS	0.5	40.7 U	38.9 U	43.1 U	62.8 U	1.48 U
1,2,4-Trimethylbenzene	9.5	NS	9.8	27 U	25.8 U	28.6 U	41.6 U	0.982 U
1,2-Dibromoethane	<1.5	NS	0.4	42.2 U	40.3 U	44.6 U	65 U	1.54 U
1,2-Dichloroethane	<1.2	NS	0.5	22.2 []	21.2 U	23.5 11	34.3 11	0.809.11
1,2-Dichloropropane	<1.6	NS	0.4	25.4 U	24.2 U	26.8 U	39.1 U	0.924 U
1,3,5-Trimethybenzene	3.7	NS	3.9	27 U	25.8 U	28.6 U	41.6 U	0.982 U
1,3-Butadiene	<3.0	NS	0.5	21.8 U	11.6 U	12.8 U	18.7 U	0.442 U
1,3-Dichlorobenzene	<2.4	NS	0.5	33 U	31.5 U	34.9 U	50.9 U	1.2 U
1,4-Dichlorobenzene	5.5	NS	1.2	33 U	31.5 U	34.9 U	50.9 U	1.2 U
1,4-Dioxane	NS	NS	NS	19.8 U	18.9 U	20.9 U	30.5 U	0.72 U
2,2,4-Trimethylpentane	NS 10	NS	5	620	7520	31600	6380	0.934 U
2-Butanone	12 NS	NS	16 NG	41.6	26.7 U	17.1 U	48.3	0.589 U
3-Chloropropene	NS	NS	NS	17.2	164 []	23.6 U	26.5 []	0.619 0
4-Ethyltoluene	3.6	NS	NS	27 U	25.8 U	28.6 U	41.6 U	0.982 U
4-Methyl-2-pentanone	6	NS	1.9	22.5 U	21.5 U	23.8 U	34.7 U	0.819 U
Acetone	98.9	NS	115	2940	325	69 U	4250	2.37 U
Benzene	9.4	NS	13	37.3	69.4	153	92	0.638 U
Benzyl chloride	<6.8	NS	NS	28.4 U	27.2 U	30.1 U	43.8 U	1.03 U
Bromodichloromethane	NS	NS	NS	36.8 U	35.1 U	38.9 U	56.7 U	1.34 U
Bromoform	NS	NS	NS	56.7 U	54.2 U	60.1 U	87.5 U	2.06 U
Bromometnane	<1.7	NS	0.5 NS	21.3 U	20.4 0	22.6 U	32.9 0	0.776 U
Carbon tetrachloride	<1.3	NS	1.3	34.5 U	33 U	36.6 U	53.3 U	1.26 U
Chlorobenzene	<0.9	NS	0.4	25.3 U	24.1 U	26.8 U	39 U	0.92 U
Chloroethane	<1.1	NS	0.4	14.5 U	13.8 U	15.3 U	22.3 U	0.527 U
Chloroform	1.1	NS	1.2	26.8 U	25.6 U	28.4 U	41.3 U	0.976 U
Chloromethane	3.7	NS	4.2	11.3 U	10.8 U	12 U	17.5 U	0.413 U
cis-1,2-Dichloroethene	<1.9	NS	0.4	21.8 U	20.8 U	23 U	33.6 U	0.792 U
cis-1,3-Dichloropropene	<2.3	NS	0.4	24.9 0	23.8 U	26.4 U	38.4 U	0.907 U
Dibromochloromethane	NS	NS	0.3 NS	49.3	41.5	4000	72 1 11	0.000 0
Dichlorodifluoromethane	16.5	NS	10	27 1 U	25.9 U	28.7 U	41.9 U	0.988 U
Ethanol	210	NS	1300	129 U	124 U	137 U	199 U	4.71 U
Ethyl Acetate	5.4	NS	NS	49.4 U	47.2 U	52.4 U	76.3 U	1.8 U
Ethylbenzene	5.7	NS	6.4	23.8 U	22.8 U	25.2 U	36.8 U	0.868 U
Freon-113	3.5	NS	2.5	42 U	40.2 U	44.5 U	64.9 U	1.53 U
Freon-114	NS	NS	0.4	38.4 U	36.7 U	40.6 U	59.2 U	1.4 U
Heptane	NS	NS	18	57.5	118	749	96.8	0.819 U
nexachiorobutadiene	<0.8	NS	0.5 NS	58.5 U	55.9 U 84.8	62 U 50 7	90.3 U 145	2.13 U
Methyl tert butyl ether	11 5	NS	14	324	103	660	145	0.72 11
Methylene chloride	10	60	16	47.6 U	45.6 U	50.5 U	73.5 U	2.07 U
n-Hexane	10.2	NS	14	72.6	189	3570	238	0.704 U
o-Xylene	7.9	NS	7.1	23.8 U	22.8 U	25.2 U	36.8 U	0.868 U
p/m-Xylene	NS	NS	NS	47.6 U	45.6 U	50.5 U	73.5 U	1.74 U
Propylene	NS	NS	NS	206	41	261	239	0.344 U
Styrene	1.9	NS	1.4	23.4 U	22.3 U	24.8 U	36.1 U	0.851 U
Tetrachioroethene	15.9 NG	100	2.5	37.2 U	35.6 U	39.4 U	57.4 U	1.36 U
	43	NS	0.0 57	10.2 U 49 2	37.6	31.5	25 U 42 4	0.569 0
trans-1.2-Dichloroethene	NS	NS	NS	21.8 U	20.8 U	23 U	33.6 U	0.792 U
trans-1,3-Dichloropropene	<1.3	NS	NC	24.9 U	23.8 U	26.4 U	38.4 U	0.907 U
Trichloroethene	4.2	5	0.5	29.5 U	28.2 U	31.2 U	45.5 U	1.07 U
Trichlorofluoromethane	18.1	NS	12	30.8 U	29.5 U	32.6 U	47.6 U	1.12 U
Vinyl acetate	NS	NS	NS	19.3 U	18.5 U	20.5 U	29.8 U	0.704 U
Vinyl bromide	NS	NS	NS	24 U	22.9 U	25.4 U	37 U	0.874 U
Vinyl chloride	<1.9	NS	0.4	14 U	13.4 U	14.8 U	21.6 U	0.511 U

GENERAL

- NS: No soil cleanup objective listed.
- ND : No Detect
 - ${\bf U}$: The analyte was not detected at the indicated concentration.

SOIL VAPOR

EPA 2001 BASE	Guidelines from Appendix C of the New York State Department of Health (NYSDOH) Guidance for Evaluating
90th percentile	Soil Vapor Intrusion in the State of New York, October 2006.

NYSDOH 2003

Soil Vapor Intrusion Air Guideline Value & Upper Fence

 $\mu g/m^3$: micrograms per cubic meter of air

Table 3a 2477 Third Avenue Bronx, New York Groundwater Analytical Results Volatile Organic Compounds

Client ID	NYSDEC	MW-1	MW-2	MW-3	MW-4	MW-6
Lab Sample ID	Class GA	L1008380-07	L1008380-06	L1008380-01	L1008380-10	L1008380-03
Date Sampled	Ambient	6/4/2010	6/4/2010	6/3/2010	6/4/2010	6/3/2010
Dilution	Standard	10	2	10	5	1
μg/L	μg/L					
1,1,1,2-Tetrachloroethane	5	5 U	1 U	5 U	2.5 U	0.5 U
1,1,1-Trichloroethane	5	5 U	1 U	5 U	2.5 U	0.5 U
1,1,2,2-1 etrachioroethane	5	50	1511	50	2.5 U	0.5 U
1,1,2-1 nchioroethane	5	7.5 U	1.5 U	7.5 U	3.8 U	0.75 U
1 1-Dichloroethene	5	5.0	1.5 0	5.0	2511	0.75 0
1,1-Dichloropropene	5	25 U	5 U	25 U	12 U	2.5 U
1.2.3-Trichlorobenzene	5	25 U	5 U	25 U	12 U	2.5 U
1,2,3-Trichloropropane	0.04	50 U	10 U	50 U	25 U	5 U
1,2,4,5-Tetramethylbenzene	5	72	61	96	12	2 U
1,2,4-Trichlorobenzene	5	25 U	5 U	25 U	12 U	2.5 U
1,2,4-Trimethylbenzene	5	220	14	200	130	2.5 U
1,2-Dibromo-3-chloropropane	0.04	25 U	5 U	25 U	12 U	2.5 U
1,2-Dibromoethane	0.0006	20 U	4 U	20 U	10 U	2 U
1,2-Dichlorobenzene	3	25 U	5 U	25 U	12 U	2.5 U
1,2-Dichloroethane	0.6	5 U	1 U	5 U	2.5 U	0.5 U
1,2-Dichloropropane	1	18 U	3.5 U	18 U	8.8 U	1.8 U
1,3,5-Trimethylbenzene	5	45	5 U	57	31	2.5 U
1,3-Dichlorobenzene	3	25 U	5 U	25 U	12 U	2.5 U
1,3-Dichloropropane	5	25 U	5 U	25 U	12 U	2.5 U
1,4-Dichlorobenzene	3	25 U	5 U	25 U	12 U	2.5 U
1,4-Diethylbenzene	NS	33	32	50	14	20
2,2-Dichloropropane	5	25 U	5 U	25 U	12 U	2.5 U
2-Butanone	50	50 U	10 U	50 U	25 U	50
4-Ethyltoluene	NS	120	4 11	160	23 0	211
4-Methyl-2-pentanone	NS	50 11	10 U	50 11	25 U	5.0
Acetone	50	50 U	10 U	50 U	25 U	5 U
Acrylonitrile	5	50 U	10 U	50 U	25 U	5 U
Benzene	1	5 U	1 U	42	2.5 U	0.5 U
Bromobenzene	5	25 U	5 U	25 U	12 U	2.5 U
Bromochloromethane	5	25 U	5 U	25 U	12 U	2.5 U
Bromodichloromethane	50	5 U	1 U	5 U	2.5 U	0.5 U
Bromoform	50	20 U	4 U	20 U	10 U	2 U
Bromomethane	5	10 U	2 U	10 U	5 U	1 U
Carbon disulfide	60	50 U	10 U	50 U	25 U	5 U
Carbon tetrachloride	5	5 U	10	5 U	2.5 U	0.5 U
Chlorobenzene	5	5 U	10	5 U	2.5 U	0.5 U
Chloroform	5	75.11	15.0	75.11	2811	0.75 U
Chloromethane	5	25 11	5.11	25 11	12 11	2511
cis-1 2-Dichloroethene	5	5 11	1 11	5 11	2511	0.5 U
cis-1,3-Dichloropropene	0.4 sum	5 U	1 U	5 U	2.5 U	0.5 U
Dibromochloromethane	50	5 U	1 U	5 U	2.5 U	0.5 U
Dibromomethane	5	50 U	10 U	50 U	25 U	5 U
Dichlorodifluoromethane	5	50 U	10 U	50 U	25 U	5 U
Ethyl ether	NS	25 U	5 U	25 U	12 U	2.5 U
Ethylbenzene	5	360	7.9	350	47	0.5 U
Hexachlorobutadiene	0.5	6 U	1.2 U	6 U	3 U	0.6 U
Isopropylbenzene	5	100	12	85	6.7	0.5 U
Methyl tert butyl ether	10	10 U	2 U	28	5 U	1 U
Methylene chloride	5	50 U	10 U	50 U	25 0	50
Naphthalene	10	33	50	54	26	2.5 U
	5	240	84	43	3.2 17	0.5 0
o-Chlorotoluene	5	25 11	511	25 11	12	2511
o-Xvlene	5	190	2 U	450	43	1 U
p/m-Xylene	5	700	2.3	980	160	1 U
p-Chlorotoluene	5	25 U	5 U	25 U	12 U	2.5 U
p-Isopropyltoluene	5	7.6	1.1	5 U	2.5 U	0.5 U
sec-Butylbenzene	5	19	33	38	2.5 U	0.5 U
Styrene	5	10 U	2 U	10 U	5 U	1 U
tert-Butylbenzene	5	25 U	5 U	25 U	12 U	2.5 U
Tetrachloroethene	5	5 U	1 U	5 U	2.5 U	0.5 U
Toluene	5	65	1.5 U	410	4	0.75 U
trans-1,2-Dichloroethene	5	7.5 U	1.5 U	7.5 U	3.8 U	0.75 U
trans-1,3-Dichloropropene	0.4 sum	5 U	1 U	5 U	2.5 U	0.5 U
trans-1,4-Dichloro-2-butene	5	25 U	5 U	25 U	12 U	2.5 U
	5	5 U	1 U	5 U	2.5 U	0.5 U
Vinvl acetate	C NC	20 U	0 U	20 U	12 U 2E I I	2.3 U
Vinyl acetate	CNI C	10 11	211	10 11	20 U	5 U 1 I I
t myr chionae	-	10 0	20	10.0	30	10

Table 3a 2477 Third Avenue Bronx, New York Groundwater Analytical Results

Volatile Organic Compounds Client ID NYSDEC MW-8 MW-9 MW-10 ab Sample ID Class GA L1008380-11 L1008380-09 L1008380-04 Date Sampled Ambient 6/4/2010 6/4/2010 6/3/2010 Dilution Standard 10 1 1 µg/L μg/L 1,1,1,2-Tetrachloroethane 0.5 U 0.5 U 5 5 U 5 1.1.1-Trichloroethane 5 U 05 U 0511 1,1,2,2-Tetrachloroethane 5 5 U 0.5 U 0.5 U 1,1,2-Trichloroethane 7.5 U 0.75 U 0.75 U 1 5 7.5 U 0.75 U 0.75 U 1,1-Dichloroethane 1,1-Dichloroethene 5 5 U 0.5 U 0.5 U 1,1-Dichloropropene 5 25 U 2.5 U 2.5 U 1,2,3-Trichlorobenzene 5 25 U 2.5 U 2.5 U 0.04 1.2.3-Trichloropropane 50 U 5 U 5 U 1,2,4,5-Tetramethylbenzene 5 26 211 2 U 1,2,4-Trichlorobenzene 5 25 U 2.5 U 2.5 U 1,2,4-Trimethylbenzene 5 420 2.5 U 2.5 U 0.04 2.5 U 2.5 U 1,2-Dibromo-3-chloropropane 25 U 1,2-Dibromoethane 0.0006 20 U 2 U 2 U 1,2-Dichlorobenzene 3 25 U 2.5 U 2.5 U 1.2-Dichloroethane 0.6 5 U 0.5 U 0.5 U 1,2-Dichloropropane 1 18 U 1.8 U 1.8 U 1,3,5-Trimethylbenzene 5 75 2.5 U 2.5 U 1,3-Dichlorobenzene 3 25 U 2.5 U 2.5 U 5 2.5 U 2.5 U 1.3-Dichloropropane 25 U 1,4-Dichlorobenzene 3 25 U 2.5 U 2.5 U NS 26 2 U 2 U 1,4-Diethylbenzene 2,2-Dichloropropane 25 U 2.5 U 5 2.5 U 2-Butanone 50 50 U 5 U 5 U 2-Hexanone 50 50 U 5 U 5 U NS I-Ethyltoluene 220 2 U 2 U 5 U NS 50 U 5 U 4-Methyl-2-pentanone Acetone 50 50 U 8.9 5 U Acrylonitrile 5 50 U 5 U 5 U Benzene 33 0.58 0.5 U 1 5 25 U 2.5 U Bromobenzene 2.5 U Bromochloromethane 5 25 U 2.5 U 2.5 U Bromodichloromethane 50 5 U 0.5 U 0.5 U 50 20 U 2 U 2 U Bromoform Bromomethane 5 10 U 1 U 1 U Carbon disulfide 60 50 U 5 U 5 U Carbon tetrachloride 5 5 U 0.5 U 0.5 U 5 5 U 0.5 U 0.5 U Chlorobenzene 10 LI Chloroethane 5 1 U 111 Chloroform 7 7.5 U 0.75 U 0.75 U 5 2.5 U 2.5 U Chloromethane 25 U cis-1.2-Dichloroethene 5 5 U 0.5 U 0.5 U sis-1,3-Dichloropropene 0.4 sum 5 U 0.5 U 0.5 U 50 5 U 0.5 U 0.5 U Dibromochloromethane 50 U Dibromomethane 5 U 5 U 5 Dichlorodifluoromethane 50 LI 5 U 5 U 5 Ethyl ether NS 25 U 2.5 U 2.5 U Ethylbenzene 5 920 0.68 0.5 U Hexachlorobutadiene 0.5 6 U 0.6 U 0.6 U Isopropylbenzene 5 90 0.5 U 0.5 U Methyl tert butyl ether 10 10 U 2.2 1 U 5 U Methylene chloride 5 50 U 5 U 10 2.5 U 2.5 U Naphthalene 51 n-Butylbenzene 5 9.1 0.5 U 0.5 U n-Propylbenzene 5 180 0.5 U 0.5 U o-Chlorotoluene 5 2.5 U 25 U 2.5 U o-Xylene 5 620 1 U 1 U p/m-Xylene 5 1900 1 U 1 U 5 p-Chlorotoluene 25 U 2.5 U 2.5 U 5 5 U 0.5 U 0.5 U p-IsopropyItoluene sec-Butylbenzene 5 8.4 0.5 U 0.5 U Styrene 5 10 U 1 U 1 U tert-Butylbenzene 5 25 U 2.5 U 2.5 U 0.5 U 0.5 U Tetrachloroethene 5 5 U Toluene 5 770 0.75 U 0.75 U trans-1,2-Dichloroethene 5 7.5 U 0.75 U 0.75 U 0.5 U trans-1.3-Dichloropropene 0.4 sum 5 U 0.5 U trans-1,4-Dichloro-2-butene 5 25 U 2.5 U 2.5 U Trichloroethene 5 5 U 0.5 U 0.5 U Trichlorofluoromethane 5 25 U 2.5 U 2.5 U NS 50 U 5 U 5 U Vinyl acetate 10 U Vinyl chloride 2 111 111

Client ID	NYSDEC	MW-1	MW-2	MW-3	MW-4
Lab Sample ID	Class GA	L1008380-07	L1008380-06	L1008380-01	L1008380-10
Date Sampled	Ambient	6/4/2010	6/4/2010	6/3/2010	6/4/2010
Dilution	Standard	5	1	5	5
ug/l					
µy/L 1 2 4 5-Tetrachlorohon	µg/L	00.11	00.17	100 11	20.11
1.2.4-Trichlorobenzene	э 5	20 U 4 G H	20 U 4 9 H	100 U 25 H	20 U 5 U
1,2-Dichlorobenzene	3	4.911	4.911	25 11	511
1,3-Dichlorobenzene	3	4.9 U	4.9 U	25 U	5 U
1,4-Dichlorobenzene	3	4.9 U	4.9 U	25 U	5 U
2,4,5-Trichlorophenol	NS	4.9 U	4.9 U	25 U	5 U
2,4,6-Trichlorophenol	NS	4.9 U	4.9 U	25 U	5 U
2,4-Dichlorophenol	5	9.8 U	9.9 U	50 U	10 U
2.4-Dinitrophenol	5U 10	9.8 U	9.9 U	50 U	10 U
2,4-Dinitrotoluene	5	5.911	5.911	30 11	611
2,6-Dinitrotoluene	5	4.9 U	4.9 U	25 U	5 U
2-Chloronaphthalene	10	1 U	0.2 U	1 U	1 U
2-Chlorophenol	NS	5.9 U	5.9 U	30 U	6 U
2-Methylnaphthalene	NS	8.4	0.2 U	4.5	1.4
2-Methylphenol	NS	5.9 U	5.9 U	30 U	6 U
2-Nitrophonel	5	4.9 U	4.9 U	25 U	5 U
2-Microphenol 3.3'-Dichlorobenzidine	1ND 5	20 U 70 U	20 U 70 U	100 U 250 H	20 U 50 U
3-Methylphenol/4-Methylphenol	NS	5.9 U	5.9 U	30 U	6 U
3-Nitroaniline	5	4.9 U	4.9 U	25 U	5 U
4,6-Dinitro-o-cresol	NS	20 U	20 U	100 U	20 U
4-Bromophenyl phenyl ether	NS	4.9 U	4.9 U	25 U	5 U
4-Chloroaniline	5	4.9 U	4.9 U	25 U	5 U
4-Chiorophenyl phenyl ether	NS	4.9 U	4.9 U	25 U	5 U
4-Mitrophenel	5 NC	6.8 U	6.9 U	35 U	7 U
Acenaphthene	20	9.0 U 1 I I	9.9 U () 2 I	50 U 1 II	111
Acenaphthylene	NS	1 U	0.2 U	1 U	1 U
Acetophenone	NS	20 U	20 U	100 U	20 U
Anthracene	50	1 U	0.2 U	1 U	1 U
Benzo(a)anthracene	0.002	1 U	0.2 U	1 U	1 U
Benzo(a)pyrene	ND 0.000	1 U	0.2 U	1 U	1 U
Benzo(b)Iluorantnene Benzo(dhi)nervlene	0.002 NS	1 U	0.2 U 0 2 U	1 U 1 II	10
Benzo(k)fluoranthene	0.002	111	0.2 0	1	111
Benzoic Acid	NS	49 U	49 U	250 U	50 U
Benzyl Alcohol	NS	9.8 U	9.9 U	50 U	10 U
Biphenyl	5	4.9 U	4.9 U	25 U	5 U
Bis(2-chloroethoxy)methane	5	4.9 U	4.9 U	25 U	5 U
DIS(2-chloroethyl)ether	1 NC	4.9 U	4.9 U	25 U	5 U
Bis(2-Ethylhexyl)phthalata	5 F	4.9 U 1 O I I	4.9 U 1 Q I I	20 U 25 II	5 U 5 U
Butyl benzyl phthalate	50	4.911	4.911	25 11	511
Carbazole	NS	4.9 U	4.9 U	25 U	5 U
Chrysene	0.002	1 U	0.2 U	1 U	1 U
Dibenzo(a,h)anthracene	NS	1 U	0.2 U	1 U	1 U
Dibenzofuran	NS	4.9 U	4.9 U	25 U	5 U
Direthyl phthalate	50	4.9 U	4.9 U	25 U	5 U
Di-n-butvlohthalate	50	4.9 U 4 G I I	4.9 U 4 G I I	25 U 25 II	5 U 5 U
Di-n-octylphthalate	50	4.9 U	4.9 U	25 U	5 U
Fluoranthene	50	1 U	0.2 U	1 U	1 U
Fluorene	50	1 U	0.2 U	1 U	1 U
Hexachlorobenzene	0.04	4 U	0.79 U	4 U	4 U
nexachlorobutadiene	0.5	2.5 U	0.49 U	2.5 U	2.5 U
Hexachiorocyclopentadiene	5 5	29 U	30 U 0 70 U	150 U	30 U 0 0
Indeno(1,2,3-cd)Pvrene	0.002	4 U 1 II	0.2 11	4 U 1 II	3.3 1 J
Isophorone	50	4.9 U	4.9 U	25 U	5 U
Naphthalene	10	26	0.2 U	41	15
Nitrobenzene	0.4	4.9 U	4.9 U	25 U	5 U
NitrosoDiPhenylAmine(NDPA)/DPA	50	15 U	15 U	75 U	15 U
n-Nitrosodi-n-propylamine	NS	4.9 U	4.9 U	25 U	5 U
r-Gilloro-M-Gresol Pentachlorophenel	NS	4.9 U	4.9 U	25 U	5 U
Phenanthrene	50	4 U 1 II	0.790	4 U 1 II	4 U 1 II
Phenol	NS	6.8 LJ	6.9 LJ	35 U	7 U
Pyrene	50	10	0.2 U	1 U	1 U

Client ID	NYSDEC	MW-6	MW-8	MW-9	MW-10
Lab Sample ID	Class GA	L1008380-03	L1008380-11	L1008380-09	L1008380-04
Date Sampled	Ambient	6/3/2010	6/4/2010	6/4/2010	6/3/2010
Dilution	Standard	1	5	1	1
μg/L	μg/L				
1,2,4,5-Tetrachlorobenzene	5	20 U	20 U	20 U	20 U
1,2,4-Trichlorobenzene	5	4.9 U	4.9 U	4.9 U	4.9 U
1,2-Dichlorobenzene	3	4.9 U	4.9 U	4.9 U	4.9 U
1,3-Dichlorobenzene	3	4.9 U	4.9 U	4.9 U	4.9 U
1,4-Dichlorobenzene	3	4.9 U	4.9 U	4.9 U	4.9 U
2,4,5-1 richlorophenol	NS	4.9 U	4.9 U	4.9 U	4.9 U
2,4,6-Trichlorophenol	N5 5	4.9 U	4.9 U	4.9 U	4.9 U
2,4-Dichlorophenol	50	9.8 U	9.8 U	9.9 0	9.8 U
2.4-Dinitrophenol	10	29 11	29.11	30 11	29 11
2.4-Dinitrotoluene	5	590	590	590	5911
2.6-Dinitrotoluene	5	4.9 U	4.9 U	4.9 U	4.9 U
2-Chloronaphthalene	10	0.2 U	0.98 U	0.2 U	0.2 U
2-Chlorophenol	NS	5.9 U	5.9 U	5.9 U	5.9 U
2-Methylnaphthalene	NS	0.2 U	4.5	0.2 U	0.2 U
2-Methylphenol	NS	5.9 U	5.9 U	5.9 U	5.9 U
2-Nitroaniline	5	4.9 U	4.9 U	4.9 U	4.9 U
2-Nitrophenol	NS	20 U	20 U	20 U	20 U
3,3'-Dichlorobenzidine	5	49 U	49 U	49 U	49 U
3-Methylphenol/4-Methylphenol	NS	5.9 U	5.9 U	5.9 U	5.9 U
3-Nitroaniline	5	4.9 U	4.9 U	4.9 U	4.9 U
4,6-Dinitro-o-cresol	NS	20 U	20 U	20 U	20 U
4-Bromophenyl phenyl ether	NS	4.9 U	4.9 U	4.9 U	4.9 U
4-Chloroaniline	5	4.9 U	4.9 U	4.9 U	4.9 U
4-Chlorophenyl phenyl ether	NS -	4.9 U	4.9 U	4.9 0	4.9 U
4-Nitroaniline	5	6.8 U	6.8 U	6.9 U	6.8 U
Aconanhthono	20	9.8 0	9.6 U	9.9 0	9.8 0
Acenaphthelene	NS	0.2 0	0.98 11	0.2 0	0.2 0
Acetophenone	NS	20 11	20 U	20 11	20 11
Anthracene	50	0.2 U	0.98 U	0.2 U	0.2 U
Benzo(a)anthracene	0.002	0.2 U	0.98 U	0.2 U	0.2 U
Benzo(a)pyrene	ND	0.2 U	0.98 U	0.2 U	0.2 U
Benzo(b)fluoranthene	0.002	0.2 U	0.98 U	0.2 U	0.2 U
Benzo(ghi)perylene	NS	0.2 U	0.98 U	0.2 U	0.2 U
Benzo(k)fluoranthene	0.002	0.2 U	0.98 U	0.2 U	0.2 U
Benzoic Acid	NS	49 U	49 U	49 U	49 U
Benzyl Alcohol	NS	9.8 U	9.8 U	9.9 U	9.8 U
Biphenyl	5	4.9 U	4.9 U	4.9 U	4.9 U
Bis(2-chloroethoxy)methane	5	4.9 U	4.9 U	4.9 U	4.9 U
Bis(2-chloroethyl)ether	1	4.9 U	4.9 U	4.9 U	4.9 U
Bis(2-chioroisopropyi)ether	N3	4.9 U	4.9 U	4.9 U	4.9 U
Bis(2-Einyinexyi)phinalate	5	4.9 U	4.9 U	4.9 U	4.9 U
Carbazole	NS	4.90	4.90	4.90	4.90
Chrysene	0.002	0.2 U	0.98 U	0.2 U	0.2 []
Dibenzo(a,h)anthracene	NS	0.2 U	0.98 U	0.2 U	0.2 U
Dibenzofuran	NS	4.9 U	4.9 U	4.9 U	4.9 U
Diethyl phthalate	50	4.9 U	4.9 U	4.9 U	4.9 U
Dimethyl phthalate	50	4.9 U	4.9 U	4.9 U	4.9 U
Di-n-butylphthalate	50	4.9 U	4.9 U	4.9 U	4.9 U
Di-n-octylphthalate	50	4.9 U	4.9 U	4.9 U	4.9 U
Fluoranthene	50	0.2 U	0.98 U	0.2 U	0.2 U
Fluorene	50	0.2 U	0.98 U	0.2 U	0.2 U
Hexachlorobenzene	0.04	0.78 U	3.9 U	0.79 U	0.78 U
Hexachlorobutadiene	0.5	0.49 U	2.4 U	0.49 U	0.49 U
Hexachlorocyclopentadiene	5	29 U	29 U	30 0	29 U
Indeno(1.2.3-cd)Pyrene	0 003	0.76 0	0.9.0	0.79 0	0.78 0
Isophorone	50	4911	4911	4911	4911
Naphthalene	10	0.2 U	40	0.2 U	0.2 U
Nitrobenzene	0.4	4.9 U	4.9 U	4.9 U	4.9 U
NitrosoDiPhenyIAmine(NDPA)/DPA	50	15 U	15 U	15 U	15 U
n-Nitrosodi-n-propylamine	NS	4.9 U	4.9 U	4.9 U	4.9 U
P-Chloro-M-Cresol	NS	4.9 U	4.9 U	4.9 U	4.9 U
Pentachlorophenol	NS	0.78 U	3.9 U	0.79 U	0.78 U
Phenanthrene	50	0.2 U	0.98 U	0.2 U	0.2 U
Phenol	NS	6.8 U	6.8 U	6.9 U	6.8 U
Pyrene	50	0.2 U	0.98 U	0.2 U	0.2 U

Table 3c

2477 Third Avenue Bronx, New York Groundwater Analytical Results Metals

Client ID	NYSDEC	MW-1	MW-2	MW-3	MW-4	MW-6	MW-8	MW-9	MW-10
Lab Sample ID	Class GA	L1008380-07	L1008380-06	L1008380-01	L1008380-10	L1008380-03	L1008380-11	L1008380-09	L1008380-04
Date Sampled	Ambient	6/4/2010	6/4/2010	6/3/2010	6/4/2010	6/3/2010	6/4/2010	6/4/2010	6/3/2010
	Standard								
Total Metal - μg/L	μg/L								
Aluminum	NS	430	4400	380	880	3100	100 U	250	1800
Antimony	3	0.5 U							
Arsenic	25	10	6	26	27	12	9	5 U	5
Barium	1000	54	96	84	97	70	232	14	17
Beryllium	3	0.5 U							
Cadmium	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Calcium	NS	31000	130000	36000	64000	27000	160000	20000	10000
Chromium	50	10 U	10 U	10 U	10 U	10	10 U	10 U	10 U
Cobalt	NS	20 U							
Copper	200	10 U	13	10 U	10 U	12	10 U	10 U	10 U
Iron	300+	12000	14000	27000	33000	24000	15000	3100	6700
Lead	25	10 U							
Magnesium	35000	4900	18000	5300	11000	4900	12000	2900	2000
Manganese	300+	1160	5970	1610	2440	913	2170	139	105
Mercury	0.7	0.2 U							
Nickel	100	25 U							
Potassium	NS	5000	10000	6600	7400	4300	9400	2500 U	2500 U
Selenium	10	10 U							
Silver	50	7 U	7 U	7 U	7 U	7 U	7 U	7 U	7 U
Sodium	20000	72000	120000	33000	40000	36000	350000	11000	14000
Thallium	0.5	0.5 U							
Vanadium	NS	10 U							
Zinc	2000	50 U	51	50 U	50 U	50 U	73	50 U	50 U
Dissolved Metals									
Aluminum	NS	100 U							
Antimony	3	0.5 U							
Arsenic	25	5 U	5 U	5 U	5 U	5 U	5	5 U	5 U
Barium	1000	22	76	52	65	41	168	10 U	10 U
Beryllium	3	0.5 U							
Cadmium	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Calcium	NS	30000	130000	34000	64000	26000	150000	20000	10000
Chromium	50	10 U	10 U	10 []	10 []	10 U	10 U	10 []	10 U
Cobalt	NS	20 U							
Copper	200	10 U							
Iron	300+	220	630	1300	6300	2800	330	1500	530
Lead	25	10 U							
Magnesium	35000	4800	17000	4800	11000	3800	12000	3000	1600
Manganese	300+	1030	5700	1390	2350	787	2130	132	74
Mercury	0.7	0.2 (J	0.2 U						
Nickel	100	25 U	25 LJ	25 U					
Potassium	NS	4800	9700	6000	7400	3100	9100	2500 U	2500 U
Selenium	10	10 U							
Silver	50	7 11	7 11	7 11	7 11	7 11	7 11	7 11	7 11
Sodium	20000	71000	120000	32000	41000	34000	330000	11000	15000
Thallium	0.5	0.511	0.5.11	0.5 U	0.5 U	0.511	0.5	0.5 U	0.5 []
Vanadium	NS	10 11	10 11	10 11	10 11	10 11	10 11	10 11	10 11
Zinc	2000	50 11	50 11	220	50 11	50 11	50 11	50 11	50 11
	2000	50.0	50 0	225	30.0	50 0	50.0	50 0	50 0

Table 3d

2477 Third Avenue Bronx, New York Groundwater Analytical Results Pesticides

Client ID	NYSDEC	MW-1	MW-2	MW-3	MW-4	MW-6	MW-8	MW-9	MW-10
Lab Sample ID	Class GA	L1008380-07	L1008380-06	L1008380-01	L1008380-10	L1008380-03	L1008380-11	L1008380-09	L1008380-04
Date Sampled	Ambient	6/4/2010	6/4/2010	6/3/2010	6/4/2010	6/3/2010	6/4/2010	6/4/2010	6/3/2010
	Standard								
μg/L	μg/L								
4,4'-DDD	0.3	0.047 U	0.042 U	0.04 U	0.042 U	0.042 U	0.042 U	0.04 U	0.041 U
4,4'-DDE	0.2	0.047 U	0.042 U	0.04 U	0.042 U	0.042 U	0.042 U	0.04 U	0.041 U
4,4'-DDT	0.2	0.047 U	0.042 U	0.04 U	0.042 U	0.042 U	0.042 U	0.04 U	0.041 U
Aldrin	ND	0.024 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.02 U	0.021 U
Alpha-BHC	0.01	0.024 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.02 U	0.021 U
Beta-BHC	0.04	0.024 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.02 U	0.021 U
Chlordane	0.05	0.235 U	0.212 U	0.2 U	0.212 U	0.21 U	0.212 U	0.2 U	0.205 U
Delta-BHC	0.04	0.024 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.02 U	0.021 U
Dieldrin	0.004	0.047 U	0.042 U	0.04 U	0.042 U	0.042 U	0.042 U	0.04 U	0.041 U
Endosulfan I	NS	0.024 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.02 U	0.021 U
Endosulfan II	NS	0.047 U	0.042 U	0.04 U	0.042 U	0.042 U	0.042 U	0.04 U	0.041 U
Endosulfan sulfate	NS	0.047 U	0.042 U	0.04 U	0.042 U	0.042 U	0.042 U	0.04 U	0.041 U
Endrin	ND	0.047 U	0.042 U	0.04 U	0.042 U	0.042 U	0.042 U	0.04 U	0.041 U
Endrin ketone	5	0.047 U	0.042 U	0.04 U	0.042 U	0.042 U	0.042 U	0.04 U	0.041 U
Heptachlor	0.04	0.024 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.02 U	0.021 U
Heptachlor epoxide	0.03	0.804	0.024	0.035	0.05	0.021 U	0.15	0.037	0.021 U
Lindane	0.05	0.024 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.02 U	0.021 U
Methoxychlor	35	0.235 U	0.212 U	0.2 U	0.212 U	0.21 U	0.212 U	0.2 U	0.205 U
Toxaphene	0.06	0.235 U	0.212 U	0.2 U	0.212 U	0.21 U	0.212 U	0.2 U	0.205 U
trans-Chlordane	0.05	0.024 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.02 U	0.021 U

Table 3a-d2477 Third AvenueBronx, New YorkGroundwater Analytical ResultsNotes

GENERAL

- NS: No soil cleanup objective listed.
- ND : No Detect
- ${\boldsymbol{\mathsf{U}}}$: The analyte was not detected at the indicated concentration.

GROUNDWATER

- NYSDEC New York State Department of Environmental Conservation Technical and Operational
- Class GA : Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
 - **µg/L** : micrograms per Liter = parts per billion (ppb)

Table 4 2477 Third Avenue Bronx, New York

October 2009 Quarterly Groundwater Monitoring

Groundwater Analytical Results

Volatile (Drganic Compounds	
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Client ID	NYSDEC	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-8	MW-9	MW-10
Lab Sample ID	Class GA	L0915390-01	L0915390-02	L0915390-03	L0915390-04	L0915390-05	L0915390-06	L0915390-07	L0915390-08	L0915390-09
Date Sampled	Ambient	10/27/2009	10/27/2009	10/27/2009	10/27/2009	10/27/2009	10/27/2009	10/27/2009	10/27/2009	10/27/2009
Dilution	Standard	10	1	1	1	10	1	1	1	1
μg/L	µg/L									
1,2,4-Trimethylbenzene	5	510	46	91	4.9	3,300	2.5 U	5.5	2.5 U	2.5 U
1,3,5-Trimethylbenzene	5	89	4	34	2.5 U	820	2.5 U	2.5 U	2.5 U	2.5 U
Benzene	1	6.4	0.88	72	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	5	550	23	400	2.6	730	0.5 U	4.7	0.76	0.5 U
Isopropylbenzene	5	110	26	95	0.69	160	0.5 U	1.6	0.5 U	0.5 U
Methyl tert butyl ether	10	10 U	1 U	46	1 U	10 U	1 U	1 U	4.2	1 U
Naphthalene	10	80	8.3	92	2.5 U	90	2.5 U	2.5 U	2.5 U	2.5 U
n-Butylbenzene	5	36	81	37	0.5 U	140	0.5 U	0.7	0.5 U	0.5 U
n-Propylbenzene	5	320	100	400	1.7	560	0.5 U	3.2	0.55	0.5 U
o-Xylene	5	200	1	82	1 U	370	1 U	1 U	1 U	1 U
p/m-Xylene	5	990	6	630	1 U	2,300	1 U	2.1	1.4	1 U
p-Isopropyltoluene	5	9.2	4.7	0.71	0.5 U	27	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	5	22	70	32	0.5 U	5 U	0.5 U	0.66	0.5 U	0.5 U
tert-Butylbenzene	5	25 U	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U
Toluene	5	70	0.98	36	0.75 U	11	0.75 U	0.75 U	0.75 U	0.75 U

Table 42477 Third AvenueBronx, New YorkOctober 2009 Quarterly Groundwater Monitoring
Groundwater Analytical Results
Notes

GENERAL

 ${\bf U}$: The analyte was not detected at the indicated concentration.

Exceedences are highlighted in bold font.

GROUNDWATER

NYSDEC Class GA Ambient Standard

µg/L : micrograms per Liter = parts per billion (ppb)

Table 5a 2477 Third Avenue Bronx, New York Groundwater Analytical Results Volatile Organic Compounds

Client ID	NVSDEC	MW_101	MW-104	MW-105
Lab Sample ID	Class GA	1 1000082-02	1 1000082-01	1 1000082-02
Date Sampled	Ambient	6/15/2010	6/15/2010	6/16/2010
Date Sampled	Standard	0/13/2010	0/13/2010	0/10/2010
	Standard			
ua/l	ua/l			
1 1 1 2-Tetrachloroethane	μg/= 5	0511	0511	0511
1 1 1-Trichloroethane	5	0.5 0	0.5 0	0.5 0
1 1 2 2-Tetrachloroethane	5	0.5 0	0.5 U	0.5 U
1,1,2,2 Tetrachioroethane	1	0.75 []	0.75 U	0.75 U
1,1-Dichloroethane	5	0.75 U	0.75 U	0.75 U
1,1-Dichloroethene	5	0.5 U	0.5 U	0.5 U
1.1-Dichloropropene	5	2.5 U	2.5 U	2.5 U
1.2.3-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U
1.2.3-Trichloropropane	0.04	5 U	5 U	5.0
1.2.4.5-Tetramethylbenzene	5	211	211	211
1.2.4-Trichlorobenzene	5	2511	2511	2511
1.2.4-Trimethylbenzene	5	2.5 U	2.5 U	6.2
1.2-Dibromo-3-chloropropane	0.04	2.5 U	2.5 U	2.5 U
1.2-Dibromoethane	0.0006	2 U	2 U	2 U
1.2-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U
1.2-Dichloroethane	0.6	0.5 U	0.5 U	0.5 U
1.2-Dichloropropane	1	1.8 U	1.8 U	1.8 U
1,3,5-Trimethylbenzene	5	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U
1,3-Dichloropropane	5	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U
1,4-Diethylbenzene	NS	2 U	2 U	2 U
2,2-Dichloropropane	5	2.5 U	2.5 U	2.5 U
2-Butanone	50	5 U	5 U	5 U
2-Hexanone	50	5 U	5 U	5 U
4-Ethyltoluene	NS	2 U	2 U	5.1
4-Methyl-2-pentanone	NS	5 U	5 U	5 U
Acetone	50	5 U	5 U	5 U
Acrylonitrile	5	5 U	5 U	5 U
Benzene	1	0.5 U	0.5 U	0.5 U
Bromobenzene	5	2.5 U	2.5 U	2.5 U
Bromochloromethane	5	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	0.5 U	0.5 U	0.5 U
Bromoform	50	2 U	2 U	2 U
Bromomethane	5	1 U	1 U	1 U
Carbon disulfide	60	5 U	5 U	5 U
Carbon tetrachloride	5	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	0.5 U	0.5 U	0.5 U
Chloroethane	5	1 U	1 U	1 U
Chloroform	7	2.6	4.1	0.8
Chloromethane	5	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	5	0.5 U	0.78	14
cis-1,3-Dichloropropene	0.4 sum	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	0.5 U	0.5 U	0.5 U
Dipromometnane	5	50	50	50
Ethyl ether	C NC	5 U 2 E U	5 U	5 U 2 E U
Ethylbonzono	N5 F	2.5 U	2.5 U	2.5 U
Hexachlorobutadione	0.5	0.5 0	0.5 0	0.6.11
leonronylbenzene	5	0.0 0	0.0 0	0.0 0
Methyl tert hutyl ether	10	1	3	1.4
Methylene chloride	5	511	511	5.11
Naphthalene	10	2.5 U	2.5 U	2.5 U
n-Butvlbenzene	5	0.5 U	0.5 U	0.5 U
n-Propylbenzene	5	0.5 U	0.5 U	0.5 U
o-Chlorotoluene	5	2.5 U	2.5 U	2.5 U
o-Xylene	5	1 U	1 U	4.2
p/m-Xylene	5	1 U	1 U	15
p-Chlorotoluene	5	2.5 U	2.5 U	2.5 U
p-Isopropyltoluene	5	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	5	0.5 U	0.5 U	0.5 U
Styrene	5	1 U	1 U	1 U
tert-Butylbenzene	5	2.5 U	2.5 U	2.5 U
Tetrachloroethene	5	0.5 U	1.1	0.5 U
Toluene	5	0.75 U	0.75 U	0.75 U
trans-1,2-Dichloroethene	5	0.75 U	0.75 U	0.75 U
trans-1,3-Dichloropropene	0.4 sum	0.5 U	0.5 U	0.5 U
trans-1,4-Dichloro-2-butene	5	2.5 U	2.5 U	2.5 U
Trichloroethene	5	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	2.5 U	2.5 U	2.5 U
Vinyl acetate	NS	5 U	5 U	5 U
Vinvi chloride	2	1 U	1 U	10

Table 5b 2477 Third Avenue Bronx, New York Groundwater Analytical Results

Client ID	NYSDEC	MW-101	MW-104	MW-105
Lab Sample ID	Class GA	L1009083-02	L1009083-01	L1009083-03
Date Sampled	Ambient	6/15/2010	6/15/2010	6/16/2010
	Standard			
Total Metals - μg/L	μg/L			
Aluminum	NS	2100	6600	8400
Antimony	3	0.5 U	0.5 U	0.5 U
Arsenic	25	5 U	5 U	5 U
Barium	1000	68	66	164
Beryllium	3	0.6	0.5 U	0.5 U
Cadmium	5	5 U	5 U	5 U
Calcium	NS	76000	78000	110000
Chromium	50	10 U	20	10
Cobalt	NS	20 U	20 U	20 U
Copper	200	10 U	10 U	17
Iron	300+	6600	11000	12000
Lead	25	10 U	10 U	10 U
Magnesium	35000	88000	3200	72000
Manganese	300+	622	25	901
Mercury	0.7	0.2 U	0.2 U	0.2 U
Nickel	100	25 U	25 U	25 U
Potassium	NS	16000	19000	28000
Selenium	10	10 U	10 U	10 U
Silver	50	7 U	7 U	7 U
Sodium	20000	100000	22000	110000
Thallium	0.5	0.5 U	0.5 U	0.5 U
Vanadium	NS	10 U	31	17
Zinc	2000	50 U	50 U	53

Dissolved Metals

Aluminum	NS	490	100 U	100 U
Antimony	3	0.5 U	0.5 U	0.5 U
Arsenic	25	5 U	5 U	5 U
Barium	1000	54	28	107
Beryllium	3	0.5 U	0.5 U	0.5 U
Cadmium	5	5 U	5 U	5 U
Calcium	NS	65000	56000	96000
Chromium	50	10 U	10 U	10 U
Cobalt	NS	20 U	20 U	20 U
Copper	200	10 U	10 U	10 U
Iron	300+	50 U	210	160
Lead	25	10 U	10 U	10 U
Magnesium	35000	210	74000	57000
Manganese	300+	10 U	39	681
Mercury	0.7	0.2 U	0.2 U	0.2 U
Nickel	100	25 U	25 U	25 U
Potassium	NS	18000	14000	22000
Selenium	10	10 U	10 U	10 U
Silver	50	7 U	7 U	7 U
Sodium	20000	22000	100000	100000
Thallium	0.5	0.5 U	0.5 U	0.5 U
Vanadium	NS	10 U	10 U	10 U
Zinc	2000	50 U	50 U	50 U

Table 5a-b 2477 Third Avenue Bronx, New York Groundwater Analytical Results *Notes*

GENERAL

- NS: No soil cleanup objective listed.
- ND : No Detect
- U: The analyte was not detected at the indicated concentration.

GROUNDWATER

- NYSDEC New York State Department of Environmental Conservation Technical and Operational
- Class GA : Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
 - µg/L : micrograms per Liter = parts per billion (ppb)

Table 62477 Third AvenueBronx, New YorkGroundwater Analytical Results

General Chemistry

Client ID	MW-1	MW-2	MW-3	MW-6	MW-10
Lab Sample ID	L1008380-07	L1008380-06	L1008380-01	L1008380-03	L1008380-04
Date Sampled	6/4/2010	6/4/2010	6/3/2010	6/3/2010	6/3/2010
mg/L					
Alkalinity, Total	180	230	170	60	35
Nitrogen, Nitrate	0.15	0.1	0.1 U	0.1 U	0.1 U
Sulfate	10 U	19	10 U	10 U	10 U
Sulfide	0.09	0.24	0.02	0.02 U	0.02 U
Methane, Dissolved	4.4 E	0.82	5.4	1.7	0.61

Notes

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

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

mg/L - milligrams per Liter = parts per million (ppm)