MELROSE COMMONS SITE C – SUPPORTIVE HOUSING

BRONX, NEW YORK

Remedial Investigation Report

NYC VCP Site Number: 17CVCP003X

OER Project Number: 15ENOS474X

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REMEDIAL INVESTIGATION REPORT

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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
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 VCP	New York City Voluntary Cleanup Program
NYC DOHMH	New York City Department of Health and Mental Hygiene
NYC OER	New York City Office of Environmental Remediation
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
RIR	Remedial Investigation Report
SCO	Soil Cleanup Objective
SPEED	Searchable Property Environmental Electronic Database

CERTIFICATION

We, Michelle Lapin, P.E. and Deborah Shapiro, QEP, certify that we are currently Qualified Environmental Professionals, as defined in RCNY § 43-1402(ar). We have primary direct responsibility for implementation of the Remedial Investigation for the Melrose Commons Site C – Supportive Housing Site, (NYC VCP Site No. site numbers 15CVCP003X and 15ENOS474X). We are responsible for the content of this Remedial Investigation Report (RIR), have reviewed its contents and certify that this RIR is accurate to the best of our knowledge and contains all available environmental information and data regarding the property.

Michelle Lapin, P.E.	7-13-16	
Professional Engineer	Date	Signature
Deborah Shapiro, QEP	7-13-16	
Qualified Environmental Professional	Date	Signature

EXECUTIVE SUMMARY

The Remedial Investigation Report (RIR) provides sufficient 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 (RI) described in this document is consistent with applicable guidance.

Site Location and Current Usage

The Site is located at 425 East 161st Street in the Bronx, New York and is identified as Block 2383, Lot 39 (formerly Lots 37 and 39) on the New York City Tax Map. Figure 1 shows the Site location. The Site is approximately 6,097 square feet and is bounded by residential properties to the north, East 161st Street to the south, an active construction site (Brownfield Cleanup Program Site No. C203073) to the east, and mixed-use residential and commercial properties to the west. A map of the Site boundary is shown on Figure 2. Currently, the Site is a vacant lot used for construction equipment storage. A Land Use Map is provided as Figure 3.

Summary of Proposed Redevelopment Plan

The proposed future use of the Site will consist of the excavation of soil for construction of a nine-story supportive housing building with a cellar. The proposed development is anticipated to extend approximately 12 feet below ground surface (bgs) on the southern portion of the Site and approximately two feet bgs on the northern portion of the Site. Layout of the proposed Site development is presented on Figure 4. The current zoning designation is R7-2 (medium density apartment houses) with a C1-4 commercial overlay (allows for businesses that serve local retail needs). The proposed use is consistent with existing zoning for the property.

Summary of Past Uses of Site and Areas of Concern

A Phase I Environmental Site Assessment (ESA) conducted by AKRF in April 2016 indicated that the Site was vacant until sometime between 1891 and 1951, when it was developed with residential apartment buildings. The Site has been vacant since the demolition of the residential apartment buildings on the western portion of the Site (former Lot 39) by 1981 and on the eastern portion of the Site (former Lot 37) by 1989.

Title records reviewed as part of the Phase I ESA listed the City of New York as the owner, and indicated that the City of New York was granted ownership of the Site by Harry T. Kunken in 1978.

The AOCs identified for this Site include:

1. Historic fill may be present beneath the Site.
2. An anomaly consistent with that of an underground storage tank (UST) or buried aboveground storage tank (AST), measuring 7 feet by 8.5 feet, identified on the northern portion of the Site.
3. Historic and present uses of the surrounding area, including auto repair shops, garages with gasoline underground storage tanks (USTs), industrial and manufacturing uses, and a dry cleaner west of the Site. The regulatory database identified proximal facilities that may have affected the Site subsurface including off-site Brownfield Cleanup Program

sites (one east-adjacent), off-site closed- and active-status spills, Environmental Restoration Program (ERP) sites, and Petroleum Bulk Storage (PBS) facilities.

Summary of the Work Performed under the Remedial Investigation

On behalf of Melrose Commons Supportive HDC c/o The Bridge, Inc., AKRF performed the following scope of work:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e., structures, buildings, etc.);
2. Advanced three soil borings across the entire project Site, and collected six soil samples for chemical analysis from the soil borings to evaluate soil quality; and
3. Installed two soil vapor probes around Site perimeter and collected two samples for chemical analysis. One ambient air sample was collected concurrently with the soil vapor samples for QA/QC purposes.

Summary of Environmental Findings

1. Elevation of the Site is generally level and is approximately 28 feet above the National Geodetic Vertical Datum of 1929 (an approximation of mean sea level).
2. Groundwater is expected to flow in a southerly direction towards the Harlem River.
3. Depth to bedrock is approximately 12.5 to 15 feet below grade at the Site.
4. The stratigraphy of the Site, from the surface down, generally consisted of fill comprising sand, silt, and gravel with trace amounts of wood, coal ash, and brick from existing grade to approximately five feet below grade, underlain by fill comprising sand, silt, and gravel to the terminus of the borings at bedrock.
5. Soil/fill samples collected during the Phase II were compared to NYSDEC Part 375-6 Unrestricted Use (Track 1) and Restricted Residential Use (Track 2) Soil Cleanup Objectives (SCOs). Soil/fill samples showed concentrations of semi-volatile organic compounds (SVOCs) and metals generally associated with historic fill. No volatile organic compounds (VOCs) or polychlorinated biphenyls (PCBs) were detected above laboratory reporting limits in any of the soil samples analyzed. Six SVOCs including benzo(a)anthracene [max. of 15400 micrograms per kilogram (µg/Kg)], benzo(a)pyrene (max. of 12,600 µg/Kg), benzo(b)fluoroanthene (max. of 16,000 µg/Kg), chrysene (max. of 15,500 µg/Kg), dibenzo(a,h)anthracene (max. of 3,500 µg/Kg), and indeno(1,2,3-cd)pyrene (max. of 8,570 µg/Kg) were detected in three shallow soil samples at concentrations exceeding their respective Restricted Residential Use Soil Cleanup Objectives (RRSCOs). Benzo(k)fluoroanthene and chrysene were also detected exceeding their respective Unrestricted Use SCOs, but below RRSCOs. The detected SVOCs are generally polycyclic aromatic hydrocarbons (PAHs), a class of compounds found in coal tar, coal ash, and other combustion products (as well as some petroleum products and rubber) and commonly found in historic fill. Metals including barium [max. of 1,760 milligrams per kilogram (mg/Kg)] copper (max. of 50.2 mg/Kg), lead (max. of 668 mg/Kg), mercury (max. of 0.27 mg/Kg), and zinc (max. of 827 mg/Kg) were detected in most of the soil samples at concentrations exceeding respective USCOs. Of these metals, barium and lead also exceeded their RRSCOs. Four pesticides including 4,4'-DDD (max. of 11.2 µg/Kg), 4,4'-DDE (max. of 9.6 µg/Kg), 4,4'-DDT (max. of 135

μg/Kg), and dieldrin (max. of 5.5 μg/Kg) were detected at concentrations exceeding respective USCOs, but below respective RRSCOs in the three shallow soil samples. No other pesticides were detected above their respective SCOs. Overall, soil chemistry is similar to sites with historic fill sites in New York City.

6. Bedrock at the Site is shallow and groundwater was not encountered above bedrock at the Site.
7. Soil vapor samples collected during the RI were compared to the compounds listed in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion. A review of the soil vapor analytical results indicates that up to 25 VOCs were detected in soil vapor samples SV-1 and SV-2. Additionally, 26 VOCs were detected in ambient air sample AA-1. Soil vapor samples collected during the Phase II showed low concentrations of VOCs. Overall, highest concentrations were detected for ethanol at 207 ug/m^3. PCE was detected at concentrations of 1.4 μg/m^3, below its respective guideline value of 30 μg/m^3. PCE was also detected in ambient air sample AA-1 at a concentration of 3.1 μg/m^3. TCE was not detected in either the soil vapor samples nor the ambient air sample above laboratory reporting limits. There are no directly applicable guidance values for VOCs in soil vapor; however, the results of the soil vapor samples were compared to the NYSDOH Air Guideline Values (AGVs) and decision matrices. No VOCs were detected above NYSDOH AGVs.

REMEDIAL INVESTIGATION REPORT

1.0 SITE BACKGROUND

Melrose Commons Supportive HDC c/o The Bridge, Inc. has enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a 6,097 square foot site (the "Site") located at 425 East 161st Street [(also identified as Bronx Tax Block 2383, Lot 39 (formerly Lots 37 and 39)] in the Bronx, New York. Residential use is proposed for the property. The RI work was performed on May 28, 2014. This RIR summarizes the nature and extent of contamination and provides sufficient information for establishment of remedial action objectives, evaluation of remedial action alternatives, and selection of a remedy that is protective of human health and the environment consistent with the use of the property pursuant to RCNY§ 43-1407(f). The results of this RIR were previously reported as a part of a Subsurface (Phase II) Investigation conducted by AKRF in October 2014, which is further described in Section 2.2.

1.1 Site Location and Current Usage

The Site is located at 425 East 161st Street in the Bronx, New York and is identified as Block 2383, Lot 39 (formerly Lots 37 and 39) on the New York City Tax Map. Figure 1 shows the Site location. The Site is approximately 6,097 square feet and is bounded by residential properties to the north, East 161st Street to the south, an active construction site (Brownfield Cleanup Program Site No. C203073) to the east, and mixed-use residential and commercial properties to the west. A map of the Site boundary is shown on Figure 2. Currently, the Site is a vacant lot used for construction equipment storage. A Land Use Map is provided as Figure 3.

1.2 Proposed Redevelopment Plan

The proposed future use of the Site will entail the excavation of soil for construction of a nine-story supportive housing building with a cellar. The proposed development is anticipated to extend approximately 12 feet below ground surface (bgs) on the southern portion of the Site and approximately 2 feet bgs on the northern portion of the Site. Layout of the proposed Site development is presented on Figure 4. The current zoning designation is R7-2 (medium density apartment houses) with a C1-4 commercial overlay (allows for businesses that serve local retail needs). The proposed use is consistent with existing zoning for the property.

1.3 Description of Surrounding Property

The neighborhood surrounding the Site includes a mix of institutional uses (including the campus of Boricua College), residential, commercial, and industrial uses. The Site is abutted to the north by residential properties; to the east by an active construction site at 899 Elton Avenue (Brownfield Cleanup Program Site No. C203073); to the south by East 161st Street, followed by mixed-use residential and commercial properties; and to the west by mixed-use residential and commercial properties. A dry cleaning facility is located at 413 East 161st Street, approximately 200 feet west of the Site. Figure 3 shows the surrounding land usage.

2.0 SITE HISTORY

2.1 Past Uses and Ownership

A Phase I Environmental Site Assessment (ESA) conducted by AKRF in April 2016 indicated that the Site was vacant until sometime between 1891 and 1951, when it was developed with residential apartment buildings. The Site has been vacant since the demolition of the residential apartment buildings on the western portion of the Site (former Lot 39) by 1981 and on the eastern portion of the Site (former Lot 37) by 1989.

Title records reviewed as part of the Phase I ESA listed the City of New York as the owner, and indicated that the City of New York was granted ownership of the Site by Harry T. Kunken in 1978.

2.2 Previous Investigations

Phase I Environmental Site Assessment (ESA), Melrose Commons Site C – Supportive Housing, Bronx, NY, AKRF, April 2016

AKRF conducted a Phase I ESA of the Site in April 2016 in accordance with ASTM E1527-13. The assessment included a site inspection, historical research, and a regulatory review of the Site. A summary of the assessment findings is presented below:

- A 2014 Subsurface Investigation conducted by AKRF identified elevated levels of semi-volatile organic compounds (SVOCs), metals, and pesticides in soil and volatile organic compounds (VOCs) in soil vapor, likely attributable to historical fill beneath the Site. In addition, an anomaly consistent with that of an underground storage tank (UST) was identified on the northern portion of the Site. Based on these findings, a remedial action plan (RAP) and a construction health and safety plan (CHASP) were prepared. The RAP and CHASP were approved by the New York City Department of Environmental Protection (NYCDEP) in a letter dated November 5, 2014.
- Various past and/or present off-site uses with some potential to affect the Site were identified, including auto repair shops, garages with gasoline USTs, industrial and manufacturing uses, and a dry cleaner west of the Site. The regulatory database identified proximal facilities that may have affected the Site subsurface including off-site Brownfield Cleanup Program (BCP) sites (one east-adjacent), off-site (closed- and active-status spills), Environmental Restoration Program (ERP) sites, and Petroleum Bulk Storage (PBS) facilities.

Phase I Environmental Site Assessment (ESA), Melrose Commons Urban Renewal Area, Site C, Bronx, NY, Environmental Health Investigations, Inc., February 2011

Environmental Health Investigations, Inc. (EHI) performed a Phase I ESA of the Site and the west-adjacent Brownfield Cleanup Program (BCP) site in February 2011 in accordance with ASTM Standard E1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Practice, the standard practice at that time. A summary of the assessment findings is presented below:

- The lots were previously occupied by multi-story residences with basements. It was reported that storage tanks were located on the Site for the storage of heating oil.

- A gasoline station, auto repair facilities, and a paint store were located south of the Site on East 161st Street, a dry cleaner was located west of the Site on East 161st Street, and a BCP site was located south of the Site across East 161st Street.
- The report noted the potential for building materials from former on-site structures and debris to be within the historical fill. Based on the age of the former structures, these materials could contain lead-based paint and/or suspect asbestos-containing materials (ACM).
- The lots had (E) designations for Noise.

Environmental Assessment Statement – Melrose Commons North, Bronx, NY, AKRF, April 2014

An Environmental Assessment Statement (EAS) was prepared as part of the City Environmental Quality Review (CEQR) for the April 1994 Melrose Commons Urban Renewal Area (URA) Final Environmental Impact Statement (FEIS) for the Site and other properties. The Site was evaluated as part of the projected Melrose Commons North development. The FEIS noted that the noise analysis conducted as part of the 1994 Melrose Commons Urban Renewal Area FEIS indicated high ambient noise levels in the vicinity of the proposed development sites and were in the "Marginal Unacceptable" and "Clearly Unacceptable" noise categories. As a result, an (E) Designation for noise was placed on the Site, which specified minimum attenuation noise levels for the Site and other properties.

Negative Declaration – Tax Block 2383, Lots 19 and 39 (formerly Lots 19, 25, p/o 27, p/o 29, 30, 31, 35, 37, 39, and 8900) and Block 2384, Lots 1, 5, 9, 10, 12-14, 16, p/o 20, 25, 28, 32-34, 38, p/o 48, 51, 53, 54, 57-60, 8900, and 8901, Bronx, NY, New York City Department of Housing Preservation and Development, October 2014

A Negative Declaration was prepared as part of the City Environmental Quality Review (CEQR) for several proposed development projects including the Site and other properties on Blocks 2383 and 2384. The Negative Declaration imposed measures related to hazardous materials and noise attenuation through mapping of (E) Designations in connection with proposed zoning changes for proposed projects at the Site. Requirements for noise include specific window-wall attenuation for the proposed building windows and façade.

Sampling Protocol and Health and Safety Plan – Melrose Commons Site C – Supportive Housing, Tax Block 2383, Lots 37 and 39, Bronx, NY, AKRF, March 2014

AKRF prepared a Sampling Protocol and associated Health and Safety Plan (HASP) to provide a scope of work for conducting a Subsurface (Phase II) Investigation at the Site. The scope of work included in Sampling Protocol based on the 2011 Phase I ESA findings and stipulations included in the Negative Declaration to investigate areas of concern and to protect personnel and the public during implementation.

Subsurface Phase II Investigation – Tax Block 2383, Lot 39 (former Lots 37 and 39), Bronx, NY, AKRF, October 2014

AKRF conducted a Subsurface Investigation at the Site in October 2014. The investigation included a geophysical survey and utility mark-outs, the advancement of

three soil borings with the collection of six soil samples, and the installation of two soil vapor points with the collection of a sub-slab vapor sample from each and the collection of one ambient air sample. Groundwater was not encountered during the investigation. The Subsurface Investigation identified subsurface materials consisting of sand, silt, and gravel with varying amounts of wood, coal, brick, and ash. Bedrock was encountered between 12.5 and 15 feet below ground surface. No elevated PID readings were noted in the borings advanced during the investigation. Several elevated levels of SVOCs, metals, and pesticides were detected in the soil samples, which were attributed to historic fill present at the Site. Up to 25 VOCs were detected in the soil vapor samples. An approximately 7-foot by 8.5-foot anomaly consistent with a UST or buried AST was encountered on the northern portion of the Site during the geophysical investigation.

Remedial Action Plan and Construction Health and Safety Plan – Tax Block 2383, Lot 39 (former Lots 37 and 39), Bronx, NY, AKRF, October 2014, revised November 2014

AKRF prepared a Remedial Action Plan (RAP) and associated Construction Health and Safety Plan (CHASP) for the Site for submission to NYCDEP. The RAP identified construction measures to be implemented during remediation and construction activities, including tank removal procedures, project design measures, quality assurance/ quality control (QA/QC) measures, and closure report documentation. The CHASP outlines Site-specific health and safety measures and contaminants of concern.

New York City Department of Environmental Protection Approval Letter – Melrose Commons North [Tax Block 2383, Lots 19 and 39 (formerly Lots 19, 25, p/o 27, p/o 29, 30, 31, 35, 37, 39, 8900, and 8901)], Bronx, NY, NYCDEP, November 2014

In a letter dated November 5, 2014, NYCDEP approved the 2014 RAP and CHASP for the Site.

2.3 Site Inspection

On April 13, 2016, AKRF staff conducted a reconnaissance of the Site as part of a Phase I ESA. At that time, the Site was similar to current uses.

2.4 Areas of Concern

The AOCs identified for this Site include:

1. Historic fill may be present beneath the Site.
2. An anomaly consistent with that of an underground storage tank (UST) or buried aboveground storage tank (AST), measuring 7 feet by 8.5 feet, identified on the northern portion of the Site.
3. Historic and present uses of the surrounding area, including auto repair shops, garages with gasoline underground storage tanks (USTs), industrial and manufacturing uses, and a dry cleaner west of the Site. The regulatory database identified proximal facilities that may have affected the Site subsurface including off-site Brownfield Cleanup Program sites (one east-adjacent), off-site closed- and active-status spills, Environmental Restoration Program (ERP) sites, and Petroleum Bulk Storage (PBS) facilities.

3.0 PROJECT MANAGEMENT

3.1 Project Organization

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

3.2 Health and Safety

All work described in this RIR was performed in full compliance with applicable laws and regulations, including Site and OSHA worker safety requirements and HAZWOPER requirements.

3.3 Materials Management

All material encountered during the RI was managed in accordance with applicable laws and regulations.

4.0 REMEDIAL INVESTIGATION ACTIVITIES

On behalf of Melrose Common Supportive HDC c/o The Bridge, Inc., AKRF performed the following scope of work:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e., structures, buildings, etc.);
2. Advanced three soil borings across the entire project Site, and collected six soil samples for chemical analysis from the soil borings to evaluate soil quality; and
3. Installed two soil vapor probes around Site perimeter and collected two samples for chemical analysis. One ambient air sample was collected concurrently with the soil vapor samples for QA/QC purposes.

4.1 Geophysical Investigation

A geophysical investigation, including GPR and magnetometry, was conducted at the Site on May 28, 2014. The survey was conducted to investigate the potential presence of USTs and buried ASTs from former buildings. The GPR survey utilized electromagnetic wave propagation and scattering to image and identify changes in electrical and magnetic properties in the ground. Magnetometers measure irregularities in the magnetic field in a given area. The survey identified an anomaly consistent with a UST or buried AST (measuring 7 feet by 8.5 feet) towards the northern portion of Lot 39. The approximate location of the subsurface anomaly is shown on Figure 2. The geophysical investigation report is enclosed as Appendix A.

4.2 Soil Boring Installation and Logging

On May 28, 2014, Aarco Environmental advanced three borings at the Site (denoted as SB-1 through SB-3). The borings were advanced using a track-mounted Geoprobe® direct push probe (DPP). The borings were advanced to bedrock, which was encountered between 12.5 and 15 feet below grade. Groundwater was not encountered above bedrock at the Site.

Soil cores were collected from the Geoprobe® borings in five-foot long, two-inch diameter, stainless steel macrocore piston rod samplers fitted with an internal acetate liner. Each core was split lengthwise and logged by AKRF field personnel. Logging consisted of: describing the soil according to the modified Burmister Classification System; describing any evidence of contamination (e.g., staining, sheens, odors); and screening the soil for organic vapors using a photoionization detector (PID) at one-foot intervals. The PID was calibrated at the start of each work day using isobutylene gas at a concentration of 100 parts per million (ppm) in accordance with the manufacturer's instructions.

Two soil samples were collected from each boring. Subsurface materials in the borings consisted of sand, silt, and gravel, with varying amounts of wood, coal, brick, and ash. No PID readings, staining, or odors were noted in any of the soil borings advanced during the investigation. Boring logs prepared by an environmental professional are attached in Appendix B. A map showing the locations of the soil borings is shown on Figure 2.

4.3 Sample Collection and Chemical Analysis

Sampling performed as part of the field investigation was conducted for all Areas of Concern and also considered other means for bias of sampling based on professional judgment, area history, discolored soil, stressed vegetation, drainage patterns, field instrument measurements, odor, or other field indicators. All media including soil, groundwater and soil vapor have been sampled and evaluated in the RIR. Discrete (grab) samples have been used for final delineation of the nature and extent of contamination and to determine the impact of contaminants on public health and the environment. The sampling performed and presented in this RIR provides sufficient basis for evaluation of remedial action alternatives, establishment of a qualitative human health exposure assessment, and selection of a final remedy.

4.3.1 Soil Sampling

Six soil samples were collected for chemical analysis during this RI. Data on soil sample collection for chemical analyses, including dates of collection and sample depths, is reported in Tables 1-4. Figure 2 shows the location of samples collected in this investigation. Laboratories and analytical methods are discussed below.

4.3.2 Soil Vapor Sampling

Two soil vapor probes were installed at the Site (denoted as SV-1 and SV-2) and two soil vapor samples were collected for chemical analysis during this RI on May 28, 2014. One ambient air sample (denoted AA-1) was collected concurrently with the soil vapor samples for quality assurance/quality control (QA/QC) purposes.

Soil vapor sampling points were installed using a direct push Geoprobe® drilling system. A two-inch screen implant (probe) with dedicated Teflon tubing and threaded fittings was installed to approximate depths of five feet below ground surface. The tubing was retracted approximately six inches to create a void space. The probes were backfilled with clean silica sand to a depth of two feet below the surface and hydrated bentonite was used to fill the remaining void around the sampling tubing to grade to prevent short-circuiting of ambient air into the soil gas sampling point.

Prior to sampling, the soil vapor points were purged of approximately three sample volumes using a peristaltic pump. During purging, an inverted bucket was placed over the 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. The purged vapors were collected into a Tedlar bag and monitored using a Dielectric Technologies Model MGD-2002 portable helium detector to check for short-circuiting of ambient air into the vapor sampling point and verify the adequacy of the bentonite seal. Helium concentrations of less than the NYSDOH threshold value of 10 percent were considered sufficient to verify a tight seal. All soil vapor points passed the seal integrity tests with helium readings of not detected (ND). Purged vapors were also field-screened for VOCs using a PID calibrated with 100 parts per million (ppm) isobutylene standard gas. Readings of 5.9 ppm and 1 ppm were detected at soil vapor sample points SV-1 and SV-2, respectively.

Soil vapor probes were connected via Teflon tubing to laboratory-supplied, batch-certified clean six-liter Summa® canisters equipped with two-hour flow regulators. Vacuum readings were collected at the start and end of the sampling period. Immediately after opening the Summa® canister, the initial vacuum (inches of mercury) was noted. After approximately two hours, the final vacuum reading (inches of mercury) was noted and the Summa® canister was closed.

Soil vapor sampling locations are shown on Figure 2. Soil vapor sample collection data is reported in Table 5. Soil vapor sampling logs are included in Appendix B. Methodologies used for soil vapor assessment conform to the *NYS DOH Final Guidance on Soil Vapor Intrusion, October 2006.*

4.3.3 Chemical Analysis

Chemical analytical work presented in this RIR has been performed in the following manner:

Factor	Description
Quality Assurance Officer	The chemical analytical quality assurance is directed by Deborah Shapiro (QEP).
Chemical Analytical Laboratory	Chemical analytical laboratory(s) used in the RI is Accutest Laboratories of Dayton, New Jersey, a NYS ELAP certified laboratory.
Chemical Analytical Methods	Soil analytical methods: • VOCs by EPA Method 8260C (rev. 2006) • SVOCs by EPA Method 8270D (rev. 2007) • Pesticides by EPA Method 8081B (rev. 2000) • PCBs by EPA Method 8082A (rev. 2000) • TAL Metals by EPA Method 6010C (rev. 2007) Soil vapor analytical methods: • VOCs by TO-15

4.3.4 Results of Chemical Analyses

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

5.0 ENVIRONMENTAL EVALUATION

5.1 Geological and Hydrogeological Conditions

5.1.1 Topography

The topography of the Site is generally level. Based on reports compiled by the U.S. Geological Survey (Central Park Quadrangle), the Site lies at an elevation of approximately 28 feet above the National Geodetic Vertical Datum of 1929 (an approximation of mean sea level).

5.1.2 Stratigraphy

The stratigraphy of the Site, from the surface down, generally consisted of fill comprising sand, silt, and gravel with trace amounts of wood, coal ash, and brick from existing grade to approximately five feet below grade, underlain by fill comprising sand, silt, and gravel to the terminus of the borings at bedrock.

5.1.3 Hydrogeology

Groundwater was not encountered above bedrock at the Site. Groundwater flow is expected to be from north to south towards the Harlem River; however, actual groundwater flow can be affected by many factors including bedrock geology, past filling activities, underground utilities, and other subsurface openings or obstructions such as basements, nearby subway lines, and other factors.

5.2 Soil Chemistry

Six soil samples were collected for laboratory analysis. Results of the analyses were compared to NYSDEC 6 NYCRR Part 375 Remedial Program Soil Cleanup Objectives or Unrestricted Use (USCOs) and Restricted - Residential Use (RRSCOs), developed for multi-family residential uses and active recreational uses with reasonable potential for soil contact. Soil descriptions, observations, and PID readings were recorded in the soil boring logs provided in Appendix B. Laboratory analytical data sheets are included in Appendix C.

5.2.1 Volatile Organic Compounds (VOCs)

No VOCs were detected in any of the soil samples analyzed during the investigation. Soil analytical results for VOCs are presented in Table 1.

5.2.2 Semi-volatile Organic Compounds (SVOCs)

Six SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoroanthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene] were detected in

at least one of the soil samples at concentrations exceeding their respective USCOs and RRSCOs. Benzo(k)fluoroanthene in soil samples SB-1(0-2') and SB-2 (0-2') and chrysene is soil sample SB-3(0-2') were also detected in at least one of the soil samples exceeding respective USCOs, but below RRSCOs. SVOCs were not detected in soil samples SB-2(10-12') or SB-3(10-12'), but were detected in the remaining soil samples at concentrations below their respective USCOs and RRSCOs.

The detected SVOCs were generally polycyclic aromatic hydrocarbons (PAHs), a class of compounds found in coal tar, coal ash, and other combustion products (as well as some petroleum products and rubber) and commonly found in historic fill. Ash was found in each of the soil borings advanced during the investigation. Therefore, the PAH concentrations were most likely attributable to fill material were not attributable to a spill or release at the site. Soil analytical results for SVOCs are presented in Table 2.

5.2.3 Metals

Metals were detected in each of the soil samples analyzed during the investigation at concentrations below respective USCOs and RRSCOs. Four metals (copper, lead, mercury, and zinc) were detected in most of the soil samples at concentrations exceeding respective USCOs but below RRSCOs. Barium and lead were detected in soil samples SB-1(0-2') and SB-2(0-2') at concentrations exceeding respective USCOs and RRSCOs. No other metals were detected above their respective RRSCOs.

These exceedances were most likely attributable to historic fill materials, which often contain highly variable concentrations of metals. Soil analytical results for metals are presented in Table 3.

5.2.4 Pesticides and PCBs

No PCBs were detected above laboratory reporting limits in any of the soil samples analyzed. Four pesticides (4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and dieldrin) were detected at concentrations exceeding respective USCOs, but below respective RRSCOs in the three shallow soil samples. No other pesticides were detected above their respective SCOs. Soil analytical results for metals are presented in Table 4.

5.2.5 Conclusions

Data collected during the RI is sufficient to delineate the vertical and horizontal distribution of contaminants in soil/fill at the Site. A summary table of data for chemical analyses performed on soil samples is included in Tables 1 to 4. Figure

5 shows the location and posts the values for soil/fill that exceed the 6NYCRR Part 375-6.8 Track 1 and/or 2 Soil Cleanup Objectives.

5.3 Soil Vapor Chemistry

Soil vapor analytical results were compared to the NYSDOH 2006 Soil Vapor Intrusion Air Guideline Values (AGVs), including the updated value for PCE from the September 2013 Fact Sheet, and the NYSDOH 2006 Final Guidance on Soil Vapor Intrusion Matrices. Note that the AGVs are associated with indoor air conditions; therefore, the comparison assumes that any soil vapor detected would completely penetrate into a new building, a condition that does not typically occur, nor would be expected for the proposed construction. Similarly, the concentrations of VOCs detected in the ambient air sample were compared to NYSDOH AGVs and to background levels of VOCs in outdoor air samples published in the NYSDOH document.

A review of the soil vapor analytical results indicated that up to 25 VOCs were detected in soil vapor samples SV-1 and SV-2. Additionally, 26 VOCs were detected in ambient air sample AA-1. The NYSDOH has established AGVs for three of the VOCs analyzed [methylene chloride, tetrachloroethylene (PCE), and trichloroethylene (TCE)]. Methylene chloride (a solvent and common laboratory contaminant) was detected in soil vapor samples SV-1 and SV-2 at concentrations of 5.2 micrograms per cubic meter ($\mu g/m^3$) and 7.3 $\mu g/m^3$, respectively, which is below the respective AGV of 60 $\mu g/m^3$. Methylene chloride was also detected in ambient air sample AA-1 at a concentration of 20 $\mu g/m^3$. PCE was detected at concentrations of 1.1 $\mu g/m^3$ and 1.4 $\mu g/m^3$, below its respective guideline value of 30 $\mu g/m^3$. PCE was also detected in ambient air sample AA-1 at a concentration of 3.1 $\mu g/m^3$. TCE was not detected in either the soil vapor samples or the ambient air sample above laboratory reporting limits. The detected VOCs were likely attributable to some combination of fill materials and/or off-site sources.

The NYSDOH Guidance for Evaluating Soil Vapor Intrusion also provides “decision matrices” for four VOCs: carbon tetrachloride, PCE, 1,1,1 trichloroethane and TCE. Carbon tetrachloride, 1,1,1 trichloroethane, and TCE were not detected in either the soil vapor samples or the ambient air sample above laboratory reporting limits. PCE was detected in both soil vapor samples and the ambient air sample at concentrations ranging from 1.1 $\mu g/m^3$ to 3.1 $\mu g/m^3$. Depending on the corresponding indoor air concentrations, the decision matrices recommend “no further action” or “reasonable and practical actions to identify source(s) and reduce exposures.”

Data collected during the RI is sufficient to delineate the distribution of contaminants in soil vapor at the Site. A summary table of data for chemical analyses performed on soil vapor samples is included in Table 5.

5.4 Prior Activity

Based on an evaluation of the data and information from the RIR, disposal of significant amounts of hazardous waste is not suspected at this Site.

5.5 Impediments to Remedial Action

There are no other known impediments to remedial action at this Site.

6.0 REFERENCES

1. *Phase I Environmental Site Assessment (ESA)* - Melrose Commons Urban Renewal Area, Site C, Bronx, NY, Environmental Health Investigations, Inc., February 2011.

2. *Subsurface Phase II Investigation* – Tax Block 2383, Lot 39, Bronx, NY, AKRF, October 2014.

3. *Remedial Action Plan and Construction Health and Safety Plan* – Tax Block 2383, Lot 39, Bronx, NY, AKRF, October 2014, revised November 2014.

4. *Phase I Environmental Site Assessment (ESA)* - Melrose Commons Site C – Supportive Housing, Bronx, NY, AKRF, April 2016.

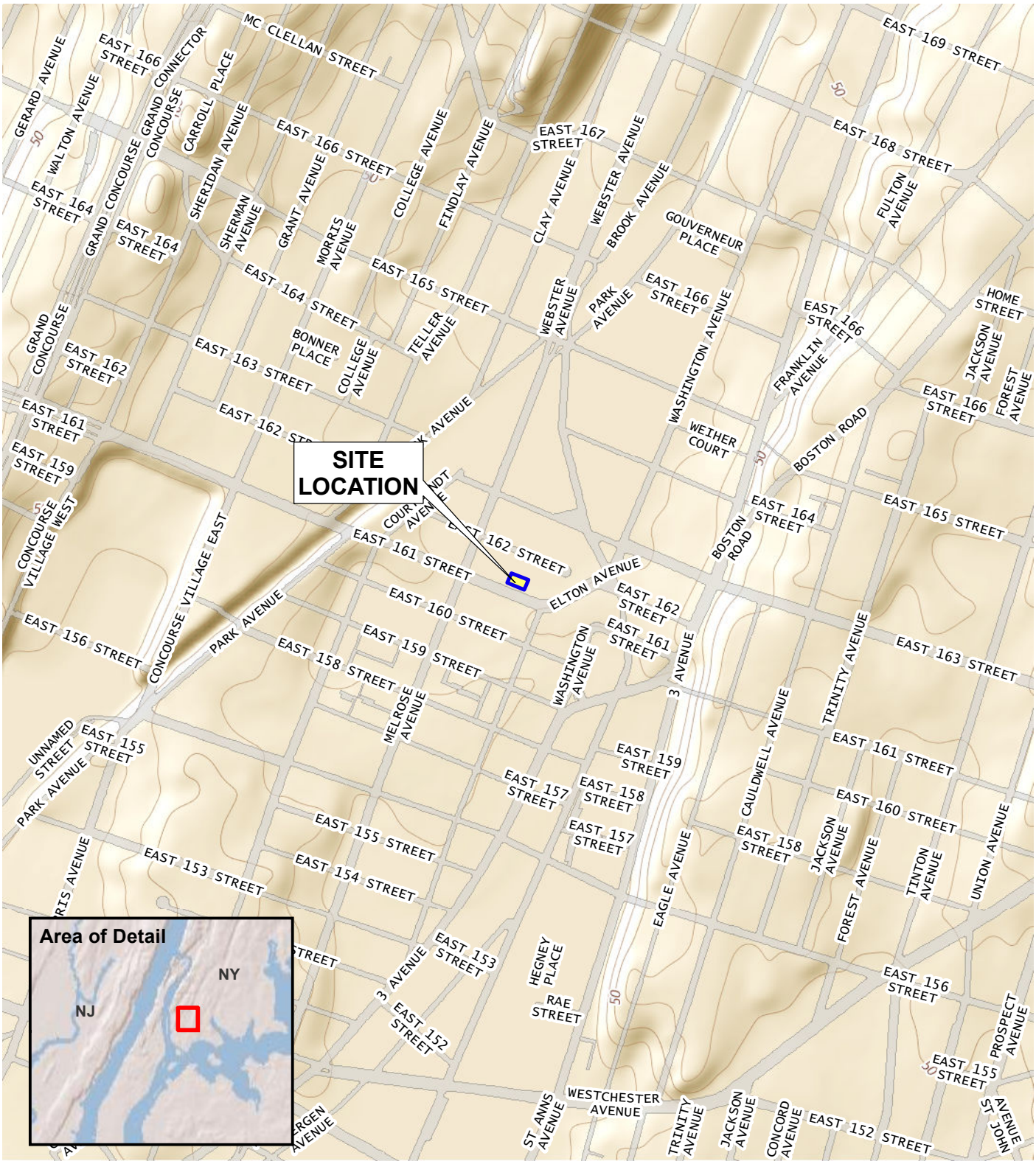
5. U.S. Geological Survey, Central Park, NY Quadrangle, 7.5 minute Series (Topographic), Scale 1:24,000, 2011.

6. 6 NYCRR Section 375-6: Remedial Program Soil Cleanup Objectives (SCOs), December 14, 2006.

7. NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York Air Guideline Values (AGVs) and Table 3.3 Matrix 1 and 2 Chemicals, October 2006; updated September 2013 for change of AGV for PCE; updated August 2015 for change of AGV for TCE.

8. NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, March 1998.

FIGURES



Source: USGS Topo base map service from The National Map

0 400 800 1,600

SCALE IN FEET

Melrose Commons Site C - Supportive Housing
Block 2383, Lot 39
Bronx, New York

SITE LOCATION

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

DATE
5/5/2016

PROJECT NO.
11925

FIGURE
1

© 2016 AKRF, Inc. Environmental Consultants M:\AKRF Project Files\11925-Site C Supportive\GIS\11925 Fig 1 Site Location RIR.mxd

SOURCE:
http://gis.nyc.gov/taxmap - Department of Finance, Current Tax Map.

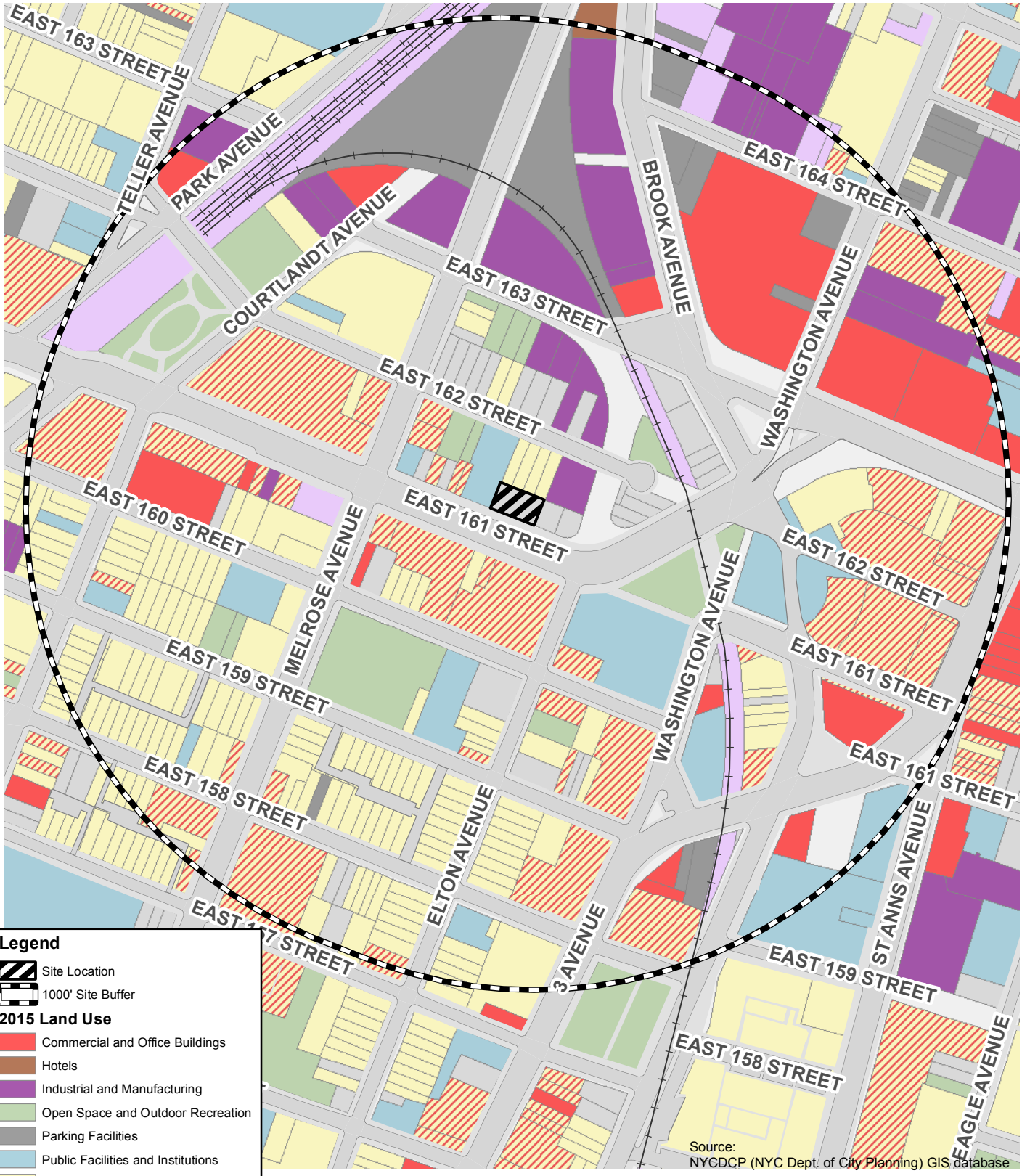
LEGEND:

	PROJECT SITE BOUNDARY
39	LOT NUMBER
	SUBSURFACE ANOMALY
SB-1	SOIL BORING (AKRF, 2014)
SV-1	SOIL VAPOR SAMPLE (AKRF, 2014)
AA-1	AMBIENT AIR SAMPLE (AKRF, 2014)

0 15 30 60
SCALE IN FEET

Melrose Commons Site C - Supportive Housing **Block 2383, Lot 39** Bronx, New York	AKRF	DATE **5/16/2016**
		PROJECT NO. **11925**
SITE PLAN AND SAMPLE LOCATIONS	Environmental Consultants 440 Park Avenue South, New York, N.Y. 10016	FIGURE **2**

©2016 AKRF, Inc. I:\AKRF Project Files\11925-Site C Supportive\CAD\11925 Figs 2 and 5 Site Plan & Sample Locs RIR.dwg last save: mveilleux 5/16/2016 3:58 PM



Legend

- Site Location
- 1000' Site Buffer

2015 Land Use

- Commercial and Office Buildings
- Hotels
- Industrial and Manufacturing
- Open Space and Outdoor Recreation
- Parking Facilities
- Public Facilities and Institutions
- Residential
- Residential with Commercial Below
- Transportation and Utility
- Vacant Land

0 150 300 600

SCALE IN FEET

Melrose Commons Site C - Supportive Housing
Block 2383, Lot 39
Bronx, New York

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

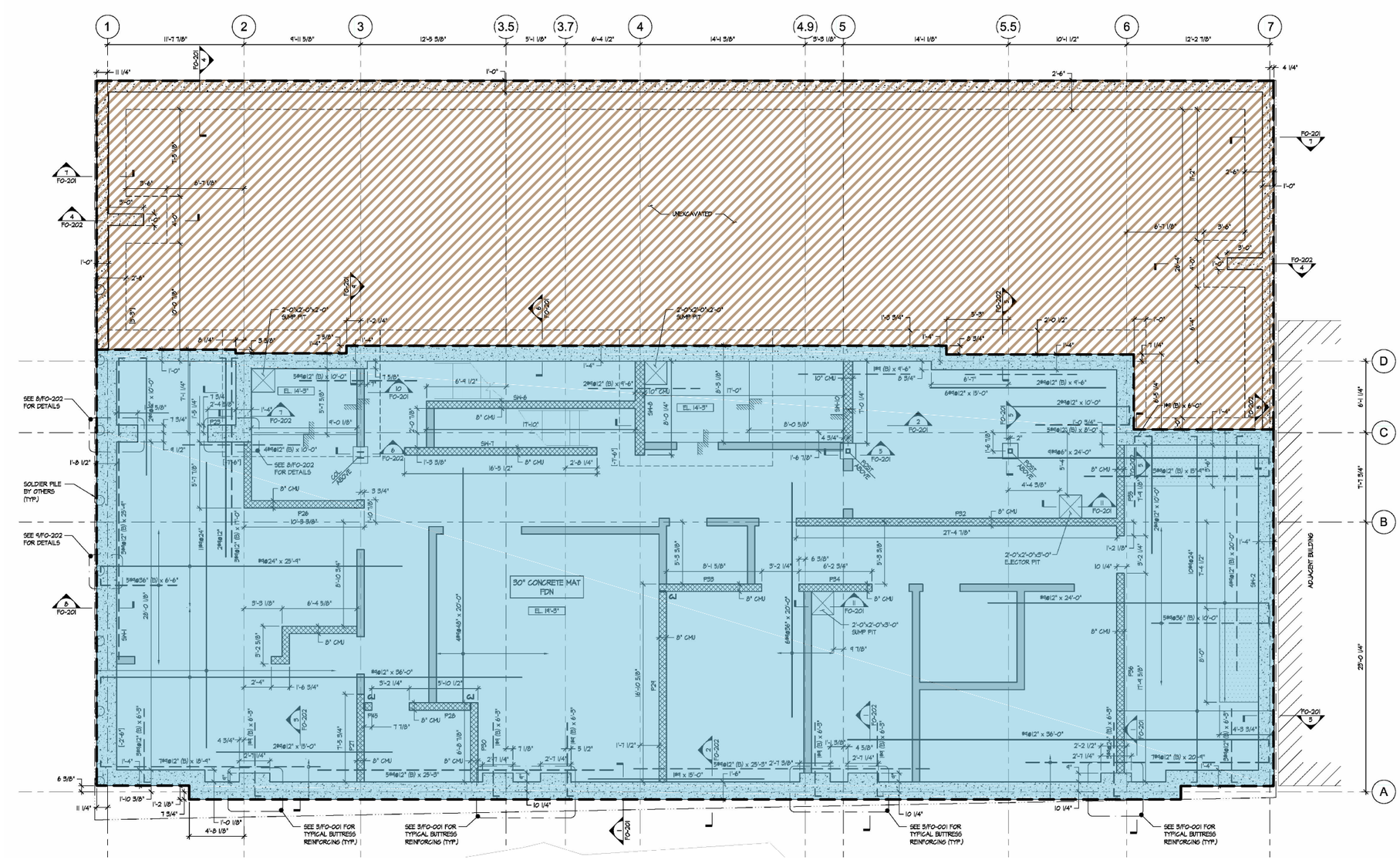
DATE
5/5/2016

PROJECT NO.
11925

FIGURE
3

SURROUNDING LAND USE

© 2016 AKRF, Inc. Environmental Consultants M:\AKRF Project Files\11925-Site C Supportive\GIS\11925 Fig 3 Land Use RIR.mxd



LEGEND:

PROPOSED 2-FOOT EXCAVATION AREA

PROPOSED 12-FOOT EXCAVATION AREA

0 5 10 20

SCALE IN FEET

SOURCE:

The Bridge Mental Health and Housing Solutions, "Foundation and Cellar Plan", DWG no. FO-101.00, Issue Date 12.14.15.

AKRF

Environmental Consultants

440 Park Avenue South, New York, N.Y. 10016

Melrose Commons Site C - Supportive Housing

Block 2383, Lot 39

Bronx, New York

PROPOSED EXCAVATION PLAN

DATE

5/23/2016

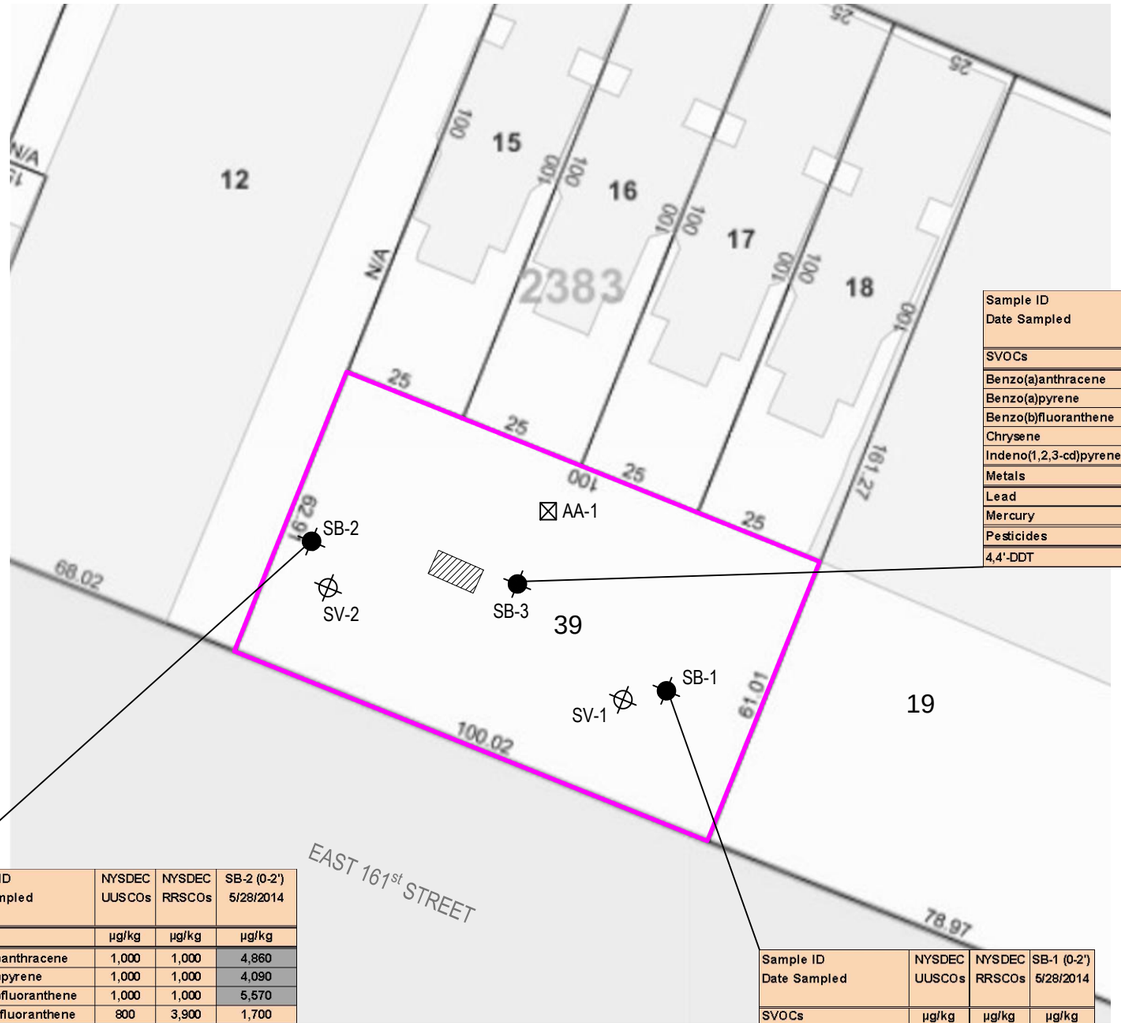
PROJECT NO.

11925

FIGURE

4

©2016 AKRF, Inc. M:\AKRF Project Files\11925-Site C Supportive\CAD\11925 Fig 4 Proposed Excavation Plan RIR.dwg last save: mveilleux 5/23/2016 8:42 AM



Sample ID Date Sampled	NYSDEC UUSCOs	NYSDEC RRSCOs	SB-3 (0-2') 5/28/2014
SVOCs	µg/kg	µg/kg	µg/kg
Benzo(a)anthracene	1,000	1,000	1,420
Benzo(a)pyrene	1,000	1,000	1,450
Benzo(b)fluoranthene	1,000	1,000	1,680
Chrysene	1,000	3,900	1,580
Indeno(1,2,3-cd)pyrene	500	500	1,030
Metals	µg/kg	µg/kg	µg/kg
Lead	63	400	96
Mercury	0.18	0.81	0.24
Pesticides	µg/kg	µg/kg	µg/kg
4,4'-DDT	3.3	7,900	14.6

Sample ID Date Sampled	NYSDEC UUSCOs	NYSDEC RRSCOs	SB-2 (0-2') 5/28/2014
SVOCs	µg/kg	µg/kg	µg/kg
Benzo(a)anthracene	1,000	1,000	4,860
Benzo(a)pyrene	1,000	1,000	4,090
Benzo(b)fluoranthene	1,000	1,000	5,570
Benzo(k)fluoranthene	800	3,900	1,700
Chrysene	1,000	3,900	5,320
Dibenzo(a,h)anthracene	330	330	920
Indeno(1,2,3-cd)pyrene	500	500	2,780
Metals	µg/kg	µg/kg	µg/kg
Barium	350	400	1,760
Lead	63	400	668
Mercury	0.18	0.81	0.27
Zinc	109	10,000	701
Pesticides	µg/kg	µg/kg	µg/kg
4,4'-DDE	3.3	8,900	6.8
4,4'-DDT	3.3	7,900	96
Dieldrin	5	200	5.5

Sample ID Date Sampled	NYSDEC UUSCOs	NYSDEC RRSCOs	SB-2 (10-12') 5/28/2014
Metals	µg/kg	µg/kg	µg/kg
Copper	50	270	50.2

Sample ID Date Sampled	NYSDEC UUSCOs	NYSDEC RRSCOs	SB-1 (0-2') 5/28/2014
SVOCs	µg/kg	µg/kg	µg/kg
Benzo(a)anthracene	1,000	1,000	15,400
Benzo(a)pyrene	1,000	1,000	12,600
Benzo(b)fluoranthene	1,000	1,000	16,000
Benzo(k)fluoranthene	800	3,900	3,700
Chrysene	1,000	3,900	15,500
Dibenzo(a,h)anthracene	330	330	3,500
Indeno(1,2,3-cd)pyrene	500	500	8,570
Metals	µg/kg	µg/kg	µg/kg
Barium	350	400	1,480
Lead	63	400	552
Mercury	0.18	0.81	0.22
Zinc	109	10,000	827
Pesticides	µg/kg	µg/kg	µg/kg
4,4'-DDD	3.3	13,000	11.2 a
4,4'-DDE	3.3	8,900	9.6
4,4'-DDT	3.3	7,900	135
Dieldrin	5	200	11.5

SOURCE:
http://gis.nyc.gov/taxmap - Department of Finance,
Current Tax Map.

LEGEND:

- PROJECT SITE BOUNDARY
- 39 LOT NUMBER
- SUBSURFACE ANOMALY
- SB-1 SOIL BORING (AKRF, 2014)
- SV-1 SOIL VAPOR SAMPLE (AKRF, 2014)
- AA-1 AMBIENT AIR SAMPLE (AKRF, 2014)

SOIL

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).

Exceedances of Part 375 Unrestricted Soil Cleanup Objectives are shown in bold font.
Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives are highlighted in gray.

µg/kg: micrograms per kilogram = parts per billion (ppb)
a: more than 40% RPD for detected concentrations between the two GC columns.

Sample ID Date Sampled	NYSDEC UUSCOs	NYSDEC RRSCOs	SB-2 (10-12') 5/28/2014
Metals	µg/kg	µg/kg	µg/kg
Copper	50	270	50.2

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

0 15 30 60
SCALE IN FEET

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

Melrose Commons Site C - Supportive Housing
Block 2383, Lot 39
Bronx, New York

SOIL CONCENTRATIONS ABOVE NYSDEC SOIL CLEANUP OBJECTIVES

DATE
5/17/2016

PROJECT NO.
11925

FIGURE
5

©2016 AKRF, Inc. \\AKRF Project Files\11925-Site C Supportive\CAD\11925 Figs 2 and 5 Site Plan & Sample Locs RIR.dwg last save: mveilleux 5/17/2016 3:15 PM

TABLES

Table 1
Melrose Commons Site C - Supportive Housing
Tax Block 2383, Lots 37 and 39
Bronx, New York
Subsurface 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') JB67915-1 5/28/2014	SB-1 (10-12') JB67915-2 5/28/2014	SB-2 (0-2') JB67915-5 5/28/2014	SB-2 (10-12') JB67915-6 5/28/2014	SB-3 (0-2') JB67915-3 5/28/2014	SB-3 (10-12') JB67915-4 5/28/2014	SSTB JB67915-7 5/28/2014
1,1,1-Trichloroethane	680	100,000	0.37 U	0.29 U	0.36 U	0.42 U	0.32 U	0.44 U	0.29 U
1,1,2,2-Tetrachloroethane	NS	NS	0.44 U	0.34 U	0.43 U	0.5 U	0.38 U	0.52 U	0.34 U
1,1,2-Trichloroethane	NS	NS	1.1 U	0.82 U	1 U	1.2 U	0.92 U	1.3 U	0.82 U
1,1-Dichloroethane	270	26,000	0.4 U	0.31 U	0.4 U	0.46 U	0.35 U	0.48 U	0.31 U
1,1-Dichloroethene	330	100,000	0.37 U	0.29 U	0.36 U	0.42 U	0.32 U	0.44 U	0.29 U
1,2,3-Trichlorobenzene	NS	NS	0.27 U	0.21 U	0.26 U	0.3 U	0.23 U	0.32 U	0.21 U
1,2,4-Trichlorobenzene	NS	NS	0.23 U	0.18 U	0.23 U	0.26 U	0.2 U	0.28 U	0.18 U
1,2-Dibromo-3-chloropropane	NS	NS	1.7 U	1.3 U	1.7 U	1.9 U	1.5 U	2 U	1.3 U
1,2-Dibromoethane	NS	NS	0.7 U	0.55 U	0.69 U	0.8 U	0.62 U	0.84 U	0.55 U
1,2-Dichlorobenzene	1,100	100,000	0.43 U	0.34 U	0.43 U	0.49 U	0.38 U	0.52 U	0.34 U
1,2-Dichloroethane	20	3,100	0.41 U	0.32 U	0.4 U	0.47 U	0.36 U	0.49 U	0.32 U
1,2-Dichloropropane	NS	NS	0.56 U	0.44 U	0.55 U	0.64 U	0.49 U	0.67 U	0.44 U
1,3-Dichlorobenzene	2,400	49,000	0.28 U	0.22 U	0.27 U	0.32 U	0.24 U	0.33 U	0.22 U
1,4-Dichlorobenzene	1,800	13,000	0.32 U	0.25 U	0.32 U	0.37 U	0.28 U	0.38 U	0.25 U
2-Butanone (MEK)	120	100,000	5.7 U	4.4 U	5.5 U	6.4 U	4.9 U	6.7 U	4.4 U
2-Hexanone	NS	NS	2.3 U	1.8 U	2.2 U	2.6 U	2 U	2.7 U	1.8 U
4-Methyl-2-pentanone(MIBK)	NS	NS	1.7 U	1.3 U	1.7 U	1.9 U	1.5 U	2 U	1.3 U
Acetone	50	100,000	5.9 U	4.6 U	5.7 U	6.7 U	5.1 U	7 U	4.6 U
Benzene	60	4,800	0.16 U	0.13 U	0.16 U	0.18 U	0.14 U	0.19 U	0.13 U
Bromochloromethane	NS	NS	0.67 U	0.52 U	0.65 U	0.76 U	0.58 U	0.79 U	0.52 U
Bromodichloromethane	NS	NS	0.36 U	0.28 U	0.35 U	0.41 U	0.32 U	0.43 U	0.28 U
Bromoform	NS	NS	0.34 U	0.26 U	0.33 U	0.38 U	0.29 U	0.4 U	0.26 U
Bromomethane	NS	NS	0.62 U	0.48 U	0.61 U	0.7 U	0.54 U	0.73 U	0.48 U
Carbon disulfide	NS	NS	0.18 U	0.14 U	0.18 U	0.21 U	0.16 U	0.22 U	0.14 U
Carbon tetrachloride	760	2,400	0.32 U	0.25 U	0.32 U	0.37 U	0.28 U	0.38 U	0.25 U
Chlorobenzene	1,100	100,000	0.25 U	0.2 U	0.25 U	0.29 U	0.22 U	0.3 U	0.2 U
Chloroethane	NS	NS	1.3 U	0.99 U	1.3 U	1.5 U	1.1 U	1.5 U	1 U
Chloroform	370	49,000	0.33 U	0.25 U	0.32 U	0.37 U	0.29 U	0.39 U	0.25 U
Chloromethane	NS	NS	0.44 U	0.34 U	0.43 U	0.5 U	0.39 U	0.52 U	0.34 U
cis-1,2-Dichloroethene	250	100,000	0.27 U	0.21 U	0.26 U	0.3 U	0.23 U	0.32 U	0.21 U
cis-1,3-Dichloropropene	NS	NS	0.29 U	0.23 U	0.29 U	0.33 U	0.26 U	0.35 U	0.23 U
Cyclohexane	NS	NS	0.33 U	0.26 U	0.32 U	0.38 U	0.29 U	0.39 U	0.26 U
Dibromochloromethane	NS	NS	0.31 U	0.24 U	0.3 U	0.35 U	0.27 U	0.37 U	0.24 U
Dichlorodifluoromethane	NS	NS	0.45 U	0.35 U	0.44 U	0.52 U	0.4 U	0.54 U	0.35 U
Ethylbenzene	1,000	41,000	0.23 U	0.17 U	0.22 U	0.26 U	0.2 U	0.27 U	0.18 U
Freon 113	NS	NS	0.56 U	0.43 U	0.55 U	0.64 U	0.49 U	0.66 U	0.44 U
Isopropylbenzene	NS	NS	0.19 U	0.15 U	0.18 U	0.22 U	0.17 U	0.22 U	0.15 U
m,p-Xylene	NS	NS	0.62 U	0.48 U	0.61 U	0.71 U	0.54 U	0.74 U	0.48 U
Methyl Acetate	NS	NS	2.1 U	1.7 U	2.1 U	2.4 U	1.9 U	2.6 U	1.7 U
Methyl Tert Butyl Ether	930	100,000	0.44 U	0.34 U	0.43 U	0.5 U	0.39 U	0.52 U	0.34 U
Methylcyclohexane	NS	NS	0.21 U	0.16 U	0.21 U	0.24 U	0.18 U	0.25 U	0.16 U
Methylene chloride	50	100,000	2.2 U	1.7 U	2.1 U	2.5 U	1.9 U	2.6 U	1.7 U
o-Xylene	NS	NS	0.23 U	0.18 U	0.22 U	0.26 U	0.2 U	0.27 U	0.18 U
Styrene	NS	NS	0.3 U	0.23 U	0.29 U	0.34 U	0.26 U	0.35 U	0.23 U
Tetrachloroethene	1,300	19,000	0.53 U	0.41 U	0.52 U	0.6 U	0.46 U	0.63 U	0.41 U
Toluene	700	100,000	0.18 U	0.14 U	0.18 U	0.21 U	0.16 U	0.22 U	0.14 U
trans-1,2-Dichloroethene	190	100,000	0.54 U	0.42 U	0.53 U	0.62 U	0.48 U	0.65 U	0.42 U
trans-1,3-Dichloropropene	NS	NS	0.35 U	0.27 U	0.34 U	0.4 U	0.3 U	0.41 U	0.27 U
Trichloroethene	470	21,000	0.45 U	0.35 U	0.44 U	0.51 U	0.39 U	0.53 U	0.35 U
Trichlorofluoromethane	NS	NS	0.29 U	0.22 U	0.28 U	0.33 U	0.25 U	0.34 U	0.23 U
Vinyl chloride	20	900	0.44 U	0.34 U	0.43 U	0.5 U	0.38 U	0.52 U	0.34 U
Xylene (total)	260	100,000	0.23 U	0.18 U	0.22 U	0.26 U	0.2 U	0.27 U	0.18 U

Table 2
Melrose Commons Site C - Supportive Housing
Tax Block 2383, Lots 37 and 39
Bronx, New York
Subsurface 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') JB67915-1 5/28/2014 10	SB-1 (10-12') JB67915-2 5/28/2014 1	SB-2 (0-2') JB67915-5 5/28/2014 10	SB-2 (10-12') JB67915-6 5/28/2014 1	SB-3 (0-2') JB67915-3 5/28/2014 1	SB-3 (10-12') JB67915-4 5/28/2014 1
1,1'-Biphenyl	NS	NS	40.5 J	4.1 U	15.3 J	4 U	4.2 U	3.8 U
1,2,4,5-Tetrachlorobenzene	NS	NS	11 U	11 U	11 U	10 U	11 U	10 U
1,4-Dioxane	100	13,000	24 U	23 U	23 U	22 U	24 U	21 U
2,3,4,6-Tetrachlorophenol	NS	NS	38 U	36 U	36 U	35 U	38 U	34 U
2,4,5-Trichlorophenol	NS	NS	43 U	41 U	41 U	40 U	42 U	38 U
2,4,6-Trichlorophenol	NS	NS	35 U	33 U	33 U	32 U	34 U	31 U
2,4-Dichlorophenol	NS	NS	60 U	57 U	57 U	55 U	59 U	53 U
2,4-Dimethylphenol	NS	NS	62 U	59 U	59 U	57 U	61 U	56 U
2,4-Dinitrophenol	NS	NS	45 U	43 U	43 U	42 U	44 U	40 U
2,4-Dinitrotoluene	NS	NS	16 U	15 U	15 U	15 U	16 U	14 U
2,6-Dinitrotoluene	NS	NS	14 U	13 U	13 U	13 U	14 U	13 U
2-Chloronaphthalene	NS	NS	11 U	11 U	11 U	11 U	11 U	10 U
2-Chlorophenol	NS	NS	37 U	35 U	35 U	34 U	36 U	33 U
2-Methylnaphthalene	NS	NS	70.2 J	20 U	41.3 J	19 U	20 U	18 U
2-Methylphenol	330	100,000	42 U	40 U	40 U	39 U	42 U	38 U
2-Nitroaniline	NS	NS	16 U	16 U	16 U	15 U	16 U	15 U
2-Nitrophenol	NS	NS	39 U	37 U	38 U	36 U	39 U	35 U
3&4-Methylphenol	NS	NS	75.9	45 U	45 U	43 U	46 U	42 U
3,3'-Dichlorobenzidine	NS	NS	9.4 U	9 U	9 U	8.7 U	9.3 U	8.4 U
3-Nitroaniline	NS	NS	15 U	14 U	14 U	14 U	15 U	13 U
4,6-Dinitro-o-cresol	NS	NS	45 U	43 U	43 U	42 U	44 U	40 U
4-Bromophenyl phenyl ether	NS	NS	13 U	13 U	13 U	12 U	13 U	12 U
4-Chloro-3-methyl phenol	NS	NS	37 U	35 U	35 U	34 U	36 U	33 U
4-Chloroaniline	NS	NS	12 U	11 U	11 U	11 U	12 U	11 U
4-Chlorophenyl phenyl ether	NS	NS	11 U	11 U	11 U	10 U	11 U	10 U
4-Nitroaniline	NS	NS	14 U	14 U	14 U	13 U	14 U	13 U
4-Nitrophenol	NS	NS	63 U	60 U	60 U	58 U	62 U	56 U
Acenaphthene	20,000	100,000	185	10 U	44.3	9.9 U	59.5	9.6 U
Acenaphthylene	100,000	100,000	2,580	11 U	1,130	11 U	226	11 U
Acetophenone	NS	NS	6.5 U	6.2 U	6.2 U	6 U	6.4 U	5.8 U
Anthracene	100,000	100,000	5,020	12 U	786	12 U	218	12 U
Atrazine	NS	NS	7.3 U	6.9 U	7 U	6.7 U	7.2 U	6.5 U
Benzaldehyde	NS	NS	8.5 U	8.1 U	8.1 U	7.8 U	8.4 U	7.6 U
Benzo(a)anthracene	1,000	1,000	**15,400**	11 U	**4,860**	11 U	**1,420**	11 U
Benzo(a)pyrene	1,000	1,000	**12,600**	11 U	**4,090**	10 U	**1,450**	10 U
Benzo(b)fluoranthene	1,000	1,000	**16,000**	12 U	**5,570**	11 U	**1,680**	11 U
Benzo(g,h,i)perylene	100,000	100,000	7,840	13 U	2,660	13 U	1,040	12 U
Benzo(k)fluoranthene	800	3,900	**3,700**	13 U	**1,700**	13 U	612	12 U
bis(2-Chloroethoxy)methane	NS	NS	15 U	14 U	14 U	14 U	15 U	13 U
bis(2-Chloroethyl)ether	NS	NS	11 U	11 U	11 U	10 U	11 U	10 U
bis(2-Chloroisopropyl)ether	NS	NS	11 U	10 U	11 U	10 U	11 U	9.8 U
bis(2-Ethylhexyl)phthalate	NS	NS	555	31 U	379	30 U	74.4	29 U
Butyl benzyl phthalate	NS	NS	21 U	20 U	20 U	20 U	21 U	19 U
Caprolactam	NS	NS	12 U	11 U	11 U	11 U	11 U	10 U
Carbazole	NS	NS	3,850	16 U	246	16 U	79.1	15 U
Chrysene	1,000	3,900	**15,500**	12 U	**5,320**	12 U	**1,580**	11 U
Dibenzo(a,h)anthracene	330	330	**3,500**	12 U	**920**	12 U	291	11 U
Dibenzofuran	7,000	59,000	758	10 U	113	10 U	33.9 J	9.8 U
Diethyl phthalate	NS	NS	13 U	12 U	12 U	12 U	12 U	11 U
Dimethyl phthalate	NS	NS	13 U	12 U	12 U	12 U	13 U	12 U
Di-n-butyl phthalate	NS	NS	8.2 U	7.8 U	7.9 U	7.6 U	8.1 U	7.3 U
Di-n-octyl phthalate	NS	NS	18 U	17 U	17 U	17 U	18 U	16 U
Fluoranthene	100,000	100,000	34,800	16 U	6,440	15 U	2,180	15 U
Fluorene	30,000	100,000	508	12 U	103	11 U	56.2	11 U
Hexachlorobenzene	330	1200	12 U	11 U	12 U	11 U	12 U	11 U
Hexachlorobutadiene	NS	NS	10 U	9.8 U	9.8 U	9.5 U	10 U	9.2 U
Hexachlorocyclopentadiene	NS	NS	38 U	36 U	36 U	35 U	37 U	34 U
Hexachloroethane	NS	NS	10 U	9.8 U	9.8 U	9.5 U	10 U	9.2 U
Indeno(1,2,3-cd)pyrene	500	500	**8,570**	12 U	**2,780**	12 U	**1,030**	11 U
Isophorone	NS	NS	10 U	9.5 U	9.5 U	9.2 U	9.8 U	8.9 U
Naphthalene	12,000	100,000	181	9.6 U	107	9.3 U	28.9 J	9 U
Nitrobenzene	NS	NS	11 U	10 U	10 U	9.9 U	11 U	9.6 U
N-Nitroso-di-n-propylamine	NS	NS	9.1 U	8.6 U	8.6 U	8.3 U	8.9 U	8.1 U
N-Nitrosodiphenylamine	NS	NS	22 U	21 U	21 U	20 U	22 U	20 U
Pentachlorophenol	800	6,700	63 U	60 U	61 U	58 U	62 U	57 U
Phenanthrene	100,000	100,000	31,000	16 U	2,670	16 U	918	15 U
Phenol	330	100,000	39 U	92.2	37 U	36 U	38 U	35 U
Pyrene	100,000	100,000	32,200	14 U	7,590	13 U	2,500	13 U

Table 3
Melrose Commons Site C - Supportive Housing
Tax Block 2383, Lots 37 and 39
Bronx, New York
Subsurface Investigation Soil Analytical Results
Metals

Client ID Lab Sample ID Date Sampled mg/kg	NYSDEC Part 375 Unrestricted SCO mg/kg	NYSDEC Part 375 Restricted Residential SCO mg/kg	SB-1 (0-2') JB67915-1 5/28/2014	SB-1 (10-12') JB67915-2 5/28/2014	SB-2 (0-2') JB67915-5 5/28/2014	SB-2 (10-12') JB67915-6 5/28/2014	SB-3 (0-2') JB67915-3 5/28/2014	SB-3 (10-12') JB67915-4 5/28/2014
Aluminum	**NS**	**NS**	6,850	5,250	8,840	9,820	10,600	4,830
Antimony	**NS**	**NS**	<2.4 U	<2.2 U	<2.3 U	<2.1 U	<2.1 U	<2.1 U
Arsenic	**13**	**16**	5.2	<2.2 U	5.1	2.6	2.8	<2.1 U
Barium	**350**	**400**	**1,480**	36.2	**1,760**	29	128	27.8
Beryllium	**7.2**	**72**	0.46	0.42	0.56	0.58	0.65	0.29
Cadmium	**2.5**	**4.3**	0.83	<0.55 U	0.84	<0.52 U	<0.53 U	<0.51 U
Calcium	**NS**	**NS**	61,300	24,700	62,300	33,500	37,000	72,700
Chromium	**30**	**180**	14.9	12.1	22.4	29.2	20.4	8.9
Cobalt	**NS**	**NS**	<5.9 U	5.6	6	14.2	7.8	<5.1 U
Copper	**50**	**270**	18.6	13.6	30.7	**50.2**	22.3	14
Iron	**NS**	**NS**	12,300	11,100	12,700	20,000	14,600	9,480
Lead	**63**	**400**	**552**	3.2	**668**	3.7	**96**	4.3
Magnesium	**NS**	**NS**	12,300	16,500	23,800	25,600	19,500	48,300
Manganese	**1,600**	**2,000**	332	209	361	172	372	171
Mercury	**0.18**	**0.81**	**0.22**	<0.032 U	**0.27**	<0.032 U	**0.24**	<0.032 U
Nickel	**30**	**310**	10.4	12.5	13.2	28.1	16	11.4
Potassium	**NS**	**NS**	<1,200 U	1,390	1,520	4,380	2,380	1,350
Selenium	**3.9**	**180**	<2.4 U	<2.2 U	<2.3 U	<2.1 U	<2.1 U	<2.1 U
Silver	**2**	**180**	0.86	<0.55 U	0.81	<0.52 U	<0.53 U	<0.51 U
Sodium	**NS**	**NS**	<1,200 U	<1,100 U	<1,200 U	<1,000 U	<1,100 U	<1,000 U
Thallium	**NS**	**NS**	<1.2 U	<1.1 U	<1.2 U	<1 U	<1.1 U	<1 U
Vanadium	**NS**	**NS**	20.7	17.5	25.8	37.4	25.5	15.6
Zinc	**109**	**10,000**	**827**	36.6	**701**	30.8	100	24.5

Table 4
Melrose Commons Site C - Supportive Housing
Tax Block 2383, Lots 37 and 39
Bronx, New York
Subsurface Investigation Soil Analytical Results
Polychlorinated Biphenyls & Pesticides

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') JB67915-1 5/28/2014 1	SB-1 (10-12') JB67915-2 5/28/2014 1	SB-2 (0-2') JB67915-5 5/28/2014 1	SB-2 (10-12') JB67915-6 5/28/2014 1	SB-3 (0-2') JB67915-3 5/28/2014 1	SB-3 (10-12') JB67915-4 5/28/2014 1
Aroclor 1016	**NS**	**NS**	1 U	0.92 U	0.97 U	0.89 U	0.95 U	0.88 U
Aroclor 1221	**NS**	**NS**	2.3 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U
Aroclor 1232	**NS**	**NS**	1.9 U	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U
Aroclor 1242	**NS**	**NS**	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
Aroclor 1248	**NS**	**NS**	1.2 U	1.1 U	1.1 U	1 U	1.1 U	1 U
Aroclor 1254	**NS**	**NS**	1.8 U	1.7 U	1.7 U	1.6 U	1.7 U	1.6 U
Aroclor 1260	**NS**	**NS**	1.3 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
Aroclor 1262	**NS**	**NS**	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
Aroclor 1268	**NS**	**NS**	1.1 U	1 U	1.1 U	1 U	1.1 U	1 U
Total PCBs	**100**	**1,000**	ND	ND	ND	ND	ND	ND

Pesticides - µg/Kg

Dilution			20	1	50	1	10	1
4,4'-DDD	**3.3**	**13,000**	**11.2 a**	0.039 U	0.04 U	0.037 U	1.2	0.037 U
4,4'-DDE	**3.3**	**8,900**	**9.6**	0.029 U	**6.8**	0.027 U	1.2	0.027 U
4,4'-DDT	**3.3**	**7,900**	**135**	0.035 U	**96**	0.034 U	**14.6**	0.033 U
Aldrin	**5**	**97**	0.035 U	0.033 U	0.034 U	0.031 U	0.033 U	0.031 U
alpha-BHC	**20**	**480**	0.023 U	0.021 U	0.53 a	0.02 U	0.32	0.02 U
alpha-Chlordane	**94**	**4,200**	8	0.026 U	5.2	0.025 U	1.3	0.025 U
beta-BHC	**36**	**360**	0.048 U	0.044 U	0.046 U	0.042 U	0.045 U	0.042 U
delta-BHC	**40**	**100,000**	0.038 U	0.035 U	0.037 U	0.034 U	0.036 U	0.033 U
Dieldrin	**5**	**200**	**11.5**	0.028 U	**5.5**	0.027 U	0.73 a	0.026 U
Endosulfan sulfate	**2,400**	**24,000**	0.033 U	0.031 U	0.032 U	0.029 U	0.031 U	0.029 U
Endosulfan-I	**2,400**	**24,000**	0.029 U	0.027 U	0.028 U	0.026 U	0.027 U	0.026 U
Endosulfan-II	**2,400**	**24,000**	2.2	0.043 U	0.044 U	0.041 U	0.043 U	0.04 U
Endrin	**14**	**11,000**	0.025 U	0.023 U	0.024 U	0.022 U	0.023 U	0.022 U
Endrin aldehyde	**NS**	**NS**	0.04 U	0.037 U	0.039 U	0.036 U	1.8	0.035 U
Endrin ketone	**NS**	**NS**	0.031 U	0.029 U	0.03 U	0.028 U	0.029 U	0.027 U
gamma-BHC (Lindane)	**100**	**1,300**	0.038 U	0.035 U	0.036 U	0.033 U	0.035 U	0.033 U
gamma-Chlordane	**NS**	**NS**	8.7	0.049 U	4.5	0.047 U	0.89	0.047 U
Heptachlor	**42**	**2,100**	0.037 U	0.035 U	0.036 U	0.033 U	0.035 U	0.033 U
Heptachlor epoxide	**NS**	**NS**	0.029 U	0.027 U	0.028 U	0.025 U	0.027 U	0.025 U
Methoxychlor	**NS**	**NS**	0.075 U	0.069 U	0.072 U	0.067 U	0.07 U	0.066 U
Toxaphene	**NS**	**NS**	0.97 U	0.89 U	0.93 U	0.86 U	0.91 U	0.85 U

Table 5
Melrose Commons Site C - Supportive Housing
Tax Block 2383 Lots 37 and 39
Bronx, NY
Subsurface 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/m³	AA-1 JB67971-1 5/28/2014 1.48	SV-1 JB67971-2 5/28/2014 1	SV-2 JB67971-3 5/28/2014 1
1,1,1-Trichloroethane	NS	0.087 U	0.36 U	0.36 U
1,1,2,2-Tetrachloroethane	NS	0.21 U	0.82 U	0.82 U
1,1,2-Trichloroethane	NS	0.17 U	0.65 U	0.65 U
1,1-Dichloroethane	NS	0.065 U	0.27 U	0.27 U
1,1-Dichloroethylene	NS	0.083 U	0.33 U	0.33 U
1,2,4-Trichlorobenzene	NS	0.59 U	2.4 U	2.4 U
1,2,4-Trimethylbenzene	NS	0.84 J	2.4 J	0.32 U
1,2-Dibromoethane	NS	0.21 U	0.85 U	0.85 U
1,2-Dichloroethane	NS	0.065 U	0.27 U	0.27 U
1,2-Dichloropropane	NS	0.18 U	0.74 U	0.74 U
1,3,5-Trimethylbenzene	NS	0.074 U	0.29 U	0.29 U
1,3-Butadiene	NS	0.044 U	0.17 U	0.17 U
1,4-Dioxane	NS	0.22 U	0.86 U	0.86 U
2,2,4-Trimethylpentane	NS	0.75 J	7.5	0.39 U
2-Chlorotoluene	NS	0.1 U	0.41 U	0.41 U
2-Hexanone	NS	0.1 U	0.4 U	0.4 U
3-Chloropropene	NS	0.088 U	0.34 U	0.34 U
4-Ethyltoluene	NS	0.074 U	0.29 U	0.29 U
Acetone	NS	36.3	66.3	16
Benzene	NS	1.5	9.3	0.27 U
Benzyl Chloride	NS	0.13 U	0.51 U	0.51 U
Bromodichloromethane	NS	0.17 U	0.66 U	0.66 U
Bromoethene	NS	0.061 U	0.25 U	0.25 U
Bromoform	NS	0.23 U	0.89 U	0.89 U
Bromomethane	NS	0.066 U	0.27 U	0.27 U
Carbon disulfide	NS	2.3	1.8 J	0.21 U
Carbon tetrachloride	NS	0.069 U	0.28	0.28 U
Chlorobenzene	NS	0.12 U	0.46 U	0.46 U
Chloroethane	NS	0.053 U	0.22 U	0.22 U
Chloroform	NS	0.093 U	0.36 U	0.36 U
Chloromethane	NS	1.4	0.27 U	1.9
cis-1,2-Dichloroethylene	NS	0.11 U	0.44 U	0.44 U
cis-1,3-Dichloropropene	NS	0.086 U	0.34 U	0.34 U
Cyclohexane	NS	0.2 U	0.79 U	0.79 U
Dibromochloromethane	NS	0.25 U	1 U	1 U
Dichlorodifluoromethane	NS	3.8	5.4	2.7 J
Ethanol	NS	75	207	11
Ethyl Acetate	NS	2.7	6.1	6.5
Ethylbenzene	NS	0.56 J	2.3 J	0.35 U
Freon 113	NS	0.16 U	0.63 U	0.63 U
Freon 114	NS	0.15 U	0.59 U	0.59 U
Heptane	NS	0.82	5.7	0.32 U
Hexachlorobutadiene	NS	0.67 U	2.7 U	2.7 U
Hexane	NS	8.8	8.1	1.5 J
Isopropyl Alcohol	NS	3.9	6.4	2.9
m,p-Xylene	NS	1.8	7.8	0.56 U
m-Dichlorobenzene	NS	0.15 U	0.6 U	0.6 U
Methyl ethyl ketone	NS	2.1	2.9	0.68 U
Methyl Isobutyl Ketone	NS	0.86	2.4 J	0.49 U
Methyl Tert Butyl Ether	NS	0.061 U	0.25 U	0.25 U
Methylene chloride	60	20	5.2	7.3
Methylmethacrylate	NS	0.16 U	0.66 U	0.66 U
o-Dichlorobenzene	NS	0.17 U	0.72 U	0.72 U
o-Xylene	NS	0.69 J	2.6 J	0.33 U
p-Dichlorobenzene	NS	0.13 U	0.52 U	0.52 U
Propylene	NS	31.3	8.9	0.22 U
Styrene	NS	0.51 J	0.34 U	0.34 U
Tertiary Butyl Alcohol	NS	1.9	3.9	0.55 U
Tetrachloroethylene	30	3.1	1.4	1.1
Tetrahydrofuran	NS	0.38 J	0.53 U	0.53 U
Toluene	NS	2.2	15	1.9 J
trans-1,2-Dichloroethylene	NS	0.059 U	0.23 U	0.23 U
trans-1,3-Dichloropropene	NS	0.095 U	0.38 U	0.38 U
Trichloroethylene	5	0.1 U	0.42 U	0.42 U
Trichlorofluoromethane	NS	5.6	26	0.31 U
Vinyl Acetate	NS	0.2 U	0.81 U	0.81 U
Vinyl chloride	NS	0.043 U	0.17 U	0.17 U
Xylenes (total)	NS	2.5	10	0.33 U

Tables 1-5
Melrose Commons Site C - Supportive Housing
Tax Block 2383 Lots 37 and 39
Bronx, NY
Subsurface Investigation Analytical Results
Notes

GENERAL

NS : No cleanup objective listed.

ND : No Detect

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

J : The concentration given is an estimated value.

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

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)

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").

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

APPENDIX A

GEOPHYSICAL INVESTIGATION REPORT

GEOPHYSICAL INVESTIGATION REPORT

PERFORMED AT:

425 & 429 East 161st Street
Bronx, NY 10451

PREPARED FOR:

Chelsea Richard
AKRF
440 Park Avenue South 7th Floor
New York, NY 10016

PREPARED BY:

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May 28, 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 May 28, 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 soil vapor points and boring locations in the vacant lot areas in rear of property. The ground surface of the survey area consisted of 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. All utilities were verified on site. No utilities were delineated on site.

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 typically consistent with an UST and measuring approximately 7 ft by 8.5 ft was detected and delineated in rear of property. See Figure 1 below.

Approximately three proposed boring locations and two soil vapor points were investigated (inside of building) with the GPR, TW-6, and RD receiver. When possible, an area of approximately 10 ft by 10 ft surrounding each location was scanned. In some cases, obstructions prevented an investigation of the entire 10 ft by 10 ft area.

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.

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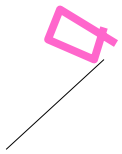
Figure 1: Anomalous area outlined in pink in rear of property.



APPENDIX B

SOIL BORING LOGS AND SOIL VAPOR SAMPLING LOGS

SOIL BORING LOG

Melrose Commons Site C
AKRF Project Number: 11925

Boring No. **SB-1**
Sheet 1 of 1

440 Park Avenue South, New York, NY 10016
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Direct Push Geoprobe
Sampling Method: Geoprobe
Driller : Aarco
Sampler: **Chelsea Richard**

Drilling
Start Time 9:15
Finish Time 9:30
Date 5/28/2014
Weather: 55 °F, Cloudy and Humid

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1, 2, 3, 4, 5	28	Brown SILT, some Sand, little Wood, trace Coal Ash, Brick (FILL).	ND	Slightly moist	ND	ND	SB-1 (0-2')
6, 7, 8, 9, 10	44	Top 8": Brown SILT, some Sand, little Wood, trace Coal Ash, Brick (FILL). Bottom 36": Light brown SAND, some Gravel, trace Silt (FILL).	ND	Slightly moist	ND	ND	
11, 12, 13, 14	36	Light brown SAND, trace Gravel, Silt (FILL).	ND	Moist	ND	ND	SB-1 (10-12')
15, 16, 17, 18, 19, 20		Refusal on bedrock @ 14' below ground surface.					

Notes:
Groundwater not encountered.

ND= Not Detected

SOIL BORING LOG

Melrose Commons Site C
AKRF Project Number: 11925

Boring No. **SB-2**
Sheet 1 of 1

440 Park Avenue South, New York, NY 10016
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Direct Push Geoprobe
Sampling Method: Geoprobe
Driller : Aarco
Sampler: **Chelsea Richard**

Drilling
Start Time 10:30
Finish Time 10:43
Date 5/28/2014
Weather: 55 °F, Cloudy and Humid

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1 2 3 4 5	30	Brown SAND, some Silt, trace Gravel, Brick, Coal Ash/Slag (FILL).	ND	Slightly moist	ND	ND	SB-2 (0-2')
6 7 8 9 10	36	Light brown SAND, trace Gravel, Silt (FILL).	ND	Slightly moist	ND	ND	
11 12 13 14 15	30	Light Brown medium SAND, trace Gravel and Silt (FILL).	ND	Moist	ND	ND	SB-2 (10-12')
16 17 18 19 20		Refusal on Bedrock @ 15' below ground surface.					

Notes:
Groundwater not encountered.

ND= Not Detected

SOIL BORING LOG

Melrose Site C - Supportive
AKRF Project Number: 11925

Boring No. **SB-3**
Sheet 1 of 1

AKRF
440 Park Avenue South, New York, NY 10016
Phone (212) 696-0670 Fax (212) 726-0942

Drilling Method: Direct Push Geoprobe
Sampling Method: Geoprobe
Driller : Aarco
Sampler: **Chelsea Richard**

Drilling
Start Time 9:55
Finish Time 10:10
Date 5/28/2014
Weather: 55 °F, Cloudy and Humid

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Samples Collected for Lab Analysis
1 2 3 4 5	36	Brown SILT, some Sand, little Brick, trace Coal Ash, Gravel.	ND	Slightly moist	ND	ND	SB-3 (0-2')
6 7 8 9 10	30	Light brown SAND, trace Silt, Gravel (FILL).	ND	Slightly moist	ND	ND	
11 12	18	Light brown SAND, trace Silt, Gravel (FILL).	ND	Moist	ND	ND	SB-3 (10-12')
13 14 15 16 17 18 19 20		Refusal on bedrock at 12.5' below ground surface.					

Notes:
Groundwater not encountered.

ND= Not Detected

AKRF, Inc.
Environmental Consultants

Soil Vapor Sampling Log

Job No:	11925	**Client:**	Melrose Commons Site C
Project Location:	425 and 429 E 161st St, Bronx	**Sampled By:**	Chelsea Richard
Date:	5/28/14		

Sample ID: SV-1

Canister ID: A648

Flow Controller ID: FC681

Purging

Time Started: 10:50

Time Stopped: 11:00

Vol. Purged: 2 liters

Flow Rate: .2 L/min

Laboratory Sample (Summa Canister)

Time Started:	11:02	**Vacuum:**	-29 inHg
Time Stopped:	13:02	**Vacuum:**	-7 inHg

Field Sample

PID Calibration: 99.6 ppm

Time Started: 11:00

Time Stopped: 11:02

PID Reading: 5.9 ppm

He Reading Not Detected

AKRF, Inc.
Environmental Consultants

Soil Vapor Sampling Log

Job No:	11925	**Client:**	Melrose Commons Site C
Project Location:	425 and 429 E 161st St, Bronx	**Sampled By:**	Chelsea Richard
Date:	5/28/14		

Sample ID:	SV-2
Canister ID:	A634
Flow Controller ID:	FC585

Purging

Time Started:	11:23
Time Stopped:	13:23
Vol. Purged:	2 liters
Flow Rate:	.2 L/min

Laboratory Sample (Summa Canister)

Time Started:	11:23	**Vacuum:**	-29 inHg
Time Stopped:	13:23	**Vacuum:**	-8.5 inHg

Field Sample

PID Calibration:	99.6 ppm
Time Started:	11:19
Time Stopped:	11:20
PID Reading:	1.0 ppm
He Reading	Not Detected

AKRF, Inc.
Environmental Consultants

Ambient Air Sampling Log

Job No:	11925	**Client:**	Melrose Commons Site C
Project Location:	425 and 429 E 161st St, Bronx	**Sampled By:**	Chelsea Richard
Date:	5/28/14		

Sample ID: AA-1

Canister ID: FC498

Flow Controller ID: A1039

Laboratory Sample (Summa Canister)

Time Started:	10:25	**Vacuum:**	-30 inHg
Time Stopped:	12:25	**Vacuum:**	-11 inHg

Possible VOC sources in vicinity: None

APPENDIX C

LABORATORY DATA DELIVERABLES FOR SOIL AND SOIL VAPOR ANALYSES

New Jersey
ACCUTEST LABORATORIES

06/10/14

Technical Report for

AKRF

Melrose Commons-Site C, 440 East 162 Street, Bronx, NY

11925

Accutest Job Number: JB67915

Sampling Date: 05/28/14

Report to:

AKRF

dshapiro@akrf.com

ATTN: Deborah Shapiro

Total number of pages in report: **64**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

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Accutest LabLink@799105 17:03 10-Jun-2014

Sample Summary

AKRF

Job No: JB67915

Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Project No: 11925

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB67915-1	05/28/14	10:07	CR	05/28/14	SO	Soil	SB-1 (0-2')
JB67915-2	05/28/14	10:08	CR	05/28/14	SO	Soil	SB-1 (10-12')
JB67915-3	05/28/14	10:34	CR	05/28/14	SO	Soil	SB-3 (0-2')
JB67915-4	05/28/14	10:35	CR	05/28/14	SO	Soil	SB-3 (10-12')
JB67915-5	05/28/14	11:55	CR	05/28/14	SO	Soil	SB-2 (0-2')
JB67915-6	05/28/14	11:56	CR	05/28/14	SO	Soil	SB-2 (10-12')
JB67915-7	05/28/14	11:56	CR	05/28/14	SO	Trip Blank Soil	SSTB

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: JB67915
Account: AKRF
Project: Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Collected: 05/28/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB67915-1	**SB-1 (0-2')**					
3&4-Methylphenol		75.9	74	47	ug/kg	SW846 8270D
Acenaphthene		185	37	11	ug/kg	SW846 8270D
Acenaphthylene		2580	37	12	ug/kg	SW846 8270D
Anthracene		5020	370	130	ug/kg	SW846 8270D
Benzo(a)anthracene		15400	370	120	ug/kg	SW846 8270D
Benzo(a)pyrene		12600	370	110	ug/kg	SW846 8270D
Benzo(b)fluoranthene		16000	370	120	ug/kg	SW846 8270D
Benzo(g,h,i)perylene		7840	370	140	ug/kg	SW846 8270D
Benzo(k)fluoranthene		3700	37	14	ug/kg	SW846 8270D
1,1'-Biphenyl		40.5 J	74	4.3	ug/kg	SW846 8270D
Carbazole		3850	740	170	ug/kg	SW846 8270D
Chrysene		15500	370	130	ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		3500	37	13	ug/kg	SW846 8270D
Dibenzofuran		758	74	11	ug/kg	SW846 8270D
bis(2-Ethylhexyl)phthalate		555	74	33	ug/kg	SW846 8270D
Fluoranthene		34800	370	160	ug/kg	SW846 8270D
Fluorene		508	37	12	ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		8570	370	130	ug/kg	SW846 8270D
2-Methylnaphthalene		70.2 J	74	21	ug/kg	SW846 8270D
Naphthalene		181	37	10	ug/kg	SW846 8270D
Phenanthrene		31000	370	170	ug/kg	SW846 8270D
Pyrene		32200	370	140	ug/kg	SW846 8270D
alpha-Chlordane		8.0	0.77	0.28	ug/kg	SW846 8081B
gamma-Chlordane		8.7	0.77	0.53	ug/kg	SW846 8081B
Dieldrin		11.5	1.5	0.60	ug/kg	SW846 8081B
4,4'-DDD [a]		11.2	0.77	0.42	ug/kg	SW846 8081B
4,4'-DDE		9.6	0.77	0.31	ug/kg	SW846 8081B
4,4'-DDT		135	1.5	0.76	ug/kg	SW846 8081B
Endosulfan-II		2.2	0.077	0.046	ug/kg	SW846 8081B
Aluminum		6850	59		mg/kg	SW846 6010C
Arsenic		5.2	2.4		mg/kg	SW846 6010C
Barium		1480	24		mg/kg	SW846 6010C
Beryllium		0.46	0.24		mg/kg	SW846 6010C
Cadmium		0.83	0.59		mg/kg	SW846 6010C
Calcium		61300	590		mg/kg	SW846 6010C
Chromium		14.9	1.2		mg/kg	SW846 6010C
Copper		18.6	3.0		mg/kg	SW846 6010C
Iron		12300	180		mg/kg	SW846 6010C
Lead		552	2.4		mg/kg	SW846 6010C
Magnesium		12300	590		mg/kg	SW846 6010C
Manganese		332	1.8		mg/kg	SW846 6010C
Mercury		0.22	0.038		mg/kg	SW846 7471B
Nickel		10.4	4.7		mg/kg	SW846 6010C

Summary of Hits

Job Number: JB67915
Account: AKRF
Project: Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Collected: 05/28/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Silver		0.86	0.59		mg/kg	SW846 6010C
Vanadium		20.7	5.9		mg/kg	SW846 6010C
Zinc		827	2.4		mg/kg	SW846 6010C
JB67915-2	**SB-1 (10-12')**					
Phenol		92.2	71	37	ug/kg	SW846 8270D
Aluminum		5250	55		mg/kg	SW846 6010C
Barium		36.2	22		mg/kg	SW846 6010C
Beryllium		0.42	0.22		mg/kg	SW846 6010C
Calcium		24700	550		mg/kg	SW846 6010C
Chromium		12.1	1.1		mg/kg	SW846 6010C
Cobalt		5.6	5.5		mg/kg	SW846 6010C
Copper		13.6	2.8		mg/kg	SW846 6010C
Iron		11100	170		mg/kg	SW846 6010C
Lead		3.2	2.2		mg/kg	SW846 6010C
Magnesium		16500	550		mg/kg	SW846 6010C
Manganese		209	1.7		mg/kg	SW846 6010C
Nickel		12.5	4.4		mg/kg	SW846 6010C
Potassium		1390	1100		mg/kg	SW846 6010C
Vanadium		17.5	5.5		mg/kg	SW846 6010C
Zinc		36.6	2.2		mg/kg	SW846 6010C
JB67915-3	**SB-3 (0-2')**					
Acenaphthene		59.5	36	11	ug/kg	SW846 8270D
Acenaphthylene		226	36	12	ug/kg	SW846 8270D
Anthracene		218	36	13	ug/kg	SW846 8270D
Benzo(a)anthracene		1420	36	12	ug/kg	SW846 8270D
Benzo(a)pyrene		1450	36	11	ug/kg	SW846 8270D
Benzo(b)fluoranthene		1680	36	12	ug/kg	SW846 8270D
Benzo(g,h,i)perylene		1040	36	14	ug/kg	SW846 8270D
Benzo(k)fluoranthene		612	36	14	ug/kg	SW846 8270D
Carbazole		79.1	73	17	ug/kg	SW846 8270D
Chrysene		1580	36	12	ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		291	36	12	ug/kg	SW846 8270D
Dibenzofuran		33.9 J	73	11	ug/kg	SW846 8270D
bis(2-Ethylhexyl)phthalate		74.4	73	32	ug/kg	SW846 8270D
Fluoranthene		2180	36	16	ug/kg	SW846 8270D
Fluorene		56.2	36	12	ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		1030	36	13	ug/kg	SW846 8270D
Naphthalene		28.9 J	36	10	ug/kg	SW846 8270D
Phenanthrene		918	36	17	ug/kg	SW846 8270D
Pyrene		2500	36	14	ug/kg	SW846 8270D
alpha-BHC		0.32	0.072	0.022	ug/kg	SW846 8081B

Summary of Hits

Job Number: JB67915
Account: AKRF
Project: Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Collected: 05/28/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
alpha-Chlordane		1.3	0.072	0.027	ug/kg	SW846 8081B
gamma-Chlordane		0.89	0.072	0.050	ug/kg	SW846 8081B
Dieldrin [a]		0.73	0.072	0.028	ug/kg	SW846 8081B
4,4'-DDD		1.2	0.72	0.39	ug/kg	SW846 8081B
4,4'-DDE		1.2	0.072	0.029	ug/kg	SW846 8081B
4,4'-DDT		14.6	0.72	0.35	ug/kg	SW846 8081B
Endrin aldehyde		1.8	0.72	0.38	ug/kg	SW846 8081B
Aluminum		10600	53		mg/kg	SW846 6010C
Arsenic		2.8	2.1		mg/kg	SW846 6010C
Barium		128	21		mg/kg	SW846 6010C
Beryllium		0.65	0.21		mg/kg	SW846 6010C
Calcium		37000	530		mg/kg	SW846 6010C
Chromium		20.4	1.1		mg/kg	SW846 6010C
Cobalt		7.8	5.3		mg/kg	SW846 6010C
Copper		22.3	2.7		mg/kg	SW846 6010C
Iron		14600	160		mg/kg	SW846 6010C
Lead		96.0	2.1		mg/kg	SW846 6010C
Magnesium		19500	530		mg/kg	SW846 6010C
Manganese		372	1.6		mg/kg	SW846 6010C
Mercury		0.24	0.034		mg/kg	SW846 7471B
Nickel		16.0	4.3		mg/kg	SW846 6010C
Potassium		2380	1100		mg/kg	SW846 6010C
Vanadium		25.5	5.3		mg/kg	SW846 6010C
Zinc		100	2.1		mg/kg	SW846 6010C
JB67915-4	**SB-3 (10-12')**					
Aluminum		4830	51		mg/kg	SW846 6010C
Barium		27.8	21		mg/kg	SW846 6010C
Beryllium		0.29	0.21		mg/kg	SW846 6010C
Calcium		72700	510		mg/kg	SW846 6010C
Chromium		8.9	1.0		mg/kg	SW846 6010C
Copper		14.0	2.6		mg/kg	SW846 6010C
Iron		9480	150		mg/kg	SW846 6010C
Lead		4.3	2.1		mg/kg	SW846 6010C
Magnesium		48300	510		mg/kg	SW846 6010C
Manganese		171	1.5		mg/kg	SW846 6010C
Nickel		11.4	4.1		mg/kg	SW846 6010C
Potassium		1350	1000		mg/kg	SW846 6010C
Vanadium		15.6	5.1		mg/kg	SW846 6010C
Zinc		24.5	2.1		mg/kg	SW846 6010C
JB67915-5	**SB-2 (0-2')**					
Acenaphthene		44.3	35	10	ug/kg	SW846 8270D

Summary of Hits

Job Number: JB67915
Account: AKRF
Project: Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Collected: 05/28/14

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Acenaphthylene	1130	35	11	ug/kg	SW846 8270D
Anthracene	786	35	12	ug/kg	SW846 8270D
Benzo(a)anthracene	4860	350	120	ug/kg	SW846 8270D
Benzo(a)pyrene	4090	350	110	ug/kg	SW846 8270D
Benzo(b)fluoranthene	5570	350	120	ug/kg	SW846 8270D
Benzo(g,h,i)perylene	2660	35	13	ug/kg	SW846 8270D
Benzo(k)fluoranthene	1700	35	13	ug/kg	SW846 8270D
1,1'-Biphenyl	15.3 J	71	4.1	ug/kg	SW846 8270D
Carbazole	246	71	16	ug/kg	SW846 8270D
Chrysene	5320	350	120	ug/kg	SW846 8270D
Dibenzo(a,h)anthracene	920	35	12	ug/kg	SW846 8270D
Dibenzofuran	113	71	11	ug/kg	SW846 8270D
bis(2-Ethylhexyl)phthalate	379	71	31	ug/kg	SW846 8270D
Fluoranthene	6440	350	160	ug/kg	SW846 8270D
Fluorene	103	35	12	ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene	2780	35	12	ug/kg	SW846 8270D
2-Methylnaphthalene	41.3 J	71	20	ug/kg	SW846 8270D
Naphthalene	107	35	9.7	ug/kg	SW846 8270D
Phenanthrene	2670	35	16	ug/kg	SW846 8270D
Pyrene	7590	350	140	ug/kg	SW846 8270D
alpha-BHC [a]	0.53	0.074	0.022	ug/kg	SW846 8081B
alpha-Chlordane	5.2	0.074	0.027	ug/kg	SW846 8081B
gamma-Chlordane	4.5	0.074	0.051	ug/kg	SW846 8081B
Dieldrin	5.5	0.074	0.029	ug/kg	SW846 8081B
4,4'-DDE	6.8	0.074	0.030	ug/kg	SW846 8081B
4,4'-DDT	96.0	3.7	1.8	ug/kg	SW846 8081B
Aluminum	8840	58		mg/kg	SW846 6010C
Arsenic	5.1	2.3		mg/kg	SW846 6010C
Barium	1760	23		mg/kg	SW846 6010C
Beryllium	0.56	0.23		mg/kg	SW846 6010C
Cadmium	0.84	0.58		mg/kg	SW846 6010C
Calcium	62300	580		mg/kg	SW846 6010C
Chromium	22.4	1.2		mg/kg	SW846 6010C
Cobalt	6.0	5.8		mg/kg	SW846 6010C
Copper	30.7	2.9		mg/kg	SW846 6010C
Iron	12700	170		mg/kg	SW846 6010C
Lead	668	2.3		mg/kg	SW846 6010C
Magnesium	23800	580		mg/kg	SW846 6010C
Manganese	361	1.8		mg/kg	SW846 6010C
Mercury	0.27	0.035		mg/kg	SW846 7471B
Nickel	13.2	4.7		mg/kg	SW846 6010C
Potassium	1520	1200		mg/kg	SW846 6010C
Silver	0.81	0.58		mg/kg	SW846 6010C
Vanadium	25.8	5.8		mg/kg	SW846 6010C
Zinc	701	2.3		mg/kg	SW846 6010C

Summary of Hits

Job Number: JB67915
Account: AKRF
Project: Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Collected: 05/28/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB67915-6	**SB-2 (10-12')**					
Aluminum		9820	52		mg/kg	SW846 6010C
Arsenic		2.6	2.1		mg/kg	SW846 6010C
Barium		29.0	21		mg/kg	SW846 6010C
Beryllium		0.58	0.21		mg/kg	SW846 6010C
Calcium		33500	520		mg/kg	SW846 6010C
Chromium		29.2	1.0		mg/kg	SW846 6010C
Cobalt		14.2	5.2		mg/kg	SW846 6010C
Copper		50.2	2.6		mg/kg	SW846 6010C
Iron		20000	160		mg/kg	SW846 6010C
Lead		3.7	2.1		mg/kg	SW846 6010C
Magnesium		25600	520		mg/kg	SW846 6010C
Manganese		172	1.5		mg/kg	SW846 6010C
Nickel		28.1	4.1		mg/kg	SW846 6010C
Potassium		4380	1000		mg/kg	SW846 6010C
Vanadium		37.4	5.2		mg/kg	SW846 6010C
Zinc		30.8	2.1		mg/kg	SW846 6010C

JB67915-7 **SSTB**

No hits reported in this sample.

(a) More than 40 % RPD for detected concentrations between the two GC columns.

New Jersey

ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SB-1 (0-2')		
Lab Sample ID:	JB67915-1	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	86.4
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V11286.D	1	05/29/14	TDN	05/29/14 11:00	n/a	V3V478
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	5.9	ug/kg	
71-43-2	Benzene	ND	1.3	0.16	ug/kg	
74-97-5	Bromochloromethane	ND	6.4	0.67	ug/kg	
75-27-4	Bromodichloromethane	ND	6.4	0.36	ug/kg	
75-25-2	Bromoform	ND	6.4	0.34	ug/kg	
74-83-9	Bromomethane	ND	6.4	0.62	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	5.7	ug/kg	
75-15-0	Carbon disulfide	ND	6.4	0.18	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.4	0.32	ug/kg	
108-90-7	Chlorobenzene	ND	6.4	0.25	ug/kg	
75-00-3	Chloroethane	ND	6.4	1.3	ug/kg	
67-66-3	Chloroform	ND	6.4	0.33	ug/kg	
74-87-3	Chloromethane	ND	6.4	0.44	ug/kg	
110-82-7	Cyclohexane	ND	6.4	0.33	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	13	1.7	ug/kg	
124-48-1	Dibromochloromethane	ND	6.4	0.31	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.70	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.4	0.43	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.4	0.28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.4	0.32	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.4	0.45	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.4	0.40	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.41	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.4	0.37	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.4	0.27	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.4	0.54	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.4	0.56	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.4	0.29	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.4	0.35	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.23	ug/kg	
76-13-1	Freon 113	ND	6.4	0.56	ug/kg	
591-78-6	2-Hexanone	ND	6.4	2.3	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (0-2')		
Lab Sample ID:	JB67915-1	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	86.4
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	6.4	0.19	ug/kg	
79-20-9	Methyl Acetate	ND	6.4	2.1	ug/kg	
108-87-2	Methylcyclohexane	ND	6.4	0.21	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.44	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.4	1.7	ug/kg	
75-09-2	Methylene chloride	ND	6.4	2.2	ug/kg	
100-42-5	Styrene	ND	6.4	0.30	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.4	0.44	ug/kg	
127-18-4	Tetrachloroethene	ND	6.4	0.53	ug/kg	
108-88-3	Toluene	ND	1.3	0.18	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.4	0.27	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.4	0.23	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.4	0.37	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.4	1.1	ug/kg	
79-01-6	Trichloroethene	ND	6.4	0.45	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.4	0.29	ug/kg	
75-01-4	Vinyl chloride	ND	6.4	0.44	ug/kg	
	m,p-Xylene	ND	1.3	0.62	ug/kg	
95-47-6	o-Xylene	ND	1.3	0.23	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		59-130%
17060-07-0	1,2-Dichloroethane-D4	102%		65-123%
2037-26-5	Toluene-D8	115%		77-125%
460-00-4	4-Bromofluorobenzene	118%		71-132%

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (0-2')		
Lab Sample ID:	JB67915-1	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	86.4
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P7525.D	1	05/30/14	ALS	05/29/14	OP75185	E6P319
Run #2	6P7634.D	10	06/02/14	AV	05/29/14	OP75185	E6P323

	Initial Weight	Final Volume
Run #1	31.2 g	1.0 ml
Run #2	31.2 g	1.0 ml

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	74	37	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	37	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	60	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	62	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	740	45	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	740	45	ug/kg	
95-48-7	2-Methylphenol	ND	74	42	ug/kg	
	3&4-Methylphenol	75.9	74	47	ug/kg	
88-75-5	2-Nitrophenol	ND	190	39	ug/kg	
100-02-7	4-Nitrophenol	ND	370	63	ug/kg	
87-86-5	Pentachlorophenol	ND	370	63	ug/kg	
108-95-2	Phenol	ND	74	39	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	38	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	43	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	35	ug/kg	
83-32-9	Acenaphthene	185	37	11	ug/kg	
208-96-8	Acenaphthylene	2580	37	12	ug/kg	
98-86-2	Acetophenone	ND	190	6.5	ug/kg	
120-12-7	Anthracene	5020 [a]	370	130	ug/kg	
1912-24-9	Atrazine	ND	74	7.3	ug/kg	
56-55-3	Benzo(a)anthracene	15400 [a]	370	120	ug/kg	
50-32-8	Benzo(a)pyrene	12600 [a]	370	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	16000 [a]	370	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	7840 [a]	370	140	ug/kg	
207-08-9	Benzo(k)fluoranthene	3700	37	14	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	74	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	74	21	ug/kg	
92-52-4	1,1'-Biphenyl	40.5	74	4.3	ug/kg	J
100-52-7	Benzaldehyde	ND	190	8.5	ug/kg	
91-58-7	2-Chloronaphthalene	ND	74	11	ug/kg	
106-47-8	4-Chloroaniline	ND	190	12	ug/kg	
86-74-8	Carbazole	3850 [a]	740	170	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (0-2')		
Lab Sample ID:	JB67915-1	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	86.4
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	74	12	ug/kg	
218-01-9	Chrysene	15500 [a]	370	130	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	74	15	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	74	11	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	74	11	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	74	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	37	16	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	37	14	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	74	9.4	ug/kg	
123-91-1	1,4-Dioxane	ND	37	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	3500	37	13	ug/kg	
132-64-9	Dibenzofuran	758	74	11	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	74	8.2	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	74	18	ug/kg	
84-66-2	Diethyl phthalate	ND	74	13	ug/kg	
131-11-3	Dimethyl phthalate	ND	74	13	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	555	74	33	ug/kg	
206-44-0	Fluoranthene	34800 [a]	370	160	ug/kg	
86-73-7	Fluorene	508	37	12	ug/kg	
118-74-1	Hexachlorobenzene	ND	74	12	ug/kg	
87-68-3	Hexachlorobutadiene	ND	37	10	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	38	ug/kg	
67-72-1	Hexachloroethane	ND	190	10	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	8570 [a]	370	130	ug/kg	
78-59-1	Isophorone	ND	74	10	ug/kg	
91-57-6	2-Methylnaphthalene	70.2	74	21	ug/kg	J
88-74-4	2-Nitroaniline	ND	190	16	ug/kg	
99-09-2	3-Nitroaniline	ND	190	15	ug/kg	
100-01-6	4-Nitroaniline	ND	190	14	ug/kg	
91-20-3	Naphthalene	181	37	10	ug/kg	
98-95-3	Nitrobenzene	ND	74	11	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	74	9.1	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	22	ug/kg	
85-01-8	Phenanthrene	31000 [a]	370	170	ug/kg	
129-00-0	Pyrene	32200 [a]	370	140	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	72%	59%	13-110%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (0-2')		
Lab Sample ID:	JB67915-1	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	86.4
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	72%	57%	15-110%
118-79-6	2,4,6-Tribromophenol	100%	75%	20-123%
4165-60-0	Nitrobenzene-d5	69%	63%	10-110%
321-60-8	2-Fluorobiphenyl	87%	79%	17-110%
1718-51-0	Terphenyl-d14	78%	81%	30-124%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (0-2')		
Lab Sample ID:	JB67915-1	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8081B SW846 3546	**Percent Solids:**	86.4
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G44896.D	1	05/30/14	DG	05/29/14	OP75189	G4G1133
Run #2	4G44971.D	10	06/02/14	YD	05/29/14	OP75189	G4G1135
Run #3	4G44975.D	20	06/02/14	YD	05/29/14	OP75189	G4G1135

	Initial Weight	Final Volume
Run #1	15.1 g	1.0 ml
Run #2	15.1 g	1.0 ml
Run #3	15.1 g	1.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.077	0.035	ug/kg	
319-84-6	alpha-BHC	ND	0.077	0.023	ug/kg	
319-85-7	beta-BHC	ND	0.077	0.048	ug/kg	
319-86-8	delta-BHC	ND	0.077	0.038	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.077	0.038	ug/kg	
5103-71-9	alpha-Chlordane	8.0 [a]	0.77	0.28	ug/kg	
5103-74-2	gamma-Chlordane	8.7 [a]	0.77	0.53	ug/kg	
60-57-1	Dieldrin	11.5 [b]	1.5	0.60	ug/kg	
72-54-8	4,4'-DDD [c]	11.2 [a]	0.77	0.42	ug/kg	
72-55-9	4,4'-DDE	9.6 [a]	0.77	0.31	ug/kg	
50-29-3	4,4'-DDT	135 [b]	1.5	0.76	ug/kg	
72-20-8	Endrin	ND	0.077	0.025	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.077	0.033	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.077	0.040	ug/kg	
959-98-8	Endosulfan-I	ND	0.077	0.029	ug/kg	
33213-65-9	Endosulfan-II	2.2	0.077	0.046	ug/kg	
76-44-8	Heptachlor	ND	0.077	0.037	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.077	0.029	ug/kg	
72-43-5	Methoxychlor	ND	0.15	0.075	ug/kg	
53494-70-5	Endrin ketone	ND	0.077	0.031	ug/kg	
8001-35-2	Toxaphene	ND	1.9	0.97	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
877-09-8	Tetrachloro-m-xylene	57%	64%	71%	10-129%
877-09-8	Tetrachloro-m-xylene	62%	62%	68%	10-129%
2051-24-3	Decachlorobiphenyl	103%	119%	125%	10-144%
2051-24-3	Decachlorobiphenyl	303% [d]	267% [d]	278% [d]	10-144%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (0-2')		
Lab Sample ID:	JB67915-1	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8081B SW846 3546	**Percent Solids:**	86.4
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(b) Result is from Run# 3
(c) More than 40 % RPD for detected concentrations between the two GC columns.
(d) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (0-2')		
Lab Sample ID:	JB67915-1	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8082A SW846 3546	**Percent Solids:**	86.4
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G95967.D	1	05/30/14	RK	05/29/14	OP75188	G2G3014
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	3.8	1.0	ug/kg	
11104-28-2	Aroclor 1221	ND	3.8	2.3	ug/kg	
11141-16-5	Aroclor 1232	ND	3.8	1.9	ug/kg	
53469-21-9	Aroclor 1242	ND	3.8	1.2	ug/kg	
12672-29-6	Aroclor 1248	ND	3.8	1.2	ug/kg	
11097-69-1	Aroclor 1254	ND	3.8	1.8	ug/kg	
11096-82-5	Aroclor 1260	ND	3.8	1.3	ug/kg	
11100-14-4	Aroclor 1268	ND	3.8	1.1	ug/kg	
37324-23-5	Aroclor 1262	ND	3.8	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	53%		14-139%
877-09-8	Tetrachloro-m-xylene	54%		14-139%
2051-24-3	Decachlorobiphenyl	85%		10-155%
2051-24-3	Decachlorobiphenyl	316% [a]		10-155%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (0-2')		
Lab Sample ID:	JB67915-1	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
		Percent Solids:	86.4
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	6850	59	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Antimony	< 2.4	2.4	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Arsenic	5.2	2.4	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Barium	1480	24	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Beryllium	0.46	0.24	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cadmium	0.83	0.59	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Calcium	61300	590	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Chromium	14.9	1.2	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cobalt	< 5.9	5.9	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Copper	18.6	3.0	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Iron	12300	180	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Lead	552	2.4	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Magnesium	12300	590	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Manganese	332	1.8	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Mercury	0.22	0.038	mg/kg	1	06/05/14	06/05/14	DP	SW846 7471B [2]	SW846 7471B [4]
Nickel	10.4	4.7	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Potassium	< 1200	1200	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 2.4	2.4	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Silver	0.86	0.59	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 1200	1200	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 1.2	1.2	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Vanadium	20.7	5.9	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Zinc	827	2.4	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA34151
(2) Instrument QC Batch: MA34169
(3) Prep QC Batch: MP79800
(4) Prep QC Batch: MP79885

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-1 (10-12')		
Lab Sample ID:	JB67915-2	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	92.7
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V11287.D	1	05/29/14	TDN	05/29/14 11:00	n/a	V3V478
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.6	ug/kg	
71-43-2	Benzene	ND	1.0	0.13	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.28	ug/kg	
75-25-2	Bromoform	ND	5.0	0.26	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.48	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	4.4	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.25	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.20	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.99	ug/kg	
67-66-3	Chloroform	ND	5.0	0.25	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.34	ug/kg	
110-82-7	Cyclohexane	ND	5.0	0.26	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.24	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.55	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.35	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.31	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.0	0.29	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	0.21	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.27	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.17	ug/kg	
76-13-1	Freon 113	ND	5.0	0.43	ug/kg	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (10-12')		
Lab Sample ID:	JB67915-2	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	92.7
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	5.0	0.15	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.7	ug/kg	
108-87-2	Methylcyclohexane	ND	5.0	0.16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	1.7	ug/kg	
100-42-5	Styrene	ND	5.0	0.23	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.34	ug/kg	
127-18-4	Tetrachloroethene	ND	5.0	0.41	ug/kg	
108-88-3	Toluene	ND	1.0	0.14	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.21	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.18	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.29	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.82	ug/kg	
79-01-6	Trichloroethene	ND	5.0	0.35	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.22	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	0.34	ug/kg	
	m,p-Xylene	ND	1.0	0.48	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.18	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		59-130%
17060-07-0	1,2-Dichloroethane-D4	102%		65-123%
2037-26-5	Toluene-D8	116%		77-125%
460-00-4	4-Bromofluorobenzene	116%		71-132%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (10-12')		
Lab Sample ID:	JB67915-2	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	92.7
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P7526.D	1	05/30/14	ALS	05/29/14	OP75185	E6P319
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	71	35	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	35	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	57	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	59	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	710	43	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	710	43	ug/kg	
95-48-7	2-Methylphenol	ND	71	40	ug/kg	
	3&4-Methylphenol	ND	71	45	ug/kg	
88-75-5	2-Nitrophenol	ND	180	37	ug/kg	
100-02-7	4-Nitrophenol	ND	350	60	ug/kg	
87-86-5	Pentachlorophenol	ND	350	60	ug/kg	
108-95-2	Phenol	92.2	71	37	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	36	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	41	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	33	ug/kg	
83-32-9	Acenaphthene	ND	35	10	ug/kg	
208-96-8	Acenaphthylene	ND	35	11	ug/kg	
98-86-2	Acetophenone	ND	180	6.2	ug/kg	
120-12-7	Anthracene	ND	35	12	ug/kg	
1912-24-9	Atrazine	ND	71	6.9	ug/kg	
56-55-3	Benzo(a)anthracene	ND	35	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	35	11	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	35	12	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	35	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	35	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	71	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	71	20	ug/kg	
92-52-4	1,1'-Biphenyl	ND	71	4.1	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.1	ug/kg	
91-58-7	2-Chloronaphthalene	ND	71	11	ug/kg	
106-47-8	4-Chloroaniline	ND	180	11	ug/kg	
86-74-8	Carbazole	ND	71	16	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (10-12')		
Lab Sample ID:	JB67915-2	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	92.7
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	71	11	ug/kg	
218-01-9	Chrysene	ND	35	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	71	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	71	11	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	71	10	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	71	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	35	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	35	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	71	9.0	ug/kg	
123-91-1	1,4-Dioxane	ND	35	23	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	35	12	ug/kg	
132-64-9	Dibenzofuran	ND	71	10	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	71	7.8	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	71	17	ug/kg	
84-66-2	Diethyl phthalate	ND	71	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	71	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	71	31	ug/kg	
206-44-0	Fluoranthene	ND	35	16	ug/kg	
86-73-7	Fluorene	ND	35	12	ug/kg	
118-74-1	Hexachlorobenzene	ND	71	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	35	9.8	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	350	36	ug/kg	
67-72-1	Hexachloroethane	ND	180	9.8	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	35	12	ug/kg	
78-59-1	Isophorone	ND	71	9.5	ug/kg	
91-57-6	2-Methylnaphthalene	ND	71	20	ug/kg	
88-74-4	2-Nitroaniline	ND	180	16	ug/kg	
99-09-2	3-Nitroaniline	ND	180	14	ug/kg	
100-01-6	4-Nitroaniline	ND	180	14	ug/kg	
91-20-3	Naphthalene	ND	35	9.6	ug/kg	
98-95-3	Nitrobenzene	ND	71	10	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	71	8.6	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	21	ug/kg	
85-01-8	Phenanthrene	ND	35	16	ug/kg	
129-00-0	Pyrene	ND	35	14	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	80%		13-110%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (10-12')		
Lab Sample ID:	JB67915-2	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	92.7
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	76%		15-110%
118-79-6	2,4,6-Tribromophenol	108%		20-123%
4165-60-0	Nitrobenzene-d5	75%		10-110%
321-60-8	2-Fluorobiphenyl	93%		17-110%
1718-51-0	Terphenyl-d14	101%		30-124%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (10-12')		
Lab Sample ID:	JB67915-2	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8081B SW846 3546	**Percent Solids:**	92.7
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G44897.D	1	05/30/14	DG	05/29/14	OP75189	G4G1133
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.071	0.033	ug/kg	
319-84-6	alpha-BHC	ND	0.071	0.021	ug/kg	
319-85-7	beta-BHC	ND	0.071	0.044	ug/kg	
319-86-8	delta-BHC	ND	0.071	0.035	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.071	0.035	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.071	0.026	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.071	0.049	ug/kg	
60-57-1	Dieldrin	ND	0.071	0.028	ug/kg	
72-54-8	4,4'-DDD	ND	0.071	0.039	ug/kg	
72-55-9	4,4'-DDE	ND	0.071	0.029	ug/kg	
50-29-3	4,4'-DDT	ND	0.071	0.035	ug/kg	
72-20-8	Endrin	ND	0.071	0.023	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.071	0.031	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.071	0.037	ug/kg	
959-98-8	Endosulfan-I	ND	0.071	0.027	ug/kg	
33213-65-9	Endosulfan-II	ND	0.071	0.043	ug/kg	
76-44-8	Heptachlor	ND	0.071	0.035	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.071	0.027	ug/kg	
72-43-5	Methoxychlor	ND	0.14	0.069	ug/kg	
53494-70-5	Endrin ketone	ND	0.071	0.029	ug/kg	
8001-35-2	Toxaphene	ND	1.8	0.89	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	55%		10-129%
877-09-8	Tetrachloro-m-xylene	62%		10-129%
2051-24-3	Decachlorobiphenyl	38%		10-144%
2051-24-3	Decachlorobiphenyl	39%		10-144%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (10-12')		
Lab Sample ID:	JB67915-2	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8082A SW846 3546	**Percent Solids:**	92.7
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G95968.D	1	05/30/14	RK	05/29/14	OP75188	G2G3014
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	3.5	0.92	ug/kg	
11104-28-2	Aroclor 1221	ND	3.5	2.1	ug/kg	
11141-16-5	Aroclor 1232	ND	3.5	1.8	ug/kg	
53469-21-9	Aroclor 1242	ND	3.5	1.1	ug/kg	
12672-29-6	Aroclor 1248	ND	3.5	1.1	ug/kg	
11097-69-1	Aroclor 1254	ND	3.5	1.7	ug/kg	
11096-82-5	Aroclor 1260	ND	3.5	1.2	ug/kg	
11100-14-4	Aroclor 1268	ND	3.5	1.0	ug/kg	
37324-23-5	Aroclor 1262	ND	3.5	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%		14-139%
877-09-8	Tetrachloro-m-xylene	77%		14-139%
2051-24-3	Decachlorobiphenyl	52%		10-155%
2051-24-3	Decachlorobiphenyl	53%		10-155%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (10-12')		
Lab Sample ID:	JB67915-2	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
		Percent Solids:	92.7
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5250	55	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Antimony	< 2.2	2.2	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Arsenic	< 2.2	2.2	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Barium	36.2	22	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Beryllium	0.42	0.22	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.55	0.55	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Calcium	24700	550	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Chromium	12.1	1.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cobalt	5.6	5.5	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Copper	13.6	2.8	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Iron	11100	170	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Lead	3.2	2.2	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Magnesium	16500	550	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Manganese	209	1.7	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.032	0.032	mg/kg	1	06/05/14	06/05/14	DP	SW846 7471B [2]	SW846 7471B [4]
Nickel	12.5	4.4	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Potassium	1390	1100	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 2.2	2.2	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.55	0.55	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 1100	1100	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 1.1	1.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Vanadium	17.5	5.5	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Zinc	36.6	2.2	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA34151
(2) Instrument QC Batch: MA34169
(3) Prep QC Batch: MP79800
(4) Prep QC Batch: MP79885

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-3 (0-2')		
Lab Sample ID:	JB67915-3	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	90.8
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V11288.D	1	05/29/14	TDN	05/29/14 11:00	n/a	V3V478
Run #2							

	Initial Weight
Run #1	4.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	5.1	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
74-97-5	Bromochloromethane	ND	5.6	0.58	ug/kg	
75-27-4	Bromodichloromethane	ND	5.6	0.32	ug/kg	
75-25-2	Bromoform	ND	5.6	0.29	ug/kg	
74-83-9	Bromomethane	ND	5.6	0.54	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.9	ug/kg	
75-15-0	Carbon disulfide	ND	5.6	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.6	0.28	ug/kg	
108-90-7	Chlorobenzene	ND	5.6	0.22	ug/kg	
75-00-3	Chloroethane	ND	5.6	1.1	ug/kg	
67-66-3	Chloroform	ND	5.6	0.29	ug/kg	
74-87-3	Chloromethane	ND	5.6	0.39	ug/kg	
110-82-7	Cyclohexane	ND	5.6	0.29	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.6	0.27	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.62	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.6	0.38	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.6	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.6	0.28	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.6	0.40	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.6	0.35	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.36	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.6	0.32	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.6	0.23	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.6	0.48	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.6	0.49	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.6	0.26	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.6	0.30	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.20	ug/kg	
76-13-1	Freon 113	ND	5.6	0.49	ug/kg	
591-78-6	2-Hexanone	ND	5.6	2.0	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (0-2')		
Lab Sample ID:	JB67915-3	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	90.8
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	5.6	0.17	ug/kg	
79-20-9	Methyl Acetate	ND	5.6	1.9	ug/kg	
108-87-2	Methylcyclohexane	ND	5.6	0.18	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.39	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.6	1.5	ug/kg	
75-09-2	Methylene chloride	ND	5.6	1.9	ug/kg	
100-42-5	Styrene	ND	5.6	0.26	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.6	0.38	ug/kg	
127-18-4	Tetrachloroethene	ND	5.6	0.46	ug/kg	
108-88-3	Toluene	ND	1.1	0.16	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.6	0.23	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.6	0.20	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.6	0.32	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.6	0.92	ug/kg	
79-01-6	Trichloroethene	ND	5.6	0.39	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.6	0.25	ug/kg	
75-01-4	Vinyl chloride	ND	5.6	0.38	ug/kg	
	m,p-Xylene	ND	1.1	0.54	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.20	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		59-130%
17060-07-0	1,2-Dichloroethane-D4	103%		65-123%
2037-26-5	Toluene-D8	117%		77-125%
460-00-4	4-Bromofluorobenzene	120%		71-132%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (0-2')		
Lab Sample ID:	JB67915-3	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	90.8
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P7527.D	1	05/30/14	ALS	05/29/14	OP75185	E6P319
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	73	36	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	36	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	59	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	61	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	730	44	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	730	44	ug/kg	
95-48-7	2-Methylphenol	ND	73	42	ug/kg	
	3&4-Methylphenol	ND	73	46	ug/kg	
88-75-5	2-Nitrophenol	ND	180	39	ug/kg	
100-02-7	4-Nitrophenol	ND	360	62	ug/kg	
87-86-5	Pentachlorophenol	ND	360	62	ug/kg	
108-95-2	Phenol	ND	73	38	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	38	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	42	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	34	ug/kg	
83-32-9	Acenaphthene	59.5	36	11	ug/kg	
208-96-8	Acenaphthylene	226	36	12	ug/kg	
98-86-2	Acetophenone	ND	180	6.4	ug/kg	
120-12-7	Anthracene	218	36	13	ug/kg	
1912-24-9	Atrazine	ND	73	7.2	ug/kg	
56-55-3	Benzo(a)anthracene	1420	36	12	ug/kg	
50-32-8	Benzo(a)pyrene	1450	36	11	ug/kg	
205-99-2	Benzo(b)fluoranthene	1680	36	12	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1040	36	14	ug/kg	
207-08-9	Benzo(k)fluoranthene	612	36	14	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	73	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	73	21	ug/kg	
92-52-4	1,1'-Biphenyl	ND	73	4.2	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.4	ug/kg	
91-58-7	2-Chloronaphthalene	ND	73	11	ug/kg	
106-47-8	4-Chloroaniline	ND	180	12	ug/kg	
86-74-8	Carbazole	79.1	73	17	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (0-2')		
Lab Sample ID:	JB67915-3	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	90.8
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	73	11	ug/kg	
218-01-9	Chrysene	1580	36	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	73	15	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	73	11	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	73	11	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	73	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	16	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	14	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	73	9.3	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	291	36	12	ug/kg	
132-64-9	Dibenzofuran	33.9	73	11	ug/kg	J
84-74-2	Di-n-butyl phthalate	ND	73	8.1	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	73	18	ug/kg	
84-66-2	Diethyl phthalate	ND	73	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	73	13	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	74.4	73	32	ug/kg	
206-44-0	Fluoranthene	2180	36	16	ug/kg	
86-73-7	Fluorene	56.2	36	12	ug/kg	
118-74-1	Hexachlorobenzene	ND	73	12	ug/kg	
87-68-3	Hexachlorobutadiene	ND	36	10	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	37	ug/kg	
67-72-1	Hexachloroethane	ND	180	10	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1030	36	13	ug/kg	
78-59-1	Isophorone	ND	73	9.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	73	20	ug/kg	
88-74-4	2-Nitroaniline	ND	180	16	ug/kg	
99-09-2	3-Nitroaniline	ND	180	15	ug/kg	
100-01-6	4-Nitroaniline	ND	180	14	ug/kg	
91-20-3	Naphthalene	28.9	36	10	ug/kg	J
98-95-3	Nitrobenzene	ND	73	11	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	73	8.9	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	22	ug/kg	
85-01-8	Phenanthrene	918	36	17	ug/kg	
129-00-0	Pyrene	2500	36	14	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		13-110%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (0-2')		
Lab Sample ID:	JB67915-3	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	90.8
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	67%		15-110%
118-79-6	2,4,6-Tribromophenol	92%		20-123%
4165-60-0	Nitrobenzene-d5	66%		10-110%
321-60-8	2-Fluorobiphenyl	82%		17-110%
1718-51-0	Terphenyl-d14	84%		30-124%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (0-2')		
Lab Sample ID:	JB67915-3	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8081B SW846 3546	**Percent Solids:**	90.8
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G12397.D	1	05/30/14	DG	05/29/14	OP75189	G6G354
Run #2	6G12471.D	10	06/03/14	YD	05/29/14	OP75189	G6G356

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2	15.3 g	1.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.072	0.033	ug/kg	
319-84-6	alpha-BHC	0.32	0.072	0.022	ug/kg	
319-85-7	beta-BHC	ND	0.072	0.045	ug/kg	
319-86-8	delta-BHC	ND	0.072	0.036	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.072	0.035	ug/kg	
5103-71-9	alpha-Chlordane	1.3	0.072	0.027	ug/kg	
5103-74-2	gamma-Chlordane	0.89	0.072	0.050	ug/kg	
60-57-1	Dieldrin [a]	0.73	0.072	0.028	ug/kg	
72-54-8	4,4'-DDD	ND	0.072	0.039	ug/kg	
72-54-8	4,4'-DDD	1.2 [b]	0.72	0.39	ug/kg	
72-55-9	4,4'-DDE	1.2	0.072	0.029	ug/kg	
50-29-3	4,4'-DDT	14.6 [b]	0.72	0.35	ug/kg	
72-20-8	Endrin	ND	0.072	0.023	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.072	0.031	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.072	0.038	ug/kg	
7421-93-4	Endrin aldehyde	1.8 [b]	0.72	0.38	ug/kg	
959-98-8	Endosulfan-I	ND	0.072	0.027	ug/kg	
33213-65-9	Endosulfan-II	ND	0.072	0.043	ug/kg	
76-44-8	Heptachlor	ND	0.072	0.035	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.072	0.027	ug/kg	
72-43-5	Methoxychlor	ND	0.14	0.070	ug/kg	
53494-70-5	Endrin ketone	ND	0.072	0.029	ug/kg	
8001-35-2	Toxaphene	ND	1.8	0.91	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	54%	95%	10-129%
877-09-8	Tetrachloro-m-xylene	52%	61%	10-129%
2051-24-3	Decachlorobiphenyl	56%	94%	10-144%
2051-24-3	Decachlorobiphenyl	46%	61%	10-144%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (0-2')		
Lab Sample ID:	JB67915-3	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8081B SW846 3546	**Percent Solids:**	90.8
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (0-2')		
Lab Sample ID:	JB67915-3	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8082A SW846 3546	**Percent Solids:**	90.8
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G95969.D	1	05/30/14	RK	05/29/14	OP75188	G2G3014
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	3.6	0.95	ug/kg	
11104-28-2	Aroclor 1221	ND	3.6	2.2	ug/kg	
11141-16-5	Aroclor 1232	ND	3.6	1.8	ug/kg	
53469-21-9	Aroclor 1242	ND	3.6	1.2	ug/kg	
12672-29-6	Aroclor 1248	ND	3.6	1.1	ug/kg	
11097-69-1	Aroclor 1254	ND	3.6	1.7	ug/kg	
11096-82-5	Aroclor 1260	ND	3.6	1.2	ug/kg	
11100-14-4	Aroclor 1268	ND	3.6	1.1	ug/kg	
37324-23-5	Aroclor 1262	ND	3.6	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%		14-139%
877-09-8	Tetrachloro-m-xylene	71%		14-139%
2051-24-3	Decachlorobiphenyl	57%		10-155%
2051-24-3	Decachlorobiphenyl	93%		10-155%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (0-2')		
Lab Sample ID:	JB67915-3	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
		Percent Solids:	90.8
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	10600	53	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Antimony	< 2.1	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Arsenic	2.8	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Barium	128	21	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Beryllium	0.65	0.21	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.53	0.53	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Calcium	37000	530	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Chromium	20.4	1.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cobalt	7.8	5.3	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Copper	22.3	2.7	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Iron	14600	160	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Lead	96.0	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Magnesium	19500	530	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Manganese	372	1.6	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Mercury	0.24	0.034	mg/kg	1	06/05/14	06/05/14	DP	SW846 7471B [2]	SW846 7471B [4]
Nickel	16.0	4.3	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Potassium	2380	1100	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 2.1	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.53	0.53	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 1100	1100	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 1.1	1.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Vanadium	25.5	5.3	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Zinc	100	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA34151
(2) Instrument QC Batch: MA34169
(3) Prep QC Batch: MP79800
(4) Prep QC Batch: MP79885

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-3 (10-12')		
Lab Sample ID:	JB67915-4	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	96.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V11289.D	1	05/29/14	TDN	05/29/14 11:00	n/a	V3V478
Run #2							

	Initial Weight
Run #1	3.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	15	7.0	ug/kg	
71-43-2	Benzene	ND	1.5	0.19	ug/kg	
74-97-5	Bromochloromethane	ND	7.6	0.79	ug/kg	
75-27-4	Bromodichloromethane	ND	7.6	0.43	ug/kg	
75-25-2	Bromoform	ND	7.6	0.40	ug/kg	
74-83-9	Bromomethane	ND	7.6	0.73	ug/kg	
78-93-3	2-Butanone (MEK)	ND	15	6.7	ug/kg	
75-15-0	Carbon disulfide	ND	7.6	0.22	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.6	0.38	ug/kg	
108-90-7	Chlorobenzene	ND	7.6	0.30	ug/kg	
75-00-3	Chloroethane	ND	7.6	1.5	ug/kg	
67-66-3	Chloroform	ND	7.6	0.39	ug/kg	
74-87-3	Chloromethane	ND	7.6	0.52	ug/kg	
110-82-7	Cyclohexane	ND	7.6	0.39	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	15	2.0	ug/kg	
124-48-1	Dibromochloromethane	ND	7.6	0.37	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.5	0.84	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	7.6	0.52	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	7.6	0.33	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	7.6	0.38	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	7.6	0.54	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.6	0.48	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	7.6	0.44	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	7.6	0.32	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	7.6	0.65	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.6	0.67	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.6	0.35	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.6	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	0.27	ug/kg	
76-13-1	Freon 113	ND	7.6	0.66	ug/kg	
591-78-6	2-Hexanone	ND	7.6	2.7	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (10-12')		
Lab Sample ID:	JB67915-4	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	96.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	7.6	0.22	ug/kg	
79-20-9	Methyl Acetate	ND	7.6	2.6	ug/kg	
108-87-2	Methylcyclohexane	ND	7.6	0.25	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.5	0.52	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.6	2.0	ug/kg	
75-09-2	Methylene chloride	ND	7.6	2.6	ug/kg	
100-42-5	Styrene	ND	7.6	0.35	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.6	0.52	ug/kg	
127-18-4	Tetrachloroethene	ND	7.6	0.63	ug/kg	
108-88-3	Toluene	ND	1.5	0.22	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	7.6	0.32	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	7.6	0.28	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.6	0.44	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.6	1.3	ug/kg	
79-01-6	Trichloroethene	ND	7.6	0.53	ug/kg	
75-69-4	Trichlorofluoromethane	ND	7.6	0.34	ug/kg	
75-01-4	Vinyl chloride	ND	7.6	0.52	ug/kg	
	m,p-Xylene	ND	1.5	0.74	ug/kg	
95-47-6	o-Xylene	ND	1.5	0.27	ug/kg	
1330-20-7	Xylene (total)	ND	1.5	0.27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		59-130%
17060-07-0	1,2-Dichloroethane-D4	102%		65-123%
2037-26-5	Toluene-D8	116%		77-125%
460-00-4	4-Bromofluorobenzene	114%		71-132%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (10-12')		
Lab Sample ID:	JB67915-4	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	96.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P7528.D	1	05/30/14	ALS	05/29/14	OP75185	E6P319
Run #2							

	Initial Weight	Final Volume
Run #1	31.4 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	66	33	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	33	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	53	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	56	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	660	40	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	660	40	ug/kg	
95-48-7	2-Methylphenol	ND	66	38	ug/kg	
	3&4-Methylphenol	ND	66	42	ug/kg	
88-75-5	2-Nitrophenol	ND	170	35	ug/kg	
100-02-7	4-Nitrophenol	ND	330	56	ug/kg	
87-86-5	Pentachlorophenol	ND	330	57	ug/kg	
108-95-2	Phenol	ND	66	35	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	34	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	38	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	31	ug/kg	
83-32-9	Acenaphthene	ND	33	9.6	ug/kg	
208-96-8	Acenaphthylene	ND	33	11	ug/kg	
98-86-2	Acetophenone	ND	170	5.8	ug/kg	
120-12-7	Anthracene	ND	33	12	ug/kg	
1912-24-9	Atrazine	ND	66	6.5	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	10	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	12	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	12	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	66	12	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	66	19	ug/kg	
92-52-4	1,1'-Biphenyl	ND	66	3.8	ug/kg	
100-52-7	Benzaldehyde	ND	170	7.6	ug/kg	
91-58-7	2-Chloronaphthalene	ND	66	10	ug/kg	
106-47-8	4-Chloroaniline	ND	170	11	ug/kg	
86-74-8	Carbazole	ND	66	15	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (10-12')		
Lab Sample ID:	JB67915-4	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	96.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	66	10	ug/kg	
218-01-9	Chrysene	ND	33	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	66	13	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	66	10	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	66	9.8	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	66	10	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	14	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	66	8.4	ug/kg	
123-91-1	1,4-Dioxane	ND	33	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	11	ug/kg	
132-64-9	Dibenzofuran	ND	66	9.8	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	66	7.3	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	66	16	ug/kg	
84-66-2	Diethyl phthalate	ND	66	11	ug/kg	
131-11-3	Dimethyl phthalate	ND	66	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	66	29	ug/kg	
206-44-0	Fluoranthene	ND	33	15	ug/kg	
86-73-7	Fluorene	ND	33	11	ug/kg	
118-74-1	Hexachlorobenzene	ND	66	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	9.2	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	34	ug/kg	
67-72-1	Hexachloroethane	ND	170	9.2	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	11	ug/kg	
78-59-1	Isophorone	ND	66	8.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	66	18	ug/kg	
88-74-4	2-Nitroaniline	ND	170	15	ug/kg	
99-09-2	3-Nitroaniline	ND	170	13	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
91-20-3	Naphthalene	ND	33	9.0	ug/kg	
98-95-3	Nitrobenzene	ND	66	9.6	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	66	8.1	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	20	ug/kg	
85-01-8	Phenanthrene	ND	33	15	ug/kg	
129-00-0	Pyrene	ND	33	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	69%		13-110%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (10-12')		
Lab Sample ID:	JB67915-4	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	96.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	65%		15-110%
118-79-6	2,4,6-Tribromophenol	91%		20-123%
4165-60-0	Nitrobenzene-d5	68%		10-110%
321-60-8	2-Fluorobiphenyl	80%		17-110%
1718-51-0	Terphenyl-d14	92%		30-124%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (10-12')		
Lab Sample ID:	JB67915-4	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8081B SW846 3546	**Percent Solids:**	96.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G12398.D	1	05/30/14	DG	05/29/14	OP75189	G6G354
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	1.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.067	0.031	ug/kg	
319-84-6	alpha-BHC	ND	0.067	0.020	ug/kg	
319-85-7	beta-BHC	ND	0.067	0.042	ug/kg	
319-86-8	delta-BHC	ND	0.067	0.033	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.067	0.033	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.067	0.025	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.067	0.047	ug/kg	
60-57-1	Dieldrin	ND	0.067	0.026	ug/kg	
72-54-8	4,4'-DDD	ND	0.067	0.037	ug/kg	
72-55-9	4,4'-DDE	ND	0.067	0.027	ug/kg	
50-29-3	4,4'-DDT	ND	0.067	0.033	ug/kg	
72-20-8	Endrin	ND	0.067	0.022	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.067	0.029	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.067	0.035	ug/kg	
959-98-8	Endosulfan-I	ND	0.067	0.026	ug/kg	
33213-65-9	Endosulfan-II	ND	0.067	0.040	ug/kg	
76-44-8	Heptachlor	ND	0.067	0.033	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.067	0.025	ug/kg	
72-43-5	Methoxychlor	ND	0.13	0.066	ug/kg	
53494-70-5	Endrin ketone	ND	0.067	0.027	ug/kg	
8001-35-2	Toxaphene	ND	1.7	0.85	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		10-129%
877-09-8	Tetrachloro-m-xylene	75%		10-129%
2051-24-3	Decachlorobiphenyl	47%		10-144%
2051-24-3	Decachlorobiphenyl	66%		10-144%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (10-12')		
Lab Sample ID:	JB67915-4	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8082A SW846 3546	**Percent Solids:**	96.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G95970.D	1	05/30/14	RK	05/29/14	OP75188	G2G3014
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	3.4	0.88	ug/kg	
11104-28-2	Aroclor 1221	ND	3.4	2.0	ug/kg	
11141-16-5	Aroclor 1232	ND	3.4	1.7	ug/kg	
53469-21-9	Aroclor 1242	ND	3.4	1.1	ug/kg	
12672-29-6	Aroclor 1248	ND	3.4	1.0	ug/kg	
11097-69-1	Aroclor 1254	ND	3.4	1.6	ug/kg	
11096-82-5	Aroclor 1260	ND	3.4	1.1	ug/kg	
11100-14-4	Aroclor 1268	ND	3.4	1.0	ug/kg	
37324-23-5	Aroclor 1262	ND	3.4	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%		14-139%
877-09-8	Tetrachloro-m-xylene	83%		14-139%
2051-24-3	Decachlorobiphenyl	57%		10-155%
2051-24-3	Decachlorobiphenyl	58%		10-155%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (10-12')		
Lab Sample ID:	JB67915-4	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
		Percent Solids:	96.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4830	51	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Antimony	< 2.1	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Arsenic	< 2.1	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Barium	27.8	21	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Beryllium	0.29	0.21	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.51	0.51	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Calcium	72700	510	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Chromium	8.9	1.0	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cobalt	< 5.1	5.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Copper	14.0	2.6	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Iron	9480	150	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Lead	4.3	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Magnesium	48300	510	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Manganese	171	1.5	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.032	0.032	mg/kg	1	06/05/14	06/05/14	DP	SW846 7471B [2]	SW846 7471B [4]
Nickel	11.4	4.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Potassium	1350	1000	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 2.1	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.51	0.51	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 1000	1000	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 1.0	1.0	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Vanadium	15.6	5.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Zinc	24.5	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA34151
(2) Instrument QC Batch: MA34169
(3) Prep QC Batch: MP79800
(4) Prep QC Batch: MP79885

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-2 (0-2')		
Lab Sample ID:	JB67915-5	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	88.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V11290.D	1	05/29/14	TDN	05/29/14 11:00	n/a	V3V478
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	5.7	ug/kg	
71-43-2	Benzene	ND	1.3	0.16	ug/kg	
74-97-5	Bromochloromethane	ND	6.3	0.65	ug/kg	
75-27-4	Bromodichloromethane	ND	6.3	0.35	ug/kg	
75-25-2	Bromoform	ND	6.3	0.33	ug/kg	
74-83-9	Bromomethane	ND	6.3	0.61	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	5.5	ug/kg	
75-15-0	Carbon disulfide	ND	6.3	0.18	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.3	0.32	ug/kg	
108-90-7	Chlorobenzene	ND	6.3	0.25	ug/kg	
75-00-3	Chloroethane	ND	6.3	1.3	ug/kg	
67-66-3	Chloroform	ND	6.3	0.32	ug/kg	
74-87-3	Chloromethane	ND	6.3	0.43	ug/kg	
110-82-7	Cyclohexane	ND	6.3	0.32	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	13	1.7	ug/kg	
124-48-1	Dibromochloromethane	ND	6.3	0.30	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.69	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.3	0.43	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.3	0.27	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.3	0.32	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.3	0.44	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.3	0.40	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.40	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.3	0.36	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.3	0.26	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.3	0.53	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.3	0.55	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.3	0.29	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.3	0.34	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.22	ug/kg	
76-13-1	Freon 113	ND	6.3	0.55	ug/kg	
591-78-6	2-Hexanone	ND	6.3	2.2	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (0-2')		
Lab Sample ID:	JB67915-5	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	88.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	6.3	0.18	ug/kg	
79-20-9	Methyl Acetate	ND	6.3	2.1	ug/kg	
108-87-2	Methylcyclohexane	ND	6.3	0.21	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.43	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.3	1.7	ug/kg	
75-09-2	Methylene chloride	ND	6.3	2.1	ug/kg	
100-42-5	Styrene	ND	6.3	0.29	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.3	0.43	ug/kg	
127-18-4	Tetrachloroethene	ND	6.3	0.52	ug/kg	
108-88-3	Toluene	ND	1.3	0.18	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.3	0.26	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.3	0.23	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.3	0.36	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.3	1.0	ug/kg	
79-01-6	Trichloroethene	ND	6.3	0.44	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.3	0.28	ug/kg	
75-01-4	Vinyl chloride	ND	6.3	0.43	ug/kg	
	m,p-Xylene	ND	1.3	0.61	ug/kg	
95-47-6	o-Xylene	ND	1.3	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		59-130%
17060-07-0	1,2-Dichloroethane-D4	106%		65-123%
2037-26-5	Toluene-D8	117%		77-125%
460-00-4	4-Bromofluorobenzene	116%		71-132%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (0-2')		
Lab Sample ID:	JB67915-5	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	88.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P7529.D	1	05/30/14	ALS	05/29/14	OP75185	E6P319
Run #2	6P7635.D	10	06/02/14	AV	05/29/14	OP75185	E6P323

	Initial Weight	Final Volume
Run #1	32.0 g	1.0 ml
Run #2	32.0 g	1.0 ml

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	71	35	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	35	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	57	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	59	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	710	43	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	710	43	ug/kg	
95-48-7	2-Methylphenol	ND	71	40	ug/kg	
	3&4-Methylphenol	ND	71	45	ug/kg	
88-75-5	2-Nitrophenol	ND	180	38	ug/kg	
100-02-7	4-Nitrophenol	ND	350	60	ug/kg	
87-86-5	Pentachlorophenol	ND	350	61	ug/kg	
108-95-2	Phenol	ND	71	37	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	36	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	41	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	33	ug/kg	
83-32-9	Acenaphthene	44.3	35	10	ug/kg	
208-96-8	Acenaphthylene	1130	35	11	ug/kg	
98-86-2	Acetophenone	ND	180	6.2	ug/kg	
120-12-7	Anthracene	786	35	12	ug/kg	
1912-24-9	Atrazine	ND	71	7.0	ug/kg	
56-55-3	Benzo(a)anthracene	4860 [a]	350	120	ug/kg	
50-32-8	Benzo(a)pyrene	4090 [a]	350	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	5570 [a]	350	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	2660	35	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	1700	35	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	71	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	71	20	ug/kg	
92-52-4	1,1'-Biphenyl	15.3	71	4.1	ug/kg	J
100-52-7	Benzaldehyde	ND	180	8.1	ug/kg	
91-58-7	2-Chloronaphthalene	ND	71	11	ug/kg	
106-47-8	4-Chloroaniline	ND	180	11	ug/kg	
86-74-8	Carbazole	246	71	16	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (0-2')		
Lab Sample ID:	JB67915-5	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	88.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	71	11	ug/kg	
218-01-9	Chrysene	5320 [a]	350	120	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	71	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	71	11	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	71	11	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	71	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	35	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	35	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	71	9.0	ug/kg	
123-91-1	1,4-Dioxane	ND	35	23	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	920	35	12	ug/kg	
132-64-9	Dibenzofuran	113	71	11	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	71	7.9	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	71	17	ug/kg	
84-66-2	Diethyl phthalate	ND	71	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	71	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	379	71	31	ug/kg	
206-44-0	Fluoranthene	6440 [a]	350	160	ug/kg	
86-73-7	Fluorene	103	35	12	ug/kg	
118-74-1	Hexachlorobenzene	ND	71	12	ug/kg	
87-68-3	Hexachlorobutadiene	ND	35	9.8	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	350	36	ug/kg	
67-72-1	Hexachloroethane	ND	180	9.8	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2780	35	12	ug/kg	
78-59-1	Isophorone	ND	71	9.5	ug/kg	
91-57-6	2-Methylnaphthalene	41.3	71	20	ug/kg	J
88-74-4	2-Nitroaniline	ND	180	16	ug/kg	
99-09-2	3-Nitroaniline	ND	180	14	ug/kg	
100-01-6	4-Nitroaniline	ND	180	14	ug/kg	
91-20-3	Naphthalene	107	35	9.7	ug/kg	
98-95-3	Nitrobenzene	ND	71	10	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	71	8.6	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	21	ug/kg	
85-01-8	Phenanthrene	2670	35	16	ug/kg	
129-00-0	Pyrene	7590 [a]	350	140	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	64%	67%	13-110%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (0-2')		
Lab Sample ID:	JB67915-5	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	88.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	63%	64%	15-110%
118-79-6	2,4,6-Tribromophenol	93%	87%	20-123%
4165-60-0	Nitrobenzene-d5	59%	69%	10-110%
321-60-8	2-Fluorobiphenyl	79%	85%	17-110%
1718-51-0	Terphenyl-d14	79%	92%	30-124%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (0-2')		
Lab Sample ID:	JB67915-5	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8081B SW846 3546	**Percent Solids:**	88.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G12399.D	1	05/30/14	DG	05/29/14	OP75189	G6G354
Run #2	6G12455.D	50	06/03/14	YD	05/29/14	OP75189	G6G356

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2	15.3 g	1.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.074	0.034	ug/kg	
319-84-6	alpha-BHC [a]	0.53	0.074	0.022	ug/kg	
319-85-7	beta-BHC	ND	0.074	0.046	ug/kg	
319-86-8	delta-BHC	ND	0.074	0.037	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.074	0.036	ug/kg	
5103-71-9	alpha-Chlordane	5.2	0.074	0.027	ug/kg	
5103-74-2	gamma-Chlordane	4.5	0.074	0.051	ug/kg	
60-57-1	Dieldrin	5.5	0.074	0.029	ug/kg	
72-54-8	4,4'-DDD	ND	0.074	0.040	ug/kg	
72-55-9	4,4'-DDE	6.8	0.074	0.030	ug/kg	
50-29-3	4,4'-DDT	96.0 [b]	3.7	1.8	ug/kg	
72-20-8	Endrin	ND	0.074	0.024	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.074	0.032	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.074	0.039	ug/kg	
959-98-8	Endosulfan-I	ND	0.074	0.028	ug/kg	
33213-65-9	Endosulfan-II	ND	0.074	0.044	ug/kg	
76-44-8	Heptachlor	ND	0.074	0.036	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.074	0.028	ug/kg	
72-43-5	Methoxychlor	ND	0.15	0.072	ug/kg	
53494-70-5	Endrin ketone	ND	0.074	0.030	ug/kg	
8001-35-2	Toxaphene	ND	1.9	0.93	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	50%	70%	10-129%
877-09-8	Tetrachloro-m-xylene	48%	59%	10-129%
2051-24-3	Decachlorobiphenyl	138%	29%	10-144%
2051-24-3	Decachlorobiphenyl	51%	74%	10-144%

(a) More than 40 % RPD for detected concentrations between the two GC columns.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (0-2')		
Lab Sample ID:	JB67915-5	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8082A SW846 3546	**Percent Solids:**	88.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G95971.D	1	05/30/14	RK	05/29/14	OP75188	G2G3014
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	3.7	0.97	ug/kg	
11104-28-2	Aroclor 1221	ND	3.7	2.2	ug/kg	
11141-16-5	Aroclor 1232	ND	3.7	1.9	ug/kg	
53469-21-9	Aroclor 1242	ND	3.7	1.2	ug/kg	
12672-29-6	Aroclor 1248	ND	3.7	1.1	ug/kg	
11097-69-1	Aroclor 1254	ND	3.7	1.7	ug/kg	
11096-82-5	Aroclor 1260	ND	3.7	1.2	ug/kg	
11100-14-4	Aroclor 1268	ND	3.7	1.1	ug/kg	
37324-23-5	Aroclor 1262	ND	3.7	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	46%		14-139%
877-09-8	Tetrachloro-m-xylene	52%		14-139%
2051-24-3	Decachlorobiphenyl	109%		10-155%
2051-24-3	Decachlorobiphenyl	443% [a]		10-155%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (0-2')		
Lab Sample ID:	JB67915-5	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
		Percent Solids:	88.3
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	8840	58	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Antimony	< 2.3	2.3	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Arsenic	5.1	2.3	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Barium	1760	23	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Beryllium	0.56	0.23	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cadmium	0.84	0.58	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Calcium	62300	580	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Chromium	22.4	1.2	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cobalt	6.0	5.8	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Copper	30.7	2.9	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Iron	12700	170	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Lead	668	2.3	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Magnesium	23800	580	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Manganese	361	1.8	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Mercury	0.27	0.035	mg/kg	1	06/05/14	06/05/14	DP	SW846 7471B [2]	SW846 7471B [4]
Nickel	13.2	4.7	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Potassium	1520	1200	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 2.3	2.3	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Silver	0.81	0.58	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 1200	1200	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 1.2	1.2	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Vanadium	25.8	5.8	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Zinc	701	2.3	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA34151
(2) Instrument QC Batch: MA34169
(3) Prep QC Batch: MP79800
(4) Prep QC Batch: MP79885

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-2 (10-12')		
Lab Sample ID:	JB67915-6	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	94.9
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V11291.D	1	05/29/14	TDN	05/29/14 11:00	n/a	V3V478
Run #2							

	Initial Weight
Run #1	3.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	15	6.7	ug/kg	
71-43-2	Benzene	ND	1.5	0.18	ug/kg	
74-97-5	Bromochloromethane	ND	7.3	0.76	ug/kg	
75-27-4	Bromodichloromethane	ND	7.3	0.41	ug/kg	
75-25-2	Bromoform	ND	7.3	0.38	ug/kg	
74-83-9	Bromomethane	ND	7.3	0.70	ug/kg	
78-93-3	2-Butanone (MEK)	ND	15	6.4	ug/kg	
75-15-0	Carbon disulfide	ND	7.3	0.21	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.3	0.37	ug/kg	
108-90-7	Chlorobenzene	ND	7.3	0.29	ug/kg	
75-00-3	Chloroethane	ND	7.3	1.5	ug/kg	
67-66-3	Chloroform	ND	7.3	0.37	ug/kg	
74-87-3	Chloromethane	ND	7.3	0.50	ug/kg	
110-82-7	Cyclohexane	ND	7.3	0.38	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	15	1.9	ug/kg	
124-48-1	Dibromochloromethane	ND	7.3	0.35	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.5	0.80	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	7.3	0.49	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	7.3	0.32	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	7.3	0.37	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	7.3	0.52	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.3	0.46	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	7.3	0.42	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	7.3	0.30	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	7.3	0.62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.3	0.64	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.3	0.33	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.3	0.40	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	0.26	ug/kg	
76-13-1	Freon 113	ND	7.3	0.64	ug/kg	
591-78-6	2-Hexanone	ND	7.3	2.6	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (10-12')		
Lab Sample ID:	JB67915-6	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8260C SW846 5035	**Percent Solids:**	94.9
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	7.3	0.22	ug/kg	
79-20-9	Methyl Acetate	ND	7.3	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	7.3	0.24	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.5	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.3	1.9	ug/kg	
75-09-2	Methylene chloride	ND	7.3	2.5	ug/kg	
100-42-5	Styrene	ND	7.3	0.34	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.3	0.50	ug/kg	
127-18-4	Tetrachloroethene	ND	7.3	0.60	ug/kg	
108-88-3	Toluene	ND	1.5	0.21	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	7.3	0.30	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	7.3	0.26	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.3	0.42	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.3	1.2	ug/kg	
79-01-6	Trichloroethene	ND	7.3	0.51	ug/kg	
75-69-4	Trichlorofluoromethane	ND	7.3	0.33	ug/kg	
75-01-4	Vinyl chloride	ND	7.3	0.50	ug/kg	
	m,p-Xylene	ND	1.5	0.71	ug/kg	
95-47-6	o-Xylene	ND	1.5	0.26	ug/kg	
1330-20-7	Xylene (total)	ND	1.5	0.26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		59-130%
17060-07-0	1,2-Dichloroethane-D4	102%		65-123%
2037-26-5	Toluene-D8	117%		77-125%
460-00-4	4-Bromofluorobenzene	115%		71-132%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (10-12')		
Lab Sample ID:	JB67915-6	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	94.9
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P7530.D	1	05/30/14	ALS	05/29/14	OP75185	E6P319
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	68	34	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	34	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	55	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	57	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	680	42	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	680	42	ug/kg	
95-48-7	2-Methylphenol	ND	68	39	ug/kg	
	3&4-Methylphenol	ND	68	43	ug/kg	
88-75-5	2-Nitrophenol	ND	170	36	ug/kg	
100-02-7	4-Nitrophenol	ND	340	58	ug/kg	
87-86-5	Pentachlorophenol	ND	340	58	ug/kg	
108-95-2	Phenol	ND	68	36	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	35	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	40	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	32	ug/kg	
83-32-9	Acenaphthene	ND	34	9.9	ug/kg	
208-96-8	Acenaphthylene	ND	34	11	ug/kg	
98-86-2	Acetophenone	ND	170	6.0	ug/kg	
120-12-7	Anthracene	ND	34	12	ug/kg	
1912-24-9	Atrazine	ND	68	6.7	ug/kg	
56-55-3	Benzo(a)anthracene	ND	34	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	34	10	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	34	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	34	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	34	13	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	68	12	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	68	20	ug/kg	
92-52-4	1,1'-Biphenyl	ND	68	4.0	ug/kg	
100-52-7	Benzaldehyde	ND	170	7.8	ug/kg	
91-58-7	2-Chloronaphthalene	ND	68	11	ug/kg	
106-47-8	4-Chloroaniline	ND	170	11	ug/kg	
86-74-8	Carbazole	ND	68	16	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (10-12')		
Lab Sample ID:	JB67915-6	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	94.9
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	68	11	ug/kg	
218-01-9	Chrysene	ND	34	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	68	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	68	10	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	68	10	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	68	10	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	34	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	34	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	68	8.7	ug/kg	
123-91-1	1,4-Dioxane	ND	34	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	34	12	ug/kg	
132-64-9	Dibenzofuran	ND	68	10	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	68	7.6	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	68	17	ug/kg	
84-66-2	Diethyl phthalate	ND	68	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	68	12	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	68	30	ug/kg	
206-44-0	Fluoranthene	ND	34	15	ug/kg	
86-73-7	Fluorene	ND	34	11	ug/kg	
118-74-1	Hexachlorobenzene	ND	68	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	34	9.5	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	340	35	ug/kg	
67-72-1	Hexachloroethane	ND	170	9.5	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	34	12	ug/kg	
78-59-1	Isophorone	ND	68	9.2	ug/kg	
91-57-6	2-Methylnaphthalene	ND	68	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	15	ug/kg	
99-09-2	3-Nitroaniline	ND	170	14	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
91-20-3	Naphthalene	ND	34	9.3	ug/kg	
98-95-3	Nitrobenzene	ND	68	9.9	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	68	8.3	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	20	ug/kg	
85-01-8	Phenanthrene	ND	34	16	ug/kg	
129-00-0	Pyrene	ND	34	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		13-110%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (10-12')		
Lab Sample ID:	JB67915-6	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	94.9
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	59%		15-110%
118-79-6	2,4,6-Tribromophenol	82%		20-123%
4165-60-0	Nitrobenzene-d5	62%		10-110%
321-60-8	2-Fluorobiphenyl	74%		17-110%
1718-51-0	Terphenyl-d14	90%		30-124%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (10-12')		
Lab Sample ID:	JB67915-6	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8081B SW846 3546	**Percent Solids:**	94.9
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G12400.D	1	05/30/14	DG	05/29/14	OP75189	G6G354
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	1.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.068	0.031	ug/kg	
319-84-6	alpha-BHC	ND	0.068	0.020	ug/kg	
319-85-7	beta-BHC	ND	0.068	0.042	ug/kg	
319-86-8	delta-BHC	ND	0.068	0.034	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.068	0.033	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.068	0.025	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.068	0.047	ug/kg	
60-57-1	Dieldrin	ND	0.068	0.027	ug/kg	
72-54-8	4,4'-DDD	ND	0.068	0.037	ug/kg	
72-55-9	4,4'-DDE	ND	0.068	0.027	ug/kg	
50-29-3	4,4'-DDT	ND	0.068	0.034	ug/kg	
72-20-8	Endrin	ND	0.068	0.022	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.068	0.029	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.068	0.036	ug/kg	
959-98-8	Endosulfan-I	ND	0.068	0.026	ug/kg	
33213-65-9	Endosulfan-II	ND	0.068	0.041	ug/kg	
76-44-8	Heptachlor	ND	0.068	0.033	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.068	0.025	ug/kg	
72-43-5	Methoxychlor	ND	0.14	0.067	ug/kg	
53494-70-5	Endrin ketone	ND	0.068	0.028	ug/kg	
8001-35-2	Toxaphene	ND	1.7	0.86	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	54%		10-129%
877-09-8	Tetrachloro-m-xylene	48%		10-129%
2051-24-3	Decachlorobiphenyl	35%		10-144%
2051-24-3	Decachlorobiphenyl	32%		10-144%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (10-12')		
Lab Sample ID:	JB67915-6	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
Method:	SW846 8082A SW846 3546	**Percent Solids:**	94.9
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G95975.D	1	05/30/14	RK	05/29/14	OP75188	G2G3014
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	3.4	0.89	ug/kg	
11104-28-2	Aroclor 1221	ND	3.4	2.1	ug/kg	
11141-16-5	Aroclor 1232	ND	3.4	1.7	ug/kg	
53469-21-9	Aroclor 1242	ND	3.4	1.1	ug/kg	
12672-29-6	Aroclor 1248	ND	3.4	1.0	ug/kg	
11097-69-1	Aroclor 1254	ND	3.4	1.6	ug/kg	
11096-82-5	Aroclor 1260	ND	3.4	1.1	ug/kg	
11100-14-4	Aroclor 1268	ND	3.4	1.0	ug/kg	
37324-23-5	Aroclor 1262	ND	3.4	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		14-139%
877-09-8	Tetrachloro-m-xylene	77%		14-139%
2051-24-3	Decachlorobiphenyl	63%		10-155%
2051-24-3	Decachlorobiphenyl	58%		10-155%

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (10-12')		
Lab Sample ID:	JB67915-6	**Date Sampled:**	05/28/14
Matrix:	SO - Soil	**Date Received:**	05/28/14
		Percent Solids:	94.9
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	9820	52	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Antimony	< 2.1	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Arsenic	2.6	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Barium	29.0	21	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Beryllium	0.58	0.21	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.52	0.52	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Calcium	33500	520	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Chromium	29.2	1.0	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Cobalt	14.2	5.2	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Copper	50.2	2.6	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Iron	20000	160	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Lead	3.7	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Magnesium	25600	520	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Manganese	172	1.5	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.032	0.032	mg/kg	1	06/05/14	06/05/14	DP	SW846 7471B [2]	SW846 7471B [4]
Nickel	28.1	4.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Potassium	4380	1000	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 2.1	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.52	0.52	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 1000	1000	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 1.0	1.0	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Vanadium	37.4	5.2	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]
Zinc	30.8	2.1	mg/kg	1	06/02/14	06/03/14	KK	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA34151
(2) Instrument QC Batch: MA34169
(3) Prep QC Batch: MP79800
(4) Prep QC Batch: MP79885

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SSTB		
Lab Sample ID:	JB67915-7	**Date Sampled:**	05/28/14
Matrix:	SO - Trip Blank Soil	**Date Received:**	05/28/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V11285.D	1	05/29/14	TDN	n/a	n/a	V3V478
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.6	ug/kg	
71-43-2	Benzene	ND	1.0	0.13	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.28	ug/kg	
75-25-2	Bromoform	ND	5.0	0.26	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.48	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	4.4	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.25	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.20	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.25	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.34	ug/kg	
110-82-7	Cyclohexane	ND	5.0	0.26	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.24	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.55	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.35	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.31	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.0	0.29	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	0.21	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.27	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/kg	
76-13-1	Freon 113	ND	5.0	0.44	ug/kg	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SSTB		
Lab Sample ID:	JB67915-7	**Date Sampled:**	05/28/14
Matrix:	SO - Trip Blank Soil	**Date Received:**	05/28/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	5.0	0.15	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.7	ug/kg	
108-87-2	Methylcyclohexane	ND	5.0	0.16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	1.7	ug/kg	
100-42-5	Styrene	ND	5.0	0.23	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.34	ug/kg	
127-18-4	Tetrachloroethene	ND	5.0	0.41	ug/kg	
108-88-3	Toluene	ND	1.0	0.14	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.21	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.18	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.29	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.82	ug/kg	
79-01-6	Trichloroethene	ND	5.0	0.35	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.23	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	0.34	ug/kg	
	m,p-Xylene	ND	1.0	0.48	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.18	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		59-130%
17060-07-0	1,2-Dichloroethane-D4	103%		65-123%
2037-26-5	Toluene-D8	116%		77-125%
460-00-4	4-Bromofluorobenzene	116%		71-132%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

New Jersey

ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST LABORATORIES

SLL
SSTB

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

Priority

PAGE 1 OF 1

~~RED EX Tracking #~~ 20148415 | Bottle Order Control #
Accutest Quote # | Accutest Job # JB67915

Client / Reporting Information

Company Name: AKRF
Street Address: 440 Park Ave South
City State Zip: New York NY 10016
Project Contact: Deborah Shapiro E-mail: dshapiro@akrf.com
Phone #: Fax #:
Sampler(s) Name(s): Chelsea Richard Phone #: 917.624.8338

Project Information

Project Name: Melrose Commons Site C
Street: 425/429 E 161st St
City State: Bronx NY
Project #: 11925
Client Purchase Order #:
Project Manager: Deborah Shapiro

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOC 8260	SVOC 8270	PCB 8082	Pesticides 8081	TAL Metals	LAB USE ONLY
1	SB-1 (0-2') ⊘		5/28	1007	CR	soil	3								3	X					C6
	SB-1 (0-2')			1008			1						1				X	X	X	X	14K3
2	SB-1 (10-12') ⊘			1008			3								3	X					40126
	SB-1 (10-12')			1008			1						1				X	X	X	X	
3	SB-3 (0-2') ⊘			1034			3								3	X					
	SB-3 (0-2')			1034			1						1				X	X	X	X	
4	SB-3 (10-12') ⊘			1035			3								3	X					
	SB-3 (10-12')			1035			1						1				X	X	X	X	
5	SB-2 (0-2') ⊘			1155			3								3	X					
	SB-2 (0-2')			1155			1						1				X	X	X	X	
6	SB-2 (10-12') ⊘			1156			3								3	X					
	SB-2 (10-12')			1156			1						1				X	X	X	X	

Turnaround Time (Business days)

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] other _____

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [x] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format _____
- [ ] Other _____

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

-7 SSTB & ADDED TOCOC (A) 5/28/14

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 KSCOTT		1	2	5/28/14 18:56	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not intact	Preserved where applicable [ ]

On Ice [x] Cooler Temp. 3.2°C

2PM/RT

⊘ 3-5 gram encore

BF

JB67915: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB67915 **Client:** _____ **Project:** _____

Date / Time Received: 5/28/2014 **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted): #1: (3.2/2.9); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

JB67915: Chain of Custody
Page 2 of 2

New Jersey
ACCUTEST LABORATORIES

06/05/14

Technical Report for

AKRF

Melrose Commons-Site C, 440 East 162 Street, Bronx, NY

11925

Accutest Job Number: JB67971

Sampling Date: 05/28/14

Report to:

AKRF, Inc.
440 Park Avenue South
New York, NY 10016
dshapiro@akrf.com

ATTN: Deborah Shapiro

Total number of pages in report: **19**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

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Accutest Laboratories

Sample Summary

AKRF

Job No: JB67971

Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Project No: 11925

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB67971-1	05/28/14	12:25	CR	05/29/14	AIR	Ambient Air Comp.	AA-1
JB67971-2	05/28/14	13:02	CR	05/29/14	AIR	Soil Vapor Comp.	SV-1
JB67971-3	05/28/14	13:23	CR	05/29/14	AIR	Soil Vapor Comp.	SV-2

Summary of Hits

Job Number: JB67971
Account: AKRF
Project: Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Collected: 05/28/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB67971-1	**AA-1**					
Acetone		15.3	0.20	0.034	ppbv	TO-15
Benzene		0.48	0.20	0.021	ppbv	TO-15
Carbon disulfide		0.73	0.20	0.017	ppbv	TO-15
Chloromethane		0.66	0.20	0.034	ppbv	TO-15
Dichlorodifluoromethane		0.76	0.20	0.015	ppbv	TO-15
Ethanol		39.8	0.50	0.19	ppbv	TO-15
Ethylbenzene		0.13 J	0.20	0.020	ppbv	TO-15
Ethyl Acetate		0.74	0.20	0.057	ppbv	TO-15
Heptane		0.20	0.20	0.020	ppbv	TO-15
Hexane		2.5	0.20	0.016	ppbv	TO-15
Isopropyl Alcohol		1.6	0.20	0.039	ppbv	TO-15
Methylene chloride		5.9	0.20	0.047	ppbv	TO-15
Methyl ethyl ketone		0.72	0.20	0.058	ppbv	TO-15
Methyl Isobutyl Ketone		0.21	0.20	0.029	ppbv	TO-15
Propylene		18.2	0.50	0.031	ppbv	TO-15
Styrene		0.12 J	0.20	0.020	ppbv	TO-15
1,2,4-Trimethylbenzene		0.17 J	0.20	0.017	ppbv	TO-15
2,2,4-Trimethylpentane		0.16 J	0.20	0.021	ppbv	TO-15
Tertiary Butyl Alcohol		0.63	0.20	0.044	ppbv	TO-15
Tetrachloroethylene		0.45	0.040	0.029	ppbv	TO-15
Tetrahydrofuran		0.13 J	0.20	0.045	ppbv	TO-15
Toluene		0.58	0.20	0.020	ppbv	TO-15
Trichlorofluoromethane		0.99	0.20	0.014	ppbv	TO-15
m,p-Xylene		0.42	0.20	0.032	ppbv	TO-15
o-Xylene		0.16 J	0.20	0.019	ppbv	TO-15
Xylenes (total)		0.58	0.20	0.019	ppbv	TO-15
Acetone		36.3	0.48	0.081	ug/m3	TO-15
Benzene		1.5	0.64	0.067	ug/m3	TO-15
Carbon disulfide		2.3	0.62	0.053	ug/m3	TO-15
Chloromethane		1.4	0.41	0.070	ug/m3	TO-15
Dichlorodifluoromethane		3.8	0.99	0.074	ug/m3	TO-15
Ethanol		75.0	0.94	0.36	ug/m3	TO-15
Ethylbenzene		0.56 J	0.87	0.087	ug/m3	TO-15
Ethyl Acetate		2.7	0.72	0.21	ug/m3	TO-15
Heptane		0.82	0.82	0.082	ug/m3	TO-15
Hexane		8.8	0.70	0.056	ug/m3	TO-15
Isopropyl Alcohol		3.9	0.49	0.096	ug/m3	TO-15
Methylene chloride		20	0.69	0.16	ug/m3	TO-15
Methyl ethyl ketone		2.1	0.59	0.17	ug/m3	TO-15
Methyl Isobutyl Ketone		0.86	0.82	0.12	ug/m3	TO-15
Propylene		31.3	0.86	0.053	ug/m3	TO-15
Styrene		0.51 J	0.85	0.085	ug/m3	TO-15
1,2,4-Trimethylbenzene		0.84 J	0.98	0.084	ug/m3	TO-15

Summary of Hits

Job Number: JB67971
Account: AKRF
Project: Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Collected: 05/28/14

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
2,2,4-Trimethylpentane	0.75 J	0.93	0.098	ug/m3	TO-15
Tertiary Butyl Alcohol	1.9	0.61	0.13	ug/m3	TO-15
Tetrachloroethylene	3.1	0.27	0.20	ug/m3	TO-15
Tetrahydrofuran	0.38 J	0.59	0.13	ug/m3	TO-15
Toluene	2.2	0.75	0.075	ug/m3	TO-15
Trichlorofluoromethane	5.6	1.1	0.079	ug/m3	TO-15
m,p-Xylene	1.8	0.87	0.14	ug/m3	TO-15
o-Xylene	0.69 J	0.87	0.083	ug/m3	TO-15
Xylenes (total)	2.5	0.87	0.083	ug/m3	TO-15
JB67971-2 SV-1					
Acetone	27.9	0.80	0.14	ppbv	TO-15
Benzene	2.9	0.80	0.084	ppbv	TO-15
Carbon disulfide	0.57 J	0.80	0.069	ppbv	TO-15
Dichlorodifluoromethane	1.1	0.80	0.062	ppbv	TO-15
Ethanol	110	2.0	0.74	ppbv	TO-15
Ethylbenzene	0.54 J	0.80	0.081	ppbv	TO-15
Ethyl Acetate	1.7	0.80	0.23	ppbv	TO-15
Heptane	1.4	0.80	0.078	ppbv	TO-15
Hexane	2.3	0.80	0.064	ppbv	TO-15
Isopropyl Alcohol	2.6	0.80	0.15	ppbv	TO-15
Methylene chloride	1.5	0.80	0.19	ppbv	TO-15
Methyl ethyl ketone	1.0	0.80	0.23	ppbv	TO-15
Methyl Isobutyl Ketone	0.58 J	0.80	0.12	ppbv	TO-15
Propylene	5.2	2.0	0.13	ppbv	TO-15
1,2,4-Trimethylbenzene	0.48 J	0.80	0.066	ppbv	TO-15
2,2,4-Trimethylpentane	1.6	0.80	0.084	ppbv	TO-15
Tertiary Butyl Alcohol	1.3	0.80	0.18	ppbv	TO-15
Tetrachloroethylene	0.21	0.16	0.12	ppbv	TO-15
Toluene	4.0	0.80	0.081	ppbv	TO-15
Trichlorofluoromethane	4.7	0.80	0.055	ppbv	TO-15
m,p-Xylene	1.8	0.80	0.13	ppbv	TO-15
o-Xylene	0.59 J	0.80	0.077	ppbv	TO-15
Xylenes (total)	2.4	0.80	0.077	ppbv	TO-15
Acetone	66.3	1.9	0.33	ug/m3	TO-15
Benzene	9.3	2.6	0.27	ug/m3	TO-15
Carbon disulfide	1.8 J	2.5	0.21	ug/m3	TO-15
Dichlorodifluoromethane	5.4	4.0	0.31	ug/m3	TO-15
Ethanol	207	3.8	1.4	ug/m3	TO-15
Ethylbenzene	2.3 J	3.5	0.35	ug/m3	TO-15
Ethyl Acetate	6.1	2.9	0.83	ug/m3	TO-15
Heptane	5.7	3.3	0.32	ug/m3	TO-15
Hexane	8.1	2.8	0.23	ug/m3	TO-15
Isopropyl Alcohol	6.4	2.0	0.37	ug/m3	TO-15

Summary of Hits

Job Number: JB67971
Account: AKRF
Project: Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Collected: 05/28/14

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Methylene chloride	5.2	2.8	0.66	ug/m3	TO-15
Methyl ethyl ketone	2.9	2.4	0.68	ug/m3	TO-15
Methyl Isobutyl Ketone	2.4 J	3.3	0.49	ug/m3	TO-15
Propylene	8.9	3.4	0.22	ug/m3	TO-15
1,2,4-Trimethylbenzene	2.4 J	3.9	0.32	ug/m3	TO-15
2,2,4-Trimethylpentane	7.5	3.7	0.39	ug/m3	TO-15
Tertiary Butyl Alcohol	3.9	2.4	0.55	ug/m3	TO-15
Tetrachloroethylene	1.4	1.1	0.81	ug/m3	TO-15
Toluene	15	3.0	0.31	ug/m3	TO-15
Trichlorofluoromethane	26	4.5	0.31	ug/m3	TO-15
m,p-Xylene	7.8	3.5	0.56	ug/m3	TO-15
o-Xylene	2.6 J	3.5	0.33	ug/m3	TO-15
Xylenes (total)	10	3.5	0.33	ug/m3	TO-15
JB67971-3 SV-2					
Acetone	6.9	0.80	0.14	ppbv	TO-15
Chloromethane	0.91	0.80	0.13	ppbv	TO-15
Dichlorodifluoromethane	0.54 J	0.80	0.062	ppbv	TO-15
Ethanol	5.6	2.0	0.74	ppbv	TO-15
Ethyl Acetate	1.8	0.80	0.23	ppbv	TO-15
Hexane	0.42 J	0.80	0.064	ppbv	TO-15
Isopropyl Alcohol	1.2	0.80	0.15	ppbv	TO-15
Methylene chloride	2.1	0.80	0.19	ppbv	TO-15
Tetrachloroethylene	0.16	0.16	0.12	ppbv	TO-15
Toluene	0.51 J	0.80	0.081	ppbv	TO-15
Acetone	16	1.9	0.33	ug/m3	TO-15
Chloromethane	1.9	1.7	0.27	ug/m3	TO-15
Dichlorodifluoromethane	2.7 J	4.0	0.31	ug/m3	TO-15
Ethanol	11	3.8	1.4	ug/m3	TO-15
Ethyl Acetate	6.5	2.9	0.83	ug/m3	TO-15
Hexane	1.5 J	2.8	0.23	ug/m3	TO-15
Isopropyl Alcohol	2.9	2.0	0.37	ug/m3	TO-15
Methylene chloride	7.3	2.8	0.66	ug/m3	TO-15
Tetrachloroethylene	1.1	1.1	0.81	ug/m3	TO-15
Toluene	1.9 J	3.0	0.31	ug/m3	TO-15

New Jersey

ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	AA-1		
Lab Sample ID:	JB67971-1	**Date Sampled:**	05/28/14
Matrix:	AIR - Ambient Air Comp. Summa ID: A634	**Date Received:**	05/29/14
Method:	TO-15	**Percent Solids:**	n/a
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W47209.D	1.48	05/31/14	DFT	n/a	n/a	VW1882
Run #2							

	Initial Volume
Run #1	592 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	15.3	0.20	0.034	ppbv		36.3	0.48	0.081	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.020	ppbv		ND	0.44	0.044	ug/m3
71-43-2	78.11	Benzene	0.48	0.20	0.021	ppbv		1.5	0.64	0.067	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.025	ppbv		ND	1.3	0.17	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.022	ppbv		ND	2.1	0.23	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.017	ppbv		ND	0.78	0.066	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.014	ppbv		ND	0.87	0.061	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
75-15-0	76.14	Carbon disulfide	0.73	0.20	0.017	ppbv		2.3	0.62	0.053	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.025	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.020	ppbv		ND	0.53	0.053	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.019	ppbv		ND	0.98	0.093	ug/m3
74-87-3	50.49	Chloromethane	0.66	0.20	0.034	ppbv		1.4	0.41	0.070	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.028	ppbv		ND	0.63	0.088	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.020	ppbv		ND	1.0	0.10	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.011	ppbv		ND	1.3	0.069	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.058	ppbv		ND	0.69	0.20	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.016	ppbv		ND	0.81	0.065	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.027	ppbv		ND	1.5	0.21	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.016	ppbv		ND	0.81	0.065	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.040	ppbv		ND	0.92	0.18	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.060	ppbv		ND	0.72	0.22	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.76	0.20	0.015	ppbv		3.8	0.99	0.074	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.029	ppbv		ND	1.7	0.25	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.015	ppbv		ND	0.79	0.059	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	0.11	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.019	ppbv		ND	0.91	0.086	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.025	ppbv		ND	1.2	0.15	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.029	ppbv		ND	1.2	0.17	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.021	ppbv		ND	0.91	0.095	ug/m3

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AA-1		
Lab Sample ID:	JB67971-1	**Date Sampled:**	05/28/14
Matrix:	AIR - Ambient Air Comp. Summa ID: A634	**Date Received:**	05/29/14
Method:	TO-15	**Percent Solids:**	n/a
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	39.8	0.50	0.19	ppbv		75.0	0.94	0.36	ug/m3
100-41-4	106.2	Ethylbenzene	0.13	0.20	0.020	ppbv	J	0.56	0.87	0.087	ug/m3
141-78-6	88	Ethyl Acetate	0.74	0.20	0.057	ppbv		2.7	0.72	0.21	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.015	ppbv		ND	0.98	0.074	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.021	ppbv		ND	1.5	0.16	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.021	ppbv		ND	1.4	0.15	ug/m3
142-82-5	100.2	Heptane	0.20	0.20	0.020	ppbv		0.82	0.82	0.082	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.063	ppbv		ND	2.1	0.67	ug/m3
110-54-3	86.17	Hexane	2.5	0.20	0.016	ppbv		8.8	0.70	0.056	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.025	ppbv		ND	0.82	0.10	ug/m3
67-63-0	60.1	Isopropyl Alcohol	1.6	0.20	0.039	ppbv		3.9	0.49	0.096	ug/m3
75-09-2	84.94	Methylene chloride	5.9	0.20	0.047	ppbv		20	0.69	0.16	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.72	0.20	0.058	ppbv		2.1	0.59	0.17	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.21	0.20	0.029	ppbv		0.86	0.82	0.12	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.017	ppbv		ND	0.72	0.061	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.040	ppbv		ND	0.82	0.16	ug/m3
115-07-1	42	Propylene	18.2	0.50	0.031	ppbv		31.3	0.86	0.053	ug/m3
100-42-5	104.1	Styrene	0.12	0.20	0.020	ppbv	J	0.51	0.85	0.085	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.016	ppbv		ND	1.1	0.087	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	0.21	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.031	ppbv		ND	1.1	0.17	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.079	ppbv		ND	1.5	0.59	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.17	0.20	0.017	ppbv	J	0.84	0.98	0.084	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	0.074	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.16	0.20	0.021	ppbv	J	0.75	0.93	0.098	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.63	0.20	0.044	ppbv		1.9	0.61	0.13	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.45	0.040	0.029	ppbv		3.1	0.27	0.20	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.13	0.20	0.045	ppbv	J	0.38	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	0.58	0.20	0.020	ppbv		2.2	0.75	0.075	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.99	0.20	0.014	ppbv		5.6	1.1	0.079	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.017	ppbv		ND	0.51	0.043	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.058	ppbv		ND	0.70	0.20	ug/m3
	106.2	m,p-Xylene	0.42	0.20	0.032	ppbv		1.8	0.87	0.14	ug/m3
95-47-6	106.2	o-Xylene	0.16	0.20	0.019	ppbv	J	0.69	0.87	0.083	ug/m3
1330-20-7	106.2	Xylenes (total)	0.58	0.20	0.019	ppbv		2.5	0.87	0.083	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		65-128%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-1		
Lab Sample ID:	JB67971-2	**Date Sampled:**	05/28/14
Matrix:	AIR - Soil Vapor Comp. Summa ID: A648	**Date Received:**	05/29/14
Method:	TO-15	**Percent Solids:**	n/a
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W47210.D	1	05/31/14	DFT	n/a	n/a	VW1882
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	27.9	0.80	0.14	ppbv		66.3	1.9	0.33	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.078	ppbv		ND	1.8	0.17	ug/m3
71-43-2	78.11	Benzene	2.9	0.80	0.084	ppbv		9.3	2.6	0.27	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.099	ppbv		ND	5.4	0.66	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.086	ppbv		ND	8.3	0.89	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.069	ppbv		ND	3.1	0.27	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.057	ppbv		ND	3.5	0.25	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.099	ppbv		ND	4.1	0.51	ug/m3
75-15-0	76.14	Carbon disulfide	0.57	0.80	0.069	ppbv	J	1.8	2.5	0.21	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.082	ppbv		ND	2.1	0.22	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.074	ppbv		ND	3.9	0.36	ug/m3
74-87-3	50.49	Chloromethane	ND	0.80	0.13	ppbv		ND	1.7	0.27	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.11	ppbv		ND	2.5	0.34	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.080	ppbv		ND	4.1	0.41	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.045	ppbv		ND	5.0	0.28	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.23	ppbv		ND	2.8	0.79	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.066	ppbv		ND	3.2	0.27	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.084	ppbv		ND	3.2	0.33	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.11	ppbv		ND	6.1	0.85	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.066	ppbv		ND	3.2	0.27	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.16	ppbv		ND	3.7	0.74	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.24	ppbv		ND	2.9	0.86	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	1.1	0.80	0.062	ppbv		5.4	4.0	0.31	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.12	ppbv		ND	6.8	1.0	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.059	ppbv		ND	3.2	0.23	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.11	ppbv		ND	3.2	0.44	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.074	ppbv		ND	3.6	0.34	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.099	ppbv		ND	4.8	0.60	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.12	ppbv		ND	4.8	0.72	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.086	ppbv		ND	4.8	0.52	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.084	ppbv		ND	3.6	0.38	ug/m3

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-1		
Lab Sample ID:	JB67971-2	**Date Sampled:**	05/28/14
Matrix:	AIR - Soil Vapor Comp. Summa ID: A648	**Date Received:**	05/29/14
Method:	TO-15	**Percent Solids:**	n/a
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	110	2.0	0.74	ppbv		207	3.8	1.4	ug/m3
100-41-4	106.2	Ethylbenzene	0.54	0.80	0.081	ppbv	J	2.3	3.5	0.35	ug/m3
141-78-6	88	Ethyl Acetate	1.7	0.80	0.23	ppbv		6.1	2.9	0.83	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.060	ppbv		ND	3.9	0.29	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.082	ppbv		ND	6.1	0.63	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.085	ppbv		ND	5.6	0.59	ug/m3
142-82-5	100.2	Heptane	1.4	0.80	0.078	ppbv		5.7	3.3	0.32	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.25	ppbv		ND	8.5	2.7	ug/m3
110-54-3	86.17	Hexane	2.3	0.80	0.064	ppbv		8.1	2.8	0.23	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.098	ppbv		ND	3.3	0.40	ug/m3
67-63-0	60.1	Isopropyl Alcohol	2.6	0.80	0.15	ppbv		6.4	2.0	0.37	ug/m3
75-09-2	84.94	Methylene chloride	1.5	0.80	0.19	ppbv		5.2	2.8	0.66	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.0	0.80	0.23	ppbv		2.9	2.4	0.68	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.58	0.80	0.12	ppbv	J	2.4	3.3	0.49	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.068	ppbv		ND	2.9	0.25	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.16	ppbv		ND	3.3	0.66	ug/m3
115-07-1	42	Propylene	5.2	2.0	0.13	ppbv		8.9	3.4	0.22	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.079	ppbv		ND	3.4	0.34	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.066	ppbv		ND	4.4	0.36	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.12	ppbv		ND	5.5	0.82	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.32	ppbv		ND	5.9	2.4	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.48	0.80	0.066	ppbv	J	2.4	3.9	0.32	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.80	0.060	ppbv		ND	3.9	0.29	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	1.6	0.80	0.084	ppbv		7.5	3.7	0.39	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	1.3	0.80	0.18	ppbv		3.9	2.4	0.55	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.21	0.16	0.12	ppbv		1.4	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.18	ppbv		ND	2.4	0.53	ug/m3
108-88-3	92.14	Toluene	4.0	0.80	0.081	ppbv		15	3.0	0.31	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.078	ppbv		ND	0.86	0.42	ug/m3
75-69-4	137.4	Trichlorofluoromethane	4.7	0.80	0.055	ppbv		26	4.5	0.31	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.068	ppbv		ND	2.0	0.17	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.23	ppbv		ND	2.8	0.81	ug/m3
	106.2	m,p-Xylene	1.8	0.80	0.13	ppbv		7.8	3.5	0.56	ug/m3
95-47-6	106.2	o-Xylene	0.59	0.80	0.077	ppbv	J	2.6	3.5	0.33	ug/m3
1330-20-7	106.2	Xylenes (total)	2.4	0.80	0.077	ppbv		10	3.5	0.33	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		65-128%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-2		
Lab Sample ID:	JB67971-3	**Date Sampled:**	05/28/14
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1039	**Date Received:**	05/29/14
Method:	TO-15	**Percent Solids:**	n/a
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W47211.D	1	05/31/14	DFT	n/a	n/a	VW1882
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	6.9	0.80	0.14	ppbv		16	1.9	0.33	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.078	ppbv		ND	1.8	0.17	ug/m3
71-43-2	78.11	Benzene	ND	0.80	0.084	ppbv		ND	2.6	0.27	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.099	ppbv		ND	5.4	0.66	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.086	ppbv		ND	8.3	0.89	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.069	ppbv		ND	3.1	0.27	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.057	ppbv		ND	3.5	0.25	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.099	ppbv		ND	4.1	0.51	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.80	0.069	ppbv		ND	2.5	0.21	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.10	ppbv		ND	3.7	0.46	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.082	ppbv		ND	2.1	0.22	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.074	ppbv		ND	3.9	0.36	ug/m3
74-87-3	50.49	Chloromethane	0.91	0.80	0.13	ppbv		1.9	1.7	0.27	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.11	ppbv		ND	2.5	0.34	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.080	ppbv		ND	4.1	0.41	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.045	ppbv		ND	5.0	0.28	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.23	ppbv		ND	2.8	0.79	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.066	ppbv		ND	3.2	0.27	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.084	ppbv		ND	3.2	0.33	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.11	ppbv		ND	6.1	0.85	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.066	ppbv		ND	3.2	0.27	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.16	ppbv		ND	3.7	0.74	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.24	ppbv		ND	2.9	0.86	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.54	0.80	0.062	ppbv	J	2.7	4.0	0.31	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.12	ppbv		ND	6.8	1.0	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.059	ppbv		ND	3.2	0.23	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.11	ppbv		ND	3.2	0.44	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.074	ppbv		ND	3.6	0.34	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.099	ppbv		ND	4.8	0.60	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.12	ppbv		ND	4.8	0.72	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.086	ppbv		ND	4.8	0.52	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.084	ppbv		ND	3.6	0.38	ug/m3

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-2		
Lab Sample ID:	JB67971-3	**Date Sampled:**	05/28/14
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1039	**Date Received:**	05/29/14
Method:	TO-15	**Percent Solids:**	n/a
Project:	Melrose Commons-Site C, 440 East 162 Street, Bronx, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	5.6	2.0	0.74	ppbv		11	3.8	1.4	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.80	0.081	ppbv		ND	3.5	0.35	ug/m3
141-78-6	88	Ethyl Acetate	1.8	0.80	0.23	ppbv		6.5	2.9	0.83	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.060	ppbv		ND	3.9	0.29	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.082	ppbv		ND	6.1	0.63	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.085	ppbv		ND	5.6	0.59	ug/m3
142-82-5	100.2	Heptane	ND	0.80	0.078	ppbv		ND	3.3	0.32	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.25	ppbv		ND	8.5	2.7	ug/m3
110-54-3	86.17	Hexane	0.42	0.80	0.064	ppbv	J	1.5	2.8	0.23	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.098	ppbv		ND	3.3	0.40	ug/m3
67-63-0	60.1	Isopropyl Alcohol	1.2	0.80	0.15	ppbv		2.9	2.0	0.37	ug/m3
75-09-2	84.94	Methylene chloride	2.1	0.80	0.19	ppbv		7.3	2.8	0.66	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.80	0.23	ppbv		ND	2.4	0.68	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.12	ppbv		ND	3.3	0.49	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.068	ppbv		ND	2.9	0.25	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.16	ppbv		ND	3.3	0.66	ug/m3
115-07-1	42	Propylene	ND	2.0	0.13	ppbv		ND	3.4	0.22	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.079	ppbv		ND	3.4	0.34	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.066	ppbv		ND	4.4	0.36	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.12	ppbv		ND	5.5	0.82	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	0.65	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.32	ppbv		ND	5.9	2.4	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.80	0.066	ppbv		ND	3.9	0.32	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.80	0.060	ppbv		ND	3.9	0.29	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.084	ppbv		ND	3.7	0.39	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.80	0.18	ppbv		ND	2.4	0.55	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.16	0.16	0.12	ppbv		1.1	1.1	0.81	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.18	ppbv		ND	2.4	0.53	ug/m3
108-88-3	92.14	Toluene	0.51	0.80	0.081	ppbv	J	1.9	3.0	0.31	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.078	ppbv		ND	0.86	0.42	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.055	ppbv		ND	4.5	0.31	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.068	ppbv		ND	2.0	0.17	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.23	ppbv		ND	2.8	0.81	ug/m3
	106.2	m,p-Xylene	ND	0.80	0.13	ppbv		ND	3.5	0.56	ug/m3
95-47-6	106.2	o-Xylene	ND	0.80	0.077	ppbv		ND	3.5	0.33	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.80	0.077	ppbv		ND	3.5	0.33	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		65-128%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log
- Sample Tracking Chronicle
- Internal Chain of Custody

CERT AIR

CHAIN OF CUSTODY

Air Sampling Field Data Sheet

ACCUTEST LABORATORIES

2235 US Highway 130, Dayton, NJ 08810
V: 732.329.0200 F: 732.329.3499 www.accutest.com

FED-EX Tracking #:
Bottle Order Control #: MP-5/27/2014-7
Lab Quote #:
Lab Job #: JB67971

PAGE 1 OF 1

Client / Reporting Information

Company Name: AKRF, Inc.
Address: 440 Park Ave South
City: New York State: NY Zip: 10016
Project Contact: deborah Shapiro E-mail: dshapiro@akrf.com
Phone #: 917.957.8991 Fax #:
Sampler(s) Name(s): Chelsea Richard 917.624.8338

Project Information

Project Name: Melrose Commons Site C
Street: 425/429 E 161st St
City: Bronx State: NY
Project #: 11925
Client Purchase Order #:

Weather Parameters

Temperature (Fahrenheit) Start: 60° Maximum: Stop: 60° Minimum:
Atmoshpheric Pressure (inches of Hg) Start: Maximum: Stop: 29.99 Minimum:
Other weather comment: 75% humidity

Requested Analysis

Standard TO-15 Reporting List

Lab Sample #	Field ID / Point of Collection	Air Type: Indoor(I) Soil Vap(SV) Ambient(A)	Sampling Equipment Info: Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Start Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Stop Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Standard TO-15 Reporting List			
-1	AA-1	A	A1039	6L	FC498	5/28	1025	<-30	60	CR	5/28	1225	-11	60	CR	X			
-2	SV-1	SV	A648	6L	FC681	5/28	1102	-29	60	CR	5/28	1302	-7	60	CR	X			
-3	SV-2	SV	A684	6L	FC585	5/28	1123	-29	60	CR	5/28	1323	-85	60	CR	X			

SUMMA

Turnaround Time (Business days)

Standard - 15 Days: X
10 Day
5 Day
3 Day
2 Day
1 Day
Other

Approved By:
Date:

Data Deliverable Information

All NJDEP TO-15 is mandatory Full T1
Comm A
Comm B
Reduced T2
Full T1
Other:

Comments / Remarks

october 2006 NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Laboratory:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		1	2		2
3		3	4 Y. Lessie Dickerson	5/29/14	4 1610 SS
5		5	Custody Seal #		

4 +

D/B.

JB67971: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB67971 **Client:** _____ **Project:** _____

Date / Time Received: 5/29/2014 **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted):

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:			
4. No. Coolers:	0		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

JB67971: Chain of Custody
Page 2 of 2

Summa Canister and Flow Controller Log

Job Number: JB67971
Account: AKRFNYNY AKRF
Project: Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Received: 05/29/14

SUMMA CANISTERS

Shipping							Receiving						
Summa ID	L	Vac " Hg	Date Out	By	SCC Batch	SCC FileID	Sample Number	Date In	By	Vac " Hg	Pres psig	Final psig	Dil Fact
A634	6	29.4	05/27/14	YMH	CP7023	3W40844.D	JB67971-1	05/30/14	ML	8		1.2	1.48
A648	6	29.4	05/27/14	YMH	CP7022	5W4795.D	JB67971-2	05/30/14	ML	7			1
A1039	6	29.4	05/27/14	YMH	CP7024	5W4761.D	JB67971-3	05/30/14	ML	7.5			1

FLOW CONTROLLERS / OTHER

Shipping					Receiving			
Flow Crtl ID	Date Out	By	cc/ min	Time hrs.	Date In	By	cc/ min	Equipment Type
FC498	05/27/14	YMH	37.5	2	06/04/14	RC	37.6	Flow Controller
FC585	05/27/14	YMH	37.5	2	06/04/14	RC	38.2	Flow Controller
FC681	05/27/14	YMH	37.5	2	06/04/14	RC	38.3	Flow Controller

Accutest Bottle Order(s):
MP-5/27/2014-7

Prep Date	Room Temp(F)	Bar Pres "Hg
05/27/14	70	29.92

Internal Sample Tracking Chronicle

AKRF

Job No: JB67971

Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Project No: 11925

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB67971-1 AA-1	Collected: 28-MAY-14 12:25 By: CR		Received: 29-MAY-14 By: DG			
JB67971-1	TO-15	31-MAY-14 21:49	DFT			VTO15STD
JB67971-2 SV-1	Collected: 28-MAY-14 13:02 By: CR		Received: 29-MAY-14 By: DG			
JB67971-2	TO-15	31-MAY-14 22:30	DFT			VTO15STD
JB67971-3 SV-2	Collected: 28-MAY-14 13:23 By: CR		Received: 29-MAY-14 By: DG			
JB67971-3	TO-15	31-MAY-14 23:10	DFT			VTO15STD

Accutest Internal Chain of Custody

Job Number: JB67971
Account: AKRFNYNY AKRF
Project: Melrose Commons-Site C, 440 East 162 Street, Bronx, NY
Received: 05/29/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB67971-1.1	Dominic Guerriero	Air Storage	05/29/14 17:02	Return to Storage
JB67971-1.1	Air Storage	Michael Lee	05/31/14 17:40	Retrieve from Storage
JB67971-1.1	Michael Lee	GCMSW	05/31/14 17:40	Load on Instrument
JB67971-2.1	Dominic Guerriero	Air Storage	05/29/14 17:02	Return to Storage
JB67971-2.1	Air Storage	Michael Lee	05/31/14 17:40	Retrieve from Storage
JB67971-2.1	Michael Lee	GCMSW	05/31/14 17:40	Load on Instrument
JB67971-3.1	Dominic Guerriero	Air Storage	05/29/14 17:02	Return to Storage
JB67971-3.1	Air Storage	Michael Lee	05/31/14 17:40	Retrieve from Storage
JB67971-3.1	Michael Lee	GCMSW	05/31/14 17:40	Load on Instrument