MELROSE COMMONS SITE C- FAMILY

BLOCK 2328, LOTS 19, 25, 27, 29, 30, 31, 35, 8900 AND SECTION OF MELROSE CRESCENT BETWEEN E. 161ST STREET AND E. 162ND STREET

BRONX, NEW YORK

Draft Remedial Investigation Report

AKRF Project Number: 11901

Prepared for:

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LIST OF ACRONYMS

Acronym	Definition
AOC	Area of Concern
CAMP	Community Air Monitoring Plan
COC	Contaminant of Concern
CPP	Citizen Participation Plan
CSM	Conceptual Site Model
DER-10	New York State Department of Environmental Conservation Technical Guide 10
ELAP	Environmental Laboratory Approval Program
FID	Flame Ionization Detector
GPS	Global Positioning System
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
IRM	Interim Remedial Measure
NAPL	Non-aqueous Phase Liquid
NYC DOHMH	New York City Department of Health and Mental Hygiene
NYS DOH ELAP	New York State Department of Health Environmental Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PID	Photoionization Detector
QEP	Qualified Environmental Professional
RI	Remedial Investigation
SIR	Site Investigation Report
SCO	Soil Cleanup Objective

CERTIFICATION

We, Michelle Lapin, P.E. and Deborah Shapiro, QEP are Qualified Environmental Professionals, as defined in RCNY § 43-1402(ar). We have direct responsibility for implementation of the Remedial Investigation for the Melrose Commons Site C- Family site. We are responsible for the content of this Site Investigation Report, have reviewed its contents and certify that this report is accurate to the best of our knowledge and contains all available environmental information and data regarding the property.

Michelle Lapin, P.E.	4-7-14	
Qualified Environmental Professional	Date	Signature

Deborah Shapiro, QEP	4-7-14	
Qualified Environmental Professional	Date	Signature

EXECUTIVE SUMMARY

The Draft Remedial Investigation (Phase II) Report (RIR) provides information for establishment of remedial action objectives, evaluation of remedial action alternatives, and selection of a remedy pursuant to RCNY§ 43-1407(f). The Remedial Investigation described in this document is consistent with applicable guidance.

Site Location and Current Usage

The Site is identified as Block 2383, Lots 19, 25, 27, 29, 30, 31, 35, 8900, and section of Melrose Crescent between E. 161st Street and E. 162nd Street, Bronx, NY on the New York City Tax Map. The corresponding Site addresses are 432-440 East 162nd Street, 446 East 162nd Street, 448-450 East 162nd Street, 903 Elton Avenue, 901 Elton Avenue, 899 Elton Avenue, 897 Elton Avenue, 433-435 East 161st Street, 429-431 East 161st Street. Figure 1 shows the Site location. A map of the Site boundary is shown on Figure 2. The Site is located in a residential, commercial, educational, and institutional area.

Summary of Past Uses of Site and Areas of Concern

Environmental Health Investigations, Inc.'s (EHI) February 2011 Phase I Environmental Site Assessment (ESA) indicated that Lot 19 was historically developed with an automobile garage from 1927 to 1940; a factory in 1945; freezer and oven mobile units in 1961; a metal works from at least 1969 to 1978; and Blasco Supply company from 2000 to 2005. Lot 25 was historically developed with an automobile garage in 1921 and a funeral home from at least 1927 to 1984. Lot 27 was historically developed with an undertaker and a multi-story residential building from at least 1969 to 1979. Lot 29 was historically developed with a beauty shop, lawyer, dentist and multi-story residential building from 1927 to 1971. Lot 35 was historically developed with the Elton Glass Works in 1927, Soenning Plumbing and Heating, a butcher and glazer in 1927, and stores and a multi-story residential building in 1965. The other lots were developed as multi-story residences with cellars that likely contained petroleum storage tanks. In addition, as part of their 2011 Phase I ESA, EHI noted a gasoline station, auto repair facilities, and a paint store south of the Site on East 161st Street; a dry cleaner west of the Site on East 161st Street; and a Brownfield Cleanup Program site south of the Site across East 161st Street.

The following were considered Areas of Concern (AOCs) for this investigation:

1. The historic usage of the Site included a factory, metal works, automobile garages, glass works, freezer and oven mobile unit warehouse, glazer, plumbing and heating store, undertaker, beauty shop, dentist, and a funeral home. The use of oils and other petroleum-containing fluids, acids, solvents, formaldehyde, phenol, and methanol, and heavy metals are commonly associated with these historic uses.

2. Due to previous residential development at the Site, fuel oil underground storage tanks (USTs) may exist at the Site.
3. Current and historic uses of the surrounding area include gasoline stations, a paint store, automotive repair shops, and a dry cleaner. A Brownfield Cleanup Program site exists south of the Site across East 161st Street.
4. Demolition debris from the former buildings may be present at the Site and may contain elevated levels of semivolatile organic compounds (SVOCs) and metals.

Summary of the Work Performed under the Remedial Site Investigation

The investigation included the following scope of work completed at the Site:

1. Conducted a geophysical survey and utility mark-outs;
2. Installed 14 soil borings across the Site and collected 27 soil samples for chemical analysis from the soil borings to evaluate soil quality; and
3. Installed six soil vapor probes across the Site and collected six soil vapor samples and one ambient air sample for chemical analysis.

Summary of Hydrogeological Findings

The following geologic and hydrogeologic conditions were noted by the investigation for the Site:

1. The Site lies at an elevation of approximately 30 feet above national geodetic vertical datum (NGVD), an approximate of mean sea level (msl).
2. Groundwater was not encountered during the investigation. According to the Geotechnical Investigation at the Site, depth to groundwater is assumed to be approximately 20.5 feet below sidewalk grade.
3. Groundwater flow is assumed to be generally southerly beneath the Site towards the Harlem River, located approximately 1.7 miles south of the Site.
4. Depth to bedrock at the Site varies from approximately 13 to 15 feet below grade. Geoprobe refusal was encountered before bedrock in some of the borings advanced during the investigation.
5. The stratigraphy of the Site, from the surface down, consists of up to 15 feet of fill comprising sand, silt, gravel, rock, ash, debris, wood, brick, asphalt, and concrete, sometimes underlain by approximately one foot of sand, clay, and gravel on top of bedrock.

Summary of Environmental Findings

1. The results of the soil sampling completed during the RI showed that VOCs were detected in 15 of the 27 soil samples. No VOCs were detected in either of the two trip blanks or the two associated aqueous field blanks. Eleven VOCs (acetone, chloroform, ethylbenzene, isopropylbenzene, m,p-xylene, methylchlorohexane, methylene chloride, o-xylene, toluene, thrichlorofluoromethane, and total xylenes) were detected in one or more of the soil samples below NYSDEC Unrestricted Use

Soil Cleanup Objectives (UUSCOs or Track 1 SCOs). M,p-xylene and o-xylene were detected in soil sample SB-13 (8-10) at concentrations of 583 and 386 parts per billion (ppb), respectively, which is above the UUSCO of 260 ppb, but below the Restricted Residential Soil Cleanup Objectives (RRSCO or Track 2 SCO) of 100,000 ppb. No VOCs were detected at concentrations exceeding NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs).

2. Twenty-three SVOCs were detected in 20 of the 27 soil samples with a maximum total SVOC concentration of 35,357.30 ppb in soil sample SB-6 (5-7). No SVOCs were detected in either of the two aqueous field blanks. A total of seven polycyclic aromatic hydrocarbons (PAHs) {benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluroanthene, chrysene, dibenzo(a,h)anthracene, and indeno[1,2,3-cd]pyrene} were detected in one or more soil samples at concentrations above their respective UUSCOs. Additionally, six SVOCs including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno[1,2,3-cd]pyrene were detected in at least seven soil samples at concentrations above their respective RRSCOs.

3. A total of 9 metals, including barium, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc, exceeded their respective UUSCOs in 21 of the 27 soil samples. Of these metals, barium in ten samples, cadmium in one sample, copper in one sample, lead in six samples, and mercury in three samples, exceeded their respective RRSCOs.

4. Two PCBs, aroclor 1248 and aroclor 1260, were detected in 3 of the 27 soil samples. Aroclor 1248 was detected in soil samples SB-13 (0-2) and SB-13 (8-10) at concentrations of 910 ppb and 110 ppb, respectively, exceeding the UUSCO of 100 ppb of total PCBs per sample. Five pesticides including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, and endrin, were detected in 18 of the soil samples at concentrations above their respective UUSCOs. Additionally, 4,4'-DDE was detected in soil sample SB-13(8-10) at a concentration of 10,400 ppb, exceeding its RRSCO of 8,900 ppb.

5. The results of the soil vapor and ambient air sampling showed that 31 VOCs were detected in the 6 soil vapor samples. Methylene chloride was detected at a concentration of 77.5 micrograms per cubic meter ($\mu g/m^3$), above its air guideline value (AGV) of 60 $\mu g/m^3$ established by the New York State Department of Health (NYSDOH). Carbon tetrachloride was also detected above its AGV of 5 $\mu g/m^3$, at a concentration of 8.2 $\mu g/m^3$ in soil vapor sample SV-1. PCE and TCE were also detected in at least one of the soil vapor samples; however, these values were below the NYSDOH AGVs for these compounds. VOCs associated with petroleum [including benzene, toluene, ethylbenzene, xylenes (collectively referred to as BTEX), 1,2,4- and 1,3,5-trimethylbenzene, cyclohexane, n-heptane, n-hexane, 4-ethyltoluene, and 2,2,4-trimethylpentane] were detected at concentrations up to 870 $\mu g/m^3$. Solvent-related VOCs [including acetone, chloroform, and methyl ethyl ketone (MEK)] were detected at concentrations up to 530 $\mu g/m^3$. Low level VOC concentrations were also noted in the ambient air sample.

6. Based on an evaluation of the data and information from the investigation, there is some contaminated soil and soil vapor present at the Site. The elevated xylenes, photoionization detector (PID) readings, staining, and petroleum odors seem to be

aassociated with former fuel oil use at the Site. The SVOCs and metals present and chemical-like odor observed in the soil, and the VOCs in the soil vapor seem to be attributable to the historic use at the Site and subsequent demolition of the former structures. The elevated levels of pesticides indicate the prior usage of pesticides at the Site and possible storage in the cellar of the former structures.

DRAFT REMEDIAL INVESTIGATION REPORT

1.0 SITE BACKGROUND

This Draft Remedial Investigation Report (RIR) summarizes the investigation work performed between February 18 and Febrary 20, and on February 25 and 26, 2014. The goal of the RIR was to determine whether the past uses have adversely affected the Site.

1.1 Site Location and Current Usage

The Site is identified as Block 2383, Lots 19, 25, 27, 29, 30, 31, 35, 8900, and section of Melrose Crescent between E. 161st Street and E. 162nd Street, Bronx, NY on the New York City Tax Map. The corresponding Site addresses are 432-440 East 162nd Street, 446 East 162nd Street, 448-450 East 162nd Street, 903 Elton Avenue, 901 Elton Avenue, 899 Elton Avenue, 897 Elton Avenue, 433-435 East 161st Street, 429-431 East 161st Street. Figure 1 shows the Site location. The Site is an approximately 0.861-acre area consisting of a series of vacant lots and a one-story 9,200-square foot building with a partial cellar. A map of the Site boundary is shown on Figure 2.

1.2 Description of Surrounding Property

The Site is abutted by East 162nd Street to the north, beyond which are vacant lots and vancant buildings; East 161st Street to the south, beyond which are residential buildings with first floor commercial spaces; residential buildings to the east, followed by Melrose Avenue; and Elton Avenue followed by Boricua College to the west. The Harlem River is the nearest water body and is located approximately 1.7 miles south of the Site. The surrounding area is primarily residential, commercial, educational, and institutional in nature.

2.0 SITE HISTORY

2.1 Past Uses and Ownership

Environmental Health Investigations, Inc.'s (EHI) February 2011 Phase I Environmental Site Assessment (ESA) indicated that Lot 19 was historically developed with an automobile garage from 1927 to 1940; a factory in 1945; freezer and oven mobile units in 1961; a metal works from at least 1969 to 1978; and Blasco Supply company from 2000 to 2005. Lot 25 was historically developed with an automobile garage in 1921 and a funeral home from at least 1927 to 1984. Lot 27 was historically developed with an undertaker and a multi-story residential building from at least 1969 to 1979. Lot 29 was historically developed with a beauty shop, lawyer, dentist and multi-story residential building from 1927 to 1971. Lot 35 was historically developed with the Elton Glass Works in 1927, Soenning Plumbing and Heating, a butcher and glazer in 1927, and stores and a multi-story residential building in 1965. The other lots were developed as multi-story residences with cellars that likely contained petroleum storage tanks. In addition, as part of their 2011 Phase I ESA, EHI noted a gasoline station, auto repair facilities, and a paint store south of the Site on East 161st Street; a dry cleaner west of the Site on East 161st Street; and a Brownfield Cleanup Program site south of the Site across East 161st Street.

2.2 Previous Investigations

Phase I Environmental Site Assessment, Melrose Commons Site C, Bronx, New York, Environmental Health Investigations, Inc., February 2011

The Phase I ESA identified several on-site and off-site conditions that may have affected the Site. The identified conditions included the historic usage of the Site as a factory, metal works, automobile garage, glass works, freezer and oven mobile unit warehouse, glazer, plumbing and heating store, undertaker, beauty shop, dentist, and as a funeral home. The use of oils and other petroleum-containing fluids, acids, solvents, formaldehyde, phenol, and methanol, and heavy metals are commonly associated with these historic uses. Suspect asbestos-containing materials (ACM), suspect lead-based paint (LBP), suspect mercury-containing fluorescent light bulbs, and suspect polychlorinated biphenyl (PCB)-containing fluorescent light ballasts were also identified in the building at Lot 19. The surrounding area was historically mixed-use and included: a gasoline station, auto repair facilities and a paint store south of the Site on East 161st Street; a dry cleaner west of the Site on East 161st Street; and a Brownfield Cleanup Program site south of the Site across East 161st Street.

The Phase I ESA also noted that, due to past residential development at the Site, there is a possibility that underground storage tanks (USTs) may exist at the Site. However, no information regarding the status of former or current petroleum storage tanks on the Site was included in the Phase I ESA.

Geotechnical Investigation, East 161st Street and Elton Avenue, Bronx, New York, Tectonic Engineering and Surveying Consultants, February 2014

Tectonic Engineering and Surveying Consultants (Tectonic) conducted a geotechnical engineering study of the Site. The investigation included the advancement of 46 test borings and probes (B-1 through B-46) and the excavation of 4 test pit wells (TP-1 through TP-4). Two ground observation wells were installed in borings B-20 and B-35. It is noted that one of the installed wells was dry. According to Tectonic's report, uncontrolled fill was reported to depths ranging from 2 to 14 feet below grade, generally consisting of sand with varying amounts of silt and gravel. The fill was underlain by native soil typically encountered between 4 and 13 feet below grade, generally consisting of sand with varying amounts of silt and gravel with cobbles and boulders. In several borings and test pits, abundant brick, debris, and refuse were encountered at depths extending to bedrock. The top of bedrock (marble) was encountered at depths ranging from 7.5 to 23 feet below grade. Groundwater was observed at elevations ranging from approximately 20.4 to 20.5 feet below grade.

2.3 Areas of Concern

The following environmental issues discussed in Section 2.0 were considered Areas of Concern (AOCs) for this investigation:

1. The historic usage of the Site included a factory, metal works, automobile garages, glass works, freezer and oven mobile unit warehouse, glazer, plumbing and heating store, undertaker, beauty shop, dentist, and a funeral home. The use of oils and other petroleum-containing fluids, acids, solvents, formaldehyde, phenol, and methanol, and heavy metals are commonly associated with these historic uses.
2. Due to previous residential development at the Site, fuel oil USTs may exist at the Site.
3. Current and historic uses of the surrounding area include gasoline stations, a paint store, automotive repair shops, and a dry cleaner. A Brownfield Cleanup Program site exists south of the Site across East 161st Street.
4. Demolition debris from the former buildings may be present at the Site and may contain elevated levels of SVOCs and metals.

3.0 PROJECT MANAGEMENT

3.1 Project Organization

The Qualified Environmental Professionals (QEP) responsible for preparation of this report are Michelle Lapin, P.E. and Deborah Shapiro, QEP.

3.2 Health and Safety

All work described in this report was performed in full compliance with applicable laws and regulations, including Site and Occupational Safety and Health Administration (OSHA) worker safety requirements and Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements. The work described in this report was also performed in accordance with a site-specific Health and Safety Plan (HASP) dated February 2014.

4.0 SITE INVESTIGATION ACTIVITIES

The following activities were performed as part of the Remedial Investigation:

1. Conducted a geophysical survey and utility mark-outs;
2. Installed 14 soil borings across the Site, and collected 27 soil samples for chemical analysis from the soil borings to evaluate soil quality; and
3. Installed six soil vapor probes across the Site and collected six soil vapor samples and one ambient air sample for chemical analysis.

A map showing the location of the soil borings, soil vapor sample points, and the ambient air sample location is provided as Figure 2.

4.1 Geophysical Survey and Utility Mark-Outs

On February 18 and 26, 2014, a geophysical survey was conducted throughout the Site by Enviroprobe Service, Inc. (Enviroprobe) to clear the proposed boring locations for subsurface utilities and to locate other potential buried structures. The geophysical survey included both electromagnetic (EM) and ground penetrating radar (GPR) methods. All utility locations were marked out with spray paint prior to the commencement of drilling activities. An anomaly consistent with that of an underground storage tank (UST), measuring approximately 7 feet by 8.5 feet, was detected and delineated at the rear of the Site building on Lot 35. The Geophysical Investigation Report is attached as Appendix A.

Utility mark-outs are required by law. Eastern Environmental Solutions, Inc. (Eastern), the drilling contractor, called Dig Safely New York at least three days prior to the start of intrusive work.

4.2 Soil Boring Installation

Fourteen soil borings were drilled across the Site between February 18 and 20, 2014 and on February 25, 2014 by Eastern. A direct push drill rig was used to advance the soil borings located inside the Site building (Lot 19) and on the adjacent vacant lots. A hand auger was used to advance soil boring SB-12 located within the Site building cellar. Borings were advanced to bedrock or equipment refusal, whichever was shallower. The three borings within the first floor of the building (SB-1, SB-2, and SB-7) were advanced to depths of 7 to 12 feet below sidewalk grade and 10 borings (SB-3, SB-4, SB-5, SB-6, SB-8, SB-9, SB-10, SB-11, SB-13, and SB-14) were advanced in the vacant lots to between and 7 and 15 feet below grade. Groundwater was not encountered in any of the borings.

Soil cores were obtained using a stainless steel, macro-core sampler with an internal acetate liner. Soil cores were field-screened using a photoionization detector (PID), which measures relative concentrations of VOCs in the soil. The PID was calibrated at the beginning of each

field day with 100 parts per million (ppm) isobutylene calibration gas. At each boring location, AKRF field personnel recorded and documented subsurface conditions.

Boring logs were prepared by an AKRF environmental scientist and are attached in Appendix B. Borings were sampled continuously and soil samples were screened for evidence of contamination by visual and olfactory methods and by using a calibrated PID. Petroleum odor, staining, and elevated PID readings in soil headspace were noted in the deep soil sample collected from boring SB-13 at approximately 10 feet below grade. An unidentified chemical-like odor was also observed in soil boring SB-1 at depths ranging from 11 to 12 feet. Detailed results of soil screening are recorded on the soil boring logs. The soil boring locations were surveyed using the Global Positioning System (GPS) upon their completion.

4.3 Soil Vapor Probe Installation

Six soil vapor probes were installed by Eastern and six soil vapor samples and one ambient air sample were collected for chemical analysis by AKRF as part of the investigation on February 20, 2014. Two soil vapor samples were collected from immediately below the slab inside the Site building and four samples were collected from approximately 5 feet below grade on the vacant Site lots.

All sampling was conducted in conformance with the applicable procedures described in ASTM E 2600-08 “Standard Practice for Assessment of Vapor Intrusion into Structures on Property Involved in Real Estate Transactions” and the October 2006 NYSDOH Soil Vapor Intrusion Guidance Document protocols.

The soil vapor sampling points were installed using a remote access direct-push probe by advancing a 0.75-inch diameter hollow probe rod fitted with an expendable 6-inch long stainless steel screened drive point immediately below the slab at the 2 locations within the Site building (SV-1 and SV-2) and 5 feet below grade at the remaining 4 exterior locations (SV-3, SV-4, SV-5, and SV-6). Dedicated Teflon-lined polyethylene tubing with threaded fittings was connected to the probe. The hollow probe rod was then removed and the boring was backfilled with clean silica sand. Hydrated bentonite was used to fill the remaining void around the sampling tubing to ground surface.

4.4 Sample Collection and Chemical Analysis

Soil and soil vapor have been sampled and evaluated in this report. The sampling performed and presented in this report provides a basis for the evaluation of subsurface Site conditions and potential remedial action with respect to the media sampled.

4.4.1 Soil Sampling

Twenty-seven soil samples were collected for chemical analysis during this investigation.

Two soil samples were collected for laboratory analysis from each soil boring except soil boring SB-12. Soil boring SB-12 was advanced less than 5 feet below grade; therefore, only one soil sample was collected from the boring. The two soil samples from each of the remaining borings were collected from the 0 to 2 feet below grade interval and from the two-foot interval exhibiting evidence of contamination. In the absence of contamination, the additional sample was collected from the 5 to 10 foot interval below grade. Soil boring SB-13 exhibited field evidence of contamination, including elevated PID readings, odor, and staining; however, the two-foot interval exhibiting evidence of contamination was located directly above bedrock and therefore, two soil samples were collected. Soil samples collected from the soil borings were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), target analyte list (TAL) metals, polychlorinated biphenyls (PCBs), and pesticides.

All samples were analyzed by Accutest Laboratories (Accutest), a New York State Department of Health (NYSDOH) certified laboratory, with Category B deliverables. Sample containers were labeled and placed in an ice-filled cooler and shipped to the laboratory via courier with appropriate chain-of-custody documentation.

Data on soil sample collection for chemical analyses, including dates of collection and sample depths, are reported in Tables 1 through 4. Figure 2 shows the location of soil borings completed as part of this investigation. Soil boring logs are included in Appendix B.

4.4.2 Soil Vapor Sampling

Six soil vapor probes were installed and six soil vapor samples and one ambient air sample were collected for chemical analysis during this investigation. Two soil vapor samples were collected from immediately below the slab inside the Site building and four samples were collected from approximately 5 feet below grade from the vacant lots adjacent to the structure.

Prior to collection, each sampling point was purged of three sample volumes using a peristaltic pump at a flow rate of approximately 0.1 liters/minute. During purging, an inverted five-gallon bucket was placed over each sampling point and helium gas was introduced through a small hole in the bucket to saturate the atmosphere around the sample port with helium gas. Purged vapors were collected in a Tedlar bag and field-screened for organic vapors using a PID and for methane using a landfill gas meter. The purged air was also monitored using a portable helium detector to check for short-circuiting of ambient air into the vapor sampling point. All soil vapor points passed the seal integrity tests with helium readings of ND (Not Detected). A PID reading of 0.3 ppm was recorded at sample location SV-3.

After purging, each probe was connected via Teflon-lined polyethylene tubing to a laboratory-supplied 6-liter SUMMA canister equipped with a flow regulator set to collect a sample over a two-hour sampling period. One ambient air sample (AA-1) was collected from the center of Lot

30 in a 6-liter SUMMA canister for an approximately two-hour sampling period. The ambient air sample was collected concurrently with the soil vapor samples to establish background conditions and for comparison purposes. Immediately after opening the flow control valve, the initial SUMMA canister vacuum (inches of mercury) was noted. After approximately two hours, the flow controller valve was closed, the final vacuum noted, and the canister placed in a shipping carton for delivery to the laboratory.

All samples were analyzed by Accutest, a NYSDOH certified laboratory, with Category B deliverables. Sample containers were labeled and placed in an ice-filled cooler and shipped to the laboratory via courier with appropriate chain of custody documentation.

Soil vapor sampling locations are shown on Figure 2. Soil vapor sample collection data is reported in Table 5. Soil vapor and ambient air sampling logs are included in Appendix B. Methodologies used for soil vapor assessment conform to the *New York State Department of Health (NYSDOH) Final Guidance on Soil Vapor Intrusion, October 2006.*

4.4.3 Chemical Analysis

Chemical analytical work has been performed under a quality assurance program that includes the following:

Factor	Description
Quality Assurance Officer	The chemical analytical QA/QC was directed by Michelle Lapin, P.E., of AKRF.
Third Party Data Validator	The third-party data validation was performed by Lori Beyer of L.A.B. Validation Corp.
Chemical Analytical Laboratory	Chemical analytical laboratory used in this investigation was Accustest Laboratories of Dayton, New Jersey, a NYS Environmental Laboratory Approval Program (ELAP) certified laboratory.
Chemical Analytical Methods	Soil analytical methods: • TAL Metals by EPA Method 6000/7000 (rev. 2007); • TCL VOCs by EPA Method 8260C (rev. 2006); • TCL SVOCs by EPA Method 8270D (rev. 2007); • TCL Pesticides by EPA Method 8081B (rev. 2000); • TCL PCBs by EPA Method 8082A (rev. 2000). Soil vapor and ambient air analytical method: • VOCs by Method TO-15

4.4.4 Quality Assurance/Quality Control Sampling

QA/QC procedures were used to provide performance information with regard to accuracy, precision, sensitivity, representation, completeness, and comparability associated with

the sampling and analysis for this investigation. Field QA/QC procedures were used (1) to document that samples are representative of actual conditions at the Site and (2) to identify possible cross-contamination from field activities or sample transit. Laboratory QA/QC procedures and analyses were used to demonstrate whether analytical results have been biased either by interfering compounds in the sample matrix, or by laboratory techniques that may have introduced systematic or random errors to the analytical process.

QA/QC samples were analyzed at an ELAP-certified laboratory. QA/QC sampling consisted of the following:

- Four soil duplicate samples (two blind duplicates and two field duplicates);
- Two soil matrix spike/matrix spike duplicate (MS/MSD) samples;
- Two aqueous trip blank samples;
- Two aqueous field blank samples; and
- One ambient air SUMMA canister.

QA/QC samples were submitted with the collected soil and soil vapor samples. The field blanks, duplicate soil samples, and MS/MSDs were analyzed for the same analyte list as the accompanying soil samples. The trip blank samples were submitted for laboratory analysis for VOCs by EPA Method 8260. The ambient air sample was analyzed for VOCs by EPA Method TO-15.

Duplicate samples for soil had relative percent differences; however, soil samples are expected to have a greater variance due to variable contaminant properties in soil, particularly in non-homogenous material as was identified in the soil samples collected during this investigation. In general, the compounds detected in the parent and duplicate sample were consistent. No VOCs or SVOCs were detected in the trip and field blanks.

Low level VOC concentrations were noted in the ambient air sample. These VOCs were detected at concentrations well below the soil vapor concentrations and are not likely to be related to site contamination or sample compromise.

The third-party data validation was performed by L.A.B. Validation Corp. and reported in Data Usability Summary Reports (DUSRs) for soil and air/soil vapor laboratory analytical data sets (see Appendix C). The DUSR identified additional qualifiers for specific compounds for specific samples. These qualifiers have been added to the data summary tables provided as Tables 1 through 5. The data sets were determined to be acceptable for use with the additional data qualifiers. The changes included the addition of a “J” qualifier indicating that the contaminant detections in the samples were considered estimated values, or in several cases, change to a “UJ” qualifier indicating the reported quantitation limit is approximate and may or

may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. In addition, a "JN" qualifier was added to the pesticide analysis when the percent differences between the sample and the field duplicate sample was greater than a 71% difference for a specific analyte. The "JN" qualifier indicates that the presence or absence of the analyte cannot be verified.

4.4.5 Results of Chemical Analyses

Laboratory data for soil and soil vapor are summarized in Tables 1 through 4 and Table 5, respectively. Laboratory data deliverables for all samples evaluated in this investigation are provided in digital form in Appendix C.

5.0 ENVIRONMENTAL EVALUATION

5.1 Geological and Hydrogeological Conditions

5.1.1 Stratigraphy

Soil observed in the borings during the investigation consisted primarily of sand with varying amounts of gravel and silt. Fill was observed in the soil borings and contained sand, silt, gravel, rock, ash, debris, wood, brick, asphalt, and concrete. The fill layer was underlain by presumed bedrock. Suspect contamination (e.g., PID readings, staining, and odors) was observed in soil boring SB-13 at a depth of 10 feet below grade. An unidentified chemical-like odor was also observed in soil boring SB-1 at depths ranging from 11 to 12 feet. Multiple refusals, potentially on bedrock, were encountered in the direct push soil borings.

5.1.2 Hydrogeology

Groundwater was not encountered above refusal/bedrock. Groundwater in the Bronx is not used as a source of drinking water.

5.2 Soil Chemistry

Twenty-seven soil samples were collected for laboratory analysis from borings SB-1 through SB-14. Soil sample analytical results were compared to the NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) and the NYSDEC Restricted Residential Use Soil Cleanup Objectives (RRSCOs) listed in 6 NYCRR Subpart 375.

A summary table of data for chemical analyses performed on soil samples is included in Tables 1 through 4 and sampling locations are shown on Figure 2. A spider map depicting exceedances of the UUSCOs and/or RRSCOs in soil is provided as Figures 3 and 4, respectively.

5.2.1 Volatile Organic Compounds in Soil

A review of the analytical results indicates that VOCs were detected in 15 of the 27 soil samples. No VOCs were detected in either of the trip blanks or either of the aqueous field blanks. The VOCs acetone, chloroform, ethylbenzene, isopropylbenzene, m,p-xylene, methylchlorohexane, methylene chloride, o-xylene, toluene, thrichlorofluoromethane, and xylene were detected in one or more of the soil samples analyzed as part of the investigation. M,p-xylene and o-xylene were detected in soil sample SB-13(8-10) at concentrations of 583 and 386 parts per billion (ppb) respectively, which is above their UUSCOs of 260 ppb, but below their Restricted Residential Soil Cleanup Objectives (RRSCO or Track 2 SCO) of 100,000 ppb. No VOCs were detected at concentrations exceeding NYSDEC RRSCOs. Soil VOC results are summarized in Table 1.

5.2.2 Semivolatile Organic Compounds in Soil

A review of the analytical results indicates that 23 SVOCs were detected in 20 of the 27 soil samples with a maximum total SVOC concentration of 35,357.30 ppb in the soil sample

collected from SB-6 (5-7). No SVOCs were detected in either of the aqueous field blank samples. Seven polycyclic aromatic hydrocarbons (PAHs) benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluroanthene, chrysene, dibenzo(a,h)anthracene, and indeno[1,2,3-cd]pyrene were detected in one or more soil samples at concentrations above their respective UUSCOs. Additionally, six SVOCs including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno[1,2,3-cd]pyrene were detected in at least seven soil samples at concentrations above their respective UUSCOs and RRSCOs. Soil SVOC results are summarized in Table 2.

5.2.3 Metals in Soil

A review of the analytical results indicates that up to 22 of the 23 metals analyzed were detected in all 27 soil samples analyzed. No metals were detected in either of the aqueous field blank samples. Nine metals, including barium (up to 2,900 ppm), cadmium (up to 6.8 ppm), chromium (up to 40.4 ppm), copper (up to 329 ppm), lead (up to 2,760 ppm), mercury (up to 34.8 ppm), nickel (up to 52.3 ppm), silver (55.1 ppm), and zinc (up to 1,470 ppm), exceeded their respective UUSCOs in 21 of the soil samples. Of these metals, barium in ten samples, cadmium in one sample, copper in one sample, lead in six samples, and mercury in three samples, exceeded their respective RRSCOs. Soil metals results are summarized in Table 3.

5.2.4 Polychlorinated Biphenyls and Pesticides in Soil

A review of the laboratory analytical results indicates that 2 of the 9 PCBs analyzed were detected in 3 of the 27 soil samples analyzed. No PCBs were detected in either of the aqueous field blank samples. Aroclor 1248 was detected in exceedance of the 100 ppm standard for total PCBs with 910 ppm and 110 ppm in soil samples SB-13 (0-2) and SB-13 (8-10), respectively.

A review of the laboratory analytical results indicates that up to 21 of the pesticides analyzed for were detected in 24 soil samples. No pesticides were detected in either of the aqueous field blank samples. 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, and endrin were detected in 18 of the soil samples exceeding their respective UUSCOs. Additionally, 4,4'-DDT was detected at a concentration of 10,400 ppb in soil sample SB-13(8-10), exceeding its RRCCO of 7,900 ppb. Soil sample results for PCBs and pesticides are listed in Table 4.

5.3 Soil Vapor Chemistry

Concentrations of VOCs detected in the soil gas samples were compared to the NYSDOH 2006 Guidance for Evaluating Soil Vapor Intrusion air guideline values (AGVs) and matrices, and the September 2013 NYSDOH Fact Sheet update for PCE. These values provide a means of comparison; however, since the AGVs 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. In addition, AGVs have only been established for five VOCs [carbon

tetrachloride, methylene chloride, 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE), and PCE] and matrices have only been established for carbon tetrachloride, PCE, 1,1,1-TCA, TCE, vinyl chloride, 1,1-dichloroethene, and cis-1,2-dichloroethene.

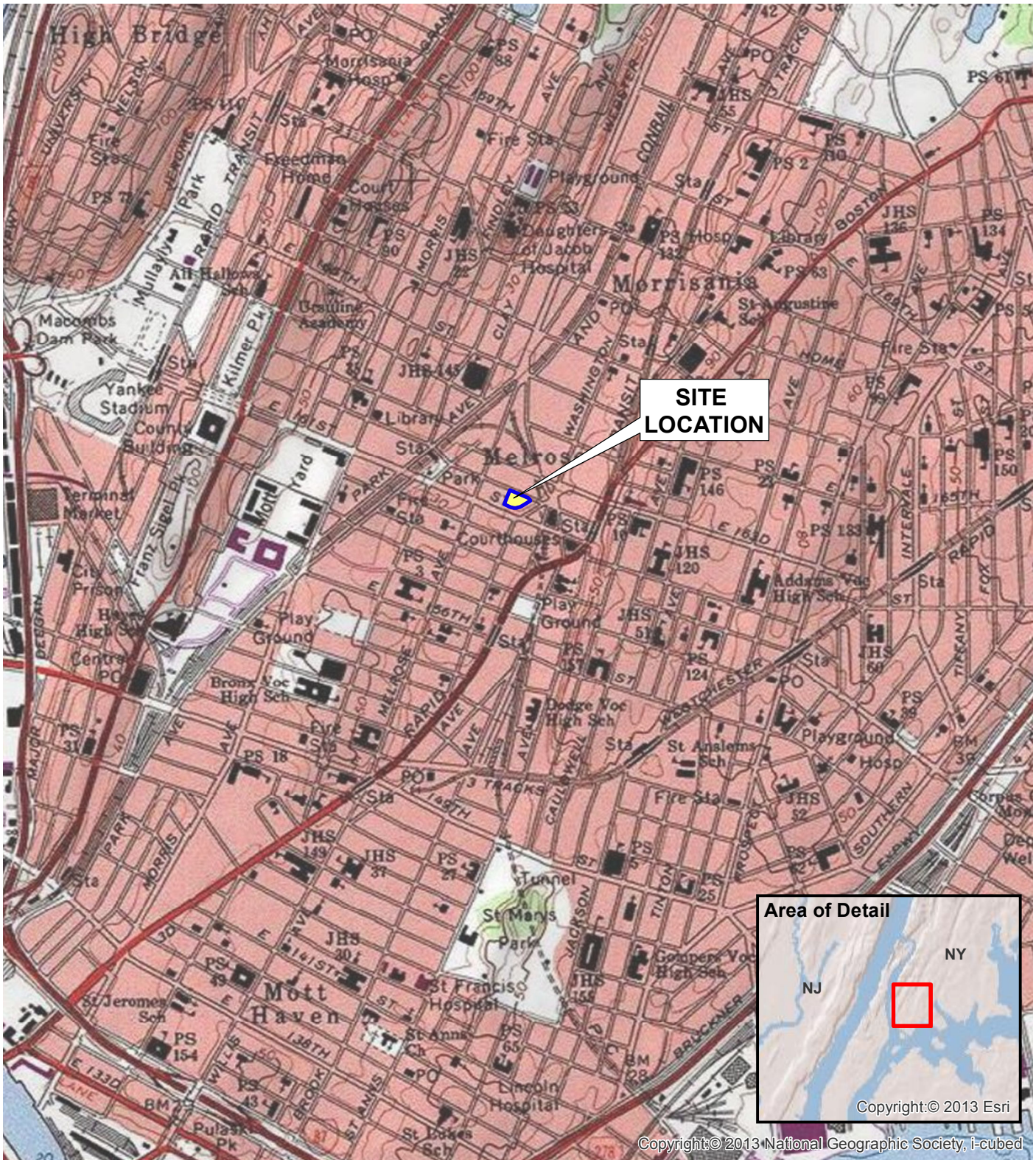
A review of the soil vapor and ambient air sample analytical results identified 31 VOCs [1,1,1-trichloroethane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,4-dioxane, 2,2,4-trimethylpentane, 4-ethyltoluene, acetone, benzene, carbon disulfide, carbon tetrachloride, chloroform, dichlorodifluoromethane, ethanol, ethyl acetate, ethylbenzene, freon 113, freon 114, heptane, hexane, isopropyl alcohol, m,p-xylene, methyl ethyl ketone, methylene chloride, o-xylene, propylene, tertiary butyl alcohol, tetrachloroethylene (PCE), toluene, trichloroethylene (TCE), thrichlorofluoromethane, and xylenes] detected in the six soil vapor samples. Methylene chloride was detected at a concentration of 77.5 µg/m^3 in soil vapor sample SV-3, which is above its NYSDOH AGV of 60 µg/m^3. Carbon tetrachloride was detected at a concentration of 8.2 µg/m^3 in soil vapor sample SV-1, which is above its AGV of 5 µg/m^3. PCE and TCE were also detected in at least one of the soil vapor samples; however, these values were below the NYSDOH AGVs for these compounds. VOCs associated with petroleum [including benzene, toluene, ethylbenzene, xylenes (collectively referred to as BTEX), 1,2,4- and 1,3,5-trimethylbenzene, cyclohexane, n-heptane, n-hexane, 4-ethyltoluene, and 2,2,4-trimethylpentane] were detected at concentrations up to 870 micrograms per cubic meter (µg/m^3). Solvent-related VOCs [including acetone, chloroform, and methyl ethyl ketone (MEK)] were detected at concentrations up to 530 µg/m^3.

Low level VOC concentrations were also noted in the ambient air sample AA-1. The VOCs 1,2,4-trimethylbenzene, 2,2,4-trimethylpentane, acetone, benzene, carbon tetrachloride, dichlorodifluoromethane, ethyl acetate, ethyl benzene, freon 113, heptane, hexane, m,p-xylene, o-xylene, toluene, trichlorofluoromethane, and xylenes were detected at concentrations below soil vapor concentrations, are not included in the NYSDOH matrices, and are not likely to be related to site contamination. 1,2-dichloropropane, 2-hexanone, chloromethane, cyclohexane, and tetrahydrofuran were detected in the ambient air sample but were not detected in any of the six soil vapor samples. Methylene chloride and tetrachloroethylene were detected at concentrations below the established NYSDOH matrices. Methyl ethyl ketone, isopropyl alchohol, and ethanol were detected at concentrations greater than the soil vapor samples collected concurrently with the ambient air sample. A summary table of data for chemical analyses performed on soil vapor and the ambient air sample is included in Table 5. Figure 2 shows the locations for the soil vapor samples. A spider map depicting soil vapor and ambient air concentrations is provided as Figure 5.

5.4 Conclusions

Based on an evaluation of the data and information from the investigation, there is some contaminated soil and soil vapor present at the Site. The elevated xylenes, PID readings, staining, and petroleum odors seem to be aassociated with former fuel oil use at the Site. The SVOCs and metals present and chemical-like odor observed in the soil, and the VOCs in the soil vapor seem to be attributed to the historic use at the Site and subsequent demolition of the former structures. The elevated levels of pesticides indicate the prior usage of pesticides at the Site and possible storage in the cellar of the former structure.

FIGURES



SOURCE
USGS 7.5 Minute Topographic Map
CENTRAL PARK Quad 1995

0 1,000 2,000 3,000 Feet

Melrose Commons Site C - Family
Bronx, New York

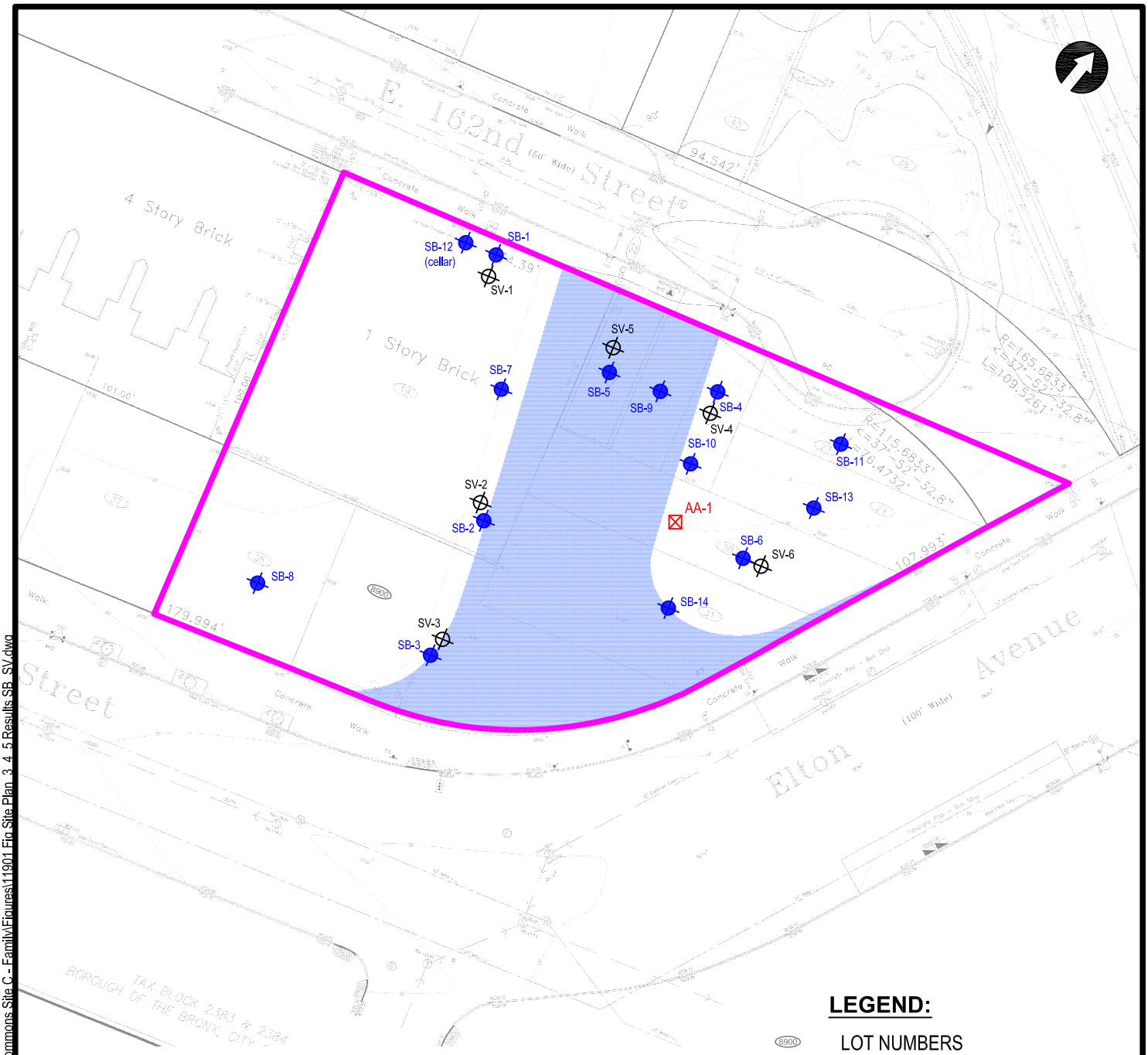
SITE LOCATION

AKRF
Environmental Consultants
440 Park Avenue South, New York, N.Y. 10016

DATE
2/18/2014

PROJECT No.
11901

FIGURE
1



SOURCE:
Based on Site Survey
Prepared by Erlandsen-Cromwell & Shaw
241 Jericho Turnpike, New Hyde Park, NY 11040
April 2012

0' 25' 50' 100'
SCALE IN FEET

LEGEND:

- 8900 — LOT NUMBERS
- PROJECT SITE BOUNDARY
- SB-8 — SOIL BORING
- SV-1 — SOIL GAS
- AA-1 — AMBIENT AIR
- SECTION OF MELROSE CRESCENT BETWEEN E. 161st STREET AND E.162nd STREET, BRONX,, NY

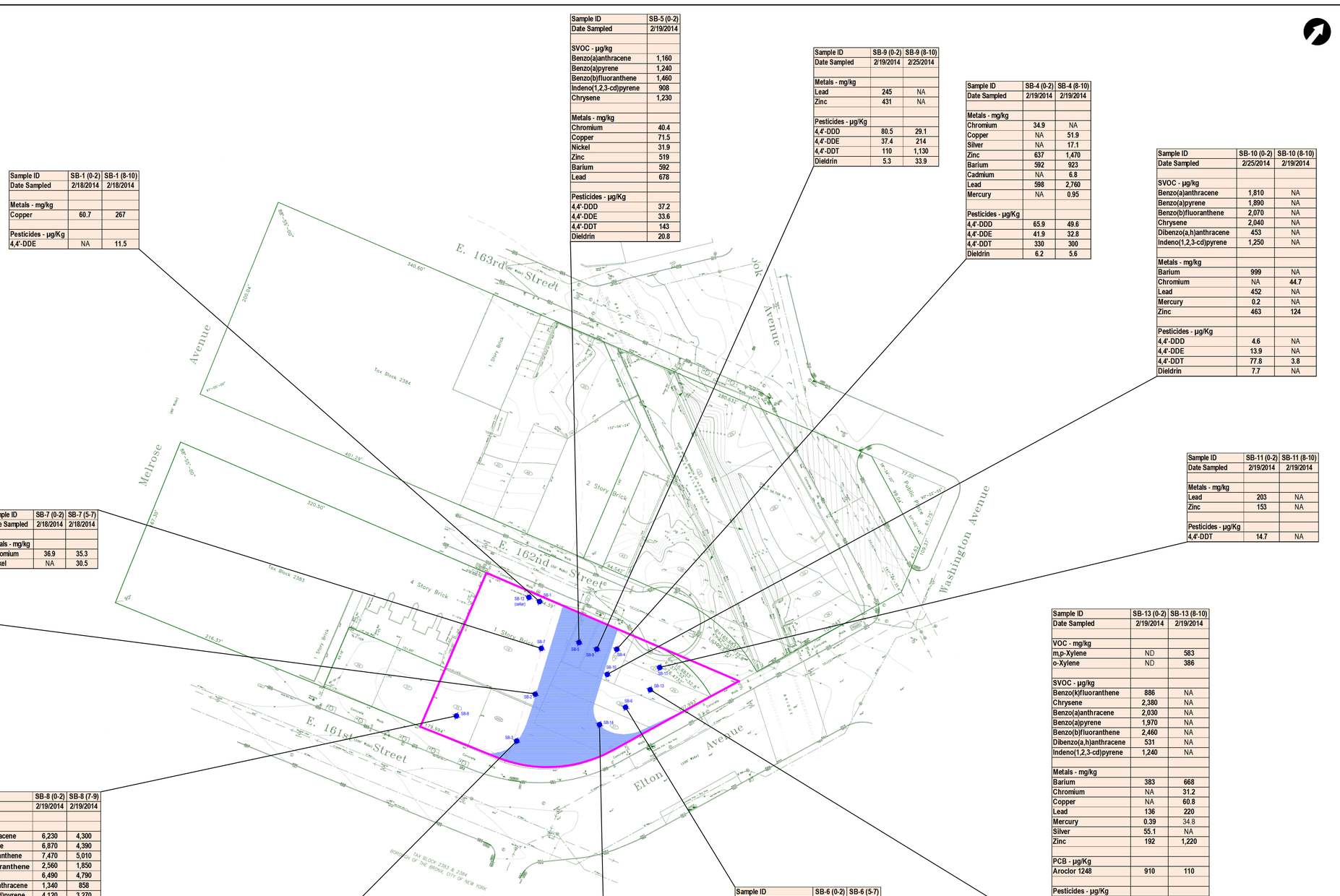
Melrose Commons Site C - Family

Bronx, New York

SITE PLAN & SAMPLE LOCATIONS

AKRF
Environmental Consultants
440 Park Avenue South, New York, N.Y. 10016

DATE	4.4.2014
PROJECT No.	11901
SCALE	as shown
FIGURE	2



Sample ID	SB-1 (0-2)	SB-1 (8-10)
Date Sampled	2/18/2014	2/18/2014
Metals - mg/kg		
Copper	60.7	267
Pesticides - µg/Kg		
4,4'-DDE	NA	11.5

Sample ID	SB-2 (0-2)	SB-2 (8-10)
Date Sampled	2/18/2014	2/18/2014
SVOC - µg/kg		
Benzo(a)anthracene	1,150	NA
Benzo(a)pyrene	1,300	NA
Benzo(b)fluoranthene	1,660	NA
Indeno(1,2,3-cd)pyrene	918	NA
Chrysene	1,380	NA
Metals - mg/kg		
Chromium	NA	33
Lead	201	NA
Mercury	0.65	NA
Zinc	197	NA
Pesticides - µg/Kg		
4,4'-DDD	5.8	NA
4,4'-DDE	NA	NA
4,4'-DDT	40	NA
Dieldrin	14	NA

Sample ID	SB-3 (0-2)	SB-3 (8-10)
Date Sampled	2/19/2014	2/19/2014
SVOC - µg/kg		
Benzo(k)fluoranthene	NA	1,120
Chrysene	NA	2,910
Benzo(a)anthracene	NA	2,720
Benzo(a)pyrene	NA	2,770
Benzo(b)fluoranthene	NA	3,010
Dibenzo(a,h)anthracene	NA	462
Indeno(1,2,3-cd)pyrene	NA	1,680
Metals - mg/kg		
Barium	588	487
Lead	199	97.9
Zinc	274	273
Pesticides - µg/Kg		
4,4'-DDD	5.3	6.8
4,4'-DDE	6.9	5.4
4,4'-DDT	59	70.1
Dieldrin	5.5	5.2

Sample ID	SB-4 (0-2)	SB-4 (8-10)
Date Sampled	2/19/2014	2/19/2014
Metals - mg/kg		
Chromium	34.9	NA
Copper	NA	51.9
Silver	NA	17.1
Zinc	637	1,470
Barium	592	923
Cadmium	NA	6.8
Lead	598	2,760
Mercury	NA	0.95
Pesticides - µg/Kg		
4,4'-DDD	65.9	49.6
4,4'-DDE	41.9	32.8
4,4'-DDT	330	300
Dieldrin	6.2	5.6

Sample ID	SB-5 (0-2)
Date Sampled	2/19/2014
SVOC - µg/kg	
Benzo(a)anthracene	1,160
Benzo(a)pyrene	1,240
Benzo(b)fluoranthene	1,460
Indeno(1,2,3-cd)pyrene	908
Chrysene	1,230
Metals - mg/kg	
Chromium	40.4
Copper	71.5
Nickel	31.9
Zinc	519
Barium	592
Lead	678
Pesticides - µg/Kg	
4,4'-DDD	37.2
4,4'-DDE	33.6
4,4'-DDT	143
Dieldrin	20.8

Sample ID	SB-6 (0-2)	SB-6 (5-7)
Date Sampled	2/19/2014	2/19/2014
SVOC - µg/kg		
Benzo(k)fluoranthene	NA	895
Chrysene	NA	2,500
Benzo(a)anthracene	NA	2,240
Benzo(a)pyrene	NA	2,150
Benzo(b)fluoranthene	NA	2,490
Dibenzo(a,h)anthracene	NA	631
Indeno(1,2,3-cd)pyrene	NA	1,780
Metals - mg/kg		
Copper	329	NA
Lead	NA	156
Zinc	NA	895
Barium	NA	2,900
Pesticides - µg/Kg		
4,4'-DDD	NA	4.3

Sample ID	SB-7 (0-2)	SB-7 (5-7)
Date Sampled	2/18/2014	2/18/2014
Metals - mg/kg		
Chromium	36.9	35.3
Nickel	NA	30.5

Sample ID	SB-8 (0-2)	SB-8 (7-9)
Date Sampled	2/19/2014	2/19/2014
SVOC - µg/kg		
Benzo(a)anthracene	6,230	4,300
Benzo(a)pyrene	6,870	4,390
Benzo(b)fluoranthene	7,470	5,010
Benzo(k)fluoranthene	2,560	1,850
Chrysene	6,490	4,790
Dibenzo(a,h)anthracene	1,340	858
Indeno(1,2,3-cd)pyrene	4,120	3,270
Metals - mg/kg		
Barium	379	1,580
Copper	54.6	NA
Lead	667	465
Mercury	2.2	0.29
Zinc	1220	669
Pesticides - µg/Kg		
4,4'-DDD	4.4	58
4,4'-DDE	7.3	61.1
4,4'-DDT	150	96.7
Dieldrin	NA	29.2
Endrin	NA	29.4

Sample ID	SB-9 (0-2)	SB-9 (8-10)
Date Sampled	2/19/2014	2/25/2014
Metals - mg/kg		
Lead	245	NA
Zinc	431	NA
Pesticides - µg/Kg		
4,4'-DDD	80.5	29.1
4,4'-DDE	37.4	214
4,4'-DDT	110	1,130
Dieldrin	5.3	33.9

Sample ID	SB-10 (0-2)	SB-10 (8-10)
Date Sampled	2/25/2014	2/19/2014
SVOC - µg/kg		
Benzo(a)anthracene	1,810	NA
Benzo(a)pyrene	1,890	NA
Benzo(b)fluoranthene	2,070	NA
Chrysene	2,040	NA
Dibenzo(a,h)anthracene	453	NA
Indeno(1,2,3-cd)pyrene	1,250	NA
Metals - mg/kg		
Barium	999	NA
Chromium	NA	44.7
Lead	452	NA
Mercury	0.2	NA
Zinc	463	124
Pesticides - µg/Kg		
4,4'-DDD	4.6	NA
4,4'-DDE	13.9	NA
4,4'-DDT	77.8	3.8
Dieldrin	7.7	NA

Sample ID	SB-11 (0-2)	SB-11 (8-10)
Date Sampled	2/19/2014	2/19/2014
Metals - mg/kg		
Lead	203	NA
Zinc	153	NA
Pesticides - µg/Kg		
4,4'-DDT	14.7	NA

Sample ID	SB-13 (0-2)	SB-13 (8-10)
Date Sampled	2/19/2014	2/19/2014
VOC - mg/kg		
m,p-Xylene	ND	583
o-Xylene	ND	386
SVOC - µg/kg		
Benzo(k)fluoranthene	886	NA
Chrysene	2,380	NA
Benzo(a)anthracene	2,030	NA
Benzo(a)pyrene	1,970	NA
Benzo(b)fluoranthene	2,460	NA
Dibenzo(a,h)anthracene	531	NA
Indeno(1,2,3-cd)pyrene	1,240	NA
Metals - mg/kg		
Barium	383	668
Chromium	NA	31.2
Copper	NA	60.8
Lead	136	220
Mercury	0.39	34.8
Silver	55.1	NA
Zinc	192	1,220
PCB - µg/Kg		
Aroclor 1248	910	110
Pesticides - µg/Kg		
4,4'-DDD	NA	2,180
4,4'-DDE	4.6	661
4,4'-DDT	37	10,400
Dieldrin	6.2	NA

Sample ID	SB-14 (0-2)	SB-14 (8-10)
Date Sampled	2/19/2014	2/19/2014
Metals - mg/kg		
Cadmium	2.8	NA
Zinc	921	NA
Barium	2200	NA
Lead	683	NA
Pesticides - µg/Kg		
4,4'-DDD	48.8	NA
4,4'-DDE	214	NA
4,4'-DDT	610	3.5
Dieldrin	74.5	NA

SOIL
Exceedences of Part 375 Unrestricted SCOs are in bold text.

Part 375 Soil
Cleanup Objectives:Soil Clean-up Objectives listed in NYSDEC (New York State Department of Environmental Conservation) "Part 375" Regulations (6 NYCRR Part 375).

µg/kg:micrograms per kilogram = parts per billion (ppb)
mg/kg:milligrams per kilogram = parts per million (ppm)

NA: Not Detected Above UUSCOs

LEGEND:
- LOT NUMBER
- PROJECT SITE BOUNDARY
- SB-8: SOIL BORING SAMPLE LOCATION
- SECTION OF MELROSE CRESCENT BETWEEN E. 161ST STREET AND E.162ND STREET, BRONX, NY

Sample ID	SB-7 (0-2)	SB-7 (5-7)
Date Sampled	2/18/2014	2/18/2014
Metals - mg/kg		
Chromium	36.9	35.3
Nickel	NA	30.5

Sample ID number
Sample Date
Analyte/Compound in Soil
Concentration in Soil

0' 25' 50' 100'
SCALE IN FEET

SOURCE:
Based on Site Survey
Prepared by Erlandsen-Cromwell & Shaw
241 Jericho Turnpike, New Hyde Park, NY 11040
April 2012

AKRF
Environmental Consultants
440 Park Avenue South, New York, N.Y. 10016

Melrose Commons Site C - Family
Bronx, New York

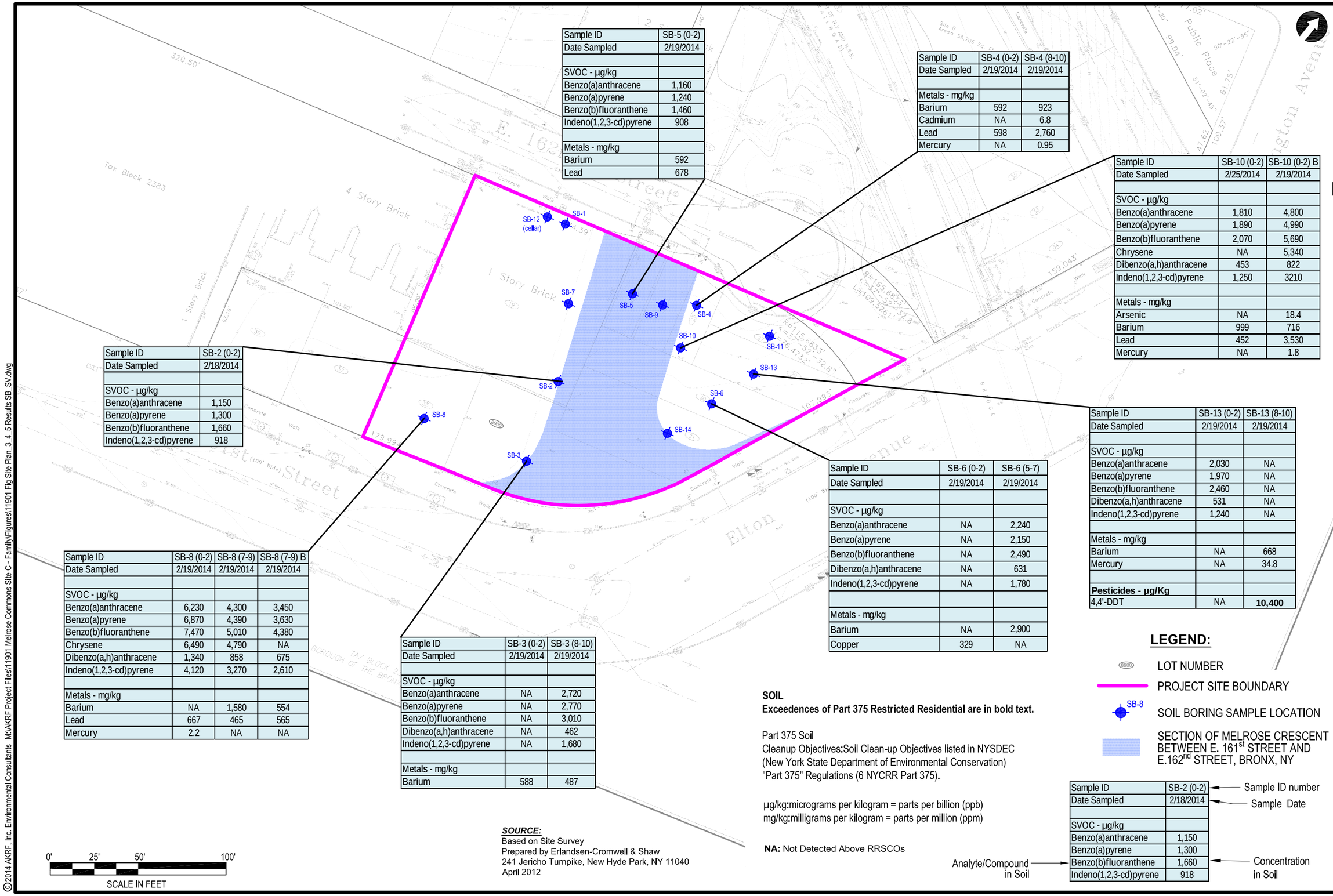
SOIL SAMPLING SPIDER MAP DEPICTING EXCEEDANCES OF UUSCOS

DATE
4.4.2014

SCALE
as shown

PROJECT No.
11901

FIGURE
3



Sample ID	SB-5 (0-2)
Date Sampled	2/19/2014
SVOC - µg/kg	
Benzo(a)anthracene	1,160
Benzo(a)pyrene	1,240
Benzo(b)fluoranthene	1,460
Indeno(1,2,3-cd)pyrene	908
Metals - mg/kg	
Barium	592
Lead	678

Sample ID	SB-4 (0-2)	SB-4 (8-10)
Date Sampled	2/19/2014	2/19/2014
Metals - mg/kg		
Barium	592	923
Cadmium	NA	6.8
Lead	598	2,760
Mercury	NA	0.95

Sample ID	SB-10 (0-2)	SB-10 (0-2) B
Date Sampled	2/25/2014	2/19/2014
SVOC - µg/kg		
Benzo(a)anthracene	1,810	4,800
Benzo(a)pyrene	1,890	4,990
Benzo(b)fluoranthene	2,070	5,690
Chrysene	NA	5,340
Dibenzo(a,h)anthracene	453	822
Indeno(1,2,3-cd)pyrene	1,250	3210
Metals - mg/kg		
Arsenic	NA	18.4
Barium	999	716
Lead	452	3,530
Mercury	NA	1.8

Sample ID	SB-2 (0-2)
Date Sampled	2/18/2014
SVOC - µg/kg	
Benzo(a)anthracene	1,150
Benzo(a)pyrene	1,300
Benzo(b)fluoranthene	1,660
Indeno(1,2,3-cd)pyrene	918

Sample ID	SB-13 (0-2)	SB-13 (8-10)
Date Sampled	2/19/2014	2/19/2014
SVOC - µg/kg		
Benzo(a)anthracene	2,030	NA
Benzo(a)pyrene	1,970	NA
Benzo(b)fluoranthene	2,460	NA
Dibenzo(a,h)anthracene	531	NA
Indeno(1,2,3-cd)pyrene	1,240	NA
Metals - mg/kg		
Barium	NA	668
Mercury	NA	34.8
Pesticides - µg/Kg		
4,4'-DDT	NA	**10,400**

Sample ID	SB-6 (0-2)	SB-6 (5-7)
Date Sampled	2/19/2014	2/19/2014
SVOC - µg/kg		
Benzo(a)anthracene	NA	2,240
Benzo(a)pyrene	NA	2,150
Benzo(b)fluoranthene	NA	2,490
Dibenzo(a,h)anthracene	NA	631
Indeno(1,2,3-cd)pyrene	NA	1,780
Metals - mg/kg		
Barium	NA	2,900
Copper	329	NA

Sample ID	SB-8 (0-2)	SB-8 (7-9)	SB-8 (7-9) B
Date Sampled	2/19/2014	2/19/2014	2/19/2014
SVOC - µg/kg			
Benzo(a)anthracene	6,230	4,300	3,450
Benzo(a)pyrene	6,870	4,390	3,630
Benzo(b)fluoranthene	7,470	5,010	4,380
Chrysene	6,490	4,790	NA
Dibenzo(a,h)anthracene	1,340	858	675
Indeno(1,2,3-cd)pyrene	4,120	3,270	2,610
Metals - mg/kg			
Barium	NA	1,580	554
Lead	667	465	565
Mercury	2.2	NA	NA

Sample ID	SB-3 (0-2)	SB-3 (8-10)
Date Sampled	2/19/2014	2/19/2014
SVOC - µg/kg		
Benzo(a)anthracene	NA	2,720
Benzo(a)pyrene	NA	2,770
Benzo(b)fluoranthene	NA	3,010
Dibenzo(a,h)anthracene	NA	462
Indeno(1,2,3-cd)pyrene	NA	1,680
Metals - mg/kg		
Barium	588	487

SOIL
Exceedences of Part 375 Restricted Residential are in bold text.

Part 375 Soil
Cleanup Objectives:Soil Clean-up Objectives listed in NYSDEC (New York State Department of Environmental Conservation) "Part 375" Regulations (6 NYCRR Part 375).

µg/kg:micrograms per kilogram = parts per billion (ppb)
mg/kg:milligrams per kilogram = parts per million (ppm)

NA: Not Detected Above RRSCOs

SOURCE:
Based on Site Survey
Prepared by Erlandsen-Cromwell & Shaw
241 Jericho Turnpike, New Hyde Park, NY 11040
April 2012

LEGEND:

- LOT NUMBER
- PROJECT SITE BOUNDARY
- SB-8 — SOIL BORING SAMPLE LOCATION
- SECTION OF MELROSE CRESCENT BETWEEN E. 161st STREET AND E.162nd STREET, BRONX, NY

Sample ID	SB-2 (0-2)	← Sample ID number
Date Sampled	2/18/2014	← Sample Date
SVOC - µg/kg		
Benzo(a)anthracene	1,150	
Benzo(a)pyrene	1,300	
Benzo(b)fluoranthene	1,660	← Concentration in Soil
Indeno(1,2,3-cd)pyrene	918	

Analyte/Compound in Soil →

0' 25' 50' 100'
SCALE IN FEET

AKRF Environmental Consultants
440 Park Avenue South, New York, NY 10016

Melrose Commons Site C - Family
Bronx, New York

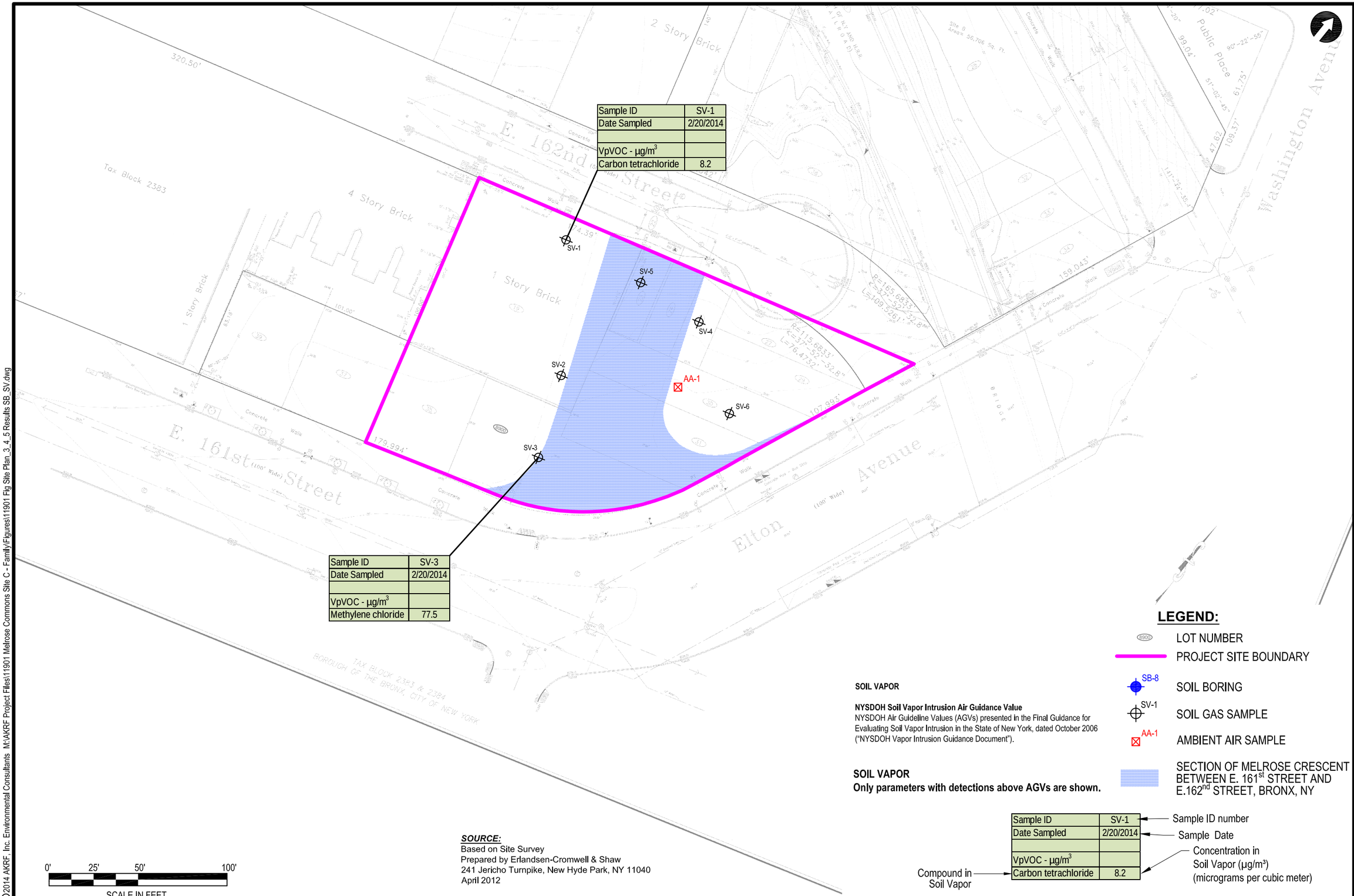
SOIL SAMPLING SPIDER MAP DEPICTING EXCEEDANCES OF RRSCOS

DATE
4.4.2014

PROJECT NO.
11901

SCALE
as shown

FIGURE
4



AKRF
Environmental Consultants
440 Park Avenue South, New York, NY 10016

Melrose Commons Site C - Family
Bronx, New York

SOIL VAPOR AND AMBIENT AIR SAMPLING SPIDER MAP DEPICTING EXCEEDANCES OF AGVS

DATE
4.4.2014

PROJECT NO.
11901

SCALE
as shown

FIGURE
5

TABLES

Table 1
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-1 (0-2) JB60086-1 2/18/2014	SB-1 (8-10) JB60086-2 2/18/2014	SB-2 (0-2) JB60086-3 2/18/2014	SB-2 (8-10) JB60086-4 2/18/2014	SB-3 (0-2) JB60086-5 2/19/2014	SB-3 (8-10) JB60086-6 2/19/2014
1,1,1-Trichloroethane	680	100,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
1,1,2,2-Tetrachloroethane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
1,1,2-Trichloroethane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
1,1-Dichloroethane	270	26,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
1,1-Dichloroethene	330	100,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
1,2,3-Trichlorobenzene	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
1,2,4-Trichlorobenzene	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
1,2-Dibromo-3-chloropropane	NS	NS	10 U	9.6 U	12 U	12 U	13 U	10 U
1,2-Dibromoethane	NS	NS	1 U	0.96 U	1.2 U	1.2 U	1.3 U	1 U
1,2-Dichlorobenzene	1,100	100,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
1,2-Dichloroethane	20	3,100	1 U	0.96 U	1.2 U	1.2 U	1.3 U	1 U
1,2-Dichloropropane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
1,3-Dichlorobenzene	2,400	49,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
1,4-Dichlorobenzene	1,800	13,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
2-Butanone (MEK)	120	100,000	10 U	9.6 U	12 U	12 U	13 U	10 U
2-Hexanone	NS	NS	5.2 U	4.8 U	5.9 UJ	5.8 U	6.3 UJ	5.2 UJ
4-Methyl-2-pentanone(MIBK)	NS	NS	5.2 U	4.8 U	5.9 UJ	5.8 U	6.3 UJ	5.2 UJ
Acetone	50	100,000	10 U	9.6 U	12 U	12 U	13 U	10 U
Benzene	60	4,800	1 U	0.96 U	1.2 U	1.2 U	1.3 U	1 U
Bromochloromethane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Bromodichloromethane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Bromoform	NS	NS	5.2 U	4.8 U	5.9 UJ	5.8 U	6.3 UJ	5.2 UJ
Bromomethane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Carbon disulfide	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Carbon tetrachloride	760	2,400	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Chlorobenzene	1,100	100,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Chloroethane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Chloroform	370	49,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Chloromethane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
cis-1,2-Dichloroethene	250	100,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
cis-1,3-Dichloropropene	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Cyclohexane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Dibromochloromethane	NS	NS	5.2 U	4.8 U	5.9 UJ	5.8 U	6.3 UJ	5.2 UJ
Dichlorodifluoromethane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Ethylbenzene	1,000	41,000	1 U	0.96 U	1.2 U	1.2 U	1 J	1 U
Freon 113	NS	NS	5.2 U	4.8 U	5.9 UJ	5.8 U	6.3 UJ	5.2 UJ
Isopropylbenzene	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
m,p-Xylene	260	100,000	1 U	0.96 U	1.2 U	1.2 U	5.4	1 U
Methyl Acetate	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Methyl Tert Butyl Ether	930	100,000	1 U	0.96 U	1.2 U	1.2 U	1.3 U	1 U
Methylcyclohexane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Methylene chloride	50	100,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	2 J
o-Xylene	260	100,000	1 U	0.96 U	1.2 U	1.2 U	3	1 U
Styrene	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Tetrachloroethene	1,300	19,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Toluene	700	100,000	1 U	0.21 J	1.2 U	0.33 J	0.28 J	0.26 J
trans-1,2-Dichloroethene	190	100,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
trans-1,3-Dichloropropene	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Trichloroethene	470	21,000	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Trichlorofluoromethane	NS	NS	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Vinyl chloride	20	900	5.2 U	4.8 U	5.9 U	5.8 U	6.3 U	5.2 U
Xylene (total)	NS	NS	1 U	0.96 U	1.2 U	0.34 J	8.4	0.28 J
Total VOCs	NS	NS	ND	0.21	ND	0.67	18.08	2.54

Table 1
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-4 (0-2) JB60086-7 2/19/2014	SB-4 (8-10) JB60086-8 2/19/2014	SB-5 (0-2) JB60086-9 2/19/2014	SB-5 (8-10) JB60086-10 2/19/2014	SB-6 (0-2) JB60086-11 2/19/2014	SB-6 (5-7) JB60086-12 2/19/2014
1,1,1-Trichloroethane	680	100,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
1,1,2,2-Tetrachloroethane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
1,1,2-Trichloroethane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
1,1-Dichloroethane	270	26,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
1,1-Dichloroethene	330	100,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
1,2,3-Trichlorobenzene	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
1,2,4-Trichlorobenzene	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
1,2-Dibromo-3-chloropropane	NS	NS	13 U	11 U	17 U	9.3 U	9.5 U	16 U
1,2-Dibromoethane	NS	NS	1.3 U	1.1 U	1.7 U	0.93 U	0.95 U	1.6 U
1,2-Dichlorobenzene	1,100	100,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
1,2-Dichloroethane	20	3,100	1.3 U	1.1 U	1.7 U	0.93 U	0.95 U	1.6 U
1,2-Dichloropropane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
1,3-Dichlorobenzene	2,400	49,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
1,4-Dichlorobenzene	1,800	13,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
2-Butanone (MEK)	120	100,000	13 U	11 U	17 U	9.3 U	9.5 U	16 U
2-Hexanone	NS	NS	6.4 UJ	5.5 UJ	8.6 UJ	4.7 UJ	4.8 UJ	7.9 UJ
4-Methyl-2-pentanone(MIBK)	NS	NS	6.4 UJ	5.5 UJ	8.6 UJ	4.7 UJ	4.8 UJ	7.9 UJ
Acetone	50	100,000	21.3	11 U	17 U	9.3 U	5.3 J	16 U
Benzene	60	4,800	1.3 U	1.1 U	1.7 U	0.93 U	0.95 U	1.6 U
Bromochloromethane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Bromodichloromethane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Bromoform	NS	NS	6.4 UJ	5.5 UJ	8.6 UJ	4.7 UJ	4.8 UJ	7.9 UJ
Bromomethane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Carbon disulfide	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Carbon tetrachloride	760	2,400	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Chlorobenzene	1,100	100,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Chloroethane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Chloroform	370	49,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Chloromethane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
cis-1,2-Dichloroethene	250	100,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
cis-1,3-Dichloropropene	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Cyclohexane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Dibromochloromethane	NS	NS	6.4 UJ	5.5 UJ	8.6 UJ	4.7 UJ	4.8 UJ	7.9 UJ
Dichlorodifluoromethane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Ethylbenzene	1,000	41,000	1.3 U	1.1 U	1.7 U	0.93 U	0.21 J	1.6 U
Freon 113	NS	NS	6.4 UJ	5.5 UJ	8.6 UJ	4.7 UJ	4.8 UJ	7.9 UJ
Isopropylbenzene	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
m,p-Xylene	260	100,000	1.3 U	1.1 U	1.7 U	0.93 U	0.99	1.6 U
Methyl Acetate	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Methyl Tert Butyl Ether	930	100,000	1.3 U	1.1 U	1.7 U	0.93 U	0.95 U	1.6 U
Methylcyclohexane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Methylene chloride	50	100,000	6.4 U	5.5 U	8.6 U	4.7 U	1.8 J	7.9 U
o-Xylene	260	100,000	1.3 U	1.1 U	1.7 U	0.93 U	0.48 J	1.6 U
Styrene	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Tetrachloroethene	1,300	19,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Toluene	700	100,000	0.36 J	1.1 U	1.7 U	0.93 U	0.95 U	1.6 U
trans-1,2-Dichloroethene	190	100,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
trans-1,3-Dichloropropene	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Trichloroethene	470	21,000	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Trichlorofluoromethane	NS	NS	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Vinyl chloride	20	900	6.4 U	5.5 U	8.6 U	4.7 U	4.8 U	7.9 U
Xylene (total)	NS	NS	1.3 U	1.1 U	1.7 U	0.93 U	1.5	1.6 U
Total VOCs	NS	NS	21.66	ND	ND	ND	10.28	ND

Table 1
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-7 (0-2) JB60086-13 2/18/2014	SB-7 (5-7) JB60086-14 2/18/2014	SB-8 (0-2) JB60086-32 2/19/2014	SB-8 (0-2)FD JB60086-15 2/19/2014	SB-8 (7-9) JB60086-16 2/19/2014	SB-8 (7-9)B JB60086-34 2/19/2014
1,1,1-Trichloroethane	680	100,000	4.6 U	4.8 U	6.7 UJ	5.4 U	6 U	5.6 U
1,1,2,2-Tetrachloroethane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
1,1,2-Trichloroethane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
1,1-Dichloroethane	270	26,000	4.6 U	4.8 U	6.7 UJ	5.4 U	6 U	5.6 U
1,1-Dichloroethene	330	100,000	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
1,2,3-Trichlorobenzene	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
1,2,4-Trichlorobenzene	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
1,2-Dibromo-3-chloropropane	NS	NS	9.1 U	9.5 U	13 U	11 U	12 U	11 U
1,2-Dibromoethane	NS	NS	0.91 U	0.95 U	1.3 U	1.1 U	1.2 U	1.1 U
1,2-Dichlorobenzene	1,100	100,000	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
1,2-Dichloroethane	20	3,100	0.91 U	0.95 U	1.3 U	1.1 U	1.2 U	1.1 U
1,2-Dichloropropane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
1,3-Dichlorobenzene	2,400	49,000	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
1,4-Dichlorobenzene	1,800	13,000	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
2-Butanone (MEK)	120	100,000	9.1 U	9.5 U	13 UJ	11 U	12 U	11 U
2-Hexanone	NS	NS	4.6 UJ	4.8 UJ	6.7 UJ	5.4 U	6 U	5.6 U
4-Methyl-2-pentanone(MIBK)	NS	NS	4.6 UJ	4.8 UJ	6.7 UJ	5.4 U	6 U	5.6 U
Acetone	50	100,000	4.8 J	9.5 U	13 U	11 U	12 U	11 U
Benzene	60	4,800	0.91 U	0.95 U	1.3 U	1.1 U	1.2 U	1.1 U
Bromochloromethane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Bromodichloromethane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Bromoform	NS	NS	4.6 UJ	4.8 UJ	6.7 UJ	5.4 U	6 U	5.6 U
Bromomethane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Carbon disulfide	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Carbon tetrachloride	760	2,400	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Chlorobenzene	1,100	100,000	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Chloroethane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Chloroform	370	49,000	0.32 J	4.8 U	6.7 UJ	5.4 U	6 U	5.6 U
Chloromethane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
cis-1,2-Dichloroethene	250	100,000	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
cis-1,3-Dichloropropene	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Cyclohexane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Dibromochloromethane	NS	NS	4.6 UJ	4.8 UJ	6.7 U	5.4 U	6 U	5.6 U
Dichlorodifluoromethane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Ethylbenzene	1,000	41,000	0.91 U	0.95 U	1.3 UJ	0.25 J	1.2 U	1.1 U
Freon 113	NS	NS	4.6 UJ	4.8 UJ	6.7 UJ	5.4 U	6 U	5.6 U
Isopropylbenzene	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
m,p-Xylene	260	100,000	0.91 U	0.95 U	1.3 U	1.3	1.2 U	1.1 U
Methyl Acetate	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Methyl Tert Butyl Ether	930	100,000	0.91 U	0.95 U	1.3 U	1.1 U	1.2 U	1.1 U
Methylcyclohexane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Methylene chloride	50	100,000	4.6 U	4.8 U	6.7 UJ	5.4 U	6 UJ	2.0 J
o-Xylene	260	100,000	0.91 U	0.95 U	1.3 U	1.2	1.2 U	1.1 U
Styrene	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Tetrachloroethene	1,300	19,000	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Toluene	700	100,000	0.91 U	0.3 J	1.3 U	1.1 U	1.2 U	1.1 U
trans-1,2-Dichloroethene	190	100,000	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
trans-1,3-Dichloropropene	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Trichloroethene	470	21,000	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Trichlorofluoromethane	NS	NS	4.6 U	4.8 U	6.7 U	5.4 U	65.2 J	5.6 UJ
Vinyl chloride	20	900	4.6 U	4.8 U	6.7 U	5.4 U	6 U	5.6 U
Xylene (total)	NS	NS	0.91 U	0.95 U	1.3 U	2.4	1.2 U	1.1 U
Total VOCs	NS	NS	5.12	0.3	ND	5.15	65.2	2

Table 1
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-9 (0-2) JB60086-17 2/19/2014	SB-9 (8-10) JB60086-36 2/25/2014	SB-10 (0-2) JB60086-37 2/25/2014	SB-10 (0-2)B JB60086-35 2/19/2014	SB-10 (8-10) JB60086-33 2/19/2014	SB-10 (8-10)FD JB60086-20 2/19/2014
1,1,1-Trichloroethane	680	100,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
1,1,2,2-Tetrachloroethane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
1,1,2-Trichloroethane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
1,1-Dichloroethane	270	26,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
1,1-Dichloroethene	330	100,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
1,2,3-Trichlorobenzene	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
1,2,4-Trichlorobenzene	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
1,2-Dibromo-3-chloropropane	NS	NS	12 U	8.8 U	10 U	14 U	9.3 U	12 U
1,2-Dibromoethane	NS	NS	1.2 U	0.88 U	1 U	1.4 U	0.93 U	1.2 U
1,2-Dichlorobenzene	1,100	100,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
1,2-Dichloroethane	20	3,100	1.2 U	0.88 U	1 U	1.4 U	0.93 U	1.2 U
1,2-Dichloropropane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
1,3-Dichlorobenzene	2,400	49,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
1,4-Dichlorobenzene	1,800	13,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
2-Butanone (MEK)	120	100,000	12 U	8.8 UR	10 UR	14 U	9.3 U	12 U
2-Hexanone	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
4-Methyl-2-pentanone(MIBK)	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Acetone	50	100,000	12 U	8.8 UR	10 UR	14 U	9.3 U	12 U
Benzene	60	4,800	1.2 U	0.88 U	1 U	1.4 U	0.93 U	1.2 U
Bromochloromethane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Bromodichloromethane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Bromoform	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Bromomethane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Carbon disulfide	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Carbon tetrachloride	760	2,400	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Chlorobenzene	1,100	100,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Chloroethane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Chloroform	370	49,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Chloromethane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
cis-1,2-Dichloroethene	250	100,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
cis-1,3-Dichloropropene	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Cyclohexane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Dibromochloromethane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Dichlorodifluoromethane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Ethylbenzene	1,000	41,000	1.2 U	0.88 U	1 UJ	1.0 J	0.93 U	1.2 U
Freon 113	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Isopropylbenzene	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
m,p-Xylene	260	100,000	1.2 U	0.88 U	1 UJ	4.9 J	0.93 U	1.2 U
Methyl Acetate	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Methyl Tert Butyl Ether	930	100,000	1.2 U	0.88 U	1 U	1.4 U	0.93 U	1.2 U
Methylcyclohexane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Methylene chloride	50	100,000	2.4 J	4.4 U	5.1 UJ	3.6 J	4.6 UJ	3.3 J
o-Xylene	260	100,000	1.2 U	0.88 U	1 UJ	3.3 J	0.93 U	1.2 U
Styrene	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Tetrachloroethene	1,300	19,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Toluene	700	100,000	1.2 U	0.88 U	1 U	1.4 U	0.93 U	1.2 U
trans-1,2-Dichloroethene	190	100,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
trans-1,3-Dichloropropene	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Trichloroethene	470	21,000	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Trichlorofluoromethane	NS	NS	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Vinyl chloride	20	900	6.2 U	4.4 U	5.1 U	6.8 U	4.6 U	6.2 U
Xylene (total)	NS	NS	1.2 U	0.88 U	1 UJ	8.2 J	0.93 U	1.2 U
Total VOCs	NS	NS	2.4	ND	ND	21	ND	3.3

Table 1
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-11 (0-2) JB60086-21 2/19/2014	SB-11 (8-10) JB60086-22 2/19/2014	SB-12 (0-2) JB60086-23 2/18/2014	SB-13 (0-2) JB60086-24 2/19/2014	SB-13 (8-10) JB60086-25 2/19/2014
1,1,1-Trichloroethane	680	100,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
1,1,2,2-Tetrachloroethane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
1,1,2-Trichloroethane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
1,1-Dichloroethane	270	26,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
1,1-Dichloroethene	330	100,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
1,2,3-Trichlorobenzene	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
1,2,4-Trichlorobenzene	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
1,2-Dibromo-3-chloropropane	NS	NS	10 U	11 U	13 U	12 U	580 U
1,2-Dibromoethane	NS	NS	1 U	1.1 U	1.3 U	1.2 U	58 U
1,2-Dichlorobenzene	1,100	100,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
1,2-Dichloroethane	20	3,100	1 U	1.1 U	1.3 U	1.2 U	58 U
1,2-Dichloropropane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
1,3-Dichlorobenzene	2,400	49,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
1,4-Dichlorobenzene	1,800	13,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
2-Butanone (MEK)	120	100,000	10 U	11 U	13 U	12 U	580 UR
2-Hexanone	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
4-Methyl-2-pentanone(MIBK)	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Acetone	50	100,000	10 U	11 U	13 U	12 U	580 UR
Benzene	60	4,800	1 U	1.1 U	1.3 U	1.2 U	58 U
Bromochloromethane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Bromodichloromethane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Bromoform	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Bromomethane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Carbon disulfide	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Carbon tetrachloride	760	2,400	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Chlorobenzene	1,100	100,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Chloroethane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Chloroform	370	49,000	5.2 U	5.4 U	0.58 J	6.1 U	290 U
Chloromethane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
cis-1,2-Dichloroethene	250	100,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
cis-1,3-Dichloropropene	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Cyclohexane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Dibromochloromethane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Dichlorodifluoromethane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Ethylbenzene	1,000	41,000	1 U	1.1 U	1.3 U	1.2 U	27.5 J
Freon 113	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Isopropylbenzene	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	123 J
m,p-Xylene	260	100,000	1 U	1.1 U	1.3 U	1.2 U	**583**
Methyl Acetate	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Methyl Tert Butyl Ether	930	100,000	1 U	1.1 U	1.3 U	1.2 U	58 U
Methylcyclohexane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	13.8 J
Methylene chloride	50	100,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
o-Xylene	260	100,000	1 U	1.1 U	1.3 U	1.2 U	**386**
Styrene	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Tetrachloroethene	1,300	19,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Toluene	700	100,000	1 U	1.1 U	1.3 U	1.2 U	58 U
trans-1,2-Dichloroethene	190	100,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
trans-1,3-Dichloropropene	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Trichloroethene	470	21,000	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Trichlorofluoromethane	NS	NS	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Vinyl chloride	20	900	5.2 U	5.4 U	6.3 U	6.1 U	290 U
Xylene (total)	NS	NS	1 U	1.1 U	1.3 U	1.2 U	969
Total VOCs	NS	NS	ND	ND	0.58	ND	2102.3

Table 1
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-14 (0-2) JB60086-26 2/19/2014	SB-14 (8-10) JB60086-27 2/19/2014	TRIP BLANK JB60086-28 2/19/2014 µg/L	TRIP BLANK JB60086-29 2/19/2014 µg/L	FIELD BLANK JB60086-30 2/19/2014 µg/L	FIELD BLANK JB60086-31 2/19/2014 µg/L
1,1,1-Trichloroethane	680	100,000	6.2 U	5 U	5 U	5 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	6.2 U	5 U	5 U	5 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	6.2 U	5 U	5 U	5 U	1 U	1 U
1,1-Dichloroethane	270	26,000	6.2 U	5 U	5 U	5 U	1 U	1 U
1,1-Dichloroethene	330	100,000	6.2 U	5 U	5 U	5 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	6.2 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	NS	NS	6.2 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	NS	NS	12 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	NS	NS	1.2 U	1 U	1 U	1 U	2 U	2 U
1,2-Dichlorobenzene	1,100	100,000	6.2 U	5 U	5 U	5 U	1 U	1 U
1,2-Dichloroethane	20	3,100	1.2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	6.2 U	5 U	5 U	5 U	1 U	1 U
1,3-Dichlorobenzene	2,400	49,000	6.2 U	5 U	5 U	5 U	1 U	1 U
1,4-Dichlorobenzene	1,800	13,000	6.2 U	5 U	5 U	5 U	1 U	1 U
2-Butanone (MEK)	120	100,000	12 U	10 U	10 U	10 U	10 UR	10 UR
2-Hexanone	NS	NS	6.2 U	5 U	5 UJ	5 UJ	5 U	5 U
4-Methyl-2-pentanone(MIBK)	NS	NS	6.2 U	5 U	5 UJ	5 UJ	5 U	5 U
Acetone	50	100,000	12 U	10 U	10 U	10 U	10 UR	10 UR
Benzene	60	4,800	1.2 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	NS	NS	6.2 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	NS	NS	6.2 U	5 U	5 U	5 U	1 U	1 U
Bromoform	NS	NS	6.2 U	5 U	5 UJ	5 UJ	4 U	4 U
Bromomethane	NS	NS	6.2 U	5 U	5 U	5 U	2 U	2 U
Carbon disulfide	NS	NS	6.2 U	5 U	5 U	5 U	2 U	2 U
Carbon tetrachloride	760	2,400	6.2 U	5 U	5 U	5 U	1 U	1 U
Chlorobenzene	1,100	100,000	6.2 U	5 U	5 U	5 U	1 U	1 U
Chloroethane	NS	NS	6.2 U	5 U	5 U	5 U	1 U	1 U
Chloroform	370	49,000	6.2 U	5 U	5 U	5 U	1 U	1 U
Chloromethane	NS	NS	6.2 U	5 U	5 U	5 U	1 U	1 U
cis-1,2-Dichloroethene	250	100,000	6.2 U	5 U	5 U	5 U	1 U	1 U
cis-1,3-Dichloropropene	NS	NS	6.2 U	5 U	5 U	5 U	1 U	1 U
Cyclohexane	NS	NS	6.2 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	NS	NS	6.2 U	5 U	5 UJ	5 UJ	1 U	1 U
Dichlorodifluoromethane	NS	NS	6.2 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	1,000	41,000	1.2 U	1 U	1 U	1 U	1 U	1 U
Freon 113	NS	NS	6.2 U	5 U	5 UJ	5 UJ	5 U	5 U
Isopropylbenzene	NS	NS	6.2 U	5 U	5 U	5 U	2 U	2 U
m,p-Xylene	260	100,000	1.2 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	NS	NS	6.2 U	5 U	5 U	5 U	5 U	5 U
Methyl Tert Butyl Ether	930	100,000	1.2 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane	NS	NS	6.2 U	5 U	5 U	5 U	5 U	5 U
Methylene chloride	50	100,000	6.2 U	2 J	5 U	5 U	2 U	2 U
o-Xylene	260	100,000	1.2 U	1 U	1 U	1 U	1 U	1 U
Styrene	NS	NS	6.2 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	1,300	19,000	6.2 U	5 U	5 U	5 U	1 U	1 U
Toluene	700	100,000	1.2 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	190	100,000	6.2 U	5 U	5 U	5 U	1 U	1 U
trans-1,3-Dichloropropene	NS	NS	6.2 U	5 U	5 U	5 U	1 U	1 U
Trichloroethene	470	21,000	6.2 U	5 U	5 U	5 U	1 U	1 U
Trichlorofluoromethane	NS	NS	6.2 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	20	900	6.2 U	5 U	5 U	5 U	1 U	1 U
Xylene (total)	NS	NS	1.2 U	1 U	1 U	1 U	1 U	1 U
Total VOCs	NS	NS	ND	2	ND	ND	ND	ND

Table 2
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Semivolatile Organic Compounds

Client ID Lab Sample ID Date Sampled Dilution µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-1 (0-2) JB60086-1 2/18/2014 1	SB-1 (8-10) JB60086-2 2/18/2014 1	SB-2 (0-2) JB60086-3 2/18/2014 1	SB-2 (8-10) JB60086-4 2/18/2014 2	SB-3 (0-2) JB60086-5 2/19/2014 1	SB-3 (8-10) JB60086-6 2/19/2014 4
1,1'-Biphenyl	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
1,2,4,5-Tetrachlorobenzene	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
1,4-Dioxane	100	13,000	35 U	35 U	38 U	71 U	36 U	37 U
2,3,4,6-Tetrachlorophenol	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
2,4,5-Trichlorophenol	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
2,4,6-Trichlorophenol	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
2,4-Dichlorophenol	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
2,4-Dimethylphenol	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
2,4-Dinitrophenol	NS	NS	700 U	690 U	750 U	1400 UJ	720 U	730 UJ
2,4-Dinitrotoluene	NS	NS	35 U	35 U	38 U	71 U	36 U	37 U
2,6-Dinitrotoluene	NS	NS	35 U	35 U	38 U	71 U	36 U	37 U
2-Chloronaphthalene	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
2-Chlorophenol	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
2-Methylnaphthalene	NS	NS	70 U	69 U	75 U	140 U	72 U	63.3 J
2-Methylphenol	330	100,000	70 U	69 U	75 U	140 U	72 U	73 U
2-Nitroaniline	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
2-Nitrophenol	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
3&4-Methylphenol	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
3,3'-Dichlorobenzidine	NS	NS	70 UJ	69 U	75 UJ	140 U	72 U	73 UJ
3-Nitroaniline	NS	NS	180 UJ	170 U	190 UJ	350 U	180 U	180 UJ
4,6-Dinitro-o-cresol	NS	NS	700 U	690 U	750 R	1400 U	720 U	730 U
4-Bromophenyl phenyl ether	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
4-Chloro-3-methyl phenol	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
4-Chloroaniline	NS	NS	180 UJ	170 U	190 UJ	350 U	180 U	180 UJ
4-Chlorophenyl phenyl ether	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
4-Nitroaniline	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
4-Nitrophenol	NS	NS	350 U	350 U	380 U	710 U	360 U	370 U
Acenaphthene	20,000	100,000	35 U	35 U	69.4	71 U	36 U	207
Acenaphthylene	100,000	100,000	35 U	35 U	157	71 U	36 U	267
Acetophenone	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
Anthracene	100,000	100,000	35 U	35 U	248	71 U	36 U	809
Atrazine	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
Benzaldehyde	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
Benzo(a)anthracene	1,000	1,000	35 U	35 U	**1,150**	71 U	36 U	**2,720**
Benzo(a)pyrene	1,000	1,000	35 U	35 U	**1,300**	71 U	36 U	**2,770**
Benzo(b)fluoranthene	1,000	1,000	35 U	35 U	**1,660**	71 U	36 U	**3,010**
Benzo(g,h,i)perylene	100,000	100,000	35 U	35 U	866	71 U	36 U	1,510
Benzo(k)fluoranthene	800	3,900	35 U	35 U	582	71 U	36 U	**1,120**
bis(2-Chloroethoxy)methane	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
bis(2-Chloroethyl)ether	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
bis(2-Chloroisopropyl)ether	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
bis(2-Ethylhexyl)phthalate	NS	NS	70 U	69 U	179	140 U	72 U	63.1 J
Butyl benzyl phthalate	NS	NS	70 U	69 U	40.7 J	140 U	72 U	73 U
Caprolactam	NS	NS	70 U	69 U	75 U	140 U	72 U	73 UJ
Carbazole	NS	NS	70 U	69 U	135	140 U	72 U	336
Chrysene	1,000	3,900	35 U	35 U	**1,380**	71 U	36 U	**2,910**
Dibenzo(a,h)anthracene	330	330	35 U	35 U	235	71 U	36 U	**462**
Dibenzofuran	7,000	59,000	70 U	69 U	42 J	140 U	72 U	102
Diethyl phthalate	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
Dimethyl phthalate	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
Di-n-butyl phthalate	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
Di-n-octyl phthalate	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
Fluoranthene	100,000	100,000	35 U	35 U	2,540	71 U	36 U	4,530 D
Fluorene	30,000	100,000	35 U	35 U	61.1	71 U	36 U	252
Hexachlorobenzene	330	1,200	70 U	69 U	75 U	140 U	72 U	73 U
Hexachlorobutadiene	NS	NS	35 U	35 U	38 U	71 U	36 U	37 U
Hexachlorocyclopentadiene	NS	NS	350 U	350 U	380 U	710 UJ	360 U	370 U
Hexachloroethane	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
Indeno(1,2,3-cd)pyrene	500	500	35 U	35 U	**918**	71 U	36 U	**1,680**
Isophorone	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
Naphthalene	12,000	100,000	35 U	35 U	25 J	71 U	36 U	93.6
Nitrobenzene	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
N-Nitroso-di-n-propylamine	NS	NS	70 U	69 U	75 U	140 U	72 U	73 U
N-Nitrosodiphenylamine	NS	NS	180 U	170 U	190 U	350 U	180 U	180 U
Pentachlorophenol	800	6,700	350 U	350 U	380 U	710 U	360 U	370 U
Phenanthrene	100,000	100,000	35 U	35 U	1,320	71 U	36 U	2,570
Phenol	330	100,000	70 U	69 U	75 U	140 U	72 U	73 U
Pyrene	100,000	100,000	35 U	35 U	2,160	71 U	36 U	4,480 D
Total SVOCs	NS	NS	ND	ND	15,068	ND	0	29,955

Table 2
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Semivolatile Organic Compounds

Client ID Lab Sample ID Date Sampled Dilution µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-4 (0-2) JB60086-7 2/19/2014 1	SB-4 (8-10) JB60086-8 2/19/2014 1	SB-5 (0-2) JB60086-9 2/19/2014 1	SB-5 (8-10) JB60086-10 2/19/2014 1	SB-6 (0-2) JB60086-11 2/19/2014 1	SB-6 (5-7) JB60086-12 2/19/2014 4
1,1'-Biphenyl	NS	NS	73 U	64 U	89 U	69 U	69 U	53.8 J
1,2,4,5-Tetrachlorobenzene	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
1,4-Dioxane	100	13,000	37 U	32 U	44 U	34 U	35 U	37 U
2,3,4,6-Tetrachlorophenol	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
2,4,5-Trichlorophenol	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
2,4,6-Trichlorophenol	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
2,4-Dichlorophenol	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
2,4-Dimethylphenol	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
2,4-Dinitrophenol	NS	NS	730 U	640 U	890 U	690 U	690 U	750 UJ
2,4-Dinitrotoluene	NS	NS	37 U	32 U	44 U	34 U	35 U	37 U
2,6-Dinitrotoluene	NS	NS	37 U	32 U	44 U	34 U	35 U	37 U
2-Chloronaphthalene	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
2-Chlorophenol	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
2-Methylnaphthalene	NS	NS	73 U	64 U	89 U	69 U	69 U	91.9
2-Methylphenol	330	100,000	73 U	64 U	89 U	69 U	69 U	75 U
2-Nitroaniline	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
2-Nitrophenol	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
3&4-Methylphenol	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
3,3'-Dichlorobenzidine	NS	NS	73 UJ	64 UJ	89 UJ	69 UJ	69 UJ	75 UJ
3-Nitroaniline	NS	NS	180 UJ	160 UJ	220 UJ	170 UJ	170 UJ	190 UJ
4,6-Dinitro-o-cresol	NS	NS	730 U	640 U	890 U	690 U	690 U	750 U
4-Bromophenyl phenyl ether	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
4-Chloro-3-methyl phenol	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
4-Chloroaniline	NS	NS	180 UJ	160 UJ	220 UJ	170 UJ	170 UJ	190 UJ
4-Chlorophenyl phenyl ether	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
4-Nitroaniline	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
4-Nitrophenol	NS	NS	370 U	320 U	440 U	340 U	350 U	370 U
Acenaphthene	20,000	100,000	37 U	32 U	72.3	34 U	35 U	84.6
Acenaphthylene	100,000	100,000	86.5	44.6	151	34 U	35 U	701
Acetophenone	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
Anthracene	100,000	100,000	53.7	33.2	322	34 U	35 U	1,140
Atrazine	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
Benzaldehyde	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
Benzo(a)anthracene	1,000	1,000	291	183	**1,160**	34 U	35 U	**2,240**
Benzo(a)pyrene	1,000	1,000	414	208	**1,240**	34 U	35 U	**2,150**
Benzo(b)fluoranthene	1,000	1,000	538	296	**1,460**	34 U	35 U	**2,490**
Benzo(g,h,i)perylene	100,000	100,000	334	159	911	34 U	35 U	2,270
Benzo(k)fluoranthene	800	3,900	188	121	503	34 U	35 U	**895**
bis(2-Chloroethoxy)methane	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
bis(2-Chloroethyl)ether	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
bis(2-Chloroisopropyl)ether	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
bis(2-Ethylhexyl)phthalate	NS	NS	71.2 J	164	331	69 U	69 U	1,930
Butyl benzyl phthalate	NS	NS	73 U	64 U	109	69 U	69 U	75 U
Caprolactam	NS	NS	73 U	64 U	89 U	69 U	69 U	75 UJ
Carbazole	NS	NS	31.1 J	19.8 J	106	69 U	69 U	679
Chrysene	1,000	3,900	362	237	**1,230**	34 U	35 U	**2,500**
Dibenzo(a,h)anthracene	330	330	77.8	46.6	237	34 U	35 U	**631**
Dibenzofuran	7,000	59,000	73 U	64 U	51.3 J	69 U	69 U	412
Diethyl phthalate	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
Dimethyl phthalate	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
Di-n-butyl phthalate	NS	NS	907	2,490	89 U	69 U	69 U	75 U
Di-n-octyl phthalate	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
Fluoranthene	100,000	100,000	515	367	2,420	34 U	35 U	5,350 D
Fluorene	30,000	100,000	37 U	32 U	93.7	34 U	35 U	457
Hexachlorobenzene	330	1,200	73 U	64 U	89 U	69 U	69 U	75 U
Hexachlorobutadiene	NS	NS	37 U	32 U	44 U	34 U	35 U	37 U
Hexachlorocyclopentadiene	NS	NS	370 U	320 U	440 U	340 U	350 U	370 U
Hexachloroethane	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
Indeno(1,2,3-cd)pyrene	500	500	334	170	**908**	34 U	35 U	**1,780**
Isophorone	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
Naphthalene	12,000	100,000	37 U	32 U	33.1 J	34 U	35 U	112
Nitrobenzene	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
N-Nitroso-di-n-propylamine	NS	NS	73 U	64 U	89 U	69 U	69 U	75 U
N-Nitrosodiphenylamine	NS	NS	180 U	160 U	220 U	170 U	170 U	190 U
Pentachlorophenol	800	6,700	370 U	320 U	440 U	340 U	350 U	370 U
Phenanthrene	100,000	100,000	189	140	1,430	34 U	35 U	5,190 D
Phenol	330	100,000	73 U	64 U	89 U	69 U	69 U	75 U
Pyrene	100,000	100,000	505	326	2,200	34 U	35 U	4,200 D
Total SVOCs	NS	NS	4,897.30	5,005.20	14,968.40	ND	ND	35,357.30

Table 2
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Semivolatile Organic Compounds

Client ID Lab Sample ID Date Sampled Dilution µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-7 (0-2) JB60086-13 2/18/2014 1	SB-7 (5-7) JB60086-14 2/18/2014 1	SB-8 (0-2) JB60086-32 2/19/2014 20	SB-8 (0-2)FD JB60086-15 2/19/2014 1	SB-8 (7-9) JB60086-16 2/19/2014 4	SB-8 (7-9)B JB60086-34 2/19/2014 2
1,1'-Biphenyl	NS	NS	71 U	65 U	131 J	66 UJ	78 U	74 U
1,2,4,5-Tetrachlorobenzene	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
1,4-Dioxane	100	13,000	35 U	33 U	35 U	33 UJ	39 U	37 U
2,3,4,6-Tetrachlorophenol	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
2,4,5-Trichlorophenol	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
2,4,6-Trichlorophenol	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
2,4-Dichlorophenol	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
2,4-Dimethylphenol	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
2,4-Dinitrophenol	NS	NS	710 U	650 U	700 UJ	660 UJ	780 UJ	740 U
2,4-Dinitrotoluene	NS	NS	35 U	33 U	35 U	33 UJ	39 U	37 U
2,6-Dinitrotoluene	NS	NS	35 U	33 U	35 U	33 UJ	39 U	37 U
2-Chloronaphthalene	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
2-Chlorophenol	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
2-Methylnaphthalene	NS	NS	71 U	65 U	229 J	66 UJ	42.1 J	27.2 J
2-Methylphenol	330	100,000	71 U	65 U	70 U	66 UJ	78 U	74 U
2-Nitroaniline	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
2-Nitrophenol	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
3&4-Methylphenol	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
3,3'-Dichlorobenzidine	NS	NS	71 UJ	65 U	70 U	66 UJ	78 UJ	74 U
3-Nitroaniline	NS	NS	180 UJ	160 U	170 U	170 UJ	200 UJ	180 U
4,6-Dinitro-o-cresol	NS	NS	710 U	650 U	700 U	660 UJ	780 U	740 U
4-Bromophenyl phenyl ether	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
4-Chloro-3-methyl phenol	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
4-Chloroaniline	NS	NS	180 UJ	160 U	170 U	170 UJ	200 UJ	180 U
4-Chlorophenyl phenyl ether	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
4-Nitroaniline	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
4-Nitrophenol	NS	NS	350 U	330 U	350 U	330 UJ	390 U	370 U
Acenaphthene	20,000	100,000	35 U	33 U	594 J	41.2 J	95.9 J	136 J
Acenaphthylene	100,000	100,000	35 U	33 U	1,560 J	49.5 J	1,180 J	584 J
Acetophenone	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
Anthracene	100,000	100,000	35 U	33 U	2820 J	105 J	998	662
Atrazine	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
Benzaldehyde	NS	NS	180 U	160 U	22.8 J	170 UJ	200 U	180 U
Benzo(a)anthracene	1,000	1,000	35 U	33 U	**6,230 D**	604 J	**4,300 D**	**3,450**
Benzo(a)pyrene	1,000	1,000	35 U	33 U	**6,870 D**	699 J	**4,390 D**	**3,630**
Benzo(b)fluoranthene	1,000	1,000	35 U	33 U	**7,470 D**	779 J	**5,010 D**	**4,380 D**
Benzo(g,h,i)perylene	100,000	100,000	35 U	33 U	3,750 D	453 J	3,110	2,550
Benzo(k)fluoranthene	800	3,900	35 U	33 U	**2,560 J**	298 J	**1,850**	**1,400**
bis(2-Chloroethoxy)methane	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
bis(2-Chloroethyl)ether	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
bis(2-Chloroisopropyl)ether	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
bis(2-Ethylhexyl)phthalate	NS	NS	119	65 U	24,100 JD	66 UJ	363 J	154 J
Butyl benzyl phthalate	NS	NS	71 U	65 U	4,330 D	66 UJ	63.6 J	74 UJ
Caprolactam	NS	NS	71 U	65 U	70 U	66 UJ	78 UJ	74 U
Carbazole	NS	NS	71 U	65 U	1,230 J	30.3 J	284	254
Chrysene	1,000	3,900	35 U	33 U	**6,490 JD**	620 J	**4,790 D**	**3,630**
Dibenzo(a,h)anthracene	330	330	35 U	33 U	**1,340 J**	120 J	**858**	**675**
Dibenzofuran	7,000	59,000	71 U	65 U	849 J	15.6 J	106 J	45.7 J
Diethyl phthalate	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
Dimethyl phthalate	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
Di-n-butyl phthalate	NS	NS	71 U	65 U	4,050 JD	66 UJ	43.8 J	74 UJ
Di-n-octyl phthalate	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
Fluoranthene	100,000	100,000	35 U	33 U	15,000 JD	1110 J	6,630 D	5,450 D
Fluorene	30,000	100,000	35 U	33 U	1,400 J	30.3 J	187	127
Hexachlorobenzene	330	1,200	71 U	65 U	70 U	66 UJ	78 U	74 U
Hexachlorobutadiene	NS	NS	35 U	33 U	35 U	33 UJ	39 U	37 U
Hexachlorocyclopentadiene	NS	NS	350 U	330 U	350 UJ	330 UJ	390 U	370 U
Hexachloroethane	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
Indeno(1,2,3-cd)pyrene	500	500	35 U	33 U	**4,120 JD**	468 J	**3,270**	**2,610**
Isophorone	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
Naphthalene	12,000	100,000	35 U	33 U	418 J	33 UJ	45.6	49.4
Nitrobenzene	NS	NS	71 U	65 U	70 U	66 UJ	78 U	74 U
N-Nitroso-di-n-propylamine	NS	NS	71 U	65 U	70 U	66 UJ	78 U	0
N-Nitrosodiphenylamine	NS	NS	180 U	160 U	170 U	170 UJ	200 U	180 U
Pentachlorophenol	800	6,700	350 U	330 U	350 U	330 UJ	390 U	370 U
Phenanthrene	100,000	100,000	35 U	33 U	10,600 JD	417 J	2,810	1,820
Phenol	330	100,000	71 U	65 U	70 U	66 UJ	78 U	74 U
Pyrene	100,000	100,000	20.3 J	33 U	12,600 JD	1,080 J	6,940 D	5,520 D
Total SVOCs	NS	NS	139.3	ND	118,764	7,090	47,367	37,154.30

Table 2
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Semivolatile Organic Compounds

Client ID Lab Sample ID Date Sampled Dilution µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-9 (0-2) JB60086-17 2/19/2014 1	SB-9 (8-10) JB60086-36 2/25/2014 1	SB-10 (0-2) JB60086-37 2/25/2014 1	SB-10 (0-2)B JB60086-35 2/19/2014 4	SB-10 (8-10) JB60086-33 2/19/2014 1	SB-10 (8-10)FD JB60086-20 2/19/2014 1
1,1'-Biphenyl	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
1,2,4,5-Tetrachlorobenzene	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
1,4-Dioxane	100	13,000	37 U	33 U	35 U	37 U	32 U	35 U
2,3,4,6-Tetrachlorophenol	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
2,4,5-Trichlorophenol	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
2,4,6-Trichlorophenol	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
2,4-Dichlorophenol	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
2,4-Dimethylphenol	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
2,4-Dinitrophenol	NS	NS	740 U	670 UJ	700 UJ	740 U	630 U	710 U
2,4-Dinitrotoluene	NS	NS	37 U	33 U	35 U	37 U	32 U	35 U
2,6-Dinitrotoluene	NS	NS	37 U	33 U	35 U	37 U	32 U	35 U
2-Chloronaphthalene	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
2-Chlorophenol	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
2-Methylnaphthalene	NS	NS	74 U	67 U	23.4 J	74 UJ	63 U	71 U
2-Methylphenol	330	100,000	74 U	67 U	70 U	74 U	63 U	71 U
2-Nitroaniline	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
2-Nitrophenol	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
3&4-Methylphenol	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
3,3'-Dichlorobenzidine	NS	NS	74 UJ	67 U	70 U	74 U	63 U	71 UJ
3-Nitroaniline	NS	NS	190 UJ	170 U	170 U	180 U	160 U	180 UJ
4,6-Dinitro-o-cresol	NS	NS	740 U	670 U	700 U	740 U	630 U	710 U
4-Bromophenyl phenyl ether	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
4-Chloro-3-methyl phenol	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
4-Chloroaniline	NS	NS	190 UJ	170 U	170 U	180 U	160 U	180 UJ
4-Chlorophenyl phenyl ether	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
4-Nitroaniline	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
4-Nitrophenol	NS	NS	370 U	330 UJ	350 UJ	370 U	320 U	350 U
Acenaphthene	20,000	100,000	37 U	33 U	59 J	153 J	32 U	35 U
Acenaphthylene	100,000	100,000	24.2 J	33 U	506	680	32 U	35 U
Acetophenone	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
Anthracene	100,000	100,000	18.2 J	33 U	462 J	930 J	32 U	35 U
Atrazine	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
Benzaldehyde	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
Benzo(a)anthracene	1,000	1,000	85	33 U	**1,810 J**	**4,800 JD**	12.9 J	35 UJ
Benzo(a)pyrene	1,000	1,000	95.9	33 U	**1,890 J**	**4,990 JD**	13.1 J	35 UJ
Benzo(b)fluoranthene	1,000	1,000	123	33 U	**2,070**	**5,690 D**	15.3 J	35 UJ
Benzo(g,h,i)perylene	100,000	100,000	83.2	13.8 J	1,630 J	3,120 J	32 U	35 U
Benzo(k)fluoranthene	800	3,900	44.3	33 U	614	**1,890** J	32 U	35 U
bis(2-Chloroethoxy)methane	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
bis(2-Chloroethyl)ether	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
bis(2-Chloroisopropyl)ether	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
bis(2-Ethylhexyl)phthalate	NS	NS	79.3	67 U	2,240 J	107 J	63 U	71 U
Butyl benzyl phthalate	NS	NS	74 U	67 U	94.3 J	74 UJ	63 U	71 U
Caprolactam	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
Carbazole	NS	NS	74 U	67 U	153 J	332 J	63 U	71 U
Chrysene	1,000	3,900	88.5	33 U	**2,040**	**5,340 D**	32 U	35 U
Dibenzo(a,h)anthracene	330	330	20.1 J	33 U	**453**	**822**	32 U	35 U
Dibenzofuran	7,000	59,000	74 U	67 U	30.4 J	41.1 J	63 U	71 U
Diethyl phthalate	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
Dimethyl phthalate	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
Di-n-butyl phthalate	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
Di-n-octyl phthalate	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
Fluoranthene	100,000	100,000	158	33 U	2,950 J	7,900 JD	17.6 J	21.6 J
Fluorene	30,000	100,000	37 U	33 U	73.9 J	160 J	32 U	35 U
Hexachlorobenzene	330	1,200	74 U	67 U	70 U	74 U	63 U	71 U
Hexachlorobutadiene	NS	NS	37 U	33 U	35 U	37 U	32 U	35 U
Hexachlorocyclopentadiene	NS	NS	370 U	330 U	350 U	370 U	320 U	350 U
Hexachloroethane	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
Indeno(1,2,3-cd)pyrene	500	500	87.8	33 U	**1,250 J**	**3,210 J**	32 U	35 U
Isophorone	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
Naphthalene	12,000	100,000	37 U	33 U	35.2	33.7 J	32 U	35 U
Nitrobenzene	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
N-Nitroso-di-n-propylamine	NS	NS	74 U	67 U	70 U	74 U	63 U	71 U
N-Nitrosodiphenylamine	NS	NS	190 U	170 U	170 U	180 U	160 U	180 U
Pentachlorophenol	800	6,700	370 U	330 UJ	350 UJ	370 U	320 U	350 U
Phenanthrene	100,000	100,000	56.2	33 U	1,240 J	2,640 J	32 UJ	21.4 J
Phenol	330	100,000	74 U	67 U	70 U	74 U	63 U	71 U
Pyrene	100,000	100,000	137	33 U	3,280 J	8,810 JD	17.1 J	19.5 J
Total SVOCs	NS	NS	1,100.70	61.3	22,904	51,648.80	76	62.5

Table 2
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Semivolatile Organic Compounds

Client ID Lab Sample ID Date Sampled Dilution µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-11 (0-2) JB60086-21 2/19/2014 1	SB-11 (8-10) JB60086-22 2/19/2014 1	SB-12 (0-2) JB60086-23 2/18/2014 1	SB-13 (0-2) JB60086-24 2/19/2014 1	SB-13 (8-10) JB60086-25 2/19/2014 1
1,1'-Biphenyl	NS	NS	72 U	84 U	71 U	70 U	70 U
1,2,4,5-Tetrachlorobenzene	NS	NS	180 U	210 U	180 U	180 U	180 U
1,4-Dioxane	100	13,000	36 U	42 U	36 U	35 U	35 U
2,3,4,6-Tetrachlorophenol	NS	NS	180 U	210 U	180 U	180 U	180 U
2,4,5-Trichlorophenol	NS	NS	180 U	210 U	180 U	180 U	180 U
2,4,6-Trichlorophenol	NS	NS	180 U	210 U	180 U	180 U	180 U
2,4-Dichlorophenol	NS	NS	180 U	210 U	180 U	180 U	180 U
2,4-Dimethylphenol	NS	NS	180 U	210 U	180 U	180 U	180 U
2,4-Dinitrophenol	NS	NS	720 U	840 U	710 U	700 U	700 U
2,4-Dinitrotoluene	NS	NS	36 U	42 U	36 U	35 U	35 U
2,6-Dinitrotoluene	NS	NS	36 U	42 U	36 U	35 U	35 U
2-Chloronaphthalene	NS	NS	72 U	84 U	71 U	70 U	70 U
2-Chlorophenol	NS	NS	72 U	84 U	71 U	70 U	70 U
2-Methylnaphthalene	NS	NS	72 U	84 U	71 U	46.4 J	54.4 J
2-Methylphenol	330	100,000	72 U	84 U	71 U	70 U	70 U
2-Nitroaniline	NS	NS	180 U	210 U	180 U	180 U	180 U
2-Nitrophenol	NS	NS	180 U	210 U	180 U	180 U	180 U
3&4-Methylphenol	NS	NS	72 U	84 U	71 U	70 U	70 U
3,3'-Dichlorobenzidine	NS	NS	72 UJ	84 UJ	71 U	70 UJ	70 UJ
3-Nitroaniline	NS	NS	180 U	210 U	180 U	180 U	180 U
4,6-Dinitro-o-cresol	NS	NS	720 U	840 U	710 U	700 U	700 U
4-Bromophenyl phenyl ether	NS	NS	72 U	84 U	71 U	70 U	70 U
4-Chloro-3-methyl phenol	NS	NS	180 U	210 U	180 U	180 U	180 U
4-Chloroaniline	NS	NS	180 U	210 U	180 U	180 U	180 U
4-Chlorophenyl phenyl ether	NS	NS	72 U	84 U	71 U	70 U	70 U
4-Nitroaniline	NS	NS	180 U	210 U	180 U	180 U	180 U
4-Nitrophenol	NS	NS	360 U	420 U	360 U	350 U	350 U
Acenaphthene	20,000	100,000	36 U	42 U	36 U	94.2	35 U
Acenaphthylene	100,000	100,000	36 U	42 U	36 U	545	24.1 J
Acetophenone	NS	NS	180 U	210 U	180 U	180 U	180 U
Anthracene	100,000	100,000	36 U	42 U	36 U	649	23 J
Atrazine	NS	NS	72 U	84 U	71 U	70 U	70 U
Benzaldehyde	NS	NS	180 U	210 U	180 U	180 U	180 U
Benzo(a)anthracene	1,000	1,000	59.6	22.8 J	36 U	**2,030**	81.4
Benzo(a)pyrene	1,000	1,000	65.6	42 U	36 U	**1,970**	86.4
Benzo(b)fluoranthene	1,000	1,000	80.2	19.1 J	36 U	**2,460**	111
Benzo(g,h,i)perylene	100,000	100,000	49.5	42 U	36 U	1,580	70.7
Benzo(k)fluoranthene	800	3,900	23.5 J	42 U	36 U	**886**	46.1
bis(2-Chloroethoxy)methane	NS	NS	72 U	84 U	71 U	70 U	70 U
bis(2-Chloroethyl)ether	NS	NS	72 U	84 U	71 U	70 U	70 U
bis(2-Chloroisopropyl)ether	NS	NS	72 U	84 U	71 U	70 U	70 U
bis(2-Ethylhexyl)phthalate	NS	NS	55.5 J	84 U	39.6 J	77.1	854
Butyl benzyl phthalate	NS	NS	72 U	84 U	71 U	159	70 U
Caprolactam	NS	NS	72 U	84 U	71 U	70 U	70 U
Carbazole	NS	NS	72 U	84 U	71 U	265	70 U
Chrysene	1,000	3,900	64.6	20.1 J	36 U	**2,380**	89
Dibenzo(a,h)anthracene	330	330	36 U	42 U	36 U	**531**	16.1 J
Dibenzofuran	7,000	59,000	72 U	84 U	71 U	54.1 J	70 U
Diethyl phthalate	NS	NS	72 U	84 U	71 U	70 U	70 U
Dimethyl phthalate	NS	NS	72 U	84 U	71 U	70 U	70 U
Di-n-butyl phthalate	NS	NS	72 U	84 U	71 U	155	149
Di-n-octyl phthalate	NS	NS	72 U	84 U	71 U	70 U	70 U
Fluoranthene	100,000	100,000	99.8	36.1 J	36 U	3,090	138
Fluorene	30,000	100,000	36 U	42 U	36 U	127	35 U
Hexachlorobenzene	330	1,200	72 U	84 U	71 U	70 U	70 U
Hexachlorobutadiene	NS	NS	36 U	42 U	36 U	35 U	35 U
Hexachlorocyclopentadiene	NS	NS	360 U	420 U	360 U	350 U	350 U
Hexachloroethane	NS	NS	180 U	210 U	180 U	180 U	180 U
Indeno(1,2,3-cd)pyrene	500	500	36.6	42 U	36 U	**1,240**	50.9
Isophorone	NS	NS	72 U	84 U	71 U	70 U	70 U
Naphthalene	12,000	100,000	36 U	42 U	36 U	61.9	30.7 J
Nitrobenzene	NS	NS	72 U	84 U	71 U	70 U	70 U
N-Nitroso-di-n-propylamine	NS	NS	72 U	84 U	71 U	70 U	70 U
N-Nitrosodiphenylamine	NS	NS	180 U	210 U	180 U	180 U	180 U
Pentachlorophenol	800	6,700	360 U	420 U	360 U	350 U	350 U
Phenanthrene	100,000	100,000	56.8	42 U	36 U	2,060	70.5
Phenol	330	100,000	72 U	84 U	71 U	70 U	70 U
Pyrene	100,000	100,000	115	31.9 J	36 U	3,460	148
Total SVOCs	NS	NS	706.7	130	39.6	23,920.70	2,043.30

Table 2
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Semivolatile Organic Compounds

Client ID	NYSDEC	NYSDEC	SB-14 (0-2)	SB-14 (8-10)	FIELD BLANK	FIELD BLANK
Lab Sample ID	Part 375	Part 375	JB60086-26	JB60086-27	JB60086-30	JB60086-31
Date Sampled	Unrestricted	Restricted	2/19/2014	2/19/2014	2/19/2014	2/19/2014
Dilution	SCO	Residential SCO	1	1	1	1
µg/Kg	µg/Kg	µg/Kg			µg/L	µg/L
1,1'-Biphenyl	NS	NS	74 U	66 U	1 U	1 U
1,2,4,5-Tetrachlorobenzene	NS	NS	180 U	160 U	2 U	2 U
1,4-Dioxane	100	13,000	37 U	33 U	1 U	1 U
2,3,4,6-Tetrachlorophenol	NS	NS	180 U	160 U	5 U	5 U
2,4,5-Trichlorophenol	NS	NS	180 U	160 U	5 U	5 U
2,4,6-Trichlorophenol	NS	NS	180 U	160 U	5 U	5 U
2,4-Dichlorophenol	NS	NS	180 U	160 U	2 U	2 U
2,4-Dimethylphenol	NS	NS	180 U	160 U	5 U	5 U
2,4-Dinitrophenol	NS	NS	740 U	660 U	20 UJ	20 UJ
2,4-Dinitrotoluene	NS	NS	37 U	33 U	1 U	1 U
2,6-Dinitrotoluene	NS	NS	37 U	33 U	1 U	1 U
2-Chloronaphthalene	NS	NS	74 U	66 U	2 U	2 U
2-Chlorophenol	NS	NS	74 U	66 U	5 U	5 U
2-Methylnaphthalene	NS	NS	25.2 J	66 U	1 U	1 U
2-Methylphenol	330	100,000	74 U	66 U	2 U	2 U
2-Nitroaniline	NS	NS	180 U	160 U	5 UJ	5 U
2-Nitrophenol	NS	NS	180 U	160 U	5 U	5 U
3&4-Methylphenol	NS	NS	74 U	66 U	2 U	2 U
3,3'-Dichlorobenzidine	NS	NS	74 UJ	66 UJ	2 U	2 U
3-Nitroaniline	NS	NS	180 U	160 U	5 U	5 U
4,6-Dinitro-o-cresol	NS	NS	740 U	660 U	20 U	20 U
4-Bromophenyl phenyl ether	NS	NS	74 U	66 U	2 U	2 U
4-Chloro-3-methyl phenol	NS	NS	180 U	160 U	5 U	5 U
4-Chloroaniline	NS	NS	180 U	160 U	5 U	5 U
4-Chlorophenyl phenyl ether	NS	NS	74 U	66 U	2 U	2 U
4-Nitroaniline	NS	NS	180 U	160 U	5 U	5 UJ
4-Nitrophenol	NS	NS	370 U	330 U	10 UJ	10 UJ
Acenaphthene	20,000	100,000	50.4	33 U	1 U	1 U
Acenaphthylene	100,000	100,000	47.2	33 U	1 U	1 U
Acetophenone	NS	NS	180 U	160 U	2 U	2 U
Anthracene	100,000	100,000	142	33 U	1 U	1 U
Atrazine	NS	NS	74 U	66 U	2 U	2 U
Benzaldehyde	NS	NS	180 U	160 U	5 U	5 U
Benzo(a)anthracene	1,000	1,000	462	15.7 J	1 U	1 U
Benzo(a)pyrene	1,000	1,000	435	19.7 J	1 U	1 U
Benzo(b)fluoranthene	1,000	1,000	526	19 J	1 U	1 U
Benzo(g,h,i)perylene	100,000	100,000	277	13.7 J	1 U	1 U
Benzo(k)fluoranthene	800	3,900	186	33 U	1 U	1 U
bis(2-Chloroethoxy)methane	NS	NS	74 U	66 U	2 U	2 U
bis(2-Chloroethyl)ether	NS	NS	74 U	66 U	2 U	2 U
bis(2-Chloroisopropyl)ether	NS	NS	74 U	66 U	2 U	2 U
bis(2-Ethylhexyl)phthalate	NS	NS	43.6 J	66 U	2 U	2 U
Butyl benzyl phthalate	NS	NS	74 U	66 U	2 U	2 U
Caprolactam	NS	NS	74 U	66 U	2 U	2 U
Carbazole	NS	NS	67.6 J	66 U	1 U	1 U
Chrysene	1,000	3,900	499	33 U	1 U	1 U
Dibenzo(a,h)anthracene	330	330	69	33 U	1 U	1 U
Dibenzofuran	7,000	59,000	34.9 J	66 U	5 U	5 U
Diethyl phthalate	NS	NS	74 U	66 U	2 U	2 U
Dimethyl phthalate	NS	NS	74 U	66 U	2 U	2 U
Di-n-butyl phthalate	NS	NS	74 U	66 U	2 U	2 U
Di-n-octyl phthalate	NS	NS	74 U	66 U	2 UJ	2 UJ
Fluoranthene	100,000	100,000	878	33 U	1 U	1 U
Fluorene	30,000	100,000	64.2	33 U	1 U	1 U
Hexachlorobenzene	330	1,200	74 U	66 U	1 U	1 U
Hexachlorobutadiene	NS	NS	37 U	33 U	1 U	1 U
Hexachlorocyclopentadiene	NS	NS	370 U	330 U	10 U	10 U
Hexachloroethane	NS	NS	180 U	160 U	2 U	2 U
Indeno(1,2,3-cd)pyrene	500	500	227	33 U	1 U	1 U
Isophorone	NS	NS	74 U	66 U	2 U	2 U
Naphthalene	12,000	100,000	52.4	33 U	1 U	1 U
Nitrobenzene	NS	NS	74 U	66 U	2 U	2 U
N-Nitroso-di-n-propylamine	NS	NS	74 U	66 U	2 U	2 U
N-Nitrosodiphenylamine	NS	NS	180 U	160 U	5 U	5 U
Pentachlorophenol	800	6,700	370 U	330 U	10 U	10 U
Phenanthrene	100,000	100,000	782	33 U	1 U	1 U
Phenol	330	100,000	74 U	66 U	2 U	2 U
Pyrene	100,000	100,000	952	33 U	1 U	1 U
Total SVOCs	NS	NS	5,820.50	68.1	ND	ND

Table 3
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Metals

Client ID Lab Sample ID Date Sampled Dilution mg/kg	NYSDEC Part 375 Unrestricted SCO mg/kg	NYSDEC Part 375 Restricted Residential SCO mg/kg	SB-1 (0-2) JB60086-1 2/18/2014 1	SB-1 (8-10) JB60086-2 2/18/2014 1	SB-2 (0-2) JB60086-3 2/18/2014 1	SB-2 (8-10) JB60086-4 2/18/2014 1	SB-3 (0-2) JB60086-5 2/19/2014 1	SB-3 (8-10) JB60086-6 2/19/2014 1	SB-4 (0-2) JB60086-7 2/19/2014 1	SB-4 (8-10) JB60086-8 2/19/2014 1/2 †
Aluminum	**NS**	**NS**	17,600	10,600 J	10,000	12,600	7,590	4,920	7,290	7,600
Antimony	**NS**	**NS**	2.3 U	2.2 UJ	2.3 U	2.3 U	2.3 U	2.4 U	4.1	10.4
Arsenic	**13**	**16**	3.7	2.2	4.9	11.9	5.2	3.3	4.8	6.4
Barium	**350**	**400**	63.5	61.2	313	44.6	**588**	**487**	**592**	**923**
Beryllium	**7.2**	**72**	0.8	0.51	0.48	1.9	0.33	0.47	0.34	0.35
Cadmium	**2.5**	**4.3**	0.57 U	0.55 U	0.58 U	0.58 U	0.58 U	0.6 U	1.9	**6.8**
Calcium	**NS**	**NS**	2,880	8,120	57,800	60,600	63,700	71,400	51,400	28,000
Chromium	**30**	**180**	29.3	25.6	19.4	**33**	17.7	13.4	**34.9**	25.6
Cobalt	**NS**	**NS**	11	7.3	6.8	12.4	5.8 U	6 U	5.6 U	7.3
Copper	**50**	**270**	**60.7**	**267**	27.2	14.8	17.4	14	27.8	**51.9**
Iron	**NS**	**NS**	24,900	15,000 J	19,400	18,600	11,400	8,340	13,200	17,700
Lead	**63**	**400**	11.4	13.7	**201**	11.7	**199**	**97.9**	**598**	**2,760**
Magnesium	**NS**	**NS**	5,590	4,360 J	24,400	57,300	19,400	36,200	24,400	14,600
Manganese	**1,600**	**2,000**	402	277	293	653	194	237	308	294
Mercury	**0.18**	**0.81**	0.036 U	0.034 U	**0.65**	0.033 U	0.13	0.036 U	0.14	**0.95**
Nickel	**30**	**310**	26.5	19.6	15.3	28.4	12.3	11.9	11	19
Potassium	**NS**	**NS**	2,850	2,460	2,000	1,200 U	1,880	1,200 U	1,820	2,120
Selenium	**3.9**	**180**	2.3 U	2.2 U	2.3 U	2.3 U	2.3 U	2.4 U	2.3 U	2.3 U
Silver	**2**	**180**	0.57 U	0.55 U	0.58 U	0.58 U	0.77	0.71	1.1	**17.1**
Sodium	**NS**	**NS**	1,100 U	1,100 U	1,200 U	1,200 U	1,200 U	1,200 U	1,100 U	1,100 U
Thallium	**NS**	**NS**	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U	1.1 U
Vanadium	**NS**	**NS**	40.1	26	26.3	32.2	24.6	13.6	24.1	35.3
Zinc	**109**	**10,000**	53	79.8 J	**197**	70.2	**274**	**273**	**637**	**1,470**

Notes: † = Second result is the dilution rate for Mercury.

‡ = The dilution rate varies.

b = Elevated detection limit due to dilution required for high interfering element.

Table 3
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Metals

Client ID Lab Sample ID Date Sampled Dilution mg/kg	NYSDEC Part 375 Unrestricted SCO mg/kg	NYSDEC Part 375 Restricted Residential SCO mg/kg	SB-5 (0-2) JB60086-9 2/19/2014 1/2 ‡	SB-5 (8-10) JB60086-10 2/19/2014 1	SB-6 (0-2) JB60086-11 2/19/2014 1	SB-6 (5-7) JB60086-12 2/19/2014 1	SB-7 (0-2) JB60086-13 2/18/2014 1	SB-7 (5-7) JB60086-14 2/18/2014 1	SB-8 (0-2) JB60086-32 2/19/2014 1/3/5 ‡	SB-8 (0-2)FD JB60086-15 2/19/2014 1/3 ‡
Aluminum	**NS**	**NS**	11,500	5,720	9,240	5,990	11,200	16,500	8,550	10,300
Antimony	**NS**	**NS**	5.4 Ub	2.1 U	2 U	2.5 U	2.2 U	2.1 U	6.7 UJb	2.2 U
Arsenic	**13**	**16**	13 b	2.2	2.1	3.8	3.4	3.6	6.7 UJb	5.5 J
Barium	**350**	**400**	**592**	25	48.2	**2,900**	32.4	75.2	**379 J**	**389**
Beryllium	**7.2**	**72**	0.67	0.42	0.63	0.36	0.55	0.79	0.38	0.49
Cadmium	**2.5**	**4.3**	1.3 Ub	0.52 U	0.51 U	1	0.56 U	0.53 U	2 b	0.54 U
Calcium	**NS**	**NS**	42,200	62,200	54,000	71,700	39,100	2,890	18,300	37,400
Chromium	**30**	**180**	**40.4** b	10.6	17	15.8	**36.9**	**35.3**	27.6 b	19.8
Cobalt	**NS**	**NS**	18.3	5.2 U	7.2	6.8	8.5	12.7	5.6 UJ	7.5 J
Copper	**50**	**270**	**71.5** b	16	**329**	24.6	41	35.6	**54.6 Jb**	31.1
Iron	**NS**	**NS**	89,400	15,600	14,300	10,800	17,000	24,300	81,900 J	18,000 J
Lead	**63**	**400**	**678** b	9.4	24.2	**156**	7	9.9	**667 Jb**	**300 J**
Magnesium	**NS**	**NS**	17,500	48,000	40,100	17,900	37,800	9,340	6,200 J	15,400 J
Manganese	**1,600**	**2,000**	584 b	263	332	242	302	442	269 **Jb**	496 J
Mercury	**0.18**	**0.81**	0.14	0.033 U	0.033 U	0.042 U	0.033 U	0.033 U	**2.2 J**	**1.2 J**
Nickel	**30**	**310**	**31.9**	9.5	16.3	10.1	26.6	**30.5**	10.1	17.1
Potassium	**NS**	**NS**	1,960	1,330	3,180	1,470	1,400	2,790	1,670	1,930
Selenium	**3.9**	**180**	5.4 Ub	2.1 U	2 U	2.5 U	2.2 U	2.1 U	6.7 Ub	2.2 U
Silver	**2**	**180**	1.3 U	0.61	0.51 U	1.5	0.56 U	0.53 U	1.7 UJb	0.59 J
Sodium	**NS**	**NS**	1,300 U	1,000 U	1,000 U	1,200 U	1,100 U	1,100 U	1,100 U	1,100 U
Thallium	**NS**	**NS**	2.7 U	1 U	1 U	1.2 U	1.1 U	1.1 U	3.4 Ub	1.1 U
Vanadium	**NS**	**NS**	48.9	17.3	22.1	24.9	33	41.8	29	26.2
Zinc	**109**	**10,000**	**519** b	60	103	**895**	54.6	56.8	**1,220 Jb**	**214 J**

Notes: † **=** Second result is the dilution rate for Mercury.

‡ **=** The dilution rate varies.

b = Elevated detection limit due to dilution required for high interfering element.

Table 3
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Metals

Client ID Lab Sample ID Date Sampled Dilution mg/kg	NYSDEC Part 375 Unrestricted SCO mg/kg	NYSDEC Part 375 Restricted Residential SCO mg/kg	SB-8 (7-9) JB60086-16 2/19/2014 1	SB-8 (7-9)B JB60086-34 2/19/2014 1	SB-9 (0-2) JB60086-17 2/19/2014 1	SB-9 (8-10) JB60086-36 2/25/2014 1	SB-10 (0-2) JB60086-37 2/25/2014 1	SB-10 (0-2)B JB60086-35 2/19/2014 1/2 ‡	SB-10 (8-10) JB60086-33 2/19/2014 1	SB-10 (8-10)FD JB60086-20 2/19/2014 1
Aluminum	**NS**	**NS**	9,590 J	5,200 J	7,600	11,300	11,100 J	10,600 J	8,000 J	19,800 J
Antimony	**NS**	**NS**	2.5 U	2.3 U	2.4 U	2.2 U	2.3 U	4.7 U	2.2 UJ	2.1 U
Arsenic	**13**	**16**	5.8	4.7	8.9	2.2	6.7 J	**18.4 J**	3.5	2.9
Barium	**350**	**400**	**1,580 J**	**554 J**	246	57.8	**999 J**	**716 J**	35.1 J	119 J
Beryllium	**7.2**	**72**	0.44	0.42	0.38	0.67	0.35 J	0.64 J	0.33	0.28
Cadmium	**2.5**	**4.3**	0.9	0.62	0.65	0.55 U	0.87 J	2.2 J	0.54 UJ	0.69 J
Calcium	**NS**	**NS**	53,100	55,200	17,800	4,300	50,400 J	23,000 J	39,200 J	64,900 J
Chromium	**30**	**180**	15.2	12.5	23.3	25.8	19.7 J	**36.5 Jb**	**44.7 J**	**70.2 J**
Cobalt	**NS**	**NS**	6.3 U	6.8	6.3	10.5	5.8 U	9.3	6.4 J	13.2 J
Copper	**50**	**270**	16.1 J	30.3 J	29.5	24	26.3 J	**138 Jb**	9.9	8.1
Iron	**NS**	**NS**	10,900	10,000	46,600	18,800	15,200 J	55,400 J	14,400 J	28,500 J
Lead	**63**	**400**	**465**	**565**	**245**	9.1	**452 J**	**3,530 Jb**	6	6.4
Magnesium	**NS**	**NS**	11,100	9,220	4,920	5,340	8,350 J	13,100 J	26,900 J	56,600 J
Manganese	**1,600**	**2,000**	266	231	425	376	327 J	550 Jb	267	361
Mercury	**0.18**	**0.81**	**0.29**	0.14	0.13	0.034 U	**0.2 J**	**1.8 J**	0.034 U	0.032 U
Nickel	**30**	**310**	10.1	12.5	17.8	23.5	14.6 J	**32.4 J**	18.7 J	**52.3 J**
Potassium	**NS**	**NS**	1,300 U	1,100 U	1,610	3,180	1,490 J	2,920 J	2,600 J	4,210 J
Selenium	**3.9**	**180**	2.5 U	2.3 U	2.8	2.2 U	2.3 U	**5.2 b**	2.2 UJ	2.6 J
Silver	**2**	**180**	1.2	0.84	1	1	1.1 J	1.2 UJb	0.54 U	0.53 U
Sodium	**NS**	**NS**	1,300 U	1,100 U	1,200 U	1,100 U	1,200 U	1,200 U	1,100 U	1,100 U
Thallium	**NS**	**NS**	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	2.3 Ub	1.1 U	1.1 U
Vanadium	**NS**	**NS**	21.3	18.4	23.9	38.5	23.9 J	63.6 J	28.7 J	61.3 J
Zinc	**109**	**10,000**	**669**	**569**	**431**	77.5	**463 J**	**1,780 Jb**	**124**	96.2

Notes: † = Second result is the dilution rate for Mercury.
‡ = The dilution rate varies.
b = Elevated detection limit due to dilution required for high interfering element.

Table 3
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Metals

Client ID Lab Sample ID Date Sampled Dilution mg/kg	NYSDEC Part 375 Unrestricted SCO mg/kg	NYSDEC Part 375 Restricted Residential SCO mg/kg	SB-11 (0-2) JB60086-21 2/19/2014 1	SB-11 (8-10) JB60086-22 2/19/2014 1	SB-12 (0-2) JB60086-23 2/18/2014 1	SB-13 (0-2) JB60086-24 2/19/2014 1	SB-13 (8-10) JB60086-25 2/19/2014 1/100 †	SB-14 (0-2) JB60086-26 2/19/2014 1	SB-14 (8-10) JB60086-27 2/19/2014 1	FIELD BLANK JB60086-30 2/19/2014 1 mg/L	FIELD BLANK JB60086-31 2/19/2014 1 mg/L
Aluminum	**NS**	**NS**	10,300	10,700	7,760	8,400	6,930	6,710	6,470	200 U	200 U
Antimony	**NS**	**NS**	2.2 U	2.5 U	2.3 U	2.2 U	2.3 U	2.4 U	2.1 U	6 U	6 U
Arsenic	**13**	**16**	3.3	2.5 U	2.3 U	2.4	6	4.2	2.1 U	3 U	3 U
Barium	**350**	**400**	136	70.1	43.2	**383**	**668**	**2,200**	32.1	200 U	200 U
Beryllium	**7.2**	**72**	0.43	0.48	0.39	0.27	0.39	0.3	0.42	1 U	1 U
Cadmium	**2.5**	**4.3**	0.91	0.63 U	0.57 U	0.56 U	0.64	**2.8**	0.52 U	3 U	3 U
Calcium	**NS**	**NS**	36,000	3,720	18,000	30,600	29,600	92,100	54,000	5000 U	5000 U
Chromium	**30**	**180**	20	26.8	23.8	16.1	**31.2**	13.7	15.8	10 U	10 U
Cobalt	**NS**	**NS**	6.8	6.3 U	7.5	6	8.1	6.1 U	6.1	50 U	50 U
Copper	**50**	**270**	26.5	11.3	18.9	23.5	**60.8**	17.5	17	10 U	10 U
Iron	**NS**	**NS**	14,700	13,900	15,500	13,600	30,400	11,400	13,000	100 U	100 U
Lead	**63**	**400**	**203**	28.3	13	**136**	**220**	**683**	10.8	3 U	3 U
Magnesium	**NS**	**NS**	12,300	4,670	11,000	5,120	8,240	15,000	40,500	5000 U	5000 U
Manganese	**1,600**	**2,000**	247	197	293	224	253	238	211	15 U	15 U
Mercury	**0.18**	**0.81**	0.16	0.089	0.04	**0.39**	**34.8**	0.1	0.036 U	0 U	0 U
Nickel	**30**	**310**	20.6	13.1	17.9	9.6	27.2	9.7	13.4	10 U	10 U
Potassium	**NS**	**NS**	3,360	1,300 U	2,140	4,960	2,420	1,200 U	1,440	10000 U	10000 U
Selenium	**3.9**	**180**	2.2 U	2.5 U	2.3 U	2.2 U	2.3 U	2.4 U	2.1 U	10 U	10 U
Silver	**2**	**180**	0.54 U	0.63 U	0.57 U	**55.1**	1.9	1.3	0.52 U	10 U	10 U
Sodium	**NS**	**NS**	1,100 U	1,300 U	1,100 U	1,100 U	1,100 U	1,200 U	1,000 U	10000 U	10000 U
Thallium	**NS**	**NS**	1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.2 U	1 U	2 U	2 U
Vanadium	**NS**	**NS**	28.7	24.7	27.4	22.7	21.4	17.6	23.6	50 U	50 U
Zinc	**109**	**10,000**	**153**	42.2	35.5	**192**	**1,220**	**921**	34.6	20 U	20 U

Notes: † = Second result is the dilution rate for Mercury.

‡ = The dilution rate varies.

b = Elevated detection limit due to dilution required for high interfering element.

Table 4
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Polychlorinated Biphenyls & Pesticides

Client ID Lab Sample ID Date Sampled Dilution Polychlorinated Biphenyls - µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-1 (0-2) JB60086-1 2/18/2014 1	SB-1 (8-10) JB60086-2 2/18/2014 1	SB-2 (0-2) JB60086-3 2/18/2014 1	SB-2 (8-10) JB60086-4 2/18/2014 1	SB-3 (0-2) JB60086-5 2/19/2014 1	SB-3 (8-10) JB60086-6 2/19/2014 1
Aroclor 1016	**NS**	**NS**	3.6 U	3.5 U	3.8 U	3.7 U	3.6 U	3.6 U
Aroclor 1221	**NS**	**NS**	3.6 U	3.5 U	3.8 U	3.7 U	3.6 U	3.6 U
Aroclor 1232	**NS**	**NS**	3.6 U	3.5 U	3.8 U	3.7 U	3.6 U	3.6 U
Aroclor 1242	**NS**	**NS**	3.6 U	3.5 U	3.8 U	3.7 U	3.6 U	3.6 U
Aroclor 1248	**NS**	**NS**	3.6 U	3.5 U	3.8 U	3.7 U	3.6 U	3.6 U
Aroclor 1254	**NS**	**NS**	3.6 U	3.5 U	3.8 U	3.7 U	3.6 U	3.6 U
Aroclor 1260	**NS**	**NS**	3.6 U	3.5 U	3.8 U	3.7 U	3.6 U	3.6 U
Aroclor 1262	**NS**	**NS**	3.6 U	3.5 U	3.8 U	3.7 U	3.6 U	3.6 U
Aroclor 1268	**NS**	**NS**	3.6 U	3.5 U	3.8 U	3.7 U	3.6 U	3.6 U
Total PCBs	**100**	**1,000**	ND	ND	ND	ND	ND	ND

Pesticides - µg/Kg

Dilution			1	5	10	1	20	50
4,4'-DDD	**3.3**	**13,000**	0.069 U	0.067 U	**5.8**	0.073 U	**5.3**	**6.8 J**
4,4'-DDE	**3.3**	**8,900**	0.085 J	**11.5 D**	3.2	0.073 U	**6.9**	**5.4 JD**
4,4'-DDT	**3.3**	**7,900**	0.069 U	0.16 J	**40 D**	0.073 U	**59 D**	**70.1 D**
Aldrin	**5**	**97**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
alpha-BHC	**20**	**480**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
alpha-Chlordane	**94**	**4,200**	0.069 U	0.53	4.5 J	0.073 U	2.7 J	2.9
beta-BHC	**36**	**360**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
delta-BHC	**40**	**100,000**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
Dieldrin	**5**	**200**	0.069 U	1.2	**14 D**	0.073 U	**5.5**	**5.2 J**
Endosulfan sulfate	**2,400**	**24,000**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
Endosulfan-I	**2,400**	**24,000**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
Endosulfan-II	**2,400**	**24,000**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
Endrin	**14**	**11,000**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
Endrin aldehyde	**NS**	**NS**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
Endrin ketone	**NS**	**NS**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
gamma-BHC (Lindane)	**100**	**1,300**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
gamma-Chlordane	**NS**	**NS**	0.069 U	0.66 JN	5 J	0.073 U	3.1 JN	2.4 JN
Heptachlor	**42**	**2,100**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
Heptachlor epoxide	**NS**	**NS**	0.069 U	0.067 U	0.072 U	0.073 U	0.07 U	0.069 U
Methoxychlor	**NS**	**NS**	0.14 U	0.98	1.4 U	0.15 U	0.14 U	6.9 U
Toxaphene	**NS**	**NS**	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.7 U

Notes: a = More than 40 % RPD for detected concentrations between the two GC columns.

Table 4
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Polychlorinated Biphenyls & Pesticides

Client ID Lab Sample ID Date Sampled Dilution Polychlorinated Biphenyls - µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-4 (0-2) JB60086-7 2/19/2014 1	SB-4 (8-10) JB60086-8 2/19/2014 1	SB-5 (0-2) JB60086-9 2/19/2014 1	SB-5 (8-10) JB60086-10 2/19/2014 1	SB-6 (0-2) JB60086-11 2/19/2014 1	SB-6 (5-7) JB60086-12 2/19/2014 1	SB-7 (0-2) JB60086-13 2/18/2014 1	SB-7 (5-7) JB60086-14 2/18/2014 1
Aroclor 1016	**NS**	**NS**	3.9 U	3.6 U	4.4 U	3.5 U	3.6 U	4.2 U	3.6 U	3.6 U
Aroclor 1221	**NS**	**NS**	3.9 U	3.6 U	4.4 U	3.5 U	3.6 U	4.2 U	3.6 U	3.6 U
Aroclor 1232	**NS**	**NS**	3.9 U	3.6 U	4.4 U	3.5 U	3.6 U	4.2 U	3.6 U	3.6 U
Aroclor 1242	**NS**	**NS**	3.9 U	3.6 U	4.4 U	3.5 U	3.6 U	4.2 U	3.6 U	3.6 U
Aroclor 1248	**NS**	**NS**	3.9 U	3.6 U	4.4 U	3.5 U	3.6 U	4.2 U	3.6 U	3.6 U
Aroclor 1254	**NS**	**NS**	3.9 U	3.6 U	4.4 U	3.5 U	3.6 U	4.2 U	3.6 U	3.6 U
Aroclor 1260	**NS**	**NS**	3.9 U	3.6 U	4.4 U	3.5 U	3.6 U	4.2 U	3.6 U	3.6 U
Aroclor 1262	**NS**	**NS**	3.9 U	3.6 U	4.4 U	3.5 U	3.6 U	4.2 U	3.6 U	3.6 U
Aroclor 1268	**NS**	**NS**	3.9 U	3.6 U	4.4 U	3.5 U	3.6 U	4.2 U	3.6 U	3.6 U
Total PCBs	**100**	**1,000**	ND	ND	ND	ND	ND	ND	ND	ND

Pesticides - µg/Kg

Dilution			**100**	**50**	**20**	**1**	**1**	**1**	**1**	**1**
4,4'-DDD	**3.3**	**13,000**	**65.9 D**	**49.6**	**37.2**	0.066 U	0.066 U	**4.3 JN**	0.073 U	0.07 U
4,4'-DDE	**3.3**	**8,900**	**41.9 D**	**32.8**	**33.6**	0.066 U	0.44	2.1 J	2.8	0.24 J
4,4'-DDT	**3.3**	**7,900**	**330 D**	**300**	**143**	0.066 U	0.066 U	2.7 J	0.073 U	0.07 U
Aldrin	**5**	**97**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.076 U	0.073 U	0.07 U
alpha-BHC	**20**	**480**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.076 U	0.073 U	0.07 U
alpha-Chlordane	**94**	**4,200**	1.9 J	3.5 U	12.4	0.066 U	0.066 U	1.1 JN	0.14 JN	0.07 U
beta-BHC	**36**	**360**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.59 JN	0.073 U	0.07 U
delta-BHC	**40**	**100,000**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.076 U	0.073 U	0.07 U
Dieldrin	**5**	**200**	**6.2 J**	**5.6**	**20.8**	0.066 U	0.066 U	4.2 JN	0.16 J	0.07 U
Endosulfan sulfate	**2,400**	**24,000**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.076 U	0.073 U	0.07 U
Endosulfan-I	**2,400**	**24,000**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.076 U	0.073 U	0.07 U
Endosulfan-II	**2,400**	**24,000**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.076 U	0.073 U	0.07 U
Endrin	**14**	**11,000**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.076 U	0.073 U	0.07 U
Endrin aldehyde	**NS**	**NS**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	1.9 JN	0.073 U	0.07 U
Endrin ketone	**NS**	**NS**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.076 U	0.073 U	0.07 U
gamma-BHC (Lindane)	**100**	**1,300**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.076 U	0.073 U	0.07 U
gamma-Chlordane	**NS**	**NS**	1.7 JN	3.5 U	7.8 J	0.066 U	0.066 U	2.7 J	0.18 JN	0.07 U
Heptachlor	**42**	**2,100**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.076 U	0.073 U	0.07 U
Heptachlor epoxide	**NS**	**NS**	0.069 U	3.5 U	1.6 U	0.066 U	0.066 U	0.076 U	0.073 U	0.07 U
Methoxychlor	**NS**	**NS**	14 U	7 U	3.2 U	0.13 U	0.13 U	0.15 U	0.15 U	0.14 U
Toxaphene	**NS**	**NS**	1.7 U	87 U	40 U	1.6 U	1.6 U	1.9 U	1.8 U	1.8 U

Notes: a = More than 40 % RPD for detected concentrations between the two GC columns.

Table 4
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Polychlorinated Biphenyls & Pesticides

Client ID Lab Sample ID Date Sampled Dilution Polychlorinated Biphenyls - µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-10 (0-2) JB60086-37 2/25/2014 1	SB-10 (0-2)B JB60086-35 2/19/2014 1	SB-10 (8-10) JB60086-33 2/19/2014 1	SB-10 (8-10)FD JB60086-20 2/19/2014 1	SB-11 (0-2) JB60086-21 2/19/2014 1	SB-11 (8-10) JB60086-22 2/19/2014 1	SB-12 (0-2) JB60086-23 2/18/2014 1
Aroclor 1016	**NS**	**NS**	3.8 U	3.8 U	3.4 U	3.5 U	3.7 U	4.3 U	3.6 U
Aroclor 1221	**NS**	**NS**	3.8 U	3.8 U	3.4 U	3.5 U	3.7 U	4.3 U	3.6 U
Aroclor 1232	**NS**	**NS**	3.8 U	3.8 U	3.4 U	3.5 U	3.7 U	4.3 U	3.6 U
Aroclor 1242	**NS**	**NS**	3.8 U	3.8 U	3.4 U	3.5 U	3.7 U	4.3 U	3.6 U
Aroclor 1248	**NS**	**NS**	3.8 U	3.8 U	3.4 U	3.5 U	3.7 U	4.3 U	3.6 U
Aroclor 1254	**NS**	**NS**	3.8 U	3.8 U	3.4 U	3.5 U	3.7 U	4.3 U	3.6 U
Aroclor 1260	**NS**	**NS**	3.8 U	3.8 U	3.4 U	3.5 U	8.4	4.3 U	3.6 U
Aroclor 1262	**NS**	**NS**	3.8 U	3.8 U	3.4 U	3.5 U	3.7 U	4.3 U	3.6 U
Aroclor 1268	**NS**	**NS**	3.8 U	3.8 U	3.4 U	3.5 U	3.7 U	4.3 U	3.6 U
Total PCBs	**100**	**1,000**	ND	ND	ND	ND	8.4	ND	ND
Pesticides - µg/Kg									
Dilution			**20**	**100**	**1**	**1**	**5**	**1**	**1**
4,4'-DDD	**3.3**	**13,000**	**4.6 D**	**5.4 J**	0.11 J	0.07 UJ	1 Ja	0.079 U	0.065 U
4,4'-DDE	**3.3**	**8,900**	**13.9 JD**	**118 JD**	0.67 J	0.07 UJ	2.4	0.079 U	0.2 J
4,4'-DDT	**3.3**	**7,900**	**77.8 JD**	**582 JD**	**3.8 J**	0.07 UJ	**14.7 D**	0.079 U	0.13 J
Aldrin	**5**	**97**	0.073 U	0.073 U	0.064 U	0.07 U	0.074 U	0.079 U	0.065 U
alpha-BHC	**20**	**480**	0.073 U	0.073 U	0.064 U	0.07 U	0.074 U	0.079 U	0.065 U
alpha-Chlordane	**94**	**4,200**	4.9 J	12.9 JD	0.15 J	0.07 UJ	1.3	0.079 U	0.22
beta-BHC	**36**	**360**	0.073 U	0.073 U	0.064 U	0.07 U	0.074 U	0.079 U	0.065 U
delta-BHC	**40**	**100,000**	0.073 U	0.073 U	0.064 U	0.07 U	0.074 U	0.079 U	0.065 U
Dieldrin	**5**	**200**	**7.7 JD**	**36.8 JD**	0.28 Ja	0.07 UJ	1.6	0.079 U	0.17 J
Endosulfan sulfate	**2,400**	**24,000**	0.073 U	0.073 U	0.064 U	0.07 U	0.074 U	0.079 U	0.065 U
Endosulfan-I	**2,400**	**24,000**	0.073 U	0.073 U	0.064 U	0.07 U	0.074 U	0.079 U	0.065 U
Endosulfan-II	**2,400**	**24,000**	0.073 U	0.073 U	0.064 U	0.07 U	0.074 U	0.079 U	0.065 U
Endrin	**14**	**11,000**	0.073 U	0.073 U	0.064 U	0.07 U	0.074 U	0.079 U	0.065 U
Endrin aldehyde	**NS**	**NS**	0.073 U	0.073 U	0.064 U	0.07 U	0.074 U	0.079 U	0.12
Endrin ketone	**NS**	**NS**	0.073 U	0.073 U	0.14 JNa	0.07 UJ	0.42 Ja	0.079 U	0.065 U
gamma-BHC (Lindane)	**100**	**1,300**	0.073 U	0.073 U	0.064 U	0.07 U	0.074 U	0.079 U	0.065 U
gamma-Chlordane	**NS**	**NS**	5.2	7.4 JD	0.12 J	0.07 UJ	1.3	0.079 U	0.2
Heptachlor	**42**	**2,100**	0.073 U	0.073 U	0.064 U	0.07 U	0.074 U	0.079 U	0.065 U
Heptachlor epoxide	**NS**	**NS**	0.37 JN	1.2 J	0.064 U	0.07 U	0.099 Ja	0.079 U	0.065 U
Methoxychlor	**NS**	**NS**	0.15 U	0.15 U	0.13 U	0.14 U	0.15 U	0.16 U	0.13 U
Toxaphene	**NS**	**NS**	1.8 U	1.8 U	1.6 U	1.8 U	1.9 U	2 U	1.6 U

Notes: a = More than 40 % RPD for detected concentrations between the two GC columns.

Table 4
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Polychlorinated Biphenyls & Pesticides

Client ID Lab Sample ID Date Sampled Dilution Polychlorinated Biphenyls - µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-8 (0-2) JB60086-32 2/19/2014 1	SB-8 (0-2) FD JB60086-15 2/19/2014 1	SB-8 (7-9) JB60086-16 2/19/2014 1	SB-8 (7-9)B JB60086-34 2/19/2014 1	SB-9 (0-2) JB60086-17 2/19/2014 1	SB-9 (8-10) JB60086-36 2/25/2014 1
Aroclor 1016	**NS**	**NS**	3.3 U	3.8 U	3.7 U	3.9 U	3.8 U	3.6 U
Aroclor 1221	**NS**	**NS**	3.3 U	3.8 U	3.7 U	3.9 U	3.8 U	3.6 U
Aroclor 1232	**NS**	**NS**	3.3 U	3.8 U	3.7 U	3.9 U	3.8 U	3.6 U
Aroclor 1242	**NS**	**NS**	3.3 U	3.8 U	3.7 U	3.9 U	3.8 U	3.6 U
Aroclor 1248	**NS**	**NS**	3.3 U	3.8 U	3.7 U	3.9 U	3.8 U	3.6 U
Aroclor 1254	**NS**	**NS**	3.3 U	3.8 U	3.7 U	3.9 U	3.8 U	3.6 U
Aroclor 1260	**NS**	**NS**	3.3 U	3.8 U	3.7 U	3.9 U	3.8 U	3.6 U
Aroclor 1262	**NS**	**NS**	3.3 U	3.8 U	3.7 U	3.9 U	3.8 U	3.6 U
Aroclor 1268	**NS**	**NS**	3.3 U	3.8 U	3.7 U	3.9 U	3.8 U	3.6 U
Total PCBs	**100**	**1,000**	ND	ND	ND	ND	ND	ND

Pesticides - µg/Kg

Dilution			**100**	**100**	**100**	**100**	**100**	**100**
4,4'-DDD	**3.3**	**13,000**	**4.4 J**	**25 JD**	**58 JD**	**20.7 JD**	**80.5 D**	**29.1 JD**
4,4'-DDE	**3.3**	**8,900**	**7.3 JD**	**5.9 JN**	**61.1 D**	**95.4 D**	**37.4 D**	**214 D**
4,4'-DDT	**3.3**	**7,900**	**150 JD**	**50.4 JD**	**96.7 JD**	**561 JD**	**110 D**	**1,130 D**
Aldrin	**5**	**97**	0.075 U	0.071 U	0.079 U	0.079 U	0.078 U	0.072 U
alpha-BHC	**20**	**480**	0.64 JN	0.29 JN	1.6 JN	0.079 UJ	0.078 U	0.072 U
alpha-Chlordane	**94**	**4,200**	0.075 UJ	3 J	20.3 D	30.4 D	7.1	40.2 JD
beta-BHC	**36**	**360**	0.075 U	0.071 U	0.079 U	0.079 U	0.078 U	0.072 U
delta-BHC	**40**	**100,000**	0.075 U	0.071 U	0.079 U	0.079 U	0.078 U	0.072 U
Dieldrin	**5**	**200**	4.2 J	**8.5 JD**	**29.2 JD**	**26.6 D**	**5.3** JNa	**33.9 D**
Endosulfan sulfate	**2,400**	**24,000**	0.075 U	0.071 U	0.079 U	0.079 U	0.078 U	0.072 U
Endosulfan-I	**2,400**	**24,000**	0.075 U	0.071 U	0.079 U	0.079 U	0.078 U	0.072 U
Endosulfan-II	**2,400**	**24,000**	0.075 UJ	1.3 JN	4.4 JN	0.079 UJ	0.078 U	0.072 U
Endrin	**14**	**11,000**	0.075 UJ	12.5 JD	**29.4 JD**	0.079 UJ	0.078 U	0.072 U
Endrin aldehyde	**NS**	**NS**	0.075 U	0.071 U	0.079 U	0.079 U	0.078 U	0.072 U
Endrin ketone	**NS**	**NS**	0.075 U	0.071 U	0.079 U	0.079 U	0.078 U	0.072 U
gamma-BHC (Lindane)	**100**	**1,300**	0.79 JN	0.071 U	0.079 U	0.079 U	0.078 U	1 JN
gamma-Chlordane	**NS**	**NS**	1.9 JN	2.9 J	12 D	24.7 D	5.5	45.2 D
Heptachlor	**42**	**2,100**	0.49 J	0.071 UJ	0.079 U	0.079 U	0.078 U	0.072 U
Heptachlor epoxide	**NS**	**NS**	0.7 J	0.071 UJ	1.3 J	0.079 UJ	0.078 U	0.072 U
Methoxychlor	**NS**	**NS**	0.15 U	0.14 U	0.16 UJ	23.8 JD	0.16 U	0.14 U
Toxaphene	**NS**	**NS**	1.9 U	1.8 U	2 U	2 U	1.9 U	1.8 U

Notes: a = More than 40 % RPD for detected concentrations between the two GC columns.

Table 4
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Analytical Results
Polychlorinated Biphenyls & Pesticides

Client ID Lab Sample ID Date Sampled Dilution Polychlorinated Biphenyls - µg/Kg	NYSDEC Part 375 Unrestricted SCO µg/Kg	NYSDEC Part 375 Restricted Residential SCO µg/Kg	SB-13 (0-2) JB60086-24 2/19/2014 10	SB-13 (8-10) JB60086-25 2/19/2014 1	SB-14 (0-2) JB60086-26 2/19/2014 1	SB-14 (8-10) JB60086-27 2/19/2014 1	FIELD BLANK JB60086-30 2/19/2014 1	FIELD BLANK JB60086-31 2/19/2014 1
Aroclor 1016	**NS**	**NS**	3.8 U	3.9 U	3.7 U	3.5 U	0.05 U	0.05 U
Aroclor 1221	**NS**	**NS**	3.8 U	3.9 U	3.7 U	3.5 U	0.05 U	0.05 U
Aroclor 1232	**NS**	**NS**	3.8 U	3.9 U	3.7 U	3.5 U	0.05 U	0.05 U
Aroclor 1242	**NS**	**NS**	3.8 U	3.9 U	3.7 U	3.5 U	0.05 U	0.05 U
Aroclor 1248	**NS**	**NS**	910 D	110	3.7 U	3.5 U	0.05 U	0.05 U
Aroclor 1254	**NS**	**NS**	3.8 U	3.9 U	3.7 U	3.5 U	0.05 U	0.05 U
Aroclor 1260	**NS**	**NS**	3.8 U	3.9 U	3.7 U	3.5 U	0.05 U	0.05 U
Aroclor 1262	**NS**	**NS**	3.8 U	3.9 U	3.7 U	3.5 U	0.05 U	0.05 U
Aroclor 1268	**NS**	**NS**	3.8 U	3.9 U	3.7 U	3.5 U	0.05 U	0.05 U
Total PCBs	**100**	**1,000**	**910**	**110**	ND	ND	ND	ND

Pesticides - µg/Kg

Dilution			10	10,000	100	1	1	1
4,4'-DDD	**3.3**	**13,000**	0.071 U	**2,180 D**	**48.8 D**	0.66	0.001 U	0.001 U
4,4'-DDE	**3.3**	**8,900**	**4.6 Ja**	**661 D**	**214 D**	1.8	0.001 U	0.001 U
4,4'-DDT	**3.3**	**7,900**	**37 D**	**10,400 D**	**610 D**	**3.5**	0.001 U	0.001 U
Aldrin	**5**	**97**	0.071 U	0.07 U	0.071 U	0.068 U	0.001 U	0.001 U
alpha-BHC	**20**	**480**	0.071 U	0.07 U	0.071 U	0.068 U	0.001 U	0.001 U
alpha-Chlordane	**94**	**4,200**	1.6 J	0.07 U	30.1 D	0.23 Ja	0.001 U	0.001 U
beta-BHC	**36**	**360**	0.071 U	0.84 JNa	0.071 U	0.068 U	0.001 U	0.001 U
delta-BHC	**40**	**100,000**	0.071 U	1.8 JNa	0.071 U	0.068 U	0.001 U	0.001 U
Dieldrin	**5**	**200**	**6.2** JNa	3.6	**74.5 D**	0.8	0.001 U	0.001 U
Endosulfan sulfate	**2,400**	**24,000**	0.071 U	0.07 U	0.64 JN	0.068 U	0.001 U	0.001 U
Endosulfan-I	**2,400**	**24,000**	0.071 U	0.07 U	0.071 U	0.068 U	0.001 U	0.001 U
Endosulfan-II	**2,400**	**24,000**	0.071 U	0.07 U	0.071 U	0.068 U	0.001 U	0.001 U
Endrin	**14**	**11,000**	0.071 U	0.07 U	3.3	0.068 U	0.001 U	0.001 U
Endrin aldehyde	**NS**	**NS**	0.071 U	0.07 U	0.071 U	0.068 U	0.001 U	0.001 U
Endrin ketone	**NS**	**NS**	0.071 U	0.07 U	4.9 J	0.25	0.001 U	0.001 U
gamma-BHC (Lindane)	**100**	**1,300**	1.7 Ja	1.4 Ja	0.15 JN	0.068 U	0.001 U	0.001 U
gamma-Chlordane	**NS**	**NS**	2.7 Ja	0.07 U	29 D	0.2	0.001 U	0.001 U
Heptachlor	**42**	**2,100**	0.071 U	0.07 U	0.23 JN	0.068 U	0.001 U	0.001 U
Heptachlor epoxide	**NS**	**NS**	0.071 U	0.07 U	0.071 U	0.068 U	0.001 U	0.001 U
Methoxychlor	**NS**	**NS**	0.14 U	0.14 U	3.8 JN	0.47 Ja	0.002 U	0.002 U
Toxaphene	**NS**	**NS**	1.8 U	1.8 U	1.8 U	1.7 U	0.025 U	0.025 U

Notes: a = More than 40 % RPD for detected concentrations between the two GC columns.

Table 5
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Soil Vapor Analytical Results
Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled Dilution µg/m3	NYSDOH 2003 Soil Vapor Intrusion Air Guideline Value µg/m^3	AA-1 JB60176-7 2/20/2014 1	SV-1 JB60176-1 2/20/2014 1	SV-2 JB60176-2 2/20/2014 1	SV-3 JB60176-3 2/20/2014 1	SV-4 JB60176-4 2/20/2014 1.55	SV-5 JB60176-5 2/20/2014 1	SV-6 JB60176-6 2/20/2014 1.52
1,1,1-Trichloroethane	100	<0.087 U	9.8	<0.36 U	<0.36 U	<0.36 U	8.2	<0.36 U
1,1,2,2-Tetrachloroethane	NS	<0.21 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U
1,1,2-Trichloroethane	NS	<0.17 U	<0.65 U	<0.65 U	<0.65 U	<0.65 U	<0.65 U	<0.65 U
1,1-Dichloroethane	NS	<0.065 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U
1,1-Dichloroethylene	NS	<0.083 U	<0.33 U	<0.33 U	<0.33 U	<0.33 U	<0.33 U	<0.33 U
1,2,4-Trichlorobenzene	NS	<0.59 UJ	<2.4 UJ	<2.4 UJ	<2.4 UJ	<2.4 UJ	<2.4 UJ	<2.4 UJ
1,2,4-Trimethylbenzene	NS	1.7	9.3	8.8	3.7 J	15	3 J	29
1,2-Dibromoethane	NS	<0.21 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U
1,2-Dichloroethane	NS	<0.065 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U
1,2-Dichloropropane	NS	1.3	<0.74 U	<0.74 U	<0.74 U	<0.74 U	<0.74 U	<0.74 U
1,3,5-Trimethylbenzene	NS	<0.074 U	2.6 J	2.5 J	2 J	4.8	<0.29 U	8.8
1,3-Butadiene	NS	<0.044 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U
1,4-Dioxane	NS	<0.22 U	<0.86 U	<0.86 U	<0.86 U	<0.86 U	3.4	<0.86 U
2,2,4-Trimethylpentane	NS	0.7 J	5.1	2.2 J	<0.39 U	<0.39 U	<0.39 U	<0.39 U
2-Chlorotoluene	NS	<0.10 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U
2-Hexanone	NS	0.61 J	<0.40 U	<0.40 U	<0.40 U	<0.40 U	<0.40 U	<0.40 U
3-Chloropropene	NS	<0.088 U	<0.34 U	<0.34 U	<0.34 U	<0.34 U	<0.34 U	<0.34 U
4-Ethyltoluene	NS	<0.074 U	5.9	6.9	2.9 J	6.4	<0.29 U	13
Acetone	NS	23	39.7	33.7	168	197	314	175
Benzene	NS	2	3.1	4.8	4.2	2.7	4.8	4.2
Benzyl Chloride	NS	<0.13 U	<0.51 U	<0.51 U	<0.51 U	<0.51 U	<0.51 U	<0.51 U
Bromodichloromethane	NS	<0.17 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U
Bromoethene	NS	<0.061 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U
Bromoform	NS	<0.23 U	<0.89 U	<0.89 U	<0.89 U	<0.89 U	<0.89 U	<0.89 U
Bromomethane	NS	<0.066 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U
Carbon disulfide	NS	<0.053 U	<0.21 U	2.6	3	<0.21 U	1.5 J	7.8
Carbon tetrachloride	5	0.69 J	**8.2**	<0.28 U	<0.28 U	<0.28 U	<0.28 U	<0.28 U
Chlorobenzene	NS	<0.12 U	<0.46 U	<0.46 U	<0.46 U	<0.46 U	<0.46 U	<0.46 U
Chloroethane	NS	<0.053 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U
Chloroform	NS	<0.093 U	60.1	48	<0.36 U	<0.36 U	<0.36 U	<0.36 U
Chloromethane	NS	0.99	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U
cis-1,2-Dichloroethylene	NS	<0.11 U	<0.44 U	<0.44 U	<0.44 U	<0.44 U	<0.44 U	<0.44 U
cis-1,3-Dichloropropene	NS	<0.086 U	<0.34 U	<0.34 U	<0.34 U	<0.34 U	<0.34 U	<0.34 U
Cyclohexane	NS	0.45 J	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U
Dibromochloromethane	NS	<0.25 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Dichlorodifluoromethane	NS	3	7.9	7.9	5.4	3 J	2.9 J	3.1 J
Ethanol	NS	14	10	15	11	17	13	25.1
Ethyl Acetate	NS	2.6	<0.83 U	<0.83 U	<0.83 U	4.7	3.1	<0.83 U
Ethylbenzene	NS	0.78 J	13	17	14	16	12	22
Freon 113	NS	4.1	7.7	27	57	11	12	3.7 J
Freon 114	NS	<0.15 U	<0.59 U	13	11	<0.59 U	<0.59 U	<0.59 U
Heptane	NS	1	5.7	11	7.8	4.9	11	6.1
Hexachlorobutadiene	NS	<0.67 U	<2.7 U	<2.7 U	<2.7 U	<2.7 U	<2.7 U	<2.7 U
Hexane	NS	2.6	9.9	21	29	6.3	11	5.6
Isopropyl Alcohol	NS	3.2	<0.37 U	<0.37 U	<0.37 U	<0.37 U	<0.37 U	1.2 J
m,p-Xylene	NS	3.3	55.6	62.1	44.7	68.6	28	99.5
m-Dichlorobenzene	NS	<0.15 U	<0.60 U	<0.60 U	<0.60 U	<0.60 U	<0.60 U	<0.60 U
Methyl ethyl ketone	NS	6.8	3.5	3.2	3.5	1.8 J	2.5	4.4
Methyl Isobutyl Ketone	NS	<0.12 U	<0.49 U	<0.49 U	<0.49 U	<0.49 U	<0.49 U	<0.49 U
Methyl Tert Butyl Ether	NS	<0.061 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U
Methylene chloride	60	5.9	11	31	**77.5**	13	14	5.9
Methylmethacrylate	NS	<0.16 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U
o-Dichlorobenzene	NS	<0.17 U	<0.72 U	<0.72 U	<0.72 U	<0.72 U	<0.72 U	<0.72 U
o-Xylene	NS	1.3	11	15	11	19	8.7	27
p-Dichlorobenzene	NS	<0.13 U	<0.52 U	<0.52 U	<0.52 U	<0.52 U	<0.52 U	<0.52 U
Propylene	NS	<0.053 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	7.6
Styrene	NS	<0.085 U	<0.34 U	<0.34 U	<0.34 U	<0.34 U	<0.34 U	<0.34 U
Tertiary Butyl Alcohol	NS	<0.13 U	<0.55 U	<0.55 U	<0.55 U	<0.55 U	3.3	<0.55 U
Tetrachloroethylene	30	0.81	2.8	1 J	3.1	4	1.6	3.7 U
Tetrahydrofuran	NS	0.77	<0.53 U	<0.53 U	<0.53 U	<0.53 U	<0.53 U	<0.53 U
Toluene	NS	4.5	45.6	54.6	54.3	44.8	67.8	47.9
trans-1,2-Dichloroethylene	NS	<0.059 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U
trans-1,3-Dichloropropene	NS	<0.095 U	<0.38 U	<0.38 U	<0.38 U	<0.38 U	<0.38 U	<0.38 U
Trichloroethylene	5	<0.10 U	0.91	<0.42 U	<0.42 U	<0.42 U	<0.42 U	<0.42 U
Trichlorofluoromethane	NS	1.9	82	12	6.2	4.9	19	<0.31 U
Vinyl Acetate	NS	<0.20 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U
Vinyl chloride	NS	<0.043 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.17 U
Xylenes (total)	NS	4.3	66.9	76.9	56	87.3	36	127

Tables 1-5
Melrose Commons Site C - Family
Bronx, NY
Remedial Investigation Analytical Results
Notes

GENERAL

NS :	No cleanup objective listed.
ND :	No Detections
U :	The analyte was not detected at the indicated concentration.
J :	The concentration given is an estimated value.
UJ :	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
UR :	The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
D :	Analyte concentration obtained from dilution.
FD :	Field Duplicate
JD :	The concentration given is an estimated value; in addition, the concentration has been obtained from a dilution.
JN :	The analysis indicates the presence of an analyte that has been "tentatively identified," and the associated numerical value represents its approximate quantity.
SB-8 (7-9) B :	Field Duplicate of SB-8 (7-9)
SB-10 (0-2) B :	Field Duplicate of SB-10 (0-2)

SOIL

Exceedences of Part 375 Unrestricted Soil Cleanup Objectives are highlighted in bold font.

Exceedences of Part 375 Restricted Residential Soil Cleanup Objectives are highlighted in gray.

Part 375 Soil Cleanup Objectives :	Soil Clean-up Objectives listed in NYSDEC (New York State Department of Environmental Conservation) "Part 375" Regulations (6 NYCRR Part 375).
µg/kg :	micrograms per kilogram = parts per billion (ppb)
mg/kg :	milligrams per kilogram = parts per million (ppm)
µg/L :	micrograms per Liter = parts per billion (ppb)
mg/L :	milligrams per Liter = parts per million (ppm)

SOIL VAPOR

NYSDOH Soil Vapor Intrusion Air Guidance Value :	NYSDOH Air Guideline Values (AGVs) presented in the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 (“NYSDOH Vapor Intrusion Guidance Document”).
µg/m^3 :	micrograms per cubic meter of air

APPENDIX A
GEOPHYSICAL INVESTIGATION REPORT

ENVIROPROBE SERVICE INCORPORATED

GEOPHYSICAL INVESTIGATION REPORT

PERFORMED AT:

440 East 162nd Street
Bronx, NY 10451

PREPARED FOR:

Amy Jordan
AKRF
440 Park Avenue South 7th Floor
New York, NY 10016

PREPARED BY:

John Rango
Geophysical Technician
Enviroprobe Service, Inc.
908 N. Lenola Road
Moorestown, NJ 08057
Phone: (856) 858-8584
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February 26, 2014

1.0 INTRODUCTION

Enviroprobe Service, Inc. (Enviroprobe) is an environmental investigation services firm which provides monitoring well installation (HSA), Geoprobe (DPT) drilling services and Environmental & Engineering Geophysics (EEG) services to the environmental consulting and engineering community.

Enviroprobe conducted a subsurface geophysical investigation at the subject property within client-specified areas of concern. Due to conditions and objectives, the investigation utilized a Sensors and Software cart-mounted ground penetrating radar (GPR) unit with a 250 MHz antenna, a Fisher TW-6 metallic locator, a Radiodetection multi-frequency transmitter, and a Radiodetection receiver.

Ground penetrating radar (commonly called GPR) is a geophysical method that has been developed over the past thirty years for shallow, high-resolution, subsurface investigations of the earth. GPR uses high frequency pulsed electromagnetic waves (generally 10 MHz to 2,000 MHz) to acquire subsurface information. An EM wave is propagated downward into the ground by a transmitting antenna. Where abrupt changes in electrical properties occur in the subsurface, a portion of the energy is reflected back to the surface. This reflected wave is detected by a receiver antenna and transmitted to a control unit for real time processing and display. The penetration depth of the GPR unit varies from several inches to tens of feet according to site-specific conditions. The penetration depth decreases with increased soil conductivity. The penetration depth is the greatest in ice, dry sands, and fine gravels. Clayey, highly saline or saturated soils, areas covered by concrete, foundry slag, or other highly conductive materials greatly reduce GPR penetration. GPR is a method that is commonly used for environmental, engineering, archaeological, and other shallow investigations.

The Fisher TW-6 metallic locator is designed to find pipes, cables and other metallic objects such as underground storage tanks (USTs). The TW-6 transmitter generates an electromagnetic field that induces electrical currents in the subsurface. These currents produce a secondary electromagnetic field that is measured by the TW-6 receiver. One surveyor can carry both the transmitter and receiver together to search for underground metallic objects, although the TW-6 response can also be affected by the electrical properties of non-metallic materials in the subsurface.

The Radiodetection (RD) transmitter and receiver are commonly used for pipe and cable locating. The multi-frequency transmitter can be directly connected, clamped, or used to induce a signal in a target line while the multi-frequency receiver is used to measure the signal from energized lines.

2.0 SCOPE OF WORK

On February 26, 2014, a geophysical technician from Enviroprobe Service Inc. was mobilized to the subject property to perform a geophysical investigation. The

purpose of the investigation was to clear proposed boring locations and designate utilities/conduits inside and outside of an abandoned building as well as the side and rear (corner property) of building. The ground surface of the survey area consisted of concrete and natural soil surfaces.

3.0 SURVEY RESULTS

The utility survey was conducted using a cart-mounted GPR unit and a RD unit. The RD unit was used to trace common utilities from sources in and around the survey area. The RD receiver was also used in the passive mode to search for live underground electrical power cables and other utilities emitting 60Hz electromagnetic signals. When possible, the location of utilities was confirmed with the GPR. The GPR survey was also performed in a grid pattern in at least two orthogonal directions to search for evident and non-evident underground utilities. Utilities were marked on site with spray paint. Green – storm drain line inside of building in the back room furthest from front of building facing 162nd Street.

The GPR and TW-6 were used in a grid pattern over all client specified areas of the site. Based on the results of the GPR and TW-6 surveys, a metallic anomaly consistent with an UST and measuring approximately 7 ft by 8.5 ft was detected and delineated in rear of property.

4.0 LIMITATIONS

Due to surface conditions and subsurface content, the GPR penetration depth was estimated as about 3 feet in the majority of the survey area.

Due to the dielectric properties of the subsurface, plastic polymer and fiberglass utilities may not have been detected.

The underground utility survey was conducted in compliance with the industry standard of care guidelines found in ASCE 38-02 (Level B).

5.0 WARRANTIES

The field observations and measurements reported herein are considered sufficient in detail and scope for this project. Enviroprobe Service, Inc. warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted environmental engineering methods. There is a possibility that conditions may exist which could not be identified within the scope of this project and were not apparent during the site activities performed for this project.

Enviroprobe represents that the services were performed in a manner consistent with that level of care and skill ordinarily exercised by environmental consultants under similar circumstances. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this agreement, or in any report, document, or otherwise.

Enviroprobe Service, Inc. believes that the information provided in this report is reliable. However, Enviroprobe cannot warrant or guarantee that the information provided by others is complete or accurate. No other warranties or guarantees are implied or expressed.

GPR data is subject to signal anomalies and operator interpretation. The GPR data is intended to provide the locations of areas of concern requiring additional investigation or the approximate location of underground structures and utilities. Great care must be utilized when excavating and/or drilling around underground structures and utilities since GPR data can only be used for estimation purposes and GPR data is subject to misinterpretation. Enviroprobe can not guarantee that utilities, post-tension cables, and/or rebar will not be incurred during drilling, cutting, coring, or excavating activities.

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APPENDIX B
SOIL BORING LOGS, AND SOIL VAPOR AND AMBIENT AIR SAMPLING LOGS

AKRF, Inc. Ambient Air Sampling Log

Environmental Consultants

Job No: 11901 **Client:** Phipps Houses

Project Location: 440 East 162nd Street, Bronx, NY **Sampled By:** A. Jordan, R. Andrews

Date: 02/21/2014

Laboratory Sample (Summa Canister)

Summa No. A0796 **Flow Control No.** FC162

Sample ID: AA-1

Time Started: 11:13 **Vacuum:** -30 In Hg

Time Stopped: 13:20 **Vacuum:** -8 In Hg

PID Readings:

Time 11:13 Reading Not Detected

Time 11:45 Reading Not Detected

Time 12:17 Reading Not Detected

Time 12:44 Reading Not Detected

Potential VOC sources in vicinity: None

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 1**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method:	**Geoprobe**
Sampling Method:	**5' Macrocore**
Driller :	Eastern Environmental
Sampler:	A. Jordan, R. Andrews

Drilling

Start Time	9:50	**Finish Time**	10:10
Date	2/18/2014		
Weather:	Clear, 39 °F		

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1	35	Top 1": CONCRETE (FILL).	ND	Dry	ND	ND	SB-1 (0-2)
2		Middle 1": ASPHALT (FILL).	ND	Dry	ND	ND	
3							
4		Bottom 33": Red-brown SAND (FILL).	ND	Dry	ND	ND	
5							
6	24	Brown SAND, trace fine Gravel (FILL).	ND	Dry	ND	ND	
7							
8							SB-1 (8-10)
9							
10							
11	14	Top 10": Brown SAND (FILL).	Chemical-like	Dry	ND	ND	
12		Bottom 4": White SAND (FILL).		Dry	ND	ND	
13							
14							
15							
16							
17							
18							
19							
20							

Notes: End of boring at 12 feet below ground surface.

Groundwater not encountered.

PID = photoionization detector

ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 2**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: 5' Macrocore
Driller : Eastern Environmental
Sampler: A. Jordan, R. Andrews

Drilling
Start Time 11:05 **Finish Time** 11:20
Date 2/18/2014
Weather: Clear, 39 °F

Surface Condition: Concrete

Depth (feet)	Recovery (Inches)		Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1	35	Top 1": CONCRETE (FILL).	ND	Dry	ND	ND	SB-2 (0-2)
2							
3		Bottom 33": Browm SAND (FILL).	ND	Dry	ND	ND	
4							
5							
6	24	Brown SAND, trace fine Gravel (FILL).	ND	Dry	ND	ND	
7							
8							SB-2 (8-10)
9							
10							
11	14	Brown SAND (FILL).	ND	Dry	ND	ND	
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: End of boring at 12 feet below ground surface.
Groundwater not encountered.
PID = photoionization detector ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 3**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: 5' Macrocore
Driller : Eastern Environmental
Sampler: A. Jordan, R. Andrews

Drilling
Start Time 13:10 **Finish Time** 13:25
Date 2/18/2014
Weather: Clear, 39 °F

Depth (feet)	Recovery (Inches)	Surface Condition: Grass, Soil	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1-5	25	Brown SAND, some Brick (FILL).	ND	Dry	ND	ND	SB-3 (0-2)
6-10	17	Brown SAND, trace Brick, trace Asphalt, trace Rock (FILL).	ND	Dry	ND	ND	SB-3 (8-10)
11	12	Top 11": Brown SAND, trace fine to medium Gravel (FILL).	ND	Dry	ND	ND	
12		Bottom 1": ROCK (FILL).	ND	Dry	ND	ND	
13-20							

Notes: End of boring at 12 feet below ground surface.
Groundwater not encountered.
PID = photoionization detector ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 4**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: 5' Macrocore
Driller : Eastern Environmental
Sampler: A. Jordan, R. Andrews

Drilling
Start Time 8:56 **Finish Time** 9:08
Date 2/19/2014
Weather: Rain, 45 °F

Depth (feet)	Recovery (Inches)	Surface Condition: Grass, Soil	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1	11	Brown SAND, some Brick, trace fine to coarse Gravel, trace Wood (FILL).	ND	Dry	ND	ND	SB-4 (0-2)
2							
3							
4							
5							
6	18	Brown SAND, some Brick, trace fine to coarse Gravel, trace Wood (FILL).	ND	Dry	ND	ND	
7							
8							SB-4 (8-10)
9							
10							
11	13	Top 4": Brown SAND, some Brick (FILL).	ND	Dry	ND	ND	
12		Bottom 9": ROCK.	ND	Dry	ND	ND	
13							
14							
15							
16							
17							
18							
19							
20							

Notes: End of boring at 13 feet below ground surface.
Groundwater not encountered.
PID = photoionization detector ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 5**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: 5' Macrocore
Driller : Eastern Environmental
Sampler: A. Jordan, R. Andrews

Drilling
Start Time 8:15 **Finish Time** 8:25
Date 2/19/2014
Weather: Rain, 45 °F

Depth (feet)	Recovery (Inches)	Surface Condition: Grass, Soil	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1 2 3 4 5	13	Dark brown SAND, some Brick, trace fine to coarse Gravel (FILL).	ND	Dry	ND	ND	SB-5 (0-2)
6 7 8 9 10	21	Brown SAND, some fine to coarse Gravel, trace Wood, trace Brick (FILL).	ND	Dry	ND	ND	SB-5 (8-10)
11 12 13 14 15	14	Brown SAND, some fine to coarse Gravel, trace Wood, trace Brick (FILL).	ND	Dry	ND	ND	
16 17 18 19 20							

Notes: End of boring at 15 feet below ground surface.
Groundwater not encountered.
PID = photoionization detector ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 6**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method:	**Geoprobe**
Sampling Method:	**5' Macrocore**
Driller :	Eastern Environmental
Sampler:	A. Jordan, R. Andrews

Drilling

Start Time	11:05	**Finish Time**	11:20
Date	2/19/2014		
Weather:	Rain, 45 °F		

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1 – 5	17	Brown SAND, some Brick, some Wood, trace fine to coarse Gravel (FILL).	ND	Dry	ND	ND	SB-6 (0-2)
6 – 7	20	Dark brown SAND, some fine to coarse Gravel, trace Mica (FILL).	ND	Dry	ND	ND	SB-6 (5-7)
8 – 20							

Notes: End of boring at 7 feet below ground surface.

Groundwater not encountered.

PID = photoionization detector

ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 7**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method:	**Geoprobe**
Sampling Method:	**5' Macrocore**
Driller :	Eastern Environmental
Sampler:	A. Jordan, R. Andrews

Drilling

Start Time	10:05	**Finish Time**	10:55
Date	2/18/2014		
Weather:	Clear, 39 °F		

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1	38	Top 1": CONCRETE (FILL).	ND	Dry	ND	ND	SB-6 (0-2)
2							
3		Middle 1": BRICK (FILL).	ND	Dry	ND	ND	
4		Bottom 36": Brown SAND, some Asphalt, trace fine to coarse Gravel (FILL).	ND	Dry	ND	ND	
5							
6	8	Top 7": Brown SAND, trace fine Gravel (FILL).	ND	Dry	ND	ND	SB-7 (5-7)
7		Bottom 1": Brown SAND, some Mica (FILL).	ND	Dry	ND	ND	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: End of boring at 7 feet below ground surface.

Groundwater not encountered.

PID = photoionization detector

ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 8**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method:	**Geoprobe**
Sampling Method:	**5' Macrocore**
Driller :	Eastern Environmental
Sampler:	A. Jordan, R. Andrews

Drilling

Start Time	13:40	**Finish Time**	14:00
Date	2/19/2014		
Weather:	Rain, 45 °F		

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1 2 3 4 5	22	Brown SAND, some Brick, trace fine to coarse Gravel (FILL).	ND	Dry	ND	ND	SB-8 (0-2)
6 7 8 9	17	Brown SAND, some Brick, trace fine to coarse Gravel (FILL).	ND	Dry	ND	ND	SB-8 (7-9)
10 11 12 13 14 15 16 17 18 19 20							

Notes: End of boring at 9 feet below ground surface.

Groundwater not encountered.

PID = photoionization detector ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 9**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method:	**Geoprobe**
Sampling Method:	**5' Macrocore**
Driller :	Eastern Environmental
Sampler:	A. Jordan, R. Andrews

Drilling

Start Time	8:36	**Finish Time**	8:41
Date	2/19/2014		
Weather:	Rain, 45 °F		

Depth (feet)	Recovery (Inches)	Surface Condition: Grass, Soil	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1	15	Brown SAND, some Brick, some fine to medium Gravel, trace Organics (FILL).	ND	Dry	ND	ND	SB-8 (0-2)
2							
3							
4							
5							
6	24	Top 5": BRICK, some Wood, some Ash, trace Debris (FILL).	ND	Dry	ND	ND	
7							
8		Bottom 19": Brown SAND, trace fine Gravel (FILL).	ND	Dry	ND	ND	SB-8 (8-10)
9							
10				Moist @ 10'			
11	25	Top 3": Brown SAND, some Brick (FILL).	ND	Moist	ND	ND	
12							
13		Bottom 22": Brown and white SAND (FILL).	ND	Moist	ND	ND	
14							
15							
16							
17							
18							
19							
20							

Notes: End of boring at 15 feet below ground surface.

Groundwater not encountered.

PID = photoionization detector ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 10**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method:	**Geoprobe**
Sampling Method:	**5' Macrocore**
Driller :	Eastern Environmental
Sampler:	A. Jordan, R. Andrews

Drilling

Start Time	14:55	**Finish Time**	15:20
Date	2/19/2014		
Weather:	Rain, 45 °F		

Depth (feet)	Recovery (Inches)	Surface Condition: Grass, Soil	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1	17	Brown SAND, some Brick, trace fine to coarse Gravel, trace Asphalt (FILL).	ND	Dry	ND	ND	SB-10 (0-2)
2							
3							
4							
5							
6	36	Top 6": Brown SAND, some Brick, trace fine to coarse Gravel, trace Asphalt (FILL).	ND	Dry	ND	ND	
7							
8		Bottom 30": Red-brown SAND, trace fine to coarse Gravel (FILL).	ND	Dry	ND	ND	SB-10 (8-10)
9							
10							
11	42	White and brown SAND, trace fine to medium Gravel (FILL).	ND	Moist @ 12'	ND	ND	
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: End of boring at 15 feet below ground surface.

Groundwater not encountered.

PID = photoionization detector

ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 11**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method:	**Geoprobe**
Sampling Method:	**5' Macrocore**
Driller :	Eastern Environmental
Sampler:	A. Jordan, R. Andrews

Drilling

Start Time	9:46	**Finish Time**	9:57
Date	2/19/2014		
Weather:	Rain 45 °F		

Depth (feet)	Recovery (Inches)	Surface Condition: Grass, Soil	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1 2 3 4 5	36	Brown SAND, some fine to coarse Gravel, trace Brick (FILL).	ND	Dry	ND	ND	SB-11 (0-2)
6 7 8 9 10	26	Brown SAND, some fine to coarse Gravel, trace Silty Sand (FILL).	ND	Dry Moist @ 10'	ND	ND	SB-11 (8-10)
11 12 13 14 15	23	Brown-gray SAND, some fine to coarse Gravel (FILL).	ND	Moist	ND	ND	
16 17 18 19 20							

Notes: End of boring at 15 feet below ground surface.

Groundwater not encountered.

PID = photoionization detector ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 12**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: **Hand Auger**
Sampling Method: **Hand Auger**
Driller : Eastern Environmental
Sampler: A. Jordan, R. Andrews

Drilling
Start Time 14:50 **Finish Time** 14:55
Date 2/18/2014
Weather: Clear, 39 °F

Depth (feet)	Recovery (Inches)	Surface Condition: Soil	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1 – 2	14	Brown SAND, some fine to coarse Gravel (FILL).	ND	Dry	ND	ND	SB-12 (0-2)
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: End of boring at 2 feet below ground surface.
Groundwater not encountered.
PID = photoionization detector ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 13**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: 5' Macrocore
Driller : Eastern Environmental
Sampler: A. Jordan, R. Andrews

Drilling
Start Time 10:30 **Finish Time** 11:00
Date 2/19/2014
Weather: Rain, 45 °F

Depth (feet)	Recovery (inches)	Surface Condition: Grass, Soil	Odor	Moisture	PPM	NAPL	Samples Collected for Lab Analysis
1	25	Brown SAND, some Brick, trace fine to coarse Gravel, trace Wood (FILL).	ND	Dry	ND	ND	SB-13 (0-2)
2							
3							
4							
5							
6	21	Top 10": Brown SAND, some Brick, trace fine to coarse Gravel, trace Wood (FILL).	ND	Dry	ND	ND	
7							
8		Bottom 11": ROCK, trace brown-black SAND, trace Clay.	Strong Petroleum-like odor @ 10'	Moist @ 10'	121	ND	SB-13 (8-10)
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: End of boring at 10 feet below ground surface.
Groundwater not encountered.

PID = photoionization detector PPM= parts per million ND = Not Detected

SOIL BORING LOG

Melrose Commons Site C

AKRF Project Number: 11901

Boring No. **SB- 14**

Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Geoprobe
Sampling Method: 5' Macrocore
Driller : Eastern Environmental
Sampler: A. Jordan, R. Andrews

Drilling
Start Time 11:55 **Finish Time** 12:03
Date 2/19/2014
Weather: Rain, 45 °F

Depth (feet)	Recovery (Inches)	Surface Condition: Grass, Soil	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1	19	Top 2": Brown SAND, some Organics, trace Brick (FILL).	ND	Dry	ND	ND	SB-11 (0-2)
2							
3		Middle 5": ASPHALT (FILL).	ND	Dry	ND	ND	
4		Bottom 12": Brown SAND, some Brick, trace fine to coarse Gravel (FILL).	ND	Dry	ND	ND	
5							
6	33	Brown SAND, some fine to coarse Gravel, trace Asphalt (FILL).	ND	Dry	ND	ND	
7							
8							SB-11 (8-10)
9							
10							
11	31	Top 29": Brown SAND, some fine to coarse Gravel, trace Asphalt (FILL).	ND	Moist @ 12'	ND	ND	
12							
13							
14		Bottom 2": ROCK.	ND	Moist	ND	ND	
15							
16							
17							
18							
19							
20							

Notes: End of boring at 15 feet below ground surface.
Groundwater not encountered.
PID = photoionization detector ND = Not Detected

AKRF, Inc.
Environmental Consultants

Soil Vapor Sampling Log

Job No:	11901	**Client:**	Phipps
Project Location:	440 East 162 Street, Bronx, NY	**Sampled By:**	A. Jordan, R. Andrews
Date:	02/20/2014		

Sample ID:	SV-1
Canister ID:	A822
Flow Controller ID:	FC680

Purging

Time Started:	10:51	
Time Stopped:	11:01	
Vol. Purged:	1.0	liters
Flow Rate:	0.1	L/min

Laboratory Sample (Summa Canister)

Time Started:	11:02	**Vacuum:**	-30 inHg
Time Stopped:	13:13	**Vacuum:**	-6 inHg

Field Sample

PID Calibration:	100 ppm
Time Started:	10:48
Time Stopped:	10:50
PID Reading:	Not Detected
He Reading	Not Detected

AKRF, Inc.
Environmental Consultants

Soil Vapor Sampling Log

Job No:	11901	**Client:**	Phipps
Project Location:	440 East 162 Street, Bronx, NY	**Sampled By:**	A. Jordan, R. Andrews
Date:	02/20/2014		

Sample ID: SV-2

Canister ID: A227

Flow Controller ID: FC382

Purging

Time Started: 10:53

Time Stopped: 11:07

Vol. Purged: 1.0 liters

Flow Rate: 0.1 L/min

Laboratory Sample (Summa Canister)

Time Started:	11:08	**Vacuum:**	-30 inHg
Time Stopped:	13:13	**Vacuum:**	-8 inHg

Field Sample

PID Calibration: 100 ppm

Time Started: 10:51

Time Stopped: 10:53

PID Reading: Not Detected

He Reading Not Detected

AKRF, Inc.
Environmental Consultants

Soil Vapor Sampling Log

Job No:	11901	**Client:**	Phipps
Project Location:	440 East 162 Street, Bronx, NY	**Sampled By:**	A. Jordan, R. Andrews
Date:	02/20/2014		

Sample ID: SV-3

Canister ID: A196

Flow Controller ID: FC479

Purging

Time Started: 11:47

Time Stopped: 11:57

Vol. Purged: 1.0 liters

Flow Rate: 0.1 L/min

Laboratory Sample (Summa Canister)

Time Started:	11:57	**Vacuum:**	-30 inHg
Time Stopped:	14:13	**Vacuum:**	-9 inHg

Field Sample

PID Calibration: 100 ppm

Time Started: 11:44

Time Stopped: 11:46

PID Reading: 0.3 ppm

He Reading Not Detected

AKRF, Inc.
Environmental Consultants

Soil Vapor Sampling Log

Job No:	11901	**Client:**	Phipps
Project Location:	440 East 162 Street, Bronx, NY	**Sampled By:**	A. Jordan, R. Andrews
Date:	02/20/2014		

Sample ID:	SV-4
Canister ID:	A1179
Flow Controller ID:	FC682

Purging

Time Started:	11:24	
Time Stopped:	11:34	
Vol. Purged:	1.0	liters
Flow Rate:	0.1	L/min

Laboratory Sample (Summa Canister)

Time Started:	11:34	**Vacuum:**	-30 inHg
Time Stopped:	13:45	**Vacuum:**	- 7.5 inHg

Field Sample

PID Calibration:	100 ppm
Time Started:	11:22
Time Stopped:	11:24
PID Reading:	Not Detected
He Reading	Not Detected

AKRF, Inc.
Environmental Consultants

Soil Vapor Sampling Log

Job No:	11901	**Client:**	Phipps
Project Location:	440 East 162 Street, Bronx, NY	**Sampled By:**	A. Jordan, R. Andrews
Date:	02/20/2014		

Sample ID: SV-5

Canister ID: A1070

Flow Controller ID: FC263

Purging

Time Started: 11:11

Time Stopped: 11:22

Vol. Purged: 1.0 liters

Flow Rate: 0.1 L/min

Laboratory Sample (Summa Canister)

Time Started:	11:23	**Vacuum:**	-30 inHg
Time Stopped:	13:22	**Vacuum:**	-9 inHg

Field Sample

PID Calibration: 100 ppm

Time Started: 11:09

Time Stopped: 11:11

PID Reading: Not Detected

He Reading Not Detected

AKRF, Inc.
Environmental Consultants

Soil Vapor Sampling Log

Job No:	11901	**Client:**	Phipps
Project Location:	440 East 162 Street, Bronx, NY	**Sampled By:**	A. Jordan, R. Andrews
Date:	02/20/2014		

Sample ID: SV-6

Canister ID: A204

Flow Controller ID: FC550

Purging

Time Started: 11:37

Time Stopped: 11:47

Vol. Purged: 1.0 liters

Flow Rate: 0.1 L/min

Laboratory Sample (Summa Canister)

Time Started:	11:47	**Vacuum:**	-30 inHg
Time Stopped:	13:45	**Vacuum:**	-7 inHg

Field Sample

PID Calibration: 100 ppm

Time Started: 11:34

Time Stopped: 11:36

PID Reading: Not Detected

He Reading Not Detected

APPENDIX C
LABORATORY DATA DELIVERABLES AND DUSRS FOR SOIL AND SOIL VAPOR ANALYSES