Appendix D

Phase I Environmental Site Assessment

Phase II Environmental Site Investigation

DRAFT PHASE I ENVIRONMENTAL SITE ASSESSMENT

Charleston Mixed-Use Development Site
Staten Island, New York

Prepared for:

AECOM
20 Exchange Place, 13th Floor
New York, NY 10005

For submittal to:

New York City Economic Development Corporation
110 William Street
New York, NY 10038

Prepared by:

ENVIRONMENTAL PLANNING & MANAGEMENT, INC
EPM

1983 Marcus Avenue, Suite 109
Lake Success, New York 11042

EPM Project No. 12043

October 11, 2012

TABLE OF CONTENTS

FIGURES

APPENDICES

EXECUTIVE SUMMARY

Environmental Planning & Management, Inc. (EPM), on behalf of AECOM and the New York City Economic Development Corporation (NYCEDC), has performed a Phase I Environmental Site Assessment (ESA) for the proposed Charleston Mixed-Use Development Site, located in Staten Island (Richmond County), New York (the project site). Refer to Figure 1 – Project Site Location and Figure 2 – Aerial View. This ESA was conducted in general accordance with American Society for Testing and Materials (ASTM) Standard E1527-05 for the purpose of evaluating the project site's compliance with applicable federal, state and local environmental regulations, and to identify any potential environmental concerns that may require further investigation or mitigation.

The proposed project involves development of an approximate 58-acre city-owned property referred to as the Charleston Mixed-Use Development. Refer to Figure 3 for a preliminary conceptual site development plan. EPM visually inspected the project site on August 13, 2012 for visual indications of the use, storage or release of hazardous materials. The project site was observed to be vacant and primarily vegetated with trees, brush, and grasses. Several cleared areas covered with shorter grasses and horse trails were observed on portions of the site. Although evidence of significant dumping was not observed, minor dumping of general debris and several junk cars were observed on the project site at the time of the inspection.

Sanborn maps dating to 1910 and aerial photography dating to 1943 were reviewed to determine historical development on the project site and vicinity. The Sanborns depict the project site as undeveloped since at least 1910 with exception of three apparent single family residential structures on the southwest corner of the site on the 1937 and 1951 maps. These residential structures are no longer present on the 1983 map. No prior land uses on or in proximity to the project site were identified on the Sanborn Maps with the potential to have adversely impacted the project site with hazardous materials.

The aerial photographs reviewed depict the project site as undeveloped and vegetated since at least 1943 with exception of the residential structures discussed in the previous paragraph. The Bricktown Retail Development first appears adjacent to the southeast of the project site on the 2006 aerial, and the MTA Bus Depot Facility located west of the project site along Arthur Kill Road first appears on the 2011 aerial. The aerials depict evidence of scattered land clearing and cleared trails throughout the site, including a large cleared area on the north central region of the project site. These cleared areas were observed during the 2012 site inspection, and no obvious indication of major dumping was observed in these areas. Based on conversations with local inhabitants and observations during the site inspection, the cleared areas and trails throughout the site are used for riding horses. No prior land uses were identified on the aerial photographs with the potential to have adversely impacted the project site with hazardous materials.

A review of Federal, State and local government environmental records was conducted to identify sites with the known use, storage or release of hazardous materials. One closed-status

New York State Department of Environmental Conservation (NYSDEC) Hazardous Material Spill was reported in the database as occurring along the central north boundary of the project site in May 2004. This spill was reported by a NYC Parks representative upon discovering a suspected oil spill on the ground surface in this area. Upon further inspection by NYSDEC and Parks, the suspected oil was determined to be water stained by wood chips that had been dumped in this area to improve a horse trail, and this spill case was closed by NYSDEC in June 2004.

Three closed-status Hazardous Material Spills are reported for the residential property at 97 Englewood Avenue, located adjacent to the northwest of the project across Englewood Avenue. The spills were reported by the residence at 97 Englewood Avenue but were attributed to the adjacent trucking company property. Most notable of these three spills was the reported observance by the inhabitant at 97 Englewood Avenue in 1994 of oil seeping through a retaining wall located between their property and the adjacent property. The impacted soil was reportedly removed and the spill case closed by NYSDEC in April 1997. As discussed below, a Phase II sampling investigation was performed on the project site in 2002 to investigate possible impacts from the closed spills reported at 97 Englewood Avenue. No impacts to the project site were reportedly discovered during the Phase II investigation and the closed spills at 97 Englewood Avenue are therefore not expected to impact the project site.

EPM was provided with the following previous environmental investigations for the project site:

- *Charleston Retail Project Site: Phase I Environmental Site Assessment, AKRF, Inc., February, 2000.* This Phase I ESA investigated an area which included the project site and the areas to the southeast now occupied by the Bricktown Retail Center. AKRF noted the presence of abandoned automobiles, empty motor vehicle fluid containers, automotive fuel tanks, and five-gallon buckets of paint on the project site. The AKRF report also summarized a 1990 Phase I ESA conducted by Vollmuth and Brush which noted that 20 automobile batteries and a 55-gallon drum with unknown contents were observed on the site's southwestern corner, and Vollmuth and Brush observed oil staining on the ground surface in the area.

- *Final Environmental Impact Statement (FEIS) for the Bricktown Centre at Charleston, AKRF, Inc., May, 2002.* Included in this FEIS is a description of a Phase II soil sampling investigation conducted at the project site in April 2002, which reportedly included soil sampling in the vicinity of the three closed petroleum spills at 97 Englewood Avenue and within the area observed with surface oil staining by Vollmuth and Brush noted above. As reported in the FEIS, this sampling did not identify impacts to the project site in these areas, and it was concluded that no adverse impacts of hazardous materials occurred at the project site.

- *Phase I Environmental Site Assessment: Charleston Site A, Staten Island, New York, Carpenter Environmental Associates (CEA), Inc., November 11, 2011.* The study area for this ESA was an approximate 10-acre parcel located within the east central region of the project site. This area was reported to be heavily vegetated and undeveloped at the

time of the site inspection in October 2011. The CEA ESA did not identify any evidence of recognized environmental conditions on the study site.

EPM has completed a Phase I ESA for the approximate 58-acre property located in Staten Island, NY that is proposed for the Charleston Mixed-Use Development. This assessment has revealed no evidence of potential environmental concerns in connection with the project site and further investigation does not appear warranted.

It is recommended that the junk vehicles and general debris be removed from the project site and properly disposed. Construction of the proposed development would require excavation of soil and possible dewatering of excavations in some locations. The preparation of a Construction Health and Safety Plan is recommended that includes contingency procedures in the unlikely event that hazardous materials are encountered during construction.

SECTION 1

1.0 INTRODUCTION

Environmental Planning & Management, Inc. (EPM), on behalf of AECOM and the New York City Economic Development Corporation (NYCEDC), has performed a Phase I Environmental Site Assessment (ESA) for the proposed Charleston Mixed-Use Development Site, located in Charleston, Staten Island (Richmond County), New York (the project site). Refer to Figure 1 – project Site Location and Figure 2 – Aerial View.

The proposed project involves the development of an approximate 58-acre city-owned property referred to as the Charleston Mixed-Use Development. The overall Charlestown Site is divided into five smaller sites for development proposed as follows:

1. Parkland: The NYC Department of Parks and Recreation would develop a 22-acre park site with areas for both active and passive recreation.
2. Retail site "A": A private developer has been selected to develop this 10-acre site with retail uses. This site will also include a public library branch.
3. Retail site "B": This site consists of approximately 10 acres and will be privately developed as retail in the future.
4. Housing: The NYC Department of Housing Preservation and Development would offer this 9-acre site for senior housing.
5. Public School: The NYC School Construction Authority would construct a combined elementary/middle school on the approximately 7-acre site.

Refer to Figure 3 for a preliminary concept site plan.

1.1 Purpose

The purpose of this ESA was to evaluate the project site's compliance with applicable federal, state and local environmental regulations, and to identify any potential environmental concerns that may require further investigation or mitigation. This Phase I ESA was conducted in general accordance with American Society for Testing and Materials (ASTM) Standard E1527-05, and consisted of the following activities:

- A visual inspection of the property to identify obvious signs of potential environmental concern such as the current/past presence of underground/aboveground storage tanks, on-site hazardous material storage or disposal practices, polychlorinated biphenyl (PCB)-containing transformers or capacitors, and any other obvious signs of use, storage, or disposal of hazardous/toxic materials;

- The identification of the current and/or past presence of potential waste disposal structures such as septic systems, dry wells, and groundwater wells;

- An assessment of possible adverse environmental conditions associated with current and/or past uses of the project site;

- An attempt to review historical development and land use for at least the past 50 years in the vicinity of the project site and an assessment of any possible adverse environmental conditions which may have resulted;

- A request for and review of available federal, state, and local agency records for the purpose of identifying any history of hazardous waste activity or environmental concerns on or in close proximity to the project site;

- A literature review of the geology and groundwater conditions in the area of the project site.

- Personal interviews with property management personnel if applicable to inquire about the use, storage or disposal of hazardous materials.

1.2 Limiting Conditions

The results of this audit and the contents of this report are subject to revision based on future events and/or investigations. EPM assumes no responsibility for the property owner's actions related to the following:

- Violation of any federal, state or local statute or ordinance relating to identification or disposal of a hazardous substance or its constituents;

- Undertaking of, or arrangement for the handling, removal, treatment, storage, transportation, or disposal of hazardous substances or constituents found or identified, and;

- Changed conditions or hazardous substances or constituents introduced at the properties by Client or third persons to this contract during or after the completion of services provided by this report.

SECTION 2

2.0 SITE ASSESSMENT

2.1 Site Description

2.1.1 General Site Description

The project site is situated within the Charleston section of Staten Island, New York. The site is generally bounded to the north by Englewood Avenue and Clay Pit Ponds State Park Preserve, to the south by Veterans Road West, to the west by Arthur Kill Road, and to the east by the shopping center known as the Bricktown Retail Center ("Bricktown Center") and a nature conservation area.

The project site was vacant and mostly heavily vegetated with trees, brush, and grasses at the time of August 2012 site inspection. Several cleared areas covered with shorter grasses and recreational hiking / horse trails were observed on portions of the site. Although evidence of significant dumping was not observed, minor dumping of general debris and three junked cars were observed.

Refer to **Appendix A** for photographs of the project site and adjacent properties taken during the site inspection.

2.1.2 Adjacent and Nearby Properties

Development surrounding the project site consists primarily of retail, residential, and commercial uses, with a wooded conservation area and NYC Park located to the northeast of the project site. The uses of the adjoining properties are described below and are depicted on Figure 2.

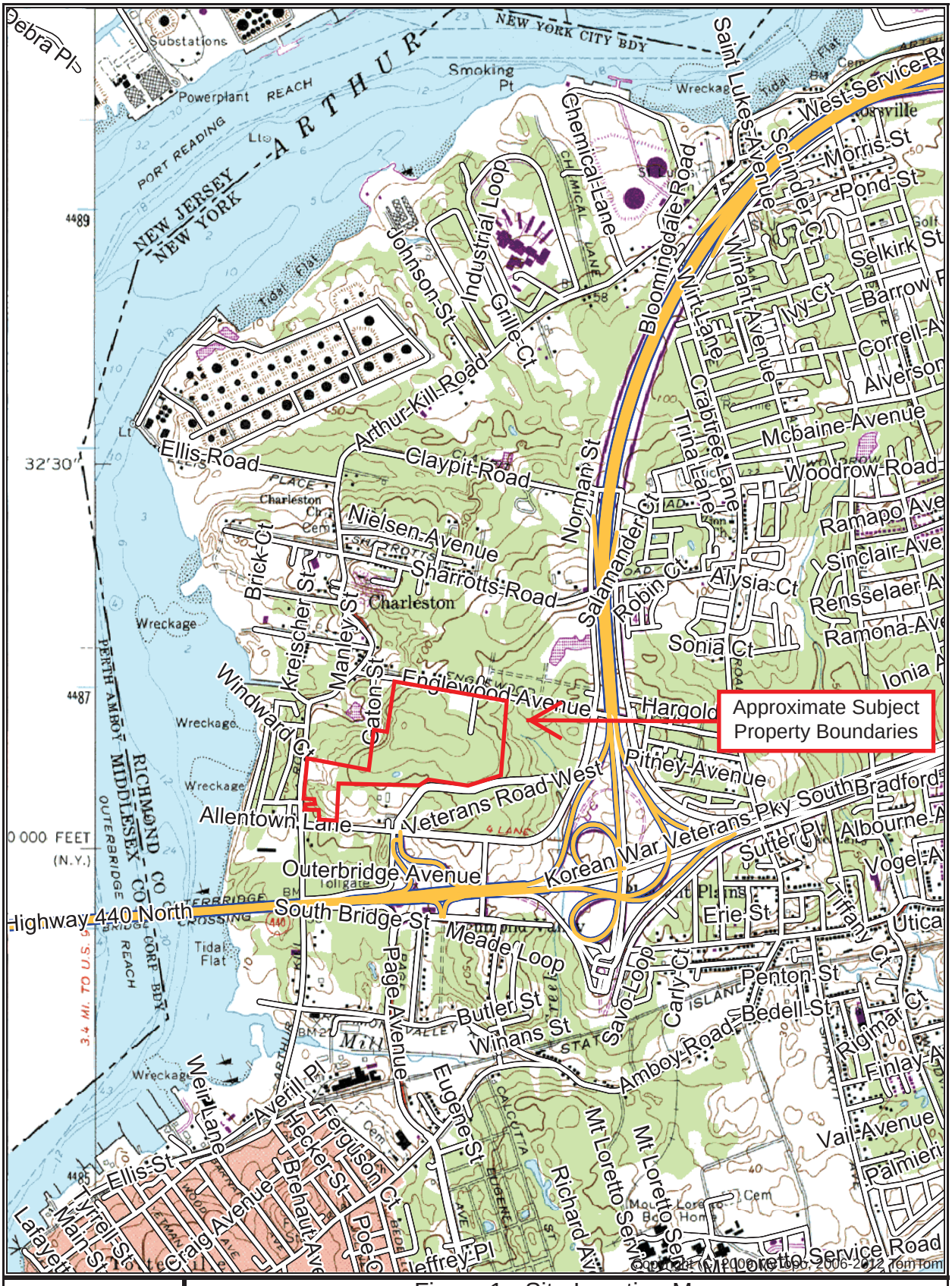
Northwest: Residential and light commercial development along Englewood Avenue;

North/Northeast: Clay Pit Pond Park, Motel;

East: Conservation Area and Bricktown Retail Center (Home Depot, Bed, Bath & Beyond, Applebee's Restaurant);

South: Bricktown Retail Center (Target), Self-Storage Facility, Car Wash, Contractor Storage Yard; and,

West: Residential, MTA Bus Depot, Gun Club Firing Range, commercial office and warehouse.



Declination

GN 0.50° E
MN 12.91° W

Figure 1 - Site Location Map

Map Name: ARTHUR KILL Horizontal Datum: NAD27
Scale: 1 inch = 2,000 ft.
Map Center: 040° 32' 06.10" N 074° 13'

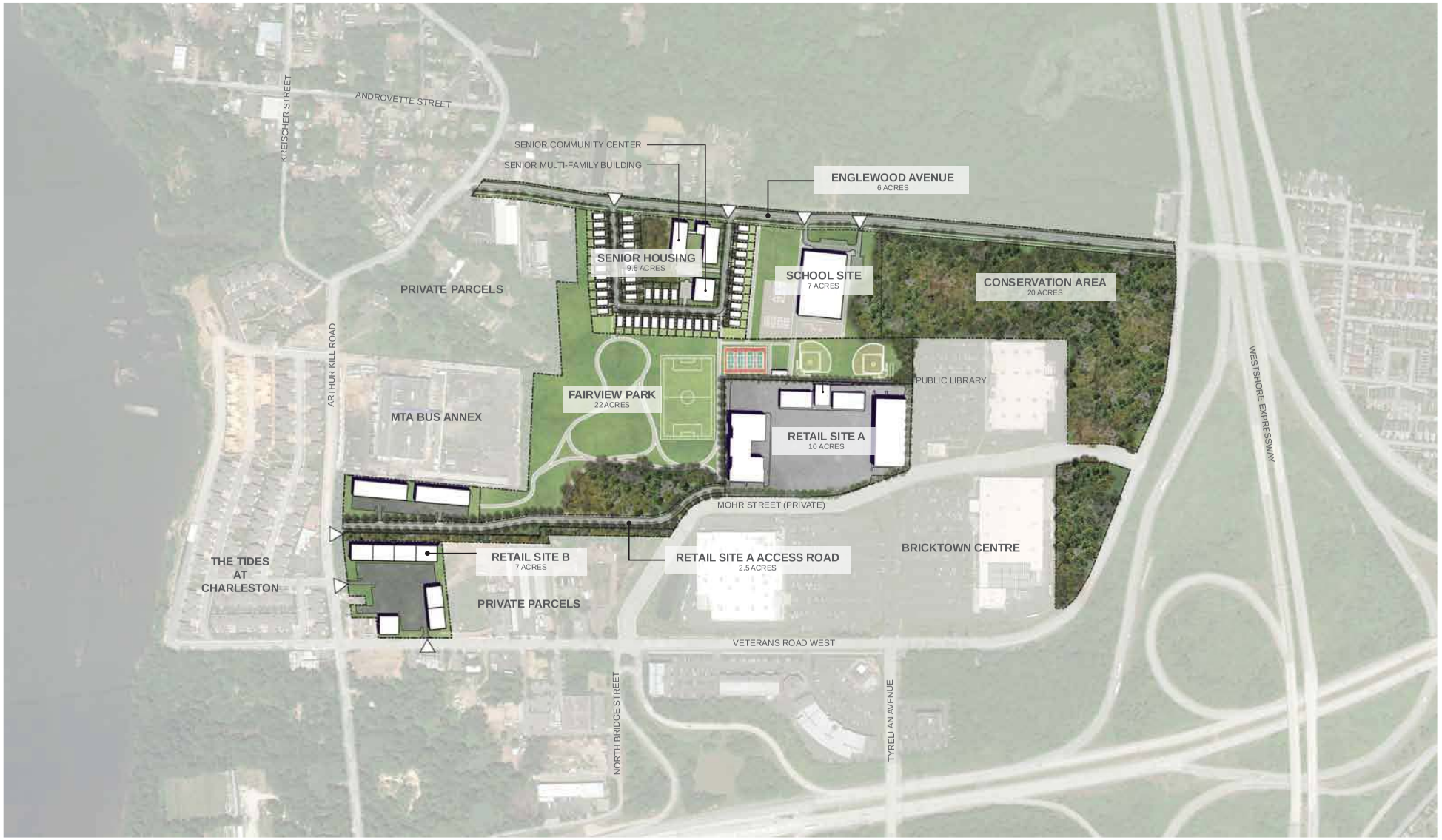
SCALE 1:24000

0 1000 2000 3000 4000 5000 6000 7000 8000 9000
FEET

Scale
One Inch = ±440 Feet

FIGURE 2
AERIAL VIEW
CHARLESTON MIXED USE DEVELOPMENT SITE
STATEN ISLAND, NEW YORK

NYCEDC
New York City Economic Development Corp.
AECOM
ENVIRONMENTAL PLANNING & MANAGEMENT, INC.
EPM



AECOM

N

Charleston Mixed-Use Development

Figure 3

Preliminary Site Concept

2.2 Site Inspection

2.2.1 Water Supply and Wastewater Disposal

Water and wastewater services were not observed at the project site. It is assumed the surrounding vicinity is serviced by the municipality.

2.2.2 Hazardous Substance and/or Petroleum Product Use or Storage

No evidence of the use or storage of hazardous materials or petroleum products was observed on the project site during the site visit.

2.2.3 Underground/Aboveground Storage Tanks (USTs/ASTs)

No evidence of any previous or current USTs or ASTs was observed on the project site during the site visit.

2.2.4 Hazardous Waste Disposal Practices

No evidence of hazardous waste disposal was observed on the project site.

2.2.5 Non-hazardous Waste Disposal Practices

Minor dumping of general household debris was observed at isolated locations across the project site, but no signs of significant dumping were observed. Three junked vehicles were observed within the west central area of the site, which consisted primarily of the rusted metal frames and engine parts. Several discarded rubber tires were observed along the proposed Englewood Avenue at the northeast corner of the project site.

2.2.6 Impoundments and Other Land Uses

A rip-rap lined drainage swale is located on the south-central region of the project site, which was not receiving any visible drainage at the time of the site inspection. There were no other impoundments or land uses identified other than those mentioned herein.

2.2.7 Asbestos Containing Materials (ACM)

There are no structures on the project site; therefore an asbestos survey was not included in the scope of services for this ESA. There was no visual evidence of significant dumping of potential ACM construction debris.

2.2.8 Polychlorinated Biphenyls (PCBs)

Electric transformers, fluorescent light ballasts, and hydraulic elevator systems may contain PCBs. EPM did not observe any such indications of potential PCB-containing equipment on the project site.

2.2.9 Lead-Based Paint (LBP)

Lead-based paint was commonly used for corrosion protection in the 1960s, and in prime, intermediate, and finish coats well into the 1970s. Regulations specifically addressing lead-based paint include Housing and Urban Development (HUD) (1995) guidelines and the Consumer Product Safety Act (1977). No potential lead painted structures were observed on the project site with the possible exception of the two painted metal gates at each end of the proposed Englewood Avenue.

2.3 Site History

2.3.1 Interviews

EPM conducted discussions with three local residents during the site inspection that were using the project site for horseback riding and dog walking at the time. The individuals all indicated that to the best of their knowledge the site has always been vacant and is used by locals primarily for horseback riding. The individuals indicated that the trails are unofficially maintained by a local group of horse owners.

2.3.2 Historical Fire Insurance Maps

Prior land use in the vicinity of the project site was ascertained through a review of available Sanborn Fire Insurance Maps for 1910, 1917, 1937, 1951, 1983, and 1990. A summary of historical land use as depicted on the Sanborn Maps is provided below. Copies of the Sanborn Maps are provided as **Appendix B**.

1910

Map coverage was available only for properties approximately 500 feet west of the project site's northwestern corner. This area was depicted as vacant land and residential development.

1917

Map coverage was available only for the northwest adjacent property, which was depicted as undeveloped land and residential structures, notably the Peter Androvette Estate.

1937

Map coverage was available only for a portion of the project site's southwestern corner and west adjacent properties. The southwestern portion of the project site was depicted as occupied by undeveloped land, residential structures, and Beckman Road. West adjacent properties were similarly developed.

1951

Map coverage was available only for a portion of the project site's southwestern corner and west adjacent properties. No significant changes from the 1937 fire insurance map were observed.

1983

Map coverage was available only for portions of the project site's western half and west and north adjacent properties. Residential structures no longer appeared on the portion of the project site's southwestern corner. The northwestern corner of the project site was developed with several roads and vacant lots. North adjacent properties included residential structures, horse stables, and a horse corral. An automotive junkyard was depicted approximately 150 feet north of the project site's northwestern corner. No other significant changes from the 1951 fire insurance map were observed.

1990

A north adjacent lot was depicted as used for bus parking. Properties adjacent to the project site's southwestern corner were depicted as a series of contractor storage yards. An automotive repair facility was depicted approximately 430 feet south of the project site's central southern border. No other significant changes from 1983 fire insurance maps were observed.

In summary, the Sanborn Maps reviewed depict the project site as undeveloped since at least 1910 with the exception of two to three residential structures located on the southwestern most corner of the project site near the intersection of Veterans Road West and Arthur Kill Road on the 1937 and 1951 maps. These residential structures are no longer present on the 1983 map.

2.3.3 Historical Topographic Maps

Prior land use in the vicinity of the project site was ascertained through a review of available United States Geological Survey (USGS) topographic maps for 1900, 1905, 1943, 1947, 1966, 1969, and 1981. Copies of the topographic maps are provided in **Appendix C**. Observations regarding these topographic maps are presented as follows:

Date: 1900 USGS Quadrangle: Staten Island, New York Scale: 1:62,500

The project site appeared developed with four small structures of an indeterminate nature. The

remainder of the project site appeared undeveloped. Adjacent properties appeared similarly developed.

Date: 1900 USGS Quadrangle: Passaic, New Jersey Scale: 1:250,000

The subject and adjacent properties appeared undeveloped.

Date: 1905 USGS Quadrangle: Passaic, New Jersey Scale: 1:250,000

No significant changes from the 1900 topographic map were observed.

Date: 1943 USGS Quadrangle: Arthur Kill, New York Scale: 1"=2,083'

Three small structures of an indeterminate nature were depicted in the project site's southwestern corner. The Kreisher & Sons Brick Co. was depicted approximately 1,100 feet west of the project site's northwestern corner. No other significant changes from the 1905 topographic map were observed.

Date: 1947 USGS Quadrangle: Arthur Kill, New York Scale: 1:25,000

No significant changes from the 1943 topographic map were observed.

Date: 1966 USGS Quadrangle: Arthur Kill, New York Scale: 1:24,000

No structures were depicted within the project site. The property was shaded green to indicate unspecified vegetation with the following exceptions: a square area along Englewood Avenue within the project site's northeastern corner; a rectangular area along Arthur Kill Road within the project site's southwestern corner; and a rectangular area along Drum Google Boulevard (identified as of the date of this report as Veterans Road West) within the project site's southwestern corner. Several rectangular and square structures of indeterminate use were located further east along Drumgoogle Boulevard, south adjacent to the project site. A pond was depicted in a southern central area of the project site, approximately in line with Page Avenue. The Kreisher & Sons Brick Co. facility was no longer depicted. No other significant changes from the 1947 topographic map were observed.

Date: 1969 USGS Quadrangle: Arthur Kill, New York Scale: 1"=2,000'

No significant changes from the 1966 topographic map were observed.

Date: 1981 USGS Quadrangle: Arthur Kill, New York Scale: 1:24,000

No significant changes from the 1969 topographic map were observed.

2.3.4 Historical Aerial Photographs

Prior land use in the vicinity of the project site was ascertained through a review of available aerial photographs for 1943, 1954, 1954, 1963, 1966, 1966, 1972, 1973, 1975, 1984, 1989, 1995, 2006, and 2011. Copies of the aerial photographs are provided as **Appendix D**. Observations regarding these aerial photographs are as follows:

Photo Date: 1943 Scale: 1"=500'

The project site appeared vegetated, with bare patches within the southwestern corner of the property and a central portion along the northern boundary. Several small structures consistent with residential developed were visible north of the project site. Several rectangular structures were visible south adjacent to the project site. The remaining adjacent properties appeared vegetated.

Photo Date: 1954 Scale: 1"=700'

Two structures visually consistent with residences were visible within the project site's southwestern corner. A long cleared strip of land was visible extending northwest from an area west adjacent to the project site's western boundary. A structure visually consistent with a residence was located at the northwestern terminus of the cleared strip. No other significant changes from the 1943 aerial photograph were observed.

Photo Date: 1954 Scale: 1"=500'

No significant changes from the 1954 aerial photograph were observed.

Photo Date: 1963 Scale: 1"=500'

Two trails extended from the north into the central northern portion of the project site and converged as they extended southwest. The track terminated within the southwestern corner of the project site. No other significant changes from the 1954 aerial photograph were observed.

Photo Date: 1966 Scale: 1"=700'

The two structures located within the project site's southwestern corner were no longer visible. No other significant changes from the 1963 aerial photograph were observed.

Photo Date: 1966 Scale: 1"=500'

No significant changes from the 1966 aerial photograph were observed.

Photo Date: 1972 Scale: 1"=750'

No significant changes from the 1966 aerial photograph were observed.

Photo Date: 1973 Scale: 1”=700’

Structures associated with the Colonial Rifle and Pistol Club appeared along the formerly cleared area extending northwest from an area west adjacent to project site’s western boundary. No other significant changes from the 1972 aerial photograph were observed.

Photo Date: 1975 Scale: 1”=750’

A square structure south of the south adjacent rectangular structures was visible. A large number of what appeared to be cars were located immediately north of this structure, an indicator that the structure was potentially an automotive repair facility or junkyard office. A cleared area occupied by several trucks was visible to the east of the facility.

A north adjacent property along Englewood Avenue was developed with several cleared areas and a number of rectangular objects visually consistent with shipping containers.

No other significant changes from the 1973 aerial photograph were observed.

Photo Date: 1984 Scale: 1”=750’

A large number of cars were stored on a rectangular lot approximately 150 feet north of the project site’s northwestern corner.

The south adjacent clearing previously occupied by trucks appeared vegetated and devoid of any stored objects. Several parallel, rectangular structures developed the land north of the south adjacent car storage area.

Two areas west adjacent to the project site’s southwestern corner were occupied with objects visually consistent with trucks and sheds. No other significant changes from the 1975 aerial photograph were observed.

Photo Date: 1989 Scale: 1”=700’

No significant changes from the 1984 aerial photograph were observed.

Photo Date: 1995 Scale: 1”=700’

A cleared area was visible east of the north adjacent horse stables.

Two warehouses and a vacant lot were visible in the area previously occupied by the south adjacent parallel, rectangular structures and automobile storage area. No other significant changes from the 1989 aerial photograph were observed.

Photo Date: 2006 Scale: 1”=700’

A large rectangular warehouse was located north adjacent to the project site's northwestern corner. Several objects visually consistent with trucks were visible in the cleared area east of the north adjacent horse stables.

Three large warehouses and associated asphalt-paved parking lots were located east, southeast, and south of the project site's southeastern corner. Several rectangular warehouses were visible east of the two south adjacent warehouses and vacant lot.

Several warehouses appeared west adjacent to the project site's northwestern corner. No other significant changes from the 1995 aerial photograph were observed.

Photo Date: 2011 Scale: 1"=700'

The Charleston Bus Depot was visible west adjacent to the project site. No other significant changes from the 2006 aerial photograph were observed.

In summary, the aerial photographs reviewed depict the project site as undeveloped and mostly densely vegetated with trees, brush and grasses since at least 1943 with exception of the residential structures formerly located on the southwest corner. The Bricktown Retail Development first appears adjacent to the southeast of the project site on the 2006 aerial, and the MTA Bus Depot Facility located adjacent to the west of the project site along Arthur Kill Road first appears on the 2011 aerial. The aerials depict evidence of scattered land clearing and cleared trails throughout the site. A large cleared area is depicted on the north central region of the site. These cleared areas were observed during the 2012 site inspection, and no obvious indication of major dumping was observed in these areas. Based on conversations with local inhabitants and visual observations during the site inspection, the cleared area on the north central portion of the project site and the trails throughout the site were cleared for riding horses.

2.3.5 Previous Investigation Reports

The results of previous environmental investigations conducted on and in the vicinity of the project site were reviewed. The provided information is summarized below.

- *Charleston Retail Project Site: Phase I Environmental Site Assessment, AKRF, Inc., February, 2000.* This Phase I ESA investigated an area which included the project site as well areas to the southeast now occupied by the Bricktown Retail Center. AKRF noted the presence of abandoned automobiles, empty motor vehicle fluid containers, automotive fuel tanks, and five-gallon buckets of paint on the project site. The AKRF report also summarized a 1990 Phase I ESA conducted by Vollmuth and Brush which noted that 20 automobile batteries and a 55-gallon drum with unknown contents were stored on Block 7494, Lot 95, located at the project site's southwestern corner. In addition, Vollmuth and Brush observed oil staining on the ground surface in the area.

- *Final Environmental Impact Statement (FEIS) for the Bricktown Centre at Charleston, AKRF, Inc., May, 2002.* Included in this FEIS is a description of a Phase II soil sampling investigation conducted at the project site in April 2002, which reportedly included soil sampling on the project site in the vicinity of the three closed petroleum spills at 97 Englewood Avenue and within the area observed with surface oil staining by Vollmuth and Brush noted above. The actual Phase II Investigation Findings Report was not made available for review. As reported in the FEIS, this sampling did not identify impacts to the project site in these areas, and it was concluded that no adverse impacts of hazardous materials occurred at the project site in the areas tested, and that no remedial actions or special precautions would likely be needed during construction.

- *Phase I Environmental Site Assessment: Charleston Site A, Staten Island, New York, Carpenter Environmental Associates (CEA), Inc., November 11, 2011.* The study area for this ESA was an approximate 10-acre parcel located within the east central region of the project site. This area was reported to be heavily vegetated and undeveloped at the time of the site inspection in October 2011. This ESA did not identify any evidence of recognized environmental conditions on the study site.

2.4 Characteristics of the Site Area

2.4.1 Geology and Hydrogeology of Richmond County

The geology of Richmond County is comprised of a layer of unconsolidated material overlying unconsolidated deposits and a complex structure of bedrock. The unconsolidated material is made up of stratified layers of sand, gravel, and clay of Cretaceous, Pleistocene and Holocene deposits. Artificial fill covers areas of Holocene deposits in the western section and areas of Pleistocene deposits in the eastern section of Richmond County. The bedrock consists of igneous, metamorphic and sedimentary rocks (schist, serpentine, diabase, shale, and sandstone) that range from Upper Proterozoic to Lower Jurassic age.

2.4.2 Site Specific Geology and Hydrogeology

Based upon review of the United States Geological Survey (USGS) Topographic Maps of Arthur Kill, NY Quadrangle (dated 1981), the project site and adjacent areas slope generally west towards Arthur Kill. The center of the project site is located at approximately 130 feet above mean sea level (amsl) and the borders of the project site are located at approximately 110 feet amsl, with the exception of the project site's southwestern corner which is located at approximately 50 feet amsl. Groundwater beneath the project site is expected to be located between approximately 30 and 100 feet below ground surface, with the possibility of more shallow perched areas of groundwater to be present. Based on review of the topographic map, regional groundwater in the area of the project site is expected to flow generally west towards Arthur Kill.

2.4.3 Proximity to Ecologically Sensitive Areas

According to the United States Fish and Wildlife Service's National Wetlands Inventory, an approximately 0.09 acre palustrine, permanently flooded wetland (pond) is located within the southern central portion of the project site. A palustrine, forested, saturated wetland was located approximately 250 feet east adjacent to the project site.

In addition, a June 29, 2009 natural resources assessment which covered the project site stated that the project site did not contain any habitat communities listed as rare, special concern, threatened, or endangered. The study noted the presence of 11 State [Rarity] Rank S1, S2, or S3 plant species, some of which were present on the project site (see Section 2.3.5). The New York State special concern Eastern Box Turtle was observed on the project site.

2.4.4 Radon

The New York State Department of Health provides data on average basement radon readings for individual townships and counties. The survey indicates the average reading (in picocuries per liter, pCi/l) for homes tested in Richmond County, NY is 1.44 pCi/l. This level does not exceed the recommended action limit of 4.0 pCi/l.

SECTION 3

3.0 REGULATORY INFORMATION REVIEW

3.1 Regulatory Database Review

The following information was obtained from a computerized environmental database report prepared by Toxics Targeting, Inc., a database services firm. The information contained in the database report was reviewed by EPM and is summarized below. The complete Toxics Targeting report is provided as **Appendix E**.

An assessment of the potential for these sites to adversely impact the project site was prepared by EPM utilizing the following criteria:

- The location of the project site with respect to the spill source, keeping in mind expected groundwater flow patterns, as determined from review of USGS groundwater contour maps;

- The resource impacted (*i.e.*, land, groundwater, surface water, public sewer); and

- The type of contaminant (*i.e.*, solvent, petroleum, or solid waste) and the potential for the material to migrate towards the project site, based upon the relative distance of the source from the project site.

3.1.1 National Priority List (NPL)

The National Priority List (NPL) is compiled by the United States Environmental Protection Agency (USEPA) pursuant to CERCLA (the Superfund Act), and includes properties with the highest priority for cleanup pursuant to USEPA's Hazard Ranking System. No NPL sites were identified on the database within a one-mile radius of the project site.

3.1.2 New York Inactive Hazardous Waste Disposal Sites (IHWDS)

The IHWDS database comprises a state listing of sites that can pose environmental or public health hazards, requiring investigation or clean-up. The IHWDS database listed the following one facility within one mile of the project site:

- The Nassau Recycling Corp., located approximately 2,700 feet south of the project site at 286 Richmond Valley Road, is listed as a NYS IHWDS as being a former lead refining and copper smelting operation, with these operations resulting in the site being contaminated with heavy metals. Remedial activity is reportedly ongoing at this site.

The Nassau Recycling Corporation site is not likely to have impacted the project site with hazardous materials based on the distance and direction of the site relative to the project site.

3.1.3 RCRA Corrective Action Activity (CORRACTS)

This is a listing of facilities with RCRA corrective action activity reported by USEPA. One CORRACTS site was identified on the database within a one-mile radius of the project site:

- The Port Mobil Terminal (bulk oil storage facility), located approximately 4,000 feet northeast of project site at 4101 Arthur Kill Road, is listed as a CORRACTS site as having undergone several investigation and remediation events.

The Port Mobil Terminal is not likely to have impacted the project site with hazardous materials based on the distance and direction of the site relative to the project site.

3.1.4 Comprehensive Environmental Response, Compensation, and Liability System

The USEPA maintains a database referred to as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System), which is a compilation of known or suspected, uncontrolled or abandoned, hazardous waste sites which the USEPA has investigated, or is currently investigating, pursuant to CERCLA. No CERCLIS facilities were identified within ½-mile of the project site.

3.1.5 New York State Brownfield Cleanup Sites

This is a listing of sites that are abandoned, idled, or under-used industrial and commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination. No Brownfield Cleanup Sites were identified on the database as located within a ½-mile radius of the project site.

3.1.6 New York Solid Waste Facilities Registry

These are active and inactive landfills, incinerators, transfer stations, or other solid waste management facilities. Three NY State Solid Waste Facilities were identified on the database as located within a ½-mile radius of the project site:

- John Ippolito Trucking is located southwest adjacent of the project site at the corner of Veterans Road West and Arthur Kill Road and is registered as a construction and demolition (C&D) processing facility which handles dirt, topsoil, and rock.

- Omega Carting, located approximately 1,200 feet northwest of the project site is listed as a large transfer station of demolition waste.

- E. G. Clemente Contracting, located approximately 1,300 feet southwest of the project site is listed as a C&D processing facility for soil, concrete, rock and asphalt.

The above SWFs are not expected to adversely impact the project site due to their distances and directions relative to the project, and the reported handling of only non-hazardous C&D materials.

3.1.7 Hazardous Waste Treatment, Storage or Disposal Facilities

These are sites reported by the NYS manifest system and the USEPA's Resource Conservation and Recovery Act Information System (RCRIS) as treating, storing or disposing of certain types of hazardous wastes. No Hazardous Waste Treatment, Storage or Disposal Facilities were identified on the database within a ½-mile radius of the project site.

3.1.8 Hazardous Substance Waste Disposal Sites

The Hazardous Substance Waste Disposal Site (HSWD) database is a New York State listing of sites contaminated with toxic substances that can pose environmental or public health hazards. These sites are not eligible for state clean up funding programs. No HSWD sites were identified within a ½-mile radius of the project site.

3.1.9 New York State Major Oil Storage Facilities (MOSFs) (>400,000 Gallons)

Sites with more than 400,000 gallons of total storage capacity are listed in the MOSF database. No MOSF facilities were identified in the database as located within $^{1}/_{8}$-mile of the project site.

3.1.10 Registered Petroleum Bulk Storage (PBS) Facilities (<400,000 Gallons)

PBS sites in general are not considered a significant concern unless there is a spill associated with the facility, the tanks are located on a property proposed for acquisition, or the tanks are located in the immediate area of proposed excavation. In accordance with ASTM standards, the project site and adjacent properties were examined for the presence of petroleum storage tanks. The following one PBS facility is identified as located within $^{1}/_{8}$-mile of the project site:

Registered Petroleum Bulk Storage Sites Within $^{1}/_{8}$-mile of the project site				
Site	**Dist(ft)/ Dir.**	**Number and Type of Tanks**	**Install Date**	**Tank Status**
Charleston Bus Annex / 4700 Arthur Kill Road	West adjacent	(1) 250-gal diesel fuel oil AST	12/21/2009	In service
		(1) 3,000-gal lube oil UST	11/30/2008	In service
		(1) 3,000-gal unknown content UST	11/30/2008	In service
		(2) 3,000-gal waste/used oil USTs	11/30/2008	In service
		(1) 5,000-gal diesel UST	11/30/2008	In service
		(4) 10,000-gal diesel USTs	11/30/2008	In service
		(1) 25,000-gal # 2 fuel oil UST	11/30/2008	In service
AST = Aboveground Storage Tank / UST = Underground Storage Tank				

The Charleston Bus Annex was associated with one minor closed spill (see Section 3.2.12) that was immediately contained with no reported impacts to surrounding soils. The Charleston Bus Annex site is not expected to adversely impact the project site based on the lack of reported spills at this facility with the noted exception, as well as the facility's hydraulically down gradient location relative to the project site.

3.1.11 **Federal and State RCRA Hazardous Waste Generators**

The USEPA and the NYSDEC maintain a list of those persons or entities that generate hazardous waste as defined and regulated by the Resource Conservation and Recovery Act (RCRA). The USEPA recognizes large quantity generators as facilities that generate more than 1,000 kg (2,200 lbs) of hazardous waste or 1kg (2.2 lbs) of acutely hazardous waste per calendar month. Small quantity generators are defined as facilities that generate between 100 kg (220 lbs) and 1,000 kg per calendar month and accumulate less than 6,000 kg (13,200 lbs) of hazardous waste at any time. Seven hazardous waste generators were identified within a ¼-mile radius of the project site. In accordance with ASTM standards, the project site and adjoining properties were evaluated for hazardous waste activity.

South adjacent Moore Self-Storage was listed as a conditionally exempt small quantity generator which generated 2,103 pounds of ignitable waste in 2005, with no violations listed for this facility.

South adjacent Target Department Store was listed as a small quantity generator which generated a variety of ignitable, corrosive, heavy metal, and volatile organic chemical (VOC) wastes in the years from 2006 through 2012, with no violations listed for this facility.

Southeast adjacent Home Depot was listed as a small quantity generator which generated a variety of ignitable, corrosive, heavy metal, and VOC wastes in the years from 2006 through 2012, with no significant violations reported for this facility.

A to Z Auto Body Inc., located approximately 600 feet northwest of the project site, is listed as a small quantity generator as generating 400 pounds of spent halogenated solvents, VOCs, and ignitable wastes in 2010, 110 gallons of spent halogenated solvents in 2004, and 265 gallons of spent halogenated solvents in 1990. No violations are listed for this facility.

The southwest adjacent John Ippolito Trucking Company and the west adjacent Charleston Bus Annex are listed as hazardous waste generators with no actual waste activity reported.

The above Hazardous Waste Generator Sites are not expected to adversely impact the project site based on their directions relative to the project site and/or the fact that no violations are reported.

3.1.12 **Identified Hazardous Material Spills**

There are 33 documented hazardous material spills located within a 1/2-mile radius of the project site identified on the NYSDEC Hazardous Material Spills database. All of these 33 spills are reported with a "closed" status, indicating they have been investigated and/or remediated to the satisfaction of NYSDEC. Spills which impact surface water, sewers, or air are not likely to result in adverse impacts to the subject property. Spills which impact land have the potential to adversely impact the subject property if they are in close proximity or are large in quantity. Spills which impact groundwater have the potential to adversely impact the subject property if they are in close proximity and are located hydraulically up gradient. Active spills at a distance greater than approximately 1,000 feet are not generally expected to adversely impact the project site. As previously noted, there are no active spills listed within ½-mile of the project site.

One closed-status NYSDEC Hazardous Material Spill was reported in the database as occurring on the central north boundary of the project site in May 2004. The spill was reported by a NYC Parks representative upon discovering a suspected oil spill on the ground surface in this area. Upon further inspection by NYSDEC and Parks, the suspected oil was determined to be water tainted with tannin from wood chips that had been dumped in this area to improve a horse trail, and this spill case was closed by NYSDEC in June 2004.

Three closed-status Hazardous Material Spills are reported for the residential property at 97 Englewood Avenue, located adjacent to the northwest of the project site along the north side of Englewood Avenue. The spills were reported by the residence at 97 Englewood Avenue but were attributed to the adjacent trucking company property. Most notable of these three spills was the reported observance by the inhabitant at 97 Englewood Avenue in 1994 of oil seeping through a retaining wall located between their property and the adjacent trucking company. The impacted soil was reportedly removed and the spill case closed by NYSDEC in April 1997. As discussed in Section 2.3.5 of this report, a Phase II sampling investigation was performed on the northwestern region of the project site in 2002 to investigate possible impacts from the closed spills reported at 97 Englewood Avenue and no adverse impacts to the project site were discovered.

The west adjacent Charleston Bus Depot was associated with a closed spill, dated January 12, 2012. The spill was reported due to the release of approximately 20 gallons of motor oil to the paved parking lot. The release was reportedly cleaned and did not affect onsite drains or soil.

The remaining reported closed spills are not expected to adversely impact the project site based on their distances and/or directions relative to the project site.

3.1.13 **Federal Toxic Release Inventory (TRI) Facilities**

The TRI database is a listing of facilities that are required to report discharges of certain chemicals to air, land, water or treatment facilities. No TRI Facilities were identified on the database within ¼-mile radius of the project site.

3.1.14 **Federal Civil and Administrative Enforcement Docket**

Judiciary cases filed on behalf of the USEPA by the Department of Justice. No Enforcement Dockets were identified on the database within a ¼-mile radius of the project site.

3.1.15 **Permitted Air Discharge Sites**

The Air Discharge Facilities database is a list of permitted air discharges. No Air Discharge Facilities were identified on the database within ¼-mile of the project site.

3.1.16 **NYS Chemical Bulk Storage (CBS) Sites**

As per New York State 6 NYCRR Part 596, for regulated substances listed in 6 NYCRR Part 597, facilities which store regulated substances in aboveground tanks with capacities greater than 185 gallons, or underground tanks of any size, are required to register the chemical storage facility with the NYSDEC. The west adjacent Charleston Bus Annex was identified in the database as the only CBS Site within a ¼-mile radius of the project site. No additional details are provided in the database for this CBS listing.

The listing of the Charleston Bus Annex site on the CBS database is not considered a significant concern to the project site based on this site's down gradient location relative to the project site as well as the fact that no violations are reported.

3.1.17 **Emergency Response Notification System (ERNS)**

This is USEPA's emergency response notification system list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. According to ASTM standards, the project site was evaluated relative to ERNS. The project site does not appear on the Federal ERNS list.

3.1.18 **Permitted Toxic Wastewater Discharges**

NYSDEC maintains a list of permitted toxic wastewater discharge facilities. There were no toxic wastewater discharge facilities identified in the database within a ¼-mile radius of the project site.

3.1.19 **1934 NYC Municipal Waste Landfills**

This is a listing of solid waste disposal sites operated by New York City municipal authorities circa 1934. No NYC Municipal Waste Landfill sites were identified within a ½-mile radius of the project site among the databases reviewed.

3.1.20 **NYC Mayor's Office of Environmental Remediation E-Designated Sites**

This is a listing of parcels assigned a special environmental ("E") designation under the City Environmental Quality Review (CEQR) process. E-designation sites have specific protocols that must be followed. No E-designated sites were identified within 1/8-mile of the project site.

3.1.21 **Historic Utility Facilities**

This search identifies any historic New York City Utility Sites (1890's -1940's), which includes power generating stations, manufactured gas plants, gas storage facilities, maintenance yards and other gas and electric utility sites located within a 1/8-mile radius of the subject property. No Historic Utility Sites are listed in the database as located within 1/8-mile of the project site.

SECTION 4

4.0 CONCLUSIONS AND RECOMMENDATIONS

EPM has performed a Phase I ESA in general accordance with ASTM Practice E1527-05 for the approximate 58-acre property located in Staten Island, NY that is proposed for the Charleston Mixed Use Development. Any exceptions to or deletions from this practice are described in this report. This assessment has revealed no evidence of potential environmental concerns in connection with the project site and further investigation does not appear warranted.

It is recommended that the junk vehicles and general debris be removed from the project site and properly disposed. Construction of the proposed development would require excavation of soil and possible dewatering of excavations in some locations. In the event that unexpected areas of contamination are encountered during construction, the preparation of a Construction Health and Safety Plan is recommended that includes contingency procedures in the event hazardous materials are encountered.

SECTION 5

5.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Site Inspected By:

Richard Hart, Environmental Scientist

Report Compiled By:

Richard Hart, Environmental Scientist

Senior Reviewed By:

A. Stacey Gogos, President

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

A. Stacey Gogos, President and Senior Environmental Engineer

Project Assignment:	Senior Environmental Engineer VI
Years of Experience:	With This Firm: 20.0 With Other Firms: 4.0
Education:	B.S., Chemical Engineering, Columbia University, 1984;
Active Registration:	NYSDOL - Certified Asbestos Inspector, Hazardous Waste Operations and Emergency Response (HAZWOPER), Confined Space Entry, SSPC-C3/C-5 (Lead Competent Person/Supervisor)

Ms. Gogos has an extensive background in a wide range of environmental project s including NYSDOT Term Agreements, soils and groundwater investigations and assessments, UST management, asbestos investigations/remedial design, environmental audits of industrial facilities, and hazardous materials/waste investigations and remediation. She is responsible for and directs project activities including the design and implementation of soil and groundwater contamination assessments, storage tank management, asbestos inspections and abatement design oversight, environmental audits and compliance with environmental regulations. Ms. Gogos has formerly served as an environmental engineer with the U.S. Environmental Protection Agency, Region II, where she conducted compliance evaluation audits and designed sampling and analysis investigations.

Richard R. Hart, Senior Environmental Scientist

project Assignment:	Sr. Environmental Scientist
Years of Experience:	With This Firm: 10.5 With Other Firms: 9.0
Education:	M.S., Environmental Pollution Control, Penn State University, 1997 B.S., Environmental Resource Management, Penn State University, 1995 A.A., Business Administration, Paul Smith's College, 1984

Mr. Hart is an Environmental Scientist and project Manager with twenty years experience conducting Hazardous Material Screening Investigations (Phase Is), Remedial Investigations, Mitigation Design, and Underground Storage Tank Investigations. For the past six years, Mr. Hart has completed Hazardous Material Investigations and Design for various Federal, NY State, and NY City agencies, with emphasis on Infrastructure Redevelopment such as Highways, Bridges, and Mass Transit Facilities. His experience includes environmental inspection and oversight at public-funded construction project s to monitor contractor compliance with environmental design requirements. He is adept at contractor management issues, contaminated and hazardous waste handling and disposal protocols, preparation of Contaminated Material Handling Plans, Health and Safety Plans, Community and Worker Protection Protocols, and preparation of design specifications and bid estimates for handling and disposal of contaminated soils, marine sediments, and groundwater.

APPENDIX A

Site Photographs

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

Property Photographs

LOCATION: Charleston Development Site, Staten Island, NY

PROJECT No: 12043

DATE: August 13, 2012

Photo No. 1

Description: View of east terminus of proposed Englewood Avenue at Veterans Road W. View facing west from Veterans Road W. Hotel visible far right.

Photo No. 2

Description: Conditions along proposed Englewood Avenue on the northeast region of the project site. View facing west.

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

Property Photographs		**LOCATION:** Charleston Development Site, Staten Island, NY **PROJECT No:** 12043 **DATE:** August 13, 2012	
			
	Photo No. 3		**Photo No. 4**
Description: General conditions within the existing Conservation Area located adjacent to the northeast portion of the project site. View facing south from proposed Englewood Avenue.		**Description**: View of park land (Clay Pit Ponds) located adjacent to the north of the project site. View facing north from proposed Englewood Avenue.	

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

Property Photographs		**LOCATION:** Charleston Development Site, Staten Island, NY **PROJECT No:** 12043 **DATE:** August 13, 2012	
			
	Photo No. 5		**Photo No. 6**
Description: North-central boundary of the project site along proposed Englewood Avenue. View facing east.		**Description**: View along proposed Englewood Avenue on the north-central region of the project site. View facing west towards Englewood Avenue.	

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

Property Photographs		**LOCATION:** Charleston Development Site, Staten Island, NY **PROJECT No:** 12043 **DATE:** August 13, 2012	
			
	Photo No. 7		**Photo No. 8**
Description: Eastern terminus of Englewood Avenue. View facing west along Englewood Avenue from the north west corner of the project site.		**Description**: General conditions along Englewood Avenue. View facing west.	

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

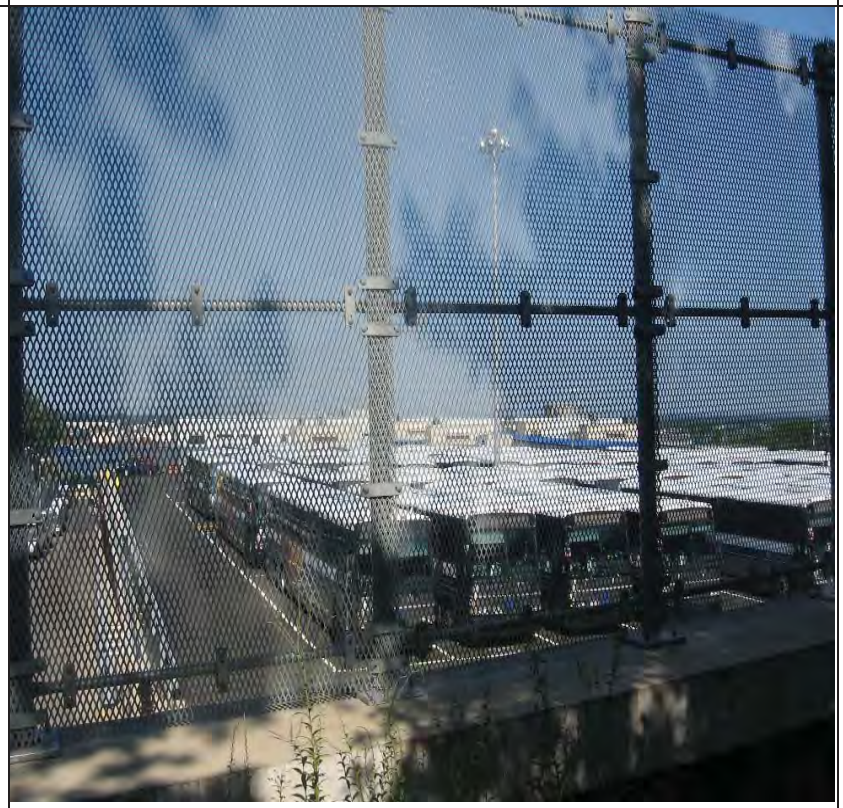
EPM

Property Photographs		**LOCATION:** Charleston Development Site, Staten Island, NY **PROJECT No:** 12043 **DATE:** August 13, 2012	
			
	Photo No. 9		**Photo No. 10**
Description: Western terminus of Englewood Avenue at Arthur Kill Road. View facing west from Englewood Avenue towards Arthur Kill Road.		**Description**: View of the north-central cleared region of the project site. Orange fencing appears related to horseback riding.	

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

Property Photographs		**LOCATION:** Charleston Development Site, Staten Island, NY **PROJECT No:** 12043 **DATE:** August 13, 2012	
			
	Photo No. 11		**Photo No. 12**
Description: General conditions on the south-central region of the project site (foreground). Target Department Store visible background. View facing southeast from the project site.		**Description**: View of self-storage facility and contractor yard located adjacent to the project site to the south along Veterans Road W. View facing southwest from the project site's southern boundary.	

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

Property Photographs		**LOCATION:** Charleston Development Site, Staten Island, NY **PROJECT No:** 12043 **DATE:** August 13, 2012	
			
	Photo No. 13		**Photo No. 14**
Description: View of the MTA Bus Depot located adjacent to the west of the project site along Arthur Kill Road. Project site visible foreground. View facing northwest from the project site.		**Description**: Buses parked inside the MTA Bus Depot. View facing west towards Arthur Kill Road from the project site.	

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

Property Photographs

LOCATION: Charleston Development Site, Staten Island, NY

PROJECT No: 12043

DATE: August 13, 2012

Photo No. 15

Description: General conditions on the west and central regions of the project site.

Photo No. 16

Description: General conditions on the central region of the project site.

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

Property Photographs		**LOCATION:** Charleston Development Site, Staten Island, NY **PROJECT No:** 12043 **DATE:** August 13, 2012	
			
	Photo No. 17		**Photo No. 18**
Description: Junk vehicle located on the western region of the project site.		**Description**: General conditions on the northwestern region of the project site.	

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

Property Photographs		**LOCATION:** Charleston Development Site, Staten Island, NY **PROJECT No:** 12043 **DATE:** August 13, 2012	
			
	Photo No. 19		**Photo No. 20**
Description: General conditions on the south central region of the project site.		**Description**: General conditions along the eastern region of the project site.	

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

EPM

Property Photographs

LOCATION: Charleston Development Site, Staten Island, NY

PROJECT No: 12043

DATE: August 13, 2012

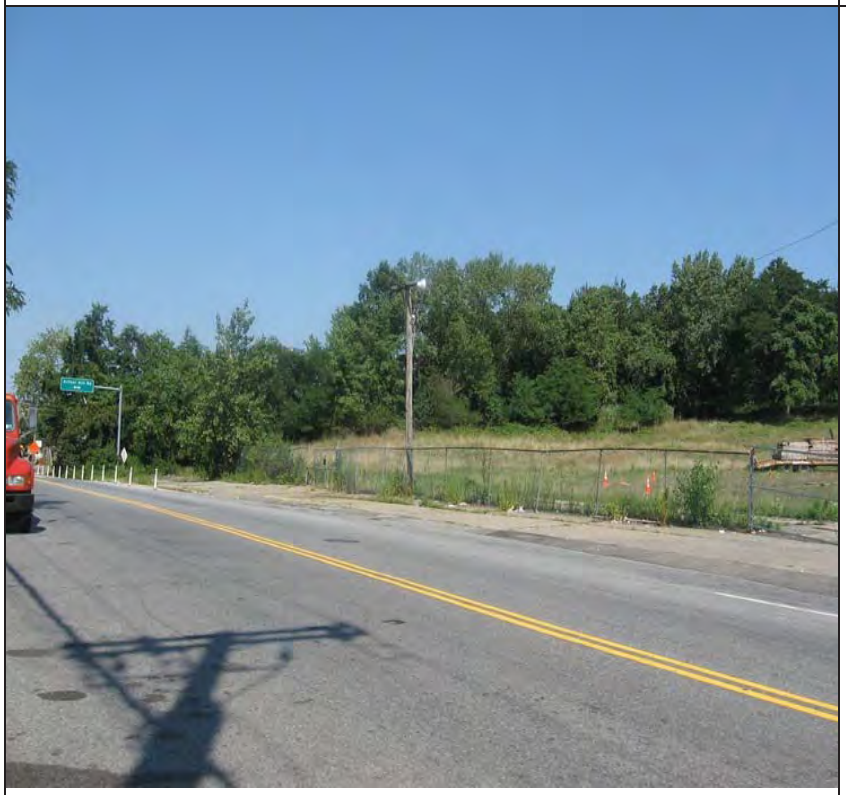


Photo No. 21

Description: View of the southwestern corner of the project site along Veterans Road W. View facing northwest towards Arthur Kill Road.

Photo No. 22

Description: Central region of the project site showing typical horse trail. View facing north.

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

Property Photographs		**LOCATION:** Charleston Development Site, Staten Island, NY **PROJECT No:** 12043 **DATE:** August 13, 2012	
			
	Photo No. 23		**Photo No. 24**
Description: View of the western boundary of the project site (background) as viewed from the Bed, Bath and Beyond parking lot. View facing west.		**Description**: View of the south boundary of the project site (background) as viewed from the Target parking lot. Target visible far left, view facing north from north side of Veterans Road W.	

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

LOCATION: Charleston Development Site, Staten Island, NY

PROJECT No: 12043

DATE: August 13, 2012

Photo No. 25

Description: View of conditions along Veterans Road W south of the project site. View facing west from north side of Veterans Road W. Target visible far right.

Photo No. 26

Description: View of conditions along Veterans Road W south of the project site. View facing east from north side of Veterans Road W. Target out of view far left.

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

LOCATION: Charleston Development Site, Staten Island, NY

PROJECT No: 12043

DATE: August 13, 2012

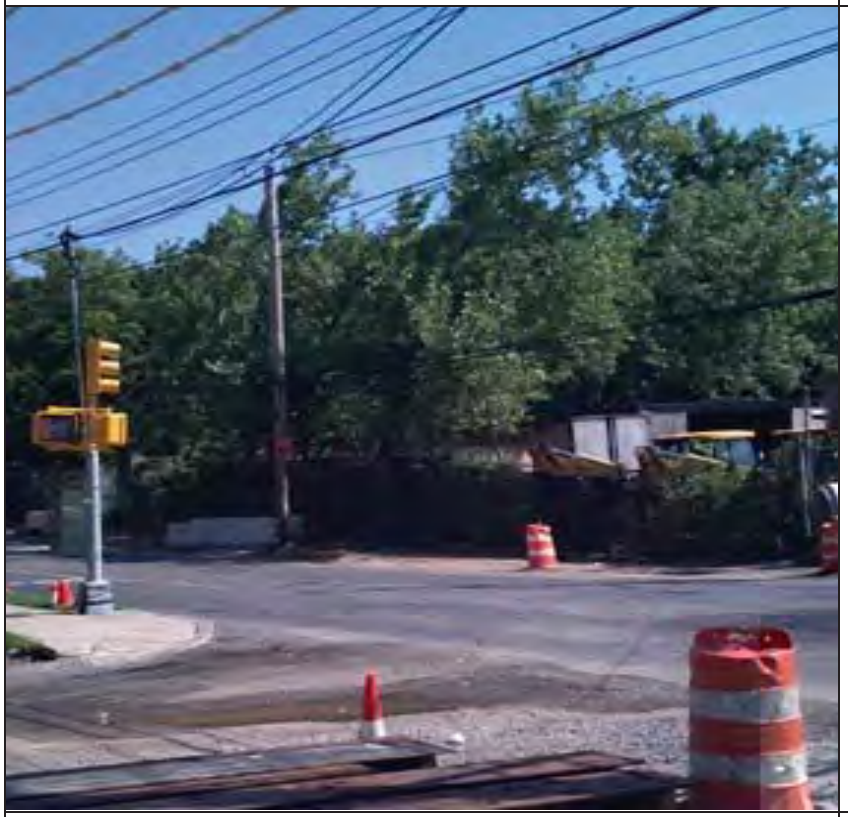


Photo No. 27

Description: View of conditions along Arthur Kill Road adjacent to the southwest corner of the project site. View facing northeast from the southwest corner of the intersection of the Arthur Kill Road and Veterans Road W. Contractor yard shown in photo No. 12 is visible to the right.

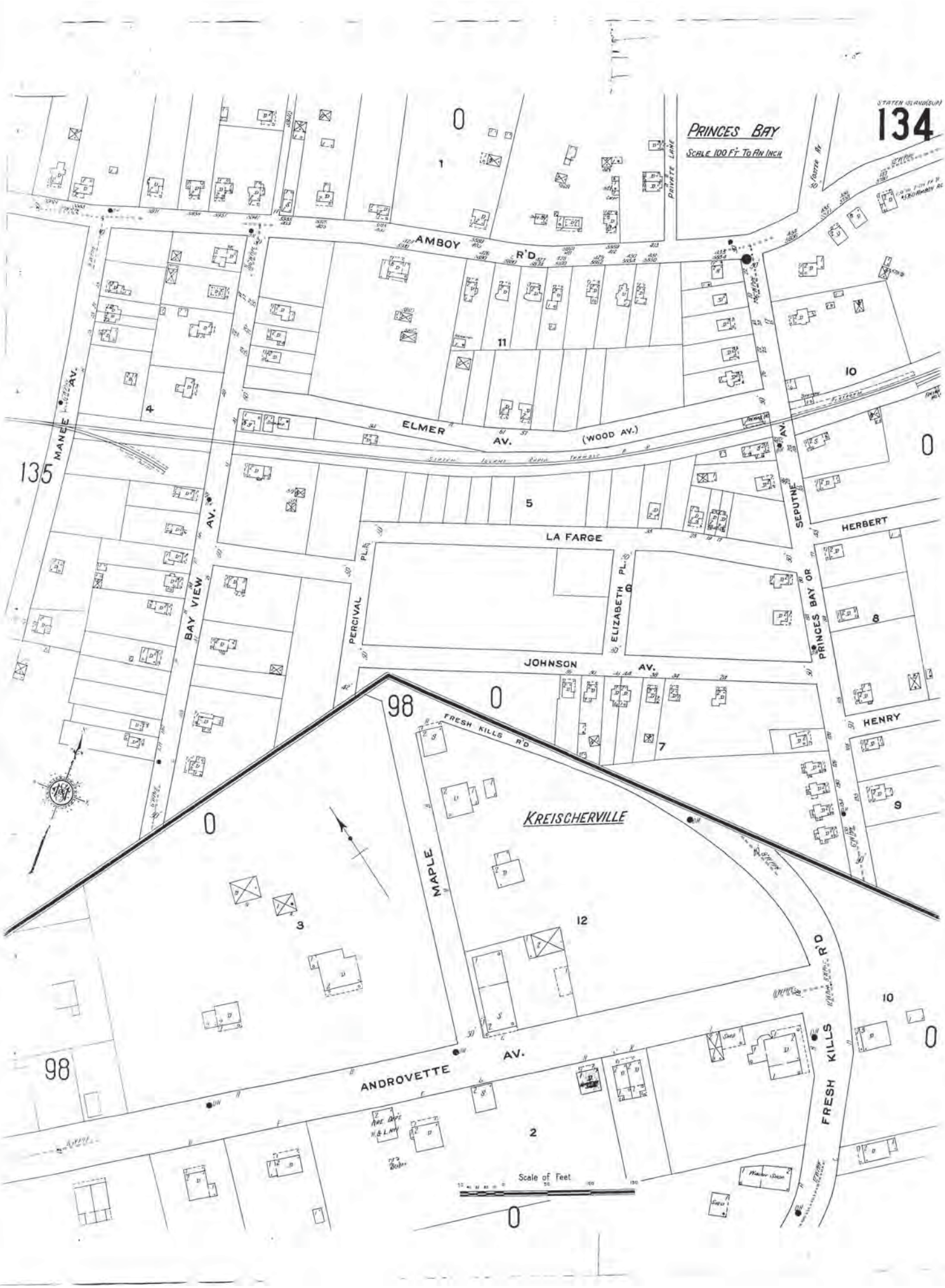
Photo No. 28

Description: MTA Bus Depot located along the east side of Arthur Kill Road and adjacent to the western region of the project site. View facing southeast from the west side of Arthur Kill Road.

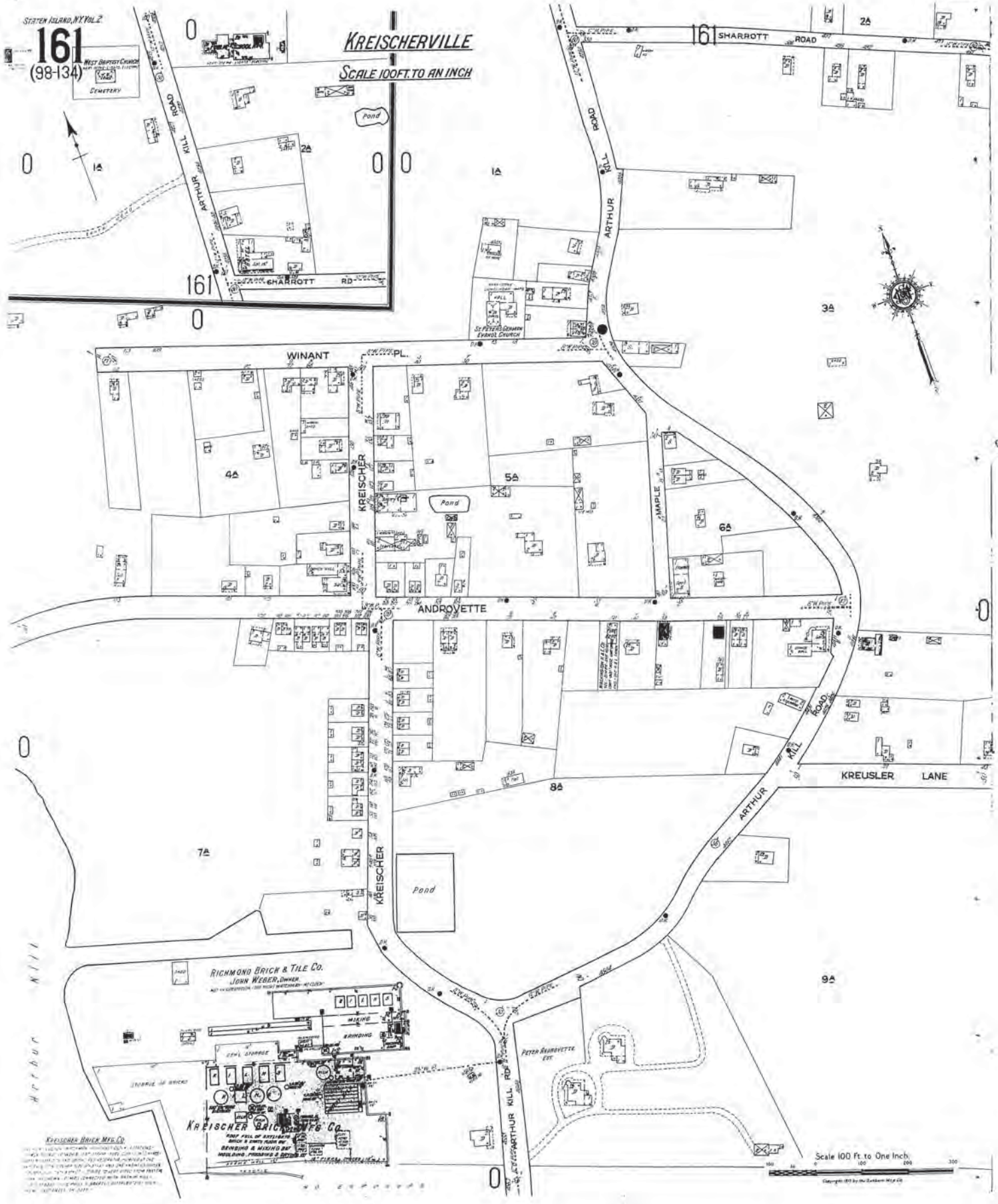
APPENDIX B

Historical Fire Insurance Maps

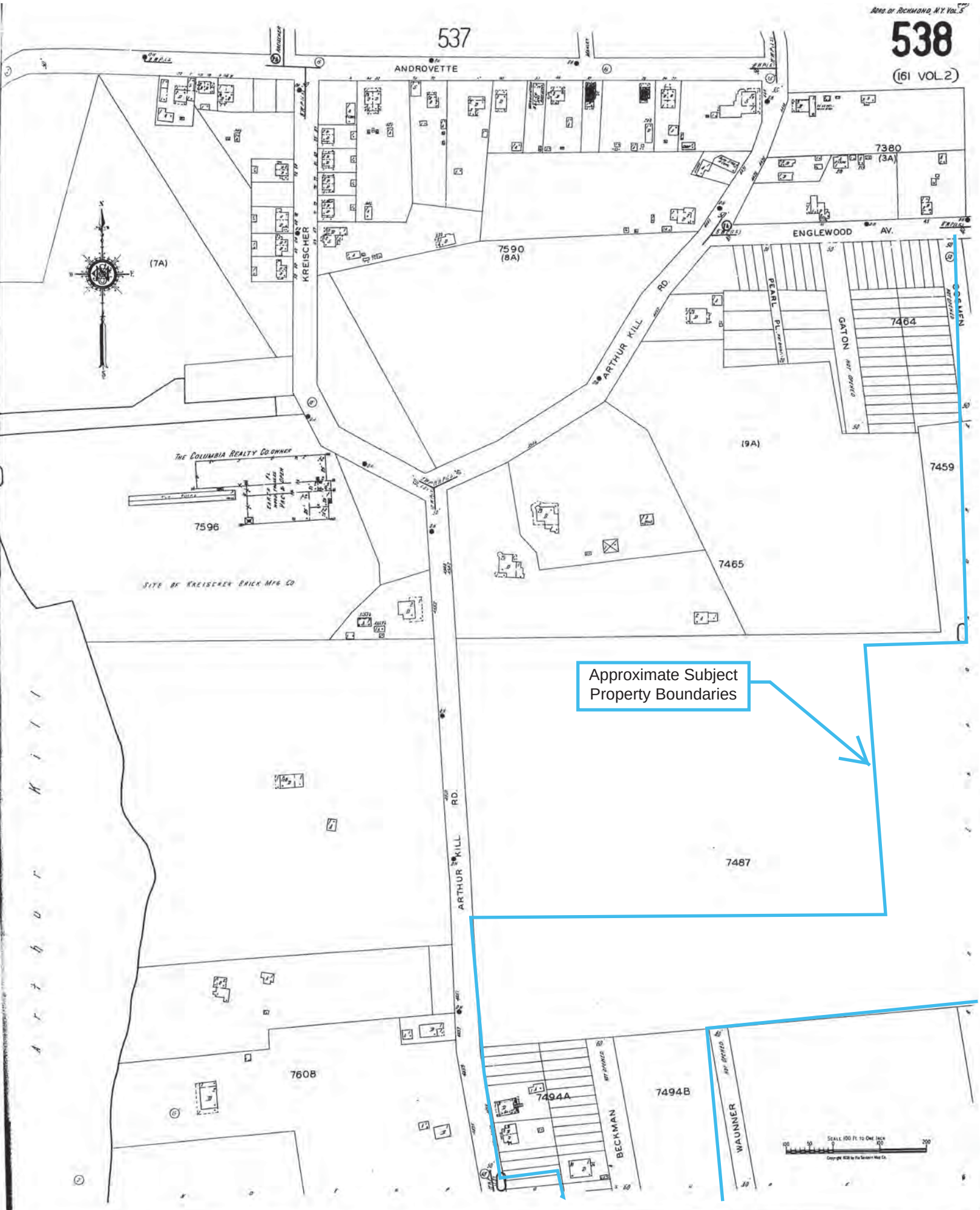
1910 Fire Insurance Map



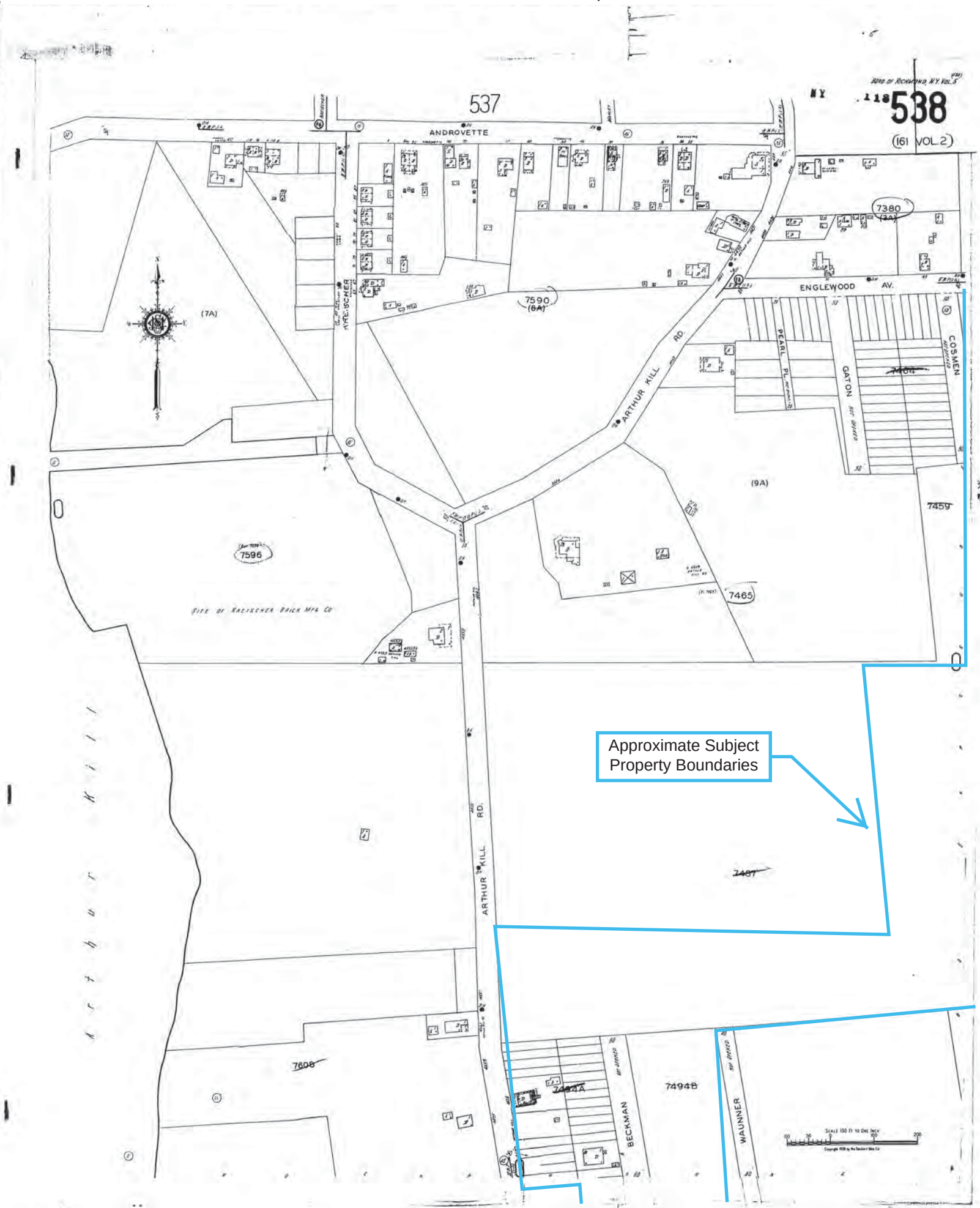
1917 Fire Insurance Map



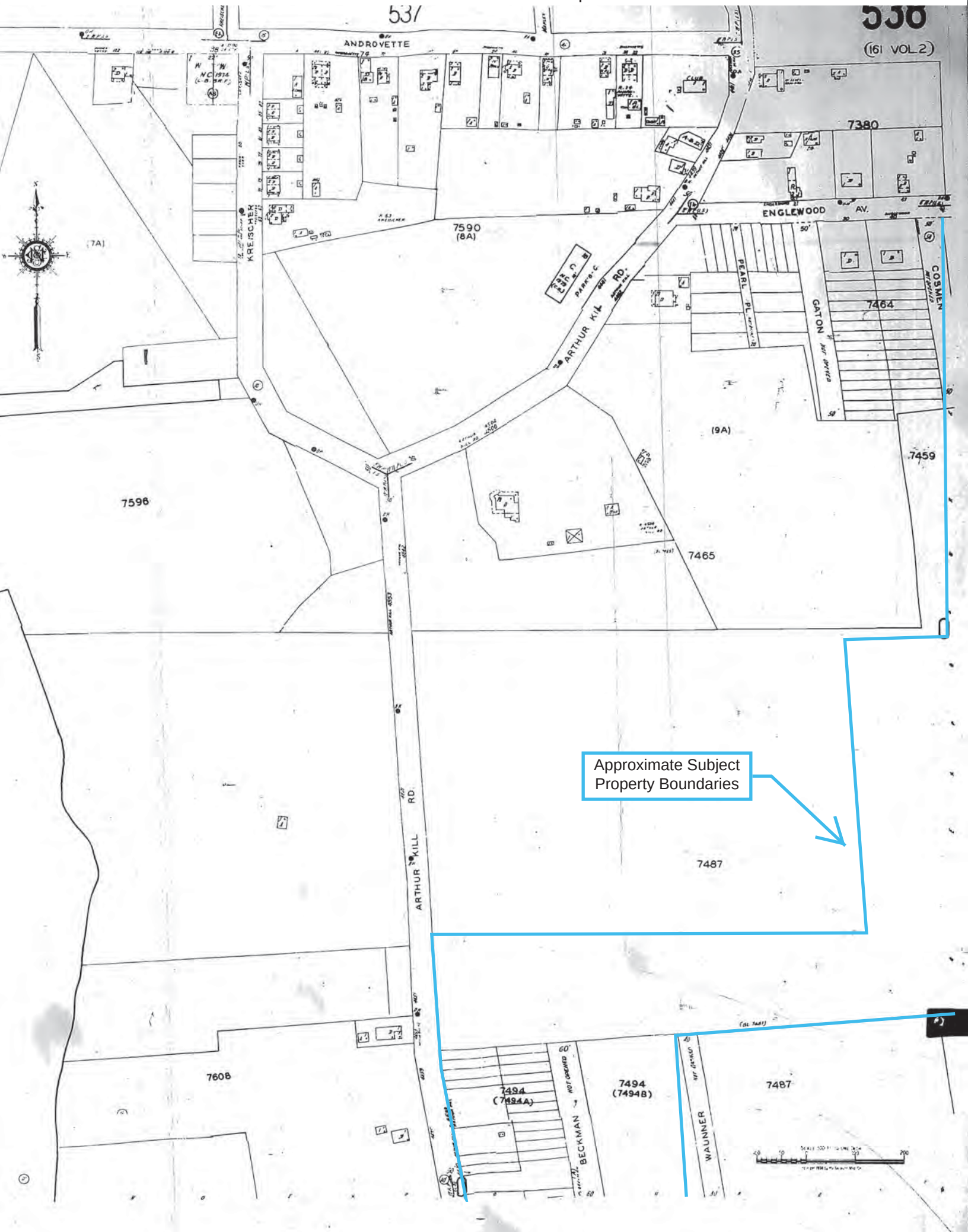
1937 Fire Insurance Map



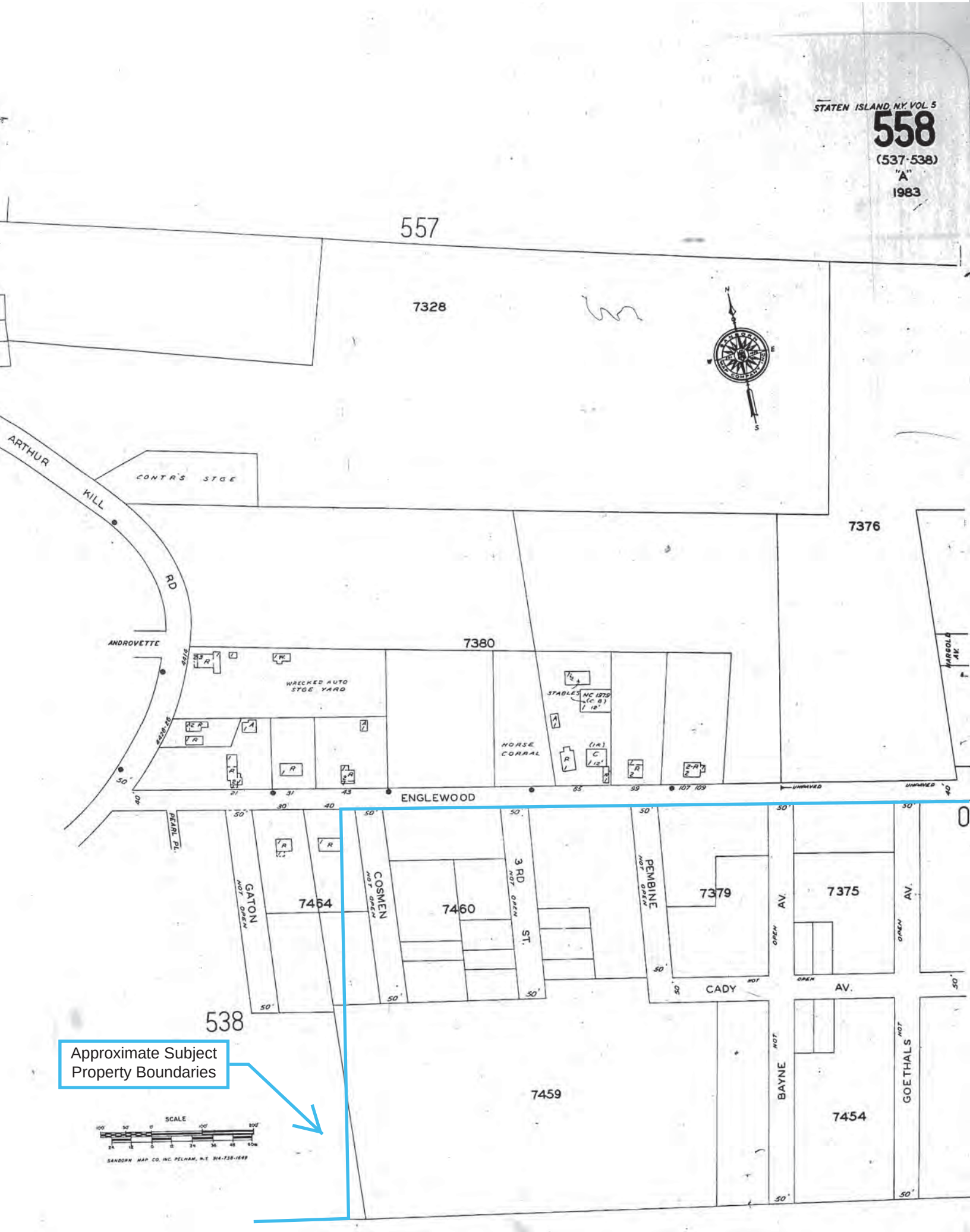
1951 Fire Insurance Map



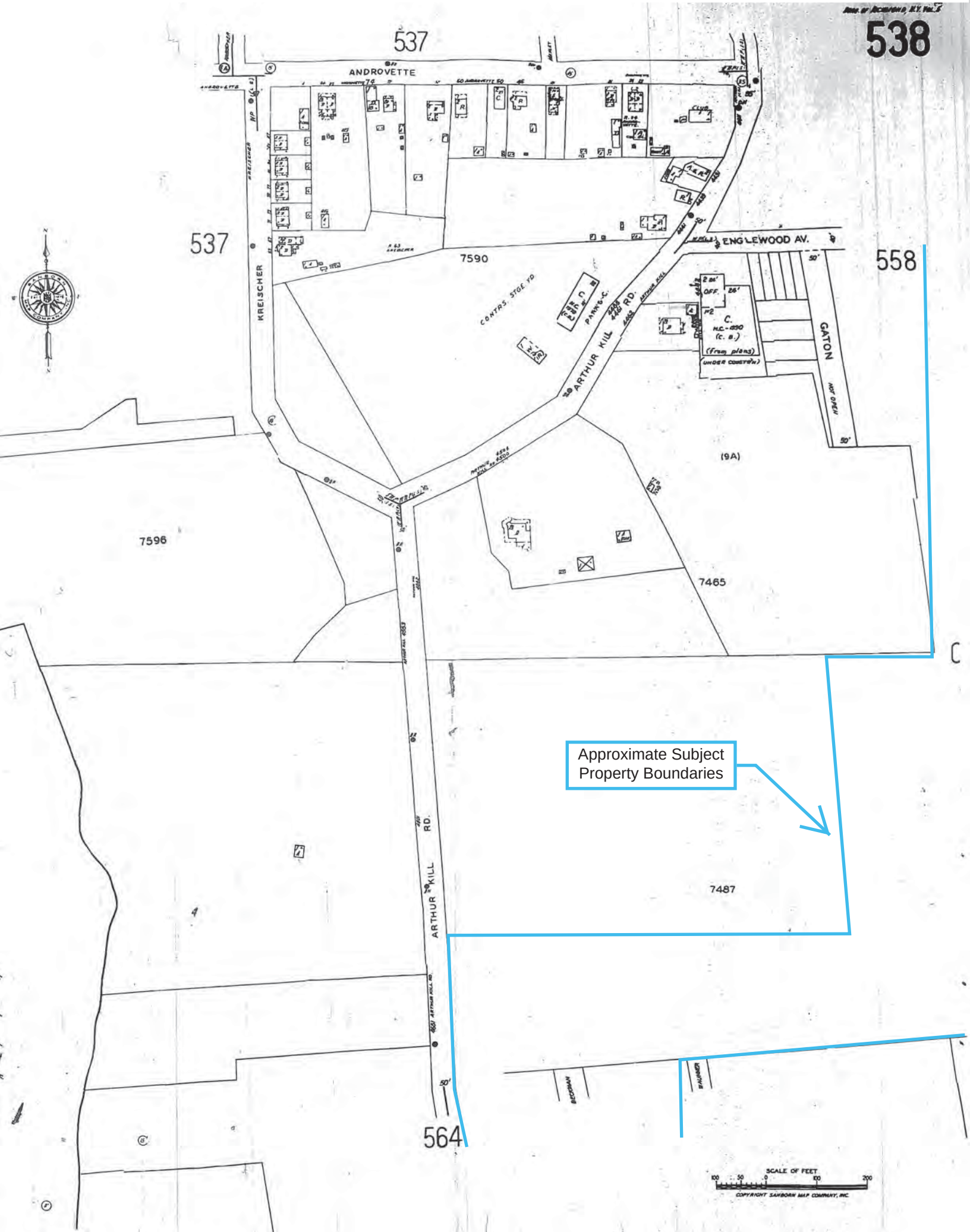
1983 Fire Insurance Map



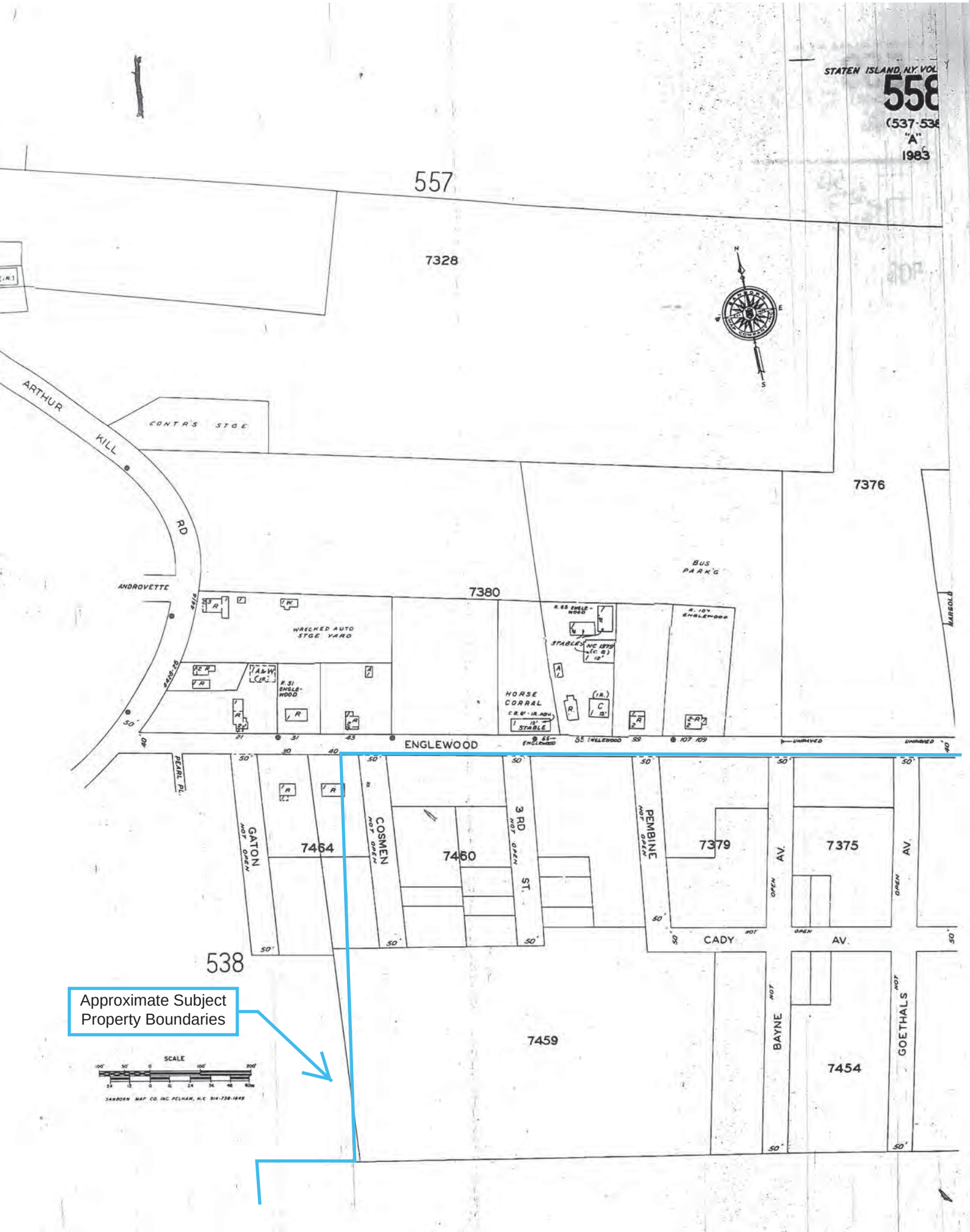
1983 Fire Insurance Map



1990 Fire Insurance Map

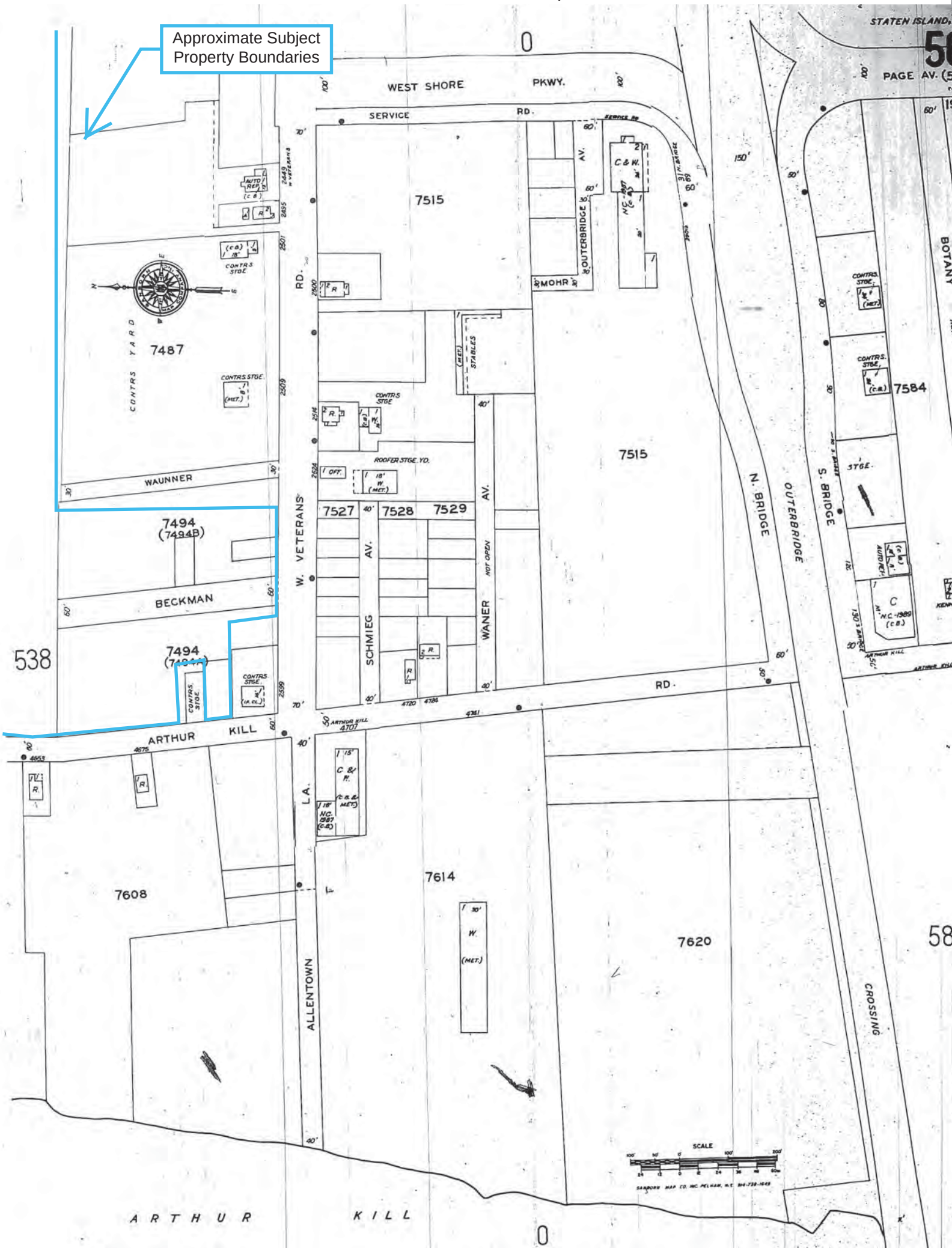


1990 Fire Insurance Map

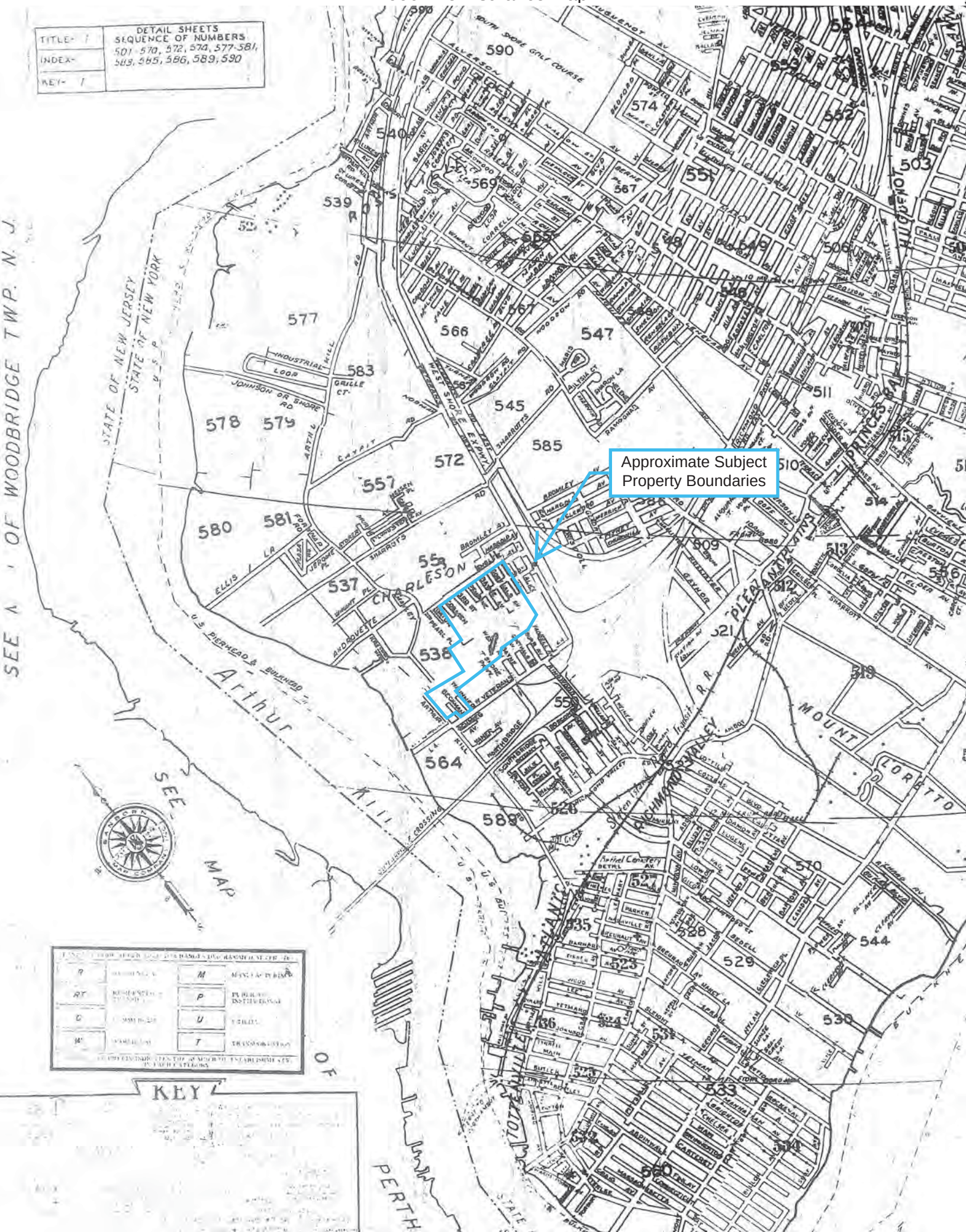


Approximate Subject Property Boundaries

1990 Fire Insurance Map



1990 Fire Insurance Map

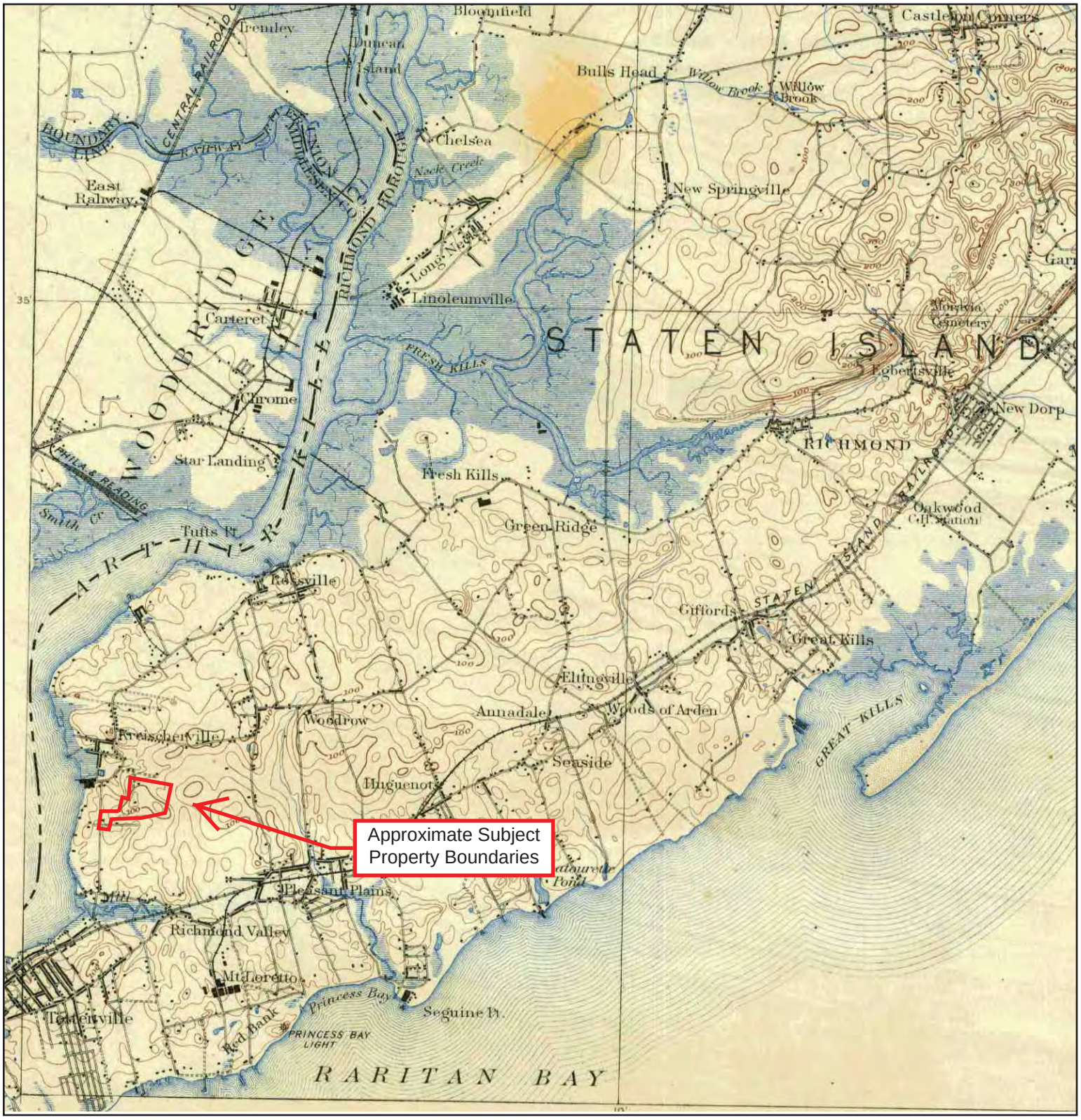


APPENDIX C

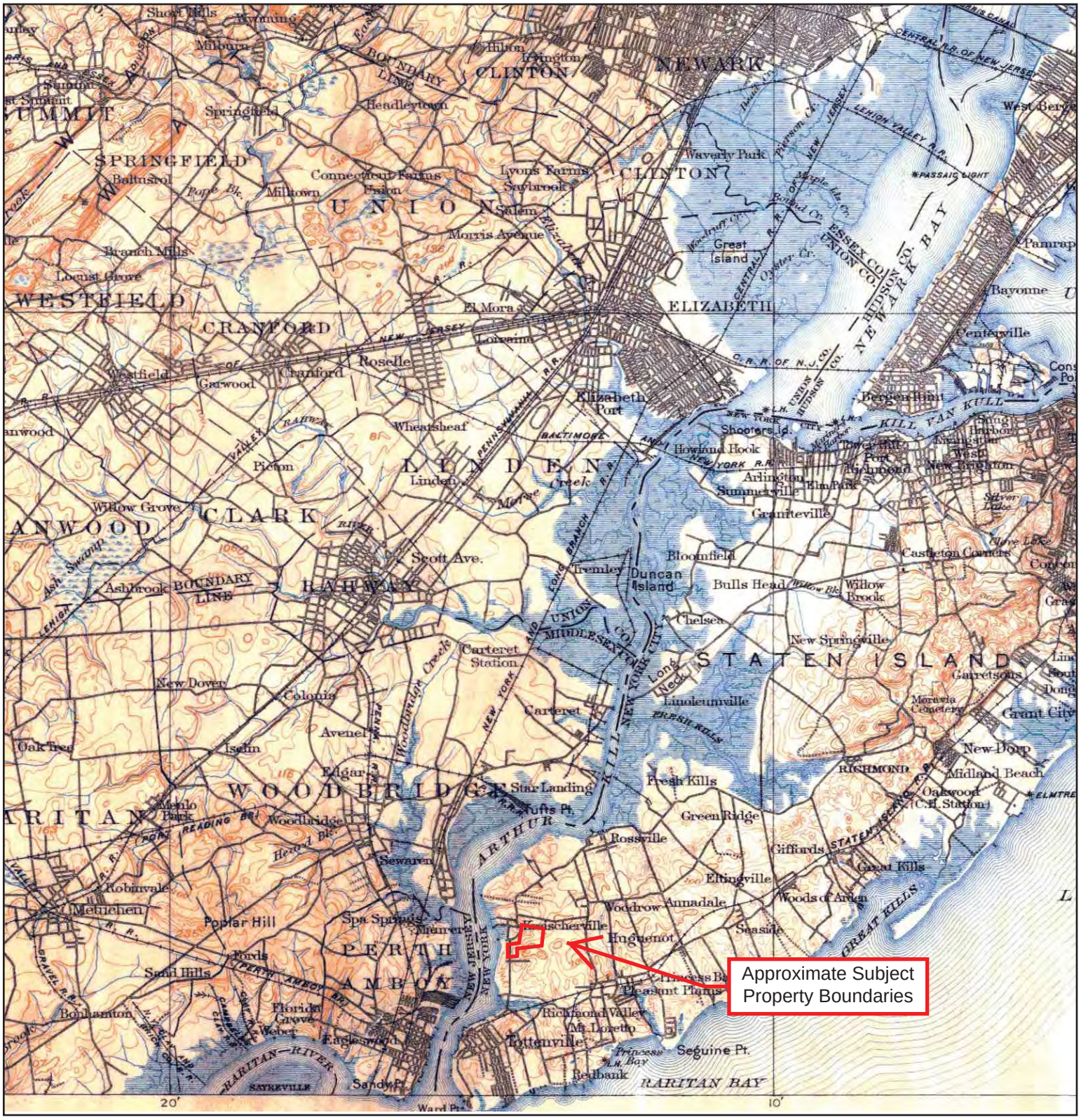
Historical Topographic Maps

(CEA, Inc.)

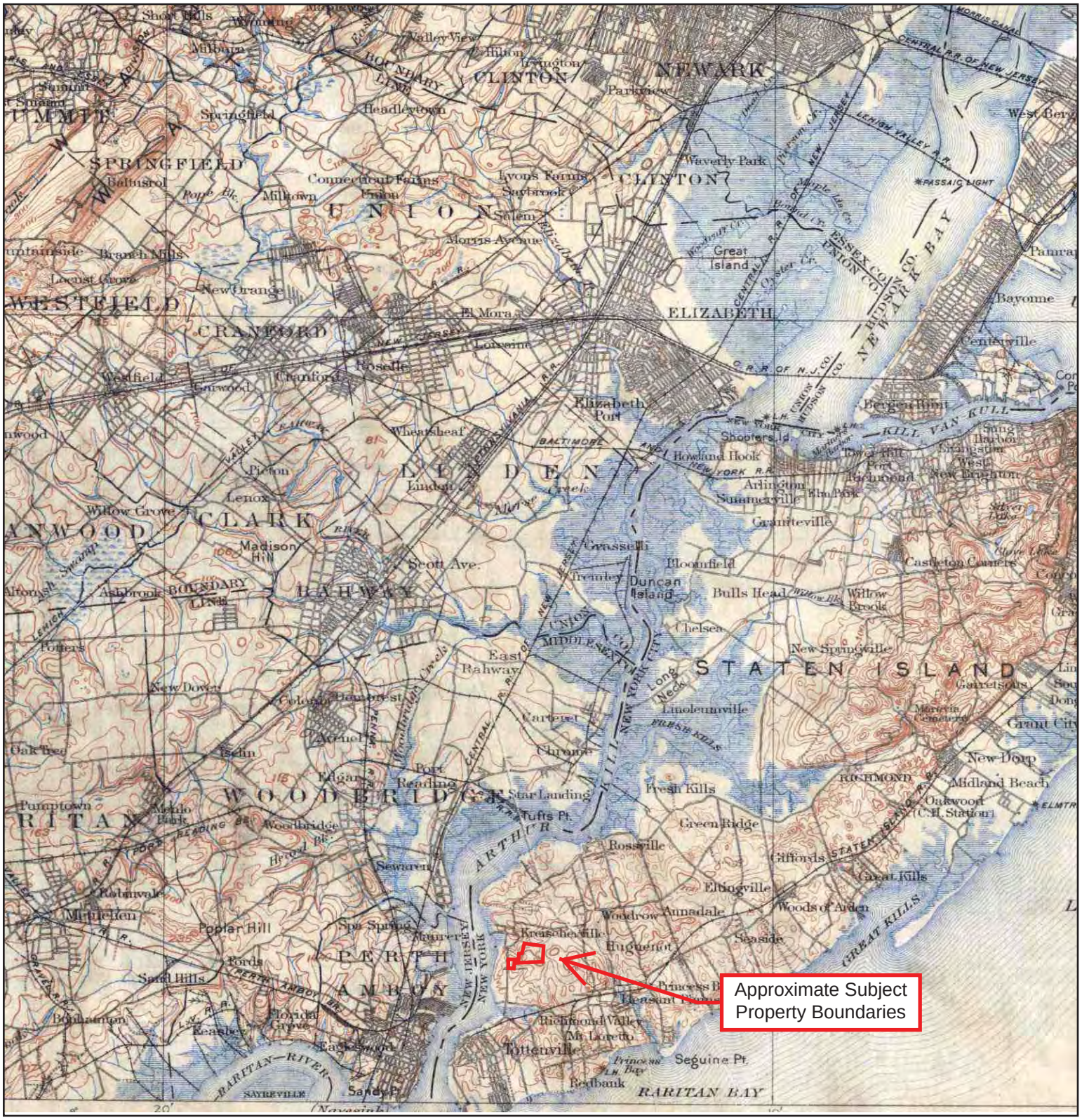
Historical Topographic Map



N	TARGET QUAD		SITE NAME:	Charleston Site A	CLIENT:	Carpenter Env. Assoc., Inc.
	NAME:	STATEN ISLAND	ADDRESS:	Veterans Road West	CONTACT:	Kim Hosea
	MAP YEAR:	1900		Staten Island, NY 10309	INQUIRY#:	3168888.4
			LAT/LONG:	40.5298 / -74.2307	RESEARCH DATE:	09/19/2011
	SERIES:	15				
	SCALE:	1:62500				



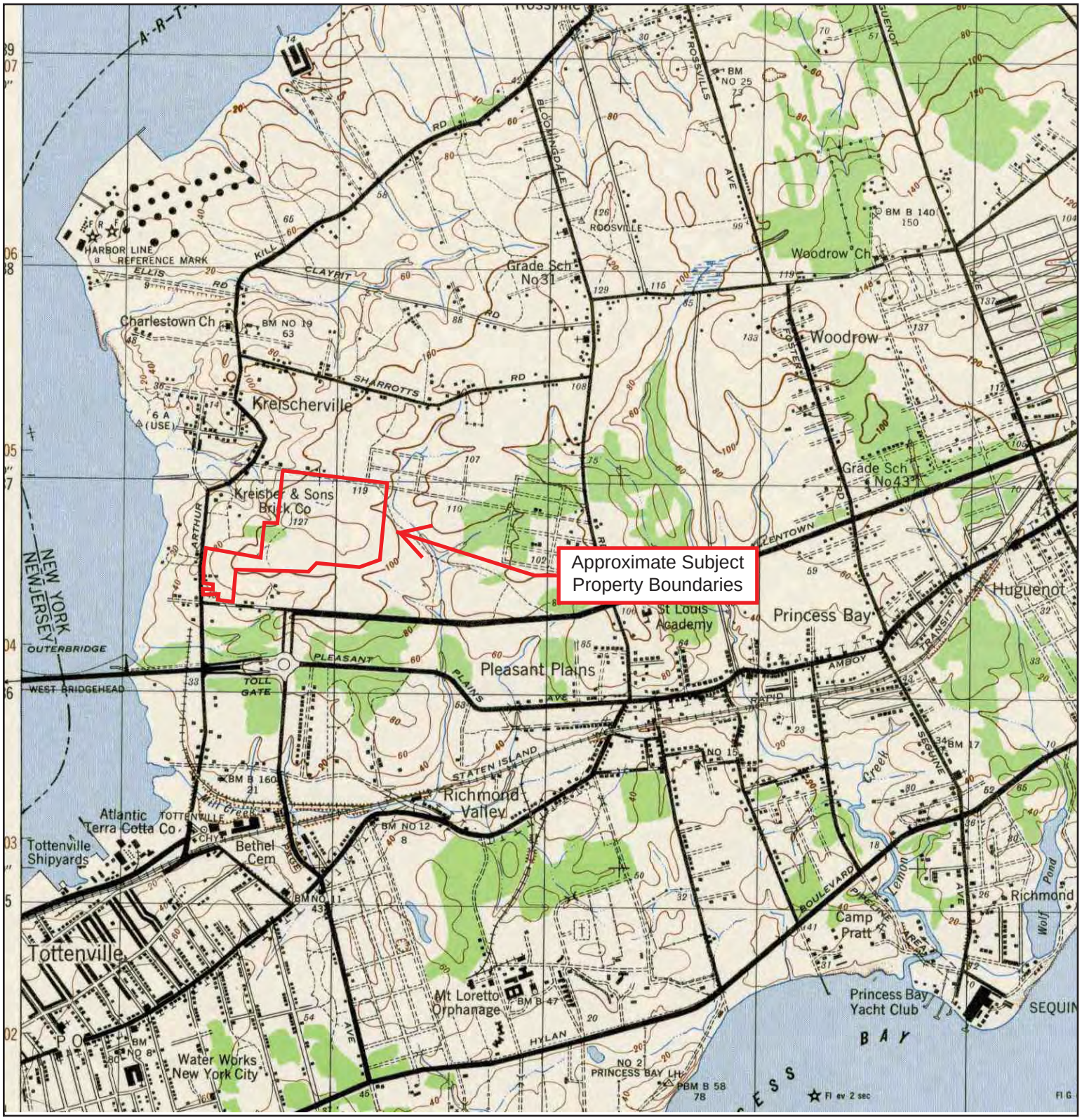
N	TARGET QUAD NAME: PASSAIC MAP YEAR: 1900 SERIES: 30 SCALE: 1:125000	SITE NAME: Charleston Site A ADDRESS: Veterans Road West Staten Island, NY 10309 LAT/LONG: 40.5298 / -74.2307	CLIENT: Carpenter Env. Assoc., Inc. CONTACT: Kim Hosea INQUIRY#: 3168888.4 RESEARCH DATE: 09/19/2011



N	TARGET QUAD		SITE NAME:	Charleston Site A	CLIENT:	Carpenter Env. Assoc., Inc.
	NAME:	PASSAIC	ADDRESS:	Veterans Road West	CONTACT:	Kim Hosea
	MAP YEAR:	1905		Staten Island, NY 10309	INQUIRY#:	3168888.4
			LAT/LONG:	40.5298 / -74.2307	RESEARCH DATE:	09/19/2011
	SERIES:	30				
	SCALE:	1:125000				

Date:	Scale:	Source:	JobID:	Project Number:
1943	1"=2083'	USGS	T1628.1003	12043
Site Location:				Comment:
ENGLEWOOD AVE STATEN ISLAND,NY				Arthur Kill NY

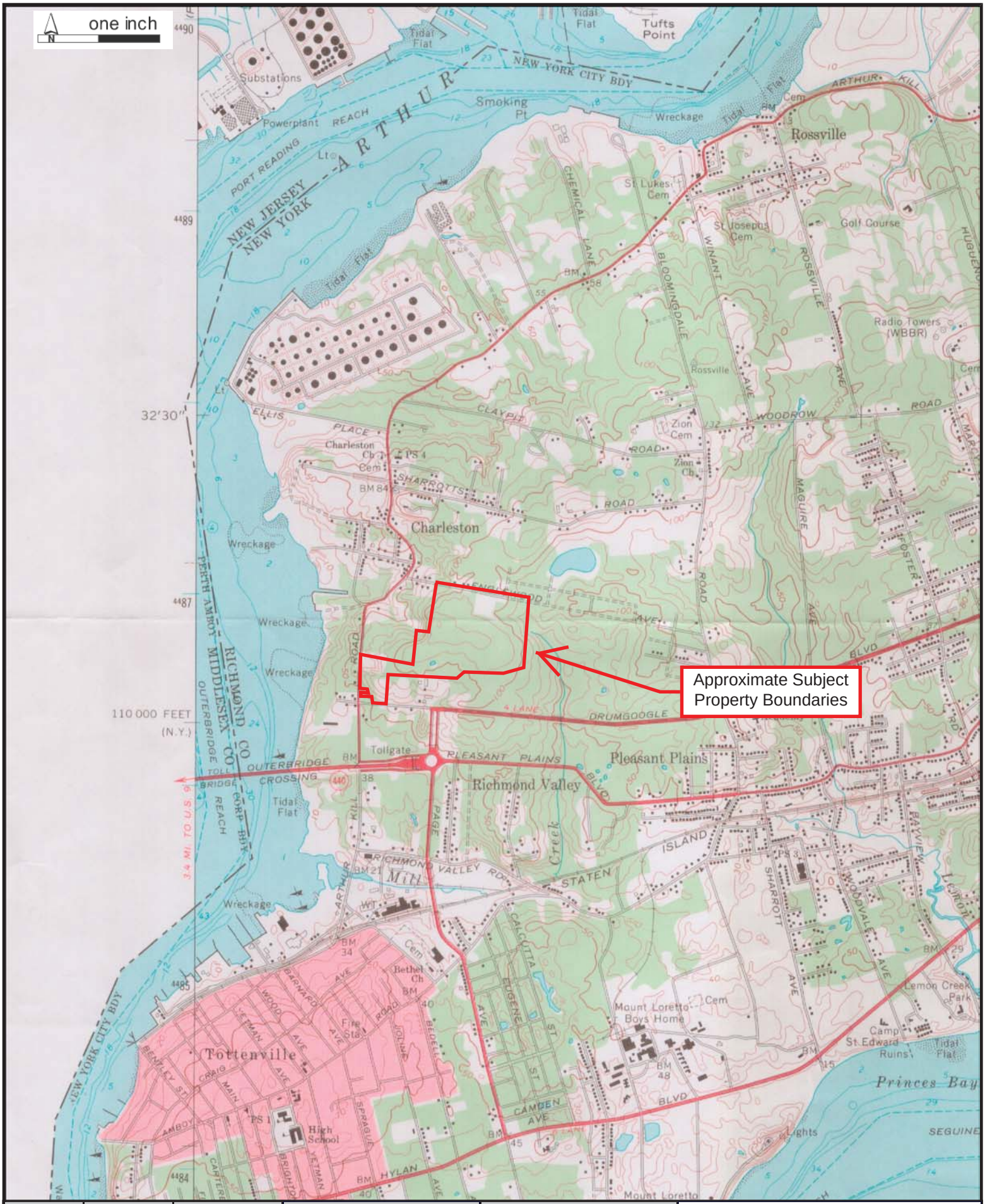
trs
environmental and historic research



N	TARGET QUAD			
	NAME:	ARTHUR KILL	SITE NAME:	Charleston Site A
	MAP YEAR:	1947	ADDRESS:	Veterans Road West
				Staten Island, NY 10309
	SERIES:	7.5	LAT/LONG:	40.5298 / -74.2307
	SCALE:	1:25000		

CLIENT:	Carpenter Env. Assoc., Inc.
CONTACT:	Kim Hosea
INQUIRY#:	3168888.4
RESEARCH DATE:	09/19/2011

N	TARGET QUAD		SITE NAME:	Charleston Site A	CLIENT:	Carpenter Env. Assoc., Inc.
	NAME:	ARTHUR KILL	ADDRESS:	Veterans Road West	CONTACT:	Kim Hosea
	MAP YEAR:	1966		Staten Island, NY 10309	INQUIRY#:	3168888.4
			LAT/LONG:	40.5298 / -74.2307	RESEARCH DATE:	09/19/2011
	SERIES:	7.5				
	SCALE:	1:24000				



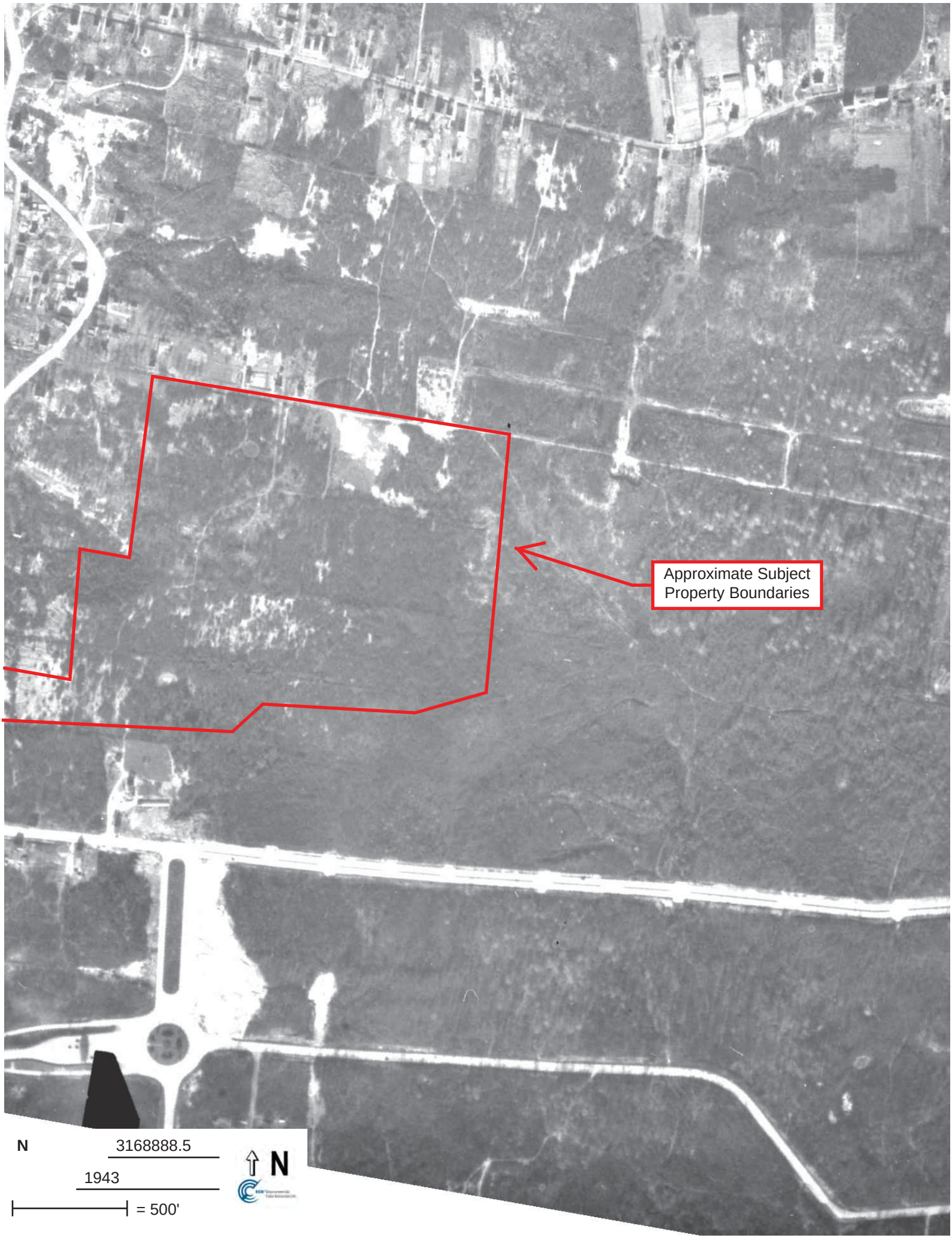
Date:	Scale:	Source:	JobID:	Project Number:
1969	1"=2000'	USGS	T1628.1003	12043
Site Location:				Comment:
ENGLEWOOD AVE STATEN ISLAND,NY				Arthur Kill NY

trs
environmental and historic research

N	TARGET QUAD				
	NAME:	ARTHUR KILL	SITE NAME:	Charleston Site A	CLIENT: Carpenter Env. Assoc., Inc.
	MAP YEAR:	1981	ADDRESS:	Veterans Road West	CONTACT: Kim Hosea
	PHOTOREVISED:	1966		Staten Island, NY 10309	INQUIRY#: 3168888.4
	SERIES:	7.5	LAT/LONG:	40.5298 / -74.2307	RESEARCH DATE: 09/19/2011
	SCALE:	1:24000			

APPENDIX D

Historical Aerial Photographs

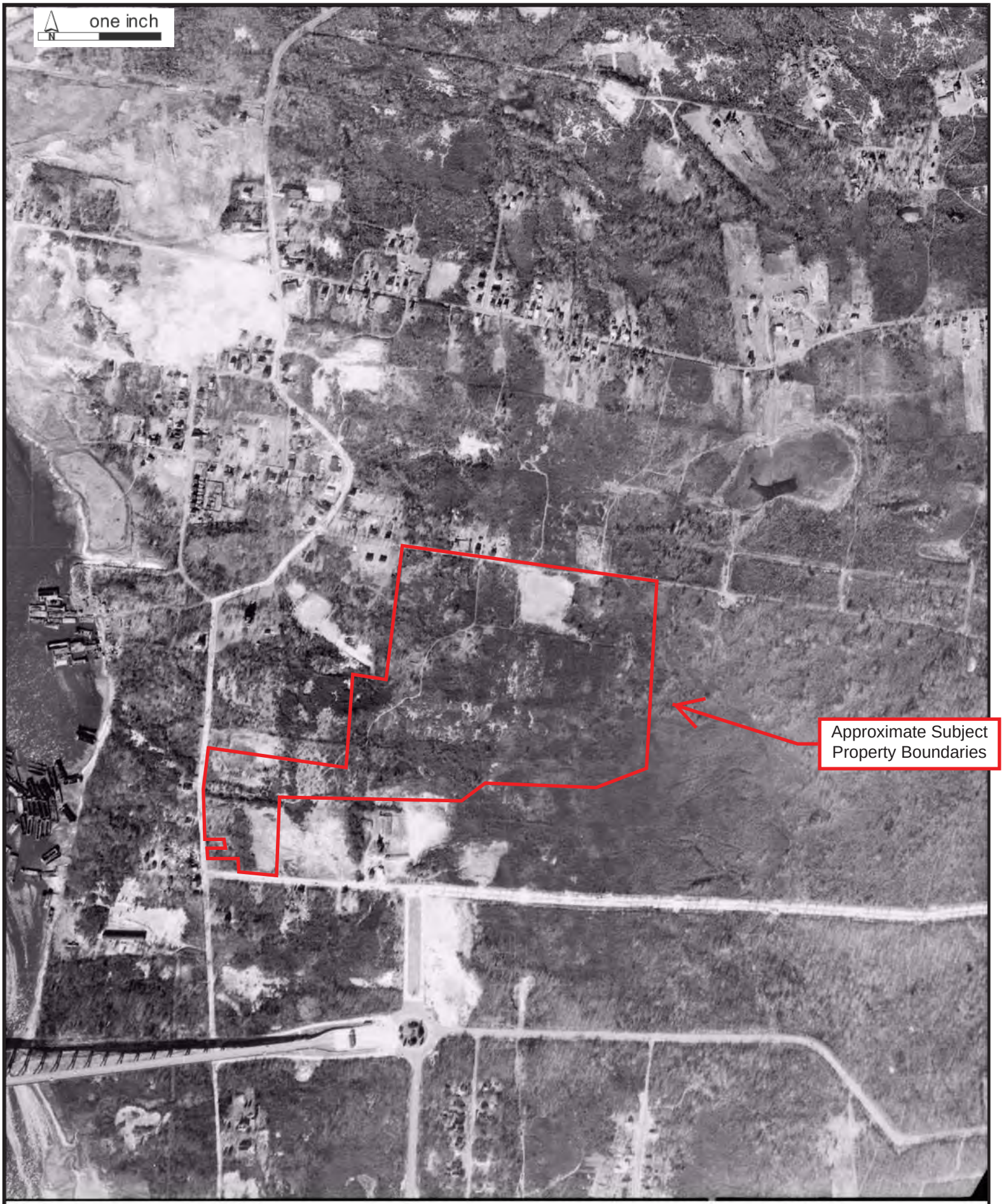

Approximate Subject Property Boundaries
N
3168888.5
1943
= 500'
N

Date:	Scale:	Source:	JobID:	Project Number:
1954	1"=700'	USGS	T1628.1003	12043
Site Location:				Comment:
ENGLEWOOD AVE STATEN ISLAND,NY				

trs
environmental and historic research


Approximate Subject Property Boundaries
N
3168888.5
1954
= 500'
N


N
3168888.5
1963
= 500'
N
Approximate Subject Property Boundaries



Date:	Scale:	Source:	JobID:	Project Number:
1966	1"=700'	USGS	T1628.1003	12043
Site Location:				Comment:
ENGLEWOOD AVE STATEN ISLAND,NY				

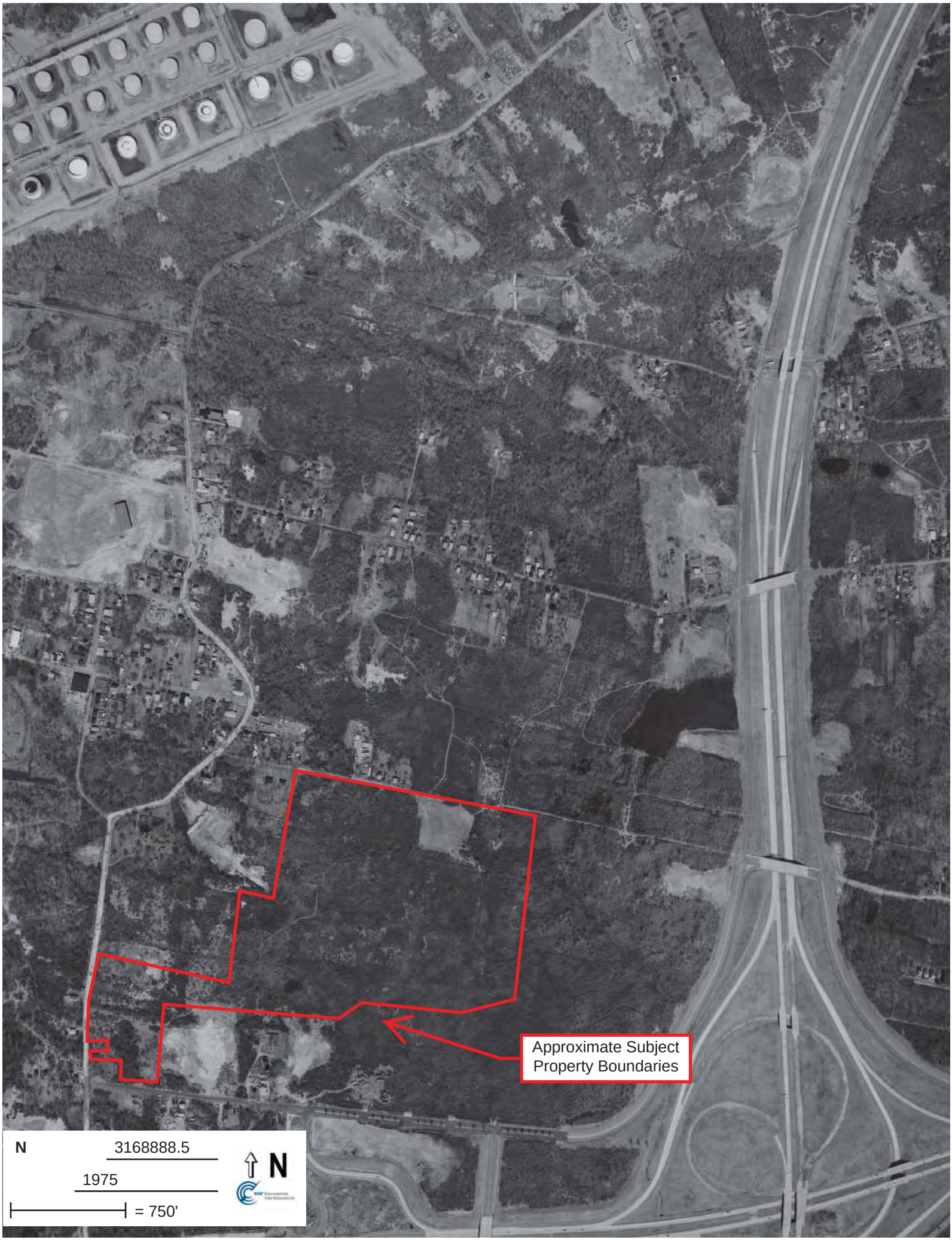
trs
environmental and historic research


Approximate Subject Property Boundaries
N
3168888.5
1966
= 500'
N


Approximate Subject Property Boundaries
N
3168888.5
1972
= 750'
N

Date:	Scale:	Source:	JobID:	Project Number:
1973	1"=700'	USGS	T1628.1003	12043
Site Location:				Comment:
ENGLEWOOD AVE STATEN ISLAND,NY				

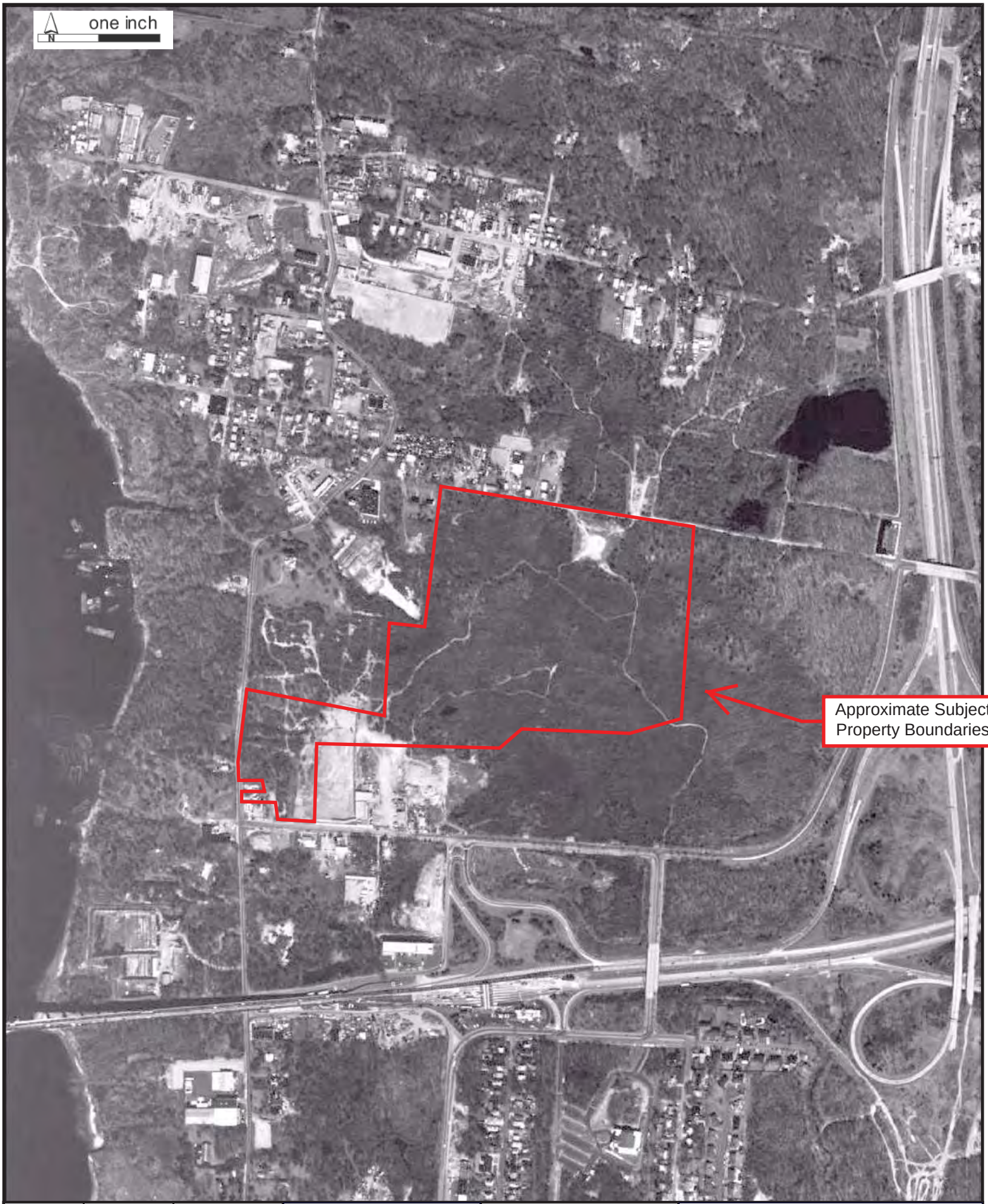
trs
environmental and historic research


Approximate Subject Property Boundaries
N
3168888.5
1975
= 750'
N


0 5 6
4-27-84
Approximate Subject Property Boundaries
N
3168888.5
1984
= 750'
N

Date:	Scale:	Source:	JobID:	Project Number:
1989	1"=700'	USGS	T1628.1003	12043
Site Location:				Comment:
ENGLEWOOD AVE STATEN ISLAND,NY				

trs
environmental and historic research

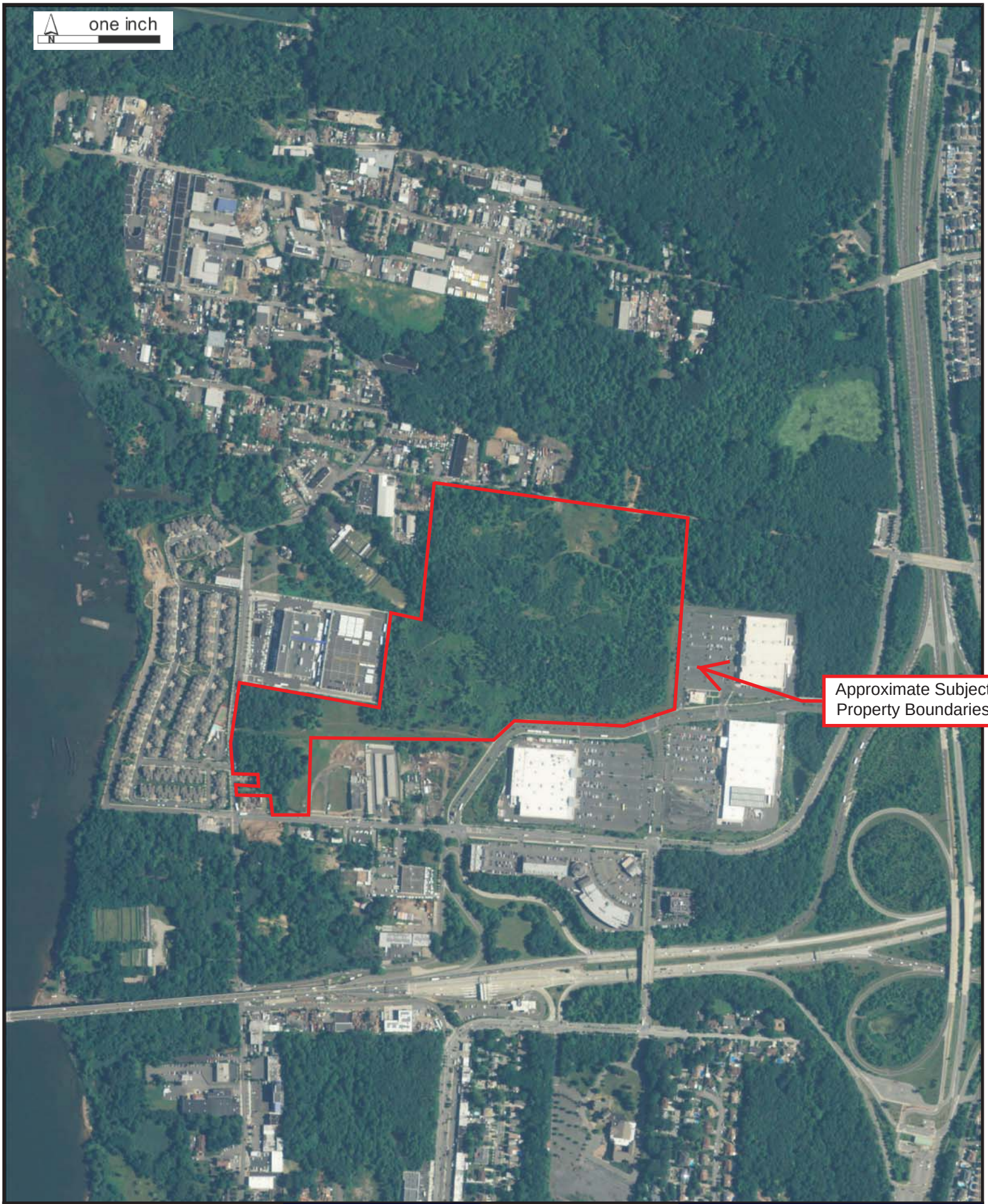


Date:	Scale:	Source:	JobID:	Project Number:
1995	1"=700'	USGS	T1628.1003	12043
Site Location:				Comment:
ENGLEWOOD AVE STATEN ISLAND,NY				

trs
environmental and historic research

Date:	Scale:	Source:	JobID:	Project Number:
2006	1"=700'	NAIP	T1628.1003	12043
Site Location:				Comment:
ENGLEWOOD AVE STATEN ISLAND,NY				

trs
environmental and historic research



Date:	Scale:	Source:	JobID:	Project Number:
2011	1"=700'	NAIP	T1628.1003	12043
Site Location:				Comment:
ENGLEWOOD AVE STATEN ISLAND,NY				

trs
environmental and historic research

APPENDIX E

Environmental Database Report

TOXICS TARGETING

Phase I
Environmental Database Report

Charleston
Staten Island, NY 10309

August 10, 2012

LIMITED WARRANTY AND DISCLAIMER OF LIABILITY

Who is Covered

This limited warranty is extended by Toxics Targeting, Inc. only to the original purchaser of the accompanying Environmental Report ("Report"). It may not be assigned to any other person.

What is Warranted

Toxics Targeting, Inc. warrants that it uses reasonable care to accurately transcribe the information contained in this Report from the sources from which it is obtained. This limited warranty is in lieu of all other express warranties which might otherwise arise with respect to the Report. No one is authorized to change or add to this limited warranty.

What We Will Do

If during the warranty period there is shown to be a material error in the transcription of the information contained in this Report from the sources from which it was obtained, Toxics Targeting, Inc. shall refund to the original purchaser the full purchase price paid for the Report. The remedy stated above is the exclusive remedy extended to the Purchaser by Toxics Targeting, Inc. for any failure of the Report to conform with this Warranty, or otherwise for breach of this Warranty or any other warranty, whether expressed or implied.

What We Won't Cover

Toxics Targeting, Inc. has not and can not verify the accuracy, correctness or completion of the information contained in this Report. Information is obtained from government agencies, site owners, and other sources, and errors are common in such information. Because Toxics Targeting, Inc. can not control the accuracy of the information contained in this Report, or the uses which may be made of the information, TOXICS TARGETING, INC. DISCLAIMS LIABILITY TO ANYONE FOR ANY EVENTS ARISING OUT OF THE USE OF THE INFORMATION. TOXICS TARGETING, INC. SHALL NOT BE LIABLE FOR ANY DAMAGE CAUSED BY THIS REPORT, WHETHER DIRECT OR INDIRECT, AND WHETHER OR NOT TOXICS TARGETING, INC. HAS BEEN ADVISED OF OR HAS KNOWLEDGE OF THE POSSIBILITY OF SUCH DAMAGES. TOXICS TARGETING, INC. EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

Period of Warranty

The period of warranty coverage is ninety days from the date of purchase of this Report. There shall be no warranty after the period of coverage. ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR USE SHALL HAVE NO GREATER DURATION THAN THE PERIOD OF WARRANTY STATED HERE, AND SHALL TERMINATE AUTOMATICALLY UPON THE EXPIRATION OF SUCH PERIOD. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above exclusion or limitation may not apply to you.

PLEASE REFER TO PAGES ONE AND FIVE FOR A DESCRIPTION OF SOME OF THE LIMITATIONS OF THIS ENVIRONMENTAL REPORT.

Ta le of Contents

Introduction

Toxics Targeting has combined environmental database searches, extensive regulatory analysis and sophisticated mapping techniques to produce your *Environmental Report.* It checks for the presence of 25 categories of government-reported toxic sites and provides detailed, up-to-date information on each identified site. The findings of your report are presented in an easy-to-understand format that:

1. ***Maps*** the approximate locations of selected government-reported toxic sites identified on or near a specified target address.

2. ***Estimates*** the distance and direction between the target address and each identified toxic site.

3. ***Reports*** air and water permit non-compliance and other regulatory violations.

4. ***Profiles*** some aspects of the usage, manufacture, storage, handling, transport or disposal of toxic chemicals at individual sites.

5. ***Summarizes*** some potential health effect information and drinking water standards for selected chemicals reported at individual sites.

The Three Sections Of Your Report

The first section highlights your report's findings by summarizing identified sites according to: **a)** distance intervals, **b)** direction, **c)** proximity to the target address and **d)** individual site categories. In addition, the locations of all identified toxic sites are illustrated on individual maps for each radius search distance used in your report. A close-up map illustrates the locations of all identified toxic sites, at the shortest radius search distance used in your report. Finally, a map of tax parcels and a table of selected information about those parcels are included.

The second section of your report contains *Toxic Site Profiles* that provide detailed information on each identified toxic site. The information in each *Toxic Site Profile* varies according to its source. Some toxic site categories have extensive information and some have limited information. All the information is updated on a regular basis.

The third section of the report contains appendices that identify: **1)** on-site spills reported to the national Emergency Response Notification System (ERNS), **2)** various toxic sites that cannot be mapped due to incomplete or erroneous addresses or other mapping problems, **3)** codes that characterize hazardous wastes reported at various facilities, **4)** methods used to map toxic sites identified in your report and **5)** information sources used in your report.

How to Use Your Report

- Check Table One to see the number of identified sites by distance intervals.

- Check Table Two to see identified sites sorted by direction.

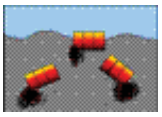
- Check Table Three to see identified sites ranked by proximity to the target address.

- Check Table Four to see identified sites sorted by site categories.

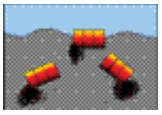
- Use Table Five to get info for the subject parcel and every parcel found on the Tax Parcel Map
- Refer to the various maps to see the locations of identified toxic sites. Refer to the *Toxic Site Profile* and *Appendix* sections for additional information.

To ic Site ata ases nal zed In Your Report

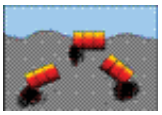
a c ad

One-Mile 

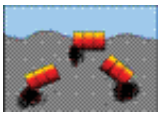
1) ***ational Priorit ist for ederal Superfund leanup*** a listing of sites known to pose environmental or health hazards that are being investigated or cleaned up under the Federal Superfund program.

alf-Mile 

2) ***elisted ational Priorit ist Sites*** a listing of NP sites that have been removed from the National Priority ist.

One-Mile 

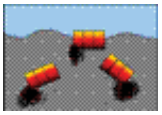
3) ***ew Yor Inacti e Hazardous aste isposal Site Re istr*** a state listing of sites that can pose environmental or public health hazards requiring investigation or clean up.

One-Mile 

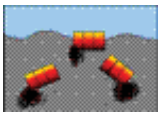
4) ***ew Yor Inacti e Hazardous aste isposal Site Re istr ualif in*** a state listing of sites that qualify for possible inclusion to the N EC Inactive az. aste isposal Site Registry.

One-Mile 

5) ***R R orrecti e ction cti it ORR TS*** waste facilities with RCRA corrective action activity reported by the USEPA.

alf-Mile 

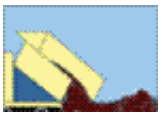
) ***ER IS*** (Comprehensive Environmental Response, Compensation and iability Information System): a federal listing of Non-NFRAP sites that can pose environmental or public health hazards requiring investigation or clean up.

alf-Mile 

) ***ER IS R P*** a federal listing of CERC IS sites that have no further remedial action planned.

alf-Mile 

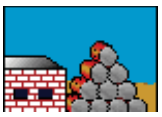
) ***ew Yor State rownfield leanup Sites*** a listing of sites that are abandoned, idled or under-used industrial and commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination.

alf-Mile 

) ***ew Yor Solid aste acilities Re istr*** active and inactive landfills, incinerators, transfer stations or other solid waste management facilities.

alf-Mile 

1) ***ew Yor it Solid aste Sites*** a listing of solid waste disposal sites operated by New ork City municipal authorities circa 1 34.

alf-Mile 

11) ***ew Yor and ederal Hazardous aste Treatment Stora e or isposal acilities*** sites reported by the N S manifest system and the USEPA's Resource Conservation and Recovery Act Information System (RCRIS). Also includes the following database:

- ***R R iolations*** waste facilities with violations reported by the USEPA pursuant to the Resource Conservation and Recovery Act.

alf-Mile 

12) ***To ic Spills acti e and inacti e or closed*** spills reported to state environmental authorities, including *remediated* and *nremediated* leaking underground storage tanks. This database includes the following categories:

- Tank Failures
- Tank Test Failures
- Unknown Spill Cause or Other Spill Causes
- Miscellaneous Spill Causes

Eighth-Mile 

13) ***ew Yor State Ma or Oil Stora e acilities*** sites with more than a 4 , gallon capacity for storing petroleum products.

Eighth-Mile 

14) ***ew Yor State Petroleum ul Stora e acilities*** sites with more than an 1,1 gallon capacity for storing petroleum products.

Eighth-Mile 

15) ***ew Yor it ire ept Tan ata*** tank data from 1 .

Eighth-Mile 

1) ***ew Yor and ederal Hazardous aste enerators and Transporters*** sites reported by the N S manifest system and the USEPA's Resource Conservation and Recovery Act Information System (RCRA). Also includes the following database:

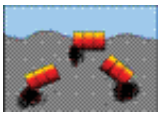
- ***R R iolations*** waste facilities with violations reported by the USEPA pursuant to the Resource Conservation and Recovery Act.

Eighth-Mile 

1) ***ew Yor hemical ul Stora e acilities*** sites storing hazardous substances listed in N CRR Part 5 in aboveground tanks with capacities of 1 5 gallons or more and or underground tanks of any size

Eighth-Mile 

1) ***Historic ew Yor it Utilit Sites s to s*** power generating stations, manufactured gas plants, gas storage facilities, maintenance yards and other gas and electric utility sites.

alf-Mile 

1) ***ew Yor Hazardous Su stance isposal Site raft Stud*** a state listing of sites contaminated with toxic substances that can pose environmental or public health hazards. These sites were not eligible for state clean up funding programs.

Eighth-Mile 

2) ***ederal To ic Release In entor acilities*** discharges of selected toxic chemicals to air, land, water or treatment facilities.

Eighth-Mile 

21) ***ederal ir ischar es*** air pollution point sources monitored by U.S. EPA and or state and local air regulatory agencies.

Eighth-Mile 

22) ***ederal Permit ompliance S stem To ic astewater ischar es*** permitted toxic wastewater discharges.

Eighth-Mile 

23) ***ederal i il and dministrati e Enforcement oc et*** judiciary cases filed on behalf of the U. S. Environmental Protection Agency by the epartment of ustice.

On-site only (25 ft) 

24) ***ew Yor it En ironmental ualit Re iew E R E esi nation Sites*** parcels assigned a special environmental (E) designation under the CE R process. E designation requires specific protocols that must be followed.

Property only 

25) ***ER S ederal Emer enc Response otification S stem Spills*** a listing of federally reported spills.

imitations Of The Information In Your Report

The information presented in your *Environmental Report* has been obtained from various local, state and federal government agencies. Please be aware that: **1)** additional information on individual sites may be available, **2)** newly discovered sites are continually reported and **3)** all map locations are approximate. As a result, this report is intended to be the FIRST STEP in the process of identifying and evaluating possible environmental threats to specific properties and can only serve as a guide for conducting on-site visits or additional, more detailed toxic hazard research.

Toxics Targeting tries to ensure that the information in your report is presented accurately and with minimal alteration. Systematic changes are made to correct obvious address errors in order to allow sites to be mapped. Any address changes that are made are noted in the map information section at the top of each corresponding *Toxic Site Profile*. Some information that has been withheld by government authorities remains included in Toxic Site Profiles and is identified as archival information. Since the information presented in your report is not edited, please be aware that it can contain reporting errors or typographical mistakes made by the site owners operators or government agencies that produced the information. Also please be aware of some other limitations of the information in your report:

- The digital map used by *Toxics Targeting* is the same one used by the U. S. Census or local authorities in New ork City. hile the map is generally accurate, no map is perfect. In addition, *Toxics Targeting s* mapping methods estimate where toxic site addresses are located if the address is not specifically designated. FOR T ESE REASONS, A MAP OCATIONS OF A RESSES AN REPORTE TO IC SITES S OU E CONSI ERE APPRO IMATE AN S OU E ERIFIE ON-SITE ISITS

- UN ISCO ERE , UNREPORTE OR UNMAPPA E TO IC SITES MI T NOT E I ENTIFIE T IS REPORT'S C EC OF 25 TO IC SITE CATE ORIES. TO IC SITES REPORTE IN OT ER O ERNMENT ATA ASES MI T A SO E IST. FOR T ESE REASONS, OUR REPORT MI T NOT I ENTIF A T E TO IC SITES T AT E IST IN T E AREA IT SEARC ES

- The appendix of your report contains a listing of sites that could not be mapped due to incomplete or erroneous address information or other mapping problems. This listing includes unmappable toxic sites in the zip codes searched for the report as well as toxic sites without zip codes reported in the same county. IF OU OU I E INFORMATION ON AN OF T E ISTE SITES, P EASE CONTACT *T S TAR ET A RE ER T T E S TE ER.*

- New ork State epartment of Environmental Conservation Remediation Site orders are approximate and may not align with tax parcel boundaries mapped by local authorities or the digital map used by the US Census ureau. As a result, Remediation Site orders may overlap parcels that do not involve site remediation activities. Selected parcels also can involve multiple Remediation Site orders. Refer to individual site profiles for more information. Sites without profiles include potential new sites or sites that have not yet been publicly listed by EC.

- Some toxic sites identified in your report may be classified as **a a d** . Most of the toxic sites identified in your report involve **a a a d** related to the on-site use, manufacture, handling, storage, transport or disposal of toxic chemicals. Some of the toxic sites identified in your report may be the addresses of parties responsible for toxic sites located elsewhere. OU S OU ON CONC U E T AT TO IC A AR S ACTUA E IST AT A SPECIFIC SITE EN O ERNMENT AUT ORITIES MA E T AT ETERMINATION OR EN T AT CONC USION IS FU OCUMENTE T E FIN IN S OF AN APPROPRIATE SITE IN ESTI ATION UN ERTA EN ICENSE PROFESSIONA S

- Compass directions and distances are approximate. Compass directions are calculated from the subject property address to the mapped location of each identified toxic site. The compass direction does not necessarily refer to the closest property boundary of an identified toxic site. The compass direction also can vary substantially for toxic sites that are located very close to the subject property address.

- The information presented in your report is a summary of the information that *Toxics Targeting* obtains from government agencies on reported toxic sites. OU MA E A E TO O TAIN A ITIONA INFORMATION A OUT REPORTE SITES IT T E FREE OM OF INFORMATION RE UEST FORM ETTERS T AT ARE PRO I E ON T E INSI E OF T E AC CO ER.

Section One:

Report Summary

Ta le ne m er of dentified Toxic Sites istance nterval

Ta le T o dentified Toxic Sites irection

Ta le T ree dentified Toxic Sites ategor

Ta le o r dentified Toxic Sites Proximit

ap ne ne ile Radi s ap

ap T o alf ile Radi s ap

ap T ree Eig t ile Radi s ap

ap o r Eig t ile Radi s lose p ap

ap ive Tax Parcel ap

Ta le ive Tax Parcel ap nformation Ta le

NUMBER OF IDENTIFIED SITES BY DISTANCE INTERVAL

Database Searched	0 − 100 ft	100 ft − 1/8 mi	1/8 mi − 1/4 mi	1/4 mi − 1/2 mi	1/2 mi − 1 mi	Site Category Totals
ASTM−Required 1 Mile Search						
National Priority List (NPL) Sites	0	0	0	0	0	0
NYS Inactive Hazardous Waste Disposal Site Registry	0	0	0	0	1	1
NYS Inactive Haz Waste Disposal Site Registry Qualifying	0	0	0	0	0	0
RCRA Corrective Action (CORRACTS) Sites	0	0	0	0	1	1
ASTM−Required 1/2 Mile Search						
Delisted National Priority List (NPL) Sites	0	0	0	0	Not searched	0
CERCLIS Superfund Non−NFRAP Sites	0	0	0	0	Not searched	0
CERCLIS Superfund NFRAP Sites	0	0	0	0	Not searched	0
Brownfields Sites						
Voluntary Cleanup Program	0	0	0	0	Not searched	0
Environmental Restoration Program	0	0	0	0	Not searched	0
Brownfield Cleanup Program	0	0	0	0	Not searched	0
NYSDEC Solid Waste Facilities / Landfills	0	1	2	0	Not searched	3
RCRA Hazardous Waste Treatment, Storage, Disposal Sites	0	0	0	0	Not searched	0
NYS Toxic Spills						
Active Tank Failures	0	0	0	0	Not searched	0
Active Tank Test Failures	0	0	0	0	Not searched	0
Active Spills − Unknown / Other Causes	0	0	0	0	Not searched	0
Active Spills − Miscellaneous Causes	0	0	0	0	Not searched	0
Closed Tank Failures	0	0	2	3	Not searched	5
Closed Tank Test Failures	0	0	2	1	Not searched	3
Closed Spills − Unknown / Other Causes	1	6	7	4	Not searched	18
Closed Spills − Miscellaneous Causes	1	4	0(10)	2(13)	Not searched	7(23)
ASTM−Required Property & Adjacent Property (1/8 Mile Search)						
NYS Major Oil Storage Facilities	0	0	Not searched	Not searched	Not searched	0
Local & State Petroleum Bulk Storage Sites	0	1	Not searched	Not searched	Not searched	1
RCRA Hazardous Waste Generators & Transporters	3	4	Not searched	Not searched	Not searched	7
NYS Chemical Bulk Storage Sites	0	1	Not searched	Not searched	Not searched	1
Historic Utility Facilities	0	0	Not searched	Not searched	Not searched	0
ASTM−Required On−Site Only Search						
NYC Environmental Quality Review Requirements ("E") Sites*	0	0	Not searched	Not searched	Not searched	0
Emergency Response Notification System (ERNS)	0	Not searched	Not searched	Not searched	Not searched	0
Institutional Controls / Engineering Controls (IC/EC)	See databases for NPL, CERCLIS, Inactive Hazardous Waste Disposal Site Registry and Brownfield Sites.					
ASTM−Required Databases Distance Interval Totals	**5**	**17**	**13(10)**	**10(13)**	**2**	**47(23)**

Numbers in ( ) indicate spills not mapped and profiled in this report, and are listed at the end of the active and closed spills sections. See these lists for a description of the parameters involved with identifying these spills.

* NYC Environmental Quality Review Requirements ("E") Sites were searched at 250 feet.

NOTE: Table continues on next page.

Non−ASTM Databases 1/2 Mile Search						
1934 NYC Municipal Waste Landfills	0	0	0	0	Not searched	0
Hazardous Substance Waste Disposal Sites	0	0	0	0	Not searched	0
Non−ASTM Databases 1/8 Mile Search						
Toxic Release Inventory Sites (TRI)	0	0	Not searched	Not searched	Not searched	0
Permit Compliance System (PCS) Toxic Wastewater Discharges	0	0	Not searched	Not searched	Not searched	0
Air Discharges	0	0	Not searched	Not searched	Not searched	0
Civil & Administrative Enforcement Docket Facilities	0	0	Not searched	Not searched	Not searched	0
Non−ASTM Databases Distance Interval Totals	**0**	**0**	**0**	**0**	**Not Searched**	**0**
Distance Interval Totals	***5***	***17***	***13(10)***	***10(13)***	***2***	***47(23)***

Numbers in ( ) indicate spills not mapped and profiled in this report, and are listed at the end of the active and closed spills sections. See these lists for a description of the parameters involved with identifying these spills.

Identified Toxic Sites by Direction

Charleston
Staten Island, NY 10309

* Compass directions can vary substantially for sites located very close to the subject property address.

Sites less than 100 feet from subject property sorted by distance

Map Id#	Site Name	Site Street	Approximate Distance & Direction From Property	Toxic Site Category
14		ENGLEWOOD AVE	0 feet	Closed Status Spill (Unk/Other Cause)
40	JOHN IPPOLITO	4700 ARTHUR KILL ROAD	62 feet to the W*	Hazardous Waste Generator/Transporter
41	NYCT − CHARLESTON BUS ANNEX	4700 ARTHUR KILL RD	62 feet to the W*	Hazardous Waste Generator/Transporter
42	MAL CONTRACTING INC	2505 VETERANS ROAD WEST	84 feet to the SW*	Hazardous Waste Generator/Transporter
32	COMMERCIAL	43 ENGLEWOOD AVE	86 feet to the NNW*	Closed Status Spill (Misc. Spill Cause)

Sites between 100 ft and 660 ft from the subject property sorted by direction and distance

Map Id#	Site Name	Site Street	Approximate Distance & Direction From Property	Toxic Site Category
16	97 ENGLEWOOD AVENUE	97 ENGLEWOOD AVENUE	147 feet to the N*	Closed Status Spill (Unk/Other Cause)
17	97 INGLEWOOD AVE	97 INGLEWOOD AVE	147 feet to the N*	Closed Status Spill (Unk/Other Cause)
18	LUCIANO RESIDENCE	97 ENGLEWOOD AVENUE	147 feet to the N*	Closed Status Spill (Unk/Other Cause)
19	HOME DEPOT PARKING LOT	TYRELLAN AVE AND VETERANS RD W	394 feet to the ESE	Closed Status Spill (Unk/Other Cause)
45	HOME DEPOT #HD1281	2750 VETERANS RD W	435 feet to the ESE	Hazardous Waste Generator/Transporter
44	TARGET 2006	2900 VETERANS RD W	256 feet to the S	Hazardous Waste Generator/Transporter
43	MOORE SELF STORAGE	3−26 VETERANS RD W	187 feet to the SW*	Hazardous Waste Generator/Transporter
3	JOHN IPPOLITO TRUCKING &	ARTHUR KILL & VETERAN RD WEST	155 feet to the WSW*	Solid Waste Facility
34	POLE	ARTHUR KILL RD/ALLEN TOWN	155 feet to the WSW*	Closed Status Spill (Misc. Spill Cause)
47	CHARLESTON BUS ANNEX	4700 ARTHUR KILL RD	111 feet to the W*	Chemical Bulk Storage Facility
33	CHARLESTON BUS DEPOT	4700 AURTHER KILL RD	147 feet to the W*	Closed Status Spill (Misc. Spill Cause)
39	CHARLESTON BUS ANNEX	4700 ARTHUR KILL ROAD	147 feet to the W*	Petroleum Bulk Storage Site
36	POLE 33	4500 ARTHUR KILL RD	527 feet to the WNW	Closed Status Spill (Misc. Spill Cause)
15	TRUCK HIT POLE #32278, XFMR LEAKING	IN FRONT OF 21 ENGLEWOOD AVENUE	102 feet to the NW*	Closed Status Spill (Unk/Other Cause)
35	IN FRONT OF	4414 ARTHUR KILL RD	255 feet to the NW	Closed Status Spill (Misc. Spill Cause)
46	A TO Z AUTO BODY INC ATTN:TONY	4409 ARTHUR KILL ROAD	501 feet to the NW	Hazardous Waste Generator/Transporter
20	4465 ARTHURKILL RD ISLAND ENVIRONMENTAL TANK	4465 ARTHURKILL RD	590 feet to the NW	Closed Status Spill (Unk/Other Cause)

Sites e ual to or reater than 660 ft from subject property sorted by direction and distance

Map Id#	Site Name	Site Street	Approximate Distance & Direction From Property	Toxic Site Category
37	NEXT TO	420 SHARROTTS RD	1454 feet to the N	Closed Status Spill (Misc. Spill Cause)
38	TANK IFO NEW BUILDING	131 STORER AVE	1813 feet to the N	Closed Status Spill (Misc. Spill Cause)
31	37 SALAMANDER CT	37 SALAMANDER CT	2538 feet to the NE	Closed Status Spill (Unk/Other Cause)
10	PRIVATE RESIDENCE	140 WEINER STREET	2325 feet to the SSE	Closed Status Tank Failure
9	OUTERBRIDGE CROSSING	101 BOSCOMBE AVE	1681 feet to the S	Closed Status Tank Failure
27	BUSINESS PROPERTY	50 SOUTH BRIDGE STREET	1301 feet to the SSW	Closed Status Spill (Unk/Other Cause)
5	E. G. CLEMENTE CONTRACTIN	S BRIDGE ST BLOCK 7584 LOT 122	1306 feet to the SSW	Solid Waste Facility
13	CLOSED−LACKOF RECENT INFO	4865 ARTHUR KING RD	1710 feet to the SSW	Closed Status Tank Test Failure
1	NASSAU RECYCLING CORP.	286 RICHMOND VALLEY ROAD	2701 feet to the SSW	NYSDEC Inactive Haz Waste Disposal Site
11	OUTER BRIDGE CROSSING	ARTHURKILL/N.BRIDGE ROAD	1029 feet to the SW	Closed Status Tank Test Failure
6	OUTER BRIDGE CROSSING	ARTHUR KILL ROAD	1104 feet to the SW	Closed Status Tank Failure
7	PORT AUTHORITY OUTERBRDG	OUTERBRIDGE CROSSING	1104 feet to the SW	Closed Status Tank Failure
12	PORT AUTH/OUTERBRIDGE	PORT AUTH/OUTERBRIDGE	1104 feet to the SW	Closed Status Tank Test Failure
24	UNDER BRIDGE ABUTEMENT	OUTERBRIDGE CROSSING	1104 feet to the SW	Closed Status Spill (Unk/Other Cause)
25	UNDER THE OUTER BRIDGE	CROSSING ARTHUR KILL	1104 feet to the SW	Closed Status Spill (Unk/Other Cause)
26	OUTERBRIDGE CROSSING	OUTERBRIDGE CROSSING	1104 feet to the SW	Closed Status Spill (Unk/Other Cause)
8	VACANT BUILDING	4849 ARTHURKILL ROAD	1542 feet to the SW	Closed Status Tank Failure
21	ARTHUR KILL ROAD AT	KREISCHER STREET	789 feet to the WNW	Closed Status Spill (Unk/Other Cause)
28	122 ANDROVETTE ST	122 ANDROVETTE ST	1453 feet to the WNW	Closed Status Spill (Unk/Other Cause)
22	RENTAL PROPERTY	53 ANDROVETTE ST	900 feet to the NW	Closed Status Spill (Unk/Other Cause)
23	TNT TRANSPORTATION − MISC	10 MANLEY STREET	1017 feet to the NW	Closed Status Spill (Unk/Other Cause)
4	OMEGA CARTING		1210 feet to the NW	Solid Waste Facility
29	AUTOSHOP	110 WINANT PL	1853 feet to the NW	Closed Status Spill (Unk/Other Cause)
30	ED MAYERS	120 WINANT PLACE	1951 feet to the NW	Closed Status Spill (Unk/Other Cause)
2	PORT MOBIL TERMINAL	4101 ARTHURKILL RD	4213 feet to the NNW	RCRA Corrective Action Site

Identified Toxic Sites by Cate ory

Charleston
Staten Island, NY 10309

* Compass directions can vary substantially for sites located very close to the subject property address.

NYSD C Inacti e a aste Disposal Site e istry Total Sites 1 — **Database searched at 1 l ST re uired search distance 1 ile**

MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET	DISTANCE & DIRECTION
1	243004	NASSAU RECYCLING CORP.	286 RICHMOND VALLEY ROAD	2701 feet to the SSW

C Correcti e ction Sites Total Sites 1 — **Database searched at 1 l ST re uired search distance 1 ile**

MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET	DISTANCE & DIRECTION
2	NYD000824516	PORT MOBIL TERMINAL	4101 ARTHURKILL RD	4213 feet to the NNW

Solid aste acilities Total Sites 3 — **Database searched at 1 l ST re uired search distance 1 ile**

MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET	DISTANCE & DIRECTION
3	43W03	JOHN IPPOLITO TRUCKING &	ARTHUR KILL & VETERAN RD WEST	155 feet to the WSW*
4	43T15	OMEGA CARTING		1210 feet to the NW
5	43W38	E. G. CLEMENTE CONTRACTIN	S BRIDGE ST BLOCK 7584 LOT 122	1306 feet to the SSW

Closed Status Tan ailures Total Sites — **Database searched at 1 l ST re uired search distance 1 ile**

MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET	DISTANCE & DIRECTION
6	9804075	OUTER BRIDGE CROSSING	ARTHUR KILL ROAD	1104 feet to the SW
7	9107077	PORT AUTHORITY OUTERBRDG	OUTERBRIDGE CROSSING	1104 feet to the SW
8	0502079	VACANT BUILDING	4849 ARTHURKILL ROAD	1542 feet to the SW
9	9905613	OUTERBRIDGE CROSSING	101 BOSCOMBE AVE	1681 feet to the S
10	0411887	PRIVATE RESIDENCE	140 WEINER STREET	2325 feet to the SSE

Closed Status Tan Test ailures Total Sites 3 — **Database searched at 1 l ST re uired search distance 1 ile**

MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET	DISTANCE & DIRECTION
11	9806016	OUTER BRIDGE CROSSING	ARTHURKILL/N.BRIDGE ROAD	1029 feet to the SW
12	9012142	PORT AUTH/OUTERBRIDGE	PORT AUTH/OUTERBRIDGE	1104 feet to the SW
13	9303798	CLOSED−LACKOF RECENT INFO	4865 ARTHUR KING RD	1710 feet to the SSW

Closed Status Spills n nown Causes ther Causes Total Sites 1 — **Database searched at 1 l ST re uired search distance 1 ile**

MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET	DISTANCE & DIRECTION
14	0401938		ENGLEWOOD AVE	0 feet
15	0710002	TRUCK HIT POLE #32278, XFMR LEAKING	IN FRONT OF 21 ENGLEWOOD AVENUE	102 feet to the NW*
16	9315579	97 ENGLEWOOD AVENUE	97 ENGLEWOOD AVENUE	147 feet to the N*
17	9314553	97 INGLEWOOD AVE	97 INGLEWOOD AVE	147 feet to the N*
18	9314325	LUCIANO RESIDENCE	97 ENGLEWOOD AVENUE	147 feet to the N*
19	1011068	HOME DEPOT PARKING LOT	TYRELLAN AVE AND VETERANS RD W	394 feet to the ESE
20	0806757	4465 ARTHURKILL RD ISLAND ENVIRONMENTAL TANK	4465 ARTHURKILL RD	590 feet to the NW
21	0308839	ARTHUR KILL ROAD AT	KREISCHER STREET	789 feet to the WNW
22	0812762	RENTAL PROPERTY	53 ANDROVETTE ST	900 feet to the NW
23	0400679	TNT TRANSPORTATION − MISC	10 MANLEY STREET	1017 feet to the NW
24	9807252	UNDER BRIDGE ABUTEMENT	OUTERBRIDGE CROSSING	1104 feet to the SW
25	9603658	UNDER THE OUTER BRIDGE	CROSSING ARTHUR KILL	1104 feet to the SW
26	9400422	OUTERBRIDGE CROSSING	OUTERBRIDGE CROSSING	1104 feet to the SW
27	0611178	BUSINESS PROPERTY	50 SOUTH BRIDGE STREET	1301 feet to the SSW
28	9904392	122 ANDROVETTE ST	122 ANDROVETTE ST	1453 feet to the WNW
29	9513151	AUTOSHOP	110 WINANT PL	1853 feet to the NW
30	0230020	ED MAYERS	120 WINANT PLACE	1951 feet to the NW
31	9706507	37 SALAMANDER CT	37 SALAMANDER CT	2538 feet to the NE

Closed Status Spills iscellaneous Spill Causes Total Sites **Database searched at 1 l ST re uired search distance 1 ile**

MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET	DISTANCE & DIRECTION
32	0910978	COMMERCIAL	43 ENGLEWOOD AVE	86 feet to the NNW*
33	1111961	CHARLESTON BUS DEPOT	4700 AURTHER KILL RD	147 feet to the W*
34	0805977	POLE	ARTHUR KILL RD/ALLEN TOWN	155 feet to the WSW*
35	0210417	IN FRONT OF	4414 ARTHUR KILL RD	255 feet to the NW
36	1110147	POLE 33	4500 ARTHUR KILL RD	527 feet to the WNW
37	9611350	NEXT TO	420 SHARROTTS RD	1454 feet to the N
38	0604966	TANK IFO NEW BUILDING	131 STORER AVE	1813 feet to the N

etroleum ul Stora e Sites Total Sites 1 **Database searched at 1 l ST re uired search distance roperty djacent**

MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET	DISTANCE & DIRECTION
39	2−610987	CHARLESTON BUS ANNEX	4700 ARTHUR KILL ROAD	147 feet to the W*

a ardous aste enerators, Transporters Total Sites **Database searched at 1 l ST re uired search distance roperty djacent**

MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET	DISTANCE & DIRECTION
40	NYN20002A276	JOHN IPPOLITO	4700 ARTHUR KILL ROAD	62 feet to the W*
41	NYR000179440	NYCT − CHARLESTON BUS ANNEX	4700 ARTHUR KILL RD	62 feet to the W*
42	NYN20002A299	MAL CONTRACTING INC	2505 VETERANS ROAD WEST	84 feet to the SW*
43	NYR000132761	MOORE SELF STORAGE	3−26 VETERANS RD W	187 feet to the SW*
44	NYR000136655	TARGET 2006	2900 VETERANS RD W	256 feet to the S
45	NYR000138784	HOME DEPOT #HD1281	2750 VETERANS RD W	435 feet to the ESE
46	NYD982736977	A TO Z AUTO BODY INC ATTN:TONY	4409 ARTHUR KILL ROAD	501 feet to the NW

Chemical ul Stora e acilities Total Sites 1 **Database searched at 1 l ST re uired search distance roperty djacent**

MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET	DISTANCE & DIRECTION
47	2−000483	CHARLESTON BUS ANNEX	4700 ARTHUR KILL RD	111 feet to the W*

Identified Toxic Sites by roximity

Charleston, Staten Island, NY 10309

* Compass directions can vary substantially for sites located very close to the subject property address.

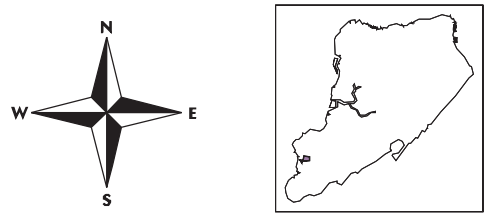
Map Id#	Site Name	Site Street	Approximate Distance & Direction From Property	Toxic Site Category
14		ENGLEWOOD AVE	0 feet	Closed Status Spill (Unk/Other Cause)
40	JOHN IPPOLITO	4700 ARTHUR KILL ROAD	62 feet to the W*	Hazardous Waste Generator/Transporter
41	NYCT − CHARLESTON BUS ANNEX	4700 ARTHUR KILL RD	62 feet to the W*	Hazardous Waste Generator/Transporter
42	MAL CONTRACTING INC	2505 VETERANS ROAD WEST	84 feet to the SW*	Hazardous Waste Generator/Transporter
32	COMMERCIAL	43 ENGLEWOOD AVE	86 feet to the NNW*	Closed Status Spill (Misc. Spill Cause)
15	TRUCK HIT POLE #32278, XFMR LEAKING	IN FRONT OF 21 ENGLEWOOD AVENUE	102 feet to the NW*	Closed Status Spill (Unk/Other Cause)
47	CHARLESTON BUS ANNEX	4700 ARTHUR KILL RD	111 feet to the W*	Chemical Bulk Storage Facility
16	97 ENGLEWOOD AVENUE	97 ENGLEWOOD AVENUE	147 feet to the N*	Closed Status Spill (Unk/Other Cause)
17	97 INGLEWOOD AVE	97 INGLEWOOD AVE	147 feet to the N*	Closed Status Spill (Unk/Other Cause)
18	LUCIANO RESIDENCE	97 ENGLEWOOD AVENUE	147 feet to the N*	Closed Status Spill (Unk/Other Cause)
33	CHARLESTON BUS DEPOT	4700 AURTHER KILL RD	147 feet to the W*	Closed Status Spill (Misc. Spill Cause)
39	CHARLESTON BUS ANNEX	4700 ARTHUR KILL ROAD	147 feet to the W*	Petroleum Bulk Storage Site
3	JOHN IPPOLITO TRUCKING &	ARTHUR KILL & VETERAN RD WEST	155 feet to the WSW*	Solid Waste Facility
34	POLE	ARTHUR KILL RD/ALLEN TOWN	155 feet to the WSW*	Closed Status Spill (Misc. Spill Cause)
43	MOORE SELF STORAGE	3−26 VETERANS RD W	187 feet to the SW*	Hazardous Waste Generator/Transporter
35	IN FRONT OF	4414 ARTHUR KILL RD	255 feet to the NW	Closed Status Spill (Misc. Spill Cause)
44	TARGET 2006	2900 VETERANS RD W	256 feet to the S	Hazardous Waste Generator/Transporter
19	HOME DEPOT PARKING LOT	TYRELLAN AVE AND VETERANS RD W	394 feet to the ESE	Closed Status Spill (Unk/Other Cause)
45	HOME DEPOT #HD1281	2750 VETERANS RD W	435 feet to the ESE	Hazardous Waste Generator/Transporter
46	A TO Z AUTO BODY INC ATTN:TONY	4409 ARTHUR KILL ROAD	501 feet to the NW	Hazardous Waste Generator/Transporter
36	POLE 33	4500 ARTHUR KILL RD	527 feet to the WNW	Closed Status Spill (Misc. Spill Cause)
20	4465 ARTHURKILL RD ISLAND ENVIRONMENTAL TANK	4465 ARTHURKILL RD	590 feet to the NW	Closed Status Spill (Unk/Other Cause)
21	ARTHUR KILL ROAD AT	KREISCHER STREET	789 feet to the WNW	Closed Status Spill (Unk/Other Cause)
22	RENTAL PROPERTY	53 ANDROVETTE ST	900 feet to the NW	Closed Status Spill (Unk/Other Cause)
23	TNT TRANSPORTATION − MISC	10 MANLEY STREET	1017 feet to the NW	Closed Status Spill (Unk/Other Cause)
11	OUTER BRIDGE CROSSING	ARTHURKILL/N.BRIDGE ROAD	1029 feet to the SW	Closed Status Tank Test Failure
6	OUTER BRIDGE CROSSING	ARTHUR KILL ROAD	1104 feet to the SW	Closed Status Tank Failure
7	PORT AUTHORITY OUTERBRDG	OUTERBRIDGE CROSSING	1104 feet to the SW	Closed Status Tank Failure
12	PORT AUTH/OUTERBRIDGE	PORT AUTH/OUTERBRIDGE	1104 feet to the SW	Closed Status Tank Test Failure
24	UNDER BRIDGE ABUTEMENT	OUTERBRIDGE CROSSING	1104 feet to the SW	Closed Status Spill (Unk/Other Cause)
25	UNDER THE OUTER BRIDGE	CROSSING ARTHUR KILL	1104 feet to the SW	Closed Status Spill (Unk/Other Cause)
26	OUTERBRIDGE CROSSING	OUTERBRIDGE CROSSING	1104 feet to the SW	Closed Status Spill (Unk/Other Cause)
4	OMEGA CARTING		1210 feet to the NW	Solid Waste Facility
27	BUSINESS PROPERTY	50 SOUTH BRIDGE STREET	1301 feet to the SSW	Closed Status Spill (Unk/Other Cause)
5	E. G. CLEMENTE CONTRACTIN	S BRIDGE ST BLOCK 7584 LOT 122	1306 feet to the SSW	Solid Waste Facility
28	122 ANDROVETTE ST	122 ANDROVETTE ST	1453 feet to the WNW	Closed Status Spill (Unk/Other Cause)
37	NEXT TO	420 SHARROTTS RD	1454 feet to the N	Closed Status Spill (Misc. Spill Cause)
8	VACANT BUILDING	4849 ARTHURKILL ROAD	1542 feet to the SW	Closed Status Tank Failure
9	OUTERBRIDGE CROSSING	101 BOSCOMBE AVE	1681 feet to the S	Closed Status Tank Failure
13	CLOSED−LACKOF RECENT INFO	4865 ARTHUR KING RD	1710 feet to the SSW	Closed Status Tank Test Failure
38	TANK IFO NEW BUILDING	131 STORER AVE	1813 feet to the N	Closed Status Spill (Misc. Spill Cause)
29	AUTOSHOP	110 WINANT PL	1853 feet to the NW	Closed Status Spill (Unk/Other Cause)
30	ED MAYERS	120 WINANT PLACE	1951 feet to the NW	Closed Status Spill (Unk/Other Cause)
10	PRIVATE RESIDENCE	140 WEINER STREET	2325 feet to the SSE	Closed Status Tank Failure
31	37 SALAMANDER CT	37 SALAMANDER CT	2538 feet to the NE	Closed Status Spill (Unk/Other Cause)

1	NASSAU RECYCLING CORP.	286 RICHMOND VALLEY ROAD	2701 feet to the SSW	NYSDEC Inactive Haz Waste Disposal Site
2	PORT MOBIL TERMINAL	4101 ARTHURKILL RD	4213 feet to the NNW	RCRA Corrective Action Site

Toxics Targeting
1 Mile Buffer Search Map

Charleston

Staten Island, NY 10309



Richmond County

National Priority List (NPL)

Inactive Hazardous Waste Disposal Registry Site

Inact. Haz Waste Disp. Registry Qualifying

RCRA Corrective Action Facility

Subject Area

Waterbody

County Border

Railroad Tracks

1 Mile Radius

1/2 Mile Radius

1/4 Mile Radius

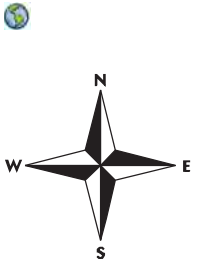
1/8 Mile Radius

Scale: 1 inch = 1988 feet

Toxics Targeting
1/2 Mile Buffer Search Map

Charleston

Staten Island, NY 10309



Richmond County

- Delisted NPL Site
- CERCLIS Superfund Non-NFRAP Site
- CERCLIS Superfund NFRAP Site
- Hazardous Waste Treater, Storer, Disposer
- Hazardous Substance Waste Disposal Site
- Solid Waste Facility
- Brownfields Site
- Hazardous Material Spill

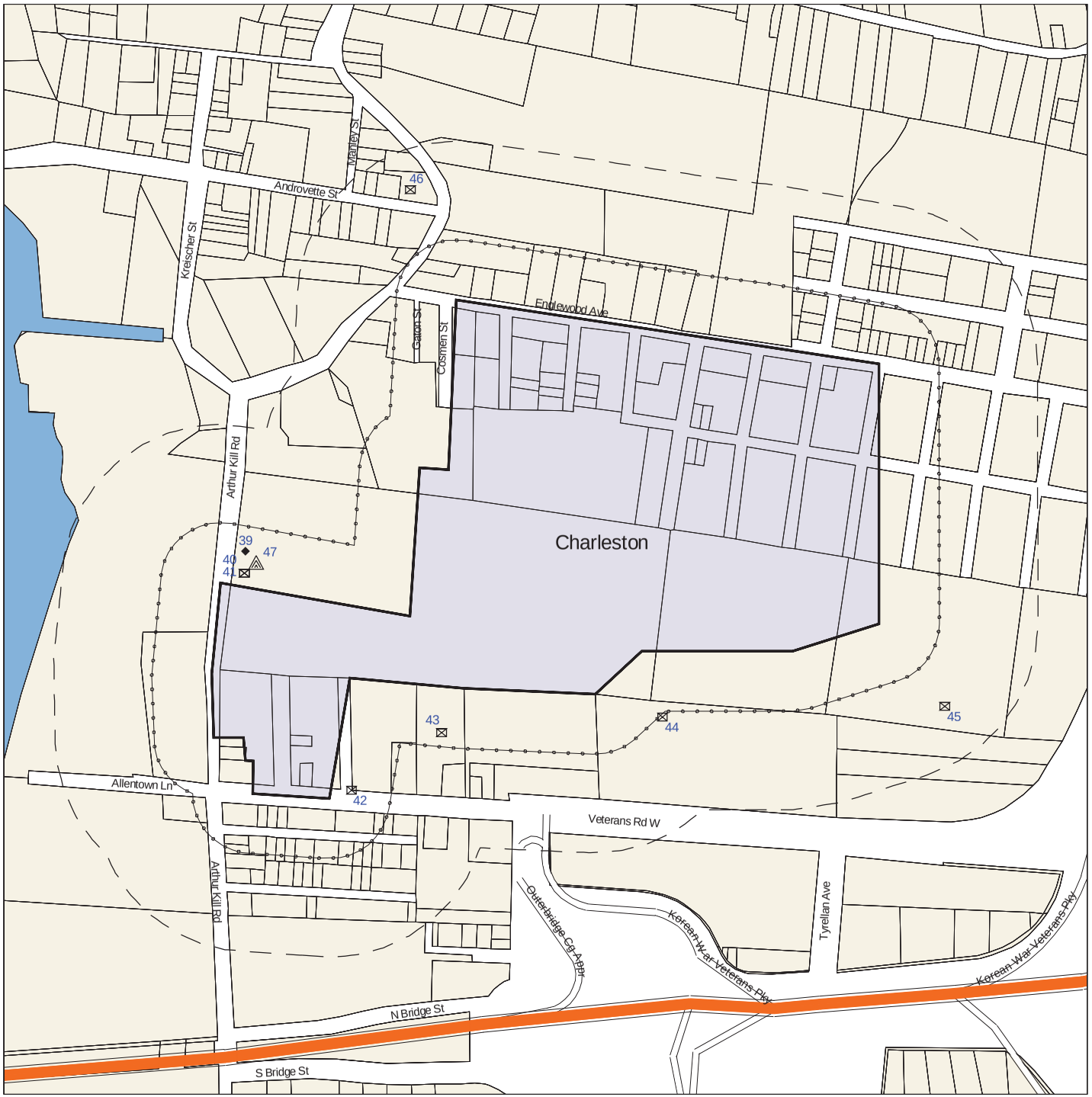
- Subject Area
- Waterbody
- County Border
- Railroad Tracks
- 1 Mile Radius
- 1/2 Mile Radius
- 1/4 Mile Radius
- 1/8 Mile Radius

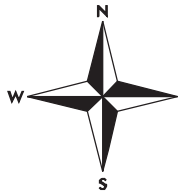
Scale: 1 inch = 1201 feet

Toxics Targeting
1/8 Mile Buffer Search Map

Charleston

Staten Island, NY 10309

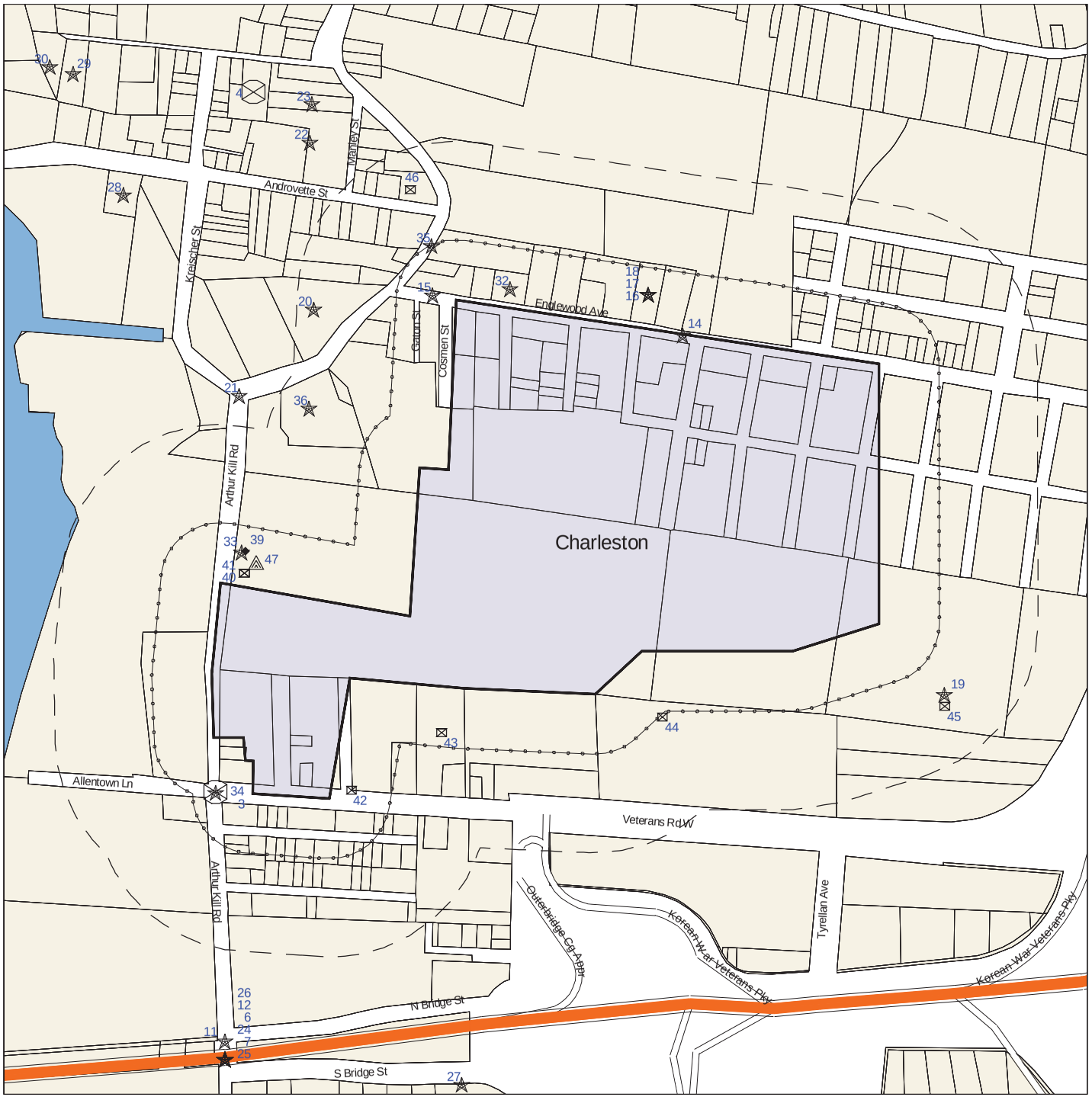




Richmond County

- Major Oil Storage Facility
- Chemical Storage Facility
- Toxic Release
- Wastewater Discharge
- Hazardous Waste Generator, Transp.
- Enforcement Docket Facility
- Air Release
- Env Qual Review E Designation
- Petroleum Bulk Storage Facility
- Historic Utility Site
- Subject Area
- County Border
- 1/8 Mile Radius
- Waterbody
- Railroad Tracks
- 250 Foot Radius

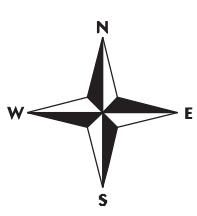
Scale: 1 inch = 610 feet



Toxics Targeting
1/8 Mile Buffer Closeup Map

Charleston

Staten Island, NY 10309



Richmond County

- National Priority List (NPL) *
- Delisted NPL Site **
- CERCLIS Superfund Non-NFRAP Site **
- CERCLIS Superfund NFRAP Site **
- Inactive Hazardous Waste Disposal Registry Site *
- Inact. Haz Waste Disp. Registry Qualifying *
- Hazardous Waste Treater, Storer, Disposer **
- RCRA Corrective Action Facility *
- Hazardous Substance Waste Disposal Site **
- Solid Waste Facility **
- Major Oil Storage Facility ****
- Brownfields Site **
- Chemical Storage Facility ****
- Hazardous Material Spill **
- Toxic Release ****
- Wastewater Discharge ****
- Petroleum Bulk Storage Facility ****
- Hazardous Waste Generator, Transp. ****
- Historic Utility Site ****
- Enforcement Docket Facility ****
- Air Release ****
- Env Qual Review E Designation *****
- Remediation Site Borders
- Subject Area
- Waterbody
- County Border
- Railroad Tracks
- 1/8 Mile Radius
- 250 Foot Radius

Scale: 1 inch = 610 feet

* 1 Mile Search Radius

** 1/2 Mile Search Radius

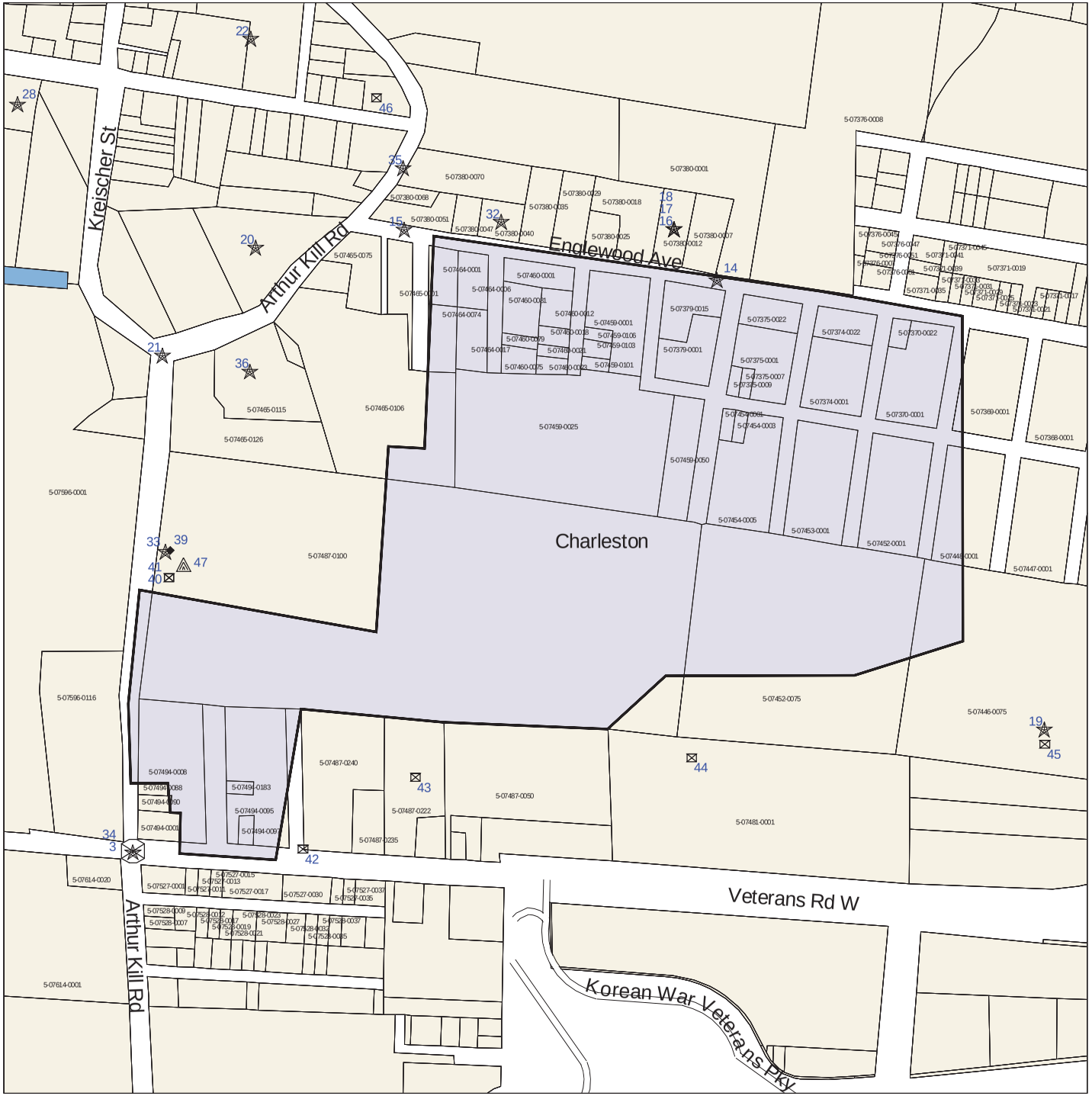
**** 1/8 Mile Search Radius

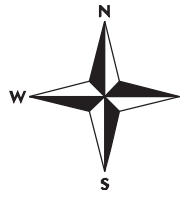
***** Onsite Search (250 Ft)

Toxics Targeting
Tax Parcel Map

Charleston

Staten Island, NY 10309





Richmond County

- National Priority List (NPL)
- Delisted NPL Site
- CERCLIS Superfund Non-NFRAP Site
- CERCLIS Superfund NFRAP Site
- Inactive Hazardous Waste Disposal Registry Site
- Inact. Haz Waste Disp. Registry Qualifying
- Hazardous Waste Treater, Storer, Disposer
- RCRA Corrective Action Facility
- Hazardous Substance Waste Disposal Site
- Solid Waste Facility
- Major Oil Storage Facility
- Brownfields Site
- Chemical Storage Facility
- Hazardous Material Spill
- Toxic Release
- Wastewater Discharge
- Petroleum Bulk Storage Facility
- Hazardous Waste Generator, Transp.
- Historic Utility Site
- Enforcement Docket Facility
- Air Release
- Env Qual Review E Designation
- Remediation Site Borders
- Subject Area
- Waterbody
- County Border
- Railroad Tracks

Scale: 1 inch = 488 feet

Tax arcel Information Table

Charleston
Staten Island, NY 10309

Subject arcel or arcels

BBL #	Address	Owner	Zoning District(s)	Building Class	# of Buildings	Year Built	Assessment	Lot Area
5-07369-0001	ALICE STREET	DEPT OF GENERAL SERVI	M1-1	V1	0		119250	68000
5-07370-0001	CLAUDE STREET	DEPT OF GENERAL SERVI	M1-1	V1	0		186300	62000
5-07370-0022	ENGLEWOOD AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		21060	6000
5-07374-0001	BURR AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		168300	48000
5-07374-0022	BURR AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		70200	20000
5-07375-0001	CADY AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		140400	40000
5-07375-0007	CADY AVENUE	BLOCK 7375 CORP	M1-1	V1	0		14040	4000
5-07375-0009	CADY AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		14040	4000
5-07375-0022	ENGLEWOOD AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		70200	20000
5-07379-0001	CADY AVENUE	ENGLEWOOD MANOR INC C	M1-1	V1	0		133200	38000
5-07379-0015	PEMBINE STREET	DEPT OF GENERAL SERVI	M1-1	V1	0		115200	32800
5-07446-0075	BAXTER STREET	DEPT OF GENERAL SERVI	M1-1	V1	0		2029500	506625
5-07448-0001	CADY AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		307350	78600
5-07452-0001	CADY AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		307350	78600
5-07452-0075	CLAUDE STREET	DEPT OF GENERAL SERVI	M1-1	V1	0		2191500	546700
5-07453-0001	CADY AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		307350	78600
5-07454-0001	CADY AVENUE	DEPT OF GENERAL SERVI	M1-1	V9	0		15615	4000
5-07454-0003	CADY AVENUE	DEPT OF GENERAL SERVI	M1-1	V9	0		15615	4000
5-07454-0005	CADY AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		275400	70600
5-07459-0001	ENGLEWOOD AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		210600	54000
5-07459-0025	BAYNE AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		1183500	294620
5-07459-0050	BAYNE AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		157500	40300
5-07459-0101	3 STREET	DEPT OF GENERAL SERVI	M1-1	V9	0		16020	4000
5-07459-0103	3 STREET	DEPT OF GENERAL SERVI	M1-1	V9	0		23535	6000
5-07459-0106	3 STREET	DEPT OF GENERAL SERVI	M1-1	V9	0		16020	4000
5-07460-0001	ENGLEWOOD AVENUE	DEPT OF GENERAL SERVI	M1-1	V9	0		90000	23100
5-07460-0012	3 STREET	DEPT OF GENERAL SERVI	M1-1	V9	0		47250	12000
5-07460-0018	3 STREET	DEPT OF GENERAL SERVI	M1-1	V9	0		23535	6000
5-07460-0021	3 STREET	DEPT OF GENERAL SERVI	M1-1	V9	0		16020	4000
5-07460-0023	3 STREET	DEPT OF GENERAL SERVI	M1-1	V9	0		23535	6000
5-07460-0075	COSMEN STREET	DEPT OF GENERAL SERVI	M1-1	V9	0		37575	9600
5-07460-0079	COSMEN STREET	DEPT OF GENERAL SERVI	M1-1	V9	0		19035	4880
5-07460-0081	COSMEN STREET	DEPT OF GENERAL SERVI	M1-1	V9	0		79650	20320
5-07464-0001	30 ENGLEWOOD AVENUE	S SZASZ	M1-1	A2	1	1955	27192	20100
5-07464-0006	40 ENGLEWOOD AVENUE	THE MANGAN/SZASZ LIVI	M1-1	A2	1	1955	26867	20100
5-07464-0017	COSMEN STREET	DEPAULIS HLDG CO	M1-1	V1	0		45000	18000
5-07464-0074	40 GATON STREET	ALBERT VITALE	M1-1	E4	1	2000	81450	20188
5-07465-0106	4484 ARTHUR KILL ROAD	COL RIFLE&PISTOL CLUB	M1-1	P9	1	1959	332820	278000
5-07487-0100	ARTHUR KILL ROAD	DEPT OF GENERAL SERVI	M1-1	V1	0		4207500	1413522
5-07494-0008	VETERANS ROAD WEST	DEPT OF GENERAL SERVI	M1-1	V1	0		338400	75000
5-07494-0095	VETERANS ROAD WEST	DEPT OF GENERAL SERVI	M1-1	V1	0		370800	82200
5-07494-0097	VETERANS ROAD WEST	DEPT OF GENERAL SERVI	M1-1	V1	0		16920	3760
5-07494-0183	BECKMAN STREET	DEPT OF GENERAL SERVI	M1-1	V9	0		18045	4000

ther arcels ound n The Tax arcel ap

BBL #	Address	Owner	Zoning District(s)	Building Class	# of Buildings	Year Built	Assessment	Lot Area
5-07368-0001	CADY AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		119250	68000

BBL #	Address	Owner	Zoning District(s)	Building Class	# of Buildings	Year Built	Assessment	Lot Area
5-07371-0017	ENGLEWOOD AVENUE	DEPT OF GENERAL SERVI	M1-1	V8	0		3006	4000
5-07371-0019	ENGLEWOOD AVENUE	NEW YORK STATE OWNED	PARKNY	Q0	0		33075	44000
5-07371-0021	ENGLEWOOD AVENUE	NEW YORK STATE OWNED	PARKNY	Q0	0		3006	4000
5-07371-0023	ENGLEWOOD AVENUE	NEW YORK STATE OWNED	PARKNY	Q0	0		10035	4000
5-07371-0025	ENGLEWOOD AVENUE	NEW YORK STATE OWNED	PARKNY	Q0	0		20025	8000
5-07371-0029	ENGLEWOOD AVENUE	NEW YORK STATE OWNED	PARKNY	Q0	0		15030	4000
5-07371-0031	ENGLEWOOD AVENUE	NEW YORK STATE OWNED	PARKNY	Q0	0		15030	4000
5-07371-0033	ENGLEWOOD AVENUE	NEW YORK STATE OWNED	PARKNY	Q0	0		15030	4000
5-07371-0035	KENT STREET	NEW YORK STATE OWNED	PARKNY	Q0	0		30060	8000
5-07371-0039	KENT STREET	NEW YORK STATE OWNED	PARKNY	Q0	0		15030	4000
5-07371-0041	KENT STREET	NEW YORK STATE OWNED	PARKNY	Q0	0		30060	8000
5-07371-0045	HARGOLD AVENUE	NEW YORK STATE OWNED	PARKNY	Q0	0		15030	4000
5-07376-0001	ENGLEWOOD AVENUE	LOMBARDI JOHN	M1-1	V1	0		30060	8000
5-07376-0007	ENGLEWOOD AVENUE	THE FAMULARO REV FAMI	M1-1	V1	0		10170	2700
5-07376-0008	ENGLEWOOD AVENUE	NORTH AMERICAN FOREIG	PARKNY	Q0	0		900000	359370
5-07376-0045	HARGOLD AVENUE	THE FAMULARO REV FAMI	M1-1	V1	0		15030	4000
5-07376-0047	HARGOLD AVENUE	THE FAMULARO REV FAMI	M1-1	V1	0		30060	8000
5-07376-0051	KENT STREET	THE FAMULARO REV FAMI	M1-1	V1	0		14040	4000
5-07380-0001	ENGLEWOOD AVENUE	NORTH AMERICAN FOREIG	M1-1	V1	0		463500	168577
5-07380-0007	107 ENGLEWOOD AVENUE	DONTIS NICHOLAS	M1-1	C0	2	1915	20528	31617
5-07380-0012	97 ENGLEWOOD AVENUE	JOANNE LUCIANO	M1-1	B2	1	1915	17002	25500
5-07380-0018	65 ENGLEWOOD AVENUE	ALBANO PETER	M1-1	S1	5	1940	78624	45329
5-07380-0025	61 ENGLEWOOD AVENUE	A-1 HOUSING CORP	M1-1	G2	1	1988	59850	14602
5-07380-0029	55 ENGLEWOOD AVENUE	R N R DEVELOPERS LLC	M1-1	O9	1	2000	59400	26280
5-07380-0035	49 ENGLEWOOD AVENUE	ENGLEWOOD MNGT LLC	M1-1	E1	1	1999	204750	26775
5-07380-0040	43 ENGLEWOOD AVENUE	BLOCK 7380 CONSTRUCTI	M1-1	A1	2	1915	17418	19600
5-07380-0047	31 ENGLEWOOD AVENUE	U C P OF NEW YORK INC	M1-1	N9	1	1960	17145	11070
5-07380-0051	21 ENGLEWOOD AVENUE	MC CUSKER, KEVIN	M1-1	S1	1	1930	31680	28054
5-07380-0068	4426 ARTHUR KILL ROAD	J SMITH CONSTRUCTION	M1-1	B2	2	1910	13684	8260
5-07380-0070	4414 ARTHUR KILL ROAD	ARENA ENRICO	M1-1	G9	1	1983	193050	53890
5-07447-0001	CADY AVENUE	DEPT OF GENERAL SERVI	M1-1	V1	0		308250	78800
5-07465-0001	ENGLEWOOD AVENUE	JPR GROUP HOLDINGS IN	M1-1	V1	0		117000	26000
5-07465-0075	4442 ARTHUR KILL ROAD	HANSON REALTY LLC	M1-1	O9	1	1990	441450	33621
5-07465-0115	4500 ARTHUR KILL ROAD	STATEN ISLAND LAND DE	M1-1	A7	3	1899	56640	81102
5-07465-0126	ARTHUR KILL ROAD	STATEN ISLAND LAND DE	M1-1	V1	0		185400	123200
5-07481-0001	VETERANS ROAD WEST	DEPT OF GENERAL SERVI	M1-1	V1	0		1552500	402570
5-07487-0050	3001 VETERANS ROAD WEST	OTTAVIO SAVO	M1-1	V1	0		517500	172480
5-07487-0222	3026 VETERANS ROAD WEST	SOUTH SHORE SAFE STOR	M1-1	E7	1	1997	535500	76390
5-07487-0235	3030 VETERANS ROAD WEST	GRACE FURSTMAN ETUX	M1-1	E1	1	1991	176850	20000
5-07487-0240	VETERANS ROAD WEST	ROSE DACHILLE	M1-1	V1	0		380700	106540
5-07494-0001	VETERANS ROAD WEST	JOHN&S.IPPOLITO	M1-1	V1	0		60300	13280
5-07494-0088	ARTHUR KILL ROAD	ANTONIO P RODRIGUES	M1-1	V1	0		18585	4000
5-07494-0090	ARTHUR KILL ROAD	DEPT OF GENERAL SERVI	M1-1	V9	0		32085	7200
5-07527-0001	VETERANS ROAD WEST	GIBBYBUNKPORT, L P	M1-1	V9	0		32580	13468
5-07527-0011	VETERANS ROAD WEST	GIBBYBUNKPORT, L P	M1-1	V9	0		14445	3600
5-07527-0013	VETERANS ROAD WEST	GIBBYBUNKPORT, L P	M1-1	V1	0		14265	3560
5-07527-0015	VETERANS ROAD WEST	GIBBYBUNKPORT, L P	M1-1	V9	0		14265	3560
5-07527-0017	3139 VETERANS ROAD WEST	DEPARTMENT OF HEALTH	M1-1	Y8	1	1994	301500	17600
5-07527-0030	2514 VETERANS ROAD WEST	JMB REALTY HOLDING CO	M1-1	F9	2	1905	89550	13820
5-07527-0035	VETERANS ROAD WEST	GIBBYBUNKPORT, L P	M1-1	V1	0		13770	3440
5-07527-0037	VETERANS ROAD WEST	FRANK CARNESI	M1-1	V9	0		13635	3400
5-07528-0007	4720 ARTHUR KILL ROAD	RICHARD L. BROWN	M1-1	A2	1	1901	6220	4000

BBL #	Address	Owner	Zoning District(s)	Building Class	# of Buildings	Year Built	Assessment	Lot Area
5−07528−0009	ARTHUR KILL ROAD	DEPT OF GENERAL SERVI	M1−1	V9	0		11025	4000
5−07528−0012	SCHMIEG AVENUE	DEPT OF GENERAL SERVI	M1−1	V9	0		20790	5928
5−07528−0017	SCHMIEG AVENUE	DEPT OF GENERAL SERVI	M1−1	V9	0		14040	4000
5−07528−0019	SCHMIEG AVENUE	OTTAVIO SAVO	M1−1	V9	0		14040	4000
5−07528−0021	SCHMIEG AVENUE	OTTAVIO SAVO	M1−1	V9	0		14040	4000
5−07528−0023	SCHMIEG AVENUE	OTTAVIO SAVO	M1−1	V9	0		27540	8000
5−07528−0027	SCHMIEG AVENUE	OTTAVIO SAVO	M1−1	V9	0		34065	10000
5−07528−0032	SCHMIEG AVENUE	OTTAVIO SAVO	M1−1	V1	0		20565	6000
5−07528−0035	SCHMIEG AVENUE	OTTAVIO SAVO	M1−1	V9	0		14040	4000
5−07528−0037	SCHMIEG AVENUE	OTTAVIO SAVO	M1−1	V9	0		14040	4000
5−07596−0001	ARTHUR KILL ROAD	PC GROUP LLC	R3−2 M1−1	V1	0		891001	3047018
5−07596−0116	4675 ARTHUR KILL ROAD	PC GROUP LLC	R3−2	V1	0		522000	138100
5−07614−0001	4741 ARTHUR KILL ROAD	CHRISTIAN A. BROWN	M3−1	E4	1	1931	208800	773190
5−07614−0020	4707 ARTHUR KILL ROAD	CAROL A. BUSHNELL	M3−1	F4	1	1931	160650	21700

Section Two: Toxic Site Profiles

The heading of each *Toxic Site Profile* refers to the site's map location and details:

- The facility name, address, city, state, and zip code.
- Any changes that were made to a site's address in order to map its location.
- The site mapping method that was used (see ***How Sites are Located***, at the end of this section for more information).

Toxic Site Profiles summarize information provided by site owners or operators and government agencies regarding various toxic chemical activities reported at each site, such as:

- Whether chemicals were stored, produced, transported, discharged or disposed of.
- The name of chemicals and their Chemical Abstract Series (CAS) numbers.
- The amount of chemicals and the units (gallons/pounds) the chemical was measured in.
- Whether the site or storage tanks at the site are currently active or inactive.
- Special codes used by government agencies to regulate hazardous waste activities at some sites, or a complete description of the codes follows the profiles section.

For selected individual chemicals reported at various toxic sites, some potential health effect summary information appears below the site profile. Each potential health effect summary identifies chemicals by name and by Chemical Abstract Series (CAS) Number. An "x" under each potential health effect heading indicates positive toxicity testing results reported by the National Institute of Occupational Safety and Health's Registry of Toxic Effects of Chemical Substances (RTECS). Some chemicals (mostly appearing in profiles of Hazardous Waste facilities), are reported as mixtures, and RTECS health effect information is only available for individual chemicals. In addition, RTECS only provides information on approximately 100,000 common chemicals. Consequently, the absence of potential health effect summary information for a particular chemical identified in a Toxic Site Profile does not necessarily mean that the chemical does not pose potential health effects.

The Maximum Contaminant Level (MCL) in drinking water allowed for selected chemicals is also noted. In most cases, the only applicable MCL has been set by the New York State Department of Health (NYSDOH). Where NYSDOH has not set an MCL, the federal standard, if one exists, is listed and is marked by an asterisk.

Presented below are column headings that describe the health effect definitions used in RTECS and applicable New York State and federal drinking water standards. Reference sources for information presented in this section are also provided.

ACUTE TOX: **Acute Toxicity**: Short-term exposure to this chemical can cause lethal and non-lethal toxicity effects not included in the following four categories.

TUMOR TOX: **Tumorigenic Toxicity**: The chemical can cause an increase in the incidence of tumors.

MUTA TOX: **ut genic Toxicity**: The chemical can cause genetic alterations that are passed from one generation to the next.

REPRO TOX: **e ro ucti e Toxicity**: May signify one of the following effects: maternal effects, paternal effects, effects on fertility, effects on the embryo or fetus, specific developmental abnormalities, tumorigenic effects, or effects on the newborn (only positive reproductive effects data for mammalian species are referenced).

IRRIT TOX: **Prim ry rrit nt**: The chemical can cause eye or skin irritation.

MCL: **rin ing ter St n r ximum ont min nt e el** (MCL) listed under Drinking Water Supplies, 10 NYCRR Part , Subparts 1. 1(f),(g), and (h) for NYDOH MCL's and under the Safe Drinking Water Act, 0 CFR 1 1, Subparts and , (indicates value for total trihalomethanes) for federal MCL's.

Reference Source for Toxicity Information: Registry of Toxic Effects of Chemical Substances (RTECS), NIOSH (on-line database) For further information, contact: NIOSH, Columbia Parkway, Cincinnati, OH, , 00/ -NIOSH.

Reference Source for Drinking Water Standards: New York State Department of Health, ureau of Toxic Substances Assessment, University Place, Room 0, Albany, NY 1 0 , 1 / - .

U.S. Environmental Protection Agency, Office of Drinking Water, 01 M St SW, Mailstop WH- , Washington, DC, 0 0, 0 / 0- 00.

Inactive Hazardous Waste Disposal Site Classifications:

1 -- Causing or presenting an imminent danger of causing irreversible or irreparable damage to the public health or the environment -- immediate action required
-- Significant threat to the public health or environment -- action required
-- Does not Present a significant threat to the environment or public health -- action may be deferred
-- Site properly closed --requires continued management
-- Site properly closed, no evidence of present or potential adverse impact -- no further action required
a -- This temporary classification has been assigned to sites where there is inadequate data to assign them to the five classifications specified by law
A -- Work underway and not yet complete
P -- Potential Site
$D_{1,}$, -- Delisted Site (1: hazardous waste not found : remediated : consolidated site or site incorrectly listed)
C -- Remediation Complete (formerly D).

NO NATIONAL PRIORITIES LIST (NPL) SITES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

INACTIVE HAZ WASTE DISPOSAL REGISTRY OR REGISTRY−QUALIFYING SITES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

PLEASE NOTE: * Compass directions can vary substantially for sites located very close to the subject property address.

Map Identification Number 1 **NASSAU RECYCLING CORP.** **Facility Id: 243004**
286 RICHMOND VALLEY ROAD STATEN ISLAND, NY TT−Id: 120A−0003−174

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING − LARGE SITE
Approximate distance from property: 2701 feet to the SSW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: 10307

This facility has been deleted from the reported data. Data reflects last reported information.

****

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL SITE INFORMATION

SITE CODE: 243004
CLASSIFICATION CODE: C REGION: 2 DEC ID: 55931
CLASSIFICATION CODE DESCRIPTION:
Remediation Complete (formerly D2). Sites may still require some degree of site management associated with either operation, maintenance, and monitoring or with institutional/engineering controls (IC/ECs).

NAME OF SITE: Nassau Recycling Corp.
STREET ADDRESS: 286 Richmond Valley Road TOWN: New York City
CITY: Staten Island ZIP: COUNTY: Richmond

SITE TYPE: Dump− Structure− Lagoon− Landfill−X Treatment Pond− ESTIMATED SIZE: 42.000 Acres

INSTITUTIONAL/ENGINEERING CONTROLS:
None reported

CROSS REFERENCES:

IDENTIFIER	SOURCE
NYD086225596	EPA Site ID
V00159	VC Site ID

SITE OWNER/OPERATOR INFORMATION:

CURRENT OWNER(S):
NAME: NASSAU RECYCLING CORP. Owner Type: Corporate or Commercial
ADDRESS: 286 RICHMOND VALLEY RD.
STATEN ISLAND, NY 10309

NAME: Nassau Recycling Corp.
ADDRESS: 286 Richmond Valley Road
Staten Island, NY 10309

OWNER(S) DURING DISPOSAL:
NAME: NASSAU RECYCLING CORP.
ADDRESS:

SITE DESCRIPTION:
The site is located in the western part of Staten Island just south of the Outerbridge Crossing. The site is bordered by tidal wetlands to the east and west, to the north by Richmond Valley Rd.(residential and commercial), the south by Nassau Place (residential) and the Staten Island Railroad. Mill Creek runs east-west across the property and divides the site. Page Avenue runs over the site (commercial properties). Between 1900 and the 1970's, portions of the site which had been low lying areas were filled with various materials. The site had such activities as lead refining and copper smelting. In the 1990's a building was constructed on the northern portion of the site for electroplating manufacturing, but all industrial operations ceased in 2001. All of the old buildings have been demolished. An investigation was completed in 1998 and a remedial action work plan was finalized in January 2002. The goal of the remediation is to encapsulate the hazardous fill and to minimize human and environmental exposure pathways. The remediation of the site will consist of the following: encapsulation of the upland areas of the site, placement of a bulkhead on the southern bank of Mill Creek (between Arthur Kill Road and Page Avenue), bank stabilization (using geotextiles and a soil cap) of the northern bank of Mill Creek, removal of one foot of contaminated sediment from Mill Creek (to be stabilized and placed on-site), capping of Mill Creek with one foot of clean sediment, and implementation of a deed restriction. Since hazardous wastes will be left on site (encapsulated) and continuous monitoring will be required, the Site will be listed on the New York State Registry of Inactive Hazardous Waste Disposal Sites as a Class 4 at the time remedial work is satisfactorily completed. The mobilization for remediation began in September 2006. This site is now being managed under the Voluntary Cleanup Program as site no. V00159. See that listing for further details.

CONFIRMED HAZARDOUS WASTE DISPOSED:

TYPE	QUANTITY
LEAD	UNKNOWN
POTASSIUM-GOLD-CYANIDE SPENT SOLUTION	6,000 G STORAGE CAPACITY
CONTINUOUS CAST WASTE LIQUID SOLUTION	9,600 G STORAGE CAPACITY
DENATURED SLUDGE CONTAINING TRACES OF METALS	600 YDS. 3/YEAR
AND METAL HYDROXIDES.	UNKNOWN

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:
The site has a significant volume of hazardous waste. Approximately 400,000 cu yd of soil is contaminated with hazardous levels of lead. The sediment in Mill Creek also contains high levels of metals. This site is now being managed under the Voluntary Cleanup Program as site no. V00159.

ASSESSMENT OF HEALTH PROBLEMS:
NYSDOH has insufficient information to fully evaluate the potential for human exposures.

The New York State Department of Environmental Conservation has not publicly updated the following fields since 2003:

ANALYTICAL DATA AVAILABLE FOR:	Air–	Surface Water–	Groundwater–	Soil–	Sediment–
APPLICABLE STANDARDS EXCEEDED IN:	Groundwater–	Drinking Water–	Surface Water–	Air–	

GEOTECHNICAL INFORMATION:
SOIL/ROCK TYPE:
GROUNDWATER DEPTH:

LEGAL ACTION:	Type:		State–	Federal–
STATUS:	Negotiation in Progress–		Order Signed–	
REMEDIAL ACTION:	Proposed–	Under Design–	In Progress–	Completed–
NATURE OF ACTION:				

RCRA CORRECTIVE ACTION SITES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

PLEASE NOTE: * Compass directions can vary substantially for sites located very close to the subject property address.

Map Identification Number 2 **POR MO IL ERMINAL** **Facility Id: NY 000 24 1**

4101 ARTHURKILL RD STATEN ISLAND, NY 10307 TT−Id: 220A−0044−041

EPA (RCRA) Name: EXXON MOBIL PORT MOBIL TERMINAL

EPA (RCRA) Address: 4101 ARTHUR KILL RD SITE 1 STATEN ISLAND, NY 10309

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING − LARGE SITE
Approximate distance from property: 4213 feet to the NNW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: 10309

GENERATOR TYPE: Small Quantity Generator − X Large Quantity Generator − Treatment, Storer, Disposal Facility − X

HANDLERS WITH CORRECTIVE ACTION ACTIVITY (CORRACTS)

CORRACTS EVENT CODE	CORRACTS DATE	CORRACTS EVENT DESCRIPTION
HQCA010	01/09/1992	RFA INITIATION
HQCA060	06/11/1992	NOTICE OF CONTAMINATION
HQCA050	07/15/1993	RFA COMPLETED
HQCA100DC	08/05/1993	RFI IMPOSITION−FOCUSED DATA COLLECTION REQ STAB EVAL
HQCA070YE	02/25/1994	DETERMINATION OF NEED FOR A RFI−RFI IS NECESSARY
HQCA075HI	06/20/1994	CA PRIORITIZATION−HIGH CA PRIORITY
HQCA225YE	07/12/1994	STABILIZATION MEASURES EVALUATION−FACILITY IS AMENABLE TO STABILIZATION
HQCA110	03/10/1995	INVESTIGATION WORKPLAN RECEIVED
HQCA120	05/03/1995	INVESTIGATION WORKPLAN MODIFICATION REQ BY AGENCY
02CA605	06/20/1995	INTERIM MEASURES PLAN RECEIVED
02CA610	10/19/1995	INTERIM MEASURES PLAN APPROVED
HQCA140	11/02/1995	INVESTIGATION WORKPLAN NOTICE OF DEFICIENCY ISSUED
02CA145	11/16/1995	RFI WORKPLAN RESUBMITTED
HQCA155	12/13/1995	INVESTIGATION SUPPLEMENTAL INFO REQ BY AGENCY
HQCA160	03/18/1996	INVESTIGATION SUPPLEMENTAL INFORMATION RECEIVED
HQCA150	03/29/1996	RFI WORKPLAN APPROVED
HQCA180	04/15/1996	INVESTIGATION IMPLEMENTATION BEGUN
HQCA600SR	05/07/1997	STABILIZATION MEASURES IMPLEMENTED−PRIMARY MEAS IS SOURCE REMOVL &/OR TRT
HQCA190	07/02/1997	INVESTIGATION REPORT RECEIVED
02CA615	07/30/1997	INTERIM MEASURES IMPLEMENTED/BEGUN

02CA620	08/01/1997	INTERIM MEASURES PROGRESS RPTS RECEIVED
HQCA650	09/26/1997	STABILIZATION CONSTRUCTION COMPLETED
HQCA725YE	06/30/2003	HUMAN EXPOSURES CONTROLLED DETERMINATION−YES, APPLICABLE AS OF THIS DATE
HQCA750YE	09/30/2003	RELEASE TO GW CONTROLLED DETERMINATION−YES, APPLICABLE AS OF THIS DATE
HQCA260	12/08/2009	CMS WORKPLAN RECEIVED
02CA220	05/11/2010	RFI FINAL REPORT RECEIVED
HQCA270	06/11/2010	CMS WORKPLAN MODIFICATION REQ BY AGENCY
HQCA300	07/14/2010	CMS WORKPLAN APPROVED

The following corrective action(s) has been deleted from the corracts database. Data reflects last reported information.

HQCA050	08/05/1993	RFA COMPLETED

NO CERCLIS SUPERFUND SITES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

NO ROWNFIELDS SITES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

SOLID WASTE FACILITIES IDENTIFIED WITHIN THE 1 MILE SEARCH RADIUS

PLEASE NOTE: * Compass directions can vary substantially for sites located very close to the subject property address.

Map Identification Number 3 **O N IPPOLI O RUC ING** **Facility Id: 43 03**
ARTHUR KILL & VETERAN RD WEST STATEN ISLAND TT-Id: 380A-0002-490

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 155 feet to the WSW*

ADDRESS CHANGE INFORMATION
Revised street: ARTHUR KILL RD / VETERANS RD W
Revised zip code: 10309

PERMIT NUMBER	PERMIT EXPIRES	FACILITY TYPE	FACILITY STATUS	WASTE TYPES
		C&D PROCESSING FACILITY	Registered	DIRT, TOPSOIL, ROCK

Map Identification Number 4 **OMEGA CAR ING** **Facility Id: 43 1**
NO ADDRESS INFORMATION PROVIDED TT-Id: 380A-0002-492

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 1210 feet to the NW

ADDRESS CHANGE INFORMATION
Revised street: 38 WINANT PLACE
Revised zip code: 10309

PERMIT NUMBER	PERMIT EXPIRES	FACILITY TYPE	FACILITY STATUS	WASTE TYPES
		LARGE TRANSFER STATION (>50000 CY/YR)	None	Demolition

Map Identification Number **E. G. CLEMEN E CON RAC IN** **Facility Id: 43 3**
S BRIDGE ST BLOCK 7584 LOT 122 STATEN ISLAND TT-Id: 380A-0002-523

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 1306 feet to the SSW

ADDRESS CHANGE INFORMATION
Revised street: S BRIDGE ST
Revised zip code: UNKNOWN

PERMIT NUMBER	PERMIT EXPIRES	FACILITY TYPE	FACILITY STATUS	WASTE TYPES
		C&D PROCESSING FACILITY	Registered	soil, concrete, rock, asphalt, pavement

NO HAZARDOUS WASTE TREATMENT STORAGE DISPOSERS IDENTIFIED WITHIN THE 1 MILE SEARCH RADIUS

HAZARDOUS MATERIAL SPILLS INTRODUCTION

The Hazardous Material Spills in this section are divided into eight spill cause groupings. These include:

Active Spills Section: Spills with incomplete paperwork that may or may not be cleaned up (See Date Cleanup Ceased)

1) Tank Failures
2) Tank Test Failures
3) Unknown Spill Cause or Other Spill Cause Hazardous Spills
4) Miscellanous Spill Causes: Equipment Failure, Human Error, Tank Overfill, Deliberate Spill, Traffic Accidents, Housekeeping, Abandoned Drum, and Vandalism.

Closed Status Spills Section: Spills with completed paperwork that may or may not be cleaned up (See Date Cleanup Ceased)

5) Tank Failures
6) Tank Test Failures
7) Unknown Spill Cause or Other Spill Cause Hazardous Spills
8) Miscellanous Spill Causes: Equipment Failure, Human Error, Tank Overfill, Deliberate Spill, Traffic Accidents, Housekeeping, Abandoned Drum, and Vandalism.

All spills within each spill cause category are presented in order of proximity to the subject site address.

Plea e note t at pill reported it in 0.2 mile or one ei t mile in Ne Yor City are mapped and profiled.

et een 0.2 mile or one ei t mile in Ne Yor City and 0. mile only t e follo in pill are mapped and profiled:

* Tank Failures;

* Tank Test Failures;

* Unknown Spill Cause or Other Spill Cause;

* Spills greater than 100 units of quantity; and

* Spills reported in the NYSDEC Fall 1998 MTBE Survey.

A table at the end of each section presents a listing of reported Miscellanous Spills with less than 100 units located between 0.25 mile (or one−eighth mile in Manhattan) and 0.5 mile. These spills are neither mapped nor profiled.

NO ACTIVE TAN FAILURES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

NO ACTIVE TAN TEST FAILURES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

NO ACTIVE UN NOWN CAUSE SPILLS AND OTHER CAUSE SPILLS IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

NO ACTIVE HAZARDOUS SPILLS − MISC SPILL CAUSES − EQUIPMENT FAILURE HUMAN ERROR TAN OVERFILL DELI ERATE SPILL TRAFFIC ACCIDENT HOUSE EEPING A ANDONED DRUM AND VANDALISM − IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

All pill mapped and profiled it in 1 mile. et een 1 mile and 1 2 mile earc radiu pill reported to be reater t an 100 unit and pill reported in t e NYS EC Fall 1 M E Sur ey are mapped and profiled. Spill reported to be le t an 100 unit are li ted in a table at t e end of t i ection.

E FOLLO ING AC I E SPILLS FOR IS CA EGORY ERE REPOR E E EEN 1 MILE AN 1 2 MILE SEARC RA IUS FROM E SU EC A RESS. ESE SPILLS ERE REPOR E O E LESS AN 100 UNI S IN UAN I Y AN CAUSE Y: E UIPMEN FAILURE UMAN ERROR AN O ERFILL ELI ERA E SPILL RAFFIC ACCI EN OUSE EEPING A AN ONE RUM OR AN ALISM. ESE SPILLS ARE NEI ER MAPPE NOR PROFILE IN IS REPOR .

FACILITY ID	FACILITY NAME	STREET	CITY

No dropped spills found for this category

CLOSED STATUS TAN FAILURES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

Please Note: * − Compass directions can vary substantially for sites located very close to the subject property address.

Map Identification Number **OU ER RI GE CROSSING** **Spill Number: 040** **Clo e ate: 0 0 1**
ARTHUR KILL ROAD STATEN ISLAND, NY TT−Id: 520A−0144−823

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (5)
Approximate distance from property: 1104 feet to the SW

ADDRESS CHANGE INFORMATION
Revised street: OUTERBRIDGE CROSSING / ARTHUR KILL RD
Revised zip code: 10309

Source of Spill:	NON−MAJOR FACILITY (>1100 GAL)	Spiller:	LARRY − PORT AUTHORITY	Spiller Phone:	
Notifier Type:	Responsible Party	Notifier Name:	SAME	Notifier Phone:	
Caller Name:	LARRY PANZICA	Caller Agency:	PORT AUTHORITY	Caller Phone:	(718) 390−2560
DEC Investigator:	SIGONA	Contact for more spill info:	LARRY PANZICA	Contact Person Phone:	(718) 390−2560

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − DEC Field Response − Corrective Action Initiated, Taken Over, or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
06/30/1998		TANK FAILURE	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
#2 FUEL OIL	PETROLEUM	10.00	GALLONS	0.00	GALLONS	SOIL

Caller Remarks:

Port Authority was upgrding a tank and found contaminated soil. The soil has not been picked up or cleaned.

DEC Investigator Remarks: DEC INVESTIGATOR REMARKS NOT AVAILABLE FOR THIS SPILL ACCORDING TO THE LAST UPDATE.

e follo in EC In e ti ator Remar ere a ailable prior to 1 1 2002:

DEC (Sigona)performed site visit at time of report. However, during August 1999, Port Authority removed the UST and replaced and reported new spill number under Spill No. 9905613. Therefore, this case has been closed and spill investigation will be handled under new spill number.

Map Identification Number **POR AU ORI Y OU ER R G** **Spill Number: 10 0** **Clo e ate: 02 2 200**
OUTERBRIDGE CROSSING STATEN ISLAND, NY TT−Id: 520A−0144−824

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (5)
Approximate distance from property: 1104 feet to the SW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: 10309

Source of Spill: INSTITUTIONAL, EDUC, GOV, OTHER Spiller: PORT AUTHORITY Spiller Phone:
Notifier Type: Responsible Party Notifier Name: Notifier Phone:
Caller Name: SANDRA MCCULLAUGH Caller Agency: PORT AUTHORITY OF NY & NJ Caller Phone: (201) 216−6325
DEC Investigator: SFRAHMAN Contact for more spill info: Contact Person Phone:

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	PBS # Involved	Meets Cleanup Standards	Penalty Recommended
10/01/1991		TANK FAILURE	2−043893	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
#2 FUEL OIL	PETROLEUM	−1.00	GALLONS	0.00	GALLONS	SOIL

Caller Remarks: NO REMARKS GIVEN FOR THIS SPILL

DEC Investigator Remarks:

No prior spills staff assignment found

1/29/07 − Austin − Transferred from Albany assignment to Rahman in R−2 office for further work − end
02/27/07 Rahman−Referred to spill#9012142.File on edocs.

Map Identification Number **ACAN UIL ING** **Spill Number: 0 020** **Clo e ate: 12 1 200**
4849 ARTHURKILL ROAD STATEN ISLAND, NY TT−Id: 520A−0143−504

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 1542 feet to the SW

ADDRESS CHANGE INFORMATION
Revised street: 4849 ARTHUR KILL RD
Revised zip code: 10309

Source of Spill:	COMMERCIAL/INDUSTRIAL	Spiller:	VINNIE LOVARI − VACANT BUILDING	Spiller Phone:	(718) 967−9424
Notifier Type:	Local Agency	Notifier Name:	VINNIE LOVARI	Notifier Phone:	(718) 967−9424
Caller Name:	VINNIE LOVARI	Caller Agency:	ISLAND TANK CLEANERS	Caller Phone:	(718) 967−9424
DEC Investigator:	JXZHAO	Contact for more spill info:	VINNIE LOVARI	Contact Person Phone:	(718) 967−9424

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − DEC Field Response − Corrective Action Initiated, Taken Over, or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
05/20/2005		TANK FAILURE	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
#2 FUEL OIL	PETROLEUM	0	GALLONS	0	GALLONS	SOIL

Caller Remarks:

WAS A TANK REMOVAL. FILL LINES HAD HOLES IN IT AND PUMPED OUT THE PRODUCT. COUPLE YARDS IN THE SOIL THAT WAS CONTAIMINATED.
TANKIS REMOVED.

DEC Investigator Remarks:

Contaminated Soil Letter sent to owner (Per City Tax Records):

Regional Island Realty
360 Bard Ave.
Staten Island, NY 10310−1666

6/1/2005 Received a letter from Vincent Lovari of Island Environmental Tank Maintenance Corp (718−967−9424) Says they pulled a 2,000 gal tank and found several holes along with contaminated soil. They are working with a geologist to prepare a work plan. When the job is complete they will forward a report (with manifest) to the DEC.

12/16/2005 − jz: Tank closure report was submitted by Island Tank. Contaminated soil has been removed and end−point samples results were below Guidance. Spill is closed

Map Identification Number **OU ER RI GE CROSSING** **Spill Number: 0 13** **Clo e ate: 10 03 200**
101 BOSCOMBE AVE STATEN ISLAND, NY TT−Id: 520A−0143−362

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (5)
Approximate distance from property: 1681 feet to the S

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: 10309

Source of Spill:	NON−MAJOR FACILITY (>1100 GAL)	Spiller:	LAWRENCE PANZICA − PORT AUTHORITY NYC	Spiller Phone:	(718) 390−2560
Notifier Type:	Responsible Party	Notifier Name:	LAWRENCE PANZICA	Notifier Phone:	(718) 390−2560
Caller Name:	LAWRENCE PANZICA	Caller Agency:	PORT AUTHORITY NYC	Caller Phone:	(718) 390−2560
DEC Investigator:	rvketani	Contact for more spill info:	LAWRENCE PANZICA	Contact Person Phone:	(718) 390−2560

Category: Known or probable release, where, without action, there is a potential for a fire/explosion hazard (indoors or outdoors), contamination of drinking water supplies, or significant release to surface waters.
Class: Willing RP − DEC Field Response − Corrective Action Initiated, Taken Over, or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
08/09/1999		TANK FAILURE	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
DIESEL	PETROLEUM	0	GALLONS	0	GALLONS	GROUNDWATER

Caller Remarks:

EXCAVATION DISCOVERED A POOL OF FUEL IN WATER AND IN THE SOIL−POSSIBLY FROM AN OLD STORAGE TANK. WILL REMEDIATE SPILL SITE

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "ROMMEL"
This spill case was reassigned from DEC (Sigona) to Rommel

on 02/02/2004.

DEC (Sigona) spoke to Katie Keough on 8/30/99 at 10:30 A.M.− Spill reported two weeks ago is not from tank, accually from diesel powered emergency genator clean out drain line. The line drains water and spent fuel, when cleaned in previous years. The drained to floor, and there was product under the floor.

While excavating the suction and return lines for 1,000 gallon diesel UST and floor drains, found contaminated soil and pocket of free product. Product is centered near generator. Port Authority does not think it is a leak from tank rather the floor drain. Celluar (908)512−1342. DEC (Sigona) reassigned from Tomasello on 8/30/99.

DEC (Sigona) performed follow−up site inspection on 8/30/99 at 2 P.M. met Katie Keough on site. !,080 gallon tank removed placed on−site for inspection. Tank was installed in 1989−double walled fiberglass tank. Tank had visible hole 12" from the top, leak of water in secondary containment, no product loss. Groundwater at 6 feet. Gordon Environmental & Mechanical Corp. 2878 Gulf Avenue, Staten Island, N.Y. 10303 (800)92−Gordon. Licensed w/NYCFD.

4 sidewalss will be sampled collected on 8/30/99 sending samples to Hampton Clark Labs, STARS, VOCs, SVOCs, MTBE, TPH.

Excavated trench in basement to install O/W Separator found some historic fill and pet. contamination which is being sampled and tested.

Albany assignment: "jjdrumm"

Excavated floor drain in generator room, and found some free product on perched water table, (There is a tidal influence of approx. 3 feet). Port Authority will install a Groundwater MW in generator room if possible, by hand. 3 MWs will be installed around the diesel UST, which is being replaced (not disturbed) DEC Sigona left site at 2:45 P.M. 8/30/99

DEC Sigona performed a follow−up investigation on 9/3/99 met Brian Lokker (718)981−2945. Tank pull was complete. No product present in groundwater at bottom of tank excavation for 1.080 gallon emergency diesel UST. The new tank is on−site and secure. Took three photographs left site at 3:15 P.M.

It appears the records were destroyed on 9/11

Spill assigned to James Drumm for SCI
10/18/05 port authority installing new monitoring wells. Couldn’t find old ones. Contact person is Danielle Mcgrath at 973 565 7563.000

9/7/06 − Austin − Assigned from Albany to Region 2 staff (Rahman) for review and closure − end

10/2/06 − Raphael Ketani. The original spill was reported as the discovery of oil and water in an excavation. The Port Authority contact is Lawrence Panzica (718) 390−2560. Today, I received the spill closure report from the Port Authority.

10/3/06 − Raphael Ketani. I reviewed the 9/28/06 spill closure report. I found the analytical results to be acceptable and the report, in general, to be acceptable. Based upon this document, I am closing the spill case.

Map Identification Number 10 **PRI A E RESI ENCE** **Spill Number: 0411** **Clo e ate: 12 23 200**
140 WEINER STREET STATEN ISLAND, NY TT−ld: 520A−0141−767

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (3)
Approximate distance from property: 2325 feet to the SSE

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	PRIVATE DWELLING	Spiller:	PAUL DAVIS RESTORATION − PRIVATE RESIDENCE	Spiller Phone:	(718) 983−7065
Notifier Type:	Other	Notifier Name:	MELANIE BRONIS	Notifier Phone:	(718) 967−9424
Caller Name:	MELANIE BRONIS	Caller Agency:	ISLAND TANK ENVIRONMENTAL	Caller Phone:	(718) 967−9424
DEC Investigator:	RHFILKIN	Contact for more spill info:	PAUL DAVIS RESTORATION	Contact Person Phone:	(718) 983−7065

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
02/07/2005		TANK FAILURE	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
#2 FUEL OIL	PETROLEUM	0	GALLONS	0	GALLONS	GROUNDWATER

Caller Remarks:

BROKEN LINE AND OIL SPILLED INTO THE BASEMENT MIXED WITH WATER : ABOUT 1 FOOT DEEP:

DEC Investigator Remarks:

2/7/05 tipple updating///// Home is vacant, the spill was observed by Paul Davis Restoration on Thursday, Monday 2/7 Island tank was called to estimate cost for cleanup////
owner's cell−917−299−1029
Island vinny cell−718−509−7600
will followup 2/8/05

12/23/05 − Cleanup was completed requiring removal of wood, carpet, wallboard, etc., from basement. Current resident says there is no odor. Closed 12/23/05

2/10/04 4000gal oil/water mix removed, carpet to be removed and cleanup will be completed.

CLOSED STATUS TAN TEST FAILURES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

Please Note: * − Compass directions can vary substantially for sites located very close to the subject property address.

Map Identification Number 11 **OU ER RI GE CROSSING** **Spill Number: 0 01** **Clo e ate: 03 04 200**
ARTHURKILL/N.BRIDGE ROAD STATEN ISLAND, NY TT−Id: 520A−0141−304

MAP LOCATION INFORMATION
Site location mapped by: ADDRESS MATCHING
Approximate distance from property: 1029 feet to the SW

ADDRESS CHANGE INFORMATION
Revised street: ARTHUR KILL RD / NORTH BRIDGE ST
Revised zip code: 10309

Source of Spill:	MAJOR OIL FACILITY (>400,000 GAL)	Spiller:	LAWRENCE PANZICA − PORT AUTHORITY OF NY &NJ	Spiller Phone:	(718) 390−2560
Notifier Type:	Responsible Party	Notifier Name:		Notifier Phone:	
Caller Name:	KATY KEOUGH	Caller Agency:	PA OF NY & NJ	Caller Phone:	(201) 216−2722
DEC Investigator:	SFRAHMAN	Contact for more spill info:	LAWRENCE PANZICA	Contact Person Phone:	(718) 390−2560

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − DEC Field Response − Corrective Action Initiated, Taken Over, or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
08/06/1998		TANK TEST FAILURE	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
DIESEL	PETROLEUM	0	GALLONS	0	GALLONS	SOIL

TANK TEST INFORMATION

Tank Number	Tank Size	Tank Test Method	Leak Rate	Gross Leak or Failure
0f1	1000	Unknown	0.00	UNKNOWN

Caller Remarks:

tank has been empty since last spill report 9707691 tank was

upgraded and repaired but failed tank testing after repaired but

failed tank testing after repairs. no product loss was noted

since tank is empty

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "ROMMEL"
4/12/04−Vought−Spill transferred from Tomasello to Rommel as per Rommel.

11/1/05 − Transferred to Central Office Staff for review.

Follow up on the Tank Testing Failure needs to be completed before spill is closed.

Albany review (above) − datromp

1/29/07 − Austin − Transferred from Albany assignment to Rahman in R−2 office for further work − end

06/13/07 Jerry Caprario (Port Authority)@(973)565−7563 is currently working to gather information about what happened/done on this spill case.(SR)

10/08/08 Rec'd voice mail from William Glynn,PA @(973)565−7565 that funding for spill investigation is approved.(sr)

01/13/09 Report in edocs,will be reviewed.(sr)

03/04/09 Reviewing report. A 1,000 gallon fiberglass doublewall UST was installed at the north side of abutment building,labeled as OF−1, used for emergency generator.On August 6,1998 UST OF−1 failed a tightness test and spill was reported on August 14,1998. The same tank failure was reported on September 14,1998 again and assigned spill #9807252.In 1999 PANYNJ removed the 1,000 gallon tank, OF−1, the existing emergency generator, and the associated supply and return lines.Surrounding soil was excavated to the limits necessary for the installation of the new 1,000 gallon steel doulbe wall storage tank.Four soil samples were collected from the sidewalls of the excavation.Lab analytical showed minor exceedances. During the execution of contract AKO−154, the excavation of suction and return lines for UST OF−1 and the floor drains near the emergency generator revealed some impacts and spill #9905613 was generated. The source of the impact was determined to be release to the floor drain centered around the emergency generator.According to PANYNJ, approx. 50 cubic yards of petroleum impacted material were excavated and disposed of off−site.Three MWs were installed at the site.GW analyticals showed contamination below NYGQS.(sr)

Map Identification Number 12 **POR AU OU ER RI GE** **Spill Number: 012142** **Clo e ate: 02 2 200**
PORT AUTH/OUTERBRIDGE STATEN ISLAND, NY TT−Id: 520A−0144−827

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (5)
Approximate distance from property: 1104 feet to the SW

ADDRESS CHANGE INFORMATION
Revised street: PORT AUTH/OUTER BRIDGE
Revised zip code: 10309

Source of Spill: INSTITUTIONAL, EDUC, GOV, OTHER
Notifier Type: Tank Tester
Caller Name: JODI ANN GARRONE
DEC Investigator: SFRAHMAN
Spiller:
Notifier Name:
Caller Agency: TONE TANK & PUMP
Contact for more spill info:
Spiller Phone: (201) 936−6396
Notifier Phone:
Caller Phone: (718) 331−5003
Contact Person Phone:

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
02/20/1991		TANK TEST FAILURE	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
DIESEL	PETROLEUM	−1.00	POUNDS	0.00	POUNDS	SOIL

TANK TEST INFORMATION

Tank Number	Tank Size	Tank Test Method	Leak Rate	Gross Leak or Failure
		Unknown	0.00	UNKNOWN

Caller Remarks:

TANK #1 (550 GAL TANK−GASOLINE),TANK #2 (550 GAL TANK−DIESEL), BOTH FAILED 10LD AIR PRESSURE TESTS WITH GROSS LEAKS,UNDETERMINED ACTION.

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "ROMMEL C"
4/12/04−Vought−Spill transferred from Sullivan to Rommel as per Rommel.

11/1/05 − Transferred to Central Office Staff for review.

Follow up on the Tank Testing Failure needs to be completed before spill is closed.

Albany review (above) − datromp

1/29/07 − Austin − Transferred from Albany assignment to Rahman in R−2 office for further work − end

02/27/07 Rahman− Tank closure report available on edocs.Three tanks, identified as E,F and H were in the process of removal in 1990.Tanks E and F were pressure tested in anticipation of upgrading the dispensing system on 02/20/91.Both tanks failed.Tank H was tested in 10/03/91 and failed (spill#9107077).Soil borings and monitoring wells were installed in the immediate vicinity of tanks E,F and H.No free product was encountered.Trace levels of VOC/SVOCs were found in soil/ground water.Based on the report provided to DEC, it is apparent that no environmental threat was present due to the tightness failed tanks.NFA required.

Map Identification Number 13 **CLOSE LAC OF RECEN INFO** **Spill Number: 303** **Clo e ate: 03 0 2003**
4865 ARTHUR KING RD STATEN ISLAND, NY TT−Id: 520A−0143−364

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (2)
Approximate distance from property: 1710 feet to the SSW

ADDRESS CHANGE INFORMATION
Revised street: 4865 ARTHUR KILL RD
Revised zip code: 10309

Source of Spill:	UNKNOWN	Spiller:	CLAIR ROSE DISTRIBUTORS	Spiller Phone:	
Notifier Type:	Other	Notifier Name:		Notifier Phone:	
Caller Name:	SCOTT MATZEN	Caller Agency:	FENDY AD NICOS	Caller Phone:	(516) 586−4900
DEC Investigator:	ADMIN. CLOSED	Contact for more spill info:		Contact Person Phone:	

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
06/23/1993		TANK TEST FAILURE	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
#2 FUEL OIL	PETROLEUM	0	POUNDS	0	POUNDS	SOIL

TANK TEST INFORMATION

Tank Number	Tank Size	Tank Test Method	Leak Rate	Gross Leak or Failure
		Unknown	0.00	UNKNOWN

Caller Remarks:

TESTED SYSTEM IT FAILED WILL REMOVE PRODUCT FROM TANK − WANTS CALLBACK CAUSE HE COULDN'T GET THOUGH ON 1800−# FOR OVER 1/2HR.CLOSED DUE TO LACK OF ANY RECENT INFO− DOES NOT MEET ANY CLEAN UP REQUIREMENTS.

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "ADMIN.CLOSED"
03/06/2003− Closed Due To The Nature / Extent Of The Spill Report

CLOSED STATUS UN NOWN CAUSE SPILLS AND OTHER CAUSE SPILLS IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

Please Note: * − Compass directions can vary substantially for sites located very close to the subject property address.

Map Identification Number 14 **Spill Number: 0401 3** **Clo e ate: 0 0 2004**

ENGLEWOOD AVE STATEN ISLAND, NY TT−Id: 520A−0275−496

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING − LARGE SITE
Approximate distance from property: 0 feet

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: 10309

Source of Spill:	UNKNOWN	Spiller:	BILL TAI − UNKNOWN	Spiller Phone:	(212) 360−1425
Notifier Type:	Other	Notifier Name:	CITIZEN	Notifier Phone:	
Caller Name:	BILL TAI	Caller Agency:	NYC PARKS	Caller Phone:	(212) 360−1425
DEC Investigator:	CESAWYER	Contact for more spill info:	BILL TAI	Contact Person Phone:	(212) 360−1425

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
05/21/2004		UNKNOWN	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
MOTOR OIL	PETROLEUM	0	POUNDS	0	POUNDS	SOIL

Caller Remarks:

englewood ave between arthur kill rd and veterans highway west.spill is directly south of englewood ave.spill lokks like oil.would like to meet a DEC officer out on site. wants someone to call him ASAP

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "SAWYER"

Sangesland spoke with Bill Tai of NYC Parks Dept. 212−360−1425

He says there appears to be an oil spill about 100 ft long and 1 to 10 feet wide on a horse riding bridal path. The path is adjacent to Engelwood Ave and looks like someone backed into the area and dumped a load of oil. The site does NOT smell of oil, it only looks like oil.

Mr. Tai would like to set up a site visit for next week to discuss what should be done on the site.

6/07/04 − Sawyer − This report seems to be a mistake, that Bill is clearing up through e−mail. Below is his e−mail to me.

Cris,

I joined some others from Parks on Thurs 6/3 at the Englewood site. From our observations and the statement of a local resident, it no longer appears that there was oil or any petroleum product spilled or

dumped at this site.

The resident, Ms. Michelle Ferraire, lives at 65 Englewood Avenue, where she maintains a horse stable.

According to Ms. Ferraire, the wood chips at the site were placed there recently to maintain a wet section of the bridle trail leading into Clay Pit Pond State Preserve on the north side of Englewood.

Ms. Ferraire also said that wood chips were routinely placed down to stabilize the wet trail and that as they soaked up water, it would darken to the same color as we saw that day.

Apparently, the trailriders have learned not to let their horses stand in the wood chips because their hooves become irritated.

Our own observations confirmed that the dark liquid, originally

reported to us as oil, actually had none of the characteristics of a petroleum product, except a light irridescent surface film in places that could also be bacterial or the result of secondary leaching of tannin, resins or foreign matter on or in the wood chips.

The wood chips were coarse and dark, what's often called hog fuel, which can consist of predominantly chipped bark, high in natural tannin. The dark liquid had the viscosity of water

with an acidic smell, that is likely horse urine, and no hint of

petroleum.

In the future, it may be advisable for higher grade wood chips or chips with lower tannin content to be used to maintain trails.

If you have further questions concerning this site, please let me

know.

Bil

Map Identification Number 1 **RUC I POLE 322 FMR LEA ING** **Spill Number: 0 10002** **Clo e ate: 02 20 200**

IN FRONT OF 21 ENGLEWOOD AVENUE
AT ARTHUR KILL ROAD
STATEN ISLAND, NY
TT−Id: 520A−0212−077

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 102 feet to the NW*

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	COMMERCIAL/INDUSTRIAL	Spiller:	ERTSDESK − CON EDISON POLE #32278	Spiller Phone:	(212) 580−8383
Notifier Type:	Responsible Party	Notifier Name:		Notifier Phone:	
Caller Name:		Caller Agency:		Caller Phone:	
DEC Investigator:	gdbreen	Contact for more spill info:	ERTSDESK	Contact Person Phone:	(212) 580−8383

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
12/19/2007		OTHER	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
DIELECTRIC FLUID	PETROLEUM	4.00	GALLONS	0.00	GALLONS	SOIL

Caller Remarks:

HIT POLE HAD A TRANSFORMER ON IT AND CAUSED A LEAK. 209189

DEC Investigator Remarks:

02/20/08 − See eDocs for Con Ed report detailing cleanup and closure.

209189. see eDocs

Map Identification Number 1 **ENGLE OO A ENUE** **Spill Number: 31** **Clo e ate: 04 2 1 4**

97 ENGLEWOOD AVENUE STATEN ISLAND, NY TT−Id: 520A−0143−367

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (2)
Approximate distance from property: 147 feet to the N*

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	UNKNOWN	Spiller:		Spiller Phone:	
Notifier Type:	Other	Notifier Name:		Notifier Phone:	
Caller Name:	OWEN REITER	Caller Agency:		Caller Phone:	
DEC Investigator:	TOMASELLO	Contact for more spill info:		Contact Person Phone:	

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − DEC Field Response − Corrective Action Initiated, Taken Over, or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
03/11/1994	04/25/1994	UNKNOWN	UNKNOWN	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
UNKNOWN PETROLEUM	PETROLEUM	1.00	GALLONS	0.00	GALLONS	SOIL

Caller Remarks:

ADJACENT TO HOUST 1107 ENGLEWOOD IS A TRUCKING COMPANY GARAGE. DEISEL FUEL IN BACKYARD OF PROPERTY.

DEC Investigator Remarks: NO DEC INVESTIGATOR REMARKS GIVEN FOR THIS SPILL.

Map Identification Number 1 **INGLE OO A E** **Spill Number: 314 3** **Clo e ate: 03 12 1 4**
97 INGLEWOOD AVE STATEN ISLAND, NY TT−Id: 520A−0143−368

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (2)
Approximate distance from property: 147 feet to the N*

ADDRESS CHANGE INFORMATION
Revised street: 97 ENGLEWOOD AVENUE
Revised zip code: 10309

Source of Spill:	UNKNOWN	Spiller:	UNK	Spiller Phone:	
Notifier Type:	Other	Notifier Name:		Notifier Phone:	
Caller Name:	ZOLLA BAILEY	Caller Agency:	NYC DEP	Caller Phone:	(718) 595−6700
DEC Investigator:	SIGONA	Contact for more spill info:		Contact Person Phone:	

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − DEC Field Response − Corrective Action Initiated, Taken Over, or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
03/12/1994	03/12/1994	UNKNOWN	UNKNOWN	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
DIESEL	PETROLEUM	−1.00	GALLONS	0.00	GALLONS	SOIL

Caller Remarks:

SNOW MELTED A LARGE AMOUNT OF OIL ON THE ROAD. CALLER DID NOT KNOW IF ACTIONS ARE BEING TAKEN. CALLED BACK MRS. DAILEY. KIM HANNA RESPONDED DEP HAZMAT INVESTIGATED, NO ACTION TAKEN SANITATION WILL BE

DEC Investigator Remarks: NO DEC INVESTIGATOR REMARKS GIVEN FOR THIS SPILL.

Map Identification Number 1 **LUCIANO RESI ENCE** **Spill Number: 31432** **Clo e ate: 04 30 1**
97 ENGLEWOOD AVENUE STATEN ISLAND, NY TT−Id: 520A−0143−366

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (2)
Approximate distance from property: 147 feet to the N*

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	PRIVATE DWELLING	Spiller:	DANTIS	Spiller Phone:	
Notifier Type:	Citizen	Notifier Name:		Notifier Phone:	
Caller Name:	MIKE LUCIANO	Caller Agency:		Caller Phone:	(718) 966−3793
DEC Investigator:	MCTIBBE	Contact for more spill info:		Contact Person Phone:	

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − DEC Field Response − Corrective Action Initiated, Taken Over, or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
03/08/1994		UNKNOWN	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
DIESEL	PETROLEUM	−1.00	POUNDS	0.00	POUNDS	SOIL

Caller Remarks:

DIESEL 7 COMING FROM WALL BET THEIR PROPERTY & NEIGHBORS − CALL BACK ASAP. TRUCKING CO. NEXT DOOR TO CALLER − CALLER AT 97 ENGLEWOOD. HE STATES THAT OIL COMING THROUGH WALL WHICH SEPARATES PROPERTIES

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "M TIBBE"
Yard is for L&B Express, 718−317−9411, night # 718−984−1135. Loie or Nick Dontis. Beeper 917−233−4040 or 917−233−4037. Cleaned by Clean Harbors for Insurance Company. See file.

Map Identification Number 1 **OME EPO PAR ING LO** **Spill Number: 10110** **Clo e ate: 02 02 2011**
TYRELLAN AVE AND VETERANS RD W STATEN ISLAND, NY TT−Id: 520A−0260−361

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (4)
Approximate distance from property: 394 feet to the ESE

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	UNKNOWN	Spiller:	UNKNOWN	Spiller Phone:	
Notifier Type:	Other	Notifier Name:		Notifier Phone:	
Caller Name:		Caller Agency:		Caller Phone:	
DEC Investigator:	smsanges	Contact for more spill info:	FIREFIGHTER CHAMBERS	Contact Person Phone:	

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
02/02/2011		UNKNOWN	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
HYDRAULIC OIL	PETROLEUM	50.00	GALLONS	0.00	GALLONS	SOIL

Caller Remarks:

Caller advised approximately 50 gallons of hydraulic fluid spilled onto blacktop parking lot. Clean up is pending. Caller advised is a very thin sheen over a large area.

DEC Investigator Remarks:

Sangesland spoke to FDNY Firefighter Chambers. He said it looks like a truck in the parking lot leaked hydraulic oil onto the ice covered parking lot. Oil is very thin and spread over a wide area. No way to pick up the oil. Sanitation is on site to spread sand. spill is all on Home Depot parking lot. No oil is on the public street.

Map Identification Number 20 **44 AR UR ILL R ISLAN EN IRONMEN AL AN** **Spill Number: 0 0** **Clo e ate: 0 1 200**
4465 ARTHURKILL RD STATEN ISLAND, NY TT−Id: 520A−0222−617

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 590 feet to the NW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: UNKNOWN

Source of Spill: UNKNOWN
Spiller: VINNY LOVARDI − VINNY LOVARDI
Spiller Phone:
Notifier Type: Other
Notifier Name:
Notifier Phone:
Caller Name:
Caller Agency:
Caller Phone:
DEC Investigator: smsanges
Contact for more spill info: VINNY LOVARDI
Contact Person Phone: (347) 244−4299

Category: Possible petroleum release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters, known releases with no potential for damage, or non−petroleum/non−hazardous spills.
Class: Any Type of RP Including No RP − No DEC Field Response − Corrective Action by Spill Response Not Required

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
09/16/2008		UNKNOWN	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
OTHER	OTHER	0	UNKNOWN	0	UNKNOWN	

Caller Remarks:

Caller is concerned about the hap hazard storage of Haz Mat materials at above location. They had a fire at that scene and NYFD is concerned.

DEC Investigator Remarks:

Fire in a trailer used by a security guard on the Island Environmental equipment yard. Vac truck was also damaged by the fire.
Vinny says there was no spill, but both truck and trailer need to be cleaned up and removed.

Map Identification Number 21 **AR UR ILL ROA A** **Spill Number: 030 3** **Clo e ate: 11 21 2003**
KREISCHER STREET STATEN ISLAND, NY TT−Id: 520A−0143−365

MAP LOCATION INFORMATION
Site location mapped by: ADDRESS MATCHING
Approximate distance from property: 789 feet to the WNW

ADDRESS CHANGE INFORMATION
Revised street: ARTHUR KILL RD / KREISCHER ST
Revised zip code: NO CHANGE

Source of Spill: COMMERCIAL VEHICLE
Spiller: UNKNOWN − UNKNOWN
Spiller Phone:
Notifier Type: Citizen
Notifier Name: VINNIE LOVARI
Notifier Phone: (917) 807−1995
Caller Name: VINNIE LOVARI
Caller Agency: ISAND TANK CLEANERS
Caller Phone: (718) 967−9424
DEC Investigator: SMSANGES
Contact for more spill info:
Contact Person Phone:

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Any Type of RP Including No RP − No DEC Field Response − Corrective Action by Spill Response Not Required

---

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
11/19/2003		OTHER	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
UNKNOWN PETROLEUM	PETROLEUM	0	GALLONS	0	GALLONS	SOIL

Caller Remarks:

caller states he saw at tank trailer being removed off a site in

the woods − caller believes as it was towed out it was leaking oil on the roadway − plate off trailer aj91832 Ny plate − poss tow company way dave's towing − caller states fire dept was also on the scene

---

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "SANGESLAND"

Map Identification Number 22 **REN AL PROPER Y** **Spill Number: 0 12 2** **Clo e ate: 02 24 200**
53 ANDROVETTE ST STATEN ISLAND, NY TT−Id: 520A−0226−637

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (3)
Approximate distance from property: 900 feet to the NW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	PRIVATE DWELLING	Spiller:	UNKNOWN	Spiller Phone:	
Notifier Type:	Affected Persons	Notifier Name:		Notifier Phone:	
Caller Name:		Caller Agency:		Caller Phone:	
DEC Investigator:	hrpatel	Contact for more spill info:	MICHAEL FRASCO	Contact Person Phone:	(347) 838−1036

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
02/24/2009		UNKNOWN	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
BENZENE	HAZARDOUS MATERIAL	0	GALLONS	0	GALLONS	SOIL, GROUNDWATER

Caller Remarks:

CALLER STATES THAT HE FOUND A DOCUMENT THAT STATES THAT THERE IS BENZENE IN THE WATER AND GROUND WHERE HE RENTS PROPERTY. CALLER IS CONCERNED BECAUSE HE HAS A SMALL CHILD AND DOES NOT WANT HER TO GET SICK.

DEC Investigator Remarks:

02/24/09−Hiralkumar Patel. spoke with Mike Frasco. he rented this house and found a report in building which indicates petroleum compounds in ground. and report has spill #: 0400679. Mike wants to samples soil to confirm any health hazards.

reviewed file for spill #: 0400679. spill reported at TNT bus depot. it was an surface spill from run off water from oil−water seperator. contaminated water ran to next door property (where Mike lives). soil samples were collected in 2004 and found contaminated soil at two feet depth in two sampling locations. based on soil investigation found that approx. 35’ * 20’ * 2’ area was impacted. injected 1000 gallon of BioRem H−10 microaerophilic enzymes in impacted areas. six post remediation samples were collected at 2 ft depth. no contamination found in post remediation samples. based on report from 09/26/06, case was closed.

Michael Frasco
cell: 347−838−1036
email: mikeyboy0527@aol.com

discussed with DEC Austin. based on previously submitted report, Austin asked for no further action. he asked to send copy of report from 2006.

cleanup report from 2006 was sent to Mike.

case closed.

Map Identification Number 23 **N RANSPOR A ION MISC** **Spill Number: 0400** **Clo e ate: 02 2 200**
10 MANLEY STREET STATEN ISLAND, NY TT−Id: 520A−0143−363

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 1017 feet to the NW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	COMMERCIAL VEHICLE	Spiller:	TOM SCHNEIDER − TNT TRANSPORTATION	Spiller Phone:	(800) 868−8411
Notifier Type:	Other	Notifier Name:	VINNY LOVARI	Notifier Phone:	(718) 967−9424
Caller Name:	VINNY LOVARI	Caller Agency:	ISLAND TANK	Caller Phone:	(718) 967−9424
DEC Investigator:	rjfeng	Contact for more spill info:	TOM SCHNEIDER	Contact Person Phone:	(800) 868−8411

Category: Possible petroleum release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters, known releases with no potential for damage, or non−petroleum/non−hazardous spills.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
04/19/2004		OTHER	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
UNKNOWN MATERIAL	OTHER	0	POUNDS	0	POUNDS	SOIL

Caller Remarks:

Caller is the main contact for this spill. As the buses were being washed there was a sheen on the water. Caller estimates the materials are oil. Caller boomed the whole driveway with cotton boom.

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "SAWYER"
4/20/2004 Sangesland left a message for Vinny asking for more information on this spill.

4/22/2004 Vinny (Island Tank) left a message with Sangesland saying that the "Spill" is a chronic long term problem. Vinny will work with the owner on cleaning up.

4/28/04 − Sawyer − Spoke to Dan D'Argnese at BioRem and he indicated that they are the environmental contractor for the PRP TNT Transportation. He will forward initial outline of work plan on e−mail.
07/28/05 Sharif.. Spoke with Daniel A. D'Agnese who is the contractor. They are now collecting the confirmatory samples and will send results to DEC .
11.09.05 Sharif− Report on file−GW affected.
12/20/05−Sharif// Case was transferred to Koon Tang for reassignment.

1/13/2006 − Feng − File reviewed by Feng:

1) The TNT Bus Depot has a catch basin and a separator on site for treatment of surface runoff which washed away with oil or other common spillage from routine operation of mechanical equipment.

2) During the torrential raining days, the separator could not adequately perform and the water passed through the system too quickly allowing some petroleum impacted water to discharge onto a limited area of the neighboring residential property.

3) 2 samples were collected nearest the property border show elevation of comtamination, such as 3,992 ppb Toluene, 12,883 ppb Xylene extended to the depth of 1.5' to 2' below grade.

4) BioRem applied H−10TM product (1,000 gallons H−10TM solution) and aeration to conduct the bioremediation for the contaminated soil found in residential property.

5) A new storm water separator was installed down gradient of the parking lot. A concret berm existing around the parking lot area and booms were placed around the berm. The separator was inspected regularly and hydrocarbon absorbent socks are placed in water separator periodically to absorb any petroleum waste.

6) Zipper trench was installed to direct runoff to the separator. Drum containments have been installed to house oil and other petroleum products.

Wait for bioremediation result report. (RJF)

6/12/2006 − Feng − Call Bio Rem and left message to Daniel A. D'Agnese requested the status of the site, like soil and groundwater samples after the bioremediation was applied. (RJF)

8/18/2006 − Feng − Sent a letter to Tom Schnieder (TNT Bus Depot) for the bioremeidation results report, due 9/18/2006. (RJF)

10/20/2006 − Feng − Fax from Vinny Lovari (Island Environmental Tank Maintenance Corp), 10/12/2006. Only soil sample lab results attached. Called Vinny Lovari for the full report. Will send it shortly by next week. (RJF)

11/2/2006 − Feng − Called Vinny Lovari for the full report, left message. (RJF)

2/28/2007 − Surface Spill Closure Report, dated 9/29/2006, submitted by Island Environmental Tank, Inc. On 9/20/2006, Island Environmental collected 6 soil samples from along the boundary of the two properties. Sampling depth 2 feet bg, 5 feet from the boundary line on the residential property. Sampling result non−detected.

Spoke with V. Lovari (Island Environmental), there is no drinking water well around and Kill Van Kull in west. Boom pads are planced around the 8" berm, the boom pads are regularly replaced and came out to be clean.

Discussed previously with DEC J. Sun, spill can be closed for: 1) Post−remediation soil samples came out to be clean, 2) preventive measures performed for future spill. Groundwater was not sampled because the spill occurred in Apirl 2004, and BioRem was applied 11/2004 and the contaminated soil may be remediated before the contamination leach to groundwater. (RJF)

Map Identification Number 24 **UN ER RI GE A U EMEN** **Spill Number: 0 2 2** **Clo e ate: 03 04 200**
OUTERBRIDGE CROSSING STATEN ISLAND, NY TT-Id: 520A-0144-825

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (5)
Approximate distance from property: 1104 feet to the SW

ADDRESS CHANGE INFORMATION
Revised street: OUTTER BRIDGE CROSSING
Revised zip code: UNKNOWN

Source of Spill: COMMERCIAL/INDUSTRIAL
Notifier Type: Responsible Party
Caller Name: KATE KEOUGH
DEC Investigator: SFRAHMAN

Spiller: KATE KEOUGH - PORT AUTH
Notifier Name: KATE KEOUGH
Caller Agency: PORT AUTH
Contact for more spill info: KATE KEOUGH

Spiller Phone: (201) 216-2722
Notifier Phone: (201) 216-2722
Caller Phone: (201) 216-2722
Contact Person Phone: (201) 216-2722

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP - No DEC Field Response - Corrective Action Initiated or Completed by RP or Other Agency

---

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
08/06/1998		UNKNOWN	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
DIESEL	PETROLEUM	0	GALLONS	0	GALLONS	SOIL

Caller Remarks:

soil samples were taken and found contaimination

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MULQUEEN"

06/16/06: This spill is transferred from Mike Mulqueen to Mr. Koon Tang.

03/04/09 See spill#9806016.(sr)

Map Identification Number 2 **UN ER E OU ER RI GE** **Spill Number: 03** **Clo e ate: 0 1 1**
CROSSING ARTHUR KILL STATEN ISLAND, NY TT−Id: 520A−0144−832

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (5)
Approximate distance from property: 1104 feet to the SW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: 10309

Source of Spill: UNKNOWN
Notifier Type: Federal Government
Caller Name: PO PINEIRO
DEC Investigator: KSTANG

Spiller: UNK
Notifier Name: JOHN DECESARIO
Caller Agency: USCG
Contact for more spill info:

Spiller Phone:
Notifier Phone: (718) 442−6212
Caller Phone: (212) 668−7920
Contact Person Phone:

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
06/17/1996		UNKNOWN	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
UNKNOWN PETROLEUM	PETROLEUM	0	GALLONS	0	GALLONS	SURFACE WATER

Caller Remarks:

sheen in water of unknown oil − uscg enroute to scene

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TANG"
USCG SENT A TEAM, FOUND NO OIL SHEEN, BUT OILY BROWN ALGAE.

Map Identification Number 2 **OU ER RI GE CROSSING** **Spill Number: 400422** **Clo e ate: 04 10 1 4**
OUTERBRIDGE CROSSING STATEN ISLAND, NY TT−Id: 520A−0144−830

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (5)
Approximate distance from property: 1104 feet to the SW

ADDRESS CHANGE INFORMATION
Revised street: OUTBRIDGE CROSSING
Revised zip code: 10309

Source of Spill: UNKNOWN | Spiller: UNK | Spiller Phone:
Notifier Type: Federal Government | Notifier Name: | Notifier Phone:
Caller Name: MARK | Caller Agency: US COAST GUARD | Caller Phone: (212) 668−7913
DEC Investigator: O'DOWD | Contact for more spill info: | Contact Person Phone:

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − DEC Field Response − Corrective Action Initiated, Taken Over, or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
04/10/1994	04/10/1994	UNKNOWN	UNKNOWN	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
UNKNOWN PETROLEUM	PETROLEUM	−1.00	UNKNOWN	0.00	UNKNOWN	SURFACE WATER

Caller Remarks:

SOMEONE SAW SHEEN & REPORTED IT NJ DEP ALSO NOTIFIED. CALL BACK UNK ACTIONS − 840/PM P.O. MARKS /USCG / CREW WAS SENT OUT AND @829 COULDN'T FIND SHEEN OR COULND'T SMELL ANYTHING.

DEC Investigator Remarks: NO DEC INVESTIGATOR REMARKS GIVEN FOR THIS SPILL.

Map Identification Number 2 **USINESS PROPER Y** **Spill Number: 0 111** **Clo e ate: 01 22 200**
50 SOUTH BRIDGE STREET STATEN ISLAND, NY TT−Id: 520A−0144−584

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (5)
Approximate distance from property: 1301 feet to the SSW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill: PRIVATE DWELLING | Spiller: FRED HAWK − BUSINESS | Spiller Phone: (609) 338−1072
Notifier Type: Responsible Party | Notifier Name: | Notifier Phone:
Caller Name: | Caller Agency: | Caller Phone:
DEC Investigator: rmpiper | Contact for more spill info: FRED HAWK | Contact Person Phone: (609) 338−1072

Category: Possible petroleum release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters, known releases with no potential for damage, or non−petroleum/non−hazardous spills.
Class: Any Type of RP Including No RP − No DEC Field Response − Corrective Action by Spill Response Not Required

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
01/08/2007		UNKNOWN	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
GASOLINE	PETROLEUM	0	GALLONS	0	GALLONS	SOIL

Caller Remarks:

GASOLINE IS BEING DUMPEDIN BACK YARD AT ABOVE ADDRESS: NO FURTHER INFO AVAILABLE

DEC Investigator Remarks:

Former employee of a company says that this company dumps gasoline & oil on the ground of this facility.
Piper performed site vistit. It was used for parking of equipment.It was noted that there was poor house keeping. Closed.

Map Identification Number 2 **122 AN RO E E S** **Spill Number: 043 2** **Clo e ate: 02 0 2000**
122 ANDROVETTE ST STATEN ISLAND, NY TT−Id: 520A−0142−449

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (3)
Approximate distance from property: 1453 feet to the WNW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	UNKNOWN	Spiller:	UNKNOWN	Spiller Phone:	
Notifier Type:	Citizen	Notifier Name:		Notifier Phone:	
Caller Name:	OWEN REITER	Caller Agency:	CITIZEN	Caller Phone:	(718) 967−4727
DEC Investigator:	O'DOWD	Contact for more spill info:	CALLER	Contact Person Phone:	

Category: Possible petroleum release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters, known releases with no potential for damage, or non−petroleum/non−hazardous spills.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
07/14/1999		UNKNOWN	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
UNKNOWN MATERIAL	OTHER	0	GALLONS	0	GALLONS	SOIL

Caller Remarks:

caller reported soot all over his property. he lives next to arthur kill where tankers are docked.

DEC Investigator Remarks: DEC INVESTIGATOR REMARKS NOT AVAILABLE FOR THIS SPILL ACCORDING TO THE LAST UPDATE.

e follo in EC In e ti ator Remar ere a ailable prior to 1 1 2002:

ECO PINEKOFFER REFERRED HIM TO AIR DIVISION CG TOLD HIM TO CALL (800) SPILL HOTLINE. FD SAID THEY HAD NO LAST NIGHT. LAST YEAR A TANKER BLEW ITS STACK − SPREADING ASH, MAY HAVE OCCURRED AGAIN. ETC.
SEE K. o'DOWD FIELD NOTES.

Map Identification Number 2 **AU OS OP** **Spill Number: 131 1** **Clo e ate: 02 14 1**
110 WINANT PL STATEN ISLAND, NY TT−Id: 520A−0142−241

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (3)
Approximate distance from property: 1853 feet to the NW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	COMMERCIAL/INDUSTRIAL	Spiller:	UNKN	Spiller Phone:	
Notifier Type:	Local Agency	Notifier Name:	CALLER REFUSED	Notifier Phone:	
Caller Name:	BRENDA BRYANT	Caller Agency:	DEP	Caller Phone:	(718) 595−6777
DEC Investigator:	GUTIERREZ	Contact for more spill info:	DEP	Contact Person Phone:	

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
01/20/1996		OTHER	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
MOTOR OIL	PETROLEUM	0	GALLONS	0	GALLONS	SOIL

Caller Remarks:

BARRELS OF OIL IN THE REAR OF THE STRUCTURE ARE LEAKING MOTOR OIL.

DEC Investigator Remarks: NO DEC INVESTIGATOR REMARKS GIVEN FOR THIS SPILL.

Map Identification Number 30 **E MAYERS** **Spill Number: 0230020** **Clo e ate: 0 0 2002**
120 WINANT PLACE STATEN ISLAND, NY TT−Id: 520A−0141−631

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (3)
Approximate distance from property: 1951 feet to the NW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	MISSING CODE IN OLD DATA	Spiller:	TED − JESSICA ALBANESE	Spiller Phone:	(718) 966−8800
Notifier Type:	Missing Code in Old Data − Must be fixed	Notifier Name:	ED MAYERS	Notifier Phone:	(917) 971−1524
Caller Name:	ECO MATT DORRETT	Caller Agency:	NYSDEC DLE	Caller Phone:	(718) 482−4885
DEC Investigator:	MXTIPPLE	Contact for more spill info:	ED MAYERS	Contact Person Phone:	(917) 971−1524

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − DEC Field Response − Corrective Action Initiated, Taken Over, or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
07/08/2002		MISSING CODE	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
DIESEL	PETROLEUM	0	GALLONS	0	GALLONS	

Caller Remarks:

Spill Referred to Spills from Law Enforcement. Notifier is affected person who reports neighbor is spilling diesel onto ground surface which is impacting his property.

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIPPLE"
7/17/2002 Site visit revealed less than good housekeeping on 110 Winant Place property. There was no ongoing leaks or pooling obvious on the prp property. The 120 address was locked, so that My view was from the 110 property which was open with no one around even after shouting into the out buildings and ringing the doorbell. Will do follow−up

7/23/01 CALL FROM MR. ALBANESE, HE IS CLEANING UP THE "HOUSEKEEPING" ON THE PROPERTY THIS WEEK

Map Identification Number 31 **3 SALAMAN ER C** **Spill Number: 0 0** **Clo e ate: 0 2 1**
37 SALAMANDER CT STATEN ISLAND, NY TT−Id: 520A−0140−880

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (4)
Approximate distance from property: 2538 feet to the NE

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	COMMERCIAL VEHICLE	Spiller:	SANITATION TRUCK	Spiller Phone:	
Notifier Type:	Local Agency	Notifier Name:	CITIZEN	Notifier Phone:	
Caller Name:	ERIC	Caller Agency:	DEP	Caller Phone:	(718) 595−6777
DEC Investigator:	SMMARTIN	Contact for more spill info:		Contact Person Phone:	

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
08/29/1997		UNKNOWN	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
UNKNOWN PETROLEUM	PETROLEUM	15.00	GALLONS	0.00	GALLONS	SOIL

Caller Remarks:

CITIZEN SAW AN OIL PRODUCTS SPILL OUT OF THE BACK OF A NYC SANITATION TRUCK ONTO THE RAODWAY

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MARTINKAT"
COULD NOT FIND SALAMANDER CT. IN BROOKLYN OR STATEN ISLAND IN THE HAGSTROM DIRECTORY. CALLED SANIT ACTION CENTER − PEARSON TOOK REPORT.

CLOSED STATUS HAZARDOUS SPILLS − MISC SPILL CAUSES − EQUIPMENT FAILURE HUMAN ERROR TAN OVERFILL DELI ERATE SPILL TRAFFIC ACCIDENT HOUSE EEPING A ANDONED DRUM AND VANDALISM − IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

All pill mapped and profiled it in 1 mile. et een 1 mile and 1 2 mile earc radiu pill reported to be reater t an 100 unit and pill reported in t e NYS EC Fall 1 M E Sur ey are mapped and profiled. Spill reported to be le t an 100 unit are li ted in a table at t e end of t i ection.

Please Note: * − Compass directions can vary substantially for sites located very close to the subject property address.

Map Identification Number 32 **COMMERCIAL** **Spill Number: 0 10** **Clo e ate: 01 13 2010**
43 ENGLEWOOD AVE STATEN ISLAND, NY TT−Id: 520A−0239−323

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (2)
Approximate distance from property: 86 feet to the NNW*

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill: COMMERCIAL VEHICLE Spiller: SEAN DONOHUE − UNKNOWN Spiller Phone:
Notifier Type: Other Notifier Name: Notifier Phone:
Caller Name: Caller Agency: Caller Phone:
DEC Investigator: hrpatel Contact for more spill info: SEAN DONOHUE Contact Person Phone: (718) 595−5000

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
01/11/2010		HUMAN ERROR	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
DIESEL	PETROLEUM	0	GALLONS	0	GALLONS	SOIL

Caller Remarks:

Caller reporting an ongoing spill due to subjects fueling thier vehicle from cans, spilling fluid onto soil.

DEC Investigator Remarks:

1/12/10−Vought−Off hours responder. Vought called NYCDEP Donahue and no further informaton available as call came in via 311 hotline. Spill assigned to DEC Patel due to proxmity of site to route home during off−hours response for site visit.

01/13/10−Hiralkumar Patel.
8:30 AM:− visited site. site has one family house and asphalt parking area around two sides of house. found trucks parked in asphalt parking. no sign of any oil spill noticed. nobody at the site. no sign of oil change operation found in grass area on other two sides of house.

based on site observations, case closed.

Map Identification Number 33 **C ARLES ON US EPO** **Spill Number: 1111 1** **Clo e ate: 01 12 2012**
4700 AURTHER KILL RD STATEN ISLAND, NY TT−Id: 520A−0272−831

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 147 feet to the W*

ADDRESS CHANGE INFORMATION
Revised street: 4700 ARTHUR KILL RD
Revised zip code: UNKNOWN

Source of Spill:	COMMERCIAL VEHICLE	Spiller:	CLAIRE − NYC TRANSIT	Spiller Phone:	
Notifier Type:	Other	Notifier Name:		Notifier Phone:	
Caller Name:		Caller Agency:		Caller Phone:	
DEC Investigator:	SMSANGES	Contact for more spill info:	CLAIRE	Contact Person Phone:	

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
01/12/2012		HUMAN ERROR	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
MOTOR OIL	PETROLEUM	20.00	GALLONS	0.00	GALLONS	

Caller Remarks:

20 gallons of oil spilled to floor when they were filling a motor and left it unattended in the building

DEC Investigator Remarks:

spill was cleaned when it was discovered. no drains impacted.

Map Identification Number 34 **POLE** **Spill Number: 0 0** **Clo e ate: 0 1 200**
ARTHUR KILL RD/ALLEN TOWN STATEN ISLAND, NY TT−Id: 520A−0222−709

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 155 feet to the WSW*

ADDRESS CHANGE INFORMATION
Revised street: ARTHUR KILL RD / ALLENTOWN LN
Revised zip code: 10309

Source of Spill: COMMERCIAL/INDUSTRIAL
Notifier Type: Responsible Party
Caller Name:
DEC Investigator: asnagi
Spiller: ERTSDESK − POLE
Notifier Name:
Caller Agency:
Contact for more spill info: ERTSDESK
Spiller Phone:
Notifier Phone:
Caller Phone:
Contact Person Phone: (212) 580−8383

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
08/26/2008		EQUIPMENT FAILURE	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
TRANSFORMER OIL	PETROLEUM	0	GALLONS	0	GALLONS	SOIL

Caller Remarks:

AMOUNT SPILLED IS 1/2 GALLON; NON PCB; ON GOING LEAK; REF #213353

DEC Investigator Remarks:

09/19/08 − See eDocs for Con Ed report detailing cleanup and closure.

Map Identification Number 3 **IN FRON OF** **Spill Number: 021041** **Clo e ate: 0 2 2003**
4414 ARTHUR KILL RD STATEN ISLAND, NY TT−Id: 520A−0143−919

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 255 feet to the NW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	COMMERCIAL/INDUSTRIAL	Spiller:	CHARLIE MCCARTHY − CON ED	Spiller Phone:	
Notifier Type:	Responsible Party	Notifier Name:	SAME	Notifier Phone:	
Caller Name:	CHARLIE MCCARTHY	Caller Agency:	CON EDISON	Caller Phone:	(212) 580−6763
DEC Investigator:	AERODRIG	Contact for more spill info:	CHARLIE MCCARTHY	Contact Person Phone:	(212) 580−6763

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
01/15/2003		EQUIPMENT FAILURE	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
TRANSFORMER OIL	PETROLEUM	1.00	GALLONS	0.00	GALLONS	SOIL

Caller Remarks:

A LEAK FROM A NEUTRAL LUG ON A POLE MOUNTED TRANSFORMER THAT CAUSED THE SPILL 1 QUART WAS ACUTALLY SPILLED.

NO SEWERS OR WATERWAYS NO SMOKE IR FIRE .CON ED 146749

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RODRIGUEZ"
E2MIS NOTES 146749

1/15/03 @ 1705 hrs, TS Frank Gerdes reports 1 quart of OH transformer oiil spilled from transformer neutral lug on pole 33−365 on Arthur Kill Rd and AndrovetteB st. The area covered is 6’ X 9’ with a 3’X3’ concentration on soil and the rest is spatter on concrete and asphalt. No sewers or waterways affected, no smoke or fire. Cleanup pending further transformer information. CIG notified at 1728 hrs (McCarthy)

1/15/03 @ 1740 hr, TS Gerdes reports transformer on pole 33−365 has been cut clear, it is labeled non PCB and it has been bagged.

Vincent Reneo, EGS 81202

01/15/03 23:15

Rotondo reports P. Gagliardi #10967 has cleanup complete. Cleaned 7’ x 10’ area cbta and took away 4’ x 4’ x4" deep of soil.

Double washed with Riptide and double rinsed with water.

Debris placed in Drum . Transformer and Drum taken to Victory Blvd Service Center and put in holding area.

UPDATE 1/17/03 0810 Hrs. Finder was F. Gerdes, #25706, Troubleshooter, Control Center. This report is being updated to include the following information as per M. Rotondo: 1) the transformer was replaced (1/15/03); 2) transformer had a manufacturer's label indicating 1996 date and non−PCB; 3) transformer and waste was disposed of as non−hazardous waste at Victory Boulevard Service Center; 4) street area affected (3'x6') was cleaned (10'x10'); 5) curb area affected (8"x3') was cleaned (8"x4'); 6) dirt area affected (tree lane 3'x3') was cleaned (4'x4'x3") and 7) as indicated above all areas were double washed with Riptide and double rinsed

with water....G. Triolo, #01868.

Map Identification Number 3 **POLE 33** **Spill Number: 111014** **Clo e ate: 01 1 2012**
4500 ARTHUR KILL RD STATEN ISLAND, NY TT−Id: 520A−0270−786

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 527 feet to the WNW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	MAJOR OIL FACILITY (>400,000 GAL)	Spiller:	ERT − CON ED	Spiller Phone:	
Notifier Type:	Other	Notifier Name:		Notifier Phone:	
Caller Name:		Caller Agency:		Caller Phone:	
DEC Investigator:	RWAUSTIN	Contact for more spill info:	ERT	Contact Person Phone:	2125808383

Category: Possible petroleum release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters, known releases with no potential for damage, or non−petroleum/non−hazardous spills.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
11/14/2011		EQUIPMENT FAILURE	NO	NO

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
DIELECTRIC FLUID	PETROLEUM	55.00	GALLONS	0.00	GALLONS	

Caller Remarks:

55 gallons on asphault − clean up pending

0326− Tom Enright of CONED called back to advise Total Amount of spill is 102 gallons, of which 82 gallons entered sewer. NRC # 995524

DEC Investigator Remarks:

emis 228076 − vehicle hit p−33−373 causing pole to fall and transformer to leak approx. 55 gallons of oil onto asphalt roadway area 30' x 3' along curb line

1/17/12 − Austin − Amount spilled eventually turned out to be 102 gals., with 82 gals. estimated to have impacted an adjoining catch basin − Con Ed hired a cotractor who pressure washed and cleaned up both the street and the catch basin − See documents in eDocs files for further info − Spill closed − end

Map Identification Number 3 **NE O** **Spill Number: 113 0** **Clo e ate: 01 2 1**
420 SHARROTTS RD STATEN ISLAND, NY TT−Id: 520A−0143−982

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (2)
Approximate distance from property: 1454 feet to the N

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	UNKNOWN	Spiller:	UNKNOWN	Spiller Phone:	
Notifier Type:	Citizen	Notifier Name:		Notifier Phone:	
Caller Name:	ANONYMOUS	Caller Agency:		Caller Phone:	
DEC Investigator:	MCTIBBE	Contact for more spill info:		Contact Person Phone:	

Category: Possible petroleum release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters, known releases with no potential for damage, or non−petroleum/non−hazardous spills.
Class: Willing RP − No DEC Field Response − Corrective Action Initiated or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
12/15/1996		DELIBERATE	NO	NO

NO MATERIAL INFORMATION GIVEN FOR THIS SPILL

Caller Remarks:

SUBJS USING BACKHOE TO LAY PVC PIPING AT THE BRICK OR STONE BLDG UNDER CONSTRUCTION NEXT TO #420 − POSS GOING TO PUMP SEWAGE INTO THE WETLANDS − NEW YORK REG# SR8713 (ON BACKHOE) − GOING ON AT THIS TIME − NYS PARK ALSO BY THE WETLANDS

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "TIBBE/SPDES"
REFER TO WATER AND NATURAL RESOURCES

Map Identification Number 3 **AN IFO NE UIL ING** **Spill Number: 0 04** **Clo e ate: 0 2 200**
131 STORER AVE STATEN ISLAND, NY TT-Id: 520A-0143-980
NEAR ARTHUR KILL RD

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (2)
Approximate distance from property: 1813 feet to the N

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Source of Spill:	UNKNOWN	Spiller:	JOHN WILSON - ARTHUR KILL/CARLIN	Spiller Phone:	(646) 879-7329
Notifier Type:	Fire Department	Notifier Name:		Notifier Phone:	
Caller Name:		Caller Agency:		Caller Phone:	
DEC Investigator:	SFRAHMAN	Contact for more spill info:	JOHN WILSON	Contact Person Phone:	(646) 879-7329

Category: Known petroleum or hazardous material release with minimal potential for fire/explosion (indoors or outdoors), drinking water contamination, or releases to surface waters.
Class: Willing RP - DEC Field Response - Corrective Action Initiated, Taken Over, or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended
08/01/2006		ABANDONED DRUM	NO	NO

NO MATERIAL INFORMATION GIVEN FOR THIS SPILL

Caller Remarks:

175 GALLON WASTE HOME HEATING OIL, NOT LEAKING AND HAVE DENTS IN IT: WOODED AREA CAN BE SEEN

DEC Investigator Remarks:

Sangesland spoke to John Wilson of NYCDEP. He says there is a 275 gal tank approx 3/4 full (about 175 gal) of waste oil.
Site is just off Arthur Kill Rd, approx 1 mile north of Outer Bridge Crossing in Southwestern Staten Island.
From Arthur Kill Rd, turn East onto Storer Ave. After 1/4 mile tank will be on the left side (North) in the edge of the woods across from new construction houses (across from #131 Storer).
275 gal tank is stable and has an opening on the top to drain it from.
08/28/06 Rahman- Tank found,was pumped out, NYC sanitation was notified via fax to pick up empty tank- unsure if they take care of empty tank.

E FOLLO ING CLOSE SPILLS FOR IS CA EGORY ERE REPOR E E EEN 1 MILE AN 1 2 MILE FROM E SU EC A RESS. ESE SPILLS ERE REPOR E O E LESS AN 100 UNI S IN UAN I Y AN CAUSE Y: E UIPMEN FAILURE UMAN ERROR AN O ERFILL ELI ERA E SPILL RAFFIC ACCI EN OUSE EEPING A AN ONE RUM OR AN ALISM. ESE SPILLS ARE NEI ER MAPPE NOR PROFILE IN IS REPOR .

FACILITY ID	FACILITY NAME	STREET	CITY

0808101	BARKER KILL RD/ KREISEHSER ST	BARKER KILL RD/ KREISEHSER ST	STATEN ISLAND
0503842	OUTER BRIDGE CROSSING	STATEN ISLAND SIDE OF TOL	STATEN ISLAND
9610775	KREISHER STREET WETLANDS	KREISHER ST	CARLSTON
9102135	S BRIDGE ST/OUTTER BRIDGE	S BRIDGE/OUTTER BRIDGE	NEW YORK CITY
8703837	OUTTER BRIDGE CROSSING /	OUTTER BRIDGE CROSSING	NEW YORK CITY
0400192	OUTERBRIDEG CROSSING	ROUTE 440 NORTH	STATEN ISLAND
9112154	OUTERBRIDGE CROSSING	OUTERBRIDGE CROSSING	STATEN ISLAND
9704366	OUTER BRIDGE BTWN NJ	STATEN ISLAND	STATEN ISLAND
9202514	448 SHARROTTS RD/SEPTIC	448 SHARROTTS RD	STATEN ISLAND
9608223	EG CLEMENTE	SOUTH BRIDGE ST	STATEN ISLAND
0405000	ON DEAD END STREET	ANDROVETTE STREET	STATEN ISLAND
0203395	PROPERTY BEHIND	419 SHARROTTS ROAD	STATEN ISLAND
0500735	ON ROAD	SHARROTTS ROAD/ ARTHUR KILL	STATEN ISLAND
0803866	PRIVATE RESIDENCE	65 PHEASANT LANE	STATTAN ISLAND
0004514	WEST SHORE EXPRESSWAY AT	SHARROTTS RD	STATEN ISLAND
0012130		4220 ARTHURKILL RD	STATEN ISLAND
0706940	FOUR OZ FROM 10629 PADMOUNT XFMR	IN FRONT OF 186 DARNELL LANE	STATEN ISLAND
1200541	PADMOUNT TRANS − CON ED	100−104 ROBIN COURT	STATEN ISLAND
9903520		65 MEADE LOOP	STATEN ISLAND
1011949	CON EDISON POLE TRANSFORMER LEAK	115−125 PAGE AVE	STATEN ISLAND
1011949	CON EDISON POLE TRANSFORMER LEAK	115−125 PAGE AVE	STATEN ISLAND
0212039	CLAYPIT PONDS STATE PARK	2876 ARTHUR KILL RD	STATEN ISLAND
9702483	CLAY PIT STATE PARK	CRABTREE ROAD	STATEN ISLAND

NO OIL STORAGE FACILITIES LARGER THAN GALLONS IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

PETROLEUM UL STORAGE FACILITIES LESS THAN GALLONS IDENTIFIED WITHIN THE 1 MILE SEARCH RADIUS

PLEASE NOTE: * Compass directions can vary substantially for sites located very close to the subject property address.

Map Identification Number 3 **C ARLES ON US ANNE** **Facility Id: 2 10** **Source: NYS EC**
4700 ARTHUR KILL ROAD STATEN ISLAND, 10309 TT−Id: 640A−0081−443

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 147 feet to the W*

ADDRESS CHANGE INFORMATION
Revised street: 4700 ARTHUR KILL RD
Revised zip code: NO CHANGE

Facility Type: Trucking/Transportation/Fleet Operation
Site Status: Active
Expiration Date of the facility's registration certificate: 01/09/2014
Operator Name: NEW YORK CITY TRANSIT Operator Phone #: (646) 252−5777
Owner Name:
Owner Company: MTA NEW YORK CITY TRANSIT Owner Type:
Owner Address: 2 BROADWAY, 27TH FLOOR, NEW YORK, NY 10004

TANK NUMBER	TANK STATUS	TANK CONTENT	CAPACITY GALLONS	TANK LOCATION	INSTALL DATE	TEST DATE	CLOSE DATE
DSL−1	In Service	Diesel	10000	Underground	11/30/2008		
DSL−2	In Service	Diesel	10000	Underground	11/30/2008		
DSL−3	In Service	Diesel	10000	Underground	11/30/2008		
DSL−4	In Service	Diesel	10000	Underground	11/30/2008		
HO−1	In Service	#2 Fuel Oil	25000	Underground	11/30/2008		
EMGEN−1	In Service	Diesel	5000	Underground	11/30/2008		
MO−1	In Service	Lube Oil	3000	Underground	11/30/2008		
ATF−1	In Service	Other	3000	Underground	11/30/2008		
WO−1	In Service	Waste Oil/Used Oil	3000	Underground	11/30/2008		
WO−2	In Service	Waste Oil/Used Oil	3000	Underground	11/30/2008		
EMGEN−2	In Service	Diesel	250	Aboveground on Crib Rack or Cradle	12/21/2009		

TANK NUMBER: DSL−1 TANK TYPE: Fiberglass Reinforced Plastic (FRP) TK INT. PROTECTION: None
TANK EXT. PROTECTION: Fiberglass TANK LEAK DETECTN: Interstitial − Electronic Monitoring In−Tank System (ATG) TK SEC. CONTAINMNT: Double−Walled (Underground)
PIPING EXT. PROTECTN: Fiberglass PIPING LEAK DETECTN: Pressurized Piping Leak Detector Tank Top Sump PIPE SEC. CONTAINMNT: Double−Walled (Underground)
PIPING TYPE: Fiberglss Reinforcd Plastic(FRP) PIPING LOCATION: Underground/On−ground

**** TANK INFO FOR THIS SITE CONTINUES ON NEXT PAGE ****

OVERFILL PROTECTION:	Automatic Shut−Off	SPILL PREVENTION:	None	DISPENSER METHOD:	Submersible
TANK NUMBER:	DSL−2	TANK TYPE:	Fiberglass Reinforced Plastic (FRP)	TK INT. PROTECTION:	None
TANK EXT. PROTECTION:	Fiberglass	TANK LEAK DETECTN:	In−Tank System (ATG) Interstitial − Electronic Monitoring	TK SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING EXT. PROTECTN:	Fiberglass	PIPING LEAK DETECTN:	Pressurized Piping Leak Detector Tank Top Sump	PIPE SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING TYPE:	Fiberglss Reinforcd Plastic(FRP)	PIPING LOCATION:	Underground/On−ground		
OVERFILL PROTECTION:	High Level Alarm	SPILL PREVENTION:	None	DISPENSER METHOD:	Submersible
TANK NUMBER:	DSL−3	TANK TYPE:	Fiberglass Reinforced Plastic (FRP)	TK INT. PROTECTION:	None
TANK EXT. PROTECTION:	Fiberglass	TANK LEAK DETECTN:	In−Tank System (ATG) Interstitial − Electronic Monitoring	TK SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING EXT. PROTECTN:	Fiberglass	PIPING LEAK DETECTN:	Pressurized Piping Leak Detector Tank Top Sump	PIPE SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING TYPE:	Fiberglss Reinforcd Plastic(FRP)	PIPING LOCATION:	Underground/On−ground		
OVERFILL PROTECTION:	High Level Alarm	SPILL PREVENTION:	None	DISPENSER METHOD:	Submersible
TANK NUMBER:	DSL−4	TANK TYPE:	Fiberglass Reinforced Plastic (FRP)	TK INT. PROTECTION:	None
TANK EXT. PROTECTION:	Fiberglass	TANK LEAK DETECTN:	Interstitial − Electronic Monitoring In−Tank System (ATG)	TK SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING EXT. PROTECTN:	Fiberglass	PIPING LEAK DETECTN:	Pressurized Piping Leak Detector Tank Top Sump	PIPE SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING TYPE:	Fiberglss Reinforcd Plastic(FRP)	PIPING LOCATION:	Underground/On−ground		
OVERFILL PROTECTION:	High Level Alarm	SPILL PREVENTION:	None	DISPENSER METHOD:	Submersible
TANK NUMBER:	HO−1	TANK TYPE:	Fiberglass Reinforced Plastic (FRP)	TK INT. PROTECTION:	None
TANK EXT. PROTECTION:	Fiberglass	TANK LEAK DETECTN:	In−Tank System (ATG) Interstitial − Electronic Monitoring	TK SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING EXT. PROTECTN:	Fiberglass	PIPING LEAK DETECTN:	Tank Top Sump	PIPE SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING TYPE:	Fiberglss Reinforcd Plastic(FRP)	PIPING LOCATION:	Underground/On−ground		
OVERFILL PROTECTION:	High Level Alarm	SPILL PREVENTION:	None	DISPENSER METHOD:	Suction
TANK NUMBER:	EMGEN−1	TANK TYPE:	Fiberglass Reinforced Plastic (FRP)	TK INT. PROTECTION:	None
TANK EXT. PROTECTION:	Fiberglass	TANK LEAK DETECTN:	In−Tank System (ATG) Interstitial − Electronic Monitoring	TK SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING EXT. PROTECTN:	Fiberglass	PIPING LEAK DETECTN:	Tank Top Sump	PIPE SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING TYPE:	Fiberglss Reinforcd Plastic(FRP)	PIPING LOCATION:	Underground/On−ground		
OVERFILL PROTECTION:	High Level Alarm	SPILL PREVENTION:	None	DISPENSER METHOD:	Suction
TANK NUMBER:	MO−1	TANK TYPE:	Fiberglass Reinforced Plastic (FRP)	TK INT. PROTECTION:	None
TANK EXT. PROTECTION:	Fiberglass	TANK LEAK DETECTN:	In−Tank System (ATG) Interstitial − Electronic Monitoring	TK SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING EXT. PROTECTN:	Fiberglass	PIPING LEAK DETECTN:	Tank Top Sump	PIPE SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING TYPE:	Fiberglss Reinforcd Plastic(FRP)	PIPING LOCATION:	Underground/On−ground		

**** TANK INFO FOR THIS SITE CONTINUES ON NEXT PAGE ****

OVERFILL PROTECTION:	High Level Alarm	SPILL PREVENTION:	None	DISPENSER METHOD:	Suction
TANK NUMBER:	ATF−1	TANK TYPE:	Fiberglass Reinforced Plastic (FRP)	TK INT. PROTECTION:	None
TANK EXT. PROTECTION:	Fiberglass	TANK LEAK DETECTN:	Interstitial − Electronic Monitoring In−Tank System (ATG)	TK SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING EXT. PROTECTN:	Fiberglass	PIPING LEAK DETECTN:	Tank Top Sump	PIPE SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING TYPE:	Fiberglss Reinforcd Plastic(FRP)	PIPING LOCATION:	Underground/On−ground		
OVERFILL PROTECTION:	Automatic Shut−Off	SPILL PREVENTION:	None	DISPENSER METHOD:	Suction
TANK NUMBER:	WO−1	TANK TYPE:	Fiberglass Reinforced Plastic (FRP)	TK INT. PROTECTION:	None
TANK EXT. PROTECTION:	Fiberglass	TANK LEAK DETECTN:	In−Tank System (ATG) Interstitial − Electronic Monitoring	TK SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING EXT. PROTECTN:	Fiberglass	PIPING LEAK DETECTN:	Tank Top Sump	PIPE SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING TYPE:	Fiberglss Reinforcd Plastic(FRP)	PIPING LOCATION:	Underground/On−ground		
OVERFILL PROTECTION:	High Level Alarm	SPILL PREVENTION:	None	DISPENSER METHOD:	Gravity
TANK NUMBER:	WO−2	TANK TYPE:	Fiberglass Reinforced Plastic (FRP)	TK INT. PROTECTION:	None
TANK EXT. PROTECTION:	Fiberglass	TANK LEAK DETECTN:	Interstitial − Electronic Monitoring In−Tank System (ATG)	TK SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING EXT. PROTECTN:	Fiberglass	PIPING LEAK DETECTN:	Tank Top Sump	PIPE SEC. CONTAINMNT:	Double−Walled (Underground)
PIPING TYPE:	Fiberglss Reinforcd Plastic(FRP)	PIPING LOCATION:	Underground/On−ground		
OVERFILL PROTECTION:	High Level Alarm	SPILL PREVENTION:	None	DISPENSER METHOD:	Gravity
TANK NUMBER:	EMGEN−2	TANK TYPE:	Steel/Carbon Steel/Iron	TK INT. PROTECTION:	Epoxy Liner
TANK EXT. PROTECTION:	Other	TANK LEAK DETECTN:	Interstitial − Electronic Monitoring	TK SEC. CONTAINMNT:	None
PIPING EXT. PROTECTN:	Other	PIPING LEAK DETECTN:	Interstitial − Electronic Monitoring	PIPE SEC. CONTAINMNT:	None
PIPING TYPE:	Fiberglss Reinforcd Plastic(FRP)	PIPING LOCATION:	Aboveground/Underground Combination		
OVERFILL PROTECTION:	High Level Alarm	SPILL PREVENTION:	Catch Basin	DISPENSER METHOD:	Suction

HAZARDOUS WASTE GENERATORS TRANSPORTERS IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

PLEASE NOTE: * Compass directions can vary substantially for sites located very close to the subject property address.

Map Identification Number 40 **NYS EC Name:** **O N IPPOLI O** **Facility Id: NYN20002A2**
NYSDEC Address: 4700 ARTHUR KILL ROAD STATEN ISLAND, NY 10309 TT-Id: 740A-0043-767

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (5)
Approximate distance from property: 62 feet to the W*

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

This facility has been deleted from the reported data. Data reflects last reported information.
US EPA RCRA (Resource Conservation and Recovery Act) information not reported; Site information reported by NYS DEC.

NYS DEC Manifested Waste Summary:
Waste Codes, Waste Units, and Transaction Types are only shown for the most recently reported year.

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT	WASTE UNITS	TRANSACTION TYPE	HISTORIC MAXIMUM YEAR	HISTORIC MAXIMUM AMOUNT	HISTORIC MAXIMUM YEAR
NONE	No hazardous waste activity reported by NYS up to 6/7/2011.						

Map Identification Number 41 **NYS EC Name:** **NYC C ARLES ON US ANNE** **Facility Id: NYR0001 440**
NYSDEC Address: 4700 ARTHUR KILL RD STATEN ISLAND, NY 10309 TT-Id: 740A-0075-700
EPA (RCRA) Name: NYCT - CHARLESTON BUS ANNEX
EPA (RCRA) Address: 4700 ARTHUR KILL RD STATEN ISLAND, NY 10309

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 62 feet to the W*

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

US EPA RCRA Type: SMALL QUANTITY GENERATOR
Land Disposal: Receives offsite waste:
Storer: Treatment facility:
Contact Name: SHERRY BULKLEY Source Type: Notification

Notification date: 11/17/2010
Incinerator:
Transporter:
Contact Phone: 646-252-5774 Contact Info Date: 11/17/2010

NYS DEC Manifested Waste Summary:
Waste Codes, Waste Units, and Transaction Types are only shown for the most recently reported year.

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT	WASTE UNITS	TRANSACTION TYPE	HISTORIC MAXIMUM YEAR	HISTORIC MAXIMUM AMOUNT	HISTORIC MAXIMUM YEAR
NONE	Site reported by US EPA. No hazardous waste activity reported by NYS.						

Map Identification Number 42 **NYS EC Name:** **MAL CON RAC ING INC** **Facility Id: NYN20002A2**
NYSDEC Address: 2505 VETERANS ROAD WEST STATEN ISLAND, N.Y.C., NY 10309 TT-Id: 740A-0061-637

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (5)
Approximate distance from property: 84 feet to the SW*

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

This facility has been deleted from the reported data. Data reflects last reported information.
US EPA RCRA (Resource Conservation and Recovery Act) information not reported; Site information reported by NYS DEC.

NYS DEC Manifested Waste Summary:
Waste Codes, Waste Units, and Transaction Types are only shown for the most recently reported year.

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT	WASTE UNITS	TRANSACTION TYPE	HISTORIC MAXIMUM YEAR	HISTORIC MAXIMUM AMOUNT	HISTORIC MAXIMUM YEAR
NONE	No hazardous waste activity reported by NYS up to 6/7/2011.						

Map Identification Number 43 **NYS EC Name:** **MOORE SELF S ORAGE** **Facility Id: NYR000132 1**
NYSDEC Address: 3-26 VETERANS RD W WHITE PLAINS, NY 10309 TT-Id: 740A-0044-070
EPA (RCRA) Name: MOORE SELF STORAGE
EPA (RCRA) Address: 3026 VETERANS RD W STATEN ISLAND, NY 10309

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 187 feet to the SW*

ADDRESS CHANGE INFORMATION
Revised street: 3026 VETERANS RD W
Revised zip code: NO CHANGE

US EPA RCRA Type: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR Notification date: 06/13/2005
Land Disposal: Receives offsite waste: Incinerator:
Storer: Treatment facility: Transporter:
Contact Name: JASON KOTZKER Source Type: Implementer Contact Phone: 914-323-7000 Contact Info Date: 01/01/2007
Contact Name: JASON KOTZKER Source Type: Notification Contact Phone: 914-323-7000 Contact Info Date: 06/13/2005

Historically listed as the following USEPA RCRA Generator Size(s) as well:
LARGE QUANTITY GENERATOR

NYS DEC Manifested Waste Summary:
Waste Codes, Waste Units, and Transaction Types are only shown for the most recently reported year.

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT	WASTE UNITS	TRANSACTION TYPE	HISTORIC MAXIMUM YEAR	HISTORIC MAXIMUM AMOUNT	HISTORIC MAXIMUM YEAR
D001	Solid waste that exhibits the characteristic of ignitability	2103	POUNDS	GENERATED	2005		

Map Identification Number 44 **NYS EC Name:** **ARGE 200** **Facility Id: NYR00013**
NYSDEC Address: 2900 VETERANS RD W STATEN ISLAND, NY 10309 TT-Id: 740A-0081-266
EPA (RCRA) Name: TARGET STORE #2006
EPA (RCRA) Address: 2900 VETERANS RD W STATEN ISLAND, NY 10309

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (4)
Approximate distance from property: 256 feet to the S

ADDRESS CHANGE INFORMATION
Revised street: 2900 W VETERANS RD
Revised zip code: NO CHANGE

US EPA RCRA Type: SMALL QUANTITY GENERATOR Notification date: 01/13/2006
Land Disposal: Receives offsite waste: Incinerator:
Storer: Treatment facility: Transporter:
Contact Name: JENNIFER RYMANOWSKI Source Type: Implementer Contact Phone: 612-304-4417 Contact Info Date: 01/01/2007
Contact Name: JENNIFER RYMANOWSKI Source Type: Notification Contact Phone: 612-304-4417 Contact Info Date: 01/13/2006

Historically listed as the following USEPA RCRA Generator Size(s) as well:
CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR

NYS DEC Manifested Waste Summary:
Waste Codes, Waste Units, and Transaction Types are only shown for the most recently reported year.

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT	WASTE UNITS	TRANSACTION TYPE	YEAR	HISTORIC MAXIMUM AMOUNT	HISTORIC MAXIMUM YEAR
D001	Solid waste that exhibits the characteristic of ignitability	21	POUNDS	GENERATED	2012	850	2011
D002	Solid waste that exhibits the characteristic of corrosivity	46	POUNDS	GENERATED	2012	795	2007
More than one waste code was reported for the following waste amount:		187	POUNDS	GENERATED	2012	3136	2011
D001	Solid waste that exhibits the characteristic of ignitability						
D035	Methyl ethyl ketone						
More than one waste code was reported for the following waste amount:		1	POUNDS	GENERATED	2012	13	2011
P001	2H−1−Benzopyran−2−one, 4−hydroxy−3−(3−oxo−1−phenylbutyl)−, & salts, when present						
P012	Arsenic oxide As2O3						
P075	Nicotine, & salts						
P108	Strychnine, & salts						
P188	Benzoic acid (OR) Physostigmine salicylate						
More than one waste code was reported for the following waste amount:		1	POUNDS	GENERATED	2012		
P001	2H−1−Benzopyran−2−one, 4−hydroxy−3−(3−oxo−1−phenylbutyl)−, & salts, when present						
P012	Arsenic oxide As2O3						
P075	Nicotine, & salts						
P188	Benzoic acid (OR) Physostigmine salicylate						
P022	Carbon disulfide						
P108	Strychnine, & salts						
D009	Mercury	3	POUNDS	GENERATED	2011		
More than one waste code was reported for the following waste amount:		4	POUNDS	GENERATED	2011		
D001	Solid waste that exhibits the characteristic of ignitability						
D002	Solid waste that exhibits the characteristic of corrosivity						
D005	Barium						
D006	Cadmium						
D007	Chromium						
More than one waste code was reported for the following waste amount:		1	POUNDS	GENERATED	2011		
D001	Solid waste that exhibits the characteristic of ignitability						
D002	Solid waste that exhibits the characteristic of corrosivity						
D005	Barium						
D006	Cadmium						
D007	Chromium						
D008	Lead						

NYS DEC Manifested Waste Transactions for NYR000136655 continued ---

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT	WASTE UNITS	TRANSACTION TYPE	YEAR	HISTORIC MAXIMUM AMOUNT	HISTORIC MAXIMUM YEAR
More than one waste code was reported for the following waste amount:		5	POUNDS	GENERATED	2011	341	2010
D006	Cadmium						
D008	Lead						
D016	2,4-D, (2,4-Dichlorophenoxyacetic acid).						
More than one waste code was reported for the following waste amount:		27	POUNDS	GENERATED	2011		
D006	Cadmium						
D018	BENZENE						
More than one waste code was reported for the following waste amount:		188	POUNDS	GENERATED	2011		
D006	Cadmium						
D016	2,4-D, (2,4-Dichlorophenoxyacetic acid).						
D008	Lead						
More than one waste code was reported for the following waste amount:		2	POUNDS	GENERATED	2011		
D001	Solid waste that exhibits the characteristic of ignitability						
U002	Acetone (I)						
D005	Barium						
D006	Cadmium						
D007	Chromium						
More than one waste code was reported for the following waste amount:		1	POUNDS	GENERATED	2010		
D001	Solid waste that exhibits the characteristic of ignitability						
U034	Acetaldehyde, trichloro-						
More than one waste code was reported for the following waste amount:		150	POUNDS	GENERATED	2009		
D035	Methyl ethyl ketone						
D001	Solid waste that exhibits the characteristic of ignitability						
D016	2,4-D, (2,4-Dichlorophenoxyacetic acid).	8	POUNDS	GENERATED	2008		
More than one waste code was reported for the following waste amount:		14	POUNDS	GENERATED	2008		
D001	Solid waste that exhibits the characteristic of ignitability						
D002	Solid waste that exhibits the characteristic of corrosivity						
More than one waste code was reported for the following waste amount:		22	POUNDS	GENERATED	2008	100	2007
D001	Solid waste that exhibits the characteristic of ignitability						
D018	BENZENE						
D035	Methyl ethyl ketone						
F005	Spent non-halogenated solvents						

NYS DEC Manifested Waste Transactions for NYR000136655 continued ---

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT	WASTE UNITS	TRANSACTION TYPE	YEAR	HISTORIC MAXIMUM AMOUNT	HISTORIC MAXIMUM YEAR
D001	Solid waste that exhibits the characteristic of ignitability	5	GALLONS	GENERATED	2007		
D002	Solid waste that exhibits the characteristic of corrosivity	3	GALLONS	GENERATED	2006		

NOTE: 2011 waste amounts are for 1/1/11 to 6/7/11 only

Map Identification Number 4 **NYS EC Name:** **OME EPO 12 1** **Facility Id: NYR00013 4**

NYSDEC Address: 2750 VETERANS RD W STATEN ISLAND, NY 10309 TT-Id: 740A-0073-799
EPA (RCRA) Name: HOME DEPOT USA HD1281
EPA (RCRA) Address: 2750 VETERANS RD W STATEN ISLAND, NY 103092500

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (4)
Approximate distance from property: 435 feet to the ESE

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

US EPA RCRA Type: SMALL QUANTITY GENERATOR
Land Disposal: Receives offsite waste:
Storer: Treatment facility:
Notification date: 03/29/2006
Incinerator:
Transporter:
Contact Name: ROBERT PERKINS Source Type: Implementer Contact Phone: 760-602-8700 Contact Info Date: 01/01/2007
Contact Name: ROBERT PERKINS Source Type: Notification Contact Phone: 760-602-8700 Contact Info Date: 03/29/2006

US EPA RCRA Violations:

Violation Type: Generators - Pre-transport
Violation Number: 0001 Location: NY
Former Citation:
Responsible Agency: STATE
Violation Determination Date: 10/14/2008
Violation Return to Compliance: 11/04/2008

Violation Type: Generators - Pre-transport
Violation Number: 0002 Location: NY
Former Citation:
Responsible Agency: STATE
Violation Determination Date: 10/14/2008
Violation Return to Compliance: 11/04/2008

Violation Type: Generators - Pre-transport
Violation Number: 0003 Location: NY
Former Citation:
Responsible Agency: STATE
Violation Determination Date: 10/14/2008
Violation Return to Compliance: 11/04/2008

Violation Type: State Statute or Regulation
Violation Number: 0004 Location: NY
Former Citation:
Responsible Agency: STATE
Violation Determination Date: 10/14/2008
Violation Return to Compliance: 11/21/2008

Violation Type: State Statute or Regulation
Violation Number: 0005 Location: NY
Former Citation:
Responsible Agency: STATE
Violation Determination Date: 10/14/2008
Violation Return to Compliance: 11/21/2008

Violation Type: TSD Interim Stat−Preparedness and Prevention
Violation Number: 0006 Location: NY
Former Citation:
Responsible Agency: STATE
Violation Determination Date: 10/14/2008
Violation Return to Compliance: 11/04/2008

Violation Type: Universal Waste − Small Quantity Handlers
Violation Number: 0007 Location: NY
Former Citation:
Responsible Agency: STATE
Violation Determination Date: 10/14/2008
Violation Return to Compliance: 11/04/2008

Violation Type: Universal Waste − Small Quantity Handlers
Violation Number: 0008 Location: NY
Former Citation:
Responsible Agency: STATE
Violation Determination Date: 10/14/2008
Violation Return to Compliance: 11/04/2008

NYS DEC Manifested Waste Summary:
Waste Codes, Waste Units, and Transaction Types are only shown for the most recently reported year.

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT	WASTE UNITS	TRANSACTION TYPE	YEAR	HISTORIC MAXIMUM AMOUNT	HISTORIC MAXIMUM YEAR
D016	2,4−D, (2,4−Dichlorophenoxyacetic acid).	75	POUNDS	GENERATED	2012	2660	2008
	More than one waste code was reported for the following waste amount: D001 Solid waste that exhibits the characteristic of ignitability D005 Barium D007 Chromium D008 Lead D035 Methyl ethyl ketone	35	POUNDS	GENERATED	2012	312	2009
	More than one waste code was reported for the following waste amount: D001 Solid waste that exhibits the characteristic of ignitability D018 BENZENE	15	GALLONS	GENERATED	2012	30	2010
	More than one waste code was reported for the following waste amount: D001 Solid waste that exhibits the characteristic of ignitability D035 Methyl ethyl ketone	80	POUNDS	GENERATED	2012	1770	2009
	More than one waste code was reported for the following waste amount: D001 Solid waste that exhibits the characteristic of ignitability D006 Cadmium D035 Methyl ethyl ketone	16	POUNDS	GENERATED	2012	82	2009
D001	Solid waste that exhibits the characteristic of ignitability	126	POUNDS	GENERATED	2011	4982	2007
D002	Solid waste that exhibits the characteristic of corrosivity	354	POUNDS	GENERATED	2011	362	2009

NYS DEC Manifested Waste Transactions for NYR000138784 continued ---

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT	WASTE UNITS	TRANSACTION TYPE	YEAR	HISTORIC MAXIMUM AMOUNT	HISTORIC MAXIMUM YEAR
D001	Solid waste that exhibits the characteristic of ignitability	1219	GALLONS	GENERATED	2009		
D003	Solid waste that exhibits the characteristic of reactivity	12	POUNDS	GENERATED	2009		
D009	Mercury	28	POUNDS	GENERATED	2009		
More than one waste code was reported for the following waste amount:		216	POUNDS	GENERATED	2009		
D001	Solid waste that exhibits the characteristic of ignitability						
D008	Lead						
More than one waste code was reported for the following waste amount:		49	POUNDS	GENERATED	2009	1772	2007
D006	Cadmium						
D008	Lead						
D011	Silver						
D016	2,4−D, (2,4−Dichlorophenoxyacetic acid).						
More than one waste code was reported for the following waste amount:		554	POUNDS	GENERATED	2009		
D006	Cadmium						
D016	2,4−D, (2,4−Dichlorophenoxyacetic acid).						
More than one waste code was reported for the following waste amount:		15	POUNDS	GENERATED	2008		
D001	Solid waste that exhibits the characteristic of ignitability						
D018	BENZENE						
More than one waste code was reported for the following waste amount:		20	POUNDS	GENERATED	2008		
D006	Cadmium						
D016	2,4−D, (2,4−Dichlorophenoxyacetic acid).						
D008	Lead						
More than one waste code was reported for the following waste amount:		1	POUNDS	GENERATED	2007		
D006	Cadmium						
D008	Lead						
D011	Silver						
More than one waste code was reported for the following waste amount:		90	POUNDS	GENERATED	2007		
D006	Cadmium						
D016	2,4−D, (2,4−Dichlorophenoxyacetic acid).						
D008	Lead						
D011	Silver						
D006	Cadmium	215	POUNDS	GENERATED	2006		

NYS DEC Manifested Waste Transactions for NYR000138784 continued ---

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT	WASTE UNITS	TRANSACTION TYPE	YEAR	HISTORIC MAXIMUM AMOUNT	HISTORIC MAXIMUM YEAR
More than one waste code was reported for the following waste amount:		47	POUNDS	GENERATED	2006		
D006	Cadmium						
D008	Lead						
More than one waste code was reported for the following waste amount:		3	POUNDS	GENERATED	2006		
D009	Mercury						
D008	Lead						
D011	Silver						
D016	2,4-D, (2,4-Dichlorophenoxyacetic acid).						

NOTE: 2011 waste amounts are for 1/1/11 to 6/7/11 only

Map Identification Number 4 **NYS EC Name:** **A O AU O O Y INC A N: ONY** **Facility Id: NY 2 3**

NYSDEC Address: 4409 ARTHUR KILL ROAD STATEN ISLAND, NY 10309 TT-Id: 740A-0043-345
EPA (RCRA) Name: A TO Z AUTO BODY
EPA (RCRA) Address: 4409 ARTHUR KILL RD STATEN ISLAND, NY 10309

MAP LOCATION INFORMATION
Site location mapped by: PARCEL MAPPING (2)
Approximate distance from property: 501 feet to the NW

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

US EPA RCRA Type: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR
Notification date: 05/19/1989
Land Disposal: Receives offsite waste: Incinerator:
Storer: Treatment facility: Transporter:
Contact Name: TONY CASSA Source Type: Implementer Contact Phone: 718-984-1511 Contact Info Date: 01/01/2007
Contact Name: TONY CASSA Source Type: Notification Contact Phone: 718-984-1511 Contact Info Date: 05/19/1989

Historically listed as the following USEPA RCRA Generator Size(s) as well:
SMALL QUANTITY GENERATOR

NYS DEC Manifested Waste Summary:
Waste Codes, Waste Units, and Transaction Types are only shown for the most recently reported year.

WASTE CODE	WASTE DESCRIPTION	WASTE AMOUNT	WASTE UNITS	TRANSACTION TYPE	YEAR	HISTORIC MAXIMUM AMOUNT	HISTORIC MAXIMUM YEAR
More than one waste code was reported for the following waste amount:		400	POUNDS	GENERATED	2010		
F005	Spent non−halogenated solvents						
F003	Spent non−halogenated solvents						
D001	Solid waste that exhibits the characteristic of ignitability						
D018	BENZENE						
D035	Methyl ethyl ketone						
F003	Spent non−halogenated solvents	110	GALLONS	GENERATED	2004	400	2000
F005	Spent non−halogenated solvents	265	GALLONS	GENERATED	1990		

CHEMICAL STORAGE FACILITIES IDENTIFIED WITHIN THE 1 MILE SEARCH RADIUS

PLEASE NOTE: * Compass directions can vary substantially for sites located very close to the subject property address.

Map Identification Number 4 **C ARLES ON US ANNE** **Facility Id: 2 0004 3**
4700 ARTHUR KILL RD NEW YORK, 10309 TT-Id: 780A-0005-207

MAP LOCATION INFORMATION
Site location mapped by: MANUAL MAPPING (3)
Approximate distance from property: 111 feet to the W*

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

Expiration Date of the facility's registration certificate: 02/03/2013
Site Type: Other

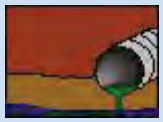
Site Status: Active

NOTE: Additional detailed facility and tank information has not been made publicly available by the NYSDEC since 1/1/2002.

NO HISTORIC UTILITY SITES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

NO HAZARDOUS SU STANCE WASTE DISPOSAL SITES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

NO TO IC AIR LAND AND WATER RELEASES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS



NO WASTEWATER DISCHARGES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

NO AIR DISCHARGE FACILITIES IDENTIFIED WITHIN 1 MILE SEARCH RADIUS

NO CIVIL ADMINISTRATIVE ENFORCEMENT DOC ET FACILITIES IDENTIFIED WITHIN THE 1 MILE SEARCH RADIUS

NO NYC ENVIRONMENTAL QUALITY REVIEW REQUIREMENTS − E DESIGNATION SITES IDENTIFIED WITHIN FT SEARCH RADIUS

U.S. EPA EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS) SPILLS
AT THE LOCATION OR POTENTIALLY AT THE LOCATION OF
Charleston
Staten Island, NY 10309

* Any ERNS Spills listed below are NOT mapped in this report *

ONSITE ERNS (A count of these spills can be found in the distance interval table):
THIS SITE IS NOT FOUND IN THE ERNS DATABASE

POTENTIALLY ONSITE ERNS:
THIS SITE IS NOT FOUND IN THE ERNS DATABASE

 August 10, 2012 'Charleston'

Unmappable facilities for 'Richmond' County

Brownfields Sites

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
V00159	NASSAU METALS	1 NASSAU PLACE AND 286 RICHMOND VALLEY R	STATEN ISLAND	UNKNOWN

Solid Waste Facilities

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
43C23	NYCDOS FOOD COMPOST			UNKNOWN
43D06	CARMENS REST. DEMO SLF			UNKNOWN
43D09	ARROW REHAB T.S.			UNKNOWN
43E02	PROCTOR & GAMBLE WOOD STO			UNKNOWN
43T21	STAR SAND & GRAVEL			UNKNOWN
43T25	STATEN ISLAND RECYCLING			UNKNOWN
43W31	M QUINTAVALLE TREE SERVIC			UNKNOWN
43W43	INTERSTATE MATERIALS CORP			UNKNOWN
43W46	T M MAINTENANCE INC			UNKNOWN
		HAMMERSLEY	STATEN ISLAND	UNKNOWN

Hazardous Waste Treater, Storer, or Disposal Sites

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
NYD086225596	NASSAU METALS CORP	1 NASSAU PLACE	STATEN ISLAND	UNKNOWN
NYR000032797	LUCENT-TECH ELECTROPLATING (NASSAU METAL	236 RICHMOND VALLEY RD	STATEN ISLAND	UNKNOWN

Hazardous Spills - UNKNOWN CAUSE OR OTHER CAUSES - Active

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
9403012	DIANE FALLON	14 WOODWELL AVE	STATEN ISLAND	UNKNOWN
0107381	FEEDER 38R52	STA 244 +00	STATEN ISLAND	UNKNOWN

Hazardous Spills - MISC. SPILL CAUSES - Active

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
1006537	NORTON SUBSTATION	226 DUNCAN HILLS AVE	STATEN ISLAND	UNKNOWN

Hazardous Spills - TANK FAILURES - Closed

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
9611929	NASSAU METALS CORP	1 NASSAU PLACE	STATEN ISLAND	UNKNOWN
9503685	ARTHUR KILL ROAD	ARTHUR KILL ROAD	STATEN ISLAND	UNKNOWN
9413991	NASSAU METALS	1 NASSAU PLACE	STATEN ISLAND	UNKNOWN
9314032	BAYWAY REFINERY	BAYWAY REFINERY	STATEN ISLAND	UNKNOWN
9313453	ARTHUR KILL - LINDEN NJ	ARTHUR KILL - LINDEN NJ	STATEN ISLAND	UNKNOWN
9213993	NASSAU METALS	1 NASSAU PLACE	STATEN ISLAND	UNKNOWN
9207117	VESSEL - PIN HOLE LEAK	IMTT TERMINAL/BAYONNE NJ	STATEN ISLAND	UNKNOWN
9105256	240 SUPERIOR ST/CONFECTIO	240 SUPERIOR ST/CONFECTIO	STATEN ISLAND	UNKNOWN
8805173	AT & T NASSAU METALS	1 NASSAU PLACE	STATEN ISLAND	UNKNOWN
9500199	132 FLAGAMAN PL	132 FLAGAMAN PL	STATEN ISLAND PL	UNKNOWN

Hazardous Spills - TANK TEST FAILURES - Closed

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
8806618	CLOSED-LACKOF RECENT INFO	77 SOUTHERN AVENUE	NEW YORK CITY	UNKNOWN
9809823		320 VONDERVILLE	STATEN ISLAND	UNKNOWN
8707893	AT & T NASSAU METALS	1 NASSAU PLACE	STATEN ISLAND	UNKNOWN
0407779	NYC DEP FACILITY	MAYFLOWER AVE & ARTHUR KILL	STATEN ISLAND	UNKNOWN

Hazardous Spills - UNKNOWN CAUSE OR OTHER CAUSES - Closed

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
9512887	MSC CLAUDIA	UNKNOWN		UNKNOWN
8503968	UNKNOWN	STATEN ISLAND		UNKNOWN

9803342	COASTAL OIL EAST 5H STREE	COASTAL OIL	BAYONNE	UNKNOWN
9503994	COASTAL OIL DOCK	COASTAL OIL DOCK	BAYONNE	UNKNOWN
0504086	PRIVATE RESIDENCE	536 PARGEE ST	BROOKLYN	UNKNOWN
9310265	SOUTH WOOD AVE.	SOUTH WOOD AVE	LINDEN	UNKNOWN
9613207	ARTHURKILL WATERWAY	AREA OFF MOUTH	NEW YORK	UNKNOWN
9100198	ARTHUR KILL RIVER/S.I.	ARTHUR KILL RIVER	NEW YORK CITY	UNKNOWN
9001507	ARTHUR KILL RIVER/S.I.	ARTHUR KILL RIVER	NEW YORK CITY	UNKNOWN
9000239	ARTHUR KILL/FRESHKILLS	ARTHUR KILL/FRESHKILLS	NEW YORK CITY	UNKNOWN
8901751	SMITH CREEK/N.J.	ARTHUR KILL/S.I.	NEW YORK CITY	UNKNOWN
8803092	STATEN ISLAND-BEACHES	STATEN ISLAND/BEACHES	NEW YORK CITY	UNKNOWN
8802348	DOCKS ARTHUR KILL RIVER	DOCKS ARTHUR KILL RIVER	NEW YORK CITY	UNKNOWN
8702694	EXXON BAYWAY / ELIZABETHT	@ EXXON BAYWAY	NEW YORK CITY	UNKNOWN
8602875	NEW LAME RD	NEW LAME RD	NEW YORK CITY	UNKNOWN
8602086	STATEN ISLAND GAS ODORS	DTATEN ISLAND (ENTIRE ISL	NYC STATEN ISLAND	10300
9913934	NEW HARBOR	SANDY HOOK CHANNEL B. 17	RICHMOND	UNKNOWN
1201753	EDC CORP	355 FRONT ST	STATEN ISALND	UNKNOWN
1114418	DRILL	SLIP ONE / BARGE 4/FUELING VESSEL	STATEN ISALND	UNKNOWN
9913764	RESIDENCE	485 MARITHIS AVE	STATEN ISLAND	UNKNOWN
9906856	FRESHKILL PLANT	1 WATERWAY	STATEN ISLAND	UNKNOWN
9814444	NAUTILUS COURT PUMP	STATION	STATEN ISLAND	10300
9810547	AMERADA HESS PORT REDDING	UNKNOWN	STATEN ISLAND	UNKNOWN
9800537	KILL VAN KULL BETWEEN	LIGHT 14 & BUOY R2	STATEN ISLAND	UNKNOWN
9708401	JOHNSON AVE	SKIEN AVE	STATEN ISLAND	10307
9707078	KILL VAN KULL	ARTHUR KILL ROAD	STATEN ISLAND	UNKNOWN
9706043	SHEEN ON WATER	ARTHUR KILL ROAD	STATEN ISLAND	UNKNOWN
9703129	1 DELMONT TERR	1 DELMONT TERR	STATEN ISLAND	UNKNOWN
9610205	STATEN ISLAND EXPRESSWAY	NORTH 2000 OF OUTERBRIDGE	STATEN ISLAND	UNKNOWN
9608044	ARTHUR KILL RIVER	ARTHUR KILL RIVER	STATEN ISLAND	UNKNOWN
9607660	ARTHUR KILL	WESTON AVE	STATEN ISLAND	UNKNOWN
9605710	WAINWRIGHT SUB-STATION	WAINWRIGHT SUB-STATION	STATEN ISLAND	UNKNOWN
9604297	ARTHURKILL	NOT APPLICABLE	STATEN ISLAND	UNKNOWN
9603368	MORAN SHIPYARD &	ARTHUR KILL	STATEN ISLAND	UNKNOWN
9510434	CONSTABLE HOOK	CONSTABLE HOOK	STATEN ISLAND	UNKNOWN
9509202	AT & T NASSAU METAL	286 RICHMOND VALLEY RD	STATEN ISLAND	UNKNOWN
9509164	S.I./PERTH AMBOY BRIDGES	S.I./PERTH AMBOY BRIDGES	STATEN ISLAND	UNKNOWN
9505486	ARTHUR KILL & RARITAN BAY	ARTHUR KILL & RARITAN BAY	STATEN ISLAND	UNKNOWN
9503203	BODINE CREEK	BODINE CREEK	STATEN ISLAND	UNKNOWN
9502691	ARTHUR KILL GEN STATION	ARTHUR KILL RIVER	STATEN ISLAND	UNKNOWN
9501967	SHIP GRAVE YARD	SHIP GRAVE YARD	STATEN ISLAND	UNKNOWN
9500457	HOWLLAND HOOK	WEST OF SHANTERS ISLAND	STATEN ISLAND	UNKNOWN
9414842	CARTERT/ARTHUR KILL	CARTERET /ARTHUR KILL	STATEN ISLAND	UNKNOWN
9410082	ARTHUR KILL-ELLIS ISLAND	ARTHUR KILL-ELLIS ISLAND	STATEN ISLAND	UNKNOWN
9409017	ARTHUR KILL	ARTHUR KILL	STATEN ISLAND	UNKNOWN
9407442	ARTHUR KILL BOAT GRAVEYAR	ARTHUR KILL BT GRAVEYARD	STATEN ISLAND	UNKNOWN
9407440	PILES CREEK-ARTHUR CREEK	PILE CREEK- ARTHUR KILL	STATEN ISLAND	UNKNOWN
9403211	ARTHUR KILL-BAYWAY REFIN.	ARTHUR KILL-BAYWAY REFIN.	STATEN ISLAND	UNKNOWN
9401061	ARTHUR KILL	ARTHUR KILL	STATEN ISLAND	UNKNOWN
9313224	NEWARK BAY - ARTHUR KILL	NEWARK BAY - ARTHUR KILL	STATEN ISLAND	UNKNOWN
9312710	ARTHUR KILL	ARTHUR KILL	STATEN ISLAND	UNKNOWN
9310779	CHEVRON DOCK -PERTH AMBOY	CHEVRON DOCK -PERTH AMBOY	STATEN ISLAND	UNKNOWN
9309914	HERBERTSON & 106 NEW STA.	HERBERTSON & 106 NEW STA	STATEN ISLAND	UNKNOWN
9307886	HALL AVENUE	HALL AVENUE	STATEN ISLAND	UNKNOWN
9305854	NAVAL STA.ANCHORAGE-PIER1	NAVAL STA.ANCHORAGE-PIER1	STATEN ISLAND	UNKNOWN
9305777	IN ARTHUR KILL BAY 20	IN ARTHUR KILL BAY 20	STATEN ISLAND	UNKNOWN
9304249	SHIP GRAVEYARD ROTHVILLE	SHIP GRAVEYARD ROTHVILLE	STATEN ISLAND	UNKNOWN
9303658	IMTT FUEL FACILITY	IMTT FUEL FACILITY	STATEN ISLAND	UNKNOWN
9301726	RUFFEK DR. STATEN ISLAND	CASTRO RES.RUFFEK DR.	STATEN ISLAND	UNKNOWN
9300139	ARTHUR KILL	ARTHUR KILL	STATEN ISLAND	UNKNOWN
9204829	ARTHUR KILL	ARTHUR KILL	STATEN ISLAND	UNKNOWN
9201133	ARTHUR KILL	ARTHUR KILL	STATEN ISLAND	UNKNOWN

9110144	ARTHURKILL RD	ARTHUR KILL ROAD	STATEN ISLAND	UNKNOWN
9107219	ARTHUR KILL	ARTHUR KILL	STATEN ISLAND	UNKNOWN
9106457	ARTHUR KILL RD & HOUSEMOU	ARTHUR KILL RD & HOUSEMOU	STATEN ISLAND	UNKNOWN
9106146	ARTHURKILL SHIP GRAVEYARD	ARTHURKILL SHIP GRAVEYARD	STATEN ISLAND	UNKNOWN
9005744	ALLIED TANK CORP/S.I.	PERTH AMBOY ANCHORAGE	STATEN ISLAND	UNKNOWN
9003773	NY & NJ/STATEN ISLAND	NY & NJ AREA/STATEN ISLAN	STATEN ISLAND	UNKNOWN
8806335	TOTTENVILLE/S.I.	NEAR DECK AT TOTTENVILLE	STATEN ISLAND	UNKNOWN
8805043	BURGEN PT / CON HOOK	BURGEN PT/ CON HOOK	STATEN ISLAND	UNKNOWN
8702892	ARTHUR KILL ROAD / STATEN	ARTHUR KILL ROAD	STATEN ISLAND	UNKNOWN
8701769	ARTHUR KILL ROAD / STATEN	ARTHUR KILL ROAD	STATEN ISLAND	UNKNOWN
8603527	LEMON CREEK	LEMON CREEK	STATEN ISLAND	10309
8603490	TOTTENVILLE	TOTTENVILLE	STATEN ISLAND	10307
8504840	STATEN ISLAND	STATEN ISLAND	STATEN ISLAND	UNKNOWN
8504757	STATEN ISLAND,RICHMOND CT	STATEN ISLAND, RICHMOND CT	STATEN ISLAND	UNKNOWN
8503295	STATEN ISLAND	STATEN ISLAND	STATEN ISLAND	UNKNOWN
8503290	STATEN ISLAND RICHMOND CT	STATEN ISLAND, RICHMOND	STATEN ISLAND	UNKNOWN
8503246	STATEN ISLAND	STATEN ISLAND	STATEN ISLAND	UNKNOWN
8503169	STATEN ISLAND	STATEN ISLAND	STATEN ISLAND	UNKNOWN
8503037	STATEN ISLAND	STATEN ISLAND	STATEN ISLAND	UNKNOWN
8502945	UNKNOWN	GREAT KILLS	STATEN ISLAND	UNKNOWN
7900846			STATEN ISLAND	UNKNOWN
1113066	ON THE BEACH	PARLPON	STATEN ISLAND	UNKNOWN
1107705	RICHMOND 1E	NAUTILUS COURT NORTH OF 8TH ST	STATEN ISLAND	UNKNOWN
1100402	OAKWOOD STATION	REWIS AVE/ SELWWOD AVE	STATEN ISLAND	UNKNOWN
1009496	EDGEWATER PLAZA	1 EDGEWATER PLAZA	STATEN ISLAND	UNKNOWN
0913173	POLE #5	20 LAGAPE AVE	STATEN ISLAND	UNKNOWN
0912818	IN ROAD - 1 MILE LONG	’ RT 440 SOUTH SERVICE RD’	STATEN ISLAND	UNKNOWN
0900156	NORTON SUB STATION	2226 DUNGEN HILL AVE	STATEN ISLAND	UNKNOWN
0710891	KMI #6	KMI TERMINAL	STATEN ISLAND	UNKNOWN
0708916	DEGAETANO RESIDENCE	26 CRISTI LN.	STATEN ISLAND	UNKNOWN
0610034	APARTMENT	55 HOLLAND AVE	STATEN ISLAND	UNKNOWN
0609869	NASSAU‘S METALS REMEDIATI	1 NASSAU PLACE	STATEN ISLAND	UNKNOWN
0607763	MANHOLE #55	SI RAPID TRANSIT/BANKI ST	STATEN ISLAND	UNKNOWN
0605768	ARTHUR KILL	STATEN ISLAND & LINDEN NJ	STATEN ISLAND	UNKNOWN
0605477	ARTHUR KILL	UNKNOWN	STATEN ISLAND	UNKNOWN
0513802	PRAWLS ISLAND	ARTHUR KILL	STATEN ISLAND	UNKNOWN
0513704	OVERSEAS REINEAR	STATEN ISLAND	STATEN ISLAND	UNKNOWN
0513538	BOTH FREEZE PITS	WEST SHORE EXPRESSWAY	STATEN ISLAND	UNKNOWN
0504691	MANHOLE#8094	STATEN ISLAND LANDFILL	STATEN ISLAND	10300
0504457	ARTHUR KILL	ARTHUR KILL RD/ARTHUR	STATEN ISLAND	UNKNOWN
0503653	MANHOLE # 07112	VETERANS ROAD/ROSSVILLE R	STATEN ISLAND	10309
0500814	POLE 20780	ARTHUR KILL RD ZEBRA RD	STATEN ISLAND	10309
0400303	STATEN ISLAND RAILROAD TR	RIGHT OF WAY	STATEN ISLAND	10300
0313976	UNKNOWN	UNKNOWN	STATEN ISLAND	UNKNOWN
0311839	JOHN LIVOTI	VETERANS ROAD WEST AND WE	STATEN ISLAND	10309
0308953		STATEN ISLAND	STATEN ISLAND	10300
0305750	MAN HOLE 42	SIRT RAILROAD ROW	STATEN ISLAND	UNKNOWN
0304409	ARTHUR KILL WATERWAY	SHORELINE OF ARTHUR KILL	STATEN ISLAND	WAKIL
0200603	MAN HOLE #7110	WOODROW SUB STA.	STATEN ISLAND	UNKNOWN
0105053	RICHMOND CO BANK BALL PK	BAY STREET	STATEN ISLAND	UNKNOWN
0010672		ARTHUR KILL	STATEN ISLAND	WAKIL
0003242	MANHOLE 366	FRESHKILLS SUBSTATION	STATEN ISLAND	UNKNOWN
0000633	NEAR GATX FACILITY DOCK 2	ARTHUR KILL	STATEN ISLAND	UNKNOWN
9907078	COMMERCIAL PROPERTY	ARTHURKILL RD	TOTTENVILLE	UNKNOWN
9208284	UNK	UNKNOWN	UNKNOWN	UNKNOWN
9415801	FERRY ST & STATE ST	FERRY ST & STATE ST	WOODBRIDGE	UNKNOWN

Hazardous Spills - MISC. SPILL CAUSES - Closed

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
9709485	M/V TEVAL	AT SEA	AT SEA	UNKNOWN

0513878	IMTT BAYONNE (KILL VAN K	EAST 22ND STREET	BAYONNE (STATEN ISLAND)	UNKNOWN
9411443	BARGE RTC # 330	FOOT OF EAST 5TH STREET	BAYONNE, HUDSON	UNKNOWN
9912483	ARTHUR KILL RIVER	PRALL ISLAND	NEW YORK	UNKNOWN
8903986	ROSSVILLE/S.I.	ROSSVILLE	NEW YORK CITY	UNKNOWN
8704674	RICHMOND MOTOR CAR CORP.	RICHMOND MOTOR CAR CORP.	NEW YORK CITY	UNKNOWN
9306968	ARTHUR KILL - STATEN ISL.	ARTHUR KILL - STATEN ISL.	RICHMOND	UNKNOWN
9301173	E.26 ST BAYONNE	E. 26 ST BAYONNE	RICHMOND	UNKNOWN
0412400	KC MARINE BARGE SPILL	ARTHUR KILL - VISY PAPER	RICHMOND	UNKNOWN
9913588	B. NO. 85	BOUCHARD TRANSPORT	STATEN ISLAND	UNKNOWN
9904372	LUCENT TECHNOLOGY	1 NASSAU PLACE	STATEN ISLAND	UNKNOWN
9814498	WILANA -VESSEL	50 MI OF LONG ISLAND	STATEN ISLAND	UNKNOWN
9806999	POLE #32633	UNKNOWN	STATEN ISLAND	UNKNOWN
9804464		IFO 11 MINNER ST	STATEN ISLAND	UNKNOWN
9701968	AURTHUR KILL	BERTH 4 OF GATX	STATEN ISLAND	UNKNOWN
9701734	GATX TERMINAL	COASTAL PIPELINE METER ST	STATEN ISLAND	UNKNOWN
9614788	BETWEEN FRESHKILL SUB STA	& STATEN ISLAND	STATEN ISLAND	UNKNOWN
9610733	CLAY PITT POND PARK	VETERANS ROAD WEST AND BLOOMINGROVE	STATEN ISLAND	UNKNOWN
9609174	85 AFAFIA AVE	85 AFAFIA AVE	STATEN ISLAND	UNKNOWN
9511695	OUTER BRIDGE CROSSING	ADMINISTRATION BUILDING	STATEN ISLAND	10309
9511554	FEEDER 38R582 SECTION 1	CON ED	STATEN ISLAND	UNKNOWN
9504908	ARTHUR KILL	ARTHUR KILL	STATEN ISLAND	UNKNOWN
9504643	409 COLLIN ST	409 COLLIN ST	STATEN ISLAND	UNKNOWN
9503545	ARTHUR KILL/SHOOTERS ISLE	ARTHUR KILL/SHOOTERS ISLE	STATEN ISLAND	UNKNOWN
9502020	VETERAN'S ROAD WEST	VETERAN'S ROAD WEST	STATEN ISLAND	10309
9414838	SANDY HOOK CHANNEL	SANDY HOOK CHANNEL	STATEN ISLAND	UNKNOWN
9406413	ARTHUR KILL	ARTHUR KILL	STATEN ISLAND	UNKNOWN
9403041	71 BEGROOT PLACE	71 BEGROOT PLACE	STATEN ISLAND	UNKNOWN
9401461	OSHKILL RD	OSHKILL ROAD	STATEN ISLAND	UNKNOWN
9400190	88 POGGY STREET	88 POGGY STREET	STATEN ISLAND	UNKNOWN
9312166	6 PERSLEY STREET	6 PERSLEY STREET	STATEN ISLAND	UNKNOWN
9311675	178 DENZIER AVENUE	178 DENZIER AVENUE	STATEN ISLAND	UNKNOWN
9309148	AT BROOKLYN TOWER	AT BROOKLYN TOWER	STATEN ISLAND	UNKNOWN
9308771	ARTHUR KILL	ARTHUR KILL	STATEN ISLAND	UNKNOWN
9305414	NAVAL STA. NY 423 SITE	NAVAL STA. NY 423 SITE	STATEN ISLAND	UNKNOWN
9303304	VAN DEUSSEN STREET	VAN DEUSSEN STREET	STATEN ISLAND	UNKNOWN
9300254	BUCKEYE PIPELINE	BUCKEYE PIPELINE	STATEN ISLAND	UNKNOWN
9211632	ARTHUR KILL RD.	ARTHUR KILL ROAD	STATEN ISLAND	UNKNOWN
9209554	RT 440	ROUTE 440	STATEN ISLAND	UNKNOWN
9207814	21 COLLONIAL PARK STREET	21 COLLONIAL PARK STREET	STATEN ISLAND	UNKNOWN
9111443	1416 4TH AVE CORP	1416 4TH AVE CORP	STATEN ISLAND	UNKNOWN
9010708	COLONIAL PIPELINE COMPANY	COLONIAL PIPELINE COMPANY	STATEN ISLAND	UNKNOWN
8607769	SHARROT'S ROAD / STATEN I	SHARROT'S ROAD	STATEN ISLAND	10309
1112910	PAD MOUNT TRANSFORMER	9 DIEDRICH AVE	STATEN ISLAND	UNKNOWN
1111869	DRILL	DRILL	STATEN ISLAND	UNKNOWN
1108097	SEWAGE TREATMENT BYPASS	ARLENI ST	STATEN ISLAND	UNKNOWN
1107358	POLE # 17022	219 MELBA STREET & WESTWOOD AVE.	STATEN ISLAND	UNKNOWN
1106542	CON EDISON UNDERGROUND TRANSFORMER 10040	140 NICHOLS DRIVE	STATEN ISLAND	UNKNOWN
1104235	I/A/O TOLL BOOTHS	ISLAND BRIDGE CROSSING EAST	STATEN ISLAND	UNKNOWN
1100775	VAULT 9810	33 FERNDALE AVE	STATEN ISLAND	UNKNOWN
1009780	ROADWAY	PORT RICHMOND SQUARE	STATEN ISLAND	UNKNOWN
1006588	DRILL DRILL DRILL	CODELL SHIP YARD	STATEN ISLAND	UNKNOWN
1003736	OVERHEAD TRANSFORMER	69 GROVER ST	STATEN ISLAND	UNKNOWN
1001254	VESSEL ATLANTIC COMPANION	NEWARK TERMINAL 17	STATEN ISLAND	UNKNOWN
0905961	MANHOLE # 100 EMIS 218141	STATEN ISLAND TRANSIT R/O/W	STATEN ISLAND	UNKNOWN
0904379	CON EDISON POLE # 19763	OPPOSITE 278 WOLFEN AVE	STATEN ISLAND	UNKNOWN
0903761	MARINE OCEAN TERMINAL	MARINE OCEAN TERMINAL	STATEN ISLAND	UNKNOWN
0808114	ARTHUR KILL WATERWAY	NASSAU ST AND RICHMOND VALLEY RD	STATEN ISLAND	UNKNOWN
0712221	DEP TRUCK	14-66 MANNER ROAD	STATEN ISLAND	UNKNOWN
0711009	RUCCI TRUCK	ROME AVE	STATEN ISLAND	UNKNOWN
0709207	STATEN ISLAND TRANSFOR ST	600 WEST ROYAL STREET	STATEN ISLAND	UNKNOWN

0613913	20 GAL RELEASE WHEN CONTRACTOR	55 TOPSIDE LANE	STATEN ISLAND	UNKNOWN
0609939	LEAKING XFMR IN VAULT 9383	21 BLACKBERRY LANE	STATEN ISLAND	UNKNOWN
0603874	TOTTENVILLE SUBSTATION	4250 TOTTENVILLE RD	STATEN ISLAND	UNKNOWN
0600890	UNKNOWN	MARTLING POND RD	STATEN ISLAND	UNKNOWN
0513099	OUTER BRIDGE CROSSING	UNKNOWN	STATEN ISLAND	UNKNOWN
0407012	ARIEL JOINT	ARTHUR KILL ROAD	STATEN ISLAND	UNKNOWN
0313087	POLE #185 TRANSFORMER	1532 DAY ST	STATEN ISLAND	UNKNOWN
0310531	CONACO PHILLIPS 66	ARTHUR KILL RIVER	STATEN ISLAND	WAKIL
0302228		WEST SHORE EXPRESSWAY	STATEN ISLAND	UNKNOWN
0301323		76 FORSTER RD	STATEN ISLAND	UNKNOWN
0212318		ARTHUR KILL ROAD	STATEN ISLAND	UNKNOWN
0211554	EXXON	NEAR OUTER BRIDGE	STATEN ISLAND	UNKNOWN
0206183	MAYFLOWER PUMP STATION	MAYFLOWER AVE & ARTHUR KILL	STATEN ISLAND	UNKNOWN
0204034	INTERSECTION	ARTHURKILL RD/RICHMOND	STATEN ISLAND	UNKNOWN
0202767	ARTHUR KILL	ARTHUR KILL	STATEN ISLAND	WAKIL
0202204	NEAR WOODROW RD EXIT NB	WEST SHORE EXPRESSWAY	STATEN ISLAND	10309
0200681	WAGNER SUBSTATION	WAGNER SUBSTATION	STATEN ISLAND	UNKNOWN
0200241	KVK CHANNEL ARTHUR KILL	IN MIDDLE OF WATER	STATEN ISLAND	UNKNOWN
0108138		STATEN ISLAND LANDFILL	STATEN ISLAND	UNKNOWN
0104052	MOTIVA SEWAREN TERMINAL	STATEN ISLAND	STATEN ISLAND	UNKNOWN
0101217	POLE 11702	MERRILL AVE	STATEN ISLAND	UNKNOWN
0101183		IRT RIGHT OF WY/MEREDITH	STATEN ISLAND	UNKNOWN
0009391	MANHOLE 94	STATEN ISLAND RAPID TRANS	STATEN ISLAND	10300
0008627	POLE 14725	DAY ST/ARTHUR KILL RD	STATEN ISLAND	UNKNOWN
0006784	HYLAND BLVD/SPRIG AV	ON THE GROUND	STATEN ISLAND	UNKNOWN
0002000	POLE 14142	RICHMOND ROAD	STATEN ISLAND	UNKNOWN
0000074	SMITH PL & MOTT AVE	SMITH PL & MOTT AVE	STATEN ISLAND	UNKNOWN
9706065	SOUTHWEST STATEN ISLAND	SOUTHWEST STATEN ISLAND	TOTTENVILLE	UNKNOWN
1200543	WATERWAY/AURTHERKILL	NORTH OF OUTERBRIDGE	TOTTENVILLE	UNKNOWN

Major Oil Storage Facilities

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
2-2120	KINDER MORGAN STATEN ISLAND TERMINAL	4101 ARTHUR KILL ROAD	STATEN ISLAND	10309

Petroleum Bulk Storage Facilities

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
2-609917	PELLICANO'S SERVICE CENTER	38 WINANT CENTER	STATEN ISLAND	10309
NY01284	AIR PROD.& CHEMICALS,INC	1010 W SERVICE RD	STATEN ISLAND	10309

Hazardous Waste Generation or Transport Facilities

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
NYP004021192	CONSOLIDTED EDISON CO	#46211 103 LEONARD		UNKNOWN
NYP000930180	CONSOLIDATED EDISON	TM6675-ORS MET AVE	BROOKLYN	UNKNOWN
NY0000010363	NYCDOT	N/S	N/S	UNKNOWN
NYP004106563	CONSOLIDATED EDISON	87 MEADOW LANE CNR	NEW YORK	UNKNOWN
NYP004011092	CONSOLIDATED EDISON	TAP. CHANCER-S.S DELAWARE -YK	QUEENS	UNKNOWN
NYD000885947	KEYSPAN ENERGY	NEW LANE ST	STATEN ISLAND	UNKNOWN
NYD020589693	NYCEDC	300 WESTERN AVENUE	STATEN ISLAND	UNKNOWN
NYD986952893	NYSDOT BIN 148-NB	NB WESTSHORE EXPWY AT ROADWAY BIN#148-NB	STATEN ISLAND	10309
NYP000791061	USEPA	MADISON WIRE WORKS SITE	STATEN ISLAND	UNKNOWN
NYP004014502	CONSOLIDATED EDISON	V5760 - JAMES ST & ROLLING	STATEN ISLAND	UNKNOWN
NYP004015632	CONSOLIDATED EDISON	TM 4381	STATEN ISLAND	UNKNOWN
NYP004025961	CONSOLIDATED EDISON	MH35314	STATEN ISLAND	UNKNOWN
NYP004045407	CONSOLIDATED EDISON	V7664-20 HILLCREST	STATEN ISLAND	UNKNOWN
NYP004098075	CONSOLIDATED EDISON	EAST SVCE RD STA 198 & 60	STATEN ISLAND	UNKNOWN
NYP004112561	CONSOLIDATED EDISON	98 OLEAN AVE	STATEN ISLAND	UNKNOWN
NYP004140430	CONSOLIDATED EDISON	E HALOM AVE	STATEN ISLAND	UNKNOWN
NYP004241212	CONED	80 E ALT LOOP ROAD	STATEN ISLAND	UNKNOWN
NYP004241303	CONSOLIDATED EDISON	300 THERFCOFF AVE	STATEN ISLAND	UNKNOWN
NYP010001683	NYCDEP	VETERAR RD EAST	STATEN ISLAND	10309

NYR000119040	NYS DOT	KOREAN WAR VET PRKWY C	STATEN ISLAND	10309
NYR000119057	NYS DOT	KOREAN WAR VET PARKWAY C	STATEN ISLAND	10309
NYR000121061	NYSDOT	EB & WB KOREAN WAR VET HIGHWAY	STATEN ISLAND	10309

Hazardous Substance Waste Sites

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
NY0031	AT&T NASSAU METALS CORP	286 RICHMOND VALLEY ROAD	STATEN ISLAND	10309
NY0369	OLD PLACE CREEK	U	U	UNKNOWN

Wastewater Discharges

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
NY0200255	RICHMOND MEMORIAL HOSPITAL			UNKNOWN
NY0200697	AMERADA HESS SERVICE STATION			UNKNOWN
NYU080008	NATIONAL SEATRADE INC.			UNKNOWN
NYU200021	NYC-CSO			UNKNOWN
NYU200063				UNKNOWN
NY0201367	PABONE GAS STATION	1550 WEST SERVICE RD	STATEN ISLAND	10309
NY0140724	ATLANTIC VILLAGE	C/O NYCDEP BWWT ROOM 124	WARDS ISLAND	UNKNOWN

Air Releases

FACILITY ID	FACILITY NAME	STREET	CITY	ZIP
3606100071	USCG-LIGHT	SUNKEN MEADOWS	NEW YORK CITY	UNKNOWN

a ardou a te code pre ented in indi idual o ic Information Profile are defined belo .

D001 Solid waste that exhibits the characteristic of ignitability, but is not listed under any other hazardous waste code.

D002 Solid waste that exhibits the characteristic of corrosivity, but is not listed under any other hazardous waste code.

D003 Solid waste that exhibits the characteristic of reactivity, but is not listed under any other hazardous waste code.

D006 Cadmium

D009 Mercury

D016 2,4−D, (2,4−Dichlorophenoxyacetic acid).

F003 The following spent non−halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n−butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non−halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non−halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I)*

F005 The following spent non−halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2−ethoxyethanol, and 2−nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non−halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I,T)

Source: U. S. Environmental Protection Agency

How Toxic Site Locations Are Mapped

Toxics Targeting maps toxic site locations on a digital version of the U. S. Census map or those used by local authorities using addresses and map coordinates provided by site owners/operators or government agencies. In order to allow site locations to be verified independently, the information used to map each site is presented in the first section of each Toxic Site Profile, along with a description of the mapping technique used and any address corrections that were made in order to locate toxic sites with incomplete or inadequate site location information. The mapping process is explained below.

Map Identification Number: 12 Site Name: Acme World Manufacturing, Inc.

Site Address: 55 Main Street Anytown, NY 11797

MAP LOCATION INFORMATION

Site location mapped by:

Address Matching

1) Most toxic sites are mapped by matching addresses provided by site owners/operators or government agencies with locations on a digital version of the street or parcel map. These site locations are identified with the method used to map them.

Note: Some sites have an address match location and a map coordinate location. Both locations are mapped because they can be equally correct.

or Map Coordinate

2) Some toxic sites are located using map coordinates provided by site owners/ operators or government agencies. These site locations are identified "map coordinate." Map coordinates for Toxic Wastewater Discharges, Toxic Release Inventory sites and Major Oil Storage Facilities should be considered suspect.

or Manual Mapping

or Site Visit

3) Incomplete addresses or map coordinates require some site locations to be determined by commercial street maps (manual mapping), site visits, map coordinates from other databases and address location services. Application of any of these methods is identified accordingly.

ADDRESS CHANGE INFORMATION

Revised Street: NO CHANGE

Revised zip code: NO CHANGE

4) Site addresses are sometimes corrected to eliminate obvious errors that prevent sites from being mapped. All address corrections are noted here.

Information Source Guide

Toxics Targeting's Environmental Reports contain government and other information compiled on 21 categories of reported known or potential toxic sites. Each toxic site database is described below with information detailing a) the source of the information, b) the date when each database is covered to and c) when *Toxics Targeting* obtained the information..

1) **National Priority List for Federal Superfund Cleanup:** Toxic sites nominated for cleanup under the Federal Superfund program. Annual compilation of special two-page detailed profiles of NPL sites. Also includes delisted NPL sites.
ASTM required.* Fannie Mae required.** Source: U. S. Environmental Protection Agency.[1]
Data attributes updated from: 7/20/2012. Data obtained by Toxics Targeting: 7/20/2012.
New Facilities updated through: 7/20/2012. Data obtained by Toxics Targeting: 7/20/2012.

2) **Inactive Hazardous Waste Disposal Site Registry:** New York State database that maintains information and aids decision making regarding the investigation and cleanup of toxic sites. The Registry's data includes two-page profiles noting site name, ID number, description, classification, cleanup status, types of cleanup, owner information, types and quantities of contaminants, and assessment of health and environmental problems. Also included are sites that qualify for possible inclusion on the Registry. These Registry Qualifying sites may or may not be on the Site Registry.
ASTM required.* Fannie Mae required.** Source: New York State Department of Environmental Conservation.[2]
Data attributes updated through: 6/19/2012. Data obtained by Toxics Targeting: 6/19/2012.
New Facilities updated to: 6/19/2012. Data obtained by Toxics Targeting: 6/19/2012.

3) **Corrective Action Activity (CORRACTS):** U. S. Environmental Protection Agency database of hazardous facilities regulated pursuant to the Resource Conservation and Recovery Act (RCRA).
ASTM required.* Fannie Mae required.** Source: U. S. Environmental Protection Agency[1]
Data attributes updated through: 5/9/2012. Data obtained by Toxics Targeting: 6/4/2012.
New facilities updated through: 5/9/2012. Data obtained by Toxics Targeting: 6/4/2012.

4) **CERCLIS:** Toxic sites listed in the Federal Comprehensive Environmental Response, Compensation and Liability Information System. Includes Active and No Further Remedial Action Planned (NFRAP) sites.
ASTM required.* Fannie Mae required.** Source: U. S. Environmental Protection Agency.[1]
Data attributes updated through: 11/28/2011. Data obtained by Toxics Targeting: 12/21/2011.
New Facilities updated through: 11/28/2011. Data obtained by Toxics Targeting: 12/21/2011.

5) **Brownfield Programs:** NYS programs for sites that are abandoned, idled or under-used industrial and/or commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination.
ASTM required.* Source: New York State Department of Environmental Conservation.[2]
Data attributes updated through: 6/19/2012. Data obtained by Toxics Targeting: 6/19/2012.
New Facilities updated to: 6/19/2012. Data obtained by Toxics Targeting: 6/19/2012.

(a) **Brownfield Cleanup Program (BCP)**
(b) **Voluntary Cleanup Program (VCP)**
(c) **Environmental Restoration Program (ERP)**

6) **Solid Waste Facilities:** a compilation of the following 2 databases:

(a) **NYS Solid Waste Registry:** which includes, but is not limited to, landfills, incinerators, transfer stations, recycling centers.
ASTM required.* Fannie Mae required.** Source: New York State Dept. of Environmental Conservation.[2]
Data updated to: 12/31/2001. Data obtained by Toxics Targeting: 3/16/2002.

(b) **1934 Solid Waste Disposal Site in New York City:** which includes sites operated by municipal authorities circa 1934. Source: City of New York Department of Sanitation (1984). The Waste Disposal Problem in New York City: A Proposal For Action.

7) **RCRA Hazardous Waste Treatment, Storage or Disposal Facility Databases:**

(a) **Manifest Information:** New York State database of hazardous waste facilities and shipments regulated by the DEC's Bureau of Hazardous Waste Facility Compliance pursuant to NYS Law and the Resource Conservation and Recovery Act (RCRA).
ASTM required.* Fannie Mae required.** Source: New York State Department of Environmental Conservation.[2]

New facilities updated through: 3/31/2012. New facilities obtained by Toxics Targeting: 6/7/2012.
Manifest transactions data updated to: 3/31/2012. Manifest transactions data obtained by Toxics Targeting: 6/7/2012.

(b) **RCRA Notifier Violations Information:** U. S. Environmental Protection Agency database of hazardous facilities regulated pursuant to the Resource Conservation and Recovery Act (RCRA).
ASTM required.* Fannie Mae required.** Source: U. S. Environmental Protection Agency[1]
New facilities updated through: 5/9/2012. Data obtained by Toxics Targeting: 6/4/2012.
Data attributes updated through: 5/9/2012. Data obtained by Toxics Targeting: 6/4/2012.

8) **Spills Information Database:** Spills reported to the DEC as required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from Petroleum Bulk Storage Regulations) or 6 NYCRR Section 595.2 (from Chemical Bulk Storage Regulations). This database includes both *acti e* and *c ose* spills.
ASTM required.* Fannie Mae.** Source: NYS Department of Environmental Conservation.[2]

New spills through: 6/17/2012 New spills data obtained by Toxics Targeting: 6/17/2012
Spill attribute data through: 6/17/2012 Spill attribute data obtained by Toxics Targeting: 6/17/2012

Active spills: paperwork not completed. Closed spills: paperwork completed.
Both active and closed spills may or may not have been cleaned up (see Date Cleanup Ceased in spill profiles).

9) **Ma or Oil Storage Facilities:** NYS database of facilities licensed pursuant to Article 12 of the Navigation Law, 6NYCRR Parts 610 and 17NYCRR Part 30, such as onshore facilities or vessels, with petroleum storage capacities equal to or greater than four hundred thousand gallons. **Tank ot er data wit eld by NYSDEC as of 4 1 .**
ASTM required.* Fannie Mae required.** Source: New York State Department of Environmental Conservation.[2]

Data updated through: 6/4/2012. Data obtained by Toxics Targeting: 6/4/2012.

10) **Petroleum Bulk Storage Facilities:** a compilation of local and state databases of aboveground and underground petroleum storage tank facilities.

(a) **NYS Petroleum Bulk Storage Database:** This includes all New York State counties except Cortland, Nassau, Rockland, Suffolk, and Westchester. ASTM required.* Fannie Mae required.**
Source: NYS Department of Environmental Conservation.[2]
New facilities updated through: 6/4/2012. Data obtained by Toxics Targeting: 6/4/2012.
Tank data updated through: 6/4/2012. Data obtained by Toxics Targeting: 6/4/2012.

(b) **New York City Fire Department Tank Data:** **Data as been wit eld by t e NYC Fire Dept**
Source: New York City Fire Department. Data obtained by Toxics Targeting: 2/18/1997

11) **RCRA Hazardous Waste enerators and or Transporters Databases:**

(a) **Manifest Information:** New York State database of hazardous waste facilities and shipments regulated by the NYS Department of Environmental Conservation's Bureau of Hazardous Waste Facility Compliance pursuant to New York State Law.
ASTM required.* Fannie Mae required.** Source: New York State Department of Environmental Conservation.[2]

New facilities updated through: 3/31/2012 . New facilities obtained by Toxics Targeting: 6/7/2012.
Manifest transactions data updated to: 3/31/2012. Manifest transactions data obtained by Toxics Targeting: 6/7/2012.

(b) **RCRA Notifier Violations Information:** U. S. Environmental Protection Agency database of hazardous facilities regulated pursuant to the Resource Conservation and Recovery Act (RCRA).
ASTM required.* Fannie Mae required.** Source: U. S. Environmental Protection Agency[1]

New facilities updated through: 5/9/2012. Data obtained by Toxics Targeting: 6/4/2012.
Data attributes updated through: 5/9/2012. Data obtained by Toxics Targeting: 6/4/2012.

12) **C emical Bulk Storage Facilities:** New York State database of facilities compiled pursuant to 6NYCRR Part 596 that store regulated substances listed in 6NYCRR Part 597 in aboveground tanks with capacities greater than 185 gallons and /or in underground tanks of any size. **Tank ot er data wit eld by NYSDEC as of 4 1 .**
ASTM required.* Fannie Mae required.** Source: New York State Department of Environmental Conservation.[2]
Data updated through: 6/4/2012. Data obtained by Toxics Targeting: 6/4/2012.

13) **Historic New York City tility Facilities (1 9 to 19):** An inventory of selected power generating stations, manufactured gas plants, gas storage facilities, maintenance yards and other gas and electric utility sites identified in various historic documents, maps and annual reports of New York utility companies, including: Sanborn Fire Insurance Maps of NYC (1898-1950) Consolidated Edison Co. Annual Reports (1922-1939) Consolidated Edison Co. Map: Boroughs of Manhattan and the Bronx Showing Distribution Mains of the New York Edison Co., (1922) and Consolidated Edison document: enerating and Annex Stations, (1911).

14) **Hazardous Substance Waste Disposal Site Study:** NYS database of waste disposal sites that may pose threats to public health or the environment, but could not be remediated using monies from the Hazardous Waste Remedial Fund.
Source: New York State Department of Environmental Conservation.[2]
Data updated to: 5/16/2000. Data obtained by Toxics Targeting: 5/16/2000.

15) **To ic Release Inventory (TRI):** Federal database of manufacturing facilities required under Section 313 of the Federal Emergency Planning and Community Right-to- now Act to report releases to the air, water and land of any specifically listed toxic chemical. See Fannie Mae requirement** below.
Source: U. S. Environmental Protection Agency.[1] / NYS Department of Environmental Conservation[2]
Data updated through: 3/8/2004. Data obtained by Toxics Targeting: 3/25/2004

16) **To ic Wastewater Disc arges (Permit Compliance System):** Federal database of discharges of wastewater to surface waters and groundwaters. See Fannie Mae requirement** below. Source: U. S. Environmental Protection Agency.[1]
Data updated through: 6/17/2004. Data obtained by Toxics Targeting: 7/19/2004.

17) **Air Disc arge Facilities:** EPA AIRS database containing address information on each air emission facility and the type of air pollutant emission it is. Compliance information is also provided on each pollutant as well as the facility itself.
See Fannie Mae requirement** below. Source: U. S. Environmental Protection Agency[1]
Data updated through: 11/24/1999. Data obtained by Toxics Targeting: 1/6/2000

18) **Civil Enforcement Administrative Docket:** This database is the U. S. EPA's system for tracking administrative and civil udiciary cases filed on behalf of the agency by the Department of ustice. Fannie Mae required.**
Source: U. S. Environmental Protection Agency.[1]
New Sites through: 10/14/1999.
Data updated through: 10/14/1999. Data obtained by Toxics Targeting: 11/18/1999.

19) **New York City Environmental uality Review (CE R) E Designation Sites:** These sites are parcels assigned a special environmental (E) designation under the CEQR process. E designation requires specific protocols that must be followed. Source: New York City Department of Planning[3]
Data updated through: 6/21/2012. Data obtained by Toxics Targeting: 7/2/2012

20) **Emergency Response Notification System (ERNS):** Federal database of spills compiled by the Emergency Response Notification System. n-site searches only.
ASTM required.* See Fannie Mae requirement** below. Source: U. S. Environmental Protection Agency.[1]
Data updated through: 1/31/2000. Data obtained by Toxics Targeting: 2/15/2000

21) **Remediation Site Borders:** Remediation site borders reported by NYSDEC.
Source: New York State Department of Environmental Conservation.[2]
Updated through: 4/8/2009. Data obtained by Toxics Targeting: 7/21/2009.

* American Society of Testing Materials: Standard Practice on Environmental Site Assessments: Phase I Environmental Site Assessment Process (E1527-05).

** Fannie Mae's Part Environmental Hazards Management Procedures specify 1.0 mile searches for any state or Federal list of hazardous waste sites (e.g. CERCLIS, HWDMS etc.). Searches for the property and ad acent properties are specified for chemical manufacturing plants, obvious high risk neighbors engaging in storing or transporting hazardous waste, chemicals or substances and ...any documented or visible evidence of dangerous waste handling... (e.g. stressed vegetation, stained soil, open or leaking containers, foul fumes or smells, oily ponds, etc. Searches for property and ad acent properties can include sites up to a quarter mile away (W. Hayward, Director, Multi-Family Business Planning and Control, Fannie Mae, personal communication, 5/94).

[1]U. S. Environmental Protection Agency, 290 Broadway, NY, NY 10007-1866.

[2]NYS Department of Environmental Conservation, 625 Broadway, Albany, NY 12233.

[3]New York City Department of City Planning, 22 Reade St, New York, NY 10007-1216

FINAL
SITE INVESTIGATION FINDINGS REPORT

CHARLESTON MIXED-USE DEVELOPMENT SITE
STATEN ISLAND, NEW YORK

NYCDEP # DEPTECH043R

EPM Project No. 12043

Prepared for:

AECOM
20 Exchange Place, 13th Floor
New York, NY 10005

For submittal to:

New York City Economic Development Corporation
110 William Street
New York, NY 10038

Prepared by:

ENVIRONMENTAL PLANNING & MANAGEMENT, INC
EPM

1983 Marcus Avenue, Suite 109
Lake Success, New York 11042

July 5, 2013

TABLE OF CONTENTS

SITE INVESTIGATION REPORT
CHARLESTON MIXED-USE DEVELOPMENT SITE

TABLE OF CONTENTS (Continued)

SITE INVESTIGATION FINDINGS REPORT
CHARLESTON MIXED-USE DEVELOPMENT SITE

FIGURES

APPENDICES

EXECUTIVE SUMMARY

Environmental Planning and Management, Inc. (EPM) has completed a subsurface environmental investigation on behalf of the New York City Economic Development Corporation (NYCEDC) and AECOM for the proposed Charleston Mixed-Use Development Site, located in Staten Island (Richmond County), NY (Figure 1 – Site Location and Figure 2 – Aerial Site View). The investigation was conducted in general accordance with EPM's *Sampling and Analysis Plan: Limited Phase II Site Investigation, Charleston Mixed-Use Development Site, May 7, 2013* for the purpose of characterizing soil, groundwater, and soil gas within areas proposed for the new Fairview Park and Retail Site A (Figure 3 –Preliminary Concept Site Plan). The proposed development within the areas investigated includes:

- Fairview Park: The NYC Department of Parks and Recreation will develop a 22-acre park site with areas for both active and passive recreation.
- Retail Site A: A private developer will develop this 10-acre site with retail uses. Preliminary plans for Retail Site A also include a public library branch.

The purpose of this investigation was to determine if any special health and safety precautions would be warranted to protect workers and the surrounding community from exposure to hazardous materials during construction, and to determine if mitigation measures would be required to prohibit public exposure to hazardous materials during future site operation. This investigation emphasized the sampling of shallow soils and soil vapor within the proposed new park area, as well as soil and soil vapor within the proposed footprints of new structures in Retail Site A. Although construction dewatering is not expected based on the deep groundwater table, and groundwater beneath the site is not expected to be used for potable purposes, a groundwater sample was collected from the project site to evaluate general groundwater quality.

The investigation included the advancement of 11 soil borings (SB1 through SB11), one soil boring converted to a temporary groundwater well (GW1), and six soil gas sampling points (SG-1, SG-2, and SG-4 through SG-7). Proposed soil gas sample SG-3 was abandoned due to the sampling apparatus taking in moisture. The sample locations are shown on Figure 4 – Sample Location Diagram. The soil and groundwater samples were laboratory analyzed for Target Compound List (TCL) volatile organic compounds (VOCs); TCL semi-volatile organic compounds (SVOCs); Polychlorinated Biphenyls (PCBs); Pesticides; and, Target Analyte List (TAL) Metals. The groundwater sample was analyzed for total and dissolved TAL Metals. The soil gas samples were laboratory analyzed for VOCs by EPA TO-15.

Soil results were compared to the New York State Department of Environmental Conservation (NYSDEC) Part 375 Remedial Program Soil Cleanup Objectives (SCOs) for Unrestricted Use, Restricted Residential Use, and Commercial Use. Soil impacted above Unrestricted SCOs should be considered potentially contaminated when estimating handling and disposal options for soil that requires removal from the site for construction. It is expected that soil within the new parkland and within unpaved areas of Retail Site A would be required to meet Restricted Residential SCOs, and soil located beneath new paved areas or buildings in Retail Site A would need to meet Commercial SCOs.

Groundwater results were compared to the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards and Guidance Values (Class GA). It should be noted that the Class GA values are essentially strict drinking water standards that do not directly apply to the project site since groundwater beneath the site will not be used as a potable water source. However, the Class GA values are used in this study to evaluate general groundwater quality.

The New York State Department of Health (NYSDOH) issued the *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006); which lists soil vapor action levels for several individual VOC compounds in relation to their potential to migrate to indoor air spaces and the effects on humans within the structures. The NYSDOH guidance also contains a USEPA-compiled database of typical ambient air concentrations of various chemicals. Since the actual structures are not yet present at the project site, a direct evaluation of soil vapor exposure is not possible. The USEPA ambient values and NYSDOH guidance values were used in this study to evaluate the likelihood for future exposure to VOC vapors at the project site.

SOIL ANALYSIS RESULTS

Photoionization detector (PID) readings ranged from non-detect (< 1.0 parts per million [ppm]) in the majority of soil samples, to a maximum of 2.8 ppm in boring SB10. No petroleum staining or odors were observed among the soils recovered.

Laboratory analysis did not identify any VOCs, SVOCs, PCBs, or Pesticides in the soil samples collected from the project site at concentrations above their respective Unrestricted, Restricted Residential, or Commercial SCOs. The majority of these results were at non-detectable levels.

The metals arsenic, copper, and lead were detected in sample SB2(0-2') at concentrations exceeding the Unrestricted SCOs for these metals, but below the respective Restricted Residential and Commercial SCOs. No other metals were detected in any of the soil samples at concentrations above Unrestricted SCOs.

GROUNDWATER ANALYSIS RESULTS

No VOCs, SVOCs, PCBs or Pesticides were detected in the groundwater sample collected from boring GW1 at concentrations above the NYSDEC Class GA values, with the majority of results at non-detectable levels.

Total (non-filtered) aluminum, cobalt, iron, and sodium were detected above their respective NYSDEC Class GA values in the groundwater sample collected from GW1. Dissolved (filtered) cobalt, iron, manganese, and sodium were detected above the respective NYSDEC Class GA values in the groundwater sample. No other metals were detected in the groundwater sample at concentrations above Class GA thresholds.

SOIL GAS ANALYSIS RESULTS

Acetone and 2-butanone were detected in all six soil gas samples. Both of these compounds were also detected in the aqueous quality control samples and are considered laboratory-introduced contaminants since these compounds were not detected at significant levels in the soil or groundwater samples collected from the site. The following VOCs were detected in several of the soil gas samples at concentrations slightly above their respective USEPA ambient screening values: dichlorodifluoromethane; Trichlorofluoromethane; methylene chloride; carbon disulfide; 1,3,5-Trimethylbenzene, and 1,2,4-Trimethylbenzene. None of these VOCs were detected in the soil or groundwater samples collected from the project site.

NYSDOH established specific action levels for carbon tetrachloride, tetrachloroethene, 1,1,1-trichloroethane, and trichloroethene when evaluating the need to mitigate vapor intrusion into inhabitable structures. None of the soil gas samples collected from the project site contained any of these four compounds above their NYSDOH action levels. In addition, no benzene, toluene, ethylbenzene, or toluene (BTEX) were detected above screening values in any of the soil gas samples.

CONCLUSIONS AND RECOMMENDATIONS

Soil from boring SB2 contained arsenic, copper, and lead at concentrations exceeding the respective Unrestricted SCOs, but below Restricted Residential and Commercial SCOs. No other compounds or metals were detected in any of the soil samples above their respective Unrestricted SCOs. Therefore, soils across the project site are considered environmentally suitable for onsite reuse. Any soil that requires offsite disposal due to engineering requirements will likely require waste classification sampling by the chosen disposal facility, and the final disposal classification of the material would depend on such results.

The metals aluminum, cobalt, iron, manganese, and sodium were detected in the groundwater sample collected from the project site at concentrations above the respective Class GA values. Since groundwater beneath the project site is not intended as a potable water source, and construction dewatering is unlikely, the presence of these metals is not expected to impact the construction or operation of the project.

Acetone and 2-butanone were detected in all six soil gas samples. Both of these compounds were also detected in the aqueous quality control samples and are considered laboratory-introduced contaminants. None of the soil gas samples contained any of the four compounds for which NYSDOH has established mitigation action levels, and no BTEX compounds were detected above screening values in any of the soil gas samples. Based on these soil vapor results, there does not appear to be a significant potential for future soil vapor exposure at the project site.

EPM also collected paint chip samples from two metal access gates located at the east and west entrances to the site at Englewood Avenue. Samples of the yellow paint coating on each gate were collected and submitted for laboratory analysis for lead content using

flame atomic absorption spectroscopy (AAS) by American Society for Testing Materials (ASTM) Method D3335-85A. The eastern gate's coating contained 0.37% lead and the western gate's coating contained 1.69% lead. Disturbance/impact to these gates must be conducted in accordance with OSHA Lead In Construction Standard (29 CFR 1926.62) requirements, and waste generation, handling, transport and disposal must be conducted in accordance with NYS Parts 360-364 Regulations and Federal Resource Conservation and Recovery Act (RCRA) requirements.

1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION AND PURPOSE

Environmental Planning and Management, Inc. (EPM) has completed a subsurface environmental investigation on behalf of the New York City Economic Development Corporation (NYCEDC) and AECOM for the proposed Charleston Mixed-Use Development Site, located in Staten Island (Richmond County), NY (Figure 1 – Site Location and Figure 2 – Aerial Site View). The investigation was conducted in general accordance with EPM's *Sampling and Analysis Plan: Limited Phase II Site Investigation, Charleston Mixed-Use Development Site, May 7, 2013* for the purpose of characterizing soil, groundwater, and soil gas within areas proposed for the new Fairview Park and Retail Site A (Figure 3 –Preliminary Concept Site Plan).

The proposed development within the areas investigated includes:

- Fairview Park: The NYC Department of Parks and Recreation will develop a 22-acre park site with areas for both active and passive recreation.
- Retail Site A: A private developer will develop this 10-acre site with retail uses. Preliminary plans for Retail Site A also include a public library branch.

The purpose of the investigation was to determine if any special health and safety precautions would be warranted to protect workers and the surrounding community from exposure to hazardous materials during construction, and to determine if mitigation measures would be required to prohibit public exposure to hazardous materials during future operation of the site. This investigation emphasized the sampling of shallow soils and soil vapor within the proposed new park area, as well as soil and soil vapor within the proposed footprints of new structures in Retail Site A. Although construction dewatering is not expected based on the deep groundwater table at the site, and groundwater beneath the site is not expected to be used for potable purposes, a groundwater sample was collected from a down gradient location on the project site to evaluate general groundwater quality.

The investigation included the advancement of 11 soil borings (SB1 through SB11), one soil boring converted to a temporary groundwater well (GW1), and six soil gas sampling points (SG-1, SG-2, and SG-4 through SG-7). Proposed soil gas sample SG-3 was abandoned due to the sampling apparatus taking in moisture. The sample locations are shown on Figure 4 – Sample Location Diagram. The sample location coordinates measured with a hand-held GPS unit and the corresponding proposed development are summarized in Table 1 on the following page.

EPM also collected paint chip samples from two metal access gates located at the east and west entrances to the site at Englewood Avenue for laboratory analysis to determine if the paint contains lead.

TABLE 1. Sample Locations – Charleston Mixed-Use Development Site				
Sample ID	**Completion Depth (ft. bgs)**	**Latitude/ Longitude***	**Elevation (ft. amsl)**	**Proposed Development**
SB1	5	N40 31.823 / W74 14.023	104	Active Park (Parking Area)
SB2	25	N40 31.791 / W74 13.956	105	Retail Site A
SB3	25	N40 31.813 / W74 13.822	112	Retail Site A
SB4	25	N40 31.841 / W74 13.896	120	Retail Site A
SB5	25	N40 31.871 / W74 13.847	120	Active Park/Retail Site A
SB6	5	N40 31.817 / W74 14.097	105	Passive Park
SB7	5	N40 31.876 / W74 14.063	119	Passive Park
SB8	5	N40 31.899 / W74 14.048	127	Passive Park
SB9	5	N40 31.898 / W74 13.917	117	Active Park (tennis courts)
SB10	25	N40 31.873 / W74 13.942	120	Retail Site A
SB11	5	N40 31.898 / W74 13.839	112	Active Park (baseball diamonds)
SG1	6	N40 31.822 / W74 13.958	115	Retail Site A
SG2	6	N40 31.818 / W74 13.792	118	Retail Site A
SG4	6	N40 31.900 / W74 14.012	127	Active Park (soccer field)
SG5	6	N40 31.909 / W74 13.953	122	Active Park
SG6	6	N40 31.873 / W74 13.938	122	Retail Site A
SG7	6	N40 31.893 / W74 13.862	105	Active Park (baseball diamonds)
GW1	50	N40 31.778 / W74 14.348	65	Down gradient location / adjacent to MTA Bus Depot

Notes:
***** Measurements taken with handheld Garmin Montana 650T with error margin of ±12 feet.
amsl Above mean sea level.
bgs Feet below ground surface.

1.2 SITE SPECIFIC HYDROGEOLOGIC SETTING

Based upon review of the United States Geological Survey (USGS) Topographic Map of Arthur Kill, NY Quadrangle (photo-revised 1981); the northern region of the project site is situated approximately 130 feet above mean sea level (amsl) and the topography slopes downward towards the southwest corner of the site to an elevation of approximately 60 feet amsl. Based on review of the topographic map, groundwater depths across the project site are expected to range from approximately 50 feet below grade at the southwest corner to approximately 100 feet below grade along the north and northeastern regions of the site. Groundwater beneath the project site is expected to flow generally towards the west/southwest towards Arthur Kill.

1.3 PREVIOUS INVESTIGATIONS

EPM completed a Phase I Environmental Site Assessment (ESA) for the project site, the results of which are provided in the *Phase I ESA Report for the Charleston Mixed-Use Development Site, October 11, 2012*. EPM's Phase I ESA did not identify any recognized environmental conditions in connection with the project site, but did recommend the removal of three observed junk vehicles and general debris. The preparation of a Construction Health and Safety Plan was recommended to include contingency procedures in the unlikely event that hazardous materials are encountered during construction.

As part of the October 2012 Phase I ESA, EPM reviewed the following environmental reports pertaining to the project site:

- *Charleston Retail Project Site: Phase I Environmental Site Assessment, AKRF, Inc., February, 2000.* This Phase I ESA investigated an area which included the project site as well areas to the southeast now occupied by the Bricktown Retail Center. AKRF noted the presence of abandoned automobiles, empty motor vehicle fluid containers, automotive fuel tanks, and five-gallon buckets of paint on the project site. The AKRF report also summarized a 1990 Phase I ESA conducted by Vollmuth and Brush which noted that 20 automobile batteries and a 55-gallon drum with unknown contents were stored on Block 7494, Lot 95, located at the project site's southwestern corner. In addition, Vollmuth and Brush observed oil staining on the ground surface in the area.

- *Final Environmental Impact Statement (FEIS) for the Bricktown Centre at Charleston, AKRF, Inc., May, 2002.* Included in this FEIS is a description of a Phase II soil sampling investigation conducted at the project site in April 2002, which reportedly included soil sampling on the project site in the vicinity of three closed petroleum spills at 97 Englewood Avenue and within the area observed with surface oil staining by Vollmuth and Brush noted above. The actual Phase II Investigation Findings Report was not made available for review. As reported in the FEIS, this sampling did not identify impacts to the project site in these areas, and it was concluded that no adverse impacts of hazardous materials

occurred at the project site in the areas tested, and that no remedial actions or special precautions would likely be needed during construction.

- *Phase I Environmental Site Assessment: Charleston Site A, Staten Island, New York, Carpenter Environmental Associates (CEA), Inc., November 11, 2011.* The study area for this ESA was an approximate 10-acre parcel located within the east central region of the project site. This area was reported to be heavily vegetated and undeveloped at the time of the site inspection in October 2011. This ESA did not identify any evidence of recognized environmental conditions on the study site.

Since the previous Phase II Investigation Report referenced in AKRF's May 2002 FEIS for the Bricktown Centre was not available for review, the New York City Department of Environmental Protection (NYCDEP) requested that a sampling investigation be performed within the areas proposed for the new park and Retail Site A to verify site conditions.

2.0 SAMPLING AND ANALYSIS METHODS

2.1 SUMMARY

EPM directed the advancement of 12 Geoprobe soil borings (borings SB1 through SB11 and GW1) and six soil gas sampling implants (SG-1, SG-2, SG-4 through SG-7) at the site from June 4 through June 6, 2013. One to three soil samples were collected for lab analysis from each soil boring depending on completion depth. A groundwater sample was collected for laboratory analysis from temporary groundwater monitoring well GW1. The soil, soil gas, and groundwater sampling locations are shown on Figure 4 – Sampling Location Diagram.

2.2 SOIL SAMPLING AND ANALYSIS

Soil samples were collected and field screened at continuous 5-foot intervals with dedicated acetate liners. Soils were field screened with a daily calibrated photo-ionization detector (PID) for indications of organic vapors, and for visual or odor evidence of contamination from ground surface to the termination depth of each boring.

One soil sample was collected for laboratory analysis from the 0 to 2-foot interval from each of the shallow borings performed within the new park area, two soil samples were collected for lab analysis from the borings completed to 25 feet within Retail Site A from the 0 to 2-foot and 8 to 10-foot intervals, and three soil samples were collected from the deeper boring performed for GW-1 from 0 to 2 feet, 8 to 10 feet, and from 43 to 45 feet (the water table interface).

Composite samples were prepared by placing the selected core interval into a stainless steel mixing bowl, separating it into quarters, and placing an equal portion of each quarter into the laboratory provided containers. To minimize volatilization, soil samples collected for volatile organic analysis were not composited, but were prepared from roughly equal portions of the middle and two ends of the selected interval prior to homogenizing the composite sample. The samples were placed in laboratory-provided containers, placed on ice, and delivered to the laboratory with chain-of-custody documentation. Samples collected for VOC analysis were collected using Encore Samplers.

Soil samples were submitted to NY State Certified Laboratory Alpha Analytical of Westborough, MA for the following analyses:

- Target Compound List (TCL) volatile organic compounds (VOCs) by EPA Method 8260;
- TCL semi-volatile organic compounds (SVOCs) by EPA Method 8270;
- Polychlorinated biphenyls (PCBs) by EPA Method 8082;
- Pesticides by EPA Method 8081, and
- Target Analyte List (TAL) Metals by EPA Methods 6020 and 7471.

2.3 GROUNDWATER SAMPLING AND ANALYSIS

A groundwater sample was collected from temporary groundwater monitoring well GW1. Groundwater was observed at a depth of 45 feet below ground surface in boring GW1, and the well was installed with 10 feet of screen at its terminal end. EPM did not observe free product, petroleum odors, or a petroleum sheen within the well or water discharged from the well. The groundwater sample was collected using a low-flow bladder pump and dedicated disposable tubing.

The groundwater sample was submitted to Alpha Analytical for the following analyses:

- TCL VOCs by EPA Method 8260;
- TCL SVOCs by EPA Method 8270;
- PCBs by EPA Method 8082;
- Pesticides by EPA Method 8081, and
- Total and dissolved TAL Metals by EPA Methods 3005 and 7470.

2.4 SOIL GAS SAMPLING AND ANALYSIS

Soil gas sampling was conducted at locations SG-1, SG-2, and SG-4 through SG-7. A Geoprobe was used to install temporary soil gas implants at each location at approximately 6 feet below grade. The samples were collected in 6 Liter Summa Canisters. The Geoprobe was used to advance a 1.5-inch outer diameter rod with expendable point to the sampling depth. A 12-inch long stainless steel vapor sampling implant connected to Teflon tubing was inserted through the rod into the borehole. The Teflon tubing was cut above ground surface, and the annular space around the screen implant was backfilled with clean sand to two feet above the implant screen. A bentonite slurry seal was then placed above the sand extending to ground surface. A helium shroud was constructed over the borehole and enriched with helium to ensure a proper seal around the tubing entering the borehole. The tubing was purged of ambient air with a low flow personal pump and the sampling apparatus measured for helium intake to ensure a tight seal at the ground surface before opening the summa canisters and collecting the samples at flow rates less than 0.2 liters per minute. Soil gas sampling logs are included in Appendix A.

Wet soil conditions at the planned location of soil gas sample SG3 caused the sampling apparatus to take in moisture and this location was abandoned. The collected soil gas samples were submitted to Alpha Analytical for analysis of VOCs by EPA Method TO-15.

2.5 FIELD DECONTAMINATION PROCEDURES

Geoprobe soil sampling was conducted with dedicated disposable acetate liners for each individual cored interval. Groundwater purging and sampling was conducted with dedicated tubing and bladder pump. All non-disposable sampling equipment such as

stainless steel mixing bowls and spoons were decontaminated between each use by scrubbing with an Alconox solution and rinsing with de-ionized water.

2.6 DATA EVALUATION CRITERIA

2.6.1 Soil

Soil results were compared to the New York State Department of Environmental Conservation (NYSDEC) Part 375 Remedial Program Soil Cleanup Objectives (SCOs) for Unrestricted Use, Restricted Residential Use, and Commercial Use contained in Subparts 375-6(a) and (b). Soil impacted above Unrestricted SCOs should be considered potentially contaminated when estimating handling and disposal options for excess soil not reusable onsite due to engineering requirements. It is expected that soils within the new parkland and within unpaved areas of Retail Site A would be required to meet Restricted Residential Use SCOs and soils located beneath new paved areas or buildings in Retail Site A would need to meet Commercial Use SCOs.

2.6.2 Groundwater

Groundwater results were compared to the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards and Guidance Values (Class GA). It should be noted that the Class GA values are essentially strict drinking water standards that do not directly apply to the project site since groundwater beneath the site will not be used as a potable water source. However, the Class GA values are used in this study to evaluate general groundwater quality beneath the project site.

2.6.3 Soil Vapor

Neither New York State nor the Federal Government has promulgated standards for contaminants in soil gas. The New York State Department of Health (NYSDOH) has issued the *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006); which lists soil vapor action levels for several individual VOC compounds in relation to their potential to migrate to indoor air spaces and the effects on humans within the structures. The NYSDOH guidance also contains a USEPA-compiled database of typical ambient air concentrations of various chemicals. Since the actual structures are not yet present at the project site, a direct evaluation of soil vapor intrusion is not possible; however, the USEPA database values and NYSDOH guidelines were used in this study to evaluate the likelihood for future exposure to VOC vapors at the project site.

2.7 QUALITY ASSURANCE / QUALITY CONTROL

New York State Department of Health Environmental Laboratory Approval Program (ELAP) Certified Alpha Laboratories of Westborough, MA was used for the soil, soil gas, and groundwater analyses. Alpha Labs of Astoria, NY was used for the paint chip

analysis. A trip blank sample for VOC analysis accompanied the samples sent to the lab to confirm lack of cross contamination during handling and shipment. One blind duplicate soil sample was collected and analyzed for the same parameters as the corresponding sample, and one field blank (equipment rinsate) sample was collected and analyzed to confirm proper field decontamination procedures.

A MiniRae 2000 model PID was used to measure for organic vapors, which was calibrated daily with Isobutylene gas (at a concentration of 100±7 parts per million [ppm]s). An MGD-2002 Multi-Gas Leak Locater was used to record the helium measurements during the soil gas sampling to confirm a tight seal around the implant at ground surface. The soil, water, and soil gas samples were collected in laboratory supplied containers and immediately placed in a cooler on ice to be maintained at approximately 4 degrees Celsius before being delivered to the laboratory with chain-of-custody documentation.

3.0 INVESTIGATION RESULTS

3.1 FIELD SCREENING OBSERVATIONS

Soils encountered in the borings generally consisted of red-brown clay and yellow-brown medium to coarse sand. PID readings ranged from non-detect (< 1.0 parts per million, ppm) in the majority of samples, to a maximum of 2.8 ppm in boring SB10. No petroleum staining or odors were noted among the soils recovered.

EPM observed no free product, petroleum odor, or petroleum sheen in the water recovered from well GW1. Water was encountered at 45 feet below ground surface at location GW1.

The field observations are recorded on the boring logs and soil vapor sampling logs provided as Appendix A.

3.2 SOIL RESULTS

The complete analytical laboratory reports and chain-of-custody forms are provided as Appendix B.

VOCs (Table 2)
No VOCs were detected in any of the soil samples at concentrations above their respective Unrestricted, Restricted Residential, or Commercial SCOs. The majority of results were at non-detectable levels.

SVOCs (Table 3)
No SVOCs were detected in any of the soil samples at concentrations above their respective Unrestricted, Restricted Residential, or Commercial SCOs. The majority of results were at non-detectable levels.

Metals (Table 4)
Arsenic, copper, and lead were detected in sample SB2 (0-2') at concentrations exceeding their respective Unrestricted Use SCOs but below Restricted Residential Use and Commercial Use SCOs. No other metals were detected in any of the soil samples at concentrations above their respective Unrestricted, Restricted Residential, or Commercial SCOs.

PCBs (Table 5)
No PCBs were detected in any of the soil samples collected from the project site.

Pesticides (Table 6)
No pesticides were detected in any of the soil samples at concentrations above their respective Unrestricted, Restricted Residential, or Commercial SCOs. The majority of results were at non-detectable levels.

3.3 GROUNDWATER RESULTS

The groundwater results are summarized in Table 6 through Table 11. The complete analytical laboratory reports and chain-of-custody forms are included in Appendix B.

VOCs (Table 7)
No VOCs were detected in the groundwater sample at concentrations above their NYSDEC Class GA values. The majority of results were at non-detectable levels.

SVOCs (Table 8)
No SVOCs were detected in the groundwater sample at concentrations above their NYSDEC Class GA values. The majority of results were at non-detectable levels.

Total and Dissolved Metals (Table 9)
Total (non-filtered) aluminum, cobalt, iron, and sodium were detected above their respective NYSDEC Class GA values in the groundwater sample collected from the project site. Dissolved (filtered) cobalt, iron, manganese, and sodium were detected above their respective NYSDEC Class GA values in the groundwater sample collected from the project site. No other metals were detected in the groundwater sample at concentrations above their Class GA Values.

PCBs (Table 10)
No PCBs were detected in the groundwater sample collected from the project site.

Pesticides (Table 11)
No pesticides were detected in the groundwater sample collected from the project site.

3.4 SOIL GAS RESULTS (Table 12)

Acetone and 2-butanone were detected in all six soil gas samples. Both of these compounds were also detected in the aqueous quality control samples and are considered laboratory-introduced contaminants. The following VOCs also were detected at concentrations slightly above their respective USEPA ambient screening values:

- Dichlorodifluoromethane in samples SG1, SG4, and SG6;
- Trichlorofluoromethane in samples SG4 and SG6;
- Methylene chloride and 1,3,5-trimethylbenzene in sample SG4;
- Carbon disulfide in samples SG1, SG2, SG4, SG5, and SG6;
- 1,3,5-Trimethylbenzene in sample SG4; and,
- 1,2,4-Trimethylbenzene in samples SG4 and SG5.

NYSDOH established specific action levels for carbon tetrachloride, tetrachloroethene, 1,1,1-trichloroethane, and trichloroethene when evaluating the need to mitigate vapor intrusion into inhabitable structures. None of the soil gas samples collected from the project site contained any of these four compounds above their NYSDOH action levels. In addition, no benzene, toluene, ethylbenzene, or toluene (BTEX) were detected above screening values in the soil gas samples collected from the project site.

3.5 LEAD PAINT INVESTIGATION RESULTS

EPM collected paint chip samples from two metal access gates located at the east and west entrances to the site at Englewood Avenue. Samples of the yellow paint coating each gate from the outer layer to substrate were collected and submitted to Alpha Labs, a NYSDOH ELAP-accredited laboratory. Samples were analyzed for lead content using flame atomic absorption spectroscopy (AAS) by American Society for Testing Materials (ASTM) Method D3335-85A. The eastern gate's coating contained 0.37% lead and the western gate's coating contained 1.69% lead. The complete lead analytical laboratory report and chain-of-custody form are included in Appendix C.

4.0 CONCLUSIONS AND RECOMMENDATIONS

EPM has completed a subsurface environmental investigation on behalf of the New York City Economic Development Corporation (NYCEDC) and AECOM for the proposed Charleston Mixed-Use Development Site, located in Staten Island, NY, for the purpose of characterizing soil, groundwater, and soil gas within areas proposed for the new Fairview Park and Retail Site A.

The purpose of this investigation was to determine if any special health and safety precautions would be warranted to protect workers and the surrounding community from exposure to hazardous materials during construction, and to determine if mitigation measures would be required to prohibit public exposure to hazardous materials during future site operation.

The investigation included the advancement of 11 soil borings (SB1 through SB11), one soil boring converted to a temporary groundwater well (GW1), and six soil gas sampling points (SG-1, SG-2, and SG-4 through SG-7). The soil and groundwater samples were laboratory analyzed for TCL VOCs; TCL SVOCs; PCBs; Pesticides; and, TAL Metals. The groundwater sample was analyzed for total and dissolved TAL Metals. The soil gas samples were analyzed for VOCs.

Soil from boring SB2 contained arsenic, copper, and lead at concentrations exceeding the respective Unrestricted SCOs, but below Restricted Residential and Commercial SCOs. No other compounds or metals were detected in any of the soil samples above their respective Unrestricted SCOs. Therefore, soils across the project site are considered environmentally suitable for onsite reuse. Any soil that requires offsite disposal due to engineering requirements will likely require waste classification sampling by the chosen disposal facility, and the final disposal classification of the material would depend on such results.

The metals aluminum, cobalt, iron, manganese, and sodium were detected in the groundwater sample collected from the project site at concentrations above their respective Class GA values. Since groundwater beneath the project site is not intended as a potable water source, and construction dewatering is unlikely, the presence of these metals is not expected to impact the construction or operation of the project.

Acetone and 2-butanone were detected in all six soil gas samples. Both of these compounds were also detected in the aqueous quality control samples and are considered laboratory-introduced contaminants. None of the soil gas samples contained any of the four compounds for which NYSDOH has established mitigation action levels, and no BTEX compounds were detected above screening values in any of the soil gas samples. Based on these soil vapor results, there does not appear to be a significant potential for future soil vapor exposure at the project site.

Paint chip samples were collected from two metal access gates located at the east and west entrances to the site at Englewood Avenue. Samples of the yellow paint coating on each gate were collected and submitted for laboratory analysis for lead content using flame atomic absorption spectroscopy (AAS) by American Society for Testing Materials

(ASTM) Method D3335-85A. The eastern gate's coating contained 0.37% lead and the western gate's coating contained 1.69% lead. Disturbance/impact to these gates must be conducted in accordance with OSHA Lead In Construction Standard (29 CFR 1926.62) requirements, and waste generation, handling, transport and disposal must be conducted in accordance with NYS Parts 360-364 Regulations and Federal Resource Conservation and Recovery Act (RCRA) requirements.

TABLES

TABLE 2 (Page 1 of 2)
Volatile Organic Compounds (VOCs) in Soil
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	SB1 (0-2')	Blind Duplicate from SB1 (0-2')	SB2 (0-2')	SB2 (8-10')	SB3 (0-2')	SB3 (8-10')	SB4 (0-2')	SB4 (8-10')	SB5 (0-2')	SB5 (8-10')	SB6 (0-2')	SB7 (0-2')	SB8 (0-2')	SB9 (0-2')	SB10 (0-2')	SB10 (8-10')	SB11 (0-2')	GW1 (0-2')	GW1 (8-10')	GW1 (43-45')	Part 375 Unrestricted Use SCO	Part 375 Restricted Residential Use SCO	Part 375 Restricted Commercial Use SCO
Sample Depth (feet bgs):	0-2	0-2	0-2	8-10	0-2	8-10	0-2	8-10	0-2	8-10	0-2	0-2	0-2	0-2	0-2	8-10	0-2	0-2	8-10	43-45			
COMPOUND	RESULTS (ppm)																				(ppm)		
Methylene chloride	< 0.01	< 0.0095	< 0.01	< 0.0089	< 0.0093	< 0.0097	< 0.0094	< 0.01	< 0.0094	< 0.0096	< 0.0098	< 0.0098	< 0.0099	< 0.01	< 0.01	< 0.0085	< 0.01	< 0.0099	< 0.0086	< 0.011	0.05	100	500
1,1-Dichloroethane	< 0.0015	< 0.0014	< 0.0016	< 0.0013	< 0.0014	< 0.0014	< 0.0014	< 0.0015	< 0.0014	< 0.0014	< 0.0015	< 0.0015	< 0.0015	< 0.0016	< 0.0015	< 0.0013	< 0.0015	< 0.0015	< 0.0013	< 0.0016	0.27	26	240
Chloroform	< 0.0015	< 0.0014	< 0.0016	< 0.0013	< 0.0014	< 0.0014	< 0.0014	< 0.0015	< 0.0014	< 0.0014	< 0.0015	< 0.0015	< 0.0015	< 0.0016	< 0.0015	< 0.0013	< 0.0015	< 0.0015	< 0.0013	< 0.0016	0.37	49	350
Carbon tetrachloride	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	0.76	2.4	22
1,2-Dichloropropane	< 0.0036	< 0.0033	< 0.0037	< 0.0031	< 0.0032	< 0.0034	< 0.0033	< 0.0035	< 0.0033	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0036	< 0.0035	< 0.003	< 0.0035	< 0.0035	< 0.003	< 0.0038	NA	NA	NA
Dibromochloromethane	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	NA	NA	NA
1,1,2-Trichloroethane	< 0.0015	< 0.0014	< 0.0016	< 0.0013	< 0.0014	< 0.0014	< 0.0014	< 0.0015	< 0.0014	< 0.0014	< 0.0015	< 0.0015	< 0.0015	< 0.0016	< 0.0015	< 0.0013	< 0.0015	< 0.0015	< 0.0013	< 0.0016	NA	NA	NA
Tetrachloroethene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	1.3	19	150
Chlorobenzene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	1.1	100	500
Trichlorofluoromethane	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
1,2-Dichloroethane	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	0.02	3.1	30
1,1,1-Trichloroethane	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	0.68	100	500
Bromodichloromethane	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	NA	NA	NA
trans-1,3-Dichloropropene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	NA	NA	NA
cis-1,3-Dichloropropene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	NA	NA	NA
1,1-Dichloropropene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
Bromoform	< 0.0041	< 0.0038	< 0.0042	< 0.0036	< 0.0037	< 0.0039	< 0.0038	< 0.004	< 0.0038	< 0.0038	< 0.0039	< 0.0039	< 0.0039	< 0.0042	< 0.004	< 0.0034	< 0.004	< 0.004	< 0.0034	< 0.0043	NA	NA	NA
1,1,2,2-Tetrachloroethane	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	NA	NA	NA
Benzene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	0.06	4.8	44
Toluene	< 0.0015	< 0.0014	< 0.0016	< 0.0013	< 0.0014	0.0029	< 0.0014	< 0.0015	< 0.0014	< 0.0014	< 0.0015	< 0.0015	0.00078 J	< 0.0016	0.00077 J	< 0.0013	< 0.0015	< 0.0015	< 0.0013	< 0.0016	0.7	100	500
Ethylbenzene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	0.0013	< 0.001	0.0012	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	1	41	390
Chloromethane	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
Bromomethane	< 0.002	< 0.0019	< 0.0021	< 0.0018	< 0.0019	< 0.0019	< 0.0019	< 0.002	0.00081 J	< 0.0019	< 0.002	< 0.002	< 0.002	< 0.0021	< 0.002	< 0.0017	< 0.002	< 0.002	< 0.0017	< 0.0022	NA	NA	NA
Vinyl chloride	< 0.002	< 0.0019	< 0.0021	< 0.0018	< 0.0019	< 0.0019	< 0.0019	< 0.002	< 0.0019	< 0.0019	< 0.002	< 0.002	< 0.002	< 0.0021	< 0.002	< 0.0017	< 0.002	< 0.002	< 0.0017	< 0.0022	0.02	0.9	13
Chloroethane	< 0.002	< 0.0019	< 0.0021	< 0.0018	< 0.0019	< 0.0019	< 0.0019	< 0.002	< 0.0019	< 0.0019	< 0.002	< 0.002	< 0.002	< 0.0021	< 0.002	< 0.0017	< 0.002	< 0.002	< 0.0017	< 0.0022	NA	NA	NA
1,1-Dichloroethene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	0.33	100	500
trans-1,2-Dichloroethene	< 0.0015	< 0.0014	< 0.0016	< 0.0013	< 0.0014	< 0.0014	< 0.0014	< 0.0015	< 0.0014	< 0.0014	< 0.0015	< 0.0015	< 0.0015	< 0.0016	< 0.0015	< 0.0013	< 0.0015	< 0.0015	< 0.0013	< 0.0016	0.19	100	500
Trichloroethene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	0.47	21	200
1,2-Dichlorobenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	1.1	100	500
1,3-Dichlorobenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	2.4	49	280
1,4-Dichlorobenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	1.8	13	130
Methyl tert butyl ether	< 0.002	< 0.0019	< 0.0021	< 0.0018	< 0.0019	< 0.0019	< 0.0019	< 0.002	< 0.0019	< 0.0019	< 0.002	< 0.002	< 0.002	< 0.0021	< 0.002	< 0.0017	< 0.002	< 0.002	< 0.0017	< 0.0022	0.93	100	500
p/m-Xylene	< 0.002	< 0.0019	< 0.0021	< 0.0018	< 0.0019	< 0.0019	< 0.0019	< 0.002	< 0.0019	< 0.0019	< 0.002	< 0.002	0.0018 J	0.0012 J	0.0016 J	< 0.0017	< 0.002	< 0.002	< 0.0017	< 0.0022	NA	NA	NA
o-Xylene	< 0.002	< 0.0019	< 0.0021	< 0.0018	< 0.0019	< 0.0019	< 0.0019	< 0.002	< 0.0019	< 0.0019	< 0.002	< 0.002	< 0.002	< 0.0021	< 0.002	< 0.0017	< 0.002	< 0.002	< 0.0017	< 0.0022	NA	NA	NA
cis-1,2-Dichloroethene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	0.25	100	500
Dibromomethane	< 0.01	< 0.0095	< 0.01	< 0.0089	< 0.0093	< 0.0097	< 0.0094	< 0.01	< 0.0094	< 0.0096	< 0.0098	< 0.0098	< 0.0099	< 0.01	< 0.01	< 0.0085	< 0.01	< 0.0099	< 0.0086	< 0.011	NA	NA	NA
Styrene	< 0.002	< 0.0019	< 0.0021	< 0.0018	< 0.0019	< 0.0019	< 0.0019	< 0.002	< 0.0019	< 0.0019	< 0.002	< 0.002	< 0.002	< 0.0021	< 0.002	< 0.0017	< 0.002	< 0.002	< 0.0017	< 0.0022	NA	NA	NA
Dichlorodifluoromethane	< 0.01	< 0.0095	< 0.01	< 0.0089	< 0.0093	< 0.0097	< 0.0094	< 0.01	< 0.0094	< 0.0096	< 0.0098	< 0.0098	< 0.0099	< 0.01	< 0.01	< 0.0085	< 0.01	< 0.0099	< 0.0086	< 0.011	NA	NA	NA
Acetone	< 0.01	< 0.0095	0.038	0.048	0.0068 J	0.0077 J	< 0.0094	< 0.01	0.0075 J	< 0.0096	0.0091 J	< 0.0098	< 0.0099	0.0083 J	0.026	< 0.0085	< 0.01	< 0.0099	< 0.0086	0.0053 J	0.05	100	500
Carbon disulfide	< 0.01	< 0.0095	< 0.01	< 0.0089	< 0.0093	< 0.0097	< 0.0094	< 0.01	< 0.0094	< 0.0096	< 0.0098	< 0.0098	< 0.0099	< 0.01	< 0.01	< 0.0085	< 0.01	< 0.0099	< 0.0086	< 0.011	NA	NA	NA
2-Butanone	< 0.01	< 0.0095	0.0067 J	0.002 J	< 0.0093	0.0015 J	< 0.0094	< 0.01	< 0.0094	< 0.0096	< 0.0098	< 0.0098	< 0.0099	< 0.01	0.0029 J	< 0.0085	< 0.01	< 0.0099	< 0.0086	< 0.011	0.12	100	500
Vinyl acetate	< 0.01	< 0.0095	< 0.01	< 0.0089	< 0.0093	< 0.0097	< 0.0094	< 0.01	< 0.0094	< 0.0096	< 0.0098	< 0.0098	< 0.0099	< 0.01	< 0.01	< 0.0085	< 0.01	< 0.0099	< 0.0086	< 0.011	NA	NA	NA
4-Methyl-2-pentanone	< 0.01	< 0.0095	< 0.01	< 0.0089	< 0.0093	< 0.0097	< 0.0094	< 0.01	< 0.0094	< 0.0096	< 0.0098	< 0.0098	< 0.0099	< 0.01	< 0.01	< 0.0085	< 0.01	< 0.0099	< 0.0086	< 0.011	NA	NA	NA
1,2,3-Trichloropropane	< 0.01	< 0.0095	< 0.01	< 0.0089	< 0.0093	< 0.0097	< 0.0094	< 0.01	< 0.0094	< 0.0096	< 0.0098	< 0.0098	< 0.0099	< 0.01	< 0.01	< 0.0085	< 0.01	< 0.0099	< 0.0086	< 0.011	NA	NA	NA
2-Hexanone	< 0.01	< 0.0095	< 0.01	< 0.0089	< 0.0093	< 0.0097	< 0.0094	< 0.01	< 0.0094	< 0.0096	< 0.0098	< 0.0098	< 0.0099	< 0.01	< 0.01	< 0.0085	< 0.01	< 0.0099	< 0.0086	< 0.011	NA	NA	NA
Bromochloromethane	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
2,2-Dichloropropane	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
1,2-Dibromoethane	< 0.0041	< 0.0038	< 0.0042	< 0.0036	< 0.0037	< 0.0039	< 0.0038	< 0.004	< 0.0038	< 0.0038	< 0.0039	< 0.0039	< 0.0039	< 0.0042	< 0.004	< 0.0034	< 0.004	< 0.004	< 0.0034	< 0.0043	NA	NA	NA
1,3-Dichloropropane	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
1,1,1,2-Tetrachloroethane	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	NA	NA	NA
Bromobenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
n-Butylbenzene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	12	100	500
sec-Butylbenzene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	11	100	500
tert-Butylbenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	5.9	100	500
o-Chlorotoluene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
p-Chlorotoluene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
1,2-Dibromo-3-chloropropane	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
Hexachlorobutadiene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA

TABLE 2 (Page 2 of 2)
Volatile Organic Compounds (VOCs) in Soil
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	SB1 (0-2')	Blind Duplicate from SB1 (0-2')	SB2 (0-2')	SB2 (8-10')	SB3 (0-2')	SB3 (8-10')	SB4 (0-2')	SB4 (8-10')	SB5 (0-2')	SB5 (8-10')	SB6 (0-2')	SB7 (0-2')	SB8 (0-2')	SB9 (0-2')	SB10 (0-2')	SB10 (8-10')	SB11 (0-2')	GW1 (0-2')	GW1 (8-10')	GW1 (43-45')	Part 375 Unrestricted Use SCO	Part 375 Restricted Residential Use SCO	Part 375 Restricted Commercial Use SCO
Sample Depth (feet bgs):	0-2	0-2	0-2	8-10	0-2	8-10	0-2	8-10	0-2	8-10	0-2	0-2	0-2	0-2	0-2	8-10	0-2	0-2	8-10	43-45			
COMPOUND	RESULTS (ppm)																				(ppm)		
Isopropylbenzene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	NA	NA	NA
p-Isopropyltoluene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	0.00074 J	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	NA	NA	NA
Naphthalene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	12	100	500
Acrylonitrile	< 0.01	< 0.0095	< 0.01	< 0.0089	< 0.0093	< 0.0097	< 0.0094	< 0.01	< 0.0094	< 0.0096	< 0.0098	< 0.0098	< 0.0099	< 0.01	< 0.01	< 0.0085	< 0.01	< 0.0099	< 0.0086	< 0.011	NA	NA	NA
n-Propylbenzene	< 0.001	< 0.00095	< 0.001	< 0.00089	< 0.00093	< 0.00097	< 0.00094	< 0.001	< 0.00094	< 0.00096	< 0.00098	< 0.00098	< 0.00099	< 0.001	< 0.001	< 0.00085	< 0.001	< 0.00099	< 0.00086	< 0.0011	3.9	100	500
1,2,3-Trichlorobenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
1,2,4-Trichlorobenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
1,3,5-Trimethylbenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	8.4	52	190
1,2,4-Trimethylbenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	3.6	52	190
1,4-Dioxane	< 0.1	< 0.095	< 0.1	< 0.089	< 0.093	< 0.097	< 0.094	< 0.1	< 0.094	< 0.096	< 0.098	< 0.098	< 0.099	< 0.1	< 0.1	< 0.085	< 0.1	< 0.099	< 0.086	< 0.11	0.1	13	130
1,4-Diethylbenzene	< 0.0041	< 0.0038	< 0.0042	< 0.0036	< 0.0037	< 0.0039	< 0.0038	< 0.004	< 0.0038	< 0.0038	< 0.0039	< 0.0039	< 0.0039	< 0.0042	< 0.004	< 0.0034	< 0.004	< 0.004	< 0.0034	< 0.0043	NA	NA	NA
4-Ethyltoluene	< 0.0041	< 0.0038	< 0.0042	< 0.0036	< 0.0037	< 0.0039	< 0.0038	< 0.004	< 0.0038	< 0.0038	< 0.0039	< 0.0039	< 0.0039	< 0.0042	< 0.004	< 0.0034	< 0.004	< 0.004	< 0.0034	< 0.0043	NA	NA	NA
1,2,4,5-Tetramethylbenzene	< 0.0041	< 0.0038	< 0.0042	< 0.0036	< 0.0037	< 0.0039	< 0.0038	< 0.004	< 0.0038	< 0.0038	< 0.0039	< 0.0039	< 0.0039	< 0.0042	< 0.004	< 0.0034	< 0.004	< 0.004	< 0.0034	< 0.0043	NA	NA	NA
Ethyl ether	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
trans-1,4-Dichloro-2-butene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA

Notes:

<	Analyte value is less than the laboratory detection limit for the listed compound
	Concentration above the indicated NYSDEC Part 375 SCO for Unrestricted Use
	Concentration above the indicated NYSDEC Part 375 SCO for Restricted Residential Use
	Concentration above the indicated NYSDEC Part 375 SCO for Commercial Use
BGS	Below ground surface
J	Analyte concentration is an estimate due to detection below the laboratory reporting limit.
NA	No regulatory guidance value established
PPM	Parts per million
SCO	NYSDEC Remedial Program Soil Cleanup Objective; Subpart 375-6(a,b), December, 2006

TABLE 3 (Page 1 of 2)
Semi Volatile Organic Compounds (SVOCs) in Soil
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	SB1 (0-2')	Blind Duplicate from SB1 (0-2')	SB2 (0-2')	SB2 (8-10')	SB3 (0-2')	SB3 (8-10')	SB4 (0-2')	SB4 (8-10')	SB5 (0-2')	SB5 (8-10')	SB6 (0-2')	SB7 (0-2')	SB8 (0-2')	SB9 (0-2')	SB10 (0-2')	SB10 (8-10')	SB11 (0-2')	GW1 (0-2')	GW1 (8-10')	GW1 (43-45')	Part 375 Unrestricted Use SCO	Part 375 Restricted Residential Use SCO	Part 375 Restricted Commercial Use SCO
Sample Depth (feet bgs):	0-2	0-2	0-2	8-10	0-2	8-10	0-2	8-10	0-2	8-10	0-2	0-2	0-2	0-2	0-2	8-10	0-2	0-2	8-10	43-45			
COMPOUND	RESULTS (ppm)																				(ppm)		
Acenaphthene	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.14	< 0.15	< 0.14	< 0.15	< 0.14	20	100	500
1,2,4-Trichlorobenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
Hexachlorobenzene	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.1	0.33	1.2	6
Bis(2-chloroethyl)ether	< 0.17	< 0.17	< 0.17	< 0.17	< 0.16	< 0.16	< 0.17	< 0.17	< 0.17	< 0.16	< 0.17	< 0.17	< 0.18	< 0.17	< 0.16	< 0.16	< 0.17	< 0.16	< 0.16	< 0.16	NA	NA	NA
2-Chloronaphthalene	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
1,2-Dichlorobenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	1.1	100	500
1,3-Dichlorobenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	2.4	49	280
1,4-Dichlorobenzene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	1.8	13	130
3,3'-Dichlorobenzidine	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
2,4-Dinitrotoluene	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
2,6-Dinitrotoluene	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Fluoranthene	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	0.12	< 0.11	< 0.1	100	100	500
4-Chlorophenyl phenyl ether	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
4-Bromophenyl phenyl ether	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Bis(2-chloroisopropyl)ether	< 0.23	< 0.22	< 0.23	< 0.23	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.21	< 0.22	< 0.23	< 0.24	< 0.23	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.21	NA	NA	NA
Bis(2-chloroethoxy)methane	< 0.2	< 0.2	< 0.2	< 0.21	< 0.2	< 0.19	< 0.2	< 0.2	< 0.2	< 0.19	< 0.2	< 0.2	< 0.21	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.19	NA	NA	NA
Hexachlorobutadiene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	NA	NA	NA
Hexachlorocyclopentadiene	< 0.54	< 0.53	< 0.54	< 0.55	< 0.52	< 0.51	< 0.53	< 0.53	< 0.54	< 0.51	< 0.53	< 0.55	< 0.56	< 0.54	< 0.53	< 0.52	< 0.53	< 0.52	< 0.52	< 0.5	NA	NA	NA
Hexachloroethane	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.14	< 0.15	< 0.14	< 0.15	< 0.14	NA	NA	NA
Isophorone	< 0.17	< 0.17	< 0.17	< 0.17	< 0.16	< 0.16	< 0.17	< 0.17	< 0.17	< 0.16	< 0.17	< 0.17	< 0.18	< 0.17	< 0.16	< 0.16	< 0.17	< 0.16	< 0.16	< 0.16	NA	NA	NA
Naphthalene	< 0.0051	< 0.0047	< 0.0052	< 0.0044	< 0.0046	< 0.0048	< 0.0047	< 0.005	< 0.0047	< 0.0048	< 0.0049	< 0.0049	< 0.0049	< 0.0052	< 0.005	< 0.0043	< 0.005	< 0.005	< 0.0043	< 0.0054	12	100	500
Nitrobenzene	< 0.17	< 0.17	< 0.17	< 0.17	< 0.16	< 0.16	< 0.17	< 0.17	< 0.17	< 0.16	< 0.17	< 0.17	< 0.18	< 0.17	< 0.16	< 0.16	< 0.17	< 0.16	< 0.16	< 0.16	NA	NA	NA
NitrosoDiPhenylAmine(NDPA)/DPA	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.14	< 0.15	< 0.14	< 0.15	< 0.14	NA	NA	NA
n-Nitrosodi-n-propylamine	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Bis(2-Ethylhexyl)phthalate	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Butyl benzyl phthalate	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Di-n-butylphthalate	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Di-n-octylphthalate	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Diethyl phthalate	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Dimethyl phthalate	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Benzo(a)anthracene	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	0.053 J	< 0.11	< 0.1	1	1	5.6
Benzo(a)pyrene	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.14	< 0.15	< 0.14	< 0.15	< 0.14	1	1	1
Benzo(b)fluoranthene	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	0.064 J	< 0.11	< 0.1	1	1	5.6
Benzo(k)fluoranthene	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.1	0.8	3.9	56
Chrysene	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	0.052 J	< 0.11	< 0.1	1	3.9	56
Acenaphthylene	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.14	< 0.15	< 0.14	< 0.15	< 0.14	100	100	500
Anthracene	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.1	100	100	500
Benzo(ghi)perylene	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.14	< 0.15	< 0.14	< 0.15	< 0.14	100	100	500
Fluorene	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	30	100	500
Phenanthrene	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	0.12	< 0.11	< 0.1	100	100	500
Dibenzo(a,h)anthracene	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.1	0.33	0.33	0.56
Indeno(1,2,3-cd)Pyrene	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.14	< 0.15	< 0.14	< 0.15	< 0.14	0.5	0.5	5.6
Pyrene	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	0.1 J	< 0.11	< 0.1	100	100	500
Biphenyl	< 0.43	< 0.42	< 0.43	< 0.44	< 0.42	< 0.41	< 0.42	< 0.42	< 0.43	< 0.41	< 0.42	< 0.43	< 0.45	< 0.43	< 0.42	< 0.41	< 0.42	< 0.41	< 0.42	< 0.4	NA	NA	NA
4-Chloroaniline	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
2-Nitroaniline	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
3-Nitroaniline	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
4-Nitroaniline	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Dibenzofuran	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	7	59	350
2-Methylnaphthalene	< 0.23	< 0.22	< 0.23	< 0.23	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.21	< 0.22	< 0.23	< 0.24	< 0.23	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.21	NA	NA	NA
1,2,4,5-Tetrachlorobenzene	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Acetophenone	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
2,4,6-Trichlorophenol	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.1	NA	NA	NA
P-Chloro-M-Cresol	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
2-Chlorophenol	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
2,4-Dichlorophenol	< 0.17	< 0.17	< 0.17	< 0.17	< 0.16	< 0.16	< 0.17	< 0.17	< 0.17	< 0.16	< 0.17	< 0.17	< 0.18	< 0.17	< 0.16	< 0.16	< 0.17	< 0.16	< 0.16	< 0.16	NA	NA	NA
2,4-Dimethylphenol	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
2-Nitrophenol	< 0.41	< 0.4	< 0.41	< 0.41	< 0.39	< 0.39	< 0.4	< 0.4	< 0.4	< 0.38	< 0.4	< 0.41	< 0.42	< 0.41	< 0.4	< 0.39	< 0.4	< 0.39	< 0.39	< 0.38	NA	NA	NA

TABLE 3 (Page 2 of 2)
Semi Volatile Organic Compounds (SVOCs) in Soil
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	SB1 (0-2')	Blind Duplicate from SB1 (0-2')	SB2 (0-2')	SB2 (8-10')	SB3 (0-2')	SB3 (8-10')	SB4 (0-2')	SB4 (8-10')	SB5 (0-2')	SB5 (8-10')	SB6 (0-2')	SB7 (0-2')	SB8 (0-2')	SB9 (0-2')	SB10 (0-2')	SB10 (8-10')	SB11 (0-2')	GW1 (0-2')	GW1 (8-10')	GW1 (43-45')	Part 375 Unrestricted Use SCO	Part 375 Restricted Residential Use SCO	Part 375 Restricted Commercial Use SCO
Sample Depth (feet bgs):	0-2	0-2	0-2	8-10	0-2	8-10	0-2	8-10	0-2	8-10	0-2	0-2	0-2	0-2	0-2	8-10	0-2	0-2	8-10	43-45			
COMPOUND	RESULTS (ppm)																				(ppm)		
4-Nitrophenol	< 0.26	< 0.26	< 0.26	< 0.27	< 0.26	< 0.25	< 0.26	< 0.26	< 0.26	< 0.25	< 0.26	< 0.27	< 0.27	< 0.26	< 0.26	< 0.25	< 0.26	< 0.25	< 0.26	< 0.25	NA	NA	NA
2,4-Dinitrophenol	< 0.91	< 0.89	< 0.91	< 0.92	< 0.88	< 0.86	< 0.89	< 0.89	< 0.9	< 0.86	< 0.89	< 0.91	< 0.94	< 0.91	< 0.88	< 0.87	< 0.89	< 0.87	< 0.88	< 0.84	NA	NA	NA
4,6-Dinitro-o-cresol	< 0.49	< 0.48	< 0.49	< 0.5	< 0.47	< 0.47	< 0.48	< 0.48	< 0.49	< 0.46	< 0.48	< 0.5	< 0.51	< 0.49	< 0.48	< 0.47	< 0.48	< 0.47	< 0.47	< 0.46	NA	NA	NA
Pentachlorophenol	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.14	< 0.15	< 0.14	< 0.15	< 0.14	0.8	6.7	6.7
Phenol	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	0.33	100	500
2-Methylphenol	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	0.33	100	500
3-Methylphenol/4-Methylphenol	< 0.27	< 0.26	< 0.27	< 0.28	< 0.26	< 0.26	< 0.26	< 0.27	< 0.27	< 0.26	< 0.27	< 0.27	< 0.28	< 0.27	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.25	0.33	100	500
2,4,5-Trichlorophenol	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Benzoic Acid	< 0.61	< 0.6	< 0.61	< 0.62	< 0.59	< 0.58	< 0.6	< 0.6	< 0.61	< 0.58	< 0.6	< 0.62	< 0.64	< 0.61	< 0.6	< 0.59	< 0.6	< 0.58	< 0.59	< 0.57	NA	NA	NA
Benzyl Alcohol	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Carbazole	< 0.19	< 0.18	< 0.19	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.19	< 0.18	< 0.18	< 0.19	< 0.2	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NA	NA	NA
Total SVOCs	< 13.21	< 12.82	< 13.21	< 13.29	< 12.73	< 12.58	< 12.82	< 12.83	< 13.17	< 12.54	< 12.83	< 13.25	< 13.91	< 13.21	< 12.77	< 12.62	< 12.82	12.46	< 12.73	< 12.37	500*	NA	NA

Notes:

*	CP-51 Soil Cleanup Guidance V(H) Subsurface Soil Cleanup for Total Polycyclic Aromatic Hydrocarbons
<	Analyte value is less than the laboratory detection limit for the listed compound
	Concentration above the indicated NYSDEC Part 375 SCO for Unrestricted Use
	Concentration above the indicated NYSDEC Part 375 SCO for Restricted Residential Use
	Concentration above the indicated NYSDEC Part 375 SCO for Commercial Use
BGS	Below ground surface
J	Analyte concentration is an estimate due to detection below the laboratory reporting limit.
NA	No regulatory guidance value established
PPM	Parts per million
SCO	NYSDEC Remedial Program Soil Cleanup Objective; Subpart 375-6(a,b), December, 2006

TABLE 4
Metals in Soil
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	SB1 (0-2')	Blind Duplicate from SB1 (0-2')	SB2 (0-2')	SB2 (8-10')	SB3 (0-2')	SB3 (8-10')	SB4 (0-2')	SB4 (8-10')	SB5 (0-2')	SB5 (8-10')	SB6 (0-2')	SB7 (0-2')	SB8 (0-2')	SB9 (0-2')	SB10 (0-2')	SB10 (8-10')	SB11 (0-2')	GW1 (0-2')	GW1 (8-10')	GW1 (43-45')	Part 375 Unrestricted Use SCO	Part 375 Restricted Residential Use SCO	Part 375 Restricted Commercial Use SCO
Sample Depth (feet bgs):	0-2	0-2	0-2	8-10	0-2	8-10	0-2	8-10	0-2	8-10	0-2	0-2	0-2	0-2	0-2	8-10	0-2	0-2	8-10	43-45			
COMPOUND	RESULTS (ppm)																				(ppm)		
Aluminum, Total	9,500	10,000	7,500	4,000	8,000	7,800	8,100	4,400	8,200	5,700	14,000	9,100	6,000	7,400	5,400	5,000	8,700	5,400	3,100	500	NA	NA	NA
Antimony, Total	< 4.5	< 4.3	9.4	< 4.4	< 4.3	< 4.2	< 4.4	< 4.4	< 4.4	< 4.3	< 4.3	< 4.6	< 4.5	< 4.5	< 4.4	< 4.2	< 4.2	1.8 J	< 4.4	< 4.2	NA	NA	NA
Arsenic, Total	3.4	2.5	**15**	2.2	3.8	1.7	2.1	1.7	3.8	2.7	5	4.2	5.5	5	3.7	2.6	3.8	5	2.2	3.2	13	16	16
Barium, Total	68	68	54	68	47	110	33	14	48	58	92	48	47	52	54	71	28	48	26	3	350	400	400
Beryllium, Total	0.55	0.5	0.32 J	0.35 J	0.5	0.51	0.35 J	0.23 J	0.45	0.45	0.62	0.36 J	0.54	0.5	0.53	0.32 J	0.49	0.42	0.35 J	0.08 J	7.2	72	590
Cadmium, Total	0.49 J	0.45 J	0.42 J	0.26 J	0.46 J	0.26 J	0.31 J	0.18 J	0.39 J	0.28 J	0.51 J	0.51 J	0.55 J	0.62 J	0.49 J	0.45 J	0.47 J	0.35 J	0.16 J	0.08 J	2.5	4.3	9
Calcium, Total	590	530	620	860	380	540	240	110	430	980	550	360	830	760	800	2,400	86	6,100	2,900	120	NA	NA	NA
Chromium, Total	18	15	14	12	19	11	19	9	15	14	20	14	16	18	15	12	14	13	6.8	9.8	30*	180*	1500*
Cobalt, Total	11	7.6	4.9	6.6	10	5.2	7.5	3.4	14	7.5	8.8	7.2	8.8	6.7	6.7	5.7	3.9	6.4	4.5	0.48 J	NA	NA	NA
Copper, Total	24	20	**84**	11	20	8	22	6.6	21	16	19	8.8	28	17	29	9.4	8	33	13	3	50	270	270
Iron, Total	21,000	18,000	14,000	14,000	22,000	13,000	13,000	9,000	18,000	15,000	19,000	15,000	16,000	21,000	16,000	16,000	15,000	15,000	8,100	4,400	NA	NA	NA
Lead, Total	17	12	**93**	6.9	10	6.4	10	4 J	16	7.4	10	10	40	12	16	11	4.9	28	12	0.98 J	63	400	1,000
Magnesium, Total	3,100	3,100	1,500	2,000	3,300	1,900	2,200	1,100	2,400	2,500	4,300	1,900	2,300	2,200	2,200	2,400	470	2,400	1,400	38	NA	NA	NA
Manganese, Total	460	450	160	250	290	330	410	130	430	380	220	180	300	350	220	320	100	340	160	4.6	1,600	2,000	10,000
Mercury, Total	0.03 J	< 0.09	0.06 J	< 0.08	< 0.09	< 0.08	< 0.08	< 0.09	< 0.08	< 0.09	< 0.08	< 0.09	< 0.08	< 0.08	< 0.09	< 0.09	< 0.08	0.09	< 0.07	< 0.08	0.18	0.81	3
Nickel, Total	22	14	9.6	12	15	11	11	5.7	12	13	16	8.5	11	12	13	11	7	11	6.3	0.64 J	30	310	310
Potassium, Total	880	910	300	560	720	540	440	320	580	720	1,900	290	630	600	520	900	200 J	600	400	< 210	NA	NA	NA
Selenium, Total	< 1.8	< 1.7	1.2 J	< 1.8	< 1.7	< 1.7	< 1.8	< 1.7	< 1.8	< 1.7	< 1.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	3.9	180	1,500
Silver, Total	< 0.91	< 0.85	0.77 J	< 0.88	< 0.86	< 0.85	< 0.88	< 0.87	< 0.88	< 0.85	< 0.86	< 0.91	< 0.9	< 0.9	< 0.89	< 0.83	< 0.85	< 0.83	< 0.87	< 0.84	2	180	1,500
Sodium, Total	< 180	< 170	< 170	72 J	71 J	< 170	< 180	< 170	210	< 170	860	< 180	< 180	< 180	< 180	70 J	< 170	85 J	< 170	< 170	NA	NA	NA
Thallium, Total	< 1.8	< 1.7	< 1.7	< 1.8	< 1.7	< 1.7	< 1.8	< 1.7	< 1.8	< 1.7	< 1.7	< 1.8	< 1.8	< 1.8	< 1.8	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	NA	NA	NA
Vanadium, Total	22	22	34	18	29	17	24	11	23	20	25	22	22	27	21	16	18	21	15	19	NA	NA	NA
Zinc, Total	44	48	41	28	45	24	31	17	43	33	67	33	45	39	41	31	22	33	19	6.6	109	10,000	10,000

Notes:

*	SCOs are for Trivalent Chromium. The reported results are for Total Chromium.
<	Analyte value is less than the laboratory detection limit for the listed compound
	Concentration above the indicated NYSDEC Part 375 SCO for Unrestricted Use
	Concentration above the indicated NYSDEC Part 375 SCO for Restricted Residential Use
	Concentration above the indicated NYSDEC Part 375 SCO for Commercial Use
BGS	Below ground surface
J	Analyte concentration is an estimate due to detection below the laboratory reporting limit.
NA	No regulatory guidance value established
PPM	Parts per million
SCO	NYSDEC Remedial Program Soil Cleanup Objective; Subpart 375-6(a,b), December, 2006

TABLE 5
Polychlorinated Biphenyls (PCBs) in Soil
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	SB1 (0-2')	Blind Duplicate from SB1 (0-2')	SB2 (0-2')	SB2 (8-10')	SB3 (0-2')	SB3 (8-10')	SB4 (0-2')	SB4 (8-10')	SB5 (0-2')	SB5 (8-10')	SB6 (0-2')	SB7 (0-2')	SB8 (0-2')	SB9 (0-2')	SB10 (0-2')	SB10 (8-10')	SB11 (0-2')	GW1 (0-2')	GW1 (8-10')	GW1 (43-45')	Part 375 Unrestricted Use SCO	Part 375 Restricted Residential Use SCO	Part 375 Restricted Commercial Use SCO
Sample Depth (feet bgs):	0-2	0-2	0-2	8-10	0-2	8-10	0-2	8-10	0-2	8-10	0-2	0-2	0-2	0-2	0-2	8-10	0-2	0-2	8-10	43-45			
COMPOUND	RESULTS (ppm)																				(ppm)		
Aroclor 1016	< 0.037	< 0.0359	< 0.0374	< 0.0381	< 0.0352	< 0.0346	< 0.0355	< 0.0359	< 0.0362	< 0.0353	< 0.0361	< 0.037	< 0.0377	< 0.0371	< 0.0359	< 0.036	< 0.0359	< 0.0368	< 0.0361	< 0.0342	0.1	1.0	1.0
Aroclor 1221	< 0.037	< 0.0359	< 0.0374	< 0.0381	< 0.0352	< 0.0346	< 0.0355	< 0.0359	< 0.0362	< 0.0353	< 0.0361	< 0.037	< 0.0377	< 0.0371	< 0.0359	< 0.036	< 0.0359	< 0.0368	< 0.0361	< 0.0342	0.1	1.0	1.0
Aroclor 1232	< 0.037	< 0.0359	< 0.0374	< 0.0381	< 0.0352	< 0.0346	< 0.0355	< 0.0359	< 0.0362	< 0.0353	< 0.0361	< 0.037	< 0.0377	< 0.0371	< 0.0359	< 0.036	< 0.0359	< 0.0368	< 0.0361	< 0.0342	0.1	1.0	1.0
Aroclor 1242	< 0.037	< 0.0359	< 0.0374	< 0.0381	< 0.0352	< 0.0346	< 0.0355	< 0.0359	< 0.0362	< 0.0353	< 0.0361	< 0.037	< 0.0377	< 0.0371	< 0.0359	< 0.036	< 0.0359	< 0.0368	< 0.0361	< 0.0342	0.1	1.0	1.0
Aroclor 1248	< 0.037	< 0.0359	< 0.0374	< 0.0381	< 0.0352	< 0.0346	< 0.0355	< 0.0359	< 0.0362	< 0.0353	< 0.0361	< 0.037	< 0.0377	< 0.0371	< 0.0359	< 0.036	< 0.0359	< 0.0368	< 0.0361	< 0.0342	0.1	1.0	1.0
Aroclor 1254	< 0.037	< 0.0359	< 0.0374	< 0.0381	< 0.0352	< 0.0346	< 0.0355	< 0.0359	< 0.0362	< 0.0353	< 0.0361	< 0.037	< 0.0377	< 0.0371	< 0.0359	< 0.036	< 0.0359	< 0.0368	< 0.0361	< 0.0342	0.1	1.0	1.0
Aroclor 1260	< 0.037	< 0.0359	< 0.0374	< 0.0381	< 0.0352	< 0.0346	< 0.0355	< 0.0359	< 0.0362	< 0.0353	< 0.0361	< 0.037	< 0.0377	< 0.0371	< 0.0359	< 0.036	< 0.0359	< 0.0368	< 0.0361	< 0.0342	0.1	1.0	1.0
Aroclor 1262	< 0.037	< 0.0359	< 0.0374	< 0.0381	< 0.0352	< 0.0346	< 0.0355	< 0.0359	< 0.0362	< 0.0353	< 0.0361	< 0.037	< 0.0377	< 0.0371	< 0.0359	< 0.036	< 0.0359	< 0.0368	< 0.0361	< 0.0342	0.1	1.0	1.0
Aroclor 1268	< 0.037	< 0.0359	< 0.0374	< 0.0381	< 0.0352	< 0.0346	< 0.0355	< 0.0359	< 0.0362	< 0.0353	< 0.0361	< 0.037	< 0.0377	< 0.0371	< 0.0359	< 0.036	< 0.0359	< 0.0368	< 0.0361	< 0.0342	0.1	1.0	1.0
Total PCBs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	1.0	1.0

Notes:

<	Analyte value is less than the laboratory detection limit for the listed compound
	Concentration above the indicated NYSDEC Part 375 SCO for Unrestricted Use
	Concentration above the indicated NYSDEC Part 375 SCO for Restricted Residential Use
	Concentration above the indicated NYSDEC Part 375 SCO for Commercial Use
BGS	Below ground surface
J	Analyte concentration is an estimate due to detection below the laboratory reporting limit.
ND	Not detected
PPM	Parts per million
SCO	NYSDEC Remedial Program Soil Cleanup Objective; Subpart 375-6(a,b), December, 2006

TABLE 6
Pesticides in Soil
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	SB1 (0-2')	Blind Duplicate from SB1 (0-2')	SB2 (0-2')	SB2 (8-10')	SB3 (0-2')	SB3 (8-10')	SB4 (0-2')	SB4 (8-10')	SB5 (0-2')	SB5 (8-10')	SB6 (0-2')	SB7 (0-2')	SB8 (0-2')	SB9 (0-2')	SB10 (0-2')	SB10 (8-10')	SB11 (0-2')	GW1 (0-2')	GW1 (8-10')	GW1 (43-45')	Part 375 Unrestricted Use SCO	Part 375 Restricted Residential Use SCO	Part 375 Restricted Commercial Use SCO
Sample Depth (feet bgs):	0-2	0-2	0-2	8-10	0-2	8-10	0-2	8-10	0-2	8-10	0-2	0-2	0-2	0-2	0-2	8-10	0-2	0-2	8-10	43-45			
COMPOUND	RESULTS (ppm)																				(ppm)		
Delta-BHC	< 0.00173	< 0.00172	< 0.00182	< 0.00184	< 0.00176	< 0.00169	< 0.00174	< 0.00173	< 0.00178	< 0.00168	< 0.00171	< 0.00179	< 0.0018	< 0.00177	< 0.00176	< 0.00167	< 0.0017	< 0.00169	< 0.00175	< 0.00165	0.04	100	500
Lindane	< 0.000722	< 0.000716	< 0.00076	< 0.000766	< 0.000732	< 0.000703	< 0.000724	< 0.000721	< 0.000741	< 0.000701	< 0.000713	< 0.000746	< 0.000752	< 0.000736	< 0.000736	< 0.000696	< 0.000708	< 0.000703	< 0.00073	< 0.000689	0.1	1.3	9.2
Alpha-BHC	< 0.000722	< 0.000716	< 0.00076	< 0.000766	< 0.000732	< 0.000703	< 0.000724	< 0.000721	< 0.000741	< 0.000701	< 0.000713	< 0.000746	< 0.000752	< 0.000736	< 0.000736	< 0.000696	< 0.000708	< 0.000703	< 0.00073	< 0.000689	0.02	0.48	3.4
Beta-BHC	< 0.00173	< 0.00172	< 0.00182	< 0.00184	< 0.00176	< 0.00169	< 0.00174	< 0.00173	< 0.00178	< 0.00168	< 0.00171	< 0.00179	< 0.0018	< 0.00177	< 0.00176	< 0.00167	< 0.0017	< 0.00169	< 0.00175	< 0.00165	0.036	0.36	3
Heptachlor	< 0.000867	< 0.00086	< 0.000911	< 0.000919	< 0.000878	< 0.000843	< 0.000868	< 0.000865	< 0.000889	< 0.000841	< 0.000856	< 0.000895	< 0.000902	< 0.000884	< 0.000883	< 0.000836	< 0.00085	< 0.000844	< 0.000876	< 0.000827	0.042	2.1	15
Aldrin	< 0.00173	< 0.00172	< 0.00182	< 0.00184	< 0.00176	< 0.00169	< 0.00174	< 0.00173	< 0.00178	< 0.00168	< 0.00171	< 0.00179	< 0.0018	< 0.00177	< 0.00176	< 0.00167	< 0.0017	< 0.00169	< 0.00175	< 0.00165	0.005	0.097	0.68
Heptachlor epoxide	< 0.00325	< 0.00322	< 0.00342	< 0.00344	< 0.00329	< 0.00316	< 0.00326	< 0.00324	< 0.00333	< 0.00315	< 0.00321	< 0.00336	< 0.00338	< 0.00331	< 0.00331	< 0.00313	< 0.00318	< 0.00316	< 0.00328	< 0.0031	NA	NA	NA
Endrin	< 0.000722	< 0.000716	< 0.00076	< 0.000766	< 0.000732	< 0.000703	< 0.000724	< 0.000721	< 0.000741	< 0.000701	< 0.000713	< 0.000746	< 0.000752	< 0.000736	< 0.000736	< 0.000696	< 0.000708	< 0.000703	< 0.00073	< 0.000689	0.014	11	89
Endrin ketone	< 0.00173	< 0.00172	< 0.00182	< 0.00184	< 0.00176	< 0.00169	< 0.00174	< 0.00173	< 0.00178	< 0.00168	< 0.00171	< 0.00179	< 0.0018	< 0.00177	< 0.00176	< 0.00167	< 0.0017	< 0.00169	< 0.00175	< 0.00165	NA	NA	NA
Dieldrin	< 0.00108	< 0.00107	< 0.00114	< 0.00115	< 0.0011	< 0.00105	< 0.00108	< 0.00108	< 0.00111	< 0.00105	< 0.00107	< 0.00112	< 0.00113	< 0.0011	< 0.0011	< 0.00104	< 0.00106	< 0.00106	< 0.00109	< 0.00103	0.005	0.2	1.4
4,4'-DDE	< 0.00173	< 0.00172	0.000608 J	< 0.00184	< 0.00176	< 0.00169	< 0.00174	< 0.00173	< 0.00178	< 0.00168	< 0.00171	< 0.00179	< 0.0018	< 0.00177	< 0.00176	< 0.00167	< 0.0017	< 0.00169	< 0.00175	< 0.00165	0.0033	8.9	62
4,4'-DDD	< 0.00173	< 0.00172	0.00104 J	< 0.00184	< 0.00176	< 0.00169	< 0.00174	< 0.00173	< 0.00178	< 0.00168	< 0.00171	< 0.00179	< 0.0018	< 0.00177	< 0.00176	< 0.00167	< 0.0017	< 0.00169	< 0.00175	< 0.00165	0.0033	13	92
4,4'-DDT	< 0.00325	< 0.00322	0.00219 J	< 0.00344	< 0.00329	< 0.00316	< 0.00326	< 0.00324	< 0.00333	< 0.00315	< 0.00321	< 0.00336	< 0.00338	< 0.00331	< 0.00331	< 0.00313	< 0.00318	0.0024 J	< 0.00328	< 0.0031	0.0033	7.9	47
Endosulfan I	< 0.00173	< 0.00172	< 0.00182	< 0.00184	< 0.00176	< 0.00169	< 0.00174	< 0.00173	< 0.00178	< 0.00168	< 0.00171	< 0.00179	< 0.0018	< 0.00177	< 0.00176	< 0.00167	< 0.0017	< 0.00169	< 0.00175	< 0.00165	2.4	24	200
Endosulfan II	< 0.00173	< 0.00172	< 0.00182	< 0.00184	< 0.00176	< 0.00169	< 0.00174	< 0.00173	< 0.00178	< 0.00168	< 0.00171	< 0.00179	< 0.0018	< 0.00177	< 0.00176	< 0.00167	< 0.0017	< 0.00169	< 0.00175	< 0.00165	2.4	24	200
Endosulfan sulfate	< 0.000722	< 0.000716	< 0.00076	< 0.000766	< 0.000732	< 0.000703	< 0.000724	< 0.000721	< 0.000741	< 0.000701	< 0.000713	< 0.000746	< 0.000752	< 0.000736	< 0.000736	< 0.000696	< 0.000708	< 0.000703	< 0.00073	< 0.000689	2.4	24	200
Methoxychlor	< 0.00325	< 0.00322	< 0.00342	< 0.00344	< 0.00329	< 0.00316	< 0.00326	< 0.00324	< 0.00333	< 0.00315	< 0.00321	< 0.00336	< 0.00338	< 0.00331	< 0.00331	< 0.00313	< 0.00318	< 0.00316	< 0.00328	< 0.0031	NA	NA	NA
Toxaphene	< 0.0325	< 0.0322	< 0.0342	< 0.0344	< 0.0329	< 0.0316	< 0.0326	< 0.0324	< 0.0333	< 0.0315	< 0.0321	< 0.0336	< 0.0338	< 0.0331	< 0.0331	< 0.0313	< 0.0318	< 0.0316	< 0.0328	< 0.031	NA	NA	NA
cis-Chlordane	< 0.00217	< 0.00215	< 0.00228	< 0.0023	< 0.0022	< 0.00211	< 0.00217	< 0.00216	< 0.00222	< 0.0021	< 0.00214	< 0.00224	< 0.00226	< 0.00221	< 0.00221	< 0.00209	< 0.00212	< 0.00211	< 0.00219	< 0.00207	0.094	4.2	24
trans-Chlordane	< 0.00217	< 0.00215	< 0.00228	< 0.0023	< 0.0022	< 0.00211	< 0.00217	< 0.00216	< 0.00222	< 0.0021	< 0.00214	< 0.00224	< 0.00226	< 0.00221	< 0.00221	< 0.00209	< 0.00212	< 0.00211	< 0.00219	< 0.00207	NA	NA	NA
Chlordane	< 0.0141	< 0.014	< 0.0148	< 0.0149	< 0.0143	< 0.0137	< 0.0141	< 0.014	< 0.0144	< 0.0137	< 0.0139	< 0.0145	< 0.0147	< 0.0144	< 0.0143	< 0.0136	< 0.0138	< 0.0137	< 0.0142	< 0.0134	NA	NA	NA

Notes:

<	Analyte value is less than the laboratory detection limit for the listed compound
	Concentration above the indicated NYSDEC Part 375 SCO for Unrestricted Use
	Concentration above the indicated NYSDEC Part 375 SCO for Restricted Residential Use
	Concentration above the indicated NYSDEC Part 375 SCO for Commercial Use
BGS	Below ground surface
J	Analyte concentration is an estimate due to detection below the laboratory reporting limit.
NA	No regulatory guidance value established
PPM	Parts per million
SCO	NYSDEC Remedial Program Soil Cleanup Objective; Subpart 375-6(a,b), December, 2006

TABLE 7 (Page 1 of 2)
VOCs in Groundwater and QAQC Samples
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	FB1	FB2	GW1	TB1	TB2	NYSDEC Class GA Standards / Guidance Values*
COMPOUND	µg/L					µg/L
Methylene chloride	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
1,1-Dichloroethane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Chloroform	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	7
Carbon tetrachloride	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	5
1,2-Dichloropropane	< 1	< 1	< 1	< 1	< 1	1
Dibromochloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	50
1,1,2-Trichloroethane	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	1
Tetrachloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	5
Chlorobenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Trichlorofluoromethane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
1,2-Dichloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6
1,1,1-Trichloroethane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	50
trans-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.4
cis-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.4
1,1-Dichloropropene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Bromoform	< 2	< 2	< 2	< 2	< 2	50
1,1,2,2-Tetrachloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	5
Benzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1
Toluene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Ethylbenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Chloromethane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Bromomethane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Vinyl chloride	< 1	< 1	< 1	< 1	< 1	2
Chloroethane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
1,1-Dichloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	5
trans-1,2-Dichloroethene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Trichloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	5
1,2-Dichlorobenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	3
1,3-Dichlorobenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	3
1,4-Dichlorobenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	3
Methyl tert butyl ether	< 2.5	< 2.5	0.7 J	< 2.5	< 2.5	10
p/m-Xylene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
o-Xylene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
cis-1,2-Dichloroethene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Dibromomethane	< 5	< 5	< 5	< 5	< 5	5
1,2,3-Trichloropropane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	0.04
Acrylonitrile	< 5	< 5	< 5	< 5	< 5	5
Styrene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Dichlorodifluoromethane	< 5	< 5	< 5	< 5	< 5	5
Acetone	12	3 J	< 5	2 J	< 5	50
Carbon disulfide	< 5	< 5	< 5	< 5	< 5	NA
2-Butanone	1.4 J	< 5	< 5	1.4 J	2 J	50
Vinyl acetate	< 5	< 5	< 5	< 5	< 5	NA
4-Methyl-2-pentanone	< 5	< 5	< 5	< 5	< 5	NA
2-Hexanone	< 5	< 5	< 5	< 5	< 5	50
Bromochloromethane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
2,2-Dichloropropane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
1,2-Dibromoethane	< 2	< 2	< 2	< 2	< 2	0.0006
1,3-Dichloropropane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
1,1,1,2-Tetrachloroethane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Bromobenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
n-Butylbenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
sec-Butylbenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
tert-Butylbenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
o-Chlorotoluene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
p-Chlorotoluene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
1,2-Dibromo-3-chloropropane	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	0.04
Hexachlorobutadiene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	0.5
Isopropylbenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
p-Isopropyltoluene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
Naphthalene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	10
n-Propylbenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
1,2,3-Trichlorobenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
1,2,4-Trichlorobenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
1,3,5-Trimethylbenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
1,2,4-Trimethylbenzene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5
1,4-Dioxane	< 250	< 250	< 250	< 250	< 250	NA

TABLE 7 (Page 2 of 2)
VOCs in Groundwater and QAQC Samples
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	FB1	FB2	GW1	TB1	TB2	NYSDEC Class GA Standards / Guidance Values*
COMPOUND	µg/L					µg/L
1,4-Diethylbenzene	< 2	< 2	< 2	< 2	< 2	NA
4-Ethyltoluene	< 2	< 2	< 2	< 2	< 2	NA
1,2,4,5-Tetramethylbenzene	< 2	< 2	< 2	< 2	< 2	5
Ethyl ether	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	NA
trans-1,4-Dichloro-2-butene	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5

Notes:

*	NYSDEC Technical & Operational Guidance Series 1.1.1 Groundwater Quality Standards and Class GA Guidance Values, June 1998
<	Analyte value is less than the laboratory detection limit for the listed compound
	Concentration above the indicated Class GA Value
J	Analyte concentration is an estimate due to detection below the laboratory reporting limit.
µg/L	Micrograms per liter
NA	No regulatory guidance value established

TABLE 8 (Page 1 of 2)
SVOCs in Groundwater and QAQC Samples
Charleston, Staten Island Mixed-Use Development Site A34

Sample ID:	FB1	FB2	GW1	NYSDEC Class GA Standards / Guidance Values*
COMPOUND	µg/L			µg/L
Acenaphthene	< 0.2	< 0.2	< 0.2	20
1,2,4-Trichlorobenzene	< 2.5	< 2.5	< 2.5	5
Hexachlorobenzene	< 0.8	< 0.8	< 0.8	0.04
Bis(2-chloroethyl)ether	< 2	< 2	< 2	10
2-Chloronaphthalene	< 0.2	< 0.2	< 0.2	10
1,2-Dichlorobenzene	< 2.5	< 2.5	< 2.5	3
1,3-Dichlorobenzene	< 2.5	< 2.5	< 2.5	3
1,4-Dichlorobenzene	< 2.5	< 2.5	< 2.5	3
3,3'-Dichlorobenzidine	< 5	< 5	< 5	5
2,4-Dinitrotoluene	< 5	< 5	< 5	5
2,6-Dinitrotoluene	< 5	< 5	< 5	5
Fluoranthene	< 0.2	< 0.2	< 0.2	50
4-Chlorophenyl phenyl ether	< 2	< 2	< 2	NA
4-Bromophenyl phenyl ether	< 2	< 2	< 2	NA
Bis(2-chloroisopropyl)ether	< 2	< 2	< 2	5
Bis(2-chloroethoxy)methane	< 5	< 5	< 5	5
Hexachlorobutadiene	< 2.5	< 2.5	< 2.5	0.5
Hexachlorocyclopentadiene	< 20	< 20	< 20	5
Hexachloroethane	< 0.8	< 0.8	< 0.8	5
Isophorone	< 5	< 5	< 5	50
Naphthalene	< 2.5	< 2.5	< 2.5	10
Nitrobenzene	< 2	< 2	< 2	0.4
NitrosoDiPhenylAmine(NDPA)/DPA	< 2	< 2	< 2	50
n-Nitrosodi-n-propylamine	< 5	< 5	< 5	NA
Bis(2-Ethylhexyl)phthalate	< 3	< 3	< 3	5
Butyl benzyl phthalate	< 5	< 5	< 5	50
Di-n-butylphthalate	< 5	< 5	< 5	50
Di-n-octylphthalate	< 5	< 5	< 5	50
Diethyl phthalate	< 5	< 5	< 5	50
Dimethyl phthalate	< 5	< 5	< 5	50
Benzo(a)anthracene	< 0.2	< 0.2	< 0.2	0.002
Benzo(a)pyrene	< 0.2	< 0.2	< 0.2	ND
Benzo(b)fluoranthene	< 0.2	< 0.2	< 0.2	0.002
Benzo(k)fluoranthene	< 0.2	< 0.2	< 0.2	0.002
Chrysene	< 0.2	< 0.2	< 0.2	0.002
Acenaphthylene	< 0.2	< 0.2	< 0.2	NA
Anthracene	< 0.2	< 0.2	< 0.2	50
Benzo(ghi)perylene	< 0.2	< 0.2	< 0.2	NA
Fluorene	< 0.2	< 0.2	< 0.2	50
Phenanthrene	< 0.2	< 0.2	< 0.2	50
Dibenzo(a,h)anthracene	< 0.2	< 0.2	< 0.2	NA
Indeno(1,2,3-cd)Pyrene	< 0.2	< 0.2	< 0.2	0.002
Pyrene	< 0.2	< 0.2	< 0.2	50
Biphenyl	< 2	< 2	< 2	5
4-Chloroaniline	< 5	< 5	< 5	5
2-Nitroaniline	< 5	< 5	< 5	5
3-Nitroaniline	< 5	< 5	< 5	5
4-Nitroaniline	< 5	< 5	< 5	5
Dibenzofuran	< 2	< 2	< 2	NA
1,2,4,5-Tetrachlorobenzene	< 10	< 10	< 10	5
Acetophenone	< 5	< 5	< 5	NA
2,4,6-Trichlorophenol	< 5	< 5	< 5	NA
2-Methylnaphthalene	< 0.2	< 0.2	< 0.2	NA
P-Chloro-M-Cresol	< 2	< 2	< 2	NA
2-Chlorophenol	< 2	< 2	< 2	NA
2,4-Dichlorophenol	< 5	< 5	< 5	5
2,4-Dimethylphenol	< 5	< 5	< 5	50
2-Nitrophenol	< 10	< 10	< 10	NA
4-Nitrophenol	< 10	< 10	< 10	NA
2,4-Dinitrophenol	< 20	< 20	< 20	10
4,6-Dinitro-o-cresol	< 10	< 10	< 10	NA
Pentachlorophenol	< 0.8	< 0.8	< 0.8	2
Phenol	< 5	< 5	< 5	2
2-Methylphenol	< 5	< 5	< 5	NA
3-Methylphenol/4-Methylphenol	< 5	< 5	< 5	NA
2,4,5-Trichlorophenol	< 5	< 5	< 5	NA
Benzoic Acid	< 50	< 50	< 50	NA
Benzyl Alcohol	< 2	< 2	< 2	NA

TABLE 8 (Page 2 of 2)
SVOCs in Groundwater and QAQC Samples
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	FB1	FB2	GW1	NYSDEC Class GA Standards / Guidance Values*
COMPOUND	µg/L			µg/L
Carbazole	< 2	< 2	< 2	NA

Notes:

*	NYSDEC Technical & Operational Guidance Series 1.1.1 Groundwater Quality Standards and Class GA Guidance Values, June 1998
<	Analyte value is less than the laboratory detection limit for the listed compound
	Concentration above the indicated Class GA Value
J	Analyte concentration is an estimate due to detection below the laboratory reporting limit.
µg/L	Micrograms per liter
NA	No regulatory guidance value established

TABLE 9
Metals in Groundwater and QAQC Samples
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	FB1	FB2	GW1	NYSDEC Class GA Standards / Guidance Values*
COMPOUND (Total)		µg/L		µg/L
Aluminum, Total	21.3	< 10	**249**	100
Antimony, Total	0.34 J	0.35 J	0.35 J	3.0
Arsenic, Total	< 0.5	< 0.5	2.04	25
Barium, Total	0.37 J	< 0.5	97.51	1,000
Beryllium, Total	< 0.5	< 0.5	0.44 J	3.0
Cadmium, Total	< 0.5	< 0.5	0.08 J	5.0
Calcium, Total	< 100	< 100	41,200	NA
Chromium, Total	2.12	< 1	6.18	50
Cobalt, Total	< 0.5	< 0.5	**21.44**	5.0
Copper, Total	0.82 J	0.11 J	5.06	200
Iron, Total	65	< 50	**4,100**	300
Lead, Total	0.22 J	< 1	0.88 J	25
Magnesium, Total	< 100	< 100	10,200	35,000
Manganese, Total	1.86	0.14 J	143.4	300
Mercury, Total	< 0.2	< 0.2	< 0.2	0.7
Nickel, Total	0.88 J	< 1	27.74	100
Potassium, Total	< 100	< 100	1,790	NA
Selenium, Total	< 5	< 5	1.16 J	10
Silver, Total	< 0.5	< 0.5	< 0.5	50
Sodium, Total	111	20 J	**51,400**	20,000
Thallium, Total	< 0.5	< 0.5	0.08 J	0.5
Vanadium, Total	< 5	< 5	1.54 J	14
Zinc, Total	2.52 J	< 10	52.23	2,000
COMPOUND (Dissolved)		µg/L		µg/L
Aluminum, Dissolved	--	--	13.4	100
Antimony, Dissolved	--	--	0.82	3.0
Arsenic, Dissolved	--	--	< 0.5	25
Barium, Dissolved	--	--	78.99	1,000
Beryllium, Dissolved	--	--	< 0.5	3.0
Cadmium, Dissolved	--	--	< 0.5	5.0
Calcium, Dissolved	--	--	47,200	NA
Chromium, Dissolved	--	--	0.46 J	50
Cobalt, Dissolved	--	--	**28.78**	5.0
Copper, Dissolved	--	--	1	200
Iron, Dissolved	--	--	**3,520**	300
Lead, Dissolved	--	--	< 1	25
Magnesium, Dissolved	--	--	11,400	35,000
Manganese, Dissolved	--	--	**498**	300
Mercury, Dissolved	--	--	< 0.2	0.7
Nickel, Dissolved	--	--	45.5	100
Potassium, Dissolved	--	--	2,560	NA
Selenium, Dissolved	--	--	0.38 J	10
Silver, Dissolved	--	--	< 0.5	50
Sodium, Dissolved	--	--	**50,300**	20,000
Thallium, Dissolved	--	--	< 0.5	0.5
Vanadium, Dissolved	--	--	< 5	14
Zinc, Dissolved	--	--	42.18	2,000

Notes:

*	NYSDEC Technical & Operational Guidance Series 1.1.1 Groundwater Quality Standards and Class GA Guidance Values, June 1998
--	Compound not analyzed in sample
<	Analyte value is less than the laboratory detection limit for the listed compound
	Concentration above the indicated Class GA Value
J	Analyte concentration is an estimate due to detection below the laboratory reporting limit.
µg/L	Micrograms per liter
NA	No regulatory guidance value established

TABLE 10
PCBs in Groundwater and QAQC Samples
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	FB1	FB2	GW1	NYSDEC Class GA Standards / Guidance Values*
COMPOUND	µg/L			µg/L
Aroclor 1016	< 0.083	< 0.083	< 0.083	0.09
Aroclor 1221	< 0.083	< 0.083	< 0.083	0.09
Aroclor 1232	< 0.083	< 0.083	< 0.083	0.09
Aroclor 1242	< 0.083	< 0.083	< 0.083	0.09
Aroclor 1248	< 0.083	< 0.083	< 0.083	0.09
Aroclor 1254	< 0.083	< 0.083	< 0.083	0.09
Aroclor 1260	< 0.083	< 0.083	< 0.083	0.09
Aroclor 1262	< 0.083	< 0.083	< 0.083	0.09
Aroclor 1268	< 0.083	< 0.083	< 0.083	0.09

Notes:

*	NYSDEC Technical & Operational Guidance Series 1.1.1 Groundwater Quality Standards and Class GA Guidance Values, June 1998
<	Analyte value is less than the laboratory detection limit for the listed compound
	Concentration above the indicated Class GA Value
J	Analyte concentration is an estimate due to detection below the laboratory reporting limit.
µg/L	Micrograms per liter
NA	No regulatory guidance value established

TABLE 11
Pesticides in Groundwater and QAQC Samples
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	FB1	FB2	GW1	NYSDEC Class GA Standards / Guidance Values*
COMPOUND	µg/L			µg/L
Delta-BHC	< 0.02	< 0.02	< 0.02	0.04
Lindane	< 0.02	< 0.02	< 0.02	0.05
Alpha-BHC	< 0.02	< 0.02	< 0.02	0.01
Beta-BHC	< 0.02	< 0.02	< 0.02	0.04
Heptachlor	< 0.02	< 0.02	< 0.02	0.04
Aldrin	< 0.02	< 0.02	< 0.02	ND
Heptachlor epoxide	< 0.02	< 0.02	< 0.02	0.03
Endrin	< 0.04	< 0.04	< 0.04	ND
Endrin ketone	< 0.04	< 0.04	< 0.04	5
Dieldrin	< 0.04	< 0.04	< 0.04	0.004
4,4'-DDE	< 0.04	< 0.04	< 0.04	0.2
4,4'-DDD	< 0.04	< 0.04	< 0.04	0.3
4,4'-DDT	< 0.04	< 0.04	< 0.04	0.2
Endosulfan I	< 0.02	< 0.02	< 0.02	NA
Endosulfan II	< 0.04	< 0.04	< 0.04	NA
Endosulfan sulfate	< 0.04	< 0.04	< 0.04	NA
Methoxychlor	< 0.2	< 0.2	< 0.2	35
Toxaphene	< 0.2	< 0.2	< 0.2	0.06
cis-Chlordane	< 0.02	< 0.02	< 0.02	NA
trans-Chlordane	< 0.02	< 0.02	< 0.02	NA
Chlordane	< 0.2	< 0.2	< 0.2	0.05

Notes:

*	NYSDEC Technical & Operational Guidance Series 1.1.1 Groundwater Quality Standards and Class GA Guidance Values, June 1998
<	Analyte value is less than the laboratory detection limit for the listed compound
	Concentration above the indicated Class GA Value
J	Analyte concentration is an estimate due to detection below the laboratory reporting limit.
µg/L	Micrograms per liter
NA	No regulatory guidance value established

TABLE 12 (Page 1 of 2)
VOCs in Soil Vapor
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	SG1	SG2	SG4	SG5	SG6	SG7	USEPA National Ambient Air Averages*	NYSDOH Air Guideline Values**
COMPOUND	RESULTS µg/m3						µg/m3	
Propylene	30.8	53.9	94.1	106	57.7	114	NA	NA
Dichlorodifluoromethane	**2.41**	1.18	**2.92**	< 4.94	**2.9**	< 9.89	2.2	NA
Chloromethane	< 0.413	< 0.413	< 0.413	< 2.07	< 0.413	< 4.13	1.5	NA
Freon-114	< 1.4	< 1.4	< 1.4	< 6.99	< 1.4	< 14	0.31	NA
Vinyl chloride	< 0.511	< 0.511	< 0.511	< 2.56	< 0.511	< 5.11	32	NA
1,3-Butadiene	3.58	2.81	7.59	6.81	5.73	9.18	NA	NA
Bromomethane	< 0.777	< 0.777	< 0.777	< 3.88	< 0.777	< 7.77	12	NA
Chloroethane	< 0.528	< 0.528	< 0.528	< 2.64	< 0.528	< 5.28	220	NA
Ethanol	31.3	< 4.71	19.6	30	8.29	< 47.1	NA	NA
Vinyl bromide	< 0.874	< 0.874	< 0.874	< 4.37	< 0.874	< 8.74	NA	NA
Acetone	**285**	**128**	**157**	**373**	**233**	**437**	16	NA
Trichlorofluoromethane	1.29	< 1.12	**1.7**	< 5.62	**1.82**	< 11.2	1.4	NA
Isopropanol	4.82	< 1.23	4.62	< 6.15	1.83	< 12.3	NA	NA
1,1-Dichloroethene	< 0.793	< 0.793	< 0.793	< 3.96	< 0.793	< 7.93	18	NA
Methylene chloride	4.55	4.79	**6.39**	< 17.4	3.89	< 34.7	5.6	NA
3-Chloropropene	< 0.626	< 0.626	< 0.626	< 3.13	< 0.626	< 6.26	NA	NA
Carbon disulfide	**3.01**	**4.33**	**4.83**	**7.35**	**2.81**	< 6.23	0.3	NA
Freon-113	< 1.53	< 1.53	< 1.53	< 7.66	< 1.53	< 15.3	2.7	NA
trans-1,2-Dichloroethene	< 0.793	< 0.793	< 0.793	< 3.96	< 0.793	< 7.93	3	NA
1,1-Dichloroethane	< 0.809	< 0.809	< 0.809	< 4.05	< 0.809	< 8.09	0.16	NA
Methyl tert butyl ether	< 0.721	< 0.721	< 0.721	< 3.61	< 0.721	< 7.21	NA	NA
Vinyl acetate	< 0.704	< 0.704	< 0.704	< 3.52	< 0.704	< 7.04	NA	NA
2-Butanone	**49**	**4.28**	**52.2**	**59**	**18.3**	**42.5**	1.9	NA
cis-1,2-Dichloroethene	< 0.793	< 0.793	< 0.793	< 3.96	< 0.793	< 7.93	1.3	NA
Ethyl Acetate	2.26	< 1.8	2.18	< 9.01	< 1.8	< 18	NA	NA
Chloroform	< 0.977	< 0.977	< 0.977	< 4.88	< 0.977	< 9.77	3.1	NA
Tetrahydrofuran	4.69	< 0.59	7.52	7.49	1.63	< 5.9	NA	NA
1,2-Dichloroethane	< 0.809	< 0.809	< 0.809	< 4.05	< 0.809	< 8.09	1.6	NA
n-Hexane	1.83	7.26	5.25	4.9	2.19	7.72	13	NA
1,1,1-Trichloroethane	< 1.09	< 1.09	< 1.09	< 5.46	< 1.09	< 10.9	5	100
Benzene	2.62	1.11	4.79	4.41	2.35	< 6.39	8.9	NA
Carbon tetrachloride	< 1.26	< 1.26	< 1.26	< 6.29	< 1.26	< 12.6	1	5
Cyclohexane	< 0.688	< 0.688	0.757	< 3.44	< 0.688	< 6.88	NA	NA
1,2-Dichloropropane	< 0.924	< 0.924	< 0.924	< 4.62	< 0.924	< 9.24	0.74	NA
Bromodichloromethane	< 1.34	< 1.34	< 1.34	< 6.7	< 1.34	< 13.4	0.01	NA
1,4-Dioxane	< 0.721	< 0.721	< 0.721	< 3.6	< 0.721	< 7.21	NA	NA
Trichloroethene	< 1.07	< 1.07	< 1.07	< 5.37	< 1.07	< 10.7	2.7	5
2,2,4-Trimethylpentane	< 0.934	< 0.934	< 0.934	< 4.67	< 0.934	< 9.34	9.3	NA
Heptane	2.52	3.25	5.41	< 4.1	1.89	< 8.2	6.6	NA
cis-1,3-Dichloropropene	< 0.908	< 0.908	< 0.908	< 4.54	< 0.908	< 9.08	110	NA
4-Methyl-2-pentanone	9.18	< 0.82	7.05	6.6	3.84	< 8.2	NA	NA
trans-1,3-Dichloropropene	< 0.908	< 0.908	< 0.908	< 4.54	< 0.908	< 9.08	NA	NA
1,1,2-Trichloroethane	< 1.09	< 1.09	< 1.09	< 5.46	< 1.09	< 10.9	6	NA
Toluene	6.14	2.88	18.2	15.6	5.58	12.4	32	NA
2-Hexanone	10.2	1.16	6.15	7.21	4.26	< 8.2	NA	NA
Dibromochloromethane	< 1.7	< 1.7	< 1.7	< 8.52	< 1.7	< 17	0.27	NA
1,2-Dibromoethane	< 1.54	< 1.54	< 1.54	< 7.69	< 1.54	< 15.4	2.5	NA
Tetrachloroethene	< 1.36	< 1.36	< 1.36	< 6.78	< 1.36	< 13.6	5.8	100
Chlorobenzene	< 0.921	< 0.921	< 0.921	< 4.61	< 0.921	< 9.21	1.5	NA
Ethylbenzene	1.84	< 0.869	6.73	6.99	1.83	< 8.69	20	NA
p/m-Xylene	6.86	2.54	25.4	25.5	6.86	< 17.4	96	NA
Bromoform	< 2.07	< 2.07	< 2.07	< 10.3	< 2.07	< 20.7	0	NA
Styrene	< 0.852	< 0.852	1.09	< 4.26	< 0.852	< 8.52	1.5	NA
1,1,2,2-Tetrachloroethane	< 1.37	< 1.37	< 1.37	< 6.87	< 1.37	< 13.7	0.7	NA

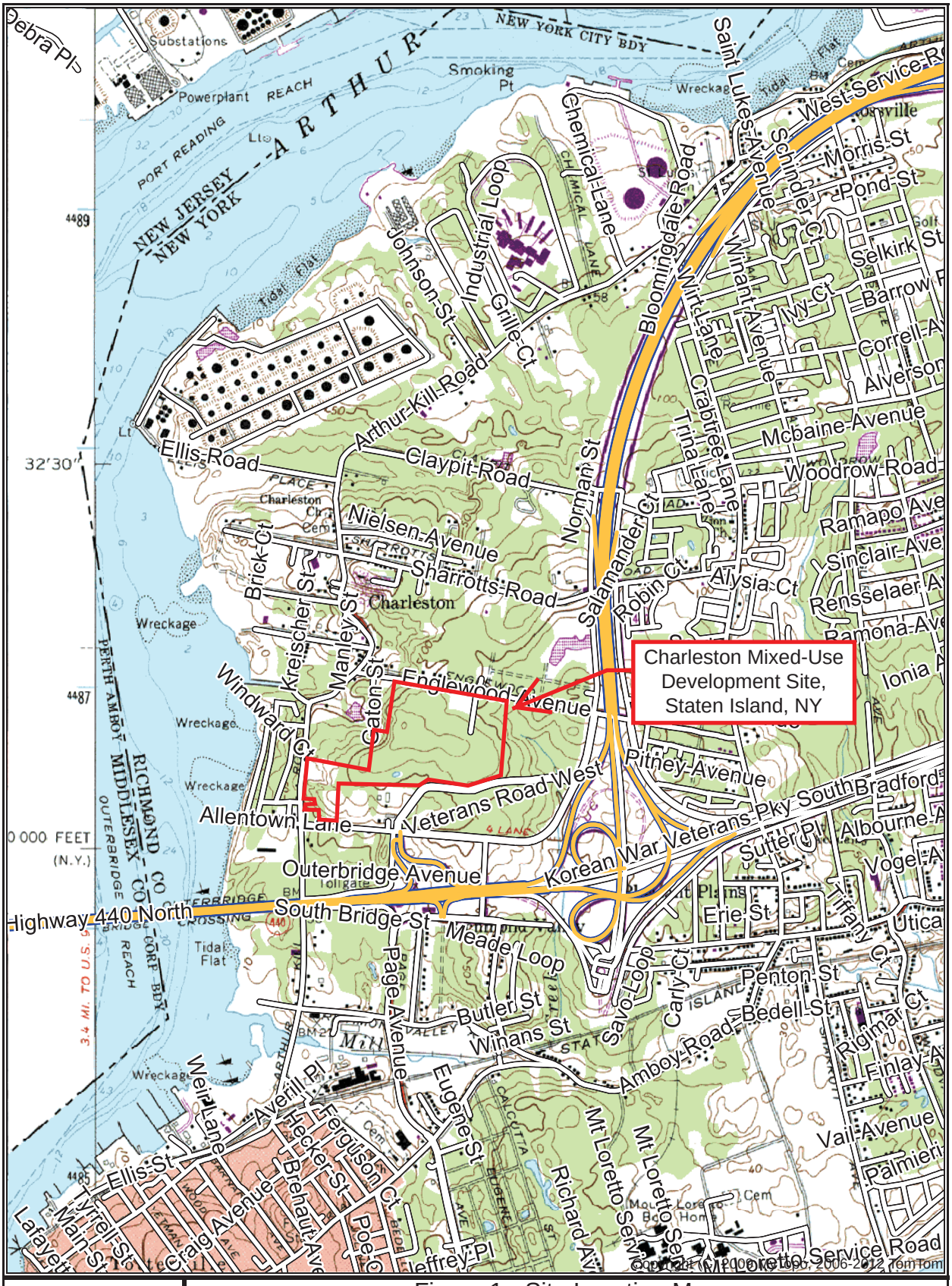
TABLE 12 (Page 2 of 2)
VOCs in Soil Vapor
Charleston, Staten Island Mixed-Use Development Site

Sample ID:	SG1	SG2	SG4	SG5	SG6	SG7	USEPA National Ambient Air Averages*	NYSDOH Air Guideline Values**
COMPOUND	RESULTS µg/m3						µg/m3	
o-Xylene	2.86	1.08	9.69	10.7	3.02	< 8.69	33	NA
4-Ethyltoluene	< 0.983	< 0.983	4.21	< 4.92	1.39	< 9.83	NA	NA
1,3,5-Trimethylbenzene	1.77	< 0.983	**4.27**	< 4.92	1.51	< 9.83	4	NA
1,2,4-Trimethylbenzene	6.29	1.87	**14.7**	**12.1**	5.9	< 9.83	6.7	NA
Benzyl chloride	< 1.04	< 1.04	< 1.04	< 5.18	< 1.04	< 10.4	0.07	NA
1,3-Dichlorobenzene	< 1.2	< 1.2	< 1.2	< 6.01	< 1.2	< 12	5.3	NA
1,4-Dichlorobenzene	< 1.2	< 1.2	< 1.2	< 6.01	< 1.2	< 12	6	NA
1,2-Dichlorobenzene	< 1.2	< 1.2	< 1.2	< 6.01	< 1.2	< 12	7.8	NA
1,2,4-Trichlorobenzene	< 1.48	< 1.48	< 1.48	< 7.42	< 1.48	< 14.8	1.3	NA
Hexachlorobutadiene	< 2.13	< 2.13	< 2.13	< 10.7	< 2.13	< 21.3	0.38	NA

Notes:

<	Analyte value is less than the laboratory detection limit for the listed compound
*	US Environmental Protection Agency: Average National Ambient Outdoor Air VOCs, NYS Department of Health - Guidance For Evaluating Soil Vapor Intrusion in the State of New York, October 2006.
**	Air guideline values contained in NYS Department of Health - Guidance For Evaluating Soil Vapor Intrusion in the State of New York, October 2006.
Bold	Concentration above the indicated USEPA National Ambient Air Average value
	Concentration above the indicated NYSDOH Air Guideline value
µg/m3	Micrograms per cubic meter
NA	No regulatory guidance value established

FIGURES



Declination

MN GN

GN 0.50° E
MN 12.91° W

Figure 1 - Site Location Map

Map Name: ARTHUR KILL Horizontal Datum: NAD27
Scale: 1 inch = 2,000 ft.
Map Center: 040° 32' 06.10" N 074° 13'

SCALE 1:24000

0 1000 2000 3000 4000 5000 6000 7000 8000 9000
FEET

Scale
One Inch = ±440 Feet

FIGURE 2
AERIAL VIEW
CHARLESTON MIXED USE DEVELOPMENT SITE
STATEN ISLAND, NEW YORK

NYCEDC New York City Economic Development Corp.
AECOM
EM P ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

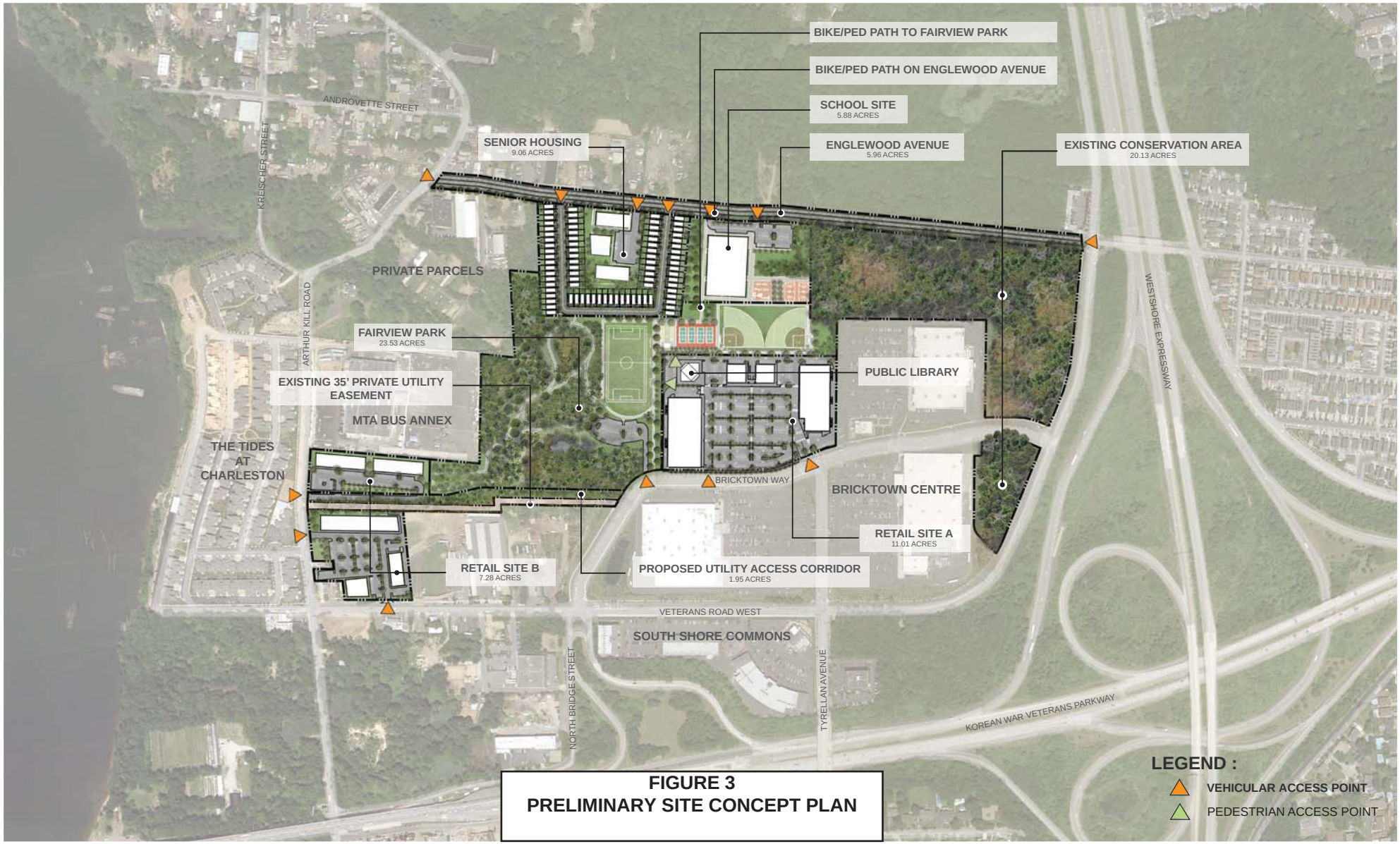
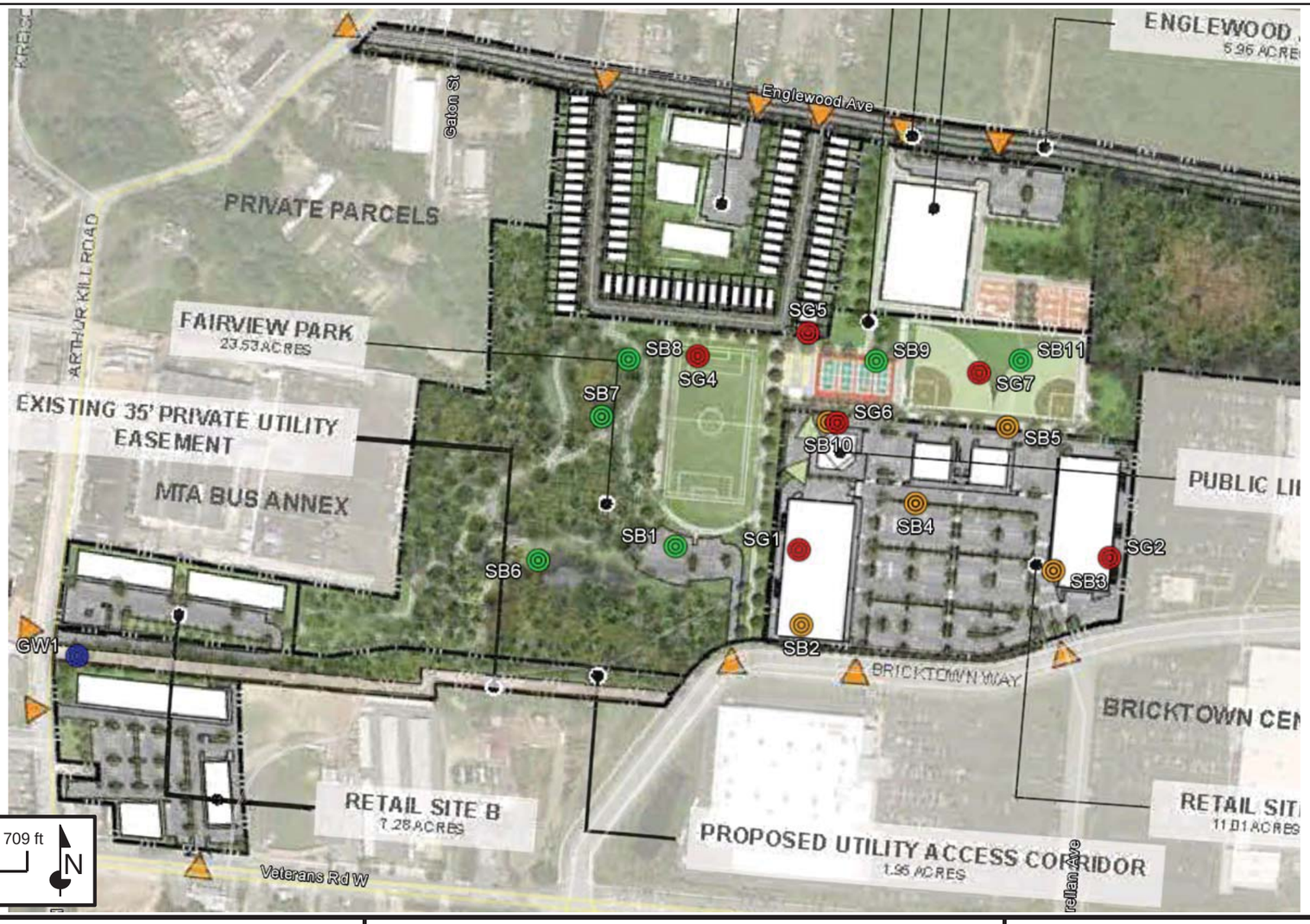


FIGURE 3
PRELIMINARY SITE CONCEPT PLAN



Legend

- Location of 5 foot soil boring
- Location of 25 foot soil boring
- Location of soil gas sampling point
- Location of temporary groundwater monitoring well

Prepared for:
AECOM
20 Exchange Place, 13th Floor
New York, New York 10005

Prepared by:
ENVIRONMENTAL PLANNING & MANAGEMENT, INC.

Figure 4:

Sampling Location Diagram

Charleston Mixed-Use Development Site
NYCDEP # 13DEPTECH043R
EPM Project No.# 12043

APPENDIX A
SOIL BORING AND SOIL VAPOR SAMPLING LOGS

Environmental Planning & Management, Inc.
EPM
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
SB1

Client:	AECOM	*Date/Time Started:*	6/5/2013	13:55	*Drilling Co.:*	Zebra Environmenal Corp.	
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/5/2013	14:05	*Rig Type:*	Direct push	
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA		*Drill Method:*	Direct push	
Project Location:		*Completion Depth:*	5 Feet Below Grade (ft. bg)		*Sample Device:*	Metal tube and acetate liner	
Project Number:	12043	*Depth to Water:*	NA		*Logged by:*	JAL	
Boring Location:	Refer to Figure 4						

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
SB1(0-2')/Blind Dup01	0-2 ft. bg	Upper half of interval comprised slightly moist brown clay and lower half of interval comprised brown clay.	36	<1	14:05	Interval 0-2 ft. bg submitted for laboratory analysis	0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5
Boring completed at depth of 5 ft. bg							5.0

Environmental Planning & Management, Inc.
EPM
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
SB2

Client:	AECOM	*Date/Time Started:*	6/6/2013 9:10	*Drilling Co.:*	Zebra Environmenal Corp.
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/6/2013 9:28	*Rig Type:*	Direct push
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA	*Drill Method:*	Direct push
Project Location:		*Completion Depth:*	25 Feet Below Grade (ft. bg)	*Sample Device:*	Metal tube and acetate liner
Project Number:	12043	*Depth to Water:*	NA	*Logged by:*	JAL
Boring Location:	Refer to Figure 4				

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
SB2(0-2')	0-2 ft. bg	Moderately moist brown clay and fine silt	39	<1	9:15	Interval 0-2 ft. bg submitted for laboratory analysis	0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5
		Moderately moist brown clay and fine silt	50	<1	9:20		5.0 5.5 6.0 6.5 7.0 7.5
SB2(8-10')	8-10 ft. bg					Interval 8-10 ft. bg submitted for laboratory analysis	8.0 8.5 9.0 9.5
		Upper 20 inches of interval comprised moderately moist brown clay and fine silt with fine gravel. The remainder of the interval consisted of yellow coarse silt and fine sand	39	<1	9:23		10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5
		Moderately moist caorse silt and medium to coarse yellow sand	40	<1	9:25		15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5
		Moderately moist caorse silt and medium to coarse yellow sand	42	<1	9:28		20.0 20.5 21.0 21.5 22.0 22.5 23.0 23.5 24.0 24.5
Boring completed at depth of 25 ft. bg							25.0

Environmental Planning & Management, Inc.
E P M
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
SB4

Client:	AECOM	*Date/Time Started:*	6/5/2013 9:45	*Drilling Co.:*	Zebra Environmenal Corp.
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/5/2013 10:15	*Rig Type:*	Direct push
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA	*Drill Method:*	Direct push
Project Location:		*Completion Depth:*	25 Feet Below Grade (ft. bg)	*Sample Device:*	Metal tube and acetate liner
Project Number:	12043	*Depth to Water:*	NA	*Logged by:*	JAL
Boring Location:	Refer to Figure 4				

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
SB4(0-2')	0-2 ft. bg	Moderately moist brown clay with fine silt	30	1.6	9:55	Interval 0-2 ft. bg submitted for laboratory analysis	0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5
		Moist brown medium silt and find sand	36	1.6	10:00		5.0 5.5 6.0 6.5 7.0 7.5
SB4(8-10')	8-10 ft. bg					Interval 8-10 ft. bg submitted for laboratory analysis	8.0 8.5 9.0 9.5
		Slightly moist brown clay and fine silt, with yellow-brown silt at bottom of interval	36	<1	10:05		10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5
		Moderately moist yellow medium silt and fine sand	30	<1	10:10		15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5
		Slightly moist yellow medium silt and fine sand with fine gravel. Terminal 6 inches of interval comprised brown-red clay	30	<1	10:15		20.0 20.5 21.0 21.5 22.0 22.5 23.0 23.5 24.0 24.5
Boring completed at depth of 25 ft. bg							25.0

Environmental Planning & Management, Inc.
EPM
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
SB2

Client:	AECOM	*Date/Time Started:*	6/6/2013 12:26	*Drilling Co.:*	Zebra Environmenal Corp.
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/6/2013 12:39	*Rig Type:*	Direct push
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA	*Drill Method:*	Direct push
Project Location:		*Completion Depth:*	25 Feet Below Grade (ft. bg)	*Sample Device:*	Metal tube and acetate liner
Project Number:	12043	*Depth to Water:*	NA	*Logged by:*	JAL
Boring Location:	Refer to Figure 4				

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
SB2(0-2')	0-2 ft. bg	Slightly moist red-brown clay and fine silt	54	<1	12:29	Interval 0-2 ft. bg submitted for laboratory analysis	0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5
		Slightly moist red-brown clay and fine silt. Terminal 8 inches of interval contained yellow medium to coarse sand	30	<1	12:31		5.0, 5.5, 6.0, 6.5, 7.0, 7.5
SB2(8-10')	8-10 ft. bg					Interval 8-10 ft. bg submitted for laboratory analysis	8.0, 8.5, 9.0, 9.5
		Slightly moist yellow-brown medium to coarse sand	24	<1	12:34		10.0, 10.5, 11.0, 11.5, 12.0, 12.5, 13.0, 13.5, 14.0, 14.5
		Slightly moist brown medium sand	<1	<1	12:37		15.0, 15.5, 16.0, 16.5, 17.0, 17.5, 18.0, 18.5, 19.0, 19.5
		Slightly moist brown medium sand	<1	<1	12:39		20.0, 20.5, 21.0, 21.5, 22.0, 22.5, 23.0, 23.5, 24.0, 24.5
Boring completed at depth of 25 ft. bg							25.0

Environmental Planning & Management, Inc.
EPM
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
SB5

Client:	AECOM	*Date/Time Started:*	6/5/2013 8:26	*Drilling Co.:*	Zebra Environmenal Corp.
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/5/2013 8:56	*Rig Type:*	Direct push
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA	*Drill Method:*	Direct push
Project Location:		*Completion Depth:*	25 Feet Below Grade (ft. bg)	*Sample Device:*	Metal tube and acetate liner
Project Number:	12043	*Depth to Water:*	NA	*Logged by:*	JAL
Boring Location:	Refer to Figure 4				

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
SB5(0-2')	0-2 ft. bg	Slightly moist red-brown clay and medium silt	54	<1	8:32	Interval 0-2 ft. bg submitted for laboratory analysis	0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5
		Slightly moist red-brown clay and medium silt. Terminal 6 inches of interval contained tellow medium sand	48	<1	8:45		5.0, 5.5, 6.0, 6.5, 7.0, 7.5
SB5(8-10')	8-10 ft. bg					Interval 8-10 ft. bg submitted for laboratory analysis	8.0, 8.5, 9.0, 9.5
		Slightly moist brown clay, medium silt, and fine sand, with fine to medium gravel within upper 6 inches of interval	30	<1	8:50		10.0, 10.5, 11.0, 11.5, 12.0, 12.5, 13.0, 13.5, 14.0, 14.5
		Slightly moist brown medium silt and fine sand	30	<1	8:53		15.0, 15.5, 16.0, 16.5, 17.0, 17.5, 18.0, 18.5, 19.0, 19.5
		Slightly moist brown medium silt and fine sand	36	<1	8:56		20.0, 20.5, 21.0, 21.5, 22.0, 22.5, 23.0, 23.5, 24.0, 24.5
		Boring completed at depth of 25 ft. bg					25.0

Environmental Planning & Management, Inc.
E P M
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
SB6

Client:	AECOM	*Date/Time Started:*	6/5/2013	14:40	*Drilling Co.:*	Zebra Environmenal Corp.
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/5/2013	14:43	*Rig Type:*	Direct push
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA		*Drill Method:*	Direct push
Project Location:		*Completion Depth:*	5 Feet Below Grade (ft. bg)		*Sample Device:*	Metal tube and acetate liner
Project Number:	12043	*Depth to Water:*	NA		*Logged by:*	JAL
Boring Location:	Refer to Figure 4					

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
SB6(0-2'	0-2 ft. bg	Slightly moist brown clay and fine silt	48	<1	14:43	Interval 0-2 ft. bg submitted for laboratory analysis	0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5
Boring completed at depth of 5 ft. bg							5.0

Environmental Planning & Management, Inc.
E P M
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
SB7

Client:	AECOM	*Date/Time Started:*	6/4/2013	9:10	*Drilling Co.:*	Zebra Environmenal Corp.
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/4/2013	9:15	*Rig Type:*	Direct push
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA		*Drill Method:*	Direct push
Project Location:		*Completion Depth:*	5 Feet Below Grade (ft. bg)		*Sample Device:*	Metal tube and acetate liner
Project Number:	12043	*Depth to Water:*	NA		*Logged by:*	JAL
Boring Location:	Refer to Figure 4					

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
SB7(0-2')	0-2 ft. bg	Moderately moist red-brown clay and fine silt	42	<1	9:15	Interval 0-2 ft. bg submitted for laboratory analysis	0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5
Boring completed at depth of 5 ft. bg							5.0

Environmental Planning & Management, Inc.
EPM
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
SB8

Client:	AECOM	*Date/Time Started:*	6/4/2013	9:35	*Drilling Co.:*	Zebra Environmenal Corp.
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/4/2013	9:40	*Rig Type:*	Direct push
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA		*Drill Method:*	Direct push
Project Location:		*Completion Depth:*	5 Feet Below Grade (ft. bg)		*Sample Device:*	Metal tube and acetate liner
Project Number:	12043	*Depth to Water:*	NA		*Logged by:*	JAL
Boring Location:	Refer to Figure 4					

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
SB8(0-2')	0-2 ft. bg	Moderately moist red-brown clay and fine silt	30	<1	9:40	Interval 0-2 ft. bg submitted for laboratory analysis	0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5
Boring completed at depth of 5 ft. bg							5.0

Environmental Planning & Management, Inc.
E P M
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
SB9

Client:	AECOM	*Date/Time Started:*	6/4/2013	14:00	*Drilling Co.:*	Zebra Environmenal Corp.
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/4/2013	14:10	*Rig Type:*	Direct push
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA		*Drill Method:*	Direct push
Project Location:		*Completion Depth:*	5 Feet Below Grade (ft. bg)		*Sample Device:*	Metal tube and acetate liner
Project Number:	12043	*Depth to Water:*	NA		*Logged by:*	JAL
Boring Location:	Refer to Figure 4					

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
SB9(0-2')	0-2 ft. bg	Slightly moist red-brown clay and silt	36	<1	14:10	Interval 0-2 ft. bg submitted for laboratory analysis	0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5
Boring completed at depth of 5 ft. bg							5.0

Environmental Planning & Management, Inc.
EPM
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
SB10

Client:	AECOM	*Date/Time Started:*	6/4/2013 12:30	*Drilling Co.:*	Zebra Environmenal Corp.
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/4/2013 12:49	*Rig Type:*	Direct push
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA	*Drill Method:*	Direct push
Project Location:		*Completion Depth:*	25 Feet Below Grade (ft. bg)	*Sample Device:*	Metal tube and acetate liner
Project Number:	12043	*Depth to Water:*	NA	*Logged by:*	JAL
Boring Location:	Refer to Figure 4				

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
SB10(0-2')	0-2 ft. bg	Slightly moist red-brown clay and fine silt	36	2.6	12:35	Interval 0-2 ft. bg submitted for laboratory analysis	0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5
		Slightly moist red-brown clay and fine silt	36	2.8	12:40		5.0, 5.5, 6.0, 6.5, 7.0, 7.5
SB10(8-10')	8-10 ft. bg					Interval 8-10 ft. bg submitted for laboratory analysis	8.0, 8.5, 9.0, 9.5
		Slightly moist red-brown clay and fine silt	36	2.1	12:43		10.0, 10.5, 11.0, 11.5, 12.0, 12.5, 13.0, 13.5, 14.0, 14.5
		Slightly moist brown-yellow medium to coarse sand and coarse silt	36	<1	12:46		15.0, 15.5, 16.0, 16.5, 17.0, 17.5, 18.0, 18.5, 19.0, 19.5
		Slightly moist brown-yellow medium to coarse sand and coarse silt	36	<1	12:49		20.0, 20.5, 21.0, 21.5, 22.0, 22.5, 23.0, 23.5, 24.0, 24.5
		Boring completed at depth of 25 ft. bg					25.0

Environmental Planning & Management, Inc.
E P M
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
SB11

Client:	AECOM	*Date/Time Started:*	6/4/2013	14:35	*Drilling Co.:*	Zebra Environmenal Corp.	
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/4/2013	14:42	*Rig Type:*	Direct push	
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA		*Drill Method:*	Direct push	
Project Location:		*Completion Depth:*	5 Feet Below Grade (ft. bg)		*Sample Device:*	Metal tube and acetate liner	
Project Number:	12043	*Depth to Water:*	NA		*Logged by:*	JAL	
Boring Location:	Refer to Figure 4						

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
SB11(0-2')	0-2 ft. bg					Interval 0-2 ft. bg submitted for laboratory analysis	0.0
							0.5
							1.0
							1.5
		Slightly moist brown clay and silt	36	1	14:42		2.0
							2.5
							3.0
							3.5
							4.0
							4.5
Boring completed at depth of 5 ft. bg							5.0

Environmental Planning & Management, Inc.
EPM
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
GW1

Client:	AECOM	*Date/Time Started:*	6/6/2013	13:50	*Drilling Co.:*	Zebra Environmenal Corp.
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/6/2013	14:25	*Rig Type:*	Direct push
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA		*Drill Method:*	Direct push
Project Location:		*Completion Depth:*	25 Feet Below Grade (ft. bg)		*Sample Device:*	Metal tube and acetate liner
Project Number:	12043	*Depth to Water:*	45 ft. bg		*Logged by:*	JAL
Boring Location:	Refer to Figure 4					

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
GW1(0-2')	0-2 ft. bg	Slightly moist brown-red clay and fine silt	38	<1	13:54	Interval 0-2 ft. bg submitted for laboratory analysis	0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5
		Slightly moist brown-red clay and fine silt	30	<1	13:57		5.0 5.5 6.0 6.5 7.0 7.5
GW1(8-10')	8-10 ft. bg					Interval 8-10 ft. bg submitted for laboratory analysis	8.0 8.5 9.0 9.5
		Upper six inches of interval slightly moist brown-red clay and fine silt. Remainder of interval comprised slightly moist yellow medium to coarse sand	32	<1	13:59		10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5
		Slightly moist yellow fine to coarse sand	35	<1	14:01		15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5
		Slightly moist yellow fine to coarse sand	38	<1	14:04		20.0 20.5 21.0 21.5 22.0 22.5 23.0 23.5 24.0 24.5
		Slightly moist yellow fine to coarse sand	36	<1	14:07		25.0 25.5 26.0 26.5 27.0 27.5 28.0 28.5 29.0 29.5
							30.0 30.5 31.0

Environmental Planning & Management, Inc.
EPM
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328-1194 Fax (516) 328-1381

LOG OF BORING
GW1

Client:	AECOM	*Date/Time Started:*	6/6/2013	13:50	*Drilling Co.:*	Zebra Environmenal Corp.
Project Name:	Charleston Mixed-Use Dev. Site	*Date/Time Completed:*	6/6/2013	14:25	*Rig Type:*	Direct push
Project Location:	Charleston, State Island, NY	*Elevation & Datum:*	NA		*Drill Method:*	Direct push
Project Location:		*Completion Depth:*	25 Feet Below Grade (ft. bg)		*Sample Device:*	Metal tube and acetate liner
Project Number:	12043	*Depth to Water:*	45 ft. bg		*Logged by:*	JAL
Boring Location:	Refer to Figure 4					

Sample No.	Sample Interval	Description	Recovery (inches	PID (ppm)	Time	Comments	Depth (ft. b.g.)
		Upper 7 inches of interval comprised grey clay and fine silt. Remainder of interval consisted of slightly moist yellow fine to coarse sand	40	<1	14:10		31.5 32.0 32.5 33.0 33.5 34.0 34.5
		Moderately moist grey and yellow fine to coarse sand	44	<1	14:15		35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 39.0 39.5
		Moderately moist grey and yellow fine to coarse sand. Terminal inch of interval wet	27	<1	14:20		40.0 40.5 41.0 41.5 42.0 42.5
GW1(43-45')	43-45 ft. bg					Interval 43-45 ft. bg submitted for laboratory analysis	43.0 43.5 44.0 44.5
		Wet yellow fine to coarse sand	42	<1	14:25		45.0 45.5 46.0 46.5 47.0 47.5 48.0 48.5 49.0 49.5
Boring completed at depth of 50 ft. bg							50.0

SUMMA CANISTER FIELD SAMPLING LOG

Site Name / Location: Charleston Mixed-Use Development Site

Name of Sampler: Judah Lebow and Phillip Lorica

Company: EPM

Sample ID:	SG1	SG2	SG4	SG5	SG6	SG7	
Summa Canister ID:	992	1655	1794	1689	1603	903	
Flow Controller ID:	0540	0217	0517	0516	0523	0533	
Summa Canister Volume (Liters):	6	6	6	6	6	6	
Sampling Date	6/5/2013	6/6/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013	
Purge Start Time:	1207	1221	1040	1145	1230	1518	
Purge Stop time:	1225	1236	1110	1210	1245	1534	
Purge Duration (min.):	18	15	30	25	15	16	
Purge Volume (Liters):	3.6	3	6	5	3	3.2	
Initial Tracer Gas Results (within shroud, ppm):	205,000	231,000	96,000	340,000	120,000	242,000	
Final Tracer Gas Results (from implant, ppm):	0	0	16,800	15,000	0	15,000	
Pressure Gauge before Sampling	-29.29	-29.83	-29.86	-29.99	-30.34	-29.88	
Sample Start Time:	1225	1241	1110	1210	1256	1534	
Sample Stop time:	1250	1307	1134	1232	1319	1600	
Total Sample Time (min):	25	26	24	22	23	26	
Final Pressure Gauge:	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	

Comments:

APPENDIX B

LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORMS – SUBSURFACE SAMPLES

ANALYTICAL REPORT

Lab Number:	L1310079
Client:	Environmental Planning and Management 1983 Marcus Avenue Suite 109 Lake Success, NY 11042
ATTN:	Rick Hart
Phone:	(516) 328-1194
Project Name:	CHARLESTON, STATEN ISLAND
Project Number:	12043
Report Date:	06/11/13

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1310079-01	SB7 (0-2')	CHARLESTON, STATEN ISLAND	06/04/13 09:15
L1310079-02	SB8 (0-2')	CHARLESTON, STATEN ISLAND	06/04/13 09:40
L1310079-03	SB10 (0-2')	CHARLESTON, STATEN ISLAND	06/04/13 12:35
L1310079-04	SB10 (8-10')	CHARLESTON, STATEN ISLAND	06/04/13 12:40
L1310079-05	SB9 (0-2')	CHARLESTON, STATEN ISLAND	06/04/13 14:10
L1310079-06	SB11 (0-2')	CHARLESTON, STATEN ISLAND	06/04/13 14:42
L1310079-07	TB1	CHARLESTON, STATEN ISLAND	06/04/13 00:00

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079
Project Number: 12043 **Report Date:** 06/11/13

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310079
Project Number:	12043	**Report Date:**	06/11/13

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Metals

L1310079-01 through -06 have elevated detection limit for all analytes, except Mercury, due to the dilutions required by matrix interferences encountered during analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 06/11/13

ORGANICS

VOLATILES

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-01	Date Collected:	06/04/13 09:15
Client ID:	SB7 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/06/13 13:03		
Analyst:	BN		
Percent Solids:	86%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.8	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.17	1
Chloroform	ND		ug/kg	1.5	0.36	1
Carbon tetrachloride	ND		ug/kg	0.98	0.21	1
1,2-Dichloropropane	ND		ug/kg	3.4	0.22	1
Dibromochloromethane	ND		ug/kg	0.98	0.30	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30	1
Tetrachloroethene	ND		ug/kg	0.98	0.14	1
Chlorobenzene	ND		ug/kg	0.98	0.34	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.12	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	0.98	0.11	1
Bromodichloromethane	ND		ug/kg	0.98	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.12	1
cis-1,3-Dichloropropene	ND		ug/kg	0.98	0.12	1
1,1-Dichloropropene	ND		ug/kg	4.9	0.45	1
Bromoform	ND		ug/kg	3.9	0.41	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.98	0.17	1
Benzene	ND		ug/kg	0.98	0.12	1
Toluene	ND		ug/kg	1.5	0.11	1
Ethylbenzene	ND		ug/kg	0.98	0.14	1
Chloromethane	ND		ug/kg	4.9	0.77	1
Bromomethane	ND		ug/kg	2.0	0.33	1
Vinyl chloride	ND		ug/kg	2.0	0.14	1
Chloroethane	ND		ug/kg	2.0	0.31	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21	1
Trichloroethene	ND		ug/kg	0.98	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	4.9	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	4.9	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	4.9	0.24	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-01 Date Collected: 06/04/13 09:15

Client ID: SB7 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.0	0.10	1
p/m-Xylene	ND		ug/kg	2.0	0.32	1
o-Xylene	ND		ug/kg	2.0	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.15	1
Dibromomethane	ND		ug/kg	9.8	0.16	1
Styrene	ND		ug/kg	2.0	0.30	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.21	1
Acetone	ND		ug/kg	9.8	3.0	1
Carbon disulfide	ND		ug/kg	9.8	2.0	1
2-Butanone	ND		ug/kg	9.8	0.35	1
Vinyl acetate	ND		ug/kg	9.8	0.47	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	9.8	0.22	1
2-Hexanone	ND		ug/kg	9.8	0.18	1
Bromochloromethane	ND		ug/kg	4.9	0.19	1
2,2-Dichloropropane	ND		ug/kg	4.9	0.22	1
1,2-Dibromoethane	ND		ug/kg	3.9	0.17	1
1,3-Dichloropropane	ND		ug/kg	4.9	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.98	0.31	1
Bromobenzene	ND		ug/kg	4.9	0.20	1
n-Butylbenzene	ND		ug/kg	0.98	0.19	1
sec-Butylbenzene	ND		ug/kg	0.98	0.20	1
tert-Butylbenzene	ND		ug/kg	4.9	0.55	1
o-Chlorotoluene	ND		ug/kg	4.9	0.16	1
p-Chlorotoluene	ND		ug/kg	4.9	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.9	0.78	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.42	1
Isopropylbenzene	ND		ug/kg	0.98	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.98	0.19	1
Naphthalene	ND		ug/kg	4.9	0.76	1
Acrylonitrile	ND		ug/kg	9.8	0.23	1
n-Propylbenzene	ND		ug/kg	0.98	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.9	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.9	0.78	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.9	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.9	0.56	1
1,4-Dioxane	ND		ug/kg	98	17.	1
1,4-Diethylbenzene	ND		ug/kg	3.9	0.16	1
4-Ethyltoluene	ND		ug/kg	3.9	0.12	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-01 Date Collected: 06/04/13 09:15

Client ID: SB7 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.9	0.13	1
Ethyl ether	ND		ug/kg	4.9	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	108		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-02	Date Collected:	06/04/13 09:40
Client ID:	SB8 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/06/13 13:31		
Analyst:	BN		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.9	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.18	1
Chloroform	ND		ug/kg	1.5	0.36	1
Carbon tetrachloride	ND		ug/kg	0.99	0.21	1
1,2-Dichloropropane	ND		ug/kg	3.4	0.22	1
Dibromochloromethane	ND		ug/kg	0.99	0.30	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30	1
Tetrachloroethene	ND		ug/kg	0.99	0.14	1
Chlorobenzene	ND		ug/kg	0.99	0.34	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.12	1
1,2-Dichloroethane	ND		ug/kg	0.99	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	0.99	0.11	1
Bromodichloromethane	ND		ug/kg	0.99	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	0.99	0.12	1
cis-1,3-Dichloropropene	ND		ug/kg	0.99	0.12	1
1,1-Dichloropropene	ND		ug/kg	4.9	0.45	1
Bromoform	ND		ug/kg	3.9	0.41	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.99	0.17	1
Benzene	ND		ug/kg	0.99	0.12	1
Toluene	0.78	J	ug/kg	1.5	0.11	1
Ethylbenzene	1.3		ug/kg	0.99	0.14	1
Chloromethane	ND		ug/kg	4.9	0.77	1
Bromomethane	ND		ug/kg	2.0	0.33	1
Vinyl chloride	ND		ug/kg	2.0	0.14	1
Chloroethane	ND		ug/kg	2.0	0.31	1
1,1-Dichloroethene	ND		ug/kg	0.99	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21	1
Trichloroethene	ND		ug/kg	0.99	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	4.9	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	4.9	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	4.9	0.24	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-02 Date Collected: 06/04/13 09:40

Client ID: SB8 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.0	0.10	1
p/m-Xylene	1.8	J	ug/kg	2.0	0.32	1
o-Xylene	ND		ug/kg	2.0	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.99	0.15	1
Dibromomethane	ND		ug/kg	9.9	0.16	1
Styrene	ND		ug/kg	2.0	0.30	1
Dichlorodifluoromethane	ND		ug/kg	9.9	0.22	1
Acetone	ND		ug/kg	9.9	3.1	1
Carbon disulfide	ND		ug/kg	9.9	2.0	1
2-Butanone	ND		ug/kg	9.9	0.35	1
Vinyl acetate	ND		ug/kg	9.9	0.47	1
4-Methyl-2-pentanone	ND		ug/kg	9.9	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	9.9	0.22	1
2-Hexanone	ND		ug/kg	9.9	0.18	1
Bromochloromethane	ND		ug/kg	4.9	0.19	1
2,2-Dichloropropane	ND		ug/kg	4.9	0.22	1
1,2-Dibromoethane	ND		ug/kg	3.9	0.18	1
1,3-Dichloropropane	ND		ug/kg	4.9	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.99	0.31	1
Bromobenzene	ND		ug/kg	4.9	0.20	1
n-Butylbenzene	ND		ug/kg	0.99	0.19	1
sec-Butylbenzene	ND		ug/kg	0.99	0.20	1
tert-Butylbenzene	ND		ug/kg	4.9	0.55	1
o-Chlorotoluene	ND		ug/kg	4.9	0.16	1
p-Chlorotoluene	ND		ug/kg	4.9	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.9	0.78	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.42	1
Isopropylbenzene	ND		ug/kg	0.99	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.99	0.19	1
Naphthalene	ND		ug/kg	4.9	0.76	1
Acrylonitrile	ND		ug/kg	9.9	0.23	1
n-Propylbenzene	ND		ug/kg	0.99	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.9	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.9	0.78	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.9	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.9	0.56	1
1,4-Dioxane	ND		ug/kg	99	17.	1
1,4-Diethylbenzene	ND		ug/kg	3.9	0.16	1
4-Ethyltoluene	ND		ug/kg	3.9	0.12	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-02 Date Collected: 06/04/13 09:40

Client ID: SB8 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.9	0.13	1
Ethyl ether	ND		ug/kg	4.9	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	109		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-03	Date Collected:	06/04/13 12:35
Client ID:	SB10 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/06/13 13:58		
Analyst:	BN		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	10	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.18	1
Chloroform	ND		ug/kg	1.5	0.37	1
Carbon tetrachloride	ND		ug/kg	1.0	0.21	1
1,2-Dichloropropane	ND		ug/kg	3.5	0.23	1
Dibromochloromethane	ND		ug/kg	1.0	0.31	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30	1
Tetrachloroethene	ND		ug/kg	1.0	0.14	1
Chlorobenzene	ND		ug/kg	1.0	0.35	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.12	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.15	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11	1
Bromodichloromethane	ND		ug/kg	1.0	0.23	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13	1
1,1-Dichloropropene	ND		ug/kg	5.0	0.46	1
Bromoform	ND		ug/kg	4.0	0.41	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17	1
Benzene	ND		ug/kg	1.0	0.12	1
Toluene	0.77	J	ug/kg	1.5	0.11	1
Ethylbenzene	1.2		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	5.0	0.78	1
Bromomethane	ND		ug/kg	2.0	0.34	1
Vinyl chloride	ND		ug/kg	2.0	0.14	1
Chloroethane	ND		ug/kg	2.0	0.32	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21	1
Trichloroethene	ND		ug/kg	1.0	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-03 Date Collected: 06/04/13 12:35

Client ID: SB10 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.0	0.10	1
p/m-Xylene	1.6	J	ug/kg	2.0	0.32	1
o-Xylene	ND		ug/kg	2.0	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15	1
Dibromomethane	ND		ug/kg	10	0.16	1
Styrene	ND		ug/kg	2.0	0.31	1
Dichlorodifluoromethane	ND		ug/kg	10	0.22	1
Acetone	26		ug/kg	10	3.1	1
Carbon disulfide	ND		ug/kg	10	2.0	1
2-Butanone	2.9	J	ug/kg	10	0.36	1
Vinyl acetate	ND		ug/kg	10	0.48	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	10	0.22	1
2-Hexanone	ND		ug/kg	10	0.19	1
Bromochloromethane	ND		ug/kg	5.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	5.0	0.22	1
1,2-Dibromoethane	ND		ug/kg	4.0	0.18	1
1,3-Dichloropropane	ND		ug/kg	5.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32	1
Bromobenzene	ND		ug/kg	5.0	0.21	1
n-Butylbenzene	ND		ug/kg	1.0	0.20	1
sec-Butylbenzene	ND		ug/kg	1.0	0.20	1
tert-Butylbenzene	ND		ug/kg	5.0	0.56	1
o-Chlorotoluene	ND		ug/kg	5.0	0.16	1
p-Chlorotoluene	ND		ug/kg	5.0	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.42	1
Isopropylbenzene	ND		ug/kg	1.0	0.17	1
p-Isopropyltoluene	0.74	J	ug/kg	1.0	0.19	1
Naphthalene	ND		ug/kg	5.0	0.77	1
Acrylonitrile	ND		ug/kg	10	0.24	1
n-Propylbenzene	ND		ug/kg	1.0	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57	1
1,4-Dioxane	ND		ug/kg	100	17.	1
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16	1
4-Ethyltoluene	ND		ug/kg	4.0	0.12	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-03 Date Collected: 06/04/13 12:35

Client ID: SB10 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13	1
Ethyl ether	ND		ug/kg	5.0	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.45	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	108		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-04	Date Collected:	06/04/13 12:40
Client ID:	SB10 (8-10')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/06/13 14:26		
Analyst:	BN		
Percent Solids:	92%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	8.5	1.7	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.15	1
Chloroform	ND		ug/kg	1.3	0.32	1
Carbon tetrachloride	ND		ug/kg	0.85	0.18	1
1,2-Dichloropropane	ND		ug/kg	3.0	0.20	1
Dibromochloromethane	ND		ug/kg	0.85	0.26	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.26	1
Tetrachloroethene	ND		ug/kg	0.85	0.12	1
Chlorobenzene	ND		ug/kg	0.85	0.30	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.10	1
1,2-Dichloroethane	ND		ug/kg	0.85	0.12	1
1,1,1-Trichloroethane	ND		ug/kg	0.85	0.10	1
Bromodichloromethane	ND		ug/kg	0.85	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	0.85	0.10	1
cis-1,3-Dichloropropene	ND		ug/kg	0.85	0.11	1
1,1-Dichloropropene	ND		ug/kg	4.3	0.39	1
Bromoform	ND		ug/kg	3.4	0.35	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.85	0.14	1
Benzene	ND		ug/kg	0.85	0.10	1
Toluene	ND		ug/kg	1.3	0.10	1
Ethylbenzene	ND		ug/kg	0.85	0.12	1
Chloromethane	ND		ug/kg	4.3	0.67	1
Bromomethane	ND		ug/kg	1.7	0.29	1
Vinyl chloride	ND		ug/kg	1.7	0.12	1
Chloroethane	ND		ug/kg	1.7	0.27	1
1,1-Dichloroethene	ND		ug/kg	0.85	0.18	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.18	1
Trichloroethene	ND		ug/kg	0.85	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	4.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.3	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	4.3	0.21	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-04 Date Collected: 06/04/13 12:40

Client ID: SB10 (8-10') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.7	0.09	1
p/m-Xylene	ND		ug/kg	1.7	0.28	1
o-Xylene	ND		ug/kg	1.7	0.23	1
cis-1,2-Dichloroethene	ND		ug/kg	0.85	0.13	1
Dibromomethane	ND		ug/kg	8.5	0.14	1
Styrene	ND		ug/kg	1.7	0.26	1
Dichlorodifluoromethane	ND		ug/kg	8.5	0.19	1
Acetone	ND		ug/kg	8.5	2.6	1
Carbon disulfide	ND		ug/kg	8.5	1.7	1
2-Butanone	ND		ug/kg	8.5	0.30	1
Vinyl acetate	ND		ug/kg	8.5	0.41	1
4-Methyl-2-pentanone	ND		ug/kg	8.5	0.21	1
1,2,3-Trichloropropane	ND		ug/kg	8.5	0.19	1
2-Hexanone	ND		ug/kg	8.5	0.16	1
Bromochloromethane	ND		ug/kg	4.3	0.17	1
2,2-Dichloropropane	ND		ug/kg	4.3	0.19	1
1,2-Dibromoethane	ND		ug/kg	3.4	0.15	1
1,3-Dichloropropane	ND		ug/kg	4.3	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.85	0.27	1
Bromobenzene	ND		ug/kg	4.3	0.18	1
n-Butylbenzene	ND		ug/kg	0.85	0.17	1
sec-Butylbenzene	ND		ug/kg	0.85	0.18	1
tert-Butylbenzene	ND		ug/kg	4.3	0.48	1
o-Chlorotoluene	ND		ug/kg	4.3	0.14	1
p-Chlorotoluene	ND		ug/kg	4.3	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	0.67	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.36	1
Isopropylbenzene	ND		ug/kg	0.85	0.14	1
p-Isopropyltoluene	ND		ug/kg	0.85	0.16	1
Naphthalene	ND		ug/kg	4.3	0.66	1
Acrylonitrile	ND		ug/kg	8.5	0.20	1
n-Propylbenzene	ND		ug/kg	0.85	0.11	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.3	0.14	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.3	0.67	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.3	0.12	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.3	0.49	1
1,4-Dioxane	ND		ug/kg	85	15.	1
1,4-Diethylbenzene	ND		ug/kg	3.4	0.14	1
4-Ethyltoluene	ND		ug/kg	3.4	0.10	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-04 Date Collected: 06/04/13 12:40

Client ID: SB10 (8-10') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.4	0.11	1
Ethyl ether	ND		ug/kg	4.3	0.23	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.3	0.38	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	108		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-05	Date Collected:	06/04/13 14:10
Client ID:	SB9 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/06/13 14:54		
Analyst:	BN		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	10	2.1	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.18	1
Chloroform	ND		ug/kg	1.6	0.39	1
Carbon tetrachloride	ND		ug/kg	1.0	0.22	1
1,2-Dichloropropane	ND		ug/kg	3.6	0.24	1
Dibromochloromethane	ND		ug/kg	1.0	0.32	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.32	1
Tetrachloroethene	ND		ug/kg	1.0	0.15	1
Chlorobenzene	ND		ug/kg	1.0	0.36	1
Trichlorofluoromethane	ND		ug/kg	5.2	0.13	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.15	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.12	1
Bromodichloromethane	ND		ug/kg	1.0	0.24	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13	1
1,1-Dichloropropene	ND		ug/kg	5.2	0.48	1
Bromoform	ND		ug/kg	4.2	0.43	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.18	1
Benzene	ND		ug/kg	1.0	0.12	1
Toluene	ND		ug/kg	1.6	0.12	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	5.2	0.82	1
Bromomethane	ND		ug/kg	2.1	0.35	1
Vinyl chloride	ND		ug/kg	2.1	0.15	1
Chloroethane	ND		ug/kg	2.1	0.33	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.22	1
Trichloroethene	ND		ug/kg	1.0	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	5.2	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	5.2	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	5.2	0.25	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-05 Date Collected: 06/04/13 14:10

Client ID: SB9 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.1	0.11	1
p/m-Xylene	1.2	J	ug/kg	2.1	0.34	1
o-Xylene	ND		ug/kg	2.1	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.16	1
Dibromomethane	ND		ug/kg	10	0.17	1
Styrene	ND		ug/kg	2.1	0.32	1
Dichlorodifluoromethane	ND		ug/kg	10	0.23	1
Acetone	8.3	J	ug/kg	10	3.2	1
Carbon disulfide	ND		ug/kg	10	2.1	1
2-Butanone	ND		ug/kg	10	0.37	1
Vinyl acetate	ND		ug/kg	10	0.50	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.26	1
1,2,3-Trichloropropane	ND		ug/kg	10	0.23	1
2-Hexanone	ND		ug/kg	10	0.20	1
Bromochloromethane	ND		ug/kg	5.2	0.20	1
2,2-Dichloropropane	ND		ug/kg	5.2	0.24	1
1,2-Dibromoethane	ND		ug/kg	4.2	0.18	1
1,3-Dichloropropane	ND		ug/kg	5.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.33	1
Bromobenzene	ND		ug/kg	5.2	0.22	1
n-Butylbenzene	ND		ug/kg	1.0	0.21	1
sec-Butylbenzene	ND		ug/kg	1.0	0.21	1
tert-Butylbenzene	ND		ug/kg	5.2	0.58	1
o-Chlorotoluene	ND		ug/kg	5.2	0.17	1
p-Chlorotoluene	ND		ug/kg	5.2	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.2	0.82	1
Hexachlorobutadiene	ND		ug/kg	5.2	0.44	1
Isopropylbenzene	ND		ug/kg	1.0	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.20	1
Naphthalene	ND		ug/kg	5.2	0.80	1
Acrylonitrile	ND		ug/kg	10	0.25	1
n-Propylbenzene	ND		ug/kg	1.0	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.2	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.2	0.82	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.2	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.2	0.60	1
1,4-Dioxane	ND		ug/kg	100	18.	1
1,4-Diethylbenzene	ND		ug/kg	4.2	0.17	1
4-Ethyltoluene	ND		ug/kg	4.2	0.12	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-05 Date Collected: 06/04/13 14:10

Client ID: SB9 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.2	0.14	1
Ethyl ether	ND		ug/kg	5.2	0.28	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.2	0.47	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	110		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-06	Date Collected:	06/04/13 14:42
Client ID:	SB11 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/06/13 15:22		
Analyst:	BN		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	10	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.18	1
Chloroform	ND		ug/kg	1.5	0.37	1
Carbon tetrachloride	ND		ug/kg	1.0	0.21	1
1,2-Dichloropropane	ND		ug/kg	3.5	0.23	1
Dibromochloromethane	ND		ug/kg	1.0	0.31	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30	1
Tetrachloroethene	ND		ug/kg	1.0	0.14	1
Chlorobenzene	ND		ug/kg	1.0	0.35	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.12	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.15	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11	1
Bromodichloromethane	ND		ug/kg	1.0	0.23	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13	1
1,1-Dichloropropene	ND		ug/kg	5.0	0.46	1
Bromoform	ND		ug/kg	4.0	0.41	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17	1
Benzene	ND		ug/kg	1.0	0.12	1
Toluene	ND		ug/kg	1.5	0.11	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	5.0	0.78	1
Bromomethane	ND		ug/kg	2.0	0.34	1
Vinyl chloride	ND		ug/kg	2.0	0.14	1
Chloroethane	ND		ug/kg	2.0	0.32	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21	1
Trichloroethene	ND		ug/kg	1.0	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-06 Date Collected: 06/04/13 14:42

Client ID: SB11 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.0	0.10	1
p/m-Xylene	ND		ug/kg	2.0	0.32	1
o-Xylene	ND		ug/kg	2.0	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15	1
Dibromomethane	ND		ug/kg	10	0.16	1
Styrene	ND		ug/kg	2.0	0.31	1
Dichlorodifluoromethane	ND		ug/kg	10	0.22	1
Acetone	ND		ug/kg	10	3.1	1
Carbon disulfide	ND		ug/kg	10	2.0	1
2-Butanone	ND		ug/kg	10	0.35	1
Vinyl acetate	ND		ug/kg	10	0.48	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	10	0.22	1
2-Hexanone	ND		ug/kg	10	0.19	1
Bromochloromethane	ND		ug/kg	5.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	5.0	0.22	1
1,2-Dibromoethane	ND		ug/kg	4.0	0.18	1
1,3-Dichloropropane	ND		ug/kg	5.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32	1
Bromobenzene	ND		ug/kg	5.0	0.21	1
n-Butylbenzene	ND		ug/kg	1.0	0.20	1
sec-Butylbenzene	ND		ug/kg	1.0	0.20	1
tert-Butylbenzene	ND		ug/kg	5.0	0.56	1
o-Chlorotoluene	ND		ug/kg	5.0	0.16	1
p-Chlorotoluene	ND		ug/kg	5.0	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.42	1
Isopropylbenzene	ND		ug/kg	1.0	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.19	1
Naphthalene	ND		ug/kg	5.0	0.77	1
Acrylonitrile	ND		ug/kg	10	0.24	1
n-Propylbenzene	ND		ug/kg	1.0	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57	1
1,4-Dioxane	ND		ug/kg	100	17.	1
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16	1
4-Ethyltoluene	ND		ug/kg	4.0	0.12	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-06 Date Collected: 06/04/13 14:42

Client ID: SB11 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13	1
Ethyl ether	ND		ug/kg	5.0	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.45	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	108		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-07	Date Collected:	06/04/13 00:00
Client ID:	TB1	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	06/06/13 16:21		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-07 Date Collected: 06/04/13 00:00

Client ID: TB1 Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.0	J	ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	1.4	J	ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	76.	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-07 Date Collected: 06/04/13 00:00

Client ID: TB1 Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	105		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/06/13 07:58
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-06 Batch: WG613208-3					
Methylene chloride	ND		ug/kg	10	2.0
1,1-Dichloroethane	ND		ug/kg	1.5	0.18
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.31
2-Chloroethylvinyl ether	ND		ug/kg	20	0.62
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.12
1,2-Dichloroethane	ND		ug/kg	1.0	0.15
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.23
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13
1,1-Dichloropropene	ND		ug/kg	5.0	0.46
Bromoform	ND		ug/kg	4.0	0.41
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.11
Ethylbenzene	ND		ug/kg	1.0	0.15
Chloromethane	ND		ug/kg	5.0	0.78
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.14
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.20
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.15
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/06/13 07:58
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-06 Batch: WG613208-3					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24
Methyl tert butyl ether	ND		ug/kg	2.0	0.10
p/m-Xylene	ND		ug/kg	2.0	0.32
o-Xylene	ND		ug/kg	2.0	0.27
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.31
Dichlorodifluoromethane	ND		ug/kg	10	0.22
Acetone	ND		ug/kg	10	3.1
Carbon disulfide	ND		ug/kg	10	2.0
2-Butanone	ND		ug/kg	10	0.36
Vinyl acetate	ND		ug/kg	10	0.48
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.22
2-Hexanone	ND		ug/kg	10	0.19
Bromochloromethane	ND		ug/kg	5.0	0.20
2,2-Dichloropropane	ND		ug/kg	5.0	0.22
1,2-Dibromoethane	ND		ug/kg	4.0	0.18
1,3-Dichloropropane	ND		ug/kg	5.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.20
sec-Butylbenzene	ND		ug/kg	1.0	0.20
tert-Butylbenzene	ND		ug/kg	5.0	0.56
o-Chlorotoluene	ND		ug/kg	5.0	0.16
p-Chlorotoluene	ND		ug/kg	5.0	0.15
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79
Hexachlorobutadiene	ND		ug/kg	5.0	0.42
Isopropylbenzene	ND		ug/kg	1.0	0.17
p-Isopropyltoluene	ND		ug/kg	1.0	0.19
Naphthalene	ND		ug/kg	5.0	0.77

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/06/13 07:58
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-06 Batch: WG613208-3					
Acrylonitrile	ND		ug/kg	10	0.24
Isopropyl Ether	ND		ug/kg	4.0	0.14
tert-Butyl Alcohol	ND		ug/kg	60	0.91
n-Propylbenzene	ND		ug/kg	1.0	0.12
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57
Methyl Acetate	ND		ug/kg	20	0.76
Ethyl Acetate	ND		ug/kg	20	0.82
Acrolein	ND		ug/kg	25	9.2
Cyclohexane	ND		ug/kg	20	1.1
1,4-Dioxane	ND		ug/kg	100	17.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	20	0.27
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16
4-Ethyltoluene	ND		ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Tetrahydrofuran	ND		ug/kg	20	0.38
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.45
Methyl cyclohexane	ND		ug/kg	4.0	1.3
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	0.42
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	0.58

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/06/13 07:58
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-06 Batch: WG613208-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	104		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/06/13 07:33
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG613250-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.16
1,2-Dichloropropane	ND		ug/l	1.0	0.30
Dibromochloromethane	ND		ug/l	0.50	0.19
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.16
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.18
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/06/13 07:33
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG613250-3					
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.0
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.0
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/06/13 07:33
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG613250-3					
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	76.
1,4-Diethylbenzene	ND		ug/l	2.0	0.70
4-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-06 Batch: WG613208-1 WG613208-2								
Methylene chloride	98		95		70-130	3		30
1,1-Dichloroethane	106		104		70-130	2		30
Chloroform	106		104		70-130	2		30
Carbon tetrachloride	116		114		70-130	2		30
1,2-Dichloropropane	101		100		70-130	1		30
Dibromochloromethane	98		96		70-130	2		30
2-Chloroethylvinyl ether	101		100			1		30
1,1,2-Trichloroethane	92		91		70-130	1		30
Tetrachloroethene	112		107		70-130	5		30
Chlorobenzene	106		103		70-130	3		30
Trichlorofluoromethane	93		91		70-139	2		30
1,2-Dichloroethane	99		96		70-130	3		30
1,1,1-Trichloroethane	111		108		70-130	3		30
Bromodichloromethane	105		104		70-130	1		30
trans-1,3-Dichloropropene	98		96		70-130	2		30
cis-1,3-Dichloropropene	99		98		70-130	1		30
1,1-Dichloropropene	110		107		70-130	3		30
Bromoform	86		83		70-130	4		30
1,1,2,2-Tetrachloroethane	83		84		70-130	1		30
Benzene	104		101		70-130	3		30
Toluene	103		99		70-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-06 Batch: WG613208-1 WG613208-2								
Ethylbenzene	108		104		70-130	4		30
Chloromethane	96		94		52-130	2		30
Bromomethane	86		84		57-147	2		30
Vinyl chloride	93		91		67-130	2		30
Chloroethane	81		78		50-151	4		30
1,1-Dichloroethene	111		108		65-135	3		30
trans-1,2-Dichloroethene	110		106		70-130	4		30
Trichloroethene	106		103		70-130	3		30
1,2-Dichlorobenzene	105		102		70-130	3		30
1,3-Dichlorobenzene	108		105		70-130	3		30
1,4-Dichlorobenzene	108		105		70-130	3		30
Methyl tert butyl ether	87		88		66-130	1		30
p/m-Xylene	111		106		70-130	5		30
o-Xylene	107		104		70-130	3		30
cis-1,2-Dichloroethene	103		102		70-130	1		30
Dibromomethane	96		96		70-130	0		30
Styrene	105		102		70-130	3		30
Dichlorodifluoromethane	102		98		30-146	4		30
Acetone	108		95		54-140	13		30
Carbon disulfide	104		100		59-130	4		30
2-Butanone	88		82		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-06 Batch: WG613208-1 WG613208-2								
Vinyl acetate	84		84		70-130	0		30
4-Methyl-2-pentanone	**68**	Q	70		70-130	3		30
1,2,3-Trichloropropane	81		80		68-130	1		30
2-Hexanone	76		72		70-130	5		30
Bromochloromethane	102		102		70-130	0		30
2,2-Dichloropropane	113		108		70-130	5		30
1,2-Dibromoethane	94		93		70-130	1		30
1,3-Dichloropropane	94		93		69-130	1		30
1,1,1,2-Tetrachloroethane	104		101		70-130	3		30
Bromobenzene	102		100		70-130	2		30
n-Butylbenzene	119		114		70-130	4		30
sec-Butylbenzene	117		112		70-130	4		30
tert-Butylbenzene	117		113		70-130	3		30
o-Chlorotoluene	116		112		70-130	4		30
p-Chlorotoluene	110		107		70-130	3		30
1,2-Dibromo-3-chloropropane	90		**67**	Q	68-130	29		30
Hexachlorobutadiene	128		121		67-130	6		30
Isopropylbenzene	110		105		70-130	5		30
p-Isopropyltoluene	117		111		70-130	5		30
Naphthalene	80		82		70-130	2		30
Acrylonitrile	78		79		70-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-06 Batch: WG613208-1 WG613208-2								
Isopropyl Ether	97		95		66-130	2		30
tert-Butyl Alcohol	**68**	Q	71		70-130	4		30
n-Propylbenzene	112		107		70-130	5		30
1,2,3-Trichlorobenzene	96		95		70-130	1		30
1,2,4-Trichlorobenzene	105		104		70-130	1		30
1,3,5-Trimethylbenzene	114		109		70-130	4		30
1,2,4-Trimethylbenzene	114		109		70-130	4		30
Methyl Acetate	77		78		51-146	1		30
Ethyl Acetate	75		76		70-130	1		30
Acrolein	73		73		70-130	0		30
Cyclohexane	108		102		59-142	6		30
1,4-Dioxane	80		81		65-136	1		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	110		107		50-139	3		30
1,4-Diethylbenzene	115		109		70-130	5		30
4-Ethyltoluene	111		107		70-130	4		30
1,2,4,5-Tetramethylbenzene	112		107		70-130	5		30
Tetrahydrofuran	90		89		66-130	1		30
Ethyl ether	77		78		67-130	1		30
trans-1,4-Dichloro-2-butene	82		80		70-130	2		30
Methyl cyclohexane	113		108		70-130	5		30
Ethyl-Tert-Butyl-Ether	95		93		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-06 Batch: WG613208-1 WG613208-2								
Tertiary-Amyl Methyl Ether	93		92		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		95		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	103		101		70-130
Dibromofluoromethane	102		103		70-130

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG613250-1 WG613250-2								
Methylene chloride	96		96		70-130	0		20
1,1-Dichloroethane	99		97		70-130	2		20
Chloroform	99		98		70-130	1		20
Carbon tetrachloride	98		97		63-132	1		20
1,2-Dichloropropane	97		97		70-130	0		20
Dibromochloromethane	96		99		63-130	3		20
1,1,2-Trichloroethane	97		100		70-130	3		20
Tetrachloroethene	101		98		70-130	3		20
Chlorobenzene	98		96		75-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG613250-1 WG613250-2								
Trichlorofluoromethane	98		96		62-150	2		20
1,2-Dichloroethane	99		99		70-130	0		20
1,1,1-Trichloroethane	98		96		67-130	2		20
Bromodichloromethane	97		99		67-130	2		20
trans-1,3-Dichloropropene	98		102		70-130	4		20
cis-1,3-Dichloropropene	101		99		70-130	2		20
1,1-Dichloropropene	99		97		70-130	2		20
Bromoform	98		100		54-136	2		20
1,1,2,2-Tetrachloroethane	100		97		67-130	3		20
Benzene	98		97		70-130	1		20
Toluene	98		96		70-130	2		20
Ethylbenzene	98		97		70-130	1		20
Chloromethane	104		112		64-130	7		20
Bromomethane	99		98		39-139	1		20
Vinyl chloride	102		99		55-140	3		20
Chloroethane	96		92		55-138	4		20
1,1-Dichloroethene	99		97		61-145	2		20
trans-1,2-Dichloroethene	96		94		70-130	2		20
Trichloroethene	96		97		70-130	1		20
1,2-Dichlorobenzene	98		100		70-130	2		20
1,3-Dichlorobenzene	98		98		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG613250-1 WG613250-2								
1,4-Dichlorobenzene	97		95		70-130	2		20
Methyl tert butyl ether	99		99		63-130	0		20
p/m-Xylene	101		100		70-130	1		20
o-Xylene	101		100		70-130	1		20
cis-1,2-Dichloroethene	97		96		70-130	1		20
Dibromomethane	99		99		70-130	0		20
1,2,3-Trichloropropane	102		104		64-130	2		20
Acrylonitrile	103		111		70-130	7		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	100		97		36-147	3		20
Acetone	94		86		58-148	9		20
Carbon disulfide	99		96		51-130	3		20
2-Butanone	98		87		63-138	12		20
Vinyl acetate	101		100		70-130	1		20
4-Methyl-2-pentanone	102		102		59-130	0		20
2-Hexanone	88		90		57-130	2		20
Bromochloromethane	102		99		70-130	3		20
2,2-Dichloropropane	100		98		63-133	2		20
1,2-Dibromoethane	97		100		70-130	3		20
1,3-Dichloropropane	98		97		70-130	1		20
1,1,1,2-Tetrachloroethane	97		98		64-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG613250-1 WG613250-2								
Bromobenzene	98		96		70-130	2		20
n-Butylbenzene	102		99		53-136	3		20
sec-Butylbenzene	98		99		70-130	1		20
tert-Butylbenzene	101		99		70-130	2		20
o-Chlorotoluene	106		94		70-130	12		20
p-Chlorotoluene	101		98		70-130	3		20
1,2-Dibromo-3-chloropropane	83		98		41-144	17		20
Hexachlorobutadiene	99		101		63-130	2		20
Isopropylbenzene	101		99		70-130	2		20
p-Isopropyltoluene	103		102		70-130	1		20
Naphthalene	100		105		70-130	5		20
n-Propylbenzene	99		96		69-130	3		20
1,2,3-Trichlorobenzene	106		109		70-130	3		20
1,2,4-Trichlorobenzene	100		103		70-130	3		20
1,3,5-Trimethylbenzene	99		100		64-130	1		20
1,2,4-Trimethylbenzene	101		100		70-130	1		20
1,4-Dioxane	101		108		56-162	7		20
1,4-Diethylbenzene	101		100		70-130	1		20
4-Ethyltoluene	100		98		70-130	2		20
1,2,4,5-Tetramethylbenzene	100		101		70-130	1		20
Ethyl ether	100		101		59-134	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG613250-1 WG613250-2								
trans-1,4-Dichloro-2-butene	96		96		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		100		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	101		100		70-130
Dibromofluoromethane	101		100		70-130

SEMIVOLATILES

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-01	Date Collected:	06/04/13 09:15
Client ID:	SB7 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 00:23
Analytical Date:	06/10/13 01:23		
Analyst:	RC		
Percent Solids:	86%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	39.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	62.	1
Hexachlorobenzene	ND		ug/kg	110	36.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	53.	1
2-Chloronaphthalene	ND		ug/kg	190	62.	1
1,2-Dichlorobenzene	ND		ug/kg	190	62.	1
1,3-Dichlorobenzene	ND		ug/kg	190	60.	1
1,4-Dichlorobenzene	ND		ug/kg	190	58.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	41.	1
2,6-Dinitrotoluene	ND		ug/kg	190	49.	1
Fluoranthene	ND		ug/kg	110	35.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	58.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	44.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	67.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	58.	1
Hexachlorobutadiene	ND		ug/kg	190	54.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	120	1
Hexachloroethane	ND		ug/kg	150	35.	1
Isophorone	ND		ug/kg	170	51.	1
Naphthalene	ND		ug/kg	190	63.	1
Nitrobenzene	ND		ug/kg	170	45.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	40.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	57.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	50.	1
Butyl benzyl phthalate	ND		ug/kg	190	37.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	47.	1
Diethyl phthalate	ND		ug/kg	190	40.	1
Dimethyl phthalate	ND		ug/kg	190	48.	1
Benzo(a)anthracene	ND		ug/kg	110	37.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-01 Date Collected: 06/04/13 09:15

Client ID: SB7 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	47.	1
Benzo(b)fluoranthene	ND		ug/kg	110	38.	1
Benzo(k)fluoranthene	ND		ug/kg	110	36.	1
Chrysene	ND		ug/kg	110	37.	1
Acenaphthylene	ND		ug/kg	150	36.	1
Anthracene	ND		ug/kg	110	32.	1
Benzo(ghi)perylene	ND		ug/kg	150	40.	1
Fluorene	ND		ug/kg	190	55.	1
Phenanthrene	ND		ug/kg	110	37.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	37.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	42.	1
Pyrene	ND		ug/kg	110	37.	1
Biphenyl	ND		ug/kg	430	63.	1
4-Chloroaniline	ND		ug/kg	190	50.	1
2-Nitroaniline	ND		ug/kg	190	54.	1
3-Nitroaniline	ND		ug/kg	190	53.	1
4-Nitroaniline	ND		ug/kg	190	51.	1
Dibenzofuran	ND		ug/kg	190	64.	1
2-Methylnaphthalene	ND		ug/kg	230	61.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	59.	1
Acetophenone	ND		ug/kg	190	59.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
P-Chloro-M-Cresol	ND		ug/kg	190	55.	1
2-Chlorophenol	ND		ug/kg	190	58.	1
2,4-Dichlorophenol	ND		ug/kg	170	62.	1
2,4-Dimethylphenol	ND		ug/kg	190	57.	1
2-Nitrophenol	ND		ug/kg	410	59.	1
4-Nitrophenol	ND		ug/kg	270	62.	1
2,4-Dinitrophenol	ND		ug/kg	910	260	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	70.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	56.	1
2-Methylphenol	ND		ug/kg	190	61.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	62.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	62.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	ND		ug/kg	190	41.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-01 Date Collected: 06/04/13 09:15

Client ID: SB7 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		25-120
Phenol-d6	51		10-120
Nitrobenzene-d5	48		23-120
2-Fluorobiphenyl	51		30-120
2,4,6-Tribromophenol	64		0-136
4-Terphenyl-d14	87		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-02	Date Collected:	06/04/13 09:40
Client ID:	SB8 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 00:23
Analytical Date:	06/10/13 01:50		
Analyst:	RC		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	40.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	64.	1
Hexachlorobenzene	ND		ug/kg	120	36.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	55.	1
2-Chloronaphthalene	ND		ug/kg	200	64.	1
1,2-Dichlorobenzene	ND		ug/kg	200	64.	1
1,3-Dichlorobenzene	ND		ug/kg	200	62.	1
1,4-Dichlorobenzene	ND		ug/kg	200	60.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	42.	1
2,6-Dinitrotoluene	ND		ug/kg	200	50.	1
Fluoranthene	ND		ug/kg	120	36.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	60.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	45.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	69.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	59.	1
Hexachlorobutadiene	ND		ug/kg	200	55.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	120	1
Hexachloroethane	ND		ug/kg	160	36.	1
Isophorone	ND		ug/kg	180	52.	1
Naphthalene	ND		ug/kg	200	65.	1
Nitrobenzene	ND		ug/kg	180	47.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	160	41.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	58.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	200	51.	1
Butyl benzyl phthalate	ND		ug/kg	200	38.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	48.	1
Diethyl phthalate	ND		ug/kg	200	41.	1
Dimethyl phthalate	ND		ug/kg	200	50.	1
Benzo(a)anthracene	ND		ug/kg	120	38.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-02 Date Collected: 06/04/13 09:40

Client ID: SB8 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	40.	1
Benzo(k)fluoranthene	ND		ug/kg	120	37.	1
Chrysene	ND		ug/kg	120	38.	1
Acenaphthylene	ND		ug/kg	160	37.	1
Anthracene	ND		ug/kg	120	33.	1
Benzo(ghi)perylene	ND		ug/kg	160	41.	1
Fluorene	ND		ug/kg	200	56.	1
Phenanthrene	ND		ug/kg	120	38.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	38.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	160	44.	1
Pyrene	ND		ug/kg	120	38.	1
Biphenyl	ND		ug/kg	450	65.	1
4-Chloroaniline	ND		ug/kg	200	52.	1
2-Nitroaniline	ND		ug/kg	200	55.	1
3-Nitroaniline	ND		ug/kg	200	54.	1
4-Nitroaniline	ND		ug/kg	200	53.	1
Dibenzofuran	ND		ug/kg	200	65.	1
2-Methylnaphthalene	ND		ug/kg	240	63.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	61.	1
Acetophenone	ND		ug/kg	200	61.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
P-Chloro-M-Cresol	ND		ug/kg	200	57.	1
2-Chlorophenol	ND		ug/kg	200	59.	1
2,4-Dichlorophenol	ND		ug/kg	180	64.	1
2,4-Dimethylphenol	ND		ug/kg	200	58.	1
2-Nitrophenol	ND		ug/kg	420	61.	1
4-Nitrophenol	ND		ug/kg	270	64.	1
2,4-Dinitrophenol	ND		ug/kg	940	270	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	72.	1
Pentachlorophenol	ND		ug/kg	160	42.	1
Phenol	ND		ug/kg	200	58.	1
2-Methylphenol	ND		ug/kg	200	63.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	64.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	64.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	ND		ug/kg	200	42.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-02 Date Collected: 06/04/13 09:40

Client ID: SB8 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		25-120
Phenol-d6	58		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	63		30-120
2,4,6-Tribromophenol	88		0-136
4-Terphenyl-d14	87		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-03	Date Collected:	06/04/13 12:35
Client ID:	SB10 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 00:23
Analytical Date:	06/10/13 02:16		
Analyst:	RC		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	60.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	52.	1
2-Chloronaphthalene	ND		ug/kg	180	60.	1
1,2-Dichlorobenzene	ND		ug/kg	180	60.	1
1,3-Dichlorobenzene	ND		ug/kg	180	58.	1
1,4-Dichlorobenzene	ND		ug/kg	180	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	40.	1
2,6-Dinitrotoluene	ND		ug/kg	180	47.	1
Fluoranthene	ND		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	56.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	65.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	56.	1
Hexachlorobutadiene	ND		ug/kg	180	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	120	1
Hexachloroethane	ND		ug/kg	150	33.	1
Isophorone	ND		ug/kg	160	49.	1
Naphthalene	ND		ug/kg	180	61.	1
Nitrobenzene	ND		ug/kg	160	44.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	39.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	55.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	48.	1
Butyl benzyl phthalate	ND		ug/kg	180	36.	1
Di-n-butylphthalate	ND		ug/kg	180	36.	1
Di-n-octylphthalate	ND		ug/kg	180	45.	1
Diethyl phthalate	ND		ug/kg	180	39.	1
Dimethyl phthalate	ND		ug/kg	180	47.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-03 Date Collected: 06/04/13 12:35

Client ID: SB10 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	37.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	ND		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	150	34.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	38.	1
Fluorene	ND		ug/kg	180	53.	1
Phenanthrene	ND		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	41.	1
Pyrene	ND		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	420	61.	1
4-Chloroaniline	ND		ug/kg	180	49.	1
2-Nitroaniline	ND		ug/kg	180	52.	1
3-Nitroaniline	ND		ug/kg	180	51.	1
4-Nitroaniline	ND		ug/kg	180	50.	1
Dibenzofuran	ND		ug/kg	180	62.	1
2-Methylnaphthalene	ND		ug/kg	220	59.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	57.	1
Acetophenone	ND		ug/kg	180	57.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
P-Chloro-M-Cresol	ND		ug/kg	180	53.	1
2-Chlorophenol	ND		ug/kg	180	56.	1
2,4-Dichlorophenol	ND		ug/kg	160	60.	1
2,4-Dimethylphenol	ND		ug/kg	180	55.	1
2-Nitrophenol	ND		ug/kg	400	57.	1
4-Nitrophenol	ND		ug/kg	260	60.	1
2,4-Dinitrophenol	ND		ug/kg	880	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	67.	1
Pentachlorophenol	ND		ug/kg	150	39.	1
Phenol	ND		ug/kg	180	54.	1
2-Methylphenol	ND		ug/kg	180	59.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	60.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	60.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	ND		ug/kg	180	40.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-03	Date Collected:	06/04/13 12:35
Client ID:	SB10 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		25-120
Phenol-d6	50		10-120
Nitrobenzene-d5	47		23-120
2-Fluorobiphenyl	54		30-120
2,4,6-Tribromophenol	80		0-136
4-Terphenyl-d14	91		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-04	Date Collected:	06/04/13 12:40
Client ID:	SB10 (8-10')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 00:23
Analytical Date:	06/10/13 02:43		
Analyst:	RC		
Percent Solids:	92%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	37.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	59.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	51.	1
2-Chloronaphthalene	ND		ug/kg	180	59.	1
1,2-Dichlorobenzene	ND		ug/kg	180	60.	1
1,3-Dichlorobenzene	ND		ug/kg	180	57.	1
1,4-Dichlorobenzene	ND		ug/kg	180	55.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	39.	1
2,6-Dinitrotoluene	ND		ug/kg	180	46.	1
Fluoranthene	ND		ug/kg	110	33.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	55.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	64.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	55.	1
Hexachlorobutadiene	ND		ug/kg	180	51.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	120	1
Hexachloroethane	ND		ug/kg	140	33.	1
Isophorone	ND		ug/kg	160	48.	1
Naphthalene	ND		ug/kg	180	60.	1
Nitrobenzene	ND		ug/kg	160	43.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	38.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	54.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	48.	1
Butyl benzyl phthalate	ND		ug/kg	180	35.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	45.	1
Diethyl phthalate	ND		ug/kg	180	38.	1
Dimethyl phthalate	ND		ug/kg	180	46.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-04 Date Collected: 06/04/13 12:40

Client ID: SB10 (8-10') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	37.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	ND		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	140	34.	1
Anthracene	ND		ug/kg	110	30.	1
Benzo(ghi)perylene	ND		ug/kg	140	38.	1
Fluorene	ND		ug/kg	180	52.	1
Phenanthrene	ND		ug/kg	110	35.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	35.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	40.	1
Pyrene	ND		ug/kg	110	35.	1
Biphenyl	ND		ug/kg	410	60.	1
4-Chloroaniline	ND		ug/kg	180	48.	1
2-Nitroaniline	ND		ug/kg	180	51.	1
3-Nitroaniline	ND		ug/kg	180	50.	1
4-Nitroaniline	ND		ug/kg	180	49.	1
Dibenzofuran	ND		ug/kg	180	60.	1
2-Methylnaphthalene	ND		ug/kg	220	58.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	56.	1
Acetophenone	ND		ug/kg	180	56.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
P-Chloro-M-Cresol	ND		ug/kg	180	53.	1
2-Chlorophenol	ND		ug/kg	180	55.	1
2,4-Dichlorophenol	ND		ug/kg	160	59.	1
2,4-Dimethylphenol	ND		ug/kg	180	54.	1
2-Nitrophenol	ND		ug/kg	390	57.	1
4-Nitrophenol	ND		ug/kg	250	59.	1
2,4-Dinitrophenol	ND		ug/kg	870	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	66.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	54.	1
2-Methylphenol	ND		ug/kg	180	58.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	60.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	59.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	39.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-04 Date Collected: 06/04/13 12:40

Client ID: SB10 (8-10') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	82		0-136
4-Terphenyl-d14	94		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-05	Date Collected:	06/04/13 14:10
Client ID:	SB9 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 00:23
Analytical Date:	06/10/13 03:10		
Analyst:	RC		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	39.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	62.	1
Hexachlorobenzene	ND		ug/kg	110	35.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	53.	1
2-Chloronaphthalene	ND		ug/kg	190	62.	1
1,2-Dichlorobenzene	ND		ug/kg	190	62.	1
1,3-Dichlorobenzene	ND		ug/kg	190	60.	1
1,4-Dichlorobenzene	ND		ug/kg	190	57.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	41.	1
2,6-Dinitrotoluene	ND		ug/kg	190	48.	1
Fluoranthene	ND		ug/kg	110	35.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	57.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	43.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	66.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	57.	1
Hexachlorobutadiene	ND		ug/kg	190	53.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	120	1
Hexachloroethane	ND		ug/kg	150	34.	1
Isophorone	ND		ug/kg	170	50.	1
Naphthalene	ND		ug/kg	190	63.	1
Nitrobenzene	ND		ug/kg	170	45.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	40.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	56.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	49.	1
Butyl benzyl phthalate	ND		ug/kg	190	37.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	46.	1
Diethyl phthalate	ND		ug/kg	190	40.	1
Dimethyl phthalate	ND		ug/kg	190	48.	1
Benzo(a)anthracene	ND		ug/kg	110	37.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-05 Date Collected: 06/04/13 14:10

Client ID: SB9 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	38.	1
Benzo(k)fluoranthene	ND		ug/kg	110	36.	1
Chrysene	ND		ug/kg	110	37.	1
Acenaphthylene	ND		ug/kg	150	35.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	39.	1
Fluorene	ND		ug/kg	190	54.	1
Phenanthrene	ND		ug/kg	110	37.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	42.	1
Pyrene	ND		ug/kg	110	37.	1
Biphenyl	ND		ug/kg	430	62.	1
4-Chloroaniline	ND		ug/kg	190	50.	1
2-Nitroaniline	ND		ug/kg	190	53.	1
3-Nitroaniline	ND		ug/kg	190	52.	1
4-Nitroaniline	ND		ug/kg	190	51.	1
Dibenzofuran	ND		ug/kg	190	63.	1
2-Methylnaphthalene	ND		ug/kg	230	60.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	58.	1
Acetophenone	ND		ug/kg	190	58.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
P-Chloro-M-Cresol	ND		ug/kg	190	55.	1
2-Chlorophenol	ND		ug/kg	190	57.	1
2,4-Dichlorophenol	ND		ug/kg	170	61.	1
2,4-Dimethylphenol	ND		ug/kg	190	56.	1
2-Nitrophenol	ND		ug/kg	410	59.	1
4-Nitrophenol	ND		ug/kg	260	61.	1
2,4-Dinitrophenol	ND		ug/kg	910	260	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	69.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	190	56.	1
2-Methylphenol	ND		ug/kg	190	61.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	62.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	61.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	40.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-05 Date Collected: 06/04/13 14:10

Client ID: SB9 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		25-120
Phenol-d6	50		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	58		30-120
2,4,6-Tribromophenol	77		0-136
4-Terphenyl-d14	88		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-06	Date Collected:	06/04/13 14:42
Client ID:	SB11 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 00:23
Analytical Date:	06/10/13 03:37		
Analyst:	RC		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	60.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	52.	1
2-Chloronaphthalene	ND		ug/kg	180	60.	1
1,2-Dichlorobenzene	ND		ug/kg	180	61.	1
1,3-Dichlorobenzene	ND		ug/kg	180	58.	1
1,4-Dichlorobenzene	ND		ug/kg	180	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	40.	1
2,6-Dinitrotoluene	ND		ug/kg	180	47.	1
Fluoranthene	ND		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	56.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	65.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	56.	1
Hexachlorobutadiene	ND		ug/kg	180	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	120	1
Hexachloroethane	ND		ug/kg	150	34.	1
Isophorone	ND		ug/kg	170	49.	1
Naphthalene	ND		ug/kg	180	61.	1
Nitrobenzene	ND		ug/kg	170	44.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	39.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	55.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	48.	1
Butyl benzyl phthalate	ND		ug/kg	180	36.	1
Di-n-butylphthalate	ND		ug/kg	180	36.	1
Di-n-octylphthalate	ND		ug/kg	180	45.	1
Diethyl phthalate	ND		ug/kg	180	39.	1
Dimethyl phthalate	ND		ug/kg	180	47.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-06 Date Collected: 06/04/13 14:42

Client ID: SB11 (0-2') Date Received: 06/04/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	37.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	ND		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	150	34.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	38.	1
Fluorene	ND		ug/kg	180	53.	1
Phenanthrene	ND		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	41.	1
Pyrene	ND		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	420	61.	1
4-Chloroaniline	ND		ug/kg	180	49.	1
2-Nitroaniline	ND		ug/kg	180	52.	1
3-Nitroaniline	ND		ug/kg	180	51.	1
4-Nitroaniline	ND		ug/kg	180	50.	1
Dibenzofuran	ND		ug/kg	180	62.	1
2-Methylnaphthalene	ND		ug/kg	220	59.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	57.	1
Acetophenone	ND		ug/kg	180	57.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
P-Chloro-M-Cresol	ND		ug/kg	180	54.	1
2-Chlorophenol	ND		ug/kg	180	56.	1
2,4-Dichlorophenol	ND		ug/kg	170	60.	1
2,4-Dimethylphenol	ND		ug/kg	180	55.	1
2-Nitrophenol	ND		ug/kg	400	58.	1
4-Nitrophenol	ND		ug/kg	260	60.	1
2,4-Dinitrophenol	ND		ug/kg	890	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	68.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	55.	1
2-Methylphenol	ND		ug/kg	180	59.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	60.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	60.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	ND		ug/kg	180	40.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-06	Date Collected:	06/04/13 14:42
Client ID:	SB11 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	87		0-136
4-Terphenyl-d14	100		18-120

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/07/13 16:22
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 06/06/13 00:23

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG612999-1					
Acenaphthene	ND		ug/kg	130	34.
1,2,4-Trichlorobenzene	ND		ug/kg	160	54.
Hexachlorobenzene	ND		ug/kg	99	31.
Bis(2-chloroethyl)ether	ND		ug/kg	150	46.
2-Chloronaphthalene	ND		ug/kg	160	54.
1,2-Dichlorobenzene	ND		ug/kg	160	54.
1,3-Dichlorobenzene	ND		ug/kg	160	52.
1,4-Dichlorobenzene	ND		ug/kg	160	50.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	36.
2,6-Dinitrotoluene	ND		ug/kg	160	42.
Fluoranthene	ND		ug/kg	99	30.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	50.
4-Bromophenyl phenyl ether	ND		ug/kg	160	38.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	58.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	50.
Hexachlorobutadiene	ND		ug/kg	160	47.
Hexachlorocyclopentadiene	ND		ug/kg	480	110
Hexachloroethane	ND		ug/kg	130	30.
Isophorone	ND		ug/kg	150	44.
Naphthalene	ND		ug/kg	160	55.
Nitrobenzene	ND		ug/kg	150	39.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	35.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	49.
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	160	43.
Butyl benzyl phthalate	ND		ug/kg	160	32.
Di-n-butylphthalate	ND		ug/kg	160	32.
Di-n-octylphthalate	ND		ug/kg	160	41.
Diethyl phthalate	ND		ug/kg	160	35.
Dimethyl phthalate	ND		ug/kg	160	42.
Benzo(a)anthracene	ND		ug/kg	99	32.

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/07/13 16:22
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 06/06/13 00:23

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG612999-1					
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	33.
Benzo(k)fluoranthene	ND		ug/kg	99	32.
Chrysene	ND		ug/kg	99	32.
Acenaphthylene	ND		ug/kg	130	31.
Anthracene	ND		ug/kg	99	28.
Benzo(ghi)perylene	ND		ug/kg	130	34.
Fluorene	ND		ug/kg	160	47.
Phenanthrene	ND		ug/kg	99	32.
Dibenzo(a,h)anthracene	ND		ug/kg	99	32.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	37.
Pyrene	ND		ug/kg	99	32.
Biphenyl	ND		ug/kg	380	55.
4-Chloroaniline	ND		ug/kg	160	44.
2-Nitroaniline	ND		ug/kg	160	47.
3-Nitroaniline	ND		ug/kg	160	46.
4-Nitroaniline	ND		ug/kg	160	45.
Dibenzofuran	ND		ug/kg	160	55.
2-Methylnaphthalene	ND		ug/kg	200	53.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	51.
Acetophenone	ND		ug/kg	160	51.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
P-Chloro-M-Cresol	ND		ug/kg	160	48.
2-Chlorophenol	ND		ug/kg	160	50.
2,4-Dichlorophenol	ND		ug/kg	150	54.
2,4-Dimethylphenol	ND		ug/kg	160	49.
2-Nitrophenol	ND		ug/kg	360	52.
4-Nitrophenol	ND		ug/kg	230	54.
2,4-Dinitrophenol	ND		ug/kg	800	230
4,6-Dinitro-o-cresol	ND		ug/kg	430	61.
Pentachlorophenol	ND		ug/kg	130	35.

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/07/13 16:22
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 06/06/13 00:23

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG612999-1					
Phenol	ND		ug/kg	160	49.
2-Methylphenol	ND		ug/kg	160	53.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	54.
2,4,5-Trichlorophenol	ND		ug/kg	160	54.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	51.
Carbazole	ND		ug/kg	160	36.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	76		0-136
4-Terphenyl-d14	105		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG612999-2 WG612999-3								
Acenaphthene	76		76		31-137	0		50
1,2,4-Trichlorobenzene	66		67		38-107	2		50
Hexachlorobenzene	93		93		40-140	0		50
Bis(2-chloroethyl)ether	57		59		40-140	3		50
2-Chloronaphthalene	72		69		40-140	4		50
1,2-Dichlorobenzene	60		62		40-140	3		50
1,3-Dichlorobenzene	58		60		40-140	3		50
1,4-Dichlorobenzene	59		61		28-104	3		50
3,3'-Dichlorobenzidine	83		81		40-140	2		50
2,4-Dinitrotoluene	**90**	Q	**91**	Q	28-89	1		50
2,6-Dinitrotoluene	94		91		40-140	3		50
Fluoranthene	101		101		40-140	0		50
4-Chlorophenyl phenyl ether	84		86		40-140	2		50
4-Bromophenyl phenyl ether	91		94		40-140	3		50
Bis(2-chloroisopropyl)ether	54		54		40-140	0		50
Bis(2-chloroethoxy)methane	61		58		40-117	5		50
Hexachlorobutadiene	69		69		40-140	0		50
Hexachlorocyclopentadiene	88		86		40-140	2		50
Hexachloroethane	59		61		40-140	3		50
Isophorone	60		58		40-140	3		50
Naphthalene	67		67		40-140	0		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG612999-2 WG612999-3								
Nitrobenzene	71		73		40-140	3		50
NitrosoDiPhenylAmine(NDPA)/DPA	93		94			1		50
n-Nitrosodi-n-propylamine	62		63		32-121	2		50
Bis(2-Ethylhexyl)phthalate	98		101		40-140	3		50
Butyl benzyl phthalate	98		96		40-140	2		50
Di-n-butylphthalate	105		105		40-140	0		50
Di-n-octylphthalate	101		100		40-140	1		50
Diethyl phthalate	92		94		40-140	2		50
Dimethyl phthalate	88		88		40-140	0		50
Benzo(a)anthracene	94		94		40-140	0		50
Benzo(a)pyrene	99		102		40-140	3		50
Benzo(b)fluoranthene	88		88		40-140	0		50
Benzo(k)fluoranthene	99		102		40-140	3		50
Chrysene	93		93		40-140	0		50
Acenaphthylene	81		79		40-140	3		50
Anthracene	103		102		40-140	1		50
Benzo(ghi)perylene	96		98		40-140	2		50
Fluorene	84		85		40-140	1		50
Phenanthrene	94		94		40-140	0		50
Dibenzo(a,h)anthracene	86		87		40-140	1		50
Indeno(1,2,3-cd)Pyrene	66		68		40-140	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG612999-2 WG612999-3								
Pyrene	100		98		35-142	2		50
Biphenyl	70		69			1		50
4-Chloroaniline	57		52		40-140	9		50
2-Nitroaniline	85		84		47-134	1		50
3-Nitroaniline	70		66		26-129	6		50
4-Nitroaniline	90		89		41-125	1		50
Dibenzofuran	80		80		40-140	0		50
2-Methylnaphthalene	68		67		40-140	1		50
1,2,4,5-Tetrachlorobenzene	64		66		40-117	3		50
Acetophenone	61		61		14-144	0		50
2,4,6-Trichlorophenol	84		83		30-130	1		50
P-Chloro-M-Cresol	90		87		26-103	3		50
2-Chlorophenol	68		67		25-102	1		50
2,4-Dichlorophenol	79		76		30-130	4		50
2,4-Dimethylphenol	63		62		30-130	2		50
2-Nitrophenol	71		70		30-130	1		50
4-Nitrophenol	101		101		11-114	0		50
2,4-Dinitrophenol	106		106		4-130	0		50
4,6-Dinitro-o-cresol	105		104		10-130	1		50
Pentachlorophenol	94		93		17-109	1		50
Phenol	66		65		26-90	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG612999-2 WG612999-3								
2-Methylphenol	68		66		30-130.	3		50
3-Methylphenol/4-Methylphenol	73		70		30-130	4		50
2,4,5-Trichlorophenol	96		94		30-130	2		50
Benzoic Acid	21		24			13		50
Benzyl Alcohol	62		63		40-140	2		50
Carbazole	98		98		54-128	0		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	65		65		25-120
Phenol-d6	66		65		10-120
Nitrobenzene-d5	62		61		23-120
2-Fluorobiphenyl	74		71		30-120
2,4,6-Tribromophenol	95		95		0-136
4-Terphenyl-d14	100		98		18-120

PCBS

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-01	Date Collected:	06/04/13 09:15
Client ID:	SB7 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/05/13 11:35
Analytical Date:	06/06/13 21:36	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/06/13
Percent Solids:	86%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/06/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	37.0	7.32	1
Aroclor 1221	ND		ug/kg	37.0	11.2	1
Aroclor 1232	ND		ug/kg	37.0	7.87	1
Aroclor 1242	ND		ug/kg	37.0	7.03	1
Aroclor 1248	ND		ug/kg	37.0	4.48	1
Aroclor 1254	ND		ug/kg	37.0	5.84	1
Aroclor 1260	ND		ug/kg	37.0	6.43	1
Aroclor 1262	ND		ug/kg	37.0	2.74	1
Aroclor 1268	ND		ug/kg	37.0	5.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	56		30-150
Decachlorobiphenyl	**21**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	76		30-150
Decachlorobiphenyl	31		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-02	Date Collected:	06/04/13 09:40
Client ID:	SB8 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/05/13 11:35
Analytical Date:	06/07/13 14:52	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/06/13
Percent Solids:	85%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/06/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	37.7	7.45	1
Aroclor 1221	ND		ug/kg	37.7	11.4	1
Aroclor 1232	ND		ug/kg	37.7	8.01	1
Aroclor 1242	ND		ug/kg	37.7	7.16	1
Aroclor 1248	ND		ug/kg	37.7	4.56	1
Aroclor 1254	ND		ug/kg	37.7	5.94	1
Aroclor 1260	ND		ug/kg	37.7	6.54	1
Aroclor 1262	ND		ug/kg	37.7	2.79	1
Aroclor 1268	ND		ug/kg	37.7	5.47	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	45		30-150
Decachlorobiphenyl	38		30-150
2,4,5,6-Tetrachloro-m-xylene	57		30-150
Decachlorobiphenyl	40		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-03	Date Collected:	06/04/13 12:35
Client ID:	SB10 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/05/13 11:35
Analytical Date:	06/07/13 15:05	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/06/13
Percent Solids:	88%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/06/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.9	7.10	1
Aroclor 1221	ND		ug/kg	35.9	10.8	1
Aroclor 1232	ND		ug/kg	35.9	7.64	1
Aroclor 1242	ND		ug/kg	35.9	6.82	1
Aroclor 1248	ND		ug/kg	35.9	4.35	1
Aroclor 1254	ND		ug/kg	35.9	5.67	1
Aroclor 1260	ND		ug/kg	35.9	6.24	1
Aroclor 1262	ND		ug/kg	35.9	2.66	1
Aroclor 1268	ND		ug/kg	35.9	5.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	58		30-150
Decachlorobiphenyl	42		30-150
2,4,5,6-Tetrachloro-m-xylene	65		30-150
Decachlorobiphenyl	47		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-04	Date Collected:	06/04/13 12:40
Client ID:	SB10 (8-10')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/05/13 11:35
Analytical Date:	06/07/13 09:33	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/06/13
Percent Solids:	92%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/06/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	36.0	7.10	1
Aroclor 1221	ND		ug/kg	36.0	10.8	1
Aroclor 1232	ND		ug/kg	36.0	7.64	1
Aroclor 1242	ND		ug/kg	36.0	6.82	1
Aroclor 1248	ND		ug/kg	36.0	4.35	1
Aroclor 1254	ND		ug/kg	36.0	5.67	1
Aroclor 1260	ND		ug/kg	36.0	6.24	1
Aroclor 1262	ND		ug/kg	36.0	2.66	1
Aroclor 1268	ND		ug/kg	36.0	5.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	66		30-150
2,4,5,6-Tetrachloro-m-xylene	89		30-150
Decachlorobiphenyl	71		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-05	Date Collected:	06/04/13 14:10
Client ID:	SB9 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/05/13 11:35
Analytical Date:	06/07/13 09:46	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/06/13
Percent Solids:	87%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/06/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	37.1	7.33	1
Aroclor 1221	ND		ug/kg	37.1	11.2	1
Aroclor 1232	ND		ug/kg	37.1	7.88	1
Aroclor 1242	ND		ug/kg	37.1	7.04	1
Aroclor 1248	ND		ug/kg	37.1	4.49	1
Aroclor 1254	ND		ug/kg	37.1	5.85	1
Aroclor 1260	ND		ug/kg	37.1	6.44	1
Aroclor 1262	ND		ug/kg	37.1	2.74	1
Aroclor 1268	ND		ug/kg	37.1	5.38	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	74		30-150
Decachlorobiphenyl	62		30-150
2,4,5,6-Tetrachloro-m-xylene	86		30-150
Decachlorobiphenyl	67		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-06	Date Collected:	06/04/13 14:42
Client ID:	SB11 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/05/13 11:35
Analytical Date:	06/07/13 10:00	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/06/13
Percent Solids:	89%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/06/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.9	7.10	1
Aroclor 1221	ND		ug/kg	35.9	10.8	1
Aroclor 1232	ND		ug/kg	35.9	7.64	1
Aroclor 1242	ND		ug/kg	35.9	6.82	1
Aroclor 1248	ND		ug/kg	35.9	4.35	1
Aroclor 1254	ND		ug/kg	35.9	5.67	1
Aroclor 1260	ND		ug/kg	35.9	6.24	1
Aroclor 1262	ND		ug/kg	35.9	2.66	1
Aroclor 1268	ND		ug/kg	35.9	5.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	72		30-150
Decachlorobiphenyl	55		30-150
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	59		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/06/13 22:17
Analyst: KB

Extraction Method: EPA 3546
Extraction Date: 06/05/13 11:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 06/06/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 06/06/13

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-06 Batch: WG612809-1					
Aroclor 1016	ND		ug/kg	32.8	6.48
Aroclor 1221	ND		ug/kg	32.8	9.90
Aroclor 1232	ND		ug/kg	32.8	6.97
Aroclor 1242	ND		ug/kg	32.8	6.23
Aroclor 1248	ND		ug/kg	32.8	3.97
Aroclor 1254	ND		ug/kg	32.8	5.18
Aroclor 1260	ND		ug/kg	32.8	5.70
Aroclor 1262	ND		ug/kg	32.8	2.43
Aroclor 1268	ND		ug/kg	32.8	4.76

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	84		30-150
Decachlorobiphenyl	37		30-150
2,4,5,6-Tetrachloro-m-xylene	92		30-150
Decachlorobiphenyl	50		30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG612809-2 WG612809-3								
Aroclor 1016	78		75		40-140	4		50
Aroclor 1260	49		53		40-140	8		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	82		80		30-150
Decachlorobiphenyl	40		42		30-150
2,4,5,6-Tetrachloro-m-xylene	86		84		30-150
Decachlorobiphenyl	51		52		30-150

PESTICIDES

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-01	Date Collected:	06/04/13 09:15
Client ID:	SB7 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/05/13 22:24
Analytical Date:	06/07/13 17:50	Cleanup Method1:	EPA 3620B
Analyst:	JC	Cleanup Date1:	06/07/13
Percent Solids:	86%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.79	0.351	1
Lindane	ND		ug/kg	0.746	0.333	1
Alpha-BHC	ND		ug/kg	0.746	0.212	1
Beta-BHC	ND		ug/kg	1.79	0.679	1
Heptachlor	ND		ug/kg	0.895	0.401	1
Aldrin	ND		ug/kg	1.79	0.630	1
Heptachlor epoxide	ND		ug/kg	3.36	1.01	1
Endrin	ND		ug/kg	0.746	0.306	1
Endrin ketone	ND		ug/kg	1.79	0.461	1
Dieldrin	ND		ug/kg	1.12	0.560	1
4,4'-DDE	ND		ug/kg	1.79	0.414	1
4,4'-DDD	ND		ug/kg	1.79	0.639	1
4,4'-DDT	ND		ug/kg	3.36	1.44	1
Endosulfan I	ND		ug/kg	1.79	0.423	1
Endosulfan II	ND		ug/kg	1.79	0.598	1
Endosulfan sulfate	ND		ug/kg	0.746	0.341	1
Methoxychlor	ND		ug/kg	3.36	1.04	1
Toxaphene	ND		ug/kg	33.6	9.40	1
cis-Chlordane	ND		ug/kg	2.24	0.624	1
trans-Chlordane	ND		ug/kg	2.24	0.591	1
Chlordane	ND		ug/kg	14.5	5.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	112		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	117		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-02	Date Collected:	06/04/13 09:40
Client ID:	SB8 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/05/13 22:24
Analytical Date:	06/07/13 18:03	Cleanup Method1:	EPA 3620B
Analyst:	JC	Cleanup Date1:	06/07/13
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.80	0.353	1
Lindane	ND		ug/kg	0.752	0.336	1
Alpha-BHC	ND		ug/kg	0.752	0.214	1
Beta-BHC	ND		ug/kg	1.80	0.684	1
Heptachlor	ND		ug/kg	0.902	0.404	1
Aldrin	ND		ug/kg	1.80	0.635	1
Heptachlor epoxide	ND		ug/kg	3.38	1.02	1
Endrin	ND		ug/kg	0.752	0.308	1
Endrin ketone	ND		ug/kg	1.80	0.465	1
Dieldrin	ND		ug/kg	1.13	0.564	1
4,4'-DDE	ND		ug/kg	1.80	0.417	1
4,4'-DDD	ND		ug/kg	1.80	0.644	1
4,4'-DDT	ND		ug/kg	3.38	1.45	1
Endosulfan I	ND		ug/kg	1.80	0.426	1
Endosulfan II	ND		ug/kg	1.80	0.603	1
Endosulfan sulfate	ND		ug/kg	0.752	0.344	1
Methoxychlor	ND		ug/kg	3.38	1.05	1
Toxaphene	ND		ug/kg	33.8	9.47	1
cis-Chlordane	ND		ug/kg	2.26	0.628	1
trans-Chlordane	ND		ug/kg	2.26	0.595	1
Chlordane	ND		ug/kg	14.7	5.98	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	111		30-150	A
Decachlorobiphenyl	43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	109		30-150	B
Decachlorobiphenyl	99		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-03	Date Collected:	06/04/13 12:35
Client ID:	SB10 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/05/13 22:24
Analytical Date:	06/07/13 18:15	Cleanup Method1:	EPA 3620B
Analyst:	JC	Cleanup Date1:	06/07/13
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.76	0.346	1
Lindane	ND		ug/kg	0.736	0.329	1
Alpha-BHC	ND		ug/kg	0.736	0.209	1
Beta-BHC	ND		ug/kg	1.76	0.669	1
Heptachlor	ND		ug/kg	0.883	0.396	1
Aldrin	ND		ug/kg	1.76	0.622	1
Heptachlor epoxide	ND		ug/kg	3.31	0.993	1
Endrin	ND		ug/kg	0.736	0.302	1
Endrin ketone	ND		ug/kg	1.76	0.455	1
Dieldrin	ND		ug/kg	1.10	0.552	1
4,4'-DDE	ND		ug/kg	1.76	0.408	1
4,4'-DDD	ND		ug/kg	1.76	0.630	1
4,4'-DDT	ND		ug/kg	3.31	1.42	1
Endosulfan I	ND		ug/kg	1.76	0.417	1
Endosulfan II	ND		ug/kg	1.76	0.590	1
Endosulfan sulfate	ND		ug/kg	0.736	0.336	1
Methoxychlor	ND		ug/kg	3.31	1.03	1
Toxaphene	ND		ug/kg	33.1	9.27	1
cis-Chlordane	ND		ug/kg	2.21	0.615	1
trans-Chlordane	ND		ug/kg	2.21	0.583	1
Chlordane	ND		ug/kg	14.3	5.85	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	A
Decachlorobiphenyl	36		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	93		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-04	Date Collected:	06/04/13 12:40
Client ID:	SB10 (8-10')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/05/13 22:24
Analytical Date:	06/07/13 18:28	Cleanup Method1:	EPA 3620B
Analyst:	JC	Cleanup Date1:	06/07/13
Percent Solids:	92%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.67	0.327	1
Lindane	ND		ug/kg	0.696	0.311	1
Alpha-BHC	ND		ug/kg	0.696	0.198	1
Beta-BHC	ND		ug/kg	1.67	0.634	1
Heptachlor	ND		ug/kg	0.836	0.375	1
Aldrin	ND		ug/kg	1.67	0.588	1
Heptachlor epoxide	ND		ug/kg	3.13	0.940	1
Endrin	ND		ug/kg	0.696	0.286	1
Endrin ketone	ND		ug/kg	1.67	0.430	1
Dieldrin	ND		ug/kg	1.04	0.522	1
4,4'-DDE	ND		ug/kg	1.67	0.386	1
4,4'-DDD	ND		ug/kg	1.67	0.596	1
4,4'-DDT	ND		ug/kg	3.13	1.34	1
Endosulfan I	ND		ug/kg	1.67	0.395	1
Endosulfan II	ND		ug/kg	1.67	0.559	1
Endosulfan sulfate	ND		ug/kg	0.696	0.318	1
Methoxychlor	ND		ug/kg	3.13	0.975	1
Toxaphene	ND		ug/kg	31.3	8.78	1
cis-Chlordane	ND		ug/kg	2.09	0.582	1
trans-Chlordane	ND		ug/kg	2.09	0.552	1
Chlordane	ND		ug/kg	13.6	5.54	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	110		30-150	A
Decachlorobiphenyl	44		30-150	A
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	97		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-05	Date Collected:	06/04/13 14:10
Client ID:	SB9 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/05/13 22:24
Analytical Date:	06/07/13 18:41	Cleanup Method1:	EPA 3620B
Analyst:	JC	Cleanup Date1:	06/07/13
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.77	0.346	1
Lindane	ND		ug/kg	0.736	0.329	1
Alpha-BHC	ND		ug/kg	0.736	0.209	1
Beta-BHC	ND		ug/kg	1.77	0.670	1
Heptachlor	ND		ug/kg	0.884	0.396	1
Aldrin	ND		ug/kg	1.77	0.622	1
Heptachlor epoxide	ND		ug/kg	3.31	0.994	1
Endrin	ND		ug/kg	0.736	0.302	1
Endrin ketone	ND		ug/kg	1.77	0.455	1
Dieldrin	ND		ug/kg	1.10	0.552	1
4,4'-DDE	ND		ug/kg	1.77	0.409	1
4,4'-DDD	ND		ug/kg	1.77	0.630	1
4,4'-DDT	ND		ug/kg	3.31	1.42	1
Endosulfan I	ND		ug/kg	1.77	0.418	1
Endosulfan II	ND		ug/kg	1.77	0.591	1
Endosulfan sulfate	ND		ug/kg	0.736	0.336	1
Methoxychlor	ND		ug/kg	3.31	1.03	1
Toxaphene	ND		ug/kg	33.1	9.28	1
cis-Chlordane	ND		ug/kg	2.21	0.616	1
trans-Chlordane	ND		ug/kg	2.21	0.583	1
Chlordane	ND		ug/kg	14.4	5.85	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	104		30-150	A
Decachlorobiphenyl	38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	122		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

SAMPLE RESULTS

Lab ID:	L1310079-06	Date Collected:	06/04/13 14:42
Client ID:	SB11 (0-2')	Date Received:	06/04/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/05/13 22:24
Analytical Date:	06/07/13 18:54	Cleanup Method1:	EPA 3620B
Analyst:	JC	Cleanup Date1:	06/07/13
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.70	0.333	1
Lindane	ND		ug/kg	0.708	0.316	1
Alpha-BHC	ND		ug/kg	0.708	0.201	1
Beta-BHC	ND		ug/kg	1.70	0.644	1
Heptachlor	ND		ug/kg	0.850	0.381	1
Aldrin	ND		ug/kg	1.70	0.598	1
Heptachlor epoxide	ND		ug/kg	3.18	0.956	1
Endrin	ND		ug/kg	0.708	0.290	1
Endrin ketone	ND		ug/kg	1.70	0.438	1
Dieldrin	ND		ug/kg	1.06	0.531	1
4,4'-DDE	ND		ug/kg	1.70	0.393	1
4,4'-DDD	ND		ug/kg	1.70	0.606	1
4,4'-DDT	ND		ug/kg	3.18	1.37	1
Endosulfan I	ND		ug/kg	1.70	0.401	1
Endosulfan II	ND		ug/kg	1.70	0.568	1
Endosulfan sulfate	ND		ug/kg	0.708	0.324	1
Methoxychlor	ND		ug/kg	3.18	0.991	1
Toxaphene	ND		ug/kg	31.8	8.92	1
cis-Chlordane	ND		ug/kg	2.12	0.592	1
trans-Chlordane	ND		ug/kg	2.12	0.561	1
Chlordane	ND		ug/kg	13.8	5.63	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	114		30-150	B

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/07/13 17:12
Analyst: JC

Extraction Method: EPA 3546
Extraction Date: 06/05/13 22:24
Cleanup Method1: EPA 3620B
Cleanup Date1: 06/07/13

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-06 Batch: WG612989-1					
Delta-BHC	ND		ug/kg	1.59	0.311
Lindane	ND		ug/kg	0.661	0.296
Alpha-BHC	ND		ug/kg	0.661	0.188
Beta-BHC	ND		ug/kg	1.59	0.602
Heptachlor	ND		ug/kg	0.794	0.356
Aldrin	ND		ug/kg	1.59	0.559
Heptachlor epoxide	ND		ug/kg	2.98	0.893
Endrin	ND		ug/kg	0.661	0.271
Endrin ketone	ND		ug/kg	1.59	0.409
Dieldrin	ND		ug/kg	0.992	0.496
4,4'-DDE	ND		ug/kg	1.59	0.367
4,4'-DDD	ND		ug/kg	1.59	0.566
4,4'-DDT	ND		ug/kg	2.98	1.28
Endosulfan I	ND		ug/kg	1.59	0.375
Endosulfan II	ND		ug/kg	1.59	0.530
Endosulfan sulfate	ND		ug/kg	0.661	0.302
Methoxychlor	ND		ug/kg	2.98	0.926
Toxaphene	ND		ug/kg	29.8	8.33
cis-Chlordane	ND		ug/kg	1.98	0.553
trans-Chlordane	ND		ug/kg	1.98	0.524
Chlordane	ND		ug/kg	12.9	5.26

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	116		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	112		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG612989-2 WG612989-3								
Delta-BHC	80		75		30-150	6		30
Lindane	82		80		30-150	2		30
Alpha-BHC	86		83		30-150	4		30
Beta-BHC	93		82		30-150	13		30
Heptachlor	83		79		30-150	5		30
Aldrin	87		83		30-150	5		30
Heptachlor epoxide	81		78		30-150	4		30
Endrin	85		85		30-150	0		30
Endrin ketone	68		70		30-150	3		30
Dieldrin	80		78		30-150	3		30
4,4'-DDE	79		78		30-150	1		30
4,4'-DDD	70		70		30-150	0		30
4,4'-DDT	72		71		30-150	1		30
Endosulfan I	85		77		30-150	10		30
Endosulfan II	68		68		30-150	0		30
Endosulfan sulfate	65		65		30-150	0		30
Methoxychlor	78		78		30-150	0		30
cis-Chlordane	79		78		30-150	1		30
trans-Chlordane	78		75		30-150	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG612989-2 WG612989-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	113		118		30-150	A
Decachlorobiphenyl	48		50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		87		30-150	B
Decachlorobiphenyl	118		108		30-150	B

METALS

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310079
Project Number: 12043
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-01
Client ID: SB7 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 86%

Date Collected: 06/04/13 09:15
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	9100		mg/kg	9.1	1.8	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Antimony, Total	ND		mg/kg	4.6	0.91	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Arsenic, Total	4.2		mg/kg	0.91	0.27	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Barium, Total	48		mg/kg	0.91	0.27	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Beryllium, Total	0.36	J	mg/kg	0.46	0.04	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Cadmium, Total	0.51	J	mg/kg	0.91	0.06	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Calcium, Total	360		mg/kg	9.1	0.46	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Chromium, Total	14		mg/kg	0.91	0.18	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Cobalt, Total	7.2		mg/kg	1.8	0.46	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Copper, Total	8.8		mg/kg	0.91	0.46	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Iron, Total	15000		mg/kg	4.6	1.8	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Lead, Total	10		mg/kg	4.6	0.27	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Magnesium, Total	1900		mg/kg	9.1	3.6	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Manganese, Total	180		mg/kg	0.91	0.18	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.09	0.02	1	06/11/13 09:11	06/11/13 12:30	EPA 7471B	1,7471B	MC
Nickel, Total	8.5		mg/kg	2.3	0.36	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Potassium, Total	290		mg/kg	230	73.	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Selenium, Total	ND		mg/kg	1.8	0.27	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.91	0.18	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Sodium, Total	ND		mg/kg	180	73.	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Thallium, Total	ND		mg/kg	1.8	0.55	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Vanadium, Total	22		mg/kg	0.91	0.18	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM
Zinc, Total	33		mg/kg	4.6	0.46	2	06/08/13 11:52	06/11/13 16:52	EPA 3050B	1,6010C	BM

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310079
Project Number: 12043
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-02
Client ID: SB8 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 85%

Date Collected: 06/04/13 09:40
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	6000		mg/kg	9.0	1.8	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Antimony, Total	ND		mg/kg	4.5	0.90	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Arsenic, Total	5.5		mg/kg	0.90	0.27	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Barium, Total	47		mg/kg	0.90	0.27	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Beryllium, Total	0.54		mg/kg	0.45	0.04	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Cadmium, Total	0.55	J	mg/kg	0.90	0.05	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Calcium, Total	830		mg/kg	9.0	0.45	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Chromium, Total	16		mg/kg	0.90	0.18	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Cobalt, Total	8.8		mg/kg	1.8	0.45	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Copper, Total	28		mg/kg	0.90	0.45	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Iron, Total	16000		mg/kg	4.5	1.8	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Lead, Total	40		mg/kg	4.5	0.27	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Magnesium, Total	2300		mg/kg	9.0	3.6	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Manganese, Total	300		mg/kg	0.90	0.18	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/11/13 09:11	06/11/13 12:35	EPA 7471B	1,7471B	MC
Nickel, Total	11		mg/kg	2.2	0.36	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Potassium, Total	630		mg/kg	220	72.	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Selenium, Total	ND		mg/kg	1.8	0.27	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.90	0.18	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Sodium, Total	ND		mg/kg	180	72.	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Thallium, Total	ND		mg/kg	1.8	0.54	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Vanadium, Total	22		mg/kg	0.90	0.18	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM
Zinc, Total	45		mg/kg	4.5	0.45	2	06/08/13 11:52	06/11/13 16:56	EPA 3050B	1,6010C	BM

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310079
Project Number: 12043
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-03
Client ID: SB10 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 88%

Date Collected: 06/04/13 12:35
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	5400		mg/kg	8.9	1.8	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Antimony, Total	ND		mg/kg	4.4	0.89	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Arsenic, Total	3.7		mg/kg	0.89	0.27	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Barium, Total	54		mg/kg	0.89	0.27	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Beryllium, Total	0.53		mg/kg	0.44	0.04	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Cadmium, Total	0.49	J	mg/kg	0.89	0.05	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Calcium, Total	800		mg/kg	8.9	0.44	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Chromium, Total	15		mg/kg	0.89	0.18	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Cobalt, Total	6.7		mg/kg	1.8	0.44	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Copper, Total	29		mg/kg	0.89	0.44	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Iron, Total	16000		mg/kg	4.4	1.8	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Lead, Total	16		mg/kg	4.4	0.27	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Magnesium, Total	2200		mg/kg	8.9	3.5	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Manganese, Total	220		mg/kg	0.89	0.18	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.09	0.02	1	06/11/13 09:11	06/11/13 12:37	EPA 7471B	1,7471B	MC
Nickel, Total	13		mg/kg	2.2	0.35	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Potassium, Total	520		mg/kg	220	71.	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Selenium, Total	ND		mg/kg	1.8	0.27	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.89	0.18	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Sodium, Total	ND		mg/kg	180	71.	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Thallium, Total	ND		mg/kg	1.8	0.53	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Vanadium, Total	21		mg/kg	0.89	0.18	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM
Zinc, Total	41		mg/kg	4.4	0.44	2	06/08/13 11:52	06/11/13 17:55	EPA 3050B	1,6010C	BM

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-04
Client ID: SB10 (8-10')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 92%

Date Collected: 06/04/13 12:40
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	5000		mg/kg	8.3	1.7	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Antimony, Total	ND		mg/kg	4.2	0.83	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Arsenic, Total	2.6		mg/kg	0.83	0.25	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Barium, Total	71		mg/kg	0.83	0.25	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Beryllium, Total	0.32	J	mg/kg	0.42	0.03	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Cadmium, Total	0.45	J	mg/kg	0.83	0.05	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Calcium, Total	2400		mg/kg	8.3	0.42	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Chromium, Total	12		mg/kg	0.83	0.17	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Cobalt, Total	5.7		mg/kg	1.7	0.42	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Copper, Total	9.4		mg/kg	0.83	0.42	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Iron, Total	16000		mg/kg	4.2	1.7	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Lead, Total	11		mg/kg	4.2	0.25	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Magnesium, Total	2400		mg/kg	8.3	3.3	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Manganese, Total	320		mg/kg	0.83	0.17	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.09	0.02	1	06/11/13 09:11	06/11/13 12:39	EPA 7471B	1,7471B	MC
Nickel, Total	11		mg/kg	2.1	0.33	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Potassium, Total	900		mg/kg	210	67.	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Selenium, Total	ND		mg/kg	1.7	0.25	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.83	0.17	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Sodium, Total	70	J	mg/kg	170	67.	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Thallium, Total	ND		mg/kg	1.7	0.50	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Vanadium, Total	16		mg/kg	0.83	0.17	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM
Zinc, Total	31		mg/kg	4.2	0.42	2	06/08/13 11:52	06/11/13 17:59	EPA 3050B	1,6010C	BM

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310079
Project Number: 12043
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-05
Client ID: SB9 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 87%

Date Collected: 06/04/13 14:10
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	7400		mg/kg	9.0	1.8	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Antimony, Total	ND		mg/kg	4.5	0.90	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Arsenic, Total	5.0		mg/kg	0.90	0.27	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Barium, Total	52		mg/kg	0.90	0.27	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Beryllium, Total	0.50		mg/kg	0.45	0.04	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Cadmium, Total	0.62	J	mg/kg	0.90	0.05	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Calcium, Total	760		mg/kg	9.0	0.45	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Chromium, Total	18		mg/kg	0.90	0.18	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Cobalt, Total	6.7		mg/kg	1.8	0.45	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Copper, Total	17		mg/kg	0.90	0.45	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Iron, Total	21000		mg/kg	4.5	1.8	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Lead, Total	12		mg/kg	4.5	0.27	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Magnesium, Total	2200		mg/kg	9.0	3.6	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Manganese, Total	350		mg/kg	0.90	0.18	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/11/13 09:11	06/11/13 12:41	EPA 7471B	1,7471B	MC
Nickel, Total	12		mg/kg	2.2	0.36	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Potassium, Total	600		mg/kg	220	72.	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Selenium, Total	ND		mg/kg	1.8	0.27	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.90	0.18	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Sodium, Total	ND		mg/kg	180	72.	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Thallium, Total	ND		mg/kg	1.8	0.54	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Vanadium, Total	27		mg/kg	0.90	0.18	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM
Zinc, Total	39		mg/kg	4.5	0.45	2	06/08/13 11:52	06/11/13 18:03	EPA 3050B	1,6010C	BM

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310079
Project Number: 12043
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-06
Client ID: SB11 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 89%

Date Collected: 06/04/13 14:42
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	8700		mg/kg	8.5	1.7	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Antimony, Total	ND		mg/kg	4.2	0.85	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Arsenic, Total	3.8		mg/kg	0.85	0.25	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Barium, Total	28		mg/kg	0.85	0.25	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Beryllium, Total	0.49		mg/kg	0.42	0.03	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Cadmium, Total	0.47	J	mg/kg	0.85	0.05	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Calcium, Total	86		mg/kg	8.5	0.42	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Chromium, Total	14		mg/kg	0.85	0.17	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Cobalt, Total	3.9		mg/kg	1.7	0.42	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Copper, Total	8.0		mg/kg	0.85	0.42	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Iron, Total	15000		mg/kg	4.2	1.7	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Lead, Total	4.9		mg/kg	4.2	0.25	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Magnesium, Total	470		mg/kg	8.5	3.4	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Manganese, Total	100		mg/kg	0.85	0.17	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/11/13 09:11	06/11/13 12:43	EPA 7471B	1,7471B	MC
Nickel, Total	7.0		mg/kg	2.1	0.34	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Potassium, Total	200	J	mg/kg	210	68.	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Selenium, Total	ND		mg/kg	1.7	0.25	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.85	0.17	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Sodium, Total	ND		mg/kg	170	68.	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Thallium, Total	ND		mg/kg	1.7	0.51	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Vanadium, Total	18		mg/kg	0.85	0.17	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM
Zinc, Total	22		mg/kg	4.2	0.42	2	06/08/13 11:52	06/11/13 18:06	EPA 3050B	1,6010C	BM

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310079

Project Number: 12043 **Report Date:** 06/11/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-06 Batch: WG613665-1										
Aluminum, Total	ND		mg/kg	4.0	0.80	1	06/08/13 11:52	06/11/13 16:45	1,6010C	BM
Antimony, Total	ND		mg/kg	2.0	0.40	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Arsenic, Total	ND		mg/kg	0.40	0.12	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Barium, Total	ND		mg/kg	0.40	0.12	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Beryllium, Total	ND		mg/kg	0.20	0.02	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.40	0.02	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Calcium, Total	ND		mg/kg	4.0	0.20	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Chromium, Total	ND		mg/kg	0.40	0.08	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Cobalt, Total	ND		mg/kg	0.80	0.20	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Copper, Total	ND		mg/kg	0.40	0.20	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Iron, Total	ND		mg/kg	2.0	0.80	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Lead, Total	ND		mg/kg	2.0	0.12	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Magnesium, Total	ND		mg/kg	4.0	1.6	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Manganese, Total	ND		mg/kg	0.40	0.08	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Nickel, Total	ND		mg/kg	1.0	0.16	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Potassium, Total	ND		mg/kg	100	32.	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Selenium, Total	ND		mg/kg	0.80	0.12	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Silver, Total	ND		mg/kg	0.40	0.08	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Sodium, Total	ND		mg/kg	80	32.	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Thallium, Total	ND		mg/kg	0.80	0.24	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Vanadium, Total	ND		mg/kg	0.40	0.08	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM
Zinc, Total	ND		mg/kg	2.0	0.20	1	06/08/13 11:52	06/11/13 13:52	1,6010C	BM

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-06 Batch: WG613915-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/11/13 09:11	06/11/13 12:13	1,7471B	MC

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG613665-2 SRM Lot Number: 0518-10-02								
Aluminum, Total	82		-		29-171	-		
Antimony, Total	102		-		4-196	-		
Arsenic, Total	94		-		81-119	-		
Barium, Total	92		-		83-118	-		
Beryllium, Total	92		-		83-117	-		
Cadmium, Total	85		-		82-117	-		
Calcium, Total	89		-		83-117	-		
Chromium, Total	92		-		80-119	-		
Cobalt, Total	89		-		83-117	-		
Copper, Total	92		-		83-117	-		
Iron, Total	86		-		51-150	-		
Lead, Total	85		-		80-120	-		
Magnesium, Total	83		-		74-126	-		
Manganese, Total	90		-		83-117	-		
Nickel, Total	88		-		82-117	-		
Potassium, Total	91		-		74-126	-		
Selenium, Total	91		-		80-120	-		
Silver, Total	97		-		66-134	-		
Sodium, Total	92		-		74-127	-		
Thallium, Total	86		-		79-120	-		
Vanadium, Total	89		-		79-121	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310079

Report Date: 06/11/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG613665-2 SRM Lot Number: 0518-10-02					
Zinc, Total	88	-	82-119	-	
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG613915-2 SRM Lot Number: 0518-10-02					
Mercury, Total	108	-	67-133	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG613665-4 QC Sample: L1309581-01 Client ID: MS Sample												
Aluminum, Total	6800	190	7900	**580**	Q	-	-		75-125	-		35
Antimony, Total	ND	47.4	31	**65**	Q	-	-		75-125	-		35
Arsenic, Total	6.6	11.4	15	**74**	Q	-	-		75-125	-		35
Barium, Total	24.	190	180	82		-	-		75-125	-		35
Beryllium, Total	0.50	4.74	4.4	82		-	-		75-125	-		35
Cadmium, Total	0.39J	4.84	4.4	91		-	-		75-125	-		35
Calcium, Total	180	949	930	79		-	-		75-125	-		35
Chromium, Total	12.	19	28	84		-	-		75-125	-		35
Cobalt, Total	3.2	47.4	42	82		-	-		75-125	-		35
Copper, Total	5.5	23.7	25	82		-	-		75-125	-		35
Iron, Total	12000	94.9	11000	**0**	Q	-	-		75-125	-		35
Lead, Total	20.	48.4	54	**70**	Q	-	-		75-125	-		35
Magnesium, Total	600	949	590	**0**	Q	-	-		75-125	-		35
Manganese, Total	150	47.4	980	88		-	-		75-125	-		35
Nickel, Total	4.6	47.4	42	79		-	-		75-125	-		35
Potassium, Total	400	949	1200	84		-	-		75-125	-		35
Selenium, Total	0.34J	11.4	9.1	80		-	-		75-125	-		35
Silver, Total	ND	28.4	25	88		-	-		75-125	-		35
Sodium, Total	ND	949	790	83		-	-		75-125	-		35
Thallium, Total	ND	11.4	8.0	**70**	Q	-	-		75-125	-		35
Vanadium, Total	18.	47.4	57	82		-	-		75-125	-		35

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG613665-4 QC Sample: L1309581-01 Client ID: MS Sample									
Zinc, Total	23.	47.4	60	78	-	-	75-125	-	35
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG613915-4 QC Sample: L1310003-05 Client ID: MS Sample									
Mercury, Total	ND	0.185	0.20	108	-	-	70-130	-	35

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG613665-3 QC Sample: L1309581-01 Client ID: DUP Sample						
Antimony, Total	ND	ND	mg/kg	NC		35
Arsenic, Total	6.6	6.5	mg/kg	2		35
Barium, Total	24.	21	mg/kg	13		35
Beryllium, Total	0.50	0.48	mg/kg	4		35
Cadmium, Total	0.39J	0.40J	mg/kg	NC		35
Calcium, Total	180	150	mg/kg	18		35
Chromium, Total	12.	13	mg/kg	8		35
Cobalt, Total	3.2	2.6	mg/kg	21		35
Copper, Total	5.5	5.9	mg/kg	7		35
Iron, Total	12000	12000	mg/kg	0		35
Lead, Total	20.	27	mg/kg	30		35
Magnesium, Total	600	580	mg/kg	3		35
Manganese, Total	150	120	mg/kg	22		35
Nickel, Total	4.6	4.4	mg/kg	4		35
Potassium, Total	400	400	mg/kg	0		35
Selenium, Total	0.34J	0.46J	mg/kg	NC		35
Silver, Total	ND	ND	mg/kg	NC		35
Sodium, Total	ND	ND	mg/kg	NC		35
Thallium, Total	ND	ND	mg/kg	NC		35

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG613665-3 QC Sample: L1309581-01 Client ID: DUP Sample					
Vanadium, Total	18.	19	mg/kg	5	35
Zinc, Total	23.	23	mg/kg	0	35
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG613665-3 QC Sample: L1309581-01 Client ID: DUP Sample					
Aluminum, Total	6800	6700	mg/kg	1	35
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG613915-3 QC Sample: L1310003-05 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/kg	NC	35

INORGANICS
&
MISCELLANEOUS

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-01
Client ID: SB7 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/04/13 09:15
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.2		%	0.100	NA	1	-	06/05/13 11:40	30,2540G	MO

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-02
Client ID: SB8 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/04/13 09:40
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.5		%	0.100	NA	1	-	06/05/13 11:40	30,2540G	MO

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-03
Client ID: SB10 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/04/13 12:35
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.7		%	0.100	NA	1	-	06/05/13 11:40	30,2540G	MO

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-04
Client ID: SB10 (8-10')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/04/13 12:40
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.5		%	0.100	NA	1	-	06/05/13 11:40	30,2540G	MO

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-05
Client ID: SB9 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/04/13 14:10
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.1		%	0.100	NA	1	-	06/05/13 11:40	30,2540G	MO

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310079
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310079-06
Client ID: SB11 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/04/13 14:42
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.4		%	0.100	NA	1	-	06/05/13 11:40	30,2540G	MO

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG612806-1 QC Sample: L1310082-01 Client ID: DUP Sample						
Solids, Total	87.6	85.9	%	2		20

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 06/05/2013 01:58

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310079-01A	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-01B	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-01C	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-01D	Vial MeOH preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-01E	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-01F	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-01G	Plastic 2oz unpreserved for TS	A	N/A	2.3	Y	Absent	TS(7)
L1310079-01H	Amber 500ml unpreserved	A	N/A	2.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310079-02A	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-02B	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-02C	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-02D	Vial MeOH preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-02E	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-02F	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-02G	Plastic 2oz unpreserved for TS	A	N/A	2.3	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310079-02H	Amber 500ml unpreserved	A	N/A	2.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310079-03A	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-03B	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-03C	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-03D	Vial MeOH preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-03E	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-03F	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-03G	Plastic 2oz unpreserved for TS	A	N/A	2.3	Y	Absent	TS(7)
L1310079-03H	Amber 500ml unpreserved	A	N/A	2.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310079-04A	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-04B	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-04C	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-04D	Vial MeOH preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-04E	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-04F	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-04G	Plastic 2oz unpreserved for TS	A	N/A	2.3	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310079-04H	Amber 500ml unpreserved	A	N/A	2.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310079-05A	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-05B	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-05C	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-05D	Vial MeOH preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-05E	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-05F	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-05G	Plastic 2oz unpreserved for TS	A	N/A	2.3	Y	Absent	TS(7)
L1310079-05H	Amber 500ml unpreserved	A	N/A	2.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310079-06A	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-06B	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-06C	5 gram Encore Sampler	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(2)
L1310079-06D	Vial MeOH preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-06E	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-06F	Vial water preserved	A	N/A	2.3	Y	Absent	NYTCL-8260HLW(14)
L1310079-06G	Plastic 2oz unpreserved for TS	A	N/A	2.3	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310079
Report Date: 06/11/13

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310079-06H	Amber 500ml unpreserved	A	N/A	2.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310079-07A	Vial HCl preserved	A	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1310079-07B	Vial HCl preserved	A	N/A	2.3	Y	Absent	NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310079
Project Number:	12043	**Report Date:**	06/11/13

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

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

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: DU Report with "J" Qualifiers

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310079
Project Number:	12043	**Report Date:**	06/11/13

Data Qualifiers

due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with "J" Qualifiers

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310079
Project Number:	12043	**Report Date:**	06/11/13

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised December 19, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012B, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C,

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C,

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 6/5/13

ALPHA Job #: L1300079

Client Information
Client: EPM, Inc.
Address: 1983 Marcus Ave., Ste 109
Lake Success, NY 11042
Phone: 516-328-1194
Fax:
Email: jlebow@epmco.com, rhart@epmco.com
☐ These samples have been previously analyzed by Alpha

Project Information
Project Name: Charleston, Staten Island
Project Location: Charleston, Staten Island
Project #: 12043
Project Manager: Richard Hart
ALPHA Quote #: 2013595

Turn-Around Time
☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 6/11/13 Time:

Report Information - Data Deliverables
☐ FAX ☑ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information
☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:
*QAQC samples contained in glass (8260) and plastic (6010B/7471)
†QAQC samples preserved with HCl (8260) and HNO3 (6010)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs (8260/5035)	TCL SVOCs (8270)	PCBs (8082)	TAL Metals (6010B/7471)	TCL Pesticides (8081A)	Sample Specific Comments	TOTAL # BOTTLES
1	SB7 (0-2')	6/4/13	0915	S	JL	X	X	X	X	X		
2	SB8 (0-2')	6/4/13	0940	S	JL	X	X	X	X	X		
3	SB10 (0-2')	6/4/13	1235	S	JL	X	X	X	X	X		
4	SB10 (8-10')	6/4/13	1240	S	JL	X	X	X	X	X		
5	SB9 (0-2')	6/4/13	1410	S	JL	X	X	X	X	X		
6	SB11 (0-2')	6/4/13	1442	S	JL	X	X	X	X	X		
7	TB1	6/4/13	—	W	JL	X						

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	P†	G	G	G†	G
Preservative	A†	A	A	A†	A

Relinquished By:	Date/Time	Received By:	Date/Time
	6/4/13 - 1600		6/4/13 1600
	6/4/13 19:37		6/4/13 19:37
	6/5/13 0020		6/5/13 0020

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L1310113
Client:	Environmental Planning and Management 1983 Marcus Avenue Suite 109 Lake Success, NY 11042
ATTN:	Rick Hart
Phone:	(516) 328-1194
Project Name:	CHARLESTON, STATEN ISLAND
Project Number:	12043
Report Date:	06/11/13

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310113
Report Date: 06/11/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1310113-01	SG4	CHARLESTON, STATEN ISLAND	06/04/13 11:34
L1310113-02	SG5	CHARLESTON, STATEN ISLAND	06/04/13 12:32
L1310113-03	SG6	CHARLESTON, STATEN ISLAND	06/04/13 13:19
L1310113-04	SG7	CHARLESTON, STATEN ISLAND	06/04/13 16:00

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310113
Project Number:	12043	**Report Date:**	06/11/13

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310113
Project Number: 12043 **Report Date:** 06/11/13

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on May 30, 2013. The canister certification results are provided as an addendum.

Sample L1310113-01 through -04 results for Propylene should be considered estimated due to co-elution with a non-target peak.

Sample L1310113-02 and -04 have elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the samples.

Sample L1310113-02 results for 1,3,-Butadiene and Tetrahydrofuran should be considered estimated due to co-elution with a non-target peaks.

Sample L1310113-03 results for Tetrahydrofuran should be considered estimated due to co-elution with a non-target peak.

Sample L1310113-04 results for 1,3-Butadiene should be considered estimated due to co-elution with a non-target peak.

The WG613265-3 LCS recovery for Hexachlorobutadiene (133%) is above the upper 130% acceptance limit. None of the samples associated with this LCS have reportable amounts of these analytes.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 06/11/13

AIR

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-01
Client ID: SG4
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 06/06/13 21:01
Analyst: MB

Date Collected: 06/04/13 11:34
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	54.7	0.500	--	94.1	0.861	--		1
Dichlorodifluoromethane	0.591	0.200	--	2.92	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	3.43	0.200	--	7.59	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	10.4	2.50	--	19.6	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	66.3	1.00	--	157	2.38	--		1
Trichlorofluoromethane	0.303	0.200	--	1.70	1.12	--		1
Isopropanol	1.88	0.500	--	4.62	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	1.84	1.00	--	6.39	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	1.55	0.200	--	4.83	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	17.7	0.200	--	52.2	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-01
Client ID: SG4
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/04/13 11:34
Date Received: 06/04/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	0.604	0.500	--	2.18	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	2.55	0.200	--	7.52	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.49	0.200	--	5.25	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	1.50	0.200	--	4.79	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.220	0.200	--	0.757	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	1.32	0.200	--	5.41	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.72	0.200	--	7.05	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	4.82	0.200	--	18.2	0.754	--		1
2-Hexanone	1.50	0.200	--	6.15	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.55	0.200	--	6.73	0.869	--		1
p/m-Xylene	5.84	0.400	--	25.4	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-01
Client ID: SG4
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/04/13 11:34
Date Received: 06/04/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Styrene	0.256	0.200	--	1.09	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	2.23	0.200	--	9.69	0.869	--		1
4-Ethyltoluene	0.856	0.200	--	4.21	0.983	--		1
1,3,5-Trimethybenzene	0.868	0.200	--	4.27	0.983	--		1
1,2,4-Trimethylbenzene	3.00	0.200	--	14.7	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	85		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	105		60-140

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-02 D
Client ID: SG5
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 06/06/13 21:32
Analyst: MB

Date Collected: 06/04/13 12:32
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	61.5	2.50	--	106	4.30	--		5
Dichlorodifluoromethane	ND	1.00	--	ND	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.07	--		5
Freon-114	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	ND	1.00	--	ND	2.56	--		5
1,3-Butadiene	3.08	1.00	--	6.81	2.21	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Ethanol	15.9	12.5	--	30.0	23.6	--		5
Vinyl bromide	ND	1.00	--	ND	4.37	--		5
Acetone	157	5.00	--	373	11.9	--		5
Trichlorofluoromethane	ND	1.00	--	ND	5.62	--		5
Isopropanol	ND	2.50	--	ND	6.15	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Methylene chloride	ND	5.00	--	ND	17.4	--		5
3-Chloropropene	ND	1.00	--	ND	3.13	--		5
Carbon disulfide	2.36	1.00	--	7.35	3.11	--		5
Freon-113	ND	1.00	--	ND	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
Methyl tert butyl ether	ND	1.00	--	ND	3.61	--		5
Vinyl acetate	ND	1.00	--	ND	3.52	--		5
2-Butanone	20.0	1.00	--	59.0	2.95	--		5
cis-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-02 D
Client ID: SG5
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/04/13 12:32
Date Received: 06/04/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	2.50	--	ND	9.01	--		5
Chloroform	ND	1.00	--	ND	4.88	--		5
Tetrahydrofuran	2.54	1.00	--	7.49	2.95	--		5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--		5
n-Hexane	1.39	1.00	--	4.90	3.52	--		5
1,1,1-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Benzene	1.38	1.00	--	4.41	3.19	--		5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--		5
Cyclohexane	ND	1.00	--	ND	3.44	--		5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--		5
Bromodichloromethane	ND	1.00	--	ND	6.70	--		5
1,4-Dioxane	ND	1.00	--	ND	3.60	--		5
Trichloroethene	ND	1.00	--	ND	5.37	--		5
2,2,4-Trimethylpentane	ND	1.00	--	ND	4.67	--		5
Heptane	ND	1.00	--	ND	4.10	--		5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
4-Methyl-2-pentanone	1.61	1.00	--	6.60	4.10	--		5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Toluene	4.14	1.00	--	15.6	3.77	--		5
2-Hexanone	1.76	1.00	--	7.21	4.10	--		5
Dibromochloromethane	ND	1.00	--	ND	8.52	--		5
1,2-Dibromoethane	ND	1.00	--	ND	7.69	--		5
Tetrachloroethene	ND	1.00	--	ND	6.78	--		5
Chlorobenzene	ND	1.00	--	ND	4.61	--		5
Ethylbenzene	1.61	1.00	--	6.99	4.34	--		5
p/m-Xylene	5.86	2.00	--	25.5	8.69	--		5
Bromoform	ND	1.00	--	ND	10.3	--		5

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-02 D
Client ID: SG5
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/04/13 12:32
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Styrene	ND	1.00	--	ND	4.26	--		5
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	2.47	1.00	--	10.7	4.34	--		5
4-Ethyltoluene	ND	1.00	--	ND	4.92	--		5
1,3,5-Trimethybenzene	ND	1.00	--	ND	4.92	--		5
1,2,4-Trimethylbenzene	2.47	1.00	--	12.1	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	98		60-140

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-03
Client ID: SG6
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 06/06/13 22:04
Analyst: MB

Date Collected: 06/04/13 13:19
Date Received: 06/04/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Propylene	33.5	0.500	--	57.7	0.861	--		1
Dichlorodifluoromethane	0.587	0.200	--	2.90	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	2.59	0.200	--	5.73	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	4.40	2.50	--	8.29	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	98.2	1.00	--	233	2.38	--		1
Trichlorofluoromethane	0.323	0.200	--	1.82	1.12	--		1
Isopropanol	0.743	0.500	--	1.83	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	1.12	1.00	--	3.89	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.902	0.200	--	2.81	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	6.20	0.200	--	18.3	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-03
Client ID: SG6
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/04/13 13:19
Date Received: 06/04/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	0.552	0.200	--	1.63	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.620	0.200	--	2.19	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.736	0.200	--	2.35	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.461	0.200	--	1.89	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.937	0.200	--	3.84	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.48	0.200	--	5.58	0.754	--		1
2-Hexanone	1.04	0.200	--	4.26	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.421	0.200	--	1.83	0.869	--		1
p/m-Xylene	1.58	0.400	--	6.86	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-03
Client ID: SG6
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/04/13 13:19
Date Received: 06/04/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.695	0.200	--	3.02	0.869	--		1
4-Ethyltoluene	0.283	0.200	--	1.39	0.983	--		1
1,3,5-Trimethybenzene	0.307	0.200	--	1.51	0.983	--		1
1,2,4-Trimethylbenzene	1.20	0.200	--	5.90	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	85		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	101		60-140

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-04 D
Client ID: SG7
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 06/06/13 22:34
Analyst: MB

Date Collected: 06/04/13 16:00
Date Received: 06/04/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	66.5	5.00	--	114	8.61	--		10
Dichlorodifluoromethane	ND	2.00	--	ND	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
Freon-114	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	4.15	2.00	--	9.18	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethanol	ND	25.0	--	ND	47.1	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	184	10.0	--	437	23.8	--		10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
Isopropanol	ND	5.00	--	ND	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Methylene chloride	ND	10.0	--	ND	34.7	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	ND	2.00	--	ND	6.23	--		10
Freon-113	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
Vinyl acetate	ND	2.00	--	ND	7.04	--		10
2-Butanone	14.4	2.00	--	42.5	5.90	--		10
cis-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-04 D
Client ID: SG7
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/04/13 16:00
Date Received: 06/04/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10
Chloroform	ND	2.00	--	ND	9.77	--		10
Tetrahydrofuran	ND	2.00	--	ND	5.90	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	2.19	2.00	--	7.72	7.05	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	ND	2.00	--	ND	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	ND	2.00	--	ND	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	ND	2.00	--	ND	10.7	--		10
2,2,4-Trimethylpentane	ND	2.00	--	ND	9.34	--		10
Heptane	ND	2.00	--	ND	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	ND	2.00	--	ND	8.20	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	3.29	2.00	--	12.4	7.54	--		10
2-Hexanone	ND	2.00	--	ND	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	ND	2.00	--	ND	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	ND	2.00	--	ND	8.69	--		10
p/m-Xylene	ND	4.00	--	ND	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

SAMPLE RESULTS

Lab ID: L1310113-04 D
Client ID: SG7
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/04/13 16:00
Date Received: 06/04/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Styrene	ND	2.00	--	ND	8.52	--		10
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	ND	2.00	--	ND	8.69	--		10
4-Ethyltoluene	ND	2.00	--	ND	9.83	--		10
1,3,5-Trimethybenzene	ND	2.00	--	ND	9.83	--		10
1,2,4-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	86		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	99		60-140

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/06/13 13:27

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG613265-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/06/13 13:27

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG613265-4								
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310113
Report Date: 06/11/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/06/13 13:27

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG613265-4								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethybenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310113

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG613265-3								
Chlorodifluoromethane	95		-		70-130	-		
Propylene	108		-		70-130	-		
Propane	71		-		70-130	-		
Dichlorodifluoromethane	114		-		70-130	-		
Chloromethane	98		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	110		-		70-130	-		
Methanol	83		-		70-130	-		
Vinyl chloride	103		-		70-130	-		
1,3-Butadiene	100		-		70-130	-		
Butane	90		-		70-130	-		
Bromomethane	108		-		70-130	-		
Chloroethane	98		-		70-130	-		
Ethyl Alcohol	87		-		70-130	-		
Dichlorofluoromethane	97		-		70-130	-		
Vinyl bromide	109		-		70-130	-		
Acrolein	88		-		70-130	-		
Acetone	111		-		70-130	-		
Acetonitrile	94		-		70-130	-		
Trichlorofluoromethane	123		-		70-130	-		
iso-Propyl Alcohol	100		-		70-130	-		
Acrylonitrile	94		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310113

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG613265-3								
Pentane	89		-		70-130	-		
Ethyl ether	87		-		70-130	-		
1,1-Dichloroethene	109		-		70-130	-		
tert-Butyl Alcohol	96		-		70-130	-		
Methylene chloride	103		-		70-130	-		
3-Chloropropene	121		-		70-130	-		
Carbon disulfide	101		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	118		-		70-130	-		
trans-1,2-Dichloroethene	95		-		70-130	-		
1,1-Dichloroethane	104		-		70-130	-		
Methyl tert butyl ether	99		-		70-130	-		
Vinyl acetate	106		-		70-130	-		
2-Butanone	97		-		70-130	-		
cis-1,2-Dichloroethene	119		-		70-130	-		
Ethyl Acetate	98		-		70-130	-		
Chloroform	118		-		70-130	-		
Tetrahydrofuran	86		-		70-130	-		
2,2-Dichloropropane	101		-		70-130	-		
1,2-Dichloroethane	115		-		70-130	-		
n-Hexane	95		-		70-130	-		
Isopropyl Ether	89		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310113

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG613265-3								
Ethyl-Tert-Butyl-Ether	90		-		70-130	-		
1,1,1-Trichloroethane	110		-		70-130	-		
1,1-Dichloropropene	104		-		70-130	-		
Benzene	93		-		70-130	-		
Carbon tetrachloride	112		-		70-130	-		
Cyclohexane	89		-		70-130	-		
Tertiary-Amyl Methyl Ether	88		-		70-130	-		
Dibromomethane	100		-		70-130	-		
1,2-Dichloropropane	97		-		70-130	-		
Bromodichloromethane	103		-		70-130	-		
1,4-Dioxane	88		-		70-130	-		
Trichloroethene	107		-		70-130	-		
2,2,4-Trimethylpentane	94		-		70-130	-		
Methyl methacrylate	119		-		70-130	-		
Heptane	96		-		70-130	-		
cis-1,3-Dichloropropene	102		-		70-130	-		
4-Methyl-2-pentanone	92		-		70-130	-		
trans-1,3-Dichloropropene	89		-		70-130	-		
1,1,2-Trichloroethane	105		-		70-130	-		
Toluene	102		-		70-130	-		
1,3-Dichloropropane	97		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310113

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG613265-3								
2-Hexanone	97		-		70-130	-		
Dibromochloromethane	108		-		70-130	-		
1,2-Dibromoethane	110		-		70-130	-		
Butyl Acetate	85		-		70-130	-		
Octane	92		-		70-130	-		
Tetrachloroethene	116		-		70-130	-		
1,1,1,2-Tetrachloroethane	108		-		70-130	-		
Chlorobenzene	113		-		70-130	-		
Ethylbenzene	106		-		70-130	-		
p/m-Xylene	109		-		70-130	-		
Bromoform	108		-		70-130	-		
Styrene	106		-		70-130	-		
1,1,2,2-Tetrachloroethane	111		-		70-130	-		
o-Xylene	111		-		70-130	-		
1,2,3-Trichloropropane	96		-		70-130	-		
Nonane (C9)	95		-		70-130	-		
Isopropylbenzene	106		-		70-130	-		
Bromobenzene	101		-		70-130	-		
o-Chlorotoluene	107		-		70-130	-		
n-Propylbenzene	106		-		70-130	-		
p-Chlorotoluene	102		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310113

Report Date: 06/11/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG613265-3								
4-Ethyltoluene	99		-		70-130	-		
1,3,5-Trimethylbenzene	112		-		70-130	-		
tert-Butylbenzene	108		-		70-130	-		
1,2,4-Trimethylbenzene	116		-		70-130	-		
Decane (C10)	98		-		70-130	-		
Benzyl chloride	87		-		70-130	-		
1,3-Dichlorobenzene	117		-		70-130	-		
1,4-Dichlorobenzene	116		-		70-130	-		
sec-Butylbenzene	106		-		70-130	-		
p-Isopropyltoluene	102		-		70-130	-		
1,2-Dichlorobenzene	117		-		70-130	-		
n-Butylbenzene	109		-		70-130	-		
1,2-Dibromo-3-chloropropane	110		-		70-130	-		
Undecane	108		-		70-130	-		
Dodecane (C12)	**146**	Q	-		70-130	-		
1,2,4-Trichlorobenzene	129		-		70-130	-		
Naphthalene	119		-		70-130	-		
1,2,3-Trichlorobenzene	125		-		70-130	-		
Hexachlorobutadiene	**133**	Q	-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310113
Report Date: 06/11/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG613265-5 QC Sample: L1310114-01 Client ID: DUP Sample						
Propylene	ND	ND	ppbV	NC		25
Dichlorodifluoromethane	ND	ND	ppbV	NC		25
Chloromethane	ND	ND	ppbV	NC		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	79.6	81.8	ppbV	3		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	169	167	ppbV	1		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
iso-Propyl Alcohol	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310113
Report Date: 06/11/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG613265-5 QC Sample: L1310114-01 Client ID: DUP Sample					
1,1-Dichloroethane	ND	ND	ppbV	NC	25
Methyl tert butyl ether	ND	ND	ppbV	NC	25
Vinyl acetate	ND	ND	ppbV	NC	25
2-Butanone	3.59	3.66	ppbV	2	25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	25
Ethyl Acetate	ND	ND	ppbV	NC	25
Chloroform	ND	ND	ppbV	NC	25
Tetrahydrofuran	3.80	3.97	ppbV	4	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
n-Hexane	7.27	7.07	ppbV	3	25
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
Benzene	6.75	6.88	ppbV	2	25
Carbon tetrachloride	ND	ND	ppbV	NC	25
Cyclohexane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
1,4-Dioxane	ND	ND	ppbV	NC	25
Trichloroethene	ND	ND	ppbV	NC	25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310113
Report Date: 06/11/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG613265-5 QC Sample: L1310114-01 Client ID: DUP Sample					
Heptane	7.68	7.48	ppbV	3	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	73.4	72.6	ppbV	1	25
2-Hexanone	ND	ND	ppbV	NC	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	15.1	15.0	ppbV	1	25
p/m-Xylene	71.3	71.7	ppbV	1	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	20.4	20.3	ppbV	0	25
4-Ethyltoluene	8.03	8.05	ppbV	0	25
1,3,5-Trimethylbenzene	6.18	6.27	ppbV	1	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310113
Report Date: 06/11/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG613265-5 QC Sample: L1310114-01 Client ID: DUP Sample					
1,2,4-Trimethylbenzene	23.4	23.2	ppbV	1	25
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: CHARLESTON, STATEN ISLAND

Lab Number: L1310113

Project Number: 12043

Report Date: 06/11/13

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1310113-01	SG4	0517	SV200	05/30/13	88951		-	-	-	Pass	215	220	2
L1310113-01	SG4	1794	6.0L Can	05/30/13	88951	L1308218-03	Pass	-29.7	-5.2	-	-	-	-
L1310113-02	SG5	0516	SV200	05/30/13	88951		-	-	-	Pass	217	220	1
L1310113-02	SG5	1689	6.0L Can	05/30/13	88951	L1308218-03	Pass	-29.8	-6.5	-	-	-	-
L1310113-03	SG6	0523	SV200	05/30/13	88951		-	-	-	Pass	214	219	2
L1310113-03	SG6	1603	6.0L Can	05/30/13	88951	L1308218-03	Pass	-29.5	-6.6	-	-	-	-
L1310113-04	SG7	0533	SV200	05/30/13	88951		-	-	-	Pass	214	223	4
L1310113-04	SG7	903	6.0L Can	05/30/13	88951	L1308218-03	Pass	-29.7	-6.0	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/11/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 05/09/13 20:01
Analyst: RY

Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.200	--	ND	0.361	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/11/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/11/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1308218

Project Number: CANISTER QC BAT **Report Date:** 06/11/13

Air Canister Certification Results

Lab ID: L1308218-03 Date Collected: 05/08/13 14:22

Client ID: CAN 1689 SHELF 43 Date Received: 05/09/13

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethybenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	**Qualifier**	**Units**	**RDL**	**Dilution Factor**
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/11/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	84		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/11/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 05/09/13 20:01
Analyst: RY

Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	2.00	--	ND	4.75	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/11/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.500	--	ND	2.46	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.500	--	ND	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	ND	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.500	--	ND	2.74	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/11/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	84		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	87		60-140

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310113
Report Date: 06/11/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**
Cooler
N/A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310113-01A	Canister - 6 Liter	N/A	N/A		Y	Absent	TO15-LL(30)
L1310113-02A	Canister - 6 Liter	N/A	N/A		Y	Absent	TO15-LL(30)
L1310113-03A	Canister - 6 Liter	N/A	N/A		Y	Absent	TO15-LL(30)
L1310113-04A	Canister - 6 Liter	N/A	N/A		Y	Absent	TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310113
Project Number:	12043	**Report Date:**	06/11/13

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

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

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: Data Usability Report

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310113
Project Number:	12043	**Report Date:**	06/11/13

Data Qualifiers

due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised August 3, 2012 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable). Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Titanium, Vanadium, Zinc, Total Organic Carbon, Corrosivity, TCLP 1311, SPLP 1312. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020A, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C, 8270D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 1311, 3050B, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C, 8270D.)

Biological Tissue (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C, 8270D.)

Air & Emissions (EPA TO-15.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 180.1, 1631E, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B, 3020A, . Organic Parameters: EPA 3510C, 3630C, 3640A, 3660B, 8081B, 8082A, 8270C, 8270D, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 3050B, 3051A, 6020A, 7471B, 9040B, 9045C. Organic Parameters: SW-846 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8015D, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3020A, SM2320B, SM2540D, 2540G, 4500H-B, EPA 180.1, 1631E, SW-846 7470A, 9040C, 6020A, 9050A. Organic Parameters: SW-846 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 6020A, 7471B, 7474, 9040B, 9040C, 9045C, 9045D, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8081B, 8082A, 8270C, 8270D, 8015D.)

Atmospheric Organic Parameters (EPA 3C, TO-15, TO-10A, TO-13A-SIM.)

Biological Tissue (Inorganic Parameters: SW-846 6020A. Organic Parameters: SW-846 8270C, 8270D, 3510C, 3570, 3610C, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, 6020A, 1631E, 7470A, 9050A, EPA 180.1, 3020A. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 3510C.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020A, 7471B, 7474, 9040C, 9045D. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 1311, 3050B, 3580A, 3570, 3051A.)

Air & Emissions (EPA TO-15, TO-10A.)

Pennsylvania Certificate/Lab ID: 68-02089 ***NELAP Accredited***

Non-Potable Water (Inorganic Parameters: 1312, 1631E, 180.1, 3020A, 6020A, 7470A, 9040B, 9050A, 2320B, 2540D, 2540G, SM4500H+-B. Organic Parameters: 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D .)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3051A, 6020A, 7471B, 7474 9040B, 9045C, 9060. Organic Parameters: EPA3050B, 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8270D, 8081B, 8015D, 8082A.)

Rhode Island Department of Health Certificate/Lab ID: LAO00299. ***NELAP Accredited via NJ-DEP.***

Refer to NJ-DEP Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. ***NELAP Accredited.***

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8081, 8082.)

Air (Organic Parameters: EPA TO-15)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID:460194. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters:EPA 3020A, 6020A, 245.7, 9040B. Organic Parameters: EPA 3510C, 3640A, 3660B, 3665A, 8270C, 8270D, 8082A, 8081B, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020A,7470A,7471B,9040B,9045C,3050B,3051, 9060. Organic Parameters: EPA 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 3570, 8270C, 8270D, 8081B, 8082A, 8015D.)

Washington State Department of Ecology Certificate/Lab ID: C954. *Non-Potable Water* (Inorganic Parameters: SM2540D, 180.1, 1631E.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 7474, 9045C, 9050A, 9060. Organic Parameters: EPA 8081, 8082, 8015, 8270.)

U.S. Army Corps of Engineers

Department of Defense, L-A-B Certificate/Lab ID: L2217.01.

Non-Potable Water (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH, 8082A, 8081B, 8015D-SHC, 8015D.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH 8082A, 8081B, 8015D-SHC, 8015D.

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **8270C:** Biphenyl. **TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 2-Methylnaphthalene, 1-Methylnaphthalene.

AIR ANALYSIS

PAGE 1 OF 2

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab:

ALPHA Job #: L1310113

Client Information

Client: Environmental Planning & Management, Inc.
Address: 1983 Marcus Avenue, Suite 109
New Hyde Park, NY 11042
Phone: 516-328-1194
Fax:
Email: jlebow@epmco.com, rhart@epmco.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Charleston, Staten Island
Project Location: Charleston, Staten Island
Project #: 12043
Project Manager: Richard Hart
ALPHA Quote #: 2013595

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
■ ADEx
Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)
Other Formats: _____
■ EMAIL (standard pdf report)
☐ Additional Deliverables: _____
Report to: (if different than Project Manager) _____

Billing Information

■ Same as Client info PO #: 12043

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria
NYSDOH		

Other Project Specific Requirements/Comments:

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	ANALYSIS: TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
L1310113-1	SG4	6/4/13	1110	1134	-29.86	-5.0	SV	JA	6L	1794	0517		X						
-2	SG5	6/4/13	1210	1232	-29.99	-5.0	SV	JA	6L	1689	0516		X						
-3	SG6	6/4/13	1256	1319	-30.34	-5.0	SV	JA	6L	1603	0523		X						
-4	SG7	6/4/13	1534	1600	-29.88	-5.0	SV	JA	6L	903	0533		X						

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: CS

Relinquished By:	Date/Time	Received By:	Date/Time:
	6/4/13 - 1600		6/4/13 1600
Steve Marx	6/4/13 19:37	Abdul Mohsley	6/4/13 19:37
Abdul Mohsley	6/5/13 00:20		6/5/13 00:20
	6/5/13 0400	Mansfield Lab	6/5/13 04:00

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 (19-Jun-09)

ANALYTICAL REPORT

Lab Number:	L1310227
Client:	Environmental Planning and Management 1983 Marcus Avenue Suite 109 Lake Success, NY 11042
ATTN:	Rick Hart
Phone:	(516) 328-1194
Project Name:	CHARLESTON, STATEN ISLAND
Project Number:	12043
Report Date:	06/12/13

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1310227-01	SB5 (0-2')	CHARLESTON, STATEN ISLAND	06/05/13 08:32
L1310227-02	SB5 (8-10')	CHARLESTON, STATEN ISLAND	06/05/13 08:45
L1310227-03	SB4 (0-2')	CHARLESTON, STATEN ISLAND	06/05/13 09:55
L1310227-04	SB4 (8-10')	CHARLESTON, STATEN ISLAND	06/05/13 10:00
L1310227-05	SB1 (0-2')	CHARLESTON, STATEN ISLAND	06/05/13 14:07
L1310227-06	SB6 (0-2')	CHARLESTON, STATEN ISLAND	06/05/13 14:43
L1310227-07	BLIND DUP 01	CHARLESTON, STATEN ISLAND	06/05/13 00:00
L1310227-08	FB01	CHARLESTON, STATEN ISLAND	06/05/13 15:50

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310227
Project Number:	12043	**Report Date:**	06/12/13

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310227
Project Number:	12043	**Report Date:**	06/12/13

Case Narrative (continued)

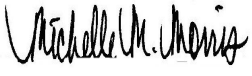
Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Metals

L1310227-01 through -07 have elevated detection limits for all elements, except Mercury, due to the analytical dilutions required by the sample matrices.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Michelle M. Morris

Title: Technical Director/Representative Date: 06/12/13

ORGANICS

VOLATILES

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-01	Date Collected:	06/05/13 08:32
Client ID:	SB5 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/07/13 10:28		
Analyst:	BN		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.4	1.9	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.17	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.94	0.20	1
1,2-Dichloropropane	ND		ug/kg	3.3	0.21	1
Dibromochloromethane	ND		ug/kg	0.94	0.29	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.28	1
Tetrachloroethene	ND		ug/kg	0.94	0.13	1
Chlorobenzene	ND		ug/kg	0.94	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.11	1
1,2-Dichloroethane	ND		ug/kg	0.94	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	0.94	0.10	1
Bromodichloromethane	ND		ug/kg	0.94	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	0.94	0.11	1
cis-1,3-Dichloropropene	ND		ug/kg	0.94	0.12	1
1,1-Dichloropropene	ND		ug/kg	4.7	0.43	1
Bromoform	ND		ug/kg	3.8	0.39	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.94	0.16	1
Benzene	ND		ug/kg	0.94	0.11	1
Toluene	ND		ug/kg	1.4	0.10	1
Ethylbenzene	ND		ug/kg	0.94	0.14	1
Chloromethane	ND		ug/kg	4.7	0.74	1
Bromomethane	0.81	J	ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.13	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.94	0.19	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.20	1
Trichloroethene	ND		ug/kg	0.94	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	4.7	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.7	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	4.7	0.23	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-01 Date Collected: 06/05/13 08:32

Client ID: SB5 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.9	0.10	1
p/m-Xylene	ND		ug/kg	1.9	0.30	1
o-Xylene	ND		ug/kg	1.9	0.25	1
cis-1,2-Dichloroethene	ND		ug/kg	0.94	0.14	1
Dibromomethane	ND		ug/kg	9.4	0.15	1
Styrene	ND		ug/kg	1.9	0.29	1
Dichlorodifluoromethane	ND		ug/kg	9.4	0.20	1
Acetone	7.5	J	ug/kg	9.4	2.9	1
Carbon disulfide	ND		ug/kg	9.4	1.9	1
2-Butanone	ND		ug/kg	9.4	0.33	1
Vinyl acetate	ND		ug/kg	9.4	0.45	1
4-Methyl-2-pentanone	ND		ug/kg	9.4	0.23	1
1,2,3-Trichloropropane	ND		ug/kg	9.4	0.21	1
2-Hexanone	ND		ug/kg	9.4	0.18	1
Bromochloromethane	ND		ug/kg	4.7	0.18	1
2,2-Dichloropropane	ND		ug/kg	4.7	0.21	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.17	1
1,3-Dichloropropane	ND		ug/kg	4.7	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.94	0.30	1
Bromobenzene	ND		ug/kg	4.7	0.20	1
n-Butylbenzene	ND		ug/kg	0.94	0.18	1
sec-Butylbenzene	ND		ug/kg	0.94	0.19	1
tert-Butylbenzene	ND		ug/kg	4.7	0.53	1
o-Chlorotoluene	ND		ug/kg	4.7	0.15	1
p-Chlorotoluene	ND		ug/kg	4.7	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	0.74	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.40	1
Isopropylbenzene	ND		ug/kg	0.94	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.94	0.18	1
Naphthalene	ND		ug/kg	4.7	0.72	1
Acrylonitrile	ND		ug/kg	9.4	0.22	1
n-Propylbenzene	ND		ug/kg	0.94	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.7	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.7	0.74	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.7	0.13	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.7	0.54	1
1,4-Dioxane	ND		ug/kg	94	16.	1
1,4-Diethylbenzene	ND		ug/kg	3.8	0.15	1
4-Ethyltoluene	ND		ug/kg	3.8	0.11	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-01 Date Collected: 06/05/13 08:32

Client ID: SB5 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.8	0.12	1
Ethyl ether	ND		ug/kg	4.7	0.25	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.7	0.42	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	104		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-02	Date Collected:	06/05/13 08:45
Client ID:	SB5 (8-10')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/07/13 11:02		
Analyst:	BN		
Percent Solids:	92%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.6	1.9	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.17	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.96	0.20	1
1,2-Dichloropropane	ND		ug/kg	3.4	0.22	1
Dibromochloromethane	ND		ug/kg	0.96	0.29	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.29	1
Tetrachloroethene	ND		ug/kg	0.96	0.13	1
Chlorobenzene	ND		ug/kg	0.96	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.12	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	0.96	0.11	1
Bromodichloromethane	ND		ug/kg	0.96	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	0.96	0.12	1
cis-1,3-Dichloropropene	ND		ug/kg	0.96	0.12	1
1,1-Dichloropropene	ND		ug/kg	4.8	0.44	1
Bromoform	ND		ug/kg	3.8	0.40	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.96	0.16	1
Benzene	ND		ug/kg	0.96	0.11	1
Toluene	ND		ug/kg	1.4	0.11	1
Ethylbenzene	ND		ug/kg	0.96	0.14	1
Chloromethane	ND		ug/kg	4.8	0.75	1
Bromomethane	ND		ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.14	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.20	1
Trichloroethene	ND		ug/kg	0.96	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	4.8	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	4.8	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	4.8	0.23	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-02 Date Collected: 06/05/13 08:45

Client ID: SB5 (8-10') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.9	0.10	1
p/m-Xylene	ND		ug/kg	1.9	0.31	1
o-Xylene	ND		ug/kg	1.9	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.96	0.14	1
Dibromomethane	ND		ug/kg	9.6	0.16	1
Styrene	ND		ug/kg	1.9	0.30	1
Dichlorodifluoromethane	ND		ug/kg	9.6	0.21	1
Acetone	ND		ug/kg	9.6	3.0	1
Carbon disulfide	ND		ug/kg	9.6	1.9	1
2-Butanone	ND		ug/kg	9.6	0.34	1
Vinyl acetate	ND		ug/kg	9.6	0.46	1
4-Methyl-2-pentanone	ND		ug/kg	9.6	0.23	1
1,2,3-Trichloropropane	ND		ug/kg	9.6	0.22	1
2-Hexanone	ND		ug/kg	9.6	0.18	1
Bromochloromethane	ND		ug/kg	4.8	0.19	1
2,2-Dichloropropane	ND		ug/kg	4.8	0.22	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.17	1
1,3-Dichloropropane	ND		ug/kg	4.8	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.96	0.30	1
Bromobenzene	ND		ug/kg	4.8	0.20	1
n-Butylbenzene	ND		ug/kg	0.96	0.19	1
sec-Butylbenzene	ND		ug/kg	0.96	0.20	1
tert-Butylbenzene	ND		ug/kg	4.8	0.54	1
o-Chlorotoluene	ND		ug/kg	4.8	0.15	1
p-Chlorotoluene	ND		ug/kg	4.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.8	0.76	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.40	1
Isopropylbenzene	ND		ug/kg	0.96	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.96	0.18	1
Naphthalene	ND		ug/kg	4.8	0.74	1
Acrylonitrile	ND		ug/kg	9.6	0.23	1
n-Propylbenzene	ND		ug/kg	0.96	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.8	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.8	0.76	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.8	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.8	0.55	1
1,4-Dioxane	ND		ug/kg	96	17.	1
1,4-Diethylbenzene	ND		ug/kg	3.8	0.15	1
4-Ethyltoluene	ND		ug/kg	3.8	0.11	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-02 Date Collected: 06/05/13 08:45

Client ID: SB5 (8-10') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.8	0.12	1
Ethyl ether	ND		ug/kg	4.8	0.25	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	0.43	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-03	Date Collected:	06/05/13 09:55
Client ID:	SB4 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/07/13 11:36		
Analyst:	BN		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.4	1.9	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.17	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.94	0.20	1
1,2-Dichloropropane	ND		ug/kg	3.3	0.22	1
Dibromochloromethane	ND		ug/kg	0.94	0.29	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.29	1
Tetrachloroethene	ND		ug/kg	0.94	0.13	1
Chlorobenzene	ND		ug/kg	0.94	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.11	1
1,2-Dichloroethane	ND		ug/kg	0.94	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	0.94	0.10	1
Bromodichloromethane	ND		ug/kg	0.94	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	0.94	0.11	1
cis-1,3-Dichloropropene	ND		ug/kg	0.94	0.12	1
1,1-Dichloropropene	ND		ug/kg	4.7	0.43	1
Bromoform	ND		ug/kg	3.8	0.39	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.94	0.16	1
Benzene	ND		ug/kg	0.94	0.11	1
Toluene	ND		ug/kg	1.4	0.10	1
Ethylbenzene	ND		ug/kg	0.94	0.14	1
Chloromethane	ND		ug/kg	4.7	0.74	1
Bromomethane	ND		ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.13	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.94	0.19	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.20	1
Trichloroethene	ND		ug/kg	0.94	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	4.7	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.7	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	4.7	0.23	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-03 Date Collected: 06/05/13 09:55

Client ID: SB4 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.9	0.10	1
p/m-Xylene	ND		ug/kg	1.9	0.30	1
o-Xylene	ND		ug/kg	1.9	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.94	0.14	1
Dibromomethane	ND		ug/kg	9.4	0.15	1
Styrene	ND		ug/kg	1.9	0.29	1
Dichlorodifluoromethane	ND		ug/kg	9.4	0.20	1
Acetone	ND		ug/kg	9.4	2.9	1
Carbon disulfide	ND		ug/kg	9.4	1.9	1
2-Butanone	ND		ug/kg	9.4	0.33	1
Vinyl acetate	ND		ug/kg	9.4	0.45	1
4-Methyl-2-pentanone	ND		ug/kg	9.4	0.23	1
1,2,3-Trichloropropane	ND		ug/kg	9.4	0.21	1
2-Hexanone	ND		ug/kg	9.4	0.18	1
Bromochloromethane	ND		ug/kg	4.7	0.18	1
2,2-Dichloropropane	ND		ug/kg	4.7	0.21	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.17	1
1,3-Dichloropropane	ND		ug/kg	4.7	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.94	0.30	1
Bromobenzene	ND		ug/kg	4.7	0.20	1
n-Butylbenzene	ND		ug/kg	0.94	0.19	1
sec-Butylbenzene	ND		ug/kg	0.94	0.19	1
tert-Butylbenzene	ND		ug/kg	4.7	0.53	1
o-Chlorotoluene	ND		ug/kg	4.7	0.15	1
p-Chlorotoluene	ND		ug/kg	4.7	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	0.74	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.40	1
Isopropylbenzene	ND		ug/kg	0.94	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.94	0.18	1
Naphthalene	ND		ug/kg	4.7	0.72	1
Acrylonitrile	ND		ug/kg	9.4	0.22	1
n-Propylbenzene	ND		ug/kg	0.94	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.7	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.7	0.74	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.7	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.7	0.54	1
1,4-Dioxane	ND		ug/kg	94	16.	1
1,4-Diethylbenzene	ND		ug/kg	3.8	0.15	1
4-Ethyltoluene	ND		ug/kg	3.8	0.11	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-03 Date Collected: 06/05/13 09:55

Client ID: SB4 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.8	0.12	1
Ethyl ether	ND		ug/kg	4.7	0.25	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.7	0.42	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-04	Date Collected:	06/05/13 10:00
Client ID:	SB4 (8-10')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/07/13 12:10		
Analyst:	BN		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	10	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.18	1
Chloroform	ND		ug/kg	1.5	0.37	1
Carbon tetrachloride	ND		ug/kg	1.0	0.21	1
1,2-Dichloropropane	ND		ug/kg	3.5	0.23	1
Dibromochloromethane	ND		ug/kg	1.0	0.31	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30	1
Tetrachloroethene	ND		ug/kg	1.0	0.14	1
Chlorobenzene	ND		ug/kg	1.0	0.35	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.12	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11	1
Bromodichloromethane	ND		ug/kg	1.0	0.23	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13	1
1,1-Dichloropropene	ND		ug/kg	5.0	0.45	1
Bromoform	ND		ug/kg	4.0	0.41	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17	1
Benzene	ND		ug/kg	1.0	0.12	1
Toluene	ND		ug/kg	1.5	0.11	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	5.0	0.78	1
Bromomethane	ND		ug/kg	2.0	0.34	1
Vinyl chloride	ND		ug/kg	2.0	0.14	1
Chloroethane	ND		ug/kg	2.0	0.31	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21	1
Trichloroethene	ND		ug/kg	1.0	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-04 Date Collected: 06/05/13 10:00

Client ID: SB4 (8-10') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.0	0.10	1
p/m-Xylene	ND		ug/kg	2.0	0.32	1
o-Xylene	ND		ug/kg	2.0	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15	1
Dibromomethane	ND		ug/kg	10	0.16	1
Styrene	ND		ug/kg	2.0	0.31	1
Dichlorodifluoromethane	ND		ug/kg	10	0.22	1
Acetone	ND		ug/kg	10	3.1	1
Carbon disulfide	ND		ug/kg	10	2.0	1
2-Butanone	ND		ug/kg	10	0.35	1
Vinyl acetate	ND		ug/kg	10	0.48	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	10	0.22	1
2-Hexanone	ND		ug/kg	10	0.19	1
Bromochloromethane	ND		ug/kg	5.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	5.0	0.22	1
1,2-Dibromoethane	ND		ug/kg	4.0	0.18	1
1,3-Dichloropropane	ND		ug/kg	5.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32	1
Bromobenzene	ND		ug/kg	5.0	0.21	1
n-Butylbenzene	ND		ug/kg	1.0	0.20	1
sec-Butylbenzene	ND		ug/kg	1.0	0.20	1
tert-Butylbenzene	ND		ug/kg	5.0	0.56	1
o-Chlorotoluene	ND		ug/kg	5.0	0.16	1
p-Chlorotoluene	ND		ug/kg	5.0	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.42	1
Isopropylbenzene	ND		ug/kg	1.0	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.19	1
Naphthalene	ND		ug/kg	5.0	0.77	1
Acrylonitrile	ND		ug/kg	10	0.24	1
n-Propylbenzene	ND		ug/kg	1.0	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57	1
1,4-Dioxane	ND		ug/kg	100	17.	1
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16	1
4-Ethyltoluene	ND		ug/kg	4.0	0.12	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-04 Date Collected: 06/05/13 10:00

Client ID: SB4 (8-10') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13	1
Ethyl ether	ND		ug/kg	5.0	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	105		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-05	Date Collected:	06/05/13 14:07
Client ID:	SB1 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/07/13 12:44		
Analyst:	BN		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	10	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.18	1
Chloroform	ND		ug/kg	1.5	0.38	1
Carbon tetrachloride	ND		ug/kg	1.0	0.21	1
1,2-Dichloropropane	ND		ug/kg	3.6	0.23	1
Dibromochloromethane	ND		ug/kg	1.0	0.31	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31	1
Tetrachloroethene	ND		ug/kg	1.0	0.14	1
Chlorobenzene	ND		ug/kg	1.0	0.36	1
Trichlorofluoromethane	ND		ug/kg	5.1	0.12	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.15	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11	1
Bromodichloromethane	ND		ug/kg	1.0	0.23	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13	1
1,1-Dichloropropene	ND		ug/kg	5.1	0.46	1
Bromoform	ND		ug/kg	4.1	0.42	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17	1
Benzene	ND		ug/kg	1.0	0.12	1
Toluene	ND		ug/kg	1.5	0.11	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	5.1	0.80	1
Bromomethane	ND		ug/kg	2.0	0.34	1
Vinyl chloride	ND		ug/kg	2.0	0.14	1
Chloroethane	ND		ug/kg	2.0	0.32	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.22	1
Trichloroethene	ND		ug/kg	1.0	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	5.1	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	5.1	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	5.1	0.25	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-05 Date Collected: 06/05/13 14:07

Client ID: SB1 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.0	0.11	1
p/m-Xylene	ND		ug/kg	2.0	0.33	1
o-Xylene	ND		ug/kg	2.0	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15	1
Dibromomethane	ND		ug/kg	10	0.17	1
Styrene	ND		ug/kg	2.0	0.32	1
Dichlorodifluoromethane	ND		ug/kg	10	0.22	1
Acetone	ND		ug/kg	10	3.2	1
Carbon disulfide	ND		ug/kg	10	2.0	1
2-Butanone	ND		ug/kg	10	0.36	1
Vinyl acetate	ND		ug/kg	10	0.49	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.25	1
1,2,3-Trichloropropane	ND		ug/kg	10	0.23	1
2-Hexanone	ND		ug/kg	10	0.19	1
Bromochloromethane	ND		ug/kg	5.1	0.20	1
2,2-Dichloropropane	ND		ug/kg	5.1	0.23	1
1,2-Dibromoethane	ND		ug/kg	4.1	0.18	1
1,3-Dichloropropane	ND		ug/kg	5.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32	1
Bromobenzene	ND		ug/kg	5.1	0.21	1
n-Butylbenzene	ND		ug/kg	1.0	0.20	1
sec-Butylbenzene	ND		ug/kg	1.0	0.21	1
tert-Butylbenzene	ND		ug/kg	5.1	0.57	1
o-Chlorotoluene	ND		ug/kg	5.1	0.16	1
p-Chlorotoluene	ND		ug/kg	5.1	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.1	0.81	1
Hexachlorobutadiene	ND		ug/kg	5.1	0.43	1
Isopropylbenzene	ND		ug/kg	1.0	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.20	1
Naphthalene	ND		ug/kg	5.1	0.79	1
Acrylonitrile	ND		ug/kg	10	0.24	1
n-Propylbenzene	ND		ug/kg	1.0	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.1	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.1	0.81	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.1	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.1	0.59	1
1,4-Dioxane	ND		ug/kg	100	18.	1
1,4-Diethylbenzene	ND		ug/kg	4.1	0.16	1
4-Ethyltoluene	ND		ug/kg	4.1	0.12	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-05 Date Collected: 06/05/13 14:07

Client ID: SB1 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.1	0.13	1
Ethyl ether	ND		ug/kg	5.1	0.27	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.1	0.46	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	103		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-06	Date Collected:	06/05/13 14:43
Client ID:	SB6 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/07/13 13:19		
Analyst:	BN		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.8	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.18	1
Chloroform	ND		ug/kg	1.5	0.36	1
Carbon tetrachloride	ND		ug/kg	0.98	0.21	1
1,2-Dichloropropane	ND		ug/kg	3.4	0.22	1
Dibromochloromethane	ND		ug/kg	0.98	0.30	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30	1
Tetrachloroethene	ND		ug/kg	0.98	0.14	1
Chlorobenzene	ND		ug/kg	0.98	0.34	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.12	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	0.98	0.11	1
Bromodichloromethane	ND		ug/kg	0.98	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.12	1
cis-1,3-Dichloropropene	ND		ug/kg	0.98	0.12	1
1,1-Dichloropropene	ND		ug/kg	4.9	0.45	1
Bromoform	ND		ug/kg	3.9	0.41	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.98	0.17	1
Benzene	ND		ug/kg	0.98	0.12	1
Toluene	ND		ug/kg	1.5	0.11	1
Ethylbenzene	ND		ug/kg	0.98	0.14	1
Chloromethane	ND		ug/kg	4.9	0.77	1
Bromomethane	ND		ug/kg	2.0	0.33	1
Vinyl chloride	ND		ug/kg	2.0	0.14	1
Chloroethane	ND		ug/kg	2.0	0.31	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21	1
Trichloroethene	ND		ug/kg	0.98	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	4.9	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	4.9	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	4.9	0.24	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-06 Date Collected: 06/05/13 14:43

Client ID: SB6 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.0	0.10	1
p/m-Xylene	ND		ug/kg	2.0	0.32	1
o-Xylene	ND		ug/kg	2.0	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.15	1
Dibromomethane	ND		ug/kg	9.8	0.16	1
Styrene	ND		ug/kg	2.0	0.30	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.22	1
Acetone	9.1	J	ug/kg	9.8	3.0	1
Carbon disulfide	ND		ug/kg	9.8	2.0	1
2-Butanone	ND		ug/kg	9.8	0.35	1
Vinyl acetate	ND		ug/kg	9.8	0.47	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	9.8	0.22	1
2-Hexanone	ND		ug/kg	9.8	0.18	1
Bromochloromethane	ND		ug/kg	4.9	0.19	1
2,2-Dichloropropane	ND		ug/kg	4.9	0.22	1
1,2-Dibromoethane	ND		ug/kg	3.9	0.18	1
1,3-Dichloropropane	ND		ug/kg	4.9	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.98	0.31	1
Bromobenzene	ND		ug/kg	4.9	0.20	1
n-Butylbenzene	ND		ug/kg	0.98	0.19	1
sec-Butylbenzene	ND		ug/kg	0.98	0.20	1
tert-Butylbenzene	ND		ug/kg	4.9	0.55	1
o-Chlorotoluene	ND		ug/kg	4.9	0.16	1
p-Chlorotoluene	ND		ug/kg	4.9	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.9	0.78	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.42	1
Isopropylbenzene	ND		ug/kg	0.98	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.98	0.19	1
Naphthalene	ND		ug/kg	4.9	0.76	1
Acrylonitrile	ND		ug/kg	9.8	0.23	1
n-Propylbenzene	ND		ug/kg	0.98	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.9	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.9	0.78	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.9	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.9	0.56	1
1,4-Dioxane	ND		ug/kg	98	17.	1
1,4-Diethylbenzene	ND		ug/kg	3.9	0.16	1
4-Ethyltoluene	ND		ug/kg	3.9	0.12	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-06 Date Collected: 06/05/13 14:43

Client ID: SB6 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.9	0.13	1
Ethyl ether	ND		ug/kg	4.9	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-07	Date Collected:	06/05/13 00:00
Client ID:	BLIND DUP 01	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/07/13 13:52		
Analyst:	BN		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.5	1.9	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.17	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.95	0.20	1
1,2-Dichloropropane	ND		ug/kg	3.3	0.22	1
Dibromochloromethane	ND		ug/kg	0.95	0.29	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.29	1
Tetrachloroethene	ND		ug/kg	0.95	0.13	1
Chlorobenzene	ND		ug/kg	0.95	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.12	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	0.95	0.10	1
Bromodichloromethane	ND		ug/kg	0.95	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.11	1
cis-1,3-Dichloropropene	ND		ug/kg	0.95	0.12	1
1,1-Dichloropropene	ND		ug/kg	4.7	0.43	1
Bromoform	ND		ug/kg	3.8	0.39	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.95	0.16	1
Benzene	ND		ug/kg	0.95	0.11	1
Toluene	ND		ug/kg	1.4	0.11	1
Ethylbenzene	ND		ug/kg	0.95	0.14	1
Chloromethane	ND		ug/kg	4.7	0.74	1
Bromomethane	ND		ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.13	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.20	1
Trichloroethene	ND		ug/kg	0.95	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	4.7	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.7	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	4.7	0.23	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-07 Date Collected: 06/05/13 00:00

Client ID: BLIND DUP 01 Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.9	0.10	1
p/m-Xylene	ND		ug/kg	1.9	0.30	1
o-Xylene	ND		ug/kg	1.9	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.14	1
Dibromomethane	ND		ug/kg	9.5	0.16	1
Styrene	ND		ug/kg	1.9	0.29	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.21	1
Acetone	ND		ug/kg	9.5	2.9	1
Carbon disulfide	ND		ug/kg	9.5	1.9	1
2-Butanone	ND		ug/kg	9.5	0.34	1
Vinyl acetate	ND		ug/kg	9.5	0.45	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	0.23	1
1,2,3-Trichloropropane	ND		ug/kg	9.5	0.21	1
2-Hexanone	ND		ug/kg	9.5	0.18	1
Bromochloromethane	ND		ug/kg	4.7	0.19	1
2,2-Dichloropropane	ND		ug/kg	4.7	0.21	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.17	1
1,3-Dichloropropane	ND		ug/kg	4.7	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.95	0.30	1
Bromobenzene	ND		ug/kg	4.7	0.20	1
n-Butylbenzene	ND		ug/kg	0.95	0.19	1
sec-Butylbenzene	ND		ug/kg	0.95	0.20	1
tert-Butylbenzene	ND		ug/kg	4.7	0.53	1
o-Chlorotoluene	ND		ug/kg	4.7	0.15	1
p-Chlorotoluene	ND		ug/kg	4.7	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	0.75	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.40	1
Isopropylbenzene	ND		ug/kg	0.95	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.18	1
Naphthalene	ND		ug/kg	4.7	0.73	1
Acrylonitrile	ND		ug/kg	9.5	0.22	1
n-Propylbenzene	ND		ug/kg	0.95	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.7	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.7	0.75	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.7	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.7	0.54	1
1,4-Dioxane	ND		ug/kg	95	16.	1
1,4-Diethylbenzene	ND		ug/kg	3.8	0.15	1
4-Ethyltoluene	ND		ug/kg	3.8	0.11	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-07 Date Collected: 06/05/13 00:00

Client ID: BLIND DUP 01 Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.8	0.12	1
Ethyl ether	ND		ug/kg	4.7	0.25	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.7	0.42	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	100		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-08	Date Collected:	06/05/13 15:50
Client ID:	FB01	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	06/10/13 11:47		
Analyst:	TR		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-08 Date Collected: 06/05/13 15:50

Client ID: FB01 Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	12		ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	1.4	J	ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	76.	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-08 Date Collected: 06/05/13 15:50

Client ID: FB01 Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	97		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/07/13 09:53
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-07 Batch: WG613552-3					
Methylene chloride	ND		ug/kg	10	2.0
1,1-Dichloroethane	ND		ug/kg	1.5	0.18
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.31
2-Chloroethylvinyl ether	ND		ug/kg	20	0.62
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.12
1,2-Dichloroethane	ND		ug/kg	1.0	0.15
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.23
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13
1,1-Dichloropropene	ND		ug/kg	5.0	0.46
Bromoform	ND		ug/kg	4.0	0.41
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17
Benzene	ND		ug/kg	1.0	0.12
Toluene	0.23	J	ug/kg	1.5	0.11
Ethylbenzene	ND		ug/kg	1.0	0.15
Chloromethane	ND		ug/kg	5.0	0.78
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.14
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.20
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.15
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/07/13 09:53
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-07 Batch: WG613552-3					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24
Methyl tert butyl ether	ND		ug/kg	2.0	0.10
p/m-Xylene	ND		ug/kg	2.0	0.32
o-Xylene	ND		ug/kg	2.0	0.27
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.31
Dichlorodifluoromethane	ND		ug/kg	10	0.22
Acetone	ND		ug/kg	10	3.1
Carbon disulfide	ND		ug/kg	10	2.0
2-Butanone	ND		ug/kg	10	0.36
Vinyl acetate	ND		ug/kg	10	0.48
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.22
2-Hexanone	ND		ug/kg	10	0.19
Bromochloromethane	ND		ug/kg	5.0	0.20
2,2-Dichloropropane	ND		ug/kg	5.0	0.22
1,2-Dibromoethane	ND		ug/kg	4.0	0.18
1,3-Dichloropropane	ND		ug/kg	5.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.20
sec-Butylbenzene	ND		ug/kg	1.0	0.20
tert-Butylbenzene	ND		ug/kg	5.0	0.56
o-Chlorotoluene	ND		ug/kg	5.0	0.16
p-Chlorotoluene	ND		ug/kg	5.0	0.15
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79
Hexachlorobutadiene	ND		ug/kg	5.0	0.42
Isopropylbenzene	ND		ug/kg	1.0	0.17
p-Isopropyltoluene	ND		ug/kg	1.0	0.19
Naphthalene	ND		ug/kg	5.0	0.77

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/07/13 09:53
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-07 Batch: WG613552-3					
Acrylonitrile	ND		ug/kg	10	0.24
Isopropyl Ether	ND		ug/kg	4.0	0.14
tert-Butyl Alcohol	ND		ug/kg	60	0.91
n-Propylbenzene	ND		ug/kg	1.0	0.12
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57
Methyl Acetate	ND		ug/kg	20	0.76
Ethyl Acetate	ND		ug/kg	20	0.82
Acrolein	ND		ug/kg	25	9.2
Cyclohexane	ND		ug/kg	20	1.1
1,4-Dioxane	ND		ug/kg	100	17.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	20	0.27
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16
4-Ethyltoluene	ND		ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Tetrahydrofuran	ND		ug/kg	20	0.38
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.45
Methyl cyclohexane	ND		ug/kg	4.0	1.3
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	0.42
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	0.58

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/07/13 09:53
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-07 Batch: WG613552-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	105		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/10/13 11:13
Analyst: TR

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG613977-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
2-Chloroethylvinyl ether	ND		ug/l	10	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.16
1,2-Dichloropropane	ND		ug/l	1.0	0.30
Dibromochloromethane	ND		ug/l	0.50	0.19
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.16
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.18
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/10/13 11:13
Analyst: TR

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG613977-3					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Isopropyl Ether	ND		ug/l	2.0	0.65
tert-Butyl Alcohol	ND		ug/l	10	0.90
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.0
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.0
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/10/13 11:13
Analyst: TR

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG613977-3					
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.38
Ethyl Acetate	ND		ug/l	10	0.70
Cyclohexane	ND		ug/l	10	0.54
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.5	0.70
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	0.38
1,4-Dioxane	ND		ug/l	250	76.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.70
1,4-Diethylbenzene	ND		ug/l	2.0	0.70
4-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Tetrahydrofuran	ND		ug/l	5.0	1.5
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.63

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-07 Batch: WG613552-1 WG613552-2								
Methylene chloride	101		93		70-130	8		30
1,1-Dichloroethane	111		101		70-130	9		30
Chloroform	108		98		70-130	10		30
Carbon tetrachloride	114		101		70-130	12		30
1,2-Dichloropropane	107		100		70-130	7		30
Dibromochloromethane	102		95		70-130	7		30
2-Chloroethylvinyl ether	27		26			4		30
1,1,2-Trichloroethane	107		101		70-130	6		30
Tetrachloroethene	101		92		70-130	9		30
Chlorobenzene	104		97		70-130	7		30
Trichlorofluoromethane	113		100		70-139	12		30
1,2-Dichloroethane	113		106		70-130	6		30
1,1,1-Trichloroethane	102		92		70-130	10		30
Bromodichloromethane	106		97		70-130	9		30
trans-1,3-Dichloropropene	89		84		70-130	6		30
cis-1,3-Dichloropropene	100		93		70-130	7		30
1,1-Dichloropropene	113		101		70-130	11		30
Bromoform	95		89		70-130	7		30
1,1,2,2-Tetrachloroethane	107		102		70-130	5		30
Benzene	108		98		70-130	10		30
Toluene	109		100		70-130	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-07 Batch: WG613552-1 WG613552-2								
Ethylbenzene	113		104		70-130	8		30
Chloromethane	**134**	Q	122		52-130	9		30
Bromomethane	107		99		57-147	8		30
Vinyl chloride	**137**	Q	121		67-130	12		30
Chloroethane	140		126		50-151	11		30
1,1-Dichloroethene	104		92		65-135	12		30
trans-1,2-Dichloroethene	103		94		70-130	9		30
Trichloroethene	104		94		70-130	10		30
1,2-Dichlorobenzene	101		94		70-130	7		30
1,3-Dichlorobenzene	102		94		70-130	8		30
1,4-Dichlorobenzene	101		94		70-130	7		30
Methyl tert butyl ether	79		77		66-130	3		30
p/m-Xylene	110		101		70-130	9		30
o-Xylene	110		102		70-130	8		30
cis-1,2-Dichloroethene	103		94		70-130	9		30
Dibromomethane	103		96		70-130	7		30
Styrene	108		101		70-130	7		30
Dichlorodifluoromethane	119		102		30-146	15		30
Acetone	126		130		54-140	3		30
Carbon disulfide	108		96		59-130	12		30
2-Butanone	109		109		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-07 Batch: WG613552-1 WG613552-2								
Vinyl acetate	102		98		70-130	4		30
4-Methyl-2-pentanone	97		92		70-130	5		30
1,2,3-Trichloropropane	108		103		68-130	5		30
2-Hexanone	110		108		70-130	2		30
Bromochloromethane	96		88		70-130	9		30
2,2-Dichloropropane	82		75		70-130	9		30
1,2-Dibromoethane	104		99		70-130	5		30
1,3-Dichloropropane	110		105		69-130	5		30
1,1,1,2-Tetrachloroethane	102		96		70-130	6		30
Bromobenzene	100		93		70-130	7		30
n-Butylbenzene	116		105		70-130	10		30
sec-Butylbenzene	112		102		70-130	9		30
tert-Butylbenzene	109		99		70-130	10		30
o-Chlorotoluene	112		102		70-130	9		30
p-Chlorotoluene	111		102		70-130	8		30
1,2-Dibromo-3-chloropropane	98		96		68-130	2		30
Hexachlorobutadiene	100		90		67-130	11		30
Isopropylbenzene	110		100		70-130	10		30
p-Isopropyltoluene	110		99		70-130	11		30
Naphthalene	96		89		70-130	8		30
Acrylonitrile	111		107		70-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-07 Batch: WG613552-1 WG613552-2								
Isopropyl Ether	113		107		66-130	5		30
tert-Butyl Alcohol	110		102		70-130	8		30
n-Propylbenzene	112		102		70-130	9		30
1,2,3-Trichlorobenzene	101		92		70-130	9		30
1,2,4-Trichlorobenzene	102		93		70-130	9		30
1,3,5-Trimethylbenzene	110		101		70-130	9		30
1,2,4-Trimethylbenzene	110		101		70-130	9		30
Methyl Acetate	109		105		51-146	4		30
Ethyl Acetate	115		111		70-130	4		30
Acrolein	103		98		70-130	5		30
Cyclohexane	120		106		59-142	12		30
1,4-Dioxane	98		96		65-136	2		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	107		94		50-139	13		30
1,4-Diethylbenzene	108		98		70-130	10		30
4-Ethyltoluene	111		100		70-130	10		30
1,2,4,5-Tetramethylbenzene	110		100		70-130	10		30
Tetrahydrofuran	115		110		66-130	4		30
Ethyl ether	106		98		67-130	8		30
trans-1,4-Dichloro-2-butene	118		110		70-130	7		30
Methyl cyclohexane	112		99		70-130	12		30
Ethyl-Tert-Butyl-Ether	82		80		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-07 Batch: WG613552-1 WG613552-2								
Tertiary-Amyl Methyl Ether	72		71		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	122		113		70-130
Toluene-d8	107		105		70-130
4-Bromofluorobenzene	105		102		70-130
Dibromofluoromethane	109		103		70-130

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG613977-1 WG613977-2								
Methylene chloride	102		101		70-130	1		20
1,1-Dichloroethane	106		107		70-130	1		20
Chloroform	102		101		70-130	1		20
2-Chloroethylvinyl ether	104		103		70-130	1		20
Carbon tetrachloride	91		93		63-132	2		20
1,2-Dichloropropane	102		102		70-130	0		20
Dibromochloromethane	89		90		63-130	1		20
1,1,2-Trichloroethane	102		103		70-130	1		20
Tetrachloroethene	96		93		70-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG613977-1 WG613977-2								
Chlorobenzene	102		100		75-130	2		20
Trichlorofluoromethane	130		129		62-150	1		20
1,2-Dichloroethane	111		113		70-130	2		20
1,1,1-Trichloroethane	96		96		67-130	0		20
Bromodichloromethane	101		103		67-130	2		20
trans-1,3-Dichloropropene	98		100		70-130	2		20
cis-1,3-Dichloropropene	95		97		70-130	2		20
1,1-Dichloropropene	102		100		70-130	2		20
Bromoform	103		102		54-136	1		20
1,1,2,2-Tetrachloroethane	99		99		67-130	0		20
Benzene	103		102		70-130	1		20
Toluene	102		101		70-130	1		20
Ethylbenzene	106		104		70-130	2		20
Chloromethane	128		**137**	Q	64-130	7		20
Bromomethane	**145**	Q	**151**	Q	39-139	4		20
Vinyl chloride	**152**	Q	**150**	Q	55-140	1		20
Chloroethane	**143**	Q	**145**	Q	55-138	1		20
1,1-Dichloroethene	134		131		61-145	2		20
trans-1,2-Dichloroethene	97		97		70-130	0		20
Trichloroethene	98		98		70-130	0		20
1,2-Dichlorobenzene	101		98		70-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG613977-1 WG613977-2								
1,3-Dichlorobenzene	101		99		70-130	2		20
1,4-Dichlorobenzene	100		98		70-130	2		20
Methyl tert butyl ether	95		99		63-130	4		20
p/m-Xylene	107		106		70-130	1		20
o-Xylene	108		106		70-130	2		20
cis-1,2-Dichloroethene	99		99		70-130	0		20
Dibromomethane	100		101		70-130	1		20
1,2,3-Trichloropropane	103		101		64-130	2		20
Acrylonitrile	103		107		70-130	4		20
Isopropyl Ether	114		116		70-130	2		20
tert-Butyl Alcohol	110		119		70-130	8		20
Styrene	111		109		70-130	2		20
Dichlorodifluoromethane	111		107		36-147	4		20
Acetone	147		**150**	Q	58-148	2		20
Carbon disulfide	100		99		51-130	1		20
2-Butanone	106		110		63-138	4		20
Vinyl acetate	87		92		70-130	6		20
4-Methyl-2-pentanone	95		100		59-130	5		20
2-Hexanone	102		104		57-130	2		20
Bromochloromethane	102		101		70-130	1		20
2,2-Dichloropropane	85		86		63-133	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG613977-1 WG613977-2								
1,2-Dibromoethane	94		94		70-130	0		20
1,3-Dichloropropane	103		102		70-130	1		20
1,1,1,2-Tetrachloroethane	99		100		64-130	1		20
Bromobenzene	99		96		70-130	3		20
n-Butylbenzene	105		105		53-136	0		20
sec-Butylbenzene	104		103		70-130	1		20
tert-Butylbenzene	103		100		70-130	3		20
o-Chlorotoluene	111		108		70-130	3		20
p-Chlorotoluene	106		105		70-130	1		20
1,2-Dibromo-3-chloropropane	89		96		41-144	8		20
Hexachlorobutadiene	90		91		63-130	1		20
Isopropylbenzene	106		104		70-130	2		20
p-Isopropyltoluene	102		101		70-130	1		20
Naphthalene	90		93		70-130	3		20
n-Propylbenzene	106		103		69-130	3		20
1,2,3-Trichlorobenzene	91		91		70-130	0		20
1,2,4-Trichlorobenzene	90		91		70-130	1		20
1,3,5-Trimethylbenzene	108		105		64-130	3		20
1,2,4-Trimethylbenzene	104		101		70-130	3		20
Methyl Acetate	118		119		70-130	1		20
Ethyl Acetate	112		111		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG613977-1 WG613977-2								
Cyclohexane	101		100		70-130	1		20
Ethyl-Tert-Butyl-Ether	97		101		70-130	4		20
Tertiary-Amyl Methyl Ether	93		96		66-130	3		20
1,4-Dioxane	100		102		56-162	2		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	130		126		70-130	3		20
1,4-Diethylbenzene	104		102		70-130	2		20
4-Ethyltoluene	105		102		70-130	3		20
1,2,4,5-Tetramethylbenzene	99		99		70-130	0		20
Ethyl ether	134		**137**	Q	59-134	2		20
trans-1,4-Dichloro-2-butene	99		101		70-130	2		20
Methyl cyclohexane	96		94		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	109		112		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	101		100		70-130
Dibromofluoromethane	99		100		70-130

SEMIVOLATILES

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-01	Date Collected:	06/05/13 08:32
Client ID:	SB5 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 08:31
Analytical Date:	06/10/13 14:33		
Analyst:	JB		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	39.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	61.	1
Hexachlorobenzene	ND		ug/kg	110	35.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	52.	1
2-Chloronaphthalene	ND		ug/kg	190	61.	1
1,2-Dichlorobenzene	ND		ug/kg	190	62.	1
1,3-Dichlorobenzene	ND		ug/kg	190	59.	1
1,4-Dichlorobenzene	ND		ug/kg	190	57.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	40.	1
2,6-Dinitrotoluene	ND		ug/kg	190	48.	1
Fluoranthene	ND		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	57.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	43.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	66.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	57.	1
Hexachlorobutadiene	ND		ug/kg	190	53.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	120	1
Hexachloroethane	ND		ug/kg	150	34.	1
Isophorone	ND		ug/kg	170	50.	1
Naphthalene	ND		ug/kg	190	62.	1
Nitrobenzene	ND		ug/kg	170	45.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	39.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	56.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	49.	1
Butyl benzyl phthalate	ND		ug/kg	190	37.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	46.	1
Diethyl phthalate	ND		ug/kg	190	40.	1
Dimethyl phthalate	ND		ug/kg	190	48.	1
Benzo(a)anthracene	ND		ug/kg	110	37.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-01 Date Collected: 06/05/13 08:32

Client ID: SB5 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	38.	1
Benzo(k)fluoranthene	ND		ug/kg	110	36.	1
Chrysene	ND		ug/kg	110	37.	1
Acenaphthylene	ND		ug/kg	150	35.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	39.	1
Fluorene	ND		ug/kg	190	54.	1
Phenanthrene	ND		ug/kg	110	37.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	42.	1
Pyrene	ND		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	430	62.	1
4-Chloroaniline	ND		ug/kg	190	49.	1
2-Nitroaniline	ND		ug/kg	190	53.	1
3-Nitroaniline	ND		ug/kg	190	52.	1
4-Nitroaniline	ND		ug/kg	190	51.	1
Dibenzofuran	ND		ug/kg	190	62.	1
2-Methylnaphthalene	ND		ug/kg	220	60.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	58.	1
Acetophenone	ND		ug/kg	190	58.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
P-Chloro-M-Cresol	ND		ug/kg	190	54.	1
2-Chlorophenol	ND		ug/kg	190	57.	1
2,4-Dichlorophenol	ND		ug/kg	170	61.	1
2,4-Dimethylphenol	ND		ug/kg	190	56.	1
2-Nitrophenol	ND		ug/kg	400	58.	1
4-Nitrophenol	ND		ug/kg	260	61.	1
2,4-Dinitrophenol	ND		ug/kg	900	260	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	69.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	190	55.	1
2-Methylphenol	ND		ug/kg	190	60.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	61.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	61.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	40.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-01 Date Collected: 06/05/13 08:32

Client ID: SB5 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	76		0-136
4-Terphenyl-d14	89		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-02	Date Collected:	06/05/13 08:45
Client ID:	SB5 (8-10')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 08:31
Analytical Date:	06/10/13 15:00		
Analyst:	JB		
Percent Solids:	92%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	37.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	58.	1
Hexachlorobenzene	ND		ug/kg	110	33.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	50.	1
2-Chloronaphthalene	ND		ug/kg	180	58.	1
1,2-Dichlorobenzene	ND		ug/kg	180	59.	1
1,3-Dichlorobenzene	ND		ug/kg	180	56.	1
1,4-Dichlorobenzene	ND		ug/kg	180	54.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	38.	1
2,6-Dinitrotoluene	ND		ug/kg	180	46.	1
Fluoranthene	ND		ug/kg	110	33.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	54.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	41.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	63.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	54.	1
Hexachlorobutadiene	ND		ug/kg	180	50.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	110	1
Hexachloroethane	ND		ug/kg	140	32.	1
Isophorone	ND		ug/kg	160	48.	1
Naphthalene	ND		ug/kg	180	59.	1
Nitrobenzene	ND		ug/kg	160	42.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	38.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	53.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	47.	1
Butyl benzyl phthalate	ND		ug/kg	180	35.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	44.	1
Diethyl phthalate	ND		ug/kg	180	38.	1
Dimethyl phthalate	ND		ug/kg	180	45.	1
Benzo(a)anthracene	ND		ug/kg	110	35.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-02 Date Collected: 06/05/13 08:45

Client ID: SB5 (8-10') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	36.	1
Benzo(k)fluoranthene	ND		ug/kg	110	34.	1
Chrysene	ND		ug/kg	110	35.	1
Acenaphthylene	ND		ug/kg	140	33.	1
Anthracene	ND		ug/kg	110	30.	1
Benzo(ghi)perylene	ND		ug/kg	140	37.	1
Fluorene	ND		ug/kg	180	51.	1
Phenanthrene	ND		ug/kg	110	35.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	34.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	40.	1
Pyrene	ND		ug/kg	110	35.	1
Biphenyl	ND		ug/kg	410	59.	1
4-Chloroaniline	ND		ug/kg	180	47.	1
2-Nitroaniline	ND		ug/kg	180	50.	1
3-Nitroaniline	ND		ug/kg	180	49.	1
4-Nitroaniline	ND		ug/kg	180	48.	1
Dibenzofuran	ND		ug/kg	180	60.	1
2-Methylnaphthalene	ND		ug/kg	210	57.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	55.	1
Acetophenone	ND		ug/kg	180	55.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
P-Chloro-M-Cresol	ND		ug/kg	180	52.	1
2-Chlorophenol	ND		ug/kg	180	54.	1
2,4-Dichlorophenol	ND		ug/kg	160	58.	1
2,4-Dimethylphenol	ND		ug/kg	180	53.	1
2-Nitrophenol	ND		ug/kg	380	56.	1
4-Nitrophenol	ND		ug/kg	250	58.	1
2,4-Dinitrophenol	ND		ug/kg	860	240	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	65.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	180	53.	1
2-Methylphenol	ND		ug/kg	180	58.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	58.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	58.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ug/kg	180	38.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-02 Date Collected: 06/05/13 08:45

Client ID: SB5 (8-10') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	84		0-136
4-Terphenyl-d14	85		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-03	Date Collected:	06/05/13 09:55
Client ID:	SB4 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 08:31
Analytical Date:	06/10/13 15:27		
Analyst:	JB		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	60.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	52.	1
2-Chloronaphthalene	ND		ug/kg	180	60.	1
1,2-Dichlorobenzene	ND		ug/kg	180	61.	1
1,3-Dichlorobenzene	ND		ug/kg	180	58.	1
1,4-Dichlorobenzene	ND		ug/kg	180	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	40.	1
2,6-Dinitrotoluene	ND		ug/kg	180	47.	1
Fluoranthene	ND		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	56.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	65.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	56.	1
Hexachlorobutadiene	ND		ug/kg	180	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	120	1
Hexachloroethane	ND		ug/kg	150	34.	1
Isophorone	ND		ug/kg	170	49.	1
Naphthalene	ND		ug/kg	180	61.	1
Nitrobenzene	ND		ug/kg	170	44.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	39.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	55.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	48.	1
Butyl benzyl phthalate	ND		ug/kg	180	36.	1
Di-n-butylphthalate	ND		ug/kg	180	36.	1
Di-n-octylphthalate	ND		ug/kg	180	45.	1
Diethyl phthalate	ND		ug/kg	180	39.	1
Dimethyl phthalate	ND		ug/kg	180	47.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-03 Date Collected: 06/05/13 09:55

Client ID: SB4 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	37.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	ND		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	150	34.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	38.	1
Fluorene	ND		ug/kg	180	53.	1
Phenanthrene	ND		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	41.	1
Pyrene	ND		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	420	61.	1
4-Chloroaniline	ND		ug/kg	180	49.	1
2-Nitroaniline	ND		ug/kg	180	52.	1
3-Nitroaniline	ND		ug/kg	180	51.	1
4-Nitroaniline	ND		ug/kg	180	50.	1
Dibenzofuran	ND		ug/kg	180	62.	1
2-Methylnaphthalene	ND		ug/kg	220	59.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	57.	1
Acetophenone	ND		ug/kg	180	57.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
P-Chloro-M-Cresol	ND		ug/kg	180	54.	1
2-Chlorophenol	ND		ug/kg	180	56.	1
2,4-Dichlorophenol	ND		ug/kg	170	60.	1
2,4-Dimethylphenol	ND		ug/kg	180	55.	1
2-Nitrophenol	ND		ug/kg	400	58.	1
4-Nitrophenol	ND		ug/kg	260	60.	1
2,4-Dinitrophenol	ND		ug/kg	890	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	68.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	55.	1
2-Methylphenol	ND		ug/kg	180	59.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	60.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	60.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	ND		ug/kg	180	40.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-03 Date Collected: 06/05/13 09:55

Client ID: SB4 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	99		0-136
4-Terphenyl-d14	95		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-04	Date Collected:	06/05/13 10:00
Client ID:	SB4 (8-10')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 08:32
Analytical Date:	06/10/13 15:54		
Analyst:	JB		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	61.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	52.	1
2-Chloronaphthalene	ND		ug/kg	180	60.	1
1,2-Dichlorobenzene	ND		ug/kg	180	61.	1
1,3-Dichlorobenzene	ND		ug/kg	180	58.	1
1,4-Dichlorobenzene	ND		ug/kg	180	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	40.	1
2,6-Dinitrotoluene	ND		ug/kg	180	47.	1
Fluoranthene	ND		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	56.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	43.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	65.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	56.	1
Hexachlorobutadiene	ND		ug/kg	180	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	120	1
Hexachloroethane	ND		ug/kg	150	34.	1
Isophorone	ND		ug/kg	170	49.	1
Naphthalene	ND		ug/kg	180	62.	1
Nitrobenzene	ND		ug/kg	170	44.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	39.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	55.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	48.	1
Butyl benzyl phthalate	ND		ug/kg	180	36.	1
Di-n-butylphthalate	ND		ug/kg	180	36.	1
Di-n-octylphthalate	ND		ug/kg	180	46.	1
Diethyl phthalate	ND		ug/kg	180	39.	1
Dimethyl phthalate	ND		ug/kg	180	47.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-04 Date Collected: 06/05/13 10:00

Client ID: SB4 (8-10') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	37.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	ND		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	150	35.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	38.	1
Fluorene	ND		ug/kg	180	53.	1
Phenanthrene	ND		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	41.	1
Pyrene	ND		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	420	61.	1
4-Chloroaniline	ND		ug/kg	180	49.	1
2-Nitroaniline	ND		ug/kg	180	52.	1
3-Nitroaniline	ND		ug/kg	180	51.	1
4-Nitroaniline	ND		ug/kg	180	50.	1
Dibenzofuran	ND		ug/kg	180	62.	1
2-Methylnaphthalene	ND		ug/kg	220	59.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	57.	1
Acetophenone	ND		ug/kg	180	57.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
P-Chloro-M-Cresol	ND		ug/kg	180	54.	1
2-Chlorophenol	ND		ug/kg	180	56.	1
2,4-Dichlorophenol	ND		ug/kg	170	60.	1
2,4-Dimethylphenol	ND		ug/kg	180	55.	1
2-Nitrophenol	ND		ug/kg	400	58.	1
4-Nitrophenol	ND		ug/kg	260	60.	1
2,4-Dinitrophenol	ND		ug/kg	890	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	68.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	55.	1
2-Methylphenol	ND		ug/kg	180	60.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	61.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	60.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	ND		ug/kg	180	40.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-04 Date Collected: 06/05/13 10:00

Client ID: SB4 (8-10') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	92		0-136
4-Terphenyl-d14	91		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-05	Date Collected:	06/05/13 14:07
Client ID:	SB1 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 08:32
Analytical Date:	06/10/13 16:20		
Analyst:	JB		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	39.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	62.	1
Hexachlorobenzene	ND		ug/kg	110	35.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	53.	1
2-Chloronaphthalene	ND		ug/kg	190	62.	1
1,2-Dichlorobenzene	ND		ug/kg	190	62.	1
1,3-Dichlorobenzene	ND		ug/kg	190	60.	1
1,4-Dichlorobenzene	ND		ug/kg	190	57.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	41.	1
2,6-Dinitrotoluene	ND		ug/kg	190	48.	1
Fluoranthene	ND		ug/kg	110	35.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	58.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	43.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	66.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	57.	1
Hexachlorobutadiene	ND		ug/kg	190	53.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	120	1
Hexachloroethane	ND		ug/kg	150	34.	1
Isophorone	ND		ug/kg	170	50.	1
Naphthalene	ND		ug/kg	190	63.	1
Nitrobenzene	ND		ug/kg	170	45.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	40.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	56.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	50.	1
Butyl benzyl phthalate	ND		ug/kg	190	37.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	46.	1
Diethyl phthalate	ND		ug/kg	190	40.	1
Dimethyl phthalate	ND		ug/kg	190	48.	1
Benzo(a)anthracene	ND		ug/kg	110	37.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-05 Date Collected: 06/05/13 14:07

Client ID: SB1 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	38.	1
Benzo(k)fluoranthene	ND		ug/kg	110	36.	1
Chrysene	ND		ug/kg	110	37.	1
Acenaphthylene	ND		ug/kg	150	35.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	39.	1
Fluorene	ND		ug/kg	190	54.	1
Phenanthrene	ND		ug/kg	110	37.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	42.	1
Pyrene	ND		ug/kg	110	37.	1
Biphenyl	ND		ug/kg	430	62.	1
4-Chloroaniline	ND		ug/kg	190	50.	1
2-Nitroaniline	ND		ug/kg	190	53.	1
3-Nitroaniline	ND		ug/kg	190	52.	1
4-Nitroaniline	ND		ug/kg	190	51.	1
Dibenzofuran	ND		ug/kg	190	63.	1
2-Methylnaphthalene	ND		ug/kg	230	60.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	58.	1
Acetophenone	ND		ug/kg	190	58.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
P-Chloro-M-Cresol	ND		ug/kg	190	55.	1
2-Chlorophenol	ND		ug/kg	190	57.	1
2,4-Dichlorophenol	ND		ug/kg	170	61.	1
2,4-Dimethylphenol	ND		ug/kg	190	56.	1
2-Nitrophenol	ND		ug/kg	410	59.	1
4-Nitrophenol	ND		ug/kg	260	61.	1
2,4-Dinitrophenol	ND		ug/kg	910	260	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	69.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	190	56.	1
2-Methylphenol	ND		ug/kg	190	61.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	62.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	61.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	41.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-05 Date Collected: 06/05/13 14:07

Client ID: SB1 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	89		0-136
4-Terphenyl-d14	92		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-06	Date Collected:	06/05/13 14:43
Client ID:	SB6 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 08:32
Analytical Date:	06/10/13 16:48		
Analyst:	JB		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	61.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	52.	1
2-Chloronaphthalene	ND		ug/kg	180	60.	1
1,2-Dichlorobenzene	ND		ug/kg	180	61.	1
1,3-Dichlorobenzene	ND		ug/kg	180	58.	1
1,4-Dichlorobenzene	ND		ug/kg	180	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	40.	1
2,6-Dinitrotoluene	ND		ug/kg	180	47.	1
Fluoranthene	ND		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	56.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	43.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	65.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	56.	1
Hexachlorobutadiene	ND		ug/kg	180	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	120	1
Hexachloroethane	ND		ug/kg	150	34.	1
Isophorone	ND		ug/kg	170	49.	1
Naphthalene	ND		ug/kg	180	62.	1
Nitrobenzene	ND		ug/kg	170	44.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	39.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	55.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	49.	1
Butyl benzyl phthalate	ND		ug/kg	180	36.	1
Di-n-butylphthalate	ND		ug/kg	180	36.	1
Di-n-octylphthalate	ND		ug/kg	180	46.	1
Diethyl phthalate	ND		ug/kg	180	39.	1
Dimethyl phthalate	ND		ug/kg	180	47.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-06 Date Collected: 06/05/13 14:43

Client ID: SB6 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	37.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	ND		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	150	35.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	38.	1
Fluorene	ND		ug/kg	180	53.	1
Phenanthrene	ND		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	41.	1
Pyrene	ND		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	420	61.	1
4-Chloroaniline	ND		ug/kg	180	49.	1
2-Nitroaniline	ND		ug/kg	180	52.	1
3-Nitroaniline	ND		ug/kg	180	51.	1
4-Nitroaniline	ND		ug/kg	180	50.	1
Dibenzofuran	ND		ug/kg	180	62.	1
2-Methylnaphthalene	ND		ug/kg	220	59.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	57.	1
Acetophenone	ND		ug/kg	180	58.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
P-Chloro-M-Cresol	ND		ug/kg	180	54.	1
2-Chlorophenol	ND		ug/kg	180	56.	1
2,4-Dichlorophenol	ND		ug/kg	170	60.	1
2,4-Dimethylphenol	ND		ug/kg	180	55.	1
2-Nitrophenol	ND		ug/kg	400	58.	1
4-Nitrophenol	ND		ug/kg	260	60.	1
2,4-Dinitrophenol	ND		ug/kg	890	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	68.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	55.	1
2-Methylphenol	ND		ug/kg	180	60.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	61.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	60.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	ND		ug/kg	180	40.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-06 Date Collected: 06/05/13 14:43

Client ID: SB6 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	88		0-136
4-Terphenyl-d14	84		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-07	Date Collected:	06/05/13 00:00
Client ID:	BLIND DUP 01	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/06/13 08:32
Analytical Date:	06/10/13 17:14		
Analyst:	JB		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	60.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	52.	1
2-Chloronaphthalene	ND		ug/kg	180	60.	1
1,2-Dichlorobenzene	ND		ug/kg	180	60.	1
1,3-Dichlorobenzene	ND		ug/kg	180	58.	1
1,4-Dichlorobenzene	ND		ug/kg	180	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	40.	1
2,6-Dinitrotoluene	ND		ug/kg	180	47.	1
Fluoranthene	ND		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	56.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	65.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	56.	1
Hexachlorobutadiene	ND		ug/kg	180	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	120	1
Hexachloroethane	ND		ug/kg	150	34.	1
Isophorone	ND		ug/kg	170	49.	1
Naphthalene	ND		ug/kg	180	61.	1
Nitrobenzene	ND		ug/kg	170	44.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	39.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	55.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	48.	1
Butyl benzyl phthalate	ND		ug/kg	180	36.	1
Di-n-butylphthalate	ND		ug/kg	180	36.	1
Di-n-octylphthalate	ND		ug/kg	180	45.	1
Diethyl phthalate	ND		ug/kg	180	39.	1
Dimethyl phthalate	ND		ug/kg	180	47.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-07 Date Collected: 06/05/13 00:00

Client ID: BLIND DUP 01 Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	37.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	ND		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	150	34.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	38.	1
Fluorene	ND		ug/kg	180	53.	1
Phenanthrene	ND		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	41.	1
Pyrene	ND		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	420	61.	1
4-Chloroaniline	ND		ug/kg	180	49.	1
2-Nitroaniline	ND		ug/kg	180	52.	1
3-Nitroaniline	ND		ug/kg	180	51.	1
4-Nitroaniline	ND		ug/kg	180	50.	1
Dibenzofuran	ND		ug/kg	180	62.	1
2-Methylnaphthalene	ND		ug/kg	220	59.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	57.	1
Acetophenone	ND		ug/kg	180	57.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
P-Chloro-M-Cresol	ND		ug/kg	180	54.	1
2-Chlorophenol	ND		ug/kg	180	56.	1
2,4-Dichlorophenol	ND		ug/kg	170	60.	1
2,4-Dimethylphenol	ND		ug/kg	180	55.	1
2-Nitrophenol	ND		ug/kg	400	58.	1
4-Nitrophenol	ND		ug/kg	260	60.	1
2,4-Dinitrophenol	ND		ug/kg	890	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	68.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	55.	1
2-Methylphenol	ND		ug/kg	180	59.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	60.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	60.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	ND		ug/kg	180	40.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-07 Date Collected: 06/05/13 00:00

Client ID: BLIND DUP 01 Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	95		0-136
4-Terphenyl-d14	84		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-08	Date Collected:	06/05/13 15:50
Client ID:	FB01	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	06/09/13 09:29
Analytical Date:	06/10/13 21:00		
Analyst:	RC		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-08 Date Collected: 06/05/13 15:50

Client ID: FB01 Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	94		41-149

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-08	Date Collected:	06/05/13 15:50
Client ID:	FB01	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	06/09/13 09:29
Analytical Date:	06/10/13 12:58		
Analyst:	AS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	0.12	J	ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	71		41-149

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/07/13 10:50
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 06/06/13 08:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG613065-1					
Acenaphthene	ND		ug/kg	130	34.
1,2,4-Trichlorobenzene	ND		ug/kg	160	54.
Hexachlorobenzene	ND		ug/kg	99	31.
Bis(2-chloroethyl)ether	ND		ug/kg	150	46.
2-Chloronaphthalene	ND		ug/kg	160	54.
1,2-Dichlorobenzene	ND		ug/kg	160	54.
1,3-Dichlorobenzene	ND		ug/kg	160	52.
1,4-Dichlorobenzene	ND		ug/kg	160	50.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	36.
2,6-Dinitrotoluene	ND		ug/kg	160	42.
Fluoranthene	ND		ug/kg	99	30.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	50.
4-Bromophenyl phenyl ether	ND		ug/kg	160	38.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	58.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	50.
Hexachlorobutadiene	ND		ug/kg	160	47.
Hexachlorocyclopentadiene	ND		ug/kg	470	110
Hexachloroethane	ND		ug/kg	130	30.
Isophorone	ND		ug/kg	150	44.
Naphthalene	ND		ug/kg	160	55.
Nitrobenzene	ND		ug/kg	150	39.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	35.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	49.
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	160	43.
Butyl benzyl phthalate	ND		ug/kg	160	32.
Di-n-butylphthalate	ND		ug/kg	160	32.
Di-n-octylphthalate	ND		ug/kg	160	41.
Diethyl phthalate	ND		ug/kg	160	35.
Dimethyl phthalate	ND		ug/kg	160	42.
Benzo(a)anthracene	ND		ug/kg	99	32.

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/07/13 10:50
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 06/06/13 08:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG613065-1					
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	33.
Benzo(k)fluoranthene	ND		ug/kg	99	32.
Chrysene	ND		ug/kg	99	32.
Acenaphthylene	ND		ug/kg	130	31.
Anthracene	ND		ug/kg	99	28.
Benzo(ghi)perylene	ND		ug/kg	130	34.
Fluorene	ND		ug/kg	160	47.
Phenanthrene	ND		ug/kg	99	32.
Dibenzo(a,h)anthracene	ND		ug/kg	99	32.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	37.
Pyrene	ND		ug/kg	99	32.
Biphenyl	ND		ug/kg	380	54.
4-Chloroaniline	ND		ug/kg	160	44.
2-Nitroaniline	ND		ug/kg	160	47.
3-Nitroaniline	ND		ug/kg	160	46.
4-Nitroaniline	ND		ug/kg	160	45.
Dibenzofuran	ND		ug/kg	160	55.
2-Methylnaphthalene	ND		ug/kg	200	53.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	51.
Acetophenone	ND		ug/kg	160	51.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
P-Chloro-M-Cresol	ND		ug/kg	160	48.
2-Chlorophenol	ND		ug/kg	160	50.
2,4-Dichlorophenol	ND		ug/kg	150	54.
2,4-Dimethylphenol	ND		ug/kg	160	49.
2-Nitrophenol	ND		ug/kg	360	52.
4-Nitrophenol	ND		ug/kg	230	54.
2,4-Dinitrophenol	ND		ug/kg	790	230
4,6-Dinitro-o-cresol	ND		ug/kg	430	60.
Pentachlorophenol	ND		ug/kg	130	35.

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/07/13 10:50
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 06/06/13 08:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG613065-1					
Phenol	ND		ug/kg	160	49.
2-Methylphenol	ND		ug/kg	160	53.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	54.
2,4,5-Trichlorophenol	ND		ug/kg	160	54.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	51.
Carbazole	ND		ug/kg	160	36.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	79		0-136
4-Terphenyl-d14	96		18-120

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/10/13 18:42
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 06/09/13 09:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG613718-1					
Acenaphthene	ND		ug/l	2.0	0.55
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67
Hexachlorobenzene	ND		ug/l	2.0	0.65
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chloronaphthalene	ND		ug/l	2.0	0.47
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46
Fluoranthene	ND		ug/l	2.0	0.51
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40
Hexachlorobutadiene	ND		ug/l	2.0	0.81
Hexachlorocyclopentadiene	ND		ug/l	20	2.1
Hexachloroethane	ND		ug/l	2.0	0.66
Isophorone	ND		ug/l	5.0	0.35
Naphthalene	ND		ug/l	2.0	0.72
Nitrobenzene	ND		ug/l	2.0	0.50
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Butyl benzyl phthalate	ND		ug/l	5.0	0.46
Di-n-butylphthalate	ND		ug/l	5.0	0.54
Di-n-octylphthalate	ND		ug/l	5.0	0.53
Diethyl phthalate	ND		ug/l	5.0	0.45
Dimethyl phthalate	ND		ug/l	5.0	0.45
Benzo(a)anthracene	ND		ug/l	2.0	0.82

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/10/13 18:42
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 06/09/13 09:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG613718-1					
Benzo(a)pyrene	ND		ug/l	2.0	0.48
Benzo(b)fluoranthene	ND		ug/l	2.0	0.48
Benzo(k)fluoranthene	ND		ug/l	2.0	0.48
Chrysene	ND		ug/l	2.0	0.56
Acenaphthylene	ND		ug/l	2.0	0.50
Anthracene	ND		ug/l	2.0	0.47
Benzo(ghi)perylene	ND		ug/l	2.0	0.53
Fluorene	ND		ug/l	2.0	0.49
Phenanthrene	ND		ug/l	2.0	0.49
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.48
Indeno(1,2,3-cd)Pyrene	ND		ug/l	2.0	0.48
Pyrene	ND		ug/l	2.0	0.44
Biphenyl	ND		ug/l	2.0	0.50
4-Chloroaniline	ND		ug/l	5.0	0.83
2-Nitroaniline	ND		ug/l	5.0	0.40
3-Nitroaniline	ND		ug/l	5.0	0.59
4-Nitroaniline	ND		ug/l	5.0	0.55
Dibenzofuran	ND		ug/l	2.0	0.47
2-Methylnaphthalene	ND		ug/l	2.0	0.55
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65
Acetophenone	ND		ug/l	5.0	0.55
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.34
2,4-Dichlorophenol	ND		ug/l	5.0	0.43
2,4-Dimethylphenol	ND		ug/l	5.0	1.2
2-Nitrophenol	ND		ug/l	10	0.48
4-Nitrophenol	ND		ug/l	10	1.2
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59
Pentachlorophenol	ND		ug/l	10	1.2

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/10/13 18:42
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 06/09/13 09:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG613718-1					
Phenol	ND		ug/l	5.0	0.26
2-Methylphenol	ND		ug/l	5.0	0.53
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.53
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	80		41-149

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 06/10/13 11:45
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 06/09/13 09:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 08 Batch: WG613719-1					
Acenaphthene	ND		ug/l	0.20	0.06
2-Chloronaphthalene	ND		ug/l	0.20	0.07
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.20	0.06
Benzo(a)anthracene	ND		ug/l	0.20	0.06
Benzo(a)pyrene	ND		ug/l	0.20	0.07
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07
Chrysene	ND		ug/l	0.20	0.05
Acenaphthylene	ND		ug/l	0.20	0.05
Anthracene	ND		ug/l	0.20	0.06
Benzo(ghi)perylene	ND		ug/l	0.20	0.07
Fluorene	ND		ug/l	0.20	0.06
Phenanthrene	ND		ug/l	0.20	0.06
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08
Pyrene	ND		ug/l	0.20	0.06
2-Methylnaphthalene	ND		ug/l	0.20	0.06
Pentachlorophenol	ND		ug/l	0.80	0.19
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.07

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 06/10/13 11:45
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 06/09/13 09:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 08 Batch: WG613719-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	25		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	63		10-120
4-Terphenyl-d14	66		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG613065-2 WG613065-3								
Acenaphthene	92		93		31-137	1		50
1,2,4-Trichlorobenzene	84		87		38-107	4		50
Hexachlorobenzene	98		98		40-140	0		50
Bis(2-chloroethyl)ether	74		78		40-140	5		50
2-Chloronaphthalene	89		90		40-140	1		50
1,2-Dichlorobenzene	75		82		40-140	9		50
1,3-Dichlorobenzene	75		81		40-140	8		50
1,4-Dichlorobenzene	75		81		28-104	8		50
3,3'-Dichlorobenzidine	72		78		40-140	8		50
2,4-Dinitrotoluene	**95**	Q	**94**	Q	28-89	1		50
2,6-Dinitrotoluene	103		99		40-140	4		50
Fluoranthene	105		102		40-140	3		50
4-Chlorophenyl phenyl ether	95		96		40-140	1		50
4-Bromophenyl phenyl ether	100		98		40-140	2		50
Bis(2-chloroisopropyl)ether	70		75		40-140	7		50
Bis(2-chloroethoxy)methane	77		80		40-117	4		50
Hexachlorobutadiene	87		91		40-140	4		50
Hexachlorocyclopentadiene	105		108		40-140	3		50
Hexachloroethane	76		82		40-140	8		50
Isophorone	76		79		40-140	4		50
Naphthalene	85		88		40-140	3		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG613065-2 WG613065-3								
Nitrobenzene	92		96		40-140	4		50
NitrosoDiPhenylAmine(NDPA)/DPA	100		100			0		50
n-Nitrosodi-n-propylamine	81		84		32-121	4		50
Bis(2-Ethylhexyl)phthalate	106		105		40-140	1		50
Butyl benzyl phthalate	104		98		40-140	6		50
Di-n-butylphthalate	113		108		40-140	5		50
Di-n-octylphthalate	106		106		40-140	0		50
Diethyl phthalate	99		99		40-140	0		50
Dimethyl phthalate	98		96		40-140	2		50
Benzo(a)anthracene	97		98		40-140	1		50
Benzo(a)pyrene	102		101		40-140	1		50
Benzo(b)fluoranthene	88		88		40-140	0		50
Benzo(k)fluoranthene	106		106		40-140	0		50
Chrysene	98		97		40-140	1		50
Acenaphthylene	98		96		40-140	2		50
Anthracene	109		107		40-140	2		50
Benzo(ghi)perylene	99		98		40-140	1		50
Fluorene	96		96		40-140	0		50
Phenanthrene	102		99		40-140	3		50
Dibenzo(a,h)anthracene	87		86		40-140	1		50
Indeno(1,2,3-cd)Pyrene	70		68		40-140	3		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG613065-2 WG613065-3								
Pyrene	105		101		35-142	4		50
Biphenyl	87		89			2		50
4-Chloroaniline	56		61		40-140	9		50
2-Nitroaniline	94		93		47-134	1		50
3-Nitroaniline	53		60		26-129	12		50
4-Nitroaniline	90		90		41-125	0		50
Dibenzofuran	94		95		40-140	1		50
2-Methylnaphthalene	86		87		40-140	1		50
1,2,4,5-Tetrachlorobenzene	82		86		40-117	5		50
Acetophenone	77		81		14-144	5		50
2,4,6-Trichlorophenol	104		101		30-130	3		50
P-Chloro-M-Cresol	**106**	Q	**104**	Q	26-103	2		50
2-Chlorophenol	84		89		25-102	6		50
2,4-Dichlorophenol	100		101		30-130	1		50
2,4-Dimethylphenol	78		81		30-130	4		50
2-Nitrophenol	86		90		30-130	5		50
4-Nitrophenol	112		109		11-114	3		50
2,4-Dinitrophenol	107		108		4-130	1		50
4,6-Dinitro-o-cresol	104		102		10-130	2		50
Pentachlorophenol	98		96		17-109	2		50
Phenol	82		88		26-90	7		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG613065-2 WG613065-3								
2-Methylphenol	87		90		30-130.	3		50
3-Methylphenol/4-Methylphenol	91		95		30-130	4		50
2,4,5-Trichlorophenol	108		107		30-130	1		50
Benzoic Acid	52		51			2		50
Benzyl Alcohol	82		85		40-140	4		50
Carbazole	104		101		54-128	3		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	78		86		25-120
Phenol-d6	79		86		10-120
Nitrobenzene-d5	75		81		23-120
2-Fluorobiphenyl	88		90		30-120
2,4,6-Tribromophenol	98		98		0-136
4-Terphenyl-d14	98		97		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG613718-2 WG613718-3								
Acenaphthene	86		89		37-111	3		30
1,2,4-Trichlorobenzene	49		66		39-98	30		30
Hexachlorobenzene	96		95		40-140	1		30
Bis(2-chloroethyl)ether	57		74		40-140	26		30
2-Chloronaphthalene	77		88		40-140	13		30
1,2-Dichlorobenzene	44		62		40-140	**34**	Q	30
1,3-Dichlorobenzene	42		59		40-140	**34**	Q	30
1,4-Dichlorobenzene	43		62		36-97	**36**	Q	30
3,3'-Dichlorobenzidine	**12**	Q	90		40-140	**153**	Q	30
2,4-Dinitrotoluene	**110**	Q	**111**	Q	24-96	1		30
2,6-Dinitrotoluene	106		108		40-140	2		30
Fluoranthene	105		105		40-140	0		30
4-Chlorophenyl phenyl ether	92		95		40-140	3		30
4-Bromophenyl phenyl ether	100		99		40-140	1		30
Bis(2-chloroisopropyl)ether	55		69		40-140	23		30
Bis(2-chloroethoxy)methane	66		81		40-140	20		30
Hexachlorobutadiene	41		62		40-140	**41**	Q	30
Hexachlorocyclopentadiene	**27**	Q	**34**	Q	40-140	23		30
Hexachloroethane	**37**	Q	57		40-140	**43**	Q	30
Isophorone	72		86		40-140	18		30
Naphthalene	55		73		40-140	28		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG613718-2 WG613718-3								
Nitrobenzene	64		82		40-140	25		30
NitrosoDiPhenylAmine(NDPA)/DPA	91		97		40-140	6		30
n-Nitrosodi-n-propylamine	68		84		29-132	21		30
Bis(2-Ethylhexyl)phthalate	101		106		40-140	5		30
Butyl benzyl phthalate	108		110		40-140	2		30
Di-n-butylphthalate	102		104		40-140	2		30
Di-n-octylphthalate	104		110		40-140	6		30
Diethyl phthalate	102		102		40-140	0		30
Dimethyl phthalate	99		103		40-140	4		30
Benzo(a)anthracene	98		104		40-140	6		30
Benzo(a)pyrene	105		104		40-140	1		30
Benzo(b)fluoranthene	104		101		40-140	3		30
Benzo(k)fluoranthene	116		109		40-140	6		30
Chrysene	99		102		40-140	3		30
Acenaphthylene	83		92		45-123	10		30
Anthracene	98		100		40-140	2		30
Benzo(ghi)perylene	97		101		40-140	4		30
Fluorene	95		97		40-140	2		30
Phenanthrene	100		99		40-140	1		30
Dibenzo(a,h)anthracene	104		103		40-140	1		30
Indeno(1,2,3-cd)Pyrene	100		102		40-140	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG613718-2 WG613718-3								
Pyrene	102		103		26-127	1		30
Biphenyl	73		81			10		30
4-Chloroaniline	**18**	Q	72		40-140	**120**	Q	30
2-Nitroaniline	96		102		52-143	6		30
3-Nitroaniline	40		80		25-145	**67**	Q	30
4-Nitroaniline	84		110		51-143	27		30
Dibenzofuran	90		94		40-140	4		30
2-Methylnaphthalene	64		78		40-140	20		30
1,2,4,5-Tetrachlorobenzene	58		72		2-134	22		30
Acetophenone	70		89		39-129	24		30
2,4,6-Trichlorophenol	95		98		30-130	3		30
P-Chloro-M-Cresol	**99**	Q	**104**	Q	23-97	5		30
2-Chlorophenol	61		76		27-123	22		30
2,4-Dichlorophenol	85		92		30-130	8		30
2,4-Dimethylphenol	83		94		30-130	12		30
2-Nitrophenol	67		84		30-130	23		30
4-Nitrophenol	80		**89**	Q	10-80	11		30
2,4-Dinitrophenol	80		83		20-130	4		30
4,6-Dinitro-o-cresol	100		103		20-164	3		30
Pentachlorophenol	95		98		9-103	3		30
Phenol	33		42		12-110	24		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG613718-2 WG613718-3								
2-Methylphenol	61		77		30-130	23		30
3-Methylphenol/4-Methylphenol	66		74		30-130	11		30
2,4,5-Trichlorophenol	104		103		30-130	1		30
Benzoic Acid	26		25			4		30
Benzyl Alcohol	61		77			23		30
Carbazole	96		106		55-144	10		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	42		53		21-120
Phenol-d6	32		39		10-120
Nitrobenzene-d5	65		82		23-120
2-Fluorobiphenyl	79		89		15-120
2,4,6-Tribromophenol	97		99		10-120
4-Terphenyl-d14	100		100		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 08 Batch: WG613719-2 WG613719-3								
Acenaphthene	65		67		37-111	3		40
2-Chloronaphthalene	65		66		40-140	2		40
Fluoranthene	80		82		40-140	2		40
Hexachlorobutadiene	58		55		40-140	5		40
Naphthalene	62		62		40-140	0		40
Benzo(a)anthracene	75		78		40-140	4		40
Benzo(a)pyrene	69		72		40-140	4		40
Benzo(b)fluoranthene	73		74		40-140	1		40
Benzo(k)fluoranthene	82		91		40-140	10		40
Chrysene	70		72		40-140	3		40
Acenaphthylene	70		71		40-140	1		40
Anthracene	76		77		40-140	1		40
Benzo(ghi)perylene	77		78		40-140	1		40
Fluorene	78		81		40-140	4		40
Phenanthrene	70		70		40-140	0		40
Dibenzo(a,h)anthracene	78		80		40-140	3		40
Indeno(1,2,3-cd)Pyrene	78		79		40-140	1		40
Pyrene	75		78		26-127	4		40
2-Methylnaphthalene	60		60		40-140	0		40
Pentachlorophenol	78		80		9-103	3		40
Hexachlorobenzene	77		79		40-140	3		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 08 Batch: WG613719-2 WG613719-3								
Hexachloroethane	57		54		40-140	5		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	41		42		21-120
Phenol-d6	27		28		10-120
Nitrobenzene-d5	65		67		23-120
2-Fluorobiphenyl	66		69		15-120
2,4,6-Tribromophenol	72		73		10-120
4-Terphenyl-d14	77		79		41-149

PCBS

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-01	Date Collected:	06/05/13 08:32
Client ID:	SB5 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/11/13 15:19
Analytical Date:	06/12/13 10:19	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/12/13
Percent Solids:	87%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/12/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	36.2	7.15	1
Aroclor 1221	ND		ug/kg	36.2	10.9	1
Aroclor 1232	ND		ug/kg	36.2	7.69	1
Aroclor 1242	ND		ug/kg	36.2	6.87	1
Aroclor 1248	ND		ug/kg	36.2	4.38	1
Aroclor 1254	ND		ug/kg	36.2	5.71	1
Aroclor 1260	ND		ug/kg	36.2	6.28	1
Aroclor 1262	ND		ug/kg	36.2	2.68	1
Aroclor 1268	ND		ug/kg	36.2	5.25	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	62		30-150
Decachlorobiphenyl	**27**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	68		30-150
Decachlorobiphenyl	43		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-02	Date Collected:	06/05/13 08:45
Client ID:	SB5 (8-10')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/11/13 15:19
Analytical Date:	06/12/13 10:34	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/12/13
Percent Solids:	92%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/12/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.3	6.97	1
Aroclor 1221	ND		ug/kg	35.3	10.6	1
Aroclor 1232	ND		ug/kg	35.3	7.50	1
Aroclor 1242	ND		ug/kg	35.3	6.70	1
Aroclor 1248	ND		ug/kg	35.3	4.27	1
Aroclor 1254	ND		ug/kg	35.3	5.56	1
Aroclor 1260	ND		ug/kg	35.3	6.12	1
Aroclor 1262	ND		ug/kg	35.3	2.61	1
Aroclor 1268	ND		ug/kg	35.3	5.12	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	31		30-150
2,4,5,6-Tetrachloro-m-xylene	85		30-150
Decachlorobiphenyl	47		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-03	Date Collected:	06/05/13 09:55
Client ID:	SB4 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/11/13 15:19
Analytical Date:	06/12/13 10:48	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/12/13
Percent Solids:	88%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/12/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.5	7.02	1
Aroclor 1221	ND		ug/kg	35.5	10.7	1
Aroclor 1232	ND		ug/kg	35.5	7.55	1
Aroclor 1242	ND		ug/kg	35.5	6.74	1
Aroclor 1248	ND		ug/kg	35.5	4.30	1
Aroclor 1254	ND		ug/kg	35.5	5.60	1
Aroclor 1260	ND		ug/kg	35.5	6.17	1
Aroclor 1262	ND		ug/kg	35.5	2.63	1
Aroclor 1268	ND		ug/kg	35.5	5.15	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	57		30-150
Decachlorobiphenyl	**23**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	63		30-150
Decachlorobiphenyl	35		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-04	Date Collected:	06/05/13 10:00
Client ID:	SB4 (8-10')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/11/13 15:19
Analytical Date:	06/12/13 11:03	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/12/13
Percent Solids:	88%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/12/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.9	7.10	1
Aroclor 1221	ND		ug/kg	35.9	10.8	1
Aroclor 1232	ND		ug/kg	35.9	7.63	1
Aroclor 1242	ND		ug/kg	35.9	6.82	1
Aroclor 1248	ND		ug/kg	35.9	4.35	1
Aroclor 1254	ND		ug/kg	35.9	5.67	1
Aroclor 1260	ND		ug/kg	35.9	6.24	1
Aroclor 1262	ND		ug/kg	35.9	2.66	1
Aroclor 1268	ND		ug/kg	35.9	5.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	77		30-150
Decachlorobiphenyl	37		30-150
2,4,5,6-Tetrachloro-m-xylene	88		30-150
Decachlorobiphenyl	53		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-05	Date Collected:	06/05/13 14:07
Client ID:	SB1 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/11/13 15:19
Analytical Date:	06/12/13 11:18	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/12/13
Percent Solids:	87%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/12/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	37.0	7.31	1
Aroclor 1221	ND		ug/kg	37.0	11.2	1
Aroclor 1232	ND		ug/kg	37.0	7.86	1
Aroclor 1242	ND		ug/kg	37.0	7.03	1
Aroclor 1248	ND		ug/kg	37.0	4.48	1
Aroclor 1254	ND		ug/kg	37.0	5.84	1
Aroclor 1260	ND		ug/kg	37.0	6.42	1
Aroclor 1262	ND		ug/kg	37.0	2.74	1
Aroclor 1268	ND		ug/kg	37.0	5.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	87		30-150
Decachlorobiphenyl	41		30-150
2,4,5,6-Tetrachloro-m-xylene	93		30-150
Decachlorobiphenyl	58		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-06	Date Collected:	06/05/13 14:43
Client ID:	SB6 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/11/13 15:19
Analytical Date:	06/12/13 11:32	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/12/13
Percent Solids:	89%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/12/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	36.1	7.14	1
Aroclor 1221	ND		ug/kg	36.1	10.9	1
Aroclor 1232	ND		ug/kg	36.1	7.67	1
Aroclor 1242	ND		ug/kg	36.1	6.86	1
Aroclor 1248	ND		ug/kg	36.1	4.37	1
Aroclor 1254	ND		ug/kg	36.1	5.70	1
Aroclor 1260	ND		ug/kg	36.1	6.27	1
Aroclor 1262	ND		ug/kg	36.1	2.67	1
Aroclor 1268	ND		ug/kg	36.1	5.24	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	81		30-150
Decachlorobiphenyl	41		30-150
2,4,5,6-Tetrachloro-m-xylene	91		30-150
Decachlorobiphenyl	59		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-07	Date Collected:	06/05/13 00:00
Client ID:	BLIND DUP 01	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/11/13 15:19
Analytical Date:	06/12/13 11:47	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/12/13
Percent Solids:	88%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/12/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.9	7.08	1
Aroclor 1221	ND		ug/kg	35.9	10.8	1
Aroclor 1232	ND		ug/kg	35.9	7.62	1
Aroclor 1242	ND		ug/kg	35.9	6.81	1
Aroclor 1248	ND		ug/kg	35.9	4.34	1
Aroclor 1254	ND		ug/kg	35.9	5.65	1
Aroclor 1260	ND		ug/kg	35.9	6.22	1
Aroclor 1262	ND		ug/kg	35.9	2.65	1
Aroclor 1268	ND		ug/kg	35.9	5.20	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	44		30-150
2,4,5,6-Tetrachloro-m-xylene	80		30-150
Decachlorobiphenyl	56		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-08	Date Collected:	06/05/13 15:50
Client ID:	FB01	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8082A	Extraction Date:	06/08/13 11:26
Analytical Date:	06/10/13 13:13	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/09/13
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/09/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.083	0.055	1
Aroclor 1221	ND		ug/l	0.083	0.053	1
Aroclor 1232	ND		ug/l	0.083	0.031	1
Aroclor 1242	ND		ug/l	0.083	0.060	1
Aroclor 1248	ND		ug/l	0.083	0.051	1
Aroclor 1254	ND		ug/l	0.083	0.034	1
Aroclor 1260	ND		ug/l	0.083	0.032	1
Aroclor 1262	ND		ug/l	0.083	0.029	1
Aroclor 1268	ND		ug/l	0.083	0.038	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	66		30-150
Decachlorobiphenyl	42		30-150
2,4,5,6-Tetrachloro-m-xylene	69		30-150
Decachlorobiphenyl	45		30-150

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/10/13 15:02
Analyst: KB

Extraction Method: EPA 3510C
Extraction Date: 06/08/13 11:26
Cleanup Method1: EPA 3665A
Cleanup Date1: 06/09/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 06/09/13

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 08 Batch: WG613664-1					
Aroclor 1016	ND		ug/l	0.083	0.055
Aroclor 1221	ND		ug/l	0.083	0.053
Aroclor 1232	ND		ug/l	0.083	0.031
Aroclor 1242	ND		ug/l	0.083	0.060
Aroclor 1248	ND		ug/l	0.083	0.051
Aroclor 1254	ND		ug/l	0.083	0.034
Aroclor 1260	ND		ug/l	0.083	0.032
Aroclor 1262	ND		ug/l	0.083	0.029
Aroclor 1268	ND		ug/l	0.083	0.038

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	55		30-150
Decachlorobiphenyl	57		30-150
2,4,5,6-Tetrachloro-m-xylene	57		30-150
Decachlorobiphenyl	57		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/12/13 12:01
Analyst: KB

Extraction Method: EPA 3546
Extraction Date: 06/11/13 15:19
Cleanup Method1: EPA 3665A
Cleanup Date1: 06/12/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 06/12/13

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-07 Batch: WG614232-1					
Aroclor 1016	ND		ug/kg	32.5	6.42
Aroclor 1221	ND		ug/kg	32.5	9.81
Aroclor 1232	ND		ug/kg	32.5	6.91
Aroclor 1242	ND		ug/kg	32.5	6.17
Aroclor 1248	ND		ug/kg	32.5	3.94
Aroclor 1254	ND		ug/kg	32.5	5.13
Aroclor 1260	ND		ug/kg	32.5	5.65
Aroclor 1262	ND		ug/kg	32.5	2.40
Aroclor 1268	ND		ug/kg	32.5	4.72

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	76		30-150
Decachlorobiphenyl	44		30-150
2,4,5,6-Tetrachloro-m-xylene	81		30-150
Decachlorobiphenyl	59		30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 08 Batch: WG613664-2 WG613664-3								
Aroclor 1016	71		82		40-140	15		50
Aroclor 1260	70		81		40-140	15		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	61		70		30-150
Decachlorobiphenyl	62		73		30-150
2,4,5,6-Tetrachloro-m-xylene	62		72		30-150
Decachlorobiphenyl	64		73		30-150

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG614232-2 WG614232-3								
Aroclor 1016	88		96		40-140	9		50
Aroclor 1260	65		69		40-140	6		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	80		83		30-150
Decachlorobiphenyl	46		50		30-150
2,4,5,6-Tetrachloro-m-xylene	85		90		30-150
Decachlorobiphenyl	62		67		30-150

PESTICIDES

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-01	Date Collected:	06/05/13 08:32
Client ID:	SB5 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/06/13 18:23
Analytical Date:	06/10/13 10:47	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.78	0.348	1
Lindane	ND		ug/kg	0.741	0.331	1
Alpha-BHC	ND		ug/kg	0.741	0.210	1
Beta-BHC	ND		ug/kg	1.78	0.674	1
Heptachlor	ND		ug/kg	0.889	0.399	1
Aldrin	ND		ug/kg	1.78	0.626	1
Heptachlor epoxide	ND		ug/kg	3.33	1.00	1
Endrin	ND		ug/kg	0.741	0.304	1
Endrin ketone	ND		ug/kg	1.78	0.458	1
Dieldrin	ND		ug/kg	1.11	0.556	1
4,4'-DDE	ND		ug/kg	1.78	0.411	1
4,4'-DDD	ND		ug/kg	1.78	0.634	1
4,4'-DDT	ND		ug/kg	3.33	1.43	1
Endosulfan I	ND		ug/kg	1.78	0.420	1
Endosulfan II	ND		ug/kg	1.78	0.594	1
Endosulfan sulfate	ND		ug/kg	0.741	0.339	1
Methoxychlor	ND		ug/kg	3.33	1.04	1
Toxaphene	ND		ug/kg	33.3	9.34	1
cis-Chlordane	ND		ug/kg	2.22	0.619	1
trans-Chlordane	ND		ug/kg	2.22	0.587	1
Chlordane	ND		ug/kg	14.4	5.89	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	78		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-02	Date Collected:	06/05/13 08:45
Client ID:	SB5 (8-10')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/06/13 18:23
Analytical Date:	06/10/13 11:00	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	92%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.68	0.329	1
Lindane	ND		ug/kg	0.701	0.313	1
Alpha-BHC	ND		ug/kg	0.701	0.199	1
Beta-BHC	ND		ug/kg	1.68	0.638	1
Heptachlor	ND		ug/kg	0.841	0.377	1
Aldrin	ND		ug/kg	1.68	0.592	1
Heptachlor epoxide	ND		ug/kg	3.15	0.946	1
Endrin	ND		ug/kg	0.701	0.287	1
Endrin ketone	ND		ug/kg	1.68	0.433	1
Dieldrin	ND		ug/kg	1.05	0.526	1
4,4'-DDE	ND		ug/kg	1.68	0.389	1
4,4'-DDD	ND		ug/kg	1.68	0.600	1
4,4'-DDT	ND		ug/kg	3.15	1.35	1
Endosulfan I	ND		ug/kg	1.68	0.397	1
Endosulfan II	ND		ug/kg	1.68	0.562	1
Endosulfan sulfate	ND		ug/kg	0.701	0.320	1
Methoxychlor	ND		ug/kg	3.15	0.981	1
Toxaphene	ND		ug/kg	31.5	8.83	1
cis-Chlordane	ND		ug/kg	2.10	0.586	1
trans-Chlordane	ND		ug/kg	2.10	0.555	1
Chlordane	ND		ug/kg	13.7	5.57	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	78		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-03	Date Collected:	06/05/13 09:55
Client ID:	SB4 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/06/13 18:23
Analytical Date:	06/10/13 11:12	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.74	0.340	1
Lindane	ND		ug/kg	0.724	0.324	1
Alpha-BHC	ND		ug/kg	0.724	0.206	1
Beta-BHC	ND		ug/kg	1.74	0.659	1
Heptachlor	ND		ug/kg	0.868	0.389	1
Aldrin	ND		ug/kg	1.74	0.612	1
Heptachlor epoxide	ND		ug/kg	3.26	0.977	1
Endrin	ND		ug/kg	0.724	0.297	1
Endrin ketone	ND		ug/kg	1.74	0.447	1
Dieldrin	ND		ug/kg	1.08	0.543	1
4,4'-DDE	ND		ug/kg	1.74	0.402	1
4,4'-DDD	ND		ug/kg	1.74	0.620	1
4,4'-DDT	ND		ug/kg	3.26	1.40	1
Endosulfan I	ND		ug/kg	1.74	0.410	1
Endosulfan II	ND		ug/kg	1.74	0.580	1
Endosulfan sulfate	ND		ug/kg	0.724	0.331	1
Methoxychlor	ND		ug/kg	3.26	1.01	1
Toxaphene	ND		ug/kg	32.6	9.12	1
cis-Chlordane	ND		ug/kg	2.17	0.605	1
trans-Chlordane	ND		ug/kg	2.17	0.573	1
Chlordane	ND		ug/kg	14.1	5.75	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-04	Date Collected:	06/05/13 10:00
Client ID:	SB4 (8-10')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/06/13 18:23
Analytical Date:	06/10/13 11:25	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.73	0.339	1
Lindane	ND		ug/kg	0.721	0.322	1
Alpha-BHC	ND		ug/kg	0.721	0.205	1
Beta-BHC	ND		ug/kg	1.73	0.656	1
Heptachlor	ND		ug/kg	0.865	0.388	1
Aldrin	ND		ug/kg	1.73	0.609	1
Heptachlor epoxide	ND		ug/kg	3.24	0.973	1
Endrin	ND		ug/kg	0.721	0.295	1
Endrin ketone	ND		ug/kg	1.73	0.445	1
Dieldrin	ND		ug/kg	1.08	0.540	1
4,4'-DDE	ND		ug/kg	1.73	0.400	1
4,4'-DDD	ND		ug/kg	1.73	0.617	1
4,4'-DDT	ND		ug/kg	3.24	1.39	1
Endosulfan I	ND		ug/kg	1.73	0.409	1
Endosulfan II	ND		ug/kg	1.73	0.578	1
Endosulfan sulfate	ND		ug/kg	0.721	0.329	1
Methoxychlor	ND		ug/kg	3.24	1.01	1
Toxaphene	ND		ug/kg	32.4	9.08	1
cis-Chlordane	ND		ug/kg	2.16	0.602	1
trans-Chlordane	ND		ug/kg	2.16	0.571	1
Chlordane	ND		ug/kg	14.0	5.73	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	112		30-150	A
Decachlorobiphenyl	112		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	91		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-05	Date Collected:	06/05/13 14:07
Client ID:	SB1 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/06/13 18:23
Analytical Date:	06/10/13 11:38	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.73	0.339	1
Lindane	ND		ug/kg	0.722	0.323	1
Alpha-BHC	ND		ug/kg	0.722	0.205	1
Beta-BHC	ND		ug/kg	1.73	0.657	1
Heptachlor	ND		ug/kg	0.867	0.388	1
Aldrin	ND		ug/kg	1.73	0.610	1
Heptachlor epoxide	ND		ug/kg	3.25	0.975	1
Endrin	ND		ug/kg	0.722	0.296	1
Endrin ketone	ND		ug/kg	1.73	0.446	1
Dieldrin	ND		ug/kg	1.08	0.542	1
4,4'-DDE	ND		ug/kg	1.73	0.401	1
4,4'-DDD	ND		ug/kg	1.73	0.618	1
4,4'-DDT	ND		ug/kg	3.25	1.39	1
Endosulfan I	ND		ug/kg	1.73	0.410	1
Endosulfan II	ND		ug/kg	1.73	0.579	1
Endosulfan sulfate	ND		ug/kg	0.722	0.330	1
Methoxychlor	ND		ug/kg	3.25	1.01	1
Toxaphene	ND		ug/kg	32.5	9.10	1
cis-Chlordane	ND		ug/kg	2.17	0.604	1
trans-Chlordane	ND		ug/kg	2.17	0.572	1
Chlordane	ND		ug/kg	14.1	5.74	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	71		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-06	Date Collected:	06/05/13 14:43
Client ID:	SB6 (0-2')	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/06/13 18:23
Analytical Date:	06/10/13 11:51	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.71	0.335	1
Lindane	ND		ug/kg	0.713	0.319	1
Alpha-BHC	ND		ug/kg	0.713	0.202	1
Beta-BHC	ND		ug/kg	1.71	0.649	1
Heptachlor	ND		ug/kg	0.856	0.384	1
Aldrin	ND		ug/kg	1.71	0.602	1
Heptachlor epoxide	ND		ug/kg	3.21	0.962	1
Endrin	ND		ug/kg	0.713	0.292	1
Endrin ketone	ND		ug/kg	1.71	0.440	1
Dieldrin	ND		ug/kg	1.07	0.535	1
4,4'-DDE	ND		ug/kg	1.71	0.396	1
4,4'-DDD	ND		ug/kg	1.71	0.610	1
4,4'-DDT	ND		ug/kg	3.21	1.38	1
Endosulfan I	ND		ug/kg	1.71	0.404	1
Endosulfan II	ND		ug/kg	1.71	0.572	1
Endosulfan sulfate	ND		ug/kg	0.713	0.326	1
Methoxychlor	ND		ug/kg	3.21	0.998	1
Toxaphene	ND		ug/kg	32.1	8.98	1
cis-Chlordane	ND		ug/kg	2.14	0.596	1
trans-Chlordane	ND		ug/kg	2.14	0.565	1
Chlordane	ND		ug/kg	13.9	5.67	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-07	Date Collected:	06/05/13 00:00
Client ID:	BLIND DUP 01	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/06/13 18:23
Analytical Date:	06/10/13 12:03	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.72	0.337	1
Lindane	ND		ug/kg	0.716	0.320	1
Alpha-BHC	ND		ug/kg	0.716	0.203	1
Beta-BHC	ND		ug/kg	1.72	0.652	1
Heptachlor	ND		ug/kg	0.860	0.385	1
Aldrin	ND		ug/kg	1.72	0.605	1
Heptachlor epoxide	ND		ug/kg	3.22	0.967	1
Endrin	ND		ug/kg	0.716	0.294	1
Endrin ketone	ND		ug/kg	1.72	0.443	1
Dieldrin	ND		ug/kg	1.07	0.537	1
4,4'-DDE	ND		ug/kg	1.72	0.398	1
4,4'-DDD	ND		ug/kg	1.72	0.613	1
4,4'-DDT	ND		ug/kg	3.22	1.38	1
Endosulfan I	ND		ug/kg	1.72	0.406	1
Endosulfan II	ND		ug/kg	1.72	0.574	1
Endosulfan sulfate	ND		ug/kg	0.716	0.327	1
Methoxychlor	ND		ug/kg	3.22	1.00	1
Toxaphene	ND		ug/kg	32.2	9.03	1
cis-Chlordane	ND		ug/kg	2.15	0.599	1
trans-Chlordane	ND		ug/kg	2.15	0.567	1
Chlordane	ND		ug/kg	14.0	5.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	111		30-150	A
Decachlorobiphenyl	111		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	93		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID:	L1310227-08	Date Collected:	06/05/13 15:50
Client ID:	FB01	Date Received:	06/05/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8081B	Extraction Date:	06/07/13 18:19
Analytical Date:	06/09/13 17:04	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/l	0.020	0.005	1
Lindane	ND		ug/l	0.020	0.004	1
Alpha-BHC	ND		ug/l	0.020	0.004	1
Beta-BHC	ND		ug/l	0.020	0.006	1
Heptachlor	ND		ug/l	0.020	0.003	1
Aldrin	ND		ug/l	0.020	0.002	1
Heptachlor epoxide	ND		ug/l	0.020	0.004	1
Endrin	ND		ug/l	0.040	0.004	1
Endrin ketone	ND		ug/l	0.040	0.005	1
Dieldrin	ND		ug/l	0.040	0.004	1
4,4'-DDE	ND		ug/l	0.040	0.004	1
4,4'-DDD	ND		ug/l	0.040	0.005	1
4,4'-DDT	ND		ug/l	0.040	0.004	1
Endosulfan I	ND		ug/l	0.020	0.003	1
Endosulfan II	ND		ug/l	0.040	0.005	1
Endosulfan sulfate	ND		ug/l	0.040	0.005	1
Methoxychlor	ND		ug/l	0.200	0.007	1
Toxaphene	ND		ug/l	0.200	0.063	1
cis-Chlordane	ND		ug/l	0.020	0.007	1
trans-Chlordane	ND		ug/l	0.020	0.006	1
Chlordane	ND		ug/l	0.200	0.046	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	**26**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/09/13 17:29
Analyst: SH

Extraction Method: EPA 3546
Extraction Date: 06/06/13 18:23
Cleanup Method1: EPA 3620B
Cleanup Date1: 06/08/13

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-07 Batch: WG613277-1					
Delta-BHC	ND		ug/kg	1.59	0.312
Lindane	ND		ug/kg	0.663	0.296
Alpha-BHC	ND		ug/kg	0.663	0.188
Beta-BHC	ND		ug/kg	1.59	0.603
Heptachlor	ND		ug/kg	0.796	0.357
Aldrin	ND		ug/kg	1.59	0.560
Heptachlor epoxide	ND		ug/kg	2.98	0.895
Endrin	ND		ug/kg	0.663	0.272
Endrin ketone	ND		ug/kg	1.59	0.410
Dieldrin	ND		ug/kg	0.995	0.497
4,4'-DDE	ND		ug/kg	1.59	0.368
4,4'-DDD	ND		ug/kg	1.59	0.568
4,4'-DDT	ND		ug/kg	2.98	1.28
Endosulfan I	ND		ug/kg	1.59	0.376
Endosulfan II	ND		ug/kg	1.59	0.532
Endosulfan sulfate	ND		ug/kg	0.663	0.303
Methoxychlor	ND		ug/kg	2.98	0.928
Toxaphene	ND		ug/kg	29.8	8.36
cis-Chlordane	ND		ug/kg	1.99	0.554
trans-Chlordane	ND		ug/kg	1.99	0.525
Chlordane	ND		ug/kg	12.9	5.27

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		30-150	A
Decachlorobiphenyl	42		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	100		30-150	B

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/09/13 15:09
Analyst: SH

Extraction Method: EPA 3510C
Extraction Date: 06/07/13 18:19
Cleanup Method1: EPA 3620B
Cleanup Date1: 06/08/13

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 08 Batch: WG613576-1					
Delta-BHC	ND		ug/l	0.020	0.005
Lindane	ND		ug/l	0.020	0.004
Alpha-BHC	ND		ug/l	0.020	0.004
Beta-BHC	ND		ug/l	0.020	0.006
Heptachlor	ND		ug/l	0.020	0.003
Aldrin	ND		ug/l	0.020	0.002
Heptachlor epoxide	ND		ug/l	0.020	0.004
Endrin	ND		ug/l	0.040	0.004
Endrin ketone	ND		ug/l	0.040	0.005
Dieldrin	ND		ug/l	0.040	0.004
4,4'-DDE	ND		ug/l	0.040	0.004
4,4'-DDD	ND		ug/l	0.040	0.005
4,4'-DDT	ND		ug/l	0.040	0.004
Endosulfan I	ND		ug/l	0.020	0.003
Endosulfan II	ND		ug/l	0.040	0.005
Endosulfan sulfate	ND		ug/l	0.040	0.005
Methoxychlor	ND		ug/l	0.200	0.007
Toxaphene	ND		ug/l	0.200	0.063
cis-Chlordane	ND		ug/l	0.020	0.007
trans-Chlordane	ND		ug/l	0.020	0.006
Chlordane	ND		ug/l	0.200	0.046

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	47		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	115		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG613277-2 WG613277-3								
Delta-BHC	72		77		30-150	7		30
Lindane	73		81		30-150	10		30
Alpha-BHC	79		84		30-150	6		30
Beta-BHC	78		80		30-150	3		30
Heptachlor	72		76		30-150	5		30
Aldrin	78		81		30-150	4		30
Heptachlor epoxide	74		77		30-150	4		30
Endrin	76		82		30-150	8		30
Endrin ketone	63		74		30-150	16		30
Dieldrin	72		77		30-150	7		30
4,4'-DDE	71		74		30-150	4		30
4,4'-DDD	63		68		30-150	8		30
4,4'-DDT	59		66		30-150	11		30
Endosulfan I	71		75		30-150	5		30
Endosulfan II	61		67		30-150	9		30
Endosulfan sulfate	62		73		30-150	16		30
Methoxychlor	66		80		30-150	19		30
cis-Chlordane	71		74		30-150	4		30
trans-Chlordane	70		74		30-150	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG613277-2 WG613277-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		106		30-150	A
Decachlorobiphenyl	43		43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		78		30-150	B
Decachlorobiphenyl	99		102		30-150	B

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 08 Batch: WG613576-2 WG613576-3								
Delta-BHC	93		89		30-150	5		20
Lindane	97		93		30-150	4		20
Alpha-BHC	100		95		30-150	5		20
Beta-BHC	100		92		30-150	7		20
Heptachlor	81		79		30-150	2		20
Aldrin	80		79		30-150	1		20
Heptachlor epoxide	92		91		30-150	1		20
Endrin	98		99		30-150	1		20
Endrin ketone	84		86		30-150	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 08 Batch: WG613576-2 WG613576-3								
Dieldrin	92		92		30-150	0		20
4,4'-DDE	89		88		30-150	1		20
4,4'-DDD	82		83		30-150	0		20
4,4'-DDT	80		81		30-150	1		20
Endosulfan I	90		89		30-150	1		20
Endosulfan II	80		82		30-150	2		20
Endosulfan sulfate	82		84		30-150	2		20
Methoxychlor	91		101		30-150	11		20
cis-Chlordane	89		90		30-150	1		20
trans-Chlordane	84		84		30-150	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		84		30-150	A
Decachlorobiphenyl	39		38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		60		30-150	B
Decachlorobiphenyl	90		95		30-150	B

METALS

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-01 Date Collected: 06/05/13 08:32

Client ID: SB5 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	8200		mg/kg	8.8	1.8	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.4	0.88	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Arsenic, Total	3.8		mg/kg	0.88	0.26	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Barium, Total	48		mg/kg	0.88	0.26	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Beryllium, Total	0.45		mg/kg	0.44	0.04	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Cadmium, Total	0.39	J	mg/kg	0.88	0.05	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Calcium, Total	430		mg/kg	8.8	1.8	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Chromium, Total	15		mg/kg	0.88	0.18	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Cobalt, Total	14		mg/kg	1.8	0.44	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Copper, Total	21		mg/kg	0.88	0.44	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Iron, Total	18000		mg/kg	4.4	1.8	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Lead, Total	16		mg/kg	4.4	0.26	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Magnesium, Total	2400		mg/kg	8.8	3.5	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Manganese, Total	430		mg/kg	0.88	0.18	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/11/13 09:11	06/11/13 15:04	EPA 7471B	1,7471B	MC
Nickel, Total	12		mg/kg	2.2	0.35	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Potassium, Total	580		mg/kg	220	71.	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.8	0.26	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.88	0.18	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Sodium, Total	210		mg/kg	180	71.	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.8	0.53	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Vanadium, Total	23		mg/kg	0.88	0.18	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG
Zinc, Total	43		mg/kg	4.4	0.44	2	06/11/13 10:55	06/12/13 15:52	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310227
Project Number: 12043
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-02
Client ID: SB5 (8-10')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 92%

Date Collected: 06/05/13 08:45
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	5700		mg/kg	8.5	1.7	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.3	0.85	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Arsenic, Total	2.7		mg/kg	0.85	0.26	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Barium, Total	58		mg/kg	0.85	0.26	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Beryllium, Total	0.45		mg/kg	0.43	0.03	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Cadmium, Total	0.28	J	mg/kg	0.85	0.05	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Calcium, Total	980		mg/kg	8.5	1.7	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Chromium, Total	14		mg/kg	0.85	0.17	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Cobalt, Total	7.5		mg/kg	1.7	0.43	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Copper, Total	16		mg/kg	0.85	0.43	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Iron, Total	15000		mg/kg	4.3	1.7	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Lead, Total	7.4		mg/kg	4.3	0.26	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Magnesium, Total	2500		mg/kg	8.5	3.4	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Manganese, Total	380		mg/kg	0.85	0.17	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.09	0.02	1	06/11/13 09:11	06/11/13 15:06	EPA 7471B	1,7471B	MC
Nickel, Total	13		mg/kg	2.1	0.34	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Potassium, Total	720		mg/kg	210	68.	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.26	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.85	0.17	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Sodium, Total	ND		mg/kg	170	68.	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.51	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Vanadium, Total	20		mg/kg	0.85	0.17	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG
Zinc, Total	33		mg/kg	4.3	0.43	2	06/11/13 10:55	06/12/13 15:56	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310227
Project Number: 12043
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-03
Client ID: SB4 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 88%

Date Collected: 06/05/13 09:55
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	8100		mg/kg	8.8	1.8	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.4	0.88	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Arsenic, Total	2.1		mg/kg	0.88	0.26	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Barium, Total	33		mg/kg	0.88	0.26	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Beryllium, Total	0.35	J	mg/kg	0.44	0.04	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Cadmium, Total	0.31	J	mg/kg	0.88	0.05	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Calcium, Total	240		mg/kg	8.8	1.8	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Chromium, Total	19		mg/kg	0.88	0.18	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Cobalt, Total	7.5		mg/kg	1.8	0.44	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Copper, Total	22		mg/kg	0.88	0.44	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Iron, Total	13000		mg/kg	4.4	1.8	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Lead, Total	10		mg/kg	4.4	0.26	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Magnesium, Total	2200		mg/kg	8.8	3.5	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Manganese, Total	410		mg/kg	0.88	0.18	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/11/13 09:11	06/11/13 15:08	EPA 7471B	1,7471B	MC
Nickel, Total	11		mg/kg	2.2	0.35	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Potassium, Total	440		mg/kg	220	70.	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.8	0.26	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.88	0.18	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Sodium, Total	ND		mg/kg	180	70.	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.8	0.53	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Vanadium, Total	24		mg/kg	0.88	0.18	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG
Zinc, Total	31		mg/kg	4.4	0.44	2	06/11/13 10:55	06/12/13 16:10	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310227
Project Number: 12043
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-04
Client ID: SB4 (8-10')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 88%

Date Collected: 06/05/13 10:00
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	4400		mg/kg	8.7	1.7	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.4	0.87	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Arsenic, Total	1.7		mg/kg	0.87	0.26	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Barium, Total	14		mg/kg	0.87	0.26	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Beryllium, Total	0.23	J	mg/kg	0.44	0.04	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Cadmium, Total	0.18	J	mg/kg	0.87	0.05	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Calcium, Total	110		mg/kg	8.7	1.7	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Chromium, Total	9.0		mg/kg	0.87	0.17	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Cobalt, Total	3.4		mg/kg	1.7	0.44	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Copper, Total	6.6		mg/kg	0.87	0.44	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Iron, Total	9000		mg/kg	4.4	1.7	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Lead, Total	4.0	J	mg/kg	4.4	0.26	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Magnesium, Total	1100		mg/kg	8.7	3.5	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Manganese, Total	130		mg/kg	0.87	0.17	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.09	0.02	1	06/12/13 09:17	06/12/13 11:04	EPA 7471B	1,7471B	MC
Nickel, Total	5.7		mg/kg	2.2	0.35	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Potassium, Total	320		mg/kg	220	70.	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.26	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.87	0.17	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Sodium, Total	ND		mg/kg	170	70.	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.52	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Vanadium, Total	11		mg/kg	0.87	0.17	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG
Zinc, Total	17		mg/kg	4.4	0.44	2	06/11/13 10:55	06/12/13 16:14	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-05 Date Collected: 06/05/13 14:07

Client ID: SB1 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	9500		mg/kg	9.1	1.8	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.5	0.91	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Arsenic, Total	3.4		mg/kg	0.91	0.27	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Barium, Total	68		mg/kg	0.91	0.27	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Beryllium, Total	0.55		mg/kg	0.45	0.04	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Cadmium, Total	0.49	J	mg/kg	0.91	0.05	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Calcium, Total	590		mg/kg	9.1	1.8	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Chromium, Total	18		mg/kg	0.91	0.18	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Cobalt, Total	11		mg/kg	1.8	0.45	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Copper, Total	24		mg/kg	0.91	0.45	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Iron, Total	21000		mg/kg	4.5	1.8	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Lead, Total	17		mg/kg	4.5	0.27	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Magnesium, Total	3100		mg/kg	9.1	3.6	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Manganese, Total	460		mg/kg	0.91	0.18	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Mercury, Total	0.03	J	mg/kg	0.08	0.02	1	06/12/13 09:17	06/12/13 11:23	EPA 7471B	1,7471B	MC
Nickel, Total	22		mg/kg	2.3	0.36	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Potassium, Total	880		mg/kg	230	72.	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.8	0.27	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.91	0.18	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Sodium, Total	ND		mg/kg	180	72.	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.8	0.54	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Vanadium, Total	22		mg/kg	0.91	0.18	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG
Zinc, Total	44		mg/kg	4.5	0.45	2	06/11/13 10:55	06/12/13 16:17	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-06 Date Collected: 06/05/13 14:43

Client ID: SB6 (0-2') Date Received: 06/05/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	14000		mg/kg	8.6	1.7	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.3	0.86	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Arsenic, Total	5.0		mg/kg	0.86	0.26	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Barium, Total	92		mg/kg	0.86	0.26	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Beryllium, Total	0.62		mg/kg	0.43	0.03	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Cadmium, Total	0.51	J	mg/kg	0.86	0.05	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Calcium, Total	550		mg/kg	8.6	1.7	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Chromium, Total	20		mg/kg	0.86	0.17	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Cobalt, Total	8.8		mg/kg	1.7	0.43	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Copper, Total	19		mg/kg	0.86	0.43	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Iron, Total	19000		mg/kg	4.3	1.7	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Lead, Total	10		mg/kg	4.3	0.26	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Magnesium, Total	4300		mg/kg	8.6	3.4	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Manganese, Total	220		mg/kg	0.86	0.17	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/12/13 09:17	06/12/13 11:25	EPA 7471B	1,7471B	MC
Nickel, Total	16		mg/kg	2.1	0.34	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Potassium, Total	1900		mg/kg	210	68.	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.26	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.86	0.17	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Sodium, Total	860		mg/kg	170	68.	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.51	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Vanadium, Total	25		mg/kg	0.86	0.17	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG
Zinc, Total	67		mg/kg	4.3	0.43	2	06/11/13 10:55	06/12/13 16:21	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310227
Project Number: 12043
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-07
Client ID: BLIND DUP 01
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 88%

Date Collected: 06/05/13 00:00
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	10000		mg/kg	8.5	1.7	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.3	0.85	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Arsenic, Total	2.5		mg/kg	0.85	0.26	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Barium, Total	68		mg/kg	0.85	0.26	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Beryllium, Total	0.50		mg/kg	0.43	0.03	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Cadmium, Total	0.45	J	mg/kg	0.85	0.05	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Calcium, Total	530		mg/kg	8.5	1.7	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Chromium, Total	15		mg/kg	0.85	0.17	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Cobalt, Total	7.6		mg/kg	1.7	0.43	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Copper, Total	20		mg/kg	0.85	0.43	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Iron, Total	18000		mg/kg	4.3	1.7	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Lead, Total	12		mg/kg	4.3	0.26	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Magnesium, Total	3100		mg/kg	8.5	3.4	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Manganese, Total	450		mg/kg	0.85	0.17	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.09	0.02	1	06/12/13 09:17	06/12/13 11:27	EPA 7471B	1,7471B	MC
Nickel, Total	14		mg/kg	2.1	0.34	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Potassium, Total	910		mg/kg	210	68.	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.26	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.85	0.17	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Sodium, Total	ND		mg/kg	170	68.	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.51	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Vanadium, Total	22		mg/kg	0.85	0.17	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG
Zinc, Total	48		mg/kg	4.3	0.43	2	06/11/13 10:55	06/12/13 16:24	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310227
Project Number: 12043
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-08
Client ID: FB01
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Water
Date Collected: 06/05/13 15:50
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	0.0213		mg/l	0.0100	0.00200	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Antimony, Total	0.00034	J	mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Arsenic, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Barium, Total	0.00037	J	mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00050	0.00005	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Calcium, Total	ND		mg/l	0.100	0.0320	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Chromium, Total	0.00212		mg/l	0.00100	0.00020	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Cobalt, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Copper, Total	0.00082	J	mg/l	0.00100	0.00010	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Iron, Total	0.0650		mg/l	0.0500	0.0130	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Lead, Total	0.00022	J	mg/l	0.00100	0.00020	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Magnesium, Total	ND		mg/l	0.100	0.0230	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Manganese, Total	0.00186		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Mercury, Total	ND		mg/l	0.00020	0.00006	1	06/09/13 13:45	06/10/13 11:16	EPA 7470A	1,7470A	JH
Nickel, Total	0.00088	J	mg/l	0.00100	0.00010	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Potassium, Total	ND		mg/l	0.100	0.0270	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.00500	0.00030	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Sodium, Total	0.111		mg/l	0.100	0.0150	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Thallium, Total	ND		mg/l	0.00050	0.00003	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Vanadium, Total	ND		mg/l	0.00500	0.00010	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK
Zinc, Total	0.00252	J	mg/l	0.01000	0.00120	1	06/07/13 10:30	06/11/13 16:33	EPA 3005A	1,6020A	AK

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 08 Batch: WG613421-1										
Aluminum, Total	ND		mg/l	0.0100	0.00200	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Antimony, Total	0.00038	J	mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Arsenic, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Barium, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00050	0.00005	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Calcium, Total	ND		mg/l	0.100	0.0320	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Chromium, Total	ND		mg/l	0.00100	0.00020	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Cobalt, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Copper, Total	0.00025	J	mg/l	0.00100	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Iron, Total	ND		mg/l	0.0500	0.0130	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Lead, Total	ND		mg/l	0.00100	0.00020	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Magnesium, Total	ND		mg/l	0.100	0.0230	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Manganese, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Nickel, Total	ND		mg/l	0.00100	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Potassium, Total	ND		mg/l	0.100	0.0270	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Selenium, Total	ND		mg/l	0.00500	0.00030	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Silver, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Sodium, Total	ND		mg/l	0.100	0.0150	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Thallium, Total	ND		mg/l	0.00050	0.00003	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Vanadium, Total	ND		mg/l	0.00500	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Zinc, Total	ND		mg/l	0.01000	0.00120	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 08 Batch: WG613729-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	06/09/13 13:45	06/10/13 10:56	1,7470A	JH

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-03 Batch: WG613918-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/11/13 09:11	06/11/13 13:07	1,7471B	MC

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-07 Batch: WG614138-1										
Aluminum, Total	ND		mg/kg	4.0	0.80	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Antimony, Total	ND		mg/kg	2.0	0.40	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Arsenic, Total	ND		mg/kg	0.40	0.12	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Barium, Total	ND		mg/kg	0.40	0.12	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Beryllium, Total	ND		mg/kg	0.20	0.02	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Cadmium, Total	ND		mg/kg	0.40	0.02	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Calcium, Total	0.80	J	mg/kg	4.0	0.80	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Chromium, Total	ND		mg/kg	0.40	0.08	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Cobalt, Total	ND		mg/kg	0.80	0.20	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Copper, Total	ND		mg/kg	0.40	0.20	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Iron, Total	1.8	J	mg/kg	2.0	0.80	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Lead, Total	ND		mg/kg	2.0	0.12	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Magnesium, Total	ND		mg/kg	4.0	1.6	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Manganese, Total	ND		mg/kg	0.40	0.08	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Nickel, Total	ND		mg/kg	1.0	0.16	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Potassium, Total	ND		mg/kg	100	32.	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Selenium, Total	ND		mg/kg	0.80	0.12	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Silver, Total	ND		mg/kg	0.40	0.08	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Sodium, Total	ND		mg/kg	80	32.	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Thallium, Total	ND		mg/kg	0.80	0.24	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG
Vanadium, Total	ND		mg/kg	0.40	0.08	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310227

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Zinc, Total	ND	mg/kg	2.0	0.20	1	06/11/13 10:55	06/12/13 14:50	1,6010C	MG

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 04-07 Batch: WG614208-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/12/13 09:17	06/12/13 11:00	1,7471B	MC

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 08 Batch: WG613421-2								
Aluminum, Total	99		-		80-120	-		
Antimony, Total	96		-		80-120	-		
Arsenic, Total	107		-		80-120	-		
Barium, Total	96		-		80-120	-		
Beryllium, Total	95		-		80-120	-		
Cadmium, Total	111		-		80-120	-		
Calcium, Total	101		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Cobalt, Total	101		-		80-120	-		
Copper, Total	104		-		80-120	-		
Iron, Total	95		-		80-120	-		
Lead, Total	102		-		80-120	-		
Magnesium, Total	100		-		80-120	-		
Manganese, Total	105		-		80-120	-		
Nickel, Total	103		-		80-120	-		
Potassium, Total	101		-		80-120	-		
Selenium, Total	110		-		80-120	-		
Silver, Total	97		-		80-120	-		
Sodium, Total	108		-		80-120	-		
Thallium, Total	102		-		80-120	-		
Vanadium, Total	103		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 08 Batch: WG613421-2					
Zinc, Total	112	-	80-120	-	
Total Metals - Westborough Lab Associated sample(s): 08 Batch: WG613729-2					
Mercury, Total	110	-	80-120	-	
Total Metals - Westborough Lab Associated sample(s): 01-03 Batch: WG613918-2 SRM Lot Number: 0518-10-02					
Mercury, Total	108	-	67-133	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 Batch: WG614138-2 SRM Lot Number: 0518-10-02					
Aluminum, Total	88	-	29-171	-	
Antimony, Total	122	-	4-196	-	
Arsenic, Total	104	-	81-119	-	
Barium, Total	100	-	83-118	-	
Beryllium, Total	104	-	83-117	-	
Cadmium, Total	98	-	82-117	-	
Calcium, Total	94	-	83-117	-	
Chromium, Total	101	-	80-119	-	
Cobalt, Total	102	-	83-117	-	
Copper, Total	109	-	83-117	-	
Iron, Total	94	-	51-150	-	
Lead, Total	101	-	80-120	-	
Magnesium, Total	97	-	74-126	-	
Manganese, Total	100	-	83-117	-	
Nickel, Total	104	-	82-117	-	
Potassium, Total	99	-	74-126	-	
Selenium, Total	106	-	80-120	-	
Silver, Total	104	-	66-134	-	
Sodium, Total	98	-	74-127	-	
Thallium, Total	106	-	79-120	-	
Vanadium, Total	98	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310227

Report Date: 06/12/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 Batch: WG614138-2 SRM Lot Number: 0518-10-02					
Zinc, Total	94	-	82-119	-	
Total Metals - Westborough Lab Associated sample(s): 04-07 Batch: WG614208-2 SRM Lot Number: 0518-10-02					
Mercury, Total	127	-	67-133	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 08 QC Batch ID: WG613421-4 QC Sample: L1310351-09 Client ID: MS Sample												
Aluminum, Total	0.249	2	2.65	120		-	-		80-120	-		20
Antimony, Total	0.00035J	0.5	0.4560	91		-	-		80-120	-		20
Arsenic, Total	0.00204	0.12	0.1136	93		-	-		80-120	-		20
Barium, Total	0.09751	2	1.982	94		-	-		80-120	-		20
Beryllium, Total	0.00044J	0.05	0.04613	92		-	-		80-120	-		20
Cadmium, Total	0.00008J	0.051	0.05580	109		-	-		80-120	-		20
Calcium, Total	41.2	10	49.6	84		-	-		80-120	-		20
Chromium, Total	0.00618	0.2	0.2015	98		-	-		80-120	-		20
Cobalt, Total	0.02144	0.5	0.5241	100		-	-		80-120	-		20
Copper, Total	0.00506	0.25	0.2617	103		-	-		80-120	-		20
Iron, Total	4.10	1	4.62	**52**	Q	-	-		80-120	-		20
Lead, Total	0.00088J	0.51	0.5210	102		-	-		80-120	-		20
Magnesium, Total	10.2	10	9.32	**0**	Q	-	-		80-120	-		20
Manganese, Total	0.1434	10	10.51	104		-	-		80-120	-		20
Nickel, Total	0.02774	0.5	0.5259	100		-	-		80-120	-		20
Potassium, Total	1.79	10	11.7	99		-	-		80-120	-		20
Selenium, Total	0.00116J	0.12	0.102	85		-	-		80-120	-		20
Silver, Total	ND	0.05	0.04816	96		-	-		80-120	-		20
Sodium, Total	51.4	10	62.0	106		-	-		80-120	-		20
Thallium, Total	0.00008J	0.12	0.1110	92		-	-		80-120	-		20
Vanadium, Total	0.00154J	0.5	0.5168	103		-	-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 08 QC Batch ID: WG613421-4 QC Sample: L1310351-09 Client ID: MS Sample										
Zinc, Total	0.05223	0.5	0.6023	110		-	-	80-120	-	20
Total Metals - Westborough Lab Associated sample(s): 08 QC Batch ID: WG613729-4 QC Sample: L1310001-01 Client ID: MS Sample										
Mercury, Total	ND	0.005	0.00596	119		-	-	70-130	-	20
Total Metals - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG613918-4 QC Sample: L1310136-03 Client ID: MS Sample										
Mercury, Total	0.84	0.143	1.1	**182**	Q	-	-	70-130	-	35

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG614138-4 QC Sample: L1310175-01 Client ID: MS Sample										
Aluminum, Total	8500	175	9800	**744**	Q	-	-	75-125	-	35
Antimony, Total	ND	43.6	42	96		-	-	75-125	-	35
Arsenic, Total	3.5	10.5	14	100		-	-	75-125	-	35
Barium, Total	100	175	300	114		-	-	75-125	-	35
Beryllium, Total	0.50	4.36	4.4	89		-	-	75-125	-	35
Cadmium, Total	0.56J	4.45	4.9	110		-	-	75-125	-	35
Calcium, Total	31000	873	29000	**0**	Q	-	-	75-125	-	35
Chromium, Total	22.	17.5	42	114		-	-	75-125	-	35
Cobalt, Total	8.0	43.6	50	96		-	-	75-125	-	35
Copper, Total	50.	21.8	64	**64**	Q	-	-	75-125	-	35
Iron, Total	16000	87.3	16000	**0**	Q	-	-	75-125	-	35
Lead, Total	67.	44.5	110	96		-	-	75-125	-	35
Magnesium, Total	11000	873	8400	**0**	Q	-	-	75-125	-	35
Manganese, Total	260	43.6	290	**69**	Q	-	-	75-125	-	35
Nickel, Total	25.	43.6	68	98		-	-	75-125	-	35
Potassium, Total	2900	873	4500	**183**	Q	-	-	75-125	-	35
Selenium, Total	ND	10.5	10	95		-	-	75-125	-	35
Silver, Total	ND	26.2	27	103		-	-	75-125	-	35
Sodium, Total	390	873	1200	93		-	-	75-125	-	35
Thallium, Total	ND	10.5	9.5	91		-	-	75-125	-	35
Vanadium, Total	37.	43.6	79	96		-	-	75-125	-	35

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG614138-4 QC Sample: L1310175-01 Client ID: MS Sample									
Zinc, Total	140	43.6	180	92	-	-	75-125	-	35
Total Metals - Westborough Lab Associated sample(s): 04-07 QC Batch ID: WG614208-4 QC Sample: L1310227-04 Client ID: SB4 (8-10')									
Mercury, Total	ND	0.178	0.20	112	-	-	70-130	-	35

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 08 QC Batch ID: WG613421-3 QC Sample: L1310351-09 Client ID: DUP Sample						
Aluminum, Total	0.249	0.249	mg/l	0		20
Antimony, Total	0.00035J	0.00025J	mg/l	NC		20
Arsenic, Total	0.00204	0.00193	mg/l	6		20
Barium, Total	0.09751	0.09856	mg/l	1		20
Beryllium, Total	0.00044J	0.00045J	mg/l	NC		20
Cadmium, Total	0.00008J	0.00009J	mg/l	NC		20
Calcium, Total	41.2	42.0	mg/l	2		20
Chromium, Total	0.00618	0.00615	mg/l	0		20
Cobalt, Total	0.02144	0.02188	mg/l	2		20
Copper, Total	0.00506	0.00479	mg/l	6		20
Iron, Total	4.10	4.08	mg/l	0		20
Lead, Total	0.00088J	0.00089J	mg/l	NC		20
Magnesium, Total	10.2	10.6	mg/l	4		20
Manganese, Total	0.1434	0.1452	mg/l	1		20
Nickel, Total	0.02774	0.02834	mg/l	2		20
Potassium, Total	1.79	1.82	mg/l	2		20
Selenium, Total	0.00116J	0.00113J	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Thallium, Total	0.00008J	0.00009J	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 08 QC Batch ID: WG613421-3 QC Sample: L1310351-09 Client ID: DUP Sample					
Vanadium, Total	0.00154J	0.00133J	mg/l	NC	20
Zinc, Total	0.05223	0.05252	mg/l	1	20
Total Metals - Westborough Lab Associated sample(s): 08 QC Batch ID: WG613421-3 QC Sample: L1310351-09 Client ID: DUP Sample					
Sodium, Total	51.4	52.2	mg/l	2	20
Total Metals - Westborough Lab Associated sample(s): 08 QC Batch ID: WG613729-3 QC Sample: L1310001-01 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/l	NC	20
Total Metals - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG613918-3 QC Sample: L1310136-03 Client ID: DUP Sample					
Mercury, Total	0.84	0.71	mg/kg	17	35

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG614138-3 QC Sample: L1310175-01 Client ID: DUP Sample					
Aluminum, Total	8500	9500	mg/kg	11	35
Antimony, Total	ND	ND	mg/kg	NC	35
Arsenic, Total	3.5	4.2	mg/kg	18	35
Barium, Total	100	140	mg/kg	33	35
Beryllium, Total	0.50	0.25J	mg/kg	NC	35
Cadmium, Total	0.56J	0.84J	mg/kg	NC	35
Calcium, Total	31000	36000	mg/kg	15	35
Chromium, Total	22.	26	mg/kg	17	35
Cobalt, Total	8.0	8.4	mg/kg	5	35
Copper, Total	50.	49	mg/kg	2	35
Iron, Total	16000	16000	mg/kg	0	35
Lead, Total	67.	71	mg/kg	6	35
Magnesium, Total	11000	8500	mg/kg	26	35
Manganese, Total	260	250	mg/kg	4	35
Nickel, Total	25.	28	mg/kg	11	35
Potassium, Total	2900	3700	mg/kg	24	35
Selenium, Total	ND	ND	mg/kg	NC	35
Silver, Total	ND	ND	mg/kg	NC	35
Sodium, Total	390	390	mg/kg	0	35

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG614138-3 QC Sample: L1310175-01 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/kg	NC	35
Vanadium, Total	37.	36	mg/kg	3	35
Zinc, Total	140	200	mg/kg	35	35
Total Metals - Westborough Lab Associated sample(s): 04-07 QC Batch ID: WG614208-3 QC Sample: L1310227-04 Client ID: SB4 (8-10')					
Mercury, Total	ND	ND	mg/kg	NC	35

INORGANICS
&
MISCELLANEOUS

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-01
Client ID: SB5 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/05/13 08:32
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.3		%	0.100	NA	1	-	06/06/13 14:59	30,2540G	MO

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-02
Client ID: SB5 (8-10')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/05/13 08:45
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.6		%	0.100	NA	1	-	06/06/13 14:59	30,2540G	MO

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-03
Client ID: SB4 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/05/13 09:55
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.4		%	0.100	NA	1	-	06/06/13 14:59	30,2540G	MO

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-04
Client ID: SB4 (8-10')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/05/13 10:00
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.1		%	0.100	NA	1	-	06/06/13 14:59	30,2540G	MO

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-05
Client ID: SB1 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/05/13 14:07
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.3		%	0.100	NA	1	-	06/06/13 14:59	30,2540G	MO

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-06
Client ID: SB6 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/05/13 14:43
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.0		%	0.100	NA	1	-	06/06/13 14:59	30,2540G	MO

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310227
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310227-07
Client ID: BLIND DUP 01
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/05/13 00:00
Date Received: 06/05/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.9		%	0.100	NA	1	-	06/06/13 14:59	30,2540G	MO

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG613207-1 QC Sample: L1310227-01 Client ID: SB5 (0-2')						
Solids, Total	87.3	87.6	%	0		20

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 06/06/2013 01:29

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310227-01A	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-01B	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-01C	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-01D	Vial MeOH preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-01E	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-01F	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-01G	Plastic 2oz unpreserved for TS	A	N/A	2.0	Y	Absent	TS(7)
L1310227-01H	Amber 500ml unpreserved	A	N/A	2.0	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310227-02A	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-02B	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-02C	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-02D	Vial MeOH preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-02E	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-02F	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-02G	Plastic 2oz unpreserved for TS	A	N/A	2.0	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310227-02H	Amber 500ml unpreserved	A	N/A	2.0	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310227-03A	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-03B	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-03C	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-03D	Vial MeOH preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-03E	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-03F	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-03G	Plastic 2oz unpreserved for TS	A	N/A	2.0	Y	Absent	TS(7)
L1310227-03H	Amber 500ml unpreserved	A	N/A	2.0	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310227-04A	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-04B	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-04C	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-04D	Vial MeOH preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-04E	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-04F	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-04G	Plastic 2oz unpreserved for TS	A	N/A	2.0	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310227-04H	Amber 500ml unpreserved	A	N/A	2.0	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310227-05A	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-05B	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-05C	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-05D	Vial MeOH preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-05E	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-05F	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-05G	Plastic 2oz unpreserved for TS	A	N/A	2.0	Y	Absent	TS(7)
L1310227-05H	Amber 500ml unpreserved	A	N/A	2.0	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310227-06A	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-06B	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-06C	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-06D	Vial MeOH preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-06E	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-06F	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-06G	Plastic 2oz unpreserved for TS	A	N/A	2.0	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310227-06H	Amber 500ml unpreserved	A	N/A	2.0	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310227-07A	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-07B	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-07C	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(2)
L1310227-07D	Vial MeOH preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-07E	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-07F	Vial water preserved	A	N/A	2.0	Y	Absent	NYTCL-8260HLW(14)
L1310227-07G	Plastic 2oz unpreserved for TS	A	N/A	2.0	Y	Absent	TS(7)
L1310227-07H	Amber 500ml unpreserved	A	N/A	2.0	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310227-08A	Vial HCl preserved	A	N/A	2.0	Y	Absent	NYTCL-8260(14)
L1310227-08B	Vial HCl preserved	A	N/A	2.0	Y	Absent	NYTCL-8260(14)
L1310227-08C	Vial HCl preserved	A	N/A	2.0	Y	Absent	NYTCL-8260(14)
L1310227-08D	Amber 1000ml unpreserved	A	7	2.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1310227-08E	Amber 1000ml unpreserved	A	7	2.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1310227-08F	Amber 1000ml unpreserved	A	7	2.0	Y	Absent	NYTCL-8081(7)
L1310227-08G	Amber 1000ml unpreserved	A	7	2.0	Y	Absent	NYTCL-8081(7)
L1310227-08H	Amber 1000ml unpreserved	A	7	2.0	Y	Absent	NYTCL-8082-1200ML(7)
L1310227-08I	Amber 1000ml unpreserved	A	7	2.0	Y	Absent	NYTCL-8082-1200ML(7)

*Values in parentheses indicate holding time in days

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310227
Report Date: 06/12/13

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310227-08J	Plastic 500ml HNO3 preserved	A	<2	2.0	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)

*Values in parentheses indicate holding time in days

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310227
Project Number:	12043	**Report Date:**	06/12/13

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

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

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: DU Report with "J" Qualifiers

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310227
Project Number:	12043	**Report Date:**	06/12/13

Data Qualifiers

due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with "J" Qualifiers

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310227
Project Number:	12043	**Report Date:**	06/12/13

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised December 19, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012B, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C,

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C,

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

CHAIN OF CUSTODY

PAGE 2 OF 2

Date Rec'd in Lab: 6/5/13

ALPHA Job #: L1310227

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: EPM, Inc.
Address: 1983 Marcus Ave., Ste 109
Lake Success, NY 11042
Phone: 516-328-1194
Fax:
Email: jlebow@epmco.com, rhart@epmco.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Charleston, Staten Island
Project Location: Charleston, Staten Island
Project #: 12043
Project Manager: Richard Hart
ALPHA Quote #: 2013595

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 6/12/13 Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

*QAQC samples contained in glass (8260) and plastic (6010B/7471)
†QAQC samples preserved with HCl (8260) and HNO3 (6010)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs (8260/5035)	TCL SVOCs (8270)	PCBs (8082)	TAL Metals (6010B/7471)	TCL Pesticides (8081A)								Sample Specific Comments	TOTAL # BOTTLES
10227.1	SB5 (0-2')	6/5/13	0832	S	JA	X	X	X	X	X									
.2	SB5 (8-10')	6/5/13	0845	S	JA	X	X	X	X	X									
.3	SB4 (0-2')	6/5/13	0955	S	JA	X	X	X	X	X									
.4	SB4 (8-10')	6/5/13	1000	S	JA	X	X	X	X	X									
.5	SB1 (0-2')	6/5/13	1407	S	JA	X	X	X	X	X									
.6	SB6 (0-2')	6/5/13	1443	S	JA	X	X	X	X	X									
.7	Blind Dup 01	—	—	S	JA	X	X	X	X	X									
.8	FB 01	6/5/13	1550	W	JA	X	X	X	X	X									

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	P+	G	G	G+	G								
Preservative	A†	A	A	A†	A								

Relinquished By:	Date/Time	Received By:	Date/Time
	6/5/13 1645		6-5-13 16:45
	6/5/13 18:09		6/5/13 19:09
	6/5/13 2250		6/5/13 2250

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L1310244
Client:	Environmental Planning and Management 1983 Marcus Avenue Suite 109 Lake Success, NY 11042
ATTN:	Rick Hart
Phone:	(516) 328-1194
Project Name:	CHARLESTON, STATEN ISLAND
Project Number:	12043
Report Date:	06/12/13

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310244
Report Date: 06/12/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1310244-01	SG1	CHARLESTON, STATEN ISLAND	06/05/13 12:50
L1310244-02	CAN 1660	CHARLESTON, STATEN ISLAND	

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310244
Project Number:	12043	**Report Date:**	06/12/13

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310244
Project Number:	12043	**Report Date:**	06/12/13

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on May 30, 2013. The canister certification results are provided as an addendum.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 06/12/13

AIR

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310244
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310244-01
Client ID: SG1
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 06/12/13 02:58
Analyst: MB

Date Collected: 06/05/13 12:50
Date Received: 06/05/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Propylene	17.9	0.500	--	30.8	0.861	--		1
Dichlorodifluoromethane	0.487	0.200	--	2.41	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	1.62	0.200	--	3.58	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	16.6	2.50	--	31.3	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	120	1.00	--	285	2.38	--		1
Trichlorofluoromethane	0.229	0.200	--	1.29	1.12	--		1
Isopropanol	1.96	0.500	--	4.82	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	1.31	1.00	--	4.55	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.967	0.200	--	3.01	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	16.6	0.200	--	49.0	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310244
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310244-01
Client ID: SG1
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/05/13 12:50
Date Received: 06/05/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	0.627	0.500	--	2.26	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	1.59	0.200	--	4.69	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.518	0.200	--	1.83	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.821	0.200	--	2.62	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.615	0.200	--	2.52	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	2.24	0.200	--	9.18	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.63	0.200	--	6.14	0.754	--		1
2-Hexanone	2.48	0.200	--	10.2	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.424	0.200	--	1.84	0.869	--		1
p/m-Xylene	1.58	0.400	--	6.86	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310244
Report Date: 06/12/13

SAMPLE RESULTS

Lab ID: L1310244-01
Client ID: SG1
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/05/13 12:50
Date Received: 06/05/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.658	0.200	--	2.86	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethybenzene	0.361	0.200	--	1.77	0.983	--		1
1,2,4-Trimethylbenzene	1.28	0.200	--	6.29	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	94		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	92		60-140

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310244
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/11/13 14:16

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG614304-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310244

Project Number: 12043 **Report Date:** 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/11/13 14:16

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG614304-4								
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310244
Report Date: 06/12/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/11/13 14:16

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG614304-4								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethybenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310244

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG614304-3								
Chlorodifluoromethane	88		-		70-130	-		
Propylene	100		-		70-130	-		
Propane	82		-		70-130	-		
Dichlorodifluoromethane	96		-		70-130	-		
Chloromethane	100		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	94		-		70-130	-		
Methanol	97		-		70-130	-		
Vinyl chloride	93		-		70-130	-		
1,3-Butadiene	95		-		70-130	-		
Butane	97		-		70-130	-		
Bromomethane	88		-		70-130	-		
Chloroethane	89		-		70-130	-		
Ethyl Alcohol	103		-		70-130	-		
Dichlorofluoromethane	87		-		70-130	-		
Vinyl bromide	87		-		70-130	-		
Acrolein	74		-		70-130	-		
Acetone	109		-		70-130	-		
Acetonitrile	96		-		70-130	-		
Trichlorofluoromethane	95		-		70-130	-		
iso-Propyl Alcohol	96		-		70-130	-		
Acrylonitrile	83		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310244

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG614304-3								
Pentane	94		-		70-130	-		
Ethyl ether	98		-		70-130	-		
1,1-Dichloroethene	95		-		70-130	-		
tert-Butyl Alcohol	82		-		70-130	-		
Methylene chloride	102		-		70-130	-		
3-Chloropropene	101		-		70-130	-		
Carbon disulfide	92		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	97		-		70-130	-		
trans-1,2-Dichloroethene	84		-		70-130	-		
1,1-Dichloroethane	92		-		70-130	-		
Methyl tert butyl ether	86		-		70-130	-		
Vinyl acetate	104		-		70-130	-		
2-Butanone	94		-		70-130	-		
cis-1,2-Dichloroethene	98		-		70-130	-		
Ethyl Acetate	84		-		70-130	-		
Chloroform	89		-		70-130	-		
Tetrahydrofuran	89		-		70-130	-		
2,2-Dichloropropane	80		-		70-130	-		
1,2-Dichloroethane	90		-		70-130	-		
n-Hexane	97		-		70-130	-		
Isopropyl Ether	90		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310244

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG614304-3								
Ethyl-Tert-Butyl-Ether	91		-		70-130	-		
1,1,1-Trichloroethane	100		-		70-130	-		
1,1-Dichloropropene	99		-		70-130	-		
Benzene	98		-		70-130	-		
Carbon tetrachloride	102		-		70-130	-		
Cyclohexane	98		-		70-130	-		
Tertiary-Amyl Methyl Ether	89		-		70-130	-		
Dibromomethane	98		-		70-130	-		
1,2-Dichloropropane	104		-		70-130	-		
Bromodichloromethane	97		-		70-130	-		
1,4-Dioxane	94		-		70-130	-		
Trichloroethene	100		-		70-130	-		
2,2,4-Trimethylpentane	102		-		70-130	-		
Methyl methacrylate	**136**	Q	-		70-130	-		
Heptane	106		-		70-130	-		
cis-1,3-Dichloropropene	107		-		70-130	-		
4-Methyl-2-pentanone	108		-		70-130	-		
trans-1,3-Dichloropropene	90		-		70-130	-		
1,1,2-Trichloroethane	104		-		70-130	-		
Toluene	90		-		70-130	-		
1,3-Dichloropropane	89		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310244

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG614304-3								
2-Hexanone	96		-		70-130	-		
Dibromochloromethane	83		-		70-130	-		
1,2-Dibromoethane	92		-		70-130	-		
Butyl Acetate	83		-		70-130	-		
Octane	83		-		70-130	-		
Tetrachloroethene	86		-		70-130	-		
1,1,1,2-Tetrachloroethane	85		-		70-130	-		
Chlorobenzene	91		-		70-130	-		
Ethylbenzene	91		-		70-130	-		
p/m-Xylene	91		-		70-130	-		
Bromoform	76		-		70-130	-		
Styrene	88		-		70-130	-		
1,1,2,2-Tetrachloroethane	98		-		70-130	-		
o-Xylene	93		-		70-130	-		
1,2,3-Trichloropropane	91		-		70-130	-		
Nonane (C9)	98		-		70-130	-		
Isopropylbenzene	88		-		70-130	-		
Bromobenzene	87		-		70-130	-		
o-Chlorotoluene	85		-		70-130	-		
n-Propylbenzene	84		-		70-130	-		
p-Chlorotoluene	84		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310244

Report Date: 06/12/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG614304-3								
4-Ethyltoluene	79		-		70-130	-		
1,3,5-Trimethylbenzene	89		-		70-130	-		
tert-Butylbenzene	87		-		70-130	-		
1,2,4-Trimethylbenzene	94		-		70-130	-		
Decane (C10)	92		-		70-130	-		
Benzyl chloride	72		-		70-130	-		
1,3-Dichlorobenzene	91		-		70-130	-		
1,4-Dichlorobenzene	89		-		70-130	-		
sec-Butylbenzene	88		-		70-130	-		
p-Isopropyltoluene	80		-		70-130	-		
1,2-Dichlorobenzene	91		-		70-130	-		
n-Butylbenzene	92		-		70-130	-		
1,2-Dibromo-3-chloropropane	92		-		70-130	-		
Undecane	98		-		70-130	-		
Dodecane (C12)	105		-		70-130	-		
1,2,4-Trichlorobenzene	94		-		70-130	-		
Naphthalene	88		-		70-130	-		
1,2,3-Trichlorobenzene	91		-		70-130	-		
Hexachlorobutadiene	89		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310244
Report Date: 06/12/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG614304-5 QC Sample: L1310244-01 Client ID: SG1						
Propylene	17.9	18.7	ppbV	4		25
Dichlorodifluoromethane	0.487	0.541	ppbV	11		25
Chloromethane	ND	ND	ppbV	NC		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	1.62	1.69	ppbV	4		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	16.6	16.3	ppbV	2		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	120	125	ppbV	4		25
Trichlorofluoromethane	0.229	0.232	ppbV	1		25
Isopropanol	1.96	1.96	ppbV	0		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	1.31	1.30	ppbV	1		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	0.967	1.02	ppbV	5		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310244
Report Date: 06/12/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG614304-5 QC Sample: L1310244-01 Client ID: SG1					
1,1-Dichloroethane	ND	ND	ppbV	NC	25
Methyl tert butyl ether	ND	ND	ppbV	NC	25
Vinyl acetate	ND	ND	ppbV	NC	25
2-Butanone	16.6	17.4	ppbV	5	25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	25
Ethyl Acetate	0.627	0.696	ppbV	10	25
Chloroform	ND	ND	ppbV	NC	25
Tetrahydrofuran	1.59	1.69	ppbV	6	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
n-Hexane	0.518	0.570	ppbV	10	25
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
Benzene	0.821	0.886	ppbV	8	25
Carbon tetrachloride	ND	ND	ppbV	NC	25
Cyclohexane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
1,4-Dioxane	ND	ND	ppbV	NC	25
Trichloroethene	ND	ND	ppbV	NC	25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310244
Report Date: 06/12/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG614304-5 QC Sample: L1310244-01 Client ID: SG1					
Heptane	0.615	0.618	ppbV	0	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	2.24	2.40	ppbV	7	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	1.63	1.61	ppbV	1	25
2-Hexanone	2.48	2.49	ppbV	0	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	0.424	0.435	ppbV	3	25
p/m-Xylene	1.58	1.56	ppbV	1	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	0.658	0.672	ppbV	2	25
4-Ethyltoluene	ND	ND	ppbV	NC	25
1,3,5-Trimethybenzene	0.361	0.349	ppbV	3	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310244
Report Date: 06/12/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG614304-5 QC Sample: L1310244-01 Client ID: SG1					
1,2,4-Trimethylbenzene	1.28	1.29	ppbV	1	25
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: CHARLESTON, STATEN ISLAND

Lab Number: L1310244

Project Number: 12043

Report Date: 06/12/13

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1310244-01	SG1	0540	SV200	05/30/13	88951		-	-	-	Pass	217	220	1
L1310244-01	SG1	992	6.0L Can	05/30/13	88951	L1308218-03	Pass	-29.8	-4.9	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/12/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 05/09/13 20:01
Analyst: RY

Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.200	--	ND	0.361	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/12/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1308218

Project Number: CANISTER QC BAT **Report Date:** 06/12/13

Air Canister Certification Results

Lab ID: L1308218-03 Date Collected: 05/08/13 14:22

Client ID: CAN 1689 SHELF 43 Date Received: 05/09/13

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1308218

Project Number: CANISTER QC BAT **Report Date:** 06/12/13

Air Canister Certification Results

Lab ID: L1308218-03 Date Collected: 05/08/13 14:22

Client ID: CAN 1689 SHELF 43 Date Received: 05/09/13

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethybenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	**Qualifier**	**Units**	**RDL**	**Dilution Factor**
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/12/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	84		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1308218

Project Number: CANISTER QC BAT **Report Date:** 06/12/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 05/09/13 20:01
Analyst: RY

Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	2.00	--	ND	4.75	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/12/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.500	--	ND	2.46	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.500	--	ND	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	ND	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.500	--	ND	2.74	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/12/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	84		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	87		60-140

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310244
Report Date: 06/12/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information	Custody Seal
Cooler	
N/A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310244-01A	Canister - 6 Liter	N/A	N/A		Y	Absent	TO15-LL(30)
L1310244-02A	Canister - 6 Liter	N/A	N/A		Y	Absent	CLEAN-FEE()

*Values in parentheses indicate holding time in days

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310244
Project Number:	12043	**Report Date:**	06/12/13

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

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

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: Data Usability Report

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310244
Project Number:	12043	**Report Date:**	06/12/13

Data Qualifiers

due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised August 3, 2012 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable). Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Titanium, Vanadium, Zinc, Total Organic Carbon, Corrosivity, TCLP 1311, SPLP 1312. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020A, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C, 8270D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 1311, 3050B, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C, 8270D.)

Biological Tissue (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C, 8270D.)

Air & Emissions (EPA TO-15.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 180.1, 1631E, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B, 3020A, . Organic Parameters: EPA 3510C, 3630C, 3640A, 3660B, 8081B, 8082A, 8270C, 8270D, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 3050B, 3051A, 6020A, 7471B, 9040B, 9045C. Organic Parameters: SW-846 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8015D, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3020A, SM2320B, SM2540D, 2540G, 4500H-B, EPA 180.1, 1631E, SW-846 7470A, 9040C, 6020A, 9050A. Organic Parameters: SW-846 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 6020A, 7471B, 7474, 9040B, 9040C, 9045C, 9045D, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8081B, 8082A, 8270C, 8270D, 8015D.)

Atmospheric Organic Parameters (EPA 3C, TO-15, TO-10A, TO-13A-SIM.)

Biological Tissue (Inorganic Parameters: SW-846 6020A. Organic Parameters: SW-846 8270C, 8270D, 3510C, 3570, 3610C, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, 6020A, 1631E, 7470A, 9050A, EPA 180.1, 3020A. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 3510C.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020A, 7471B, 7474, 9040C, 9045D. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 1311, 3050B, 3580A, 3570, 3051A.)

Air & Emissions (EPA TO-15, TO-10A.)

Pennsylvania Certificate/Lab ID: 68-02089 ***NELAP Accredited***

Non-Potable Water (Inorganic Parameters: 1312, 1631E, 180.1, 3020A, 6020A, 7470A, 9040B, 9050A, 2320B, 2540D, 2540G, SM4500H+-B. Organic Parameters: 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D .)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3051A, 6020A, 7471B, 7474 9040B, 9045C, 9060. Organic Parameters: EPA3050B, 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8270D, 8081B, 8015D, 8082A.)

Rhode Island Department of Health Certificate/Lab ID: LAO00299. ***NELAP Accredited via NJ-DEP.***

Refer to NJ-DEP Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. ***NELAP Accredited.***

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8081, 8082.)

Air (Organic Parameters: EPA TO-15)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID:460194. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters:EPA 3020A, 6020A, 245.7, 9040B. Organic Parameters: EPA 3510C, 3640A, 3660B, 3665A, 8270C, 8270D, 8082A, 8081B, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020A,7470A,7471B,9040B,9045C,3050B,3051, 9060. Organic Parameters: EPA 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 3570, 8270C, 8270D, 8081B, 8082A, 8015D.)

Washington State Department of Ecology Certificate/Lab ID: C954. *Non-Potable Water* (Inorganic Parameters: SM2540D, 180.1, 1631E.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 7474, 9045C, 9050A, 9060. Organic Parameters: EPA 8081, 8082, 8015, 8270.)

U.S. Army Corps of Engineers

Department of Defense, L-A-B Certificate/Lab ID: L2217.01.

Non-Potable Water (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH, 8082A, 8081B, 8015D-SHC, 8015D.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH 8082A, 8081B, 8015D-SHC, 8015D.

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **8270C:** Biphenyl. **TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 2-Methylnaphthalene, 1-Methylnaphthalene.

AIR ANALYSIS

PAGE 1 OF 2

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab:

ALPHA Job #: L1310244

Client Information

Client: Environmental Planning & Management, Inc.
Address: 1983 Marcus Avenue, Suite 109
New Hyde Park, NY 11042
Phone: 516-328-1194
Fax:
Email: jlebow@epmco.com, rhart@epmco.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Charleston, Staten Island
Project Location: Charleston, Staten Island
Project #: 12043
Project Manager: Richard Hart
ALPHA Quote #: 2013595

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
■ ADEx
Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)
Other Formats: _____
■ EMAIL (standard pdf report)
☐ Additional Deliverables: _____
Report to: (if different than Project Manager) _____

Billing Information

■ Same as Client info PO #: 12043

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria
NYSDOH		

Other Project Specific Requirements/Comments:

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	ANALYSIS TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
L1310244-1	SG 1	6/5/13	1225	1250	29.29	-5	SV	JA	6L	992	0540		X						

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: CS

Relinquished By:	Date/Time	Received By:	Date/Time:
	6/5/13 - 1645		6-5-13 16:45
	6/5/13 19:09		6/5/13 19:09
	6/5/13 22:50		6/5/13 22:50
	6/6/13 04:00	Mansfield Lab	6/6/13 04:00

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 (19-Jun-09)

ANALYTICAL REPORT

Lab Number:	L1310351
Client:	Environmental Planning and Management 1983 Marcus Avenue Suite 109 Lake Success, NY 11042
ATTN:	Rick Hart
Phone:	(516) 328-1194
Project Name:	CHARLESTON, STATEN ISLAND
Project Number:	12043
Report Date:	06/17/13

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1310351-01	SB2 (0-2')	CHARLESTON, STATEN ISLAND	06/06/13 09:15
L1310351-02	SB2 (8-10')	CHARLESTON, STATEN ISLAND	06/06/13 09:20
L1310351-03	SB3 (0-2')	CHARLESTON, STATEN ISLAND	06/06/13 12:29
L1310351-04	SB3 (8-10')	CHARLESTON, STATEN ISLAND	06/06/13 12:31
L1310351-05	GW1 (0-2')	CHARLESTON, STATEN ISLAND	06/06/13 13:54
L1310351-06	GW1 (8-10')	CHARLESTON, STATEN ISLAND	06/06/13 13:57
L1310351-07	GW1 (43-45')	CHARLESTON, STATEN ISLAND	06/06/13 14:20
L1310351-08	TB2	CHARLESTON, STATEN ISLAND	06/06/13 00:00
L1310351-09	GW1	CHARLESTON, STATEN ISLAND	06/06/13 16:50
L1310351-10	FB02	CHARLESTON, STATEN ISLAND	06/06/13 16:20

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310351
Project Number:	12043	**Report Date:**	06/17/13

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310351
Project Number:	12043	**Report Date:**	06/17/13

Case Narrative (continued)

Report Submission

This report replaces the report issued on June 14, 2013. The Volatile Organics compound list for L1310351-08 has been amended.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

Sample "GW1" was received without the container for Dissolved Metals analysis. An aliquot was taken from an unpreserved container and preserved appropriately.

Pesticides

The dual column RPD for L1310351-06 is above the acceptance criteria for 4,4'-DDT; however, obvious column interferences are present. Due to these interferences, the lower of the two results is reported and qualified with a "P".

Total Metals

L1310351-01 through -07 have elevated detection limits for all analytes, except Mercury, due to the dilutions required by the sample matrices.

The WG613421-4 MS recoveries, performed on L1310351-09, are below the acceptance criteria for Iron (52%) and Magnesium (0%). A post digestion spike was performed with an acceptable recovery for Iron (98%) and Magnesium (97%).

The WG614469-4 MS recoveries for Aluminum (849%) and Iron (1130%), performed on L1310351-01, do not apply because the sample concentration is greater than four times the spike amount added.

The WG614469-4 MS recoveries, performed on L1310351-01, are above the acceptance criteria for Arsenic (132%), Copper (208%), and Lead (149%). A post digestion spike was performed with acceptable recoveries of Arsenic (91%), Copper (83%), and Lead (87%).

The WG614544-4 MS recovery, performed on L1310351-01, is above the acceptance criteria for Mercury (147%). A post digestion spike was performed with an acceptable recovery of 109%.

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351
Project Number: 12043 **Report Date:** 06/17/13

Case Narrative (continued)

Dissolved Metals

L1310351-09: The Dissolved results are greater than the Total results for Cobalt, Manganese, Nickel, and Potassium. The sample containers were verified as being labeled correctly by the laboratory, and aliquots were analyzed from the total metals preserved bottle, confirming the original results. The unpreserved sample bottle for dissolved metals was received with limited sample and was consumed in analyses so could not be analyzed.

The WG614119-4 MS recovery for Calcium (37%), performed on L1310351-09, does not apply because the sample concentration is greater than four times the spike amount added.

The WG614119-4 MS recovery, performed on L1310351-09, is below the acceptance criteria for Iron (72%). A post digestion spike was performed with an acceptable recovery of 93%.

The WG614119-3 Laboratory Duplicate RPDs, performed on L1310351-09, are above the acceptance criteria for Aluminum (75%) and Antimony (27%); however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Cynthia McQueen

Title: Technical Director/Representative Date: 06/17/13

ORGANICS

VOLATILES

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-01	Date Collected:	06/06/13 09:15
Client ID:	SB2 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/10/13 15:11		
Analyst:	BN		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	10	2.1	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.18	1
Chloroform	ND		ug/kg	1.6	0.39	1
Carbon tetrachloride	ND		ug/kg	1.0	0.22	1
1,2-Dichloropropane	ND		ug/kg	3.7	0.24	1
Dibromochloromethane	ND		ug/kg	1.0	0.32	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.32	1
Tetrachloroethene	ND		ug/kg	1.0	0.15	1
Chlorobenzene	ND		ug/kg	1.0	0.36	1
Trichlorofluoromethane	ND		ug/kg	5.2	0.13	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.15	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.12	1
Bromodichloromethane	ND		ug/kg	1.0	0.24	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13	1
1,1-Dichloropropene	ND		ug/kg	5.2	0.48	1
Bromoform	ND		ug/kg	4.2	0.43	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.18	1
Benzene	ND		ug/kg	1.0	0.12	1
Toluene	ND		ug/kg	1.6	0.12	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	5.2	0.82	1
Bromomethane	ND		ug/kg	2.1	0.35	1
Vinyl chloride	ND		ug/kg	2.1	0.15	1
Chloroethane	ND		ug/kg	2.1	0.33	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.22	1
Trichloroethene	ND		ug/kg	1.0	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	5.2	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	5.2	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	5.2	0.25	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-01 Date Collected: 06/06/13 09:15

Client ID: SB2 (0-2') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.1	0.11	1
p/m-Xylene	ND		ug/kg	2.1	0.34	1
o-Xylene	ND		ug/kg	2.1	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.16	1
Dibromomethane	ND		ug/kg	10	0.17	1
Styrene	ND		ug/kg	2.1	0.32	1
Dichlorodifluoromethane	ND		ug/kg	10	0.23	1
Acetone	38		ug/kg	10	3.2	1
Carbon disulfide	ND		ug/kg	10	2.1	1
2-Butanone	6.7	J	ug/kg	10	0.37	1
Vinyl acetate	ND		ug/kg	10	0.50	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.26	1
1,2,3-Trichloropropane	ND		ug/kg	10	0.24	1
2-Hexanone	ND		ug/kg	10	0.20	1
Bromochloromethane	ND		ug/kg	5.2	0.21	1
2,2-Dichloropropane	ND		ug/kg	5.2	0.24	1
1,2-Dibromoethane	ND		ug/kg	4.2	0.19	1
1,3-Dichloropropane	ND		ug/kg	5.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.33	1
Bromobenzene	ND		ug/kg	5.2	0.22	1
n-Butylbenzene	ND		ug/kg	1.0	0.21	1
sec-Butylbenzene	ND		ug/kg	1.0	0.22	1
tert-Butylbenzene	ND		ug/kg	5.2	0.59	1
o-Chlorotoluene	ND		ug/kg	5.2	0.17	1
p-Chlorotoluene	ND		ug/kg	5.2	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.2	0.83	1
Hexachlorobutadiene	ND		ug/kg	5.2	0.44	1
Isopropylbenzene	ND		ug/kg	1.0	0.18	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.20	1
Naphthalene	ND		ug/kg	5.2	0.80	1
Acrylonitrile	ND		ug/kg	10	0.25	1
n-Propylbenzene	ND		ug/kg	1.0	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.2	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.2	0.83	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.2	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.2	0.60	1
1,4-Dioxane	ND		ug/kg	100	18.	1
1,4-Diethylbenzene	ND		ug/kg	4.2	0.17	1
4-Ethyltoluene	ND		ug/kg	4.2	0.12	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-01 Date Collected: 06/06/13 09:15

Client ID: SB2 (0-2') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.2	0.14	1
Ethyl ether	ND		ug/kg	5.2	0.28	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.2	0.47	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	99		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-02	Date Collected:	06/06/13 09:20
Client ID:	SB2 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/10/13 15:39		
Analyst:	BN		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	8.9	1.8	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.16	1
Chloroform	ND		ug/kg	1.3	0.33	1
Carbon tetrachloride	ND		ug/kg	0.89	0.19	1
1,2-Dichloropropane	ND		ug/kg	3.1	0.20	1
Dibromochloromethane	ND		ug/kg	0.89	0.27	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.27	1
Tetrachloroethene	ND		ug/kg	0.89	0.12	1
Chlorobenzene	ND		ug/kg	0.89	0.31	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.11	1
1,2-Dichloroethane	ND		ug/kg	0.89	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	0.89	0.10	1
Bromodichloromethane	ND		ug/kg	0.89	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	0.89	0.11	1
cis-1,3-Dichloropropene	ND		ug/kg	0.89	0.11	1
1,1-Dichloropropene	ND		ug/kg	4.4	0.40	1
Bromoform	ND		ug/kg	3.6	0.37	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.89	0.15	1
Benzene	ND		ug/kg	0.89	0.10	1
Toluene	ND		ug/kg	1.3	0.10	1
Ethylbenzene	ND		ug/kg	0.89	0.13	1
Chloromethane	ND		ug/kg	4.4	0.70	1
Bromomethane	ND		ug/kg	1.8	0.30	1
Vinyl chloride	ND		ug/kg	1.8	0.12	1
Chloroethane	ND		ug/kg	1.8	0.28	1
1,1-Dichloroethene	ND		ug/kg	0.89	0.18	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.19	1
Trichloroethene	ND		ug/kg	0.89	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	4.4	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.4	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	4.4	0.21	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-02 Date Collected: 06/06/13 09:20

Client ID: SB2 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.8	0.09	1
p/m-Xylene	ND		ug/kg	1.8	0.29	1
o-Xylene	ND		ug/kg	1.8	0.24	1
cis-1,2-Dichloroethene	ND		ug/kg	0.89	0.13	1
Dibromomethane	ND		ug/kg	8.9	0.14	1
Styrene	ND		ug/kg	1.8	0.27	1
Dichlorodifluoromethane	ND		ug/kg	8.9	0.19	1
Acetone	48		ug/kg	8.9	2.8	1
Carbon disulfide	ND		ug/kg	8.9	1.8	1
2-Butanone	2.0	J	ug/kg	8.9	0.32	1
Vinyl acetate	ND		ug/kg	8.9	0.42	1
4-Methyl-2-pentanone	ND		ug/kg	8.9	0.22	1
1,2,3-Trichloropropane	ND		ug/kg	8.9	0.20	1
2-Hexanone	ND		ug/kg	8.9	0.17	1
Bromochloromethane	ND		ug/kg	4.4	0.17	1
2,2-Dichloropropane	ND		ug/kg	4.4	0.20	1
1,2-Dibromoethane	ND		ug/kg	3.6	0.16	1
1,3-Dichloropropane	ND		ug/kg	4.4	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.89	0.28	1
Bromobenzene	ND		ug/kg	4.4	0.18	1
n-Butylbenzene	ND		ug/kg	0.89	0.18	1
sec-Butylbenzene	ND		ug/kg	0.89	0.18	1
tert-Butylbenzene	ND		ug/kg	4.4	0.50	1
o-Chlorotoluene	ND		ug/kg	4.4	0.14	1
p-Chlorotoluene	ND		ug/kg	4.4	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.4	0.70	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.38	1
Isopropylbenzene	ND		ug/kg	0.89	0.15	1
p-Isopropyltoluene	ND		ug/kg	0.89	0.17	1
Naphthalene	ND		ug/kg	4.4	0.68	1
Acrylonitrile	ND		ug/kg	8.9	0.21	1
n-Propylbenzene	ND		ug/kg	0.89	0.11	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.4	0.15	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.4	0.70	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.4	0.13	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.4	0.51	1
1,4-Dioxane	ND		ug/kg	89	15.	1
1,4-Diethylbenzene	ND		ug/kg	3.6	0.14	1
4-Ethyltoluene	ND		ug/kg	3.6	0.10	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-02 Date Collected: 06/06/13 09:20

Client ID: SB2 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.6	0.12	1
Ethyl ether	ND		ug/kg	4.4	0.24	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.4	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	100		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-03	Date Collected:	06/06/13 12:29
Client ID:	SB3 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/10/13 16:07		
Analyst:	BN		
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.3	1.9	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.16	1
Chloroform	ND		ug/kg	1.4	0.34	1
Carbon tetrachloride	ND		ug/kg	0.93	0.20	1
1,2-Dichloropropane	ND		ug/kg	3.2	0.21	1
Dibromochloromethane	ND		ug/kg	0.93	0.29	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.28	1
Tetrachloroethene	ND		ug/kg	0.93	0.13	1
Chlorobenzene	ND		ug/kg	0.93	0.32	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.11	1
1,2-Dichloroethane	ND		ug/kg	0.93	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	0.93	0.10	1
Bromodichloromethane	ND		ug/kg	0.93	0.21	1
trans-1,3-Dichloropropene	ND		ug/kg	0.93	0.11	1
cis-1,3-Dichloropropene	ND		ug/kg	0.93	0.12	1
1,1-Dichloropropene	ND		ug/kg	4.6	0.42	1
Bromoform	ND		ug/kg	3.7	0.38	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.93	0.16	1
Benzene	ND		ug/kg	0.93	0.11	1
Toluene	ND		ug/kg	1.4	0.10	1
Ethylbenzene	ND		ug/kg	0.93	0.14	1
Chloromethane	ND		ug/kg	4.6	0.73	1
Bromomethane	ND		ug/kg	1.9	0.31	1
Vinyl chloride	ND		ug/kg	1.9	0.13	1
Chloroethane	ND		ug/kg	1.9	0.29	1
1,1-Dichloroethene	ND		ug/kg	0.93	0.19	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.20	1
Trichloroethene	ND		ug/kg	0.93	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	4.6	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.6	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	4.6	0.22	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-03 Date Collected: 06/06/13 12:29

Client ID: SB3 (0-2') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.9	0.10	1
p/m-Xylene	ND		ug/kg	1.9	0.30	1
o-Xylene	ND		ug/kg	1.9	0.25	1
cis-1,2-Dichloroethene	ND		ug/kg	0.93	0.14	1
Dibromomethane	ND		ug/kg	9.3	0.15	1
Styrene	ND		ug/kg	1.9	0.29	1
Dichlorodifluoromethane	ND		ug/kg	9.3	0.20	1
Acetone	6.8	J	ug/kg	9.3	2.9	1
Carbon disulfide	ND		ug/kg	9.3	1.9	1
2-Butanone	ND		ug/kg	9.3	0.33	1
Vinyl acetate	ND		ug/kg	9.3	0.45	1
4-Methyl-2-pentanone	ND		ug/kg	9.3	0.23	1
1,2,3-Trichloropropane	ND		ug/kg	9.3	0.21	1
2-Hexanone	ND		ug/kg	9.3	0.18	1
Bromochloromethane	ND		ug/kg	4.6	0.18	1
2,2-Dichloropropane	ND		ug/kg	4.6	0.21	1
1,2-Dibromoethane	ND		ug/kg	3.7	0.16	1
1,3-Dichloropropane	ND		ug/kg	4.6	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.93	0.30	1
Bromobenzene	ND		ug/kg	4.6	0.19	1
n-Butylbenzene	ND		ug/kg	0.93	0.18	1
sec-Butylbenzene	ND		ug/kg	0.93	0.19	1
tert-Butylbenzene	ND		ug/kg	4.6	0.52	1
o-Chlorotoluene	ND		ug/kg	4.6	0.15	1
p-Chlorotoluene	ND		ug/kg	4.6	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.6	0.73	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.39	1
Isopropylbenzene	ND		ug/kg	0.93	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.93	0.18	1
Naphthalene	ND		ug/kg	4.6	0.72	1
Acrylonitrile	ND		ug/kg	9.3	0.22	1
n-Propylbenzene	ND		ug/kg	0.93	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.6	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.6	0.73	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.6	0.13	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.6	0.53	1
1,4-Dioxane	ND		ug/kg	93	16.	1
1,4-Diethylbenzene	ND		ug/kg	3.7	0.15	1
4-Ethyltoluene	ND		ug/kg	3.7	0.11	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-03 Date Collected: 06/06/13 12:29

Client ID: SB3 (0-2') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.7	0.12	1
Ethyl ether	ND		ug/kg	4.6	0.25	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.6	0.42	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	101		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-04	Date Collected:	06/06/13 12:31
Client ID:	SB3 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/10/13 16:35		
Analyst:	BN		
Percent Solids:	91%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.7	1.9	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.17	1
Chloroform	ND		ug/kg	1.4	0.36	1
Carbon tetrachloride	ND		ug/kg	0.97	0.20	1
1,2-Dichloropropane	ND		ug/kg	3.4	0.22	1
Dibromochloromethane	ND		ug/kg	0.97	0.30	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.29	1
Tetrachloroethene	ND		ug/kg	0.97	0.14	1
Chlorobenzene	ND		ug/kg	0.97	0.34	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.12	1
1,2-Dichloroethane	ND		ug/kg	0.97	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	0.97	0.11	1
Bromodichloromethane	ND		ug/kg	0.97	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	0.97	0.12	1
cis-1,3-Dichloropropene	ND		ug/kg	0.97	0.12	1
1,1-Dichloropropene	ND		ug/kg	4.8	0.44	1
Bromoform	ND		ug/kg	3.9	0.40	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.97	0.16	1
Benzene	ND		ug/kg	0.97	0.11	1
Toluene	2.9		ug/kg	1.4	0.11	1
Ethylbenzene	ND		ug/kg	0.97	0.14	1
Chloromethane	ND		ug/kg	4.8	0.76	1
Bromomethane	ND		ug/kg	1.9	0.33	1
Vinyl chloride	ND		ug/kg	1.9	0.14	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.97	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.20	1
Trichloroethene	ND		ug/kg	0.97	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	4.8	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	4.8	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	4.8	0.23	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-04 Date Collected: 06/06/13 12:31

Client ID: SB3 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.9	0.10	1
p/m-Xylene	ND		ug/kg	1.9	0.31	1
o-Xylene	ND		ug/kg	1.9	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.97	0.14	1
Dibromomethane	ND		ug/kg	9.7	0.16	1
Styrene	ND		ug/kg	1.9	0.30	1
Dichlorodifluoromethane	ND		ug/kg	9.7	0.21	1
Acetone	7.7	J	ug/kg	9.7	3.0	1
Carbon disulfide	ND		ug/kg	9.7	1.9	1
2-Butanone	1.5	J	ug/kg	9.7	0.34	1
Vinyl acetate	ND		ug/kg	9.7	0.46	1
4-Methyl-2-pentanone	ND		ug/kg	9.7	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	9.7	0.22	1
2-Hexanone	ND		ug/kg	9.7	0.18	1
Bromochloromethane	ND		ug/kg	4.8	0.19	1
2,2-Dichloropropane	ND		ug/kg	4.8	0.22	1
1,2-Dibromoethane	ND		ug/kg	3.9	0.17	1
1,3-Dichloropropane	ND		ug/kg	4.8	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.97	0.31	1
Bromobenzene	ND		ug/kg	4.8	0.20	1
n-Butylbenzene	ND		ug/kg	0.97	0.19	1
sec-Butylbenzene	ND		ug/kg	0.97	0.20	1
tert-Butylbenzene	ND		ug/kg	4.8	0.54	1
o-Chlorotoluene	ND		ug/kg	4.8	0.15	1
p-Chlorotoluene	ND		ug/kg	4.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.8	0.76	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.41	1
Isopropylbenzene	ND		ug/kg	0.97	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.97	0.18	1
Naphthalene	ND		ug/kg	4.8	0.74	1
Acrylonitrile	ND		ug/kg	9.7	0.23	1
n-Propylbenzene	ND		ug/kg	0.97	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.8	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.8	0.76	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.8	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.8	0.55	1
1,4-Dioxane	ND		ug/kg	97	17.	1
1,4-Diethylbenzene	ND		ug/kg	3.9	0.15	1
4-Ethyltoluene	ND		ug/kg	3.9	0.11	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-04 Date Collected: 06/06/13 12:31

Client ID: SB3 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.9	0.12	1
Ethyl ether	ND		ug/kg	4.8	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	0.43	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-05	Date Collected:	06/06/13 13:54
Client ID:	GW1 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/10/13 17:03		
Analyst:	BN		
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.9	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.18	1
Chloroform	ND		ug/kg	1.5	0.37	1
Carbon tetrachloride	ND		ug/kg	0.99	0.21	1
1,2-Dichloropropane	ND		ug/kg	3.5	0.23	1
Dibromochloromethane	ND		ug/kg	0.99	0.31	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30	1
Tetrachloroethene	ND		ug/kg	0.99	0.14	1
Chlorobenzene	ND		ug/kg	0.99	0.34	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.12	1
1,2-Dichloroethane	ND		ug/kg	0.99	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	0.99	0.11	1
Bromodichloromethane	ND		ug/kg	0.99	0.23	1
trans-1,3-Dichloropropene	ND		ug/kg	0.99	0.12	1
cis-1,3-Dichloropropene	ND		ug/kg	0.99	0.13	1
1,1-Dichloropropene	ND		ug/kg	5.0	0.45	1
Bromoform	ND		ug/kg	4.0	0.41	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.99	0.17	1
Benzene	ND		ug/kg	0.99	0.12	1
Toluene	ND		ug/kg	1.5	0.11	1
Ethylbenzene	ND		ug/kg	0.99	0.15	1
Chloromethane	ND		ug/kg	5.0	0.78	1
Bromomethane	ND		ug/kg	2.0	0.34	1
Vinyl chloride	ND		ug/kg	2.0	0.14	1
Chloroethane	ND		ug/kg	2.0	0.31	1
1,1-Dichloroethene	ND		ug/kg	0.99	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21	1
Trichloroethene	ND		ug/kg	0.99	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-05 Date Collected: 06/06/13 13:54

Client ID: GW1 (0-2') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.0	0.10	1
p/m-Xylene	ND		ug/kg	2.0	0.32	1
o-Xylene	ND		ug/kg	2.0	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.99	0.15	1
Dibromomethane	ND		ug/kg	9.9	0.16	1
Styrene	ND		ug/kg	2.0	0.31	1
Dichlorodifluoromethane	ND		ug/kg	9.9	0.22	1
Acetone	ND		ug/kg	9.9	3.1	1
Carbon disulfide	ND		ug/kg	9.9	2.0	1
2-Butanone	ND		ug/kg	9.9	0.35	1
Vinyl acetate	ND		ug/kg	9.9	0.48	1
4-Methyl-2-pentanone	ND		ug/kg	9.9	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	9.9	0.22	1
2-Hexanone	ND		ug/kg	9.9	0.19	1
Bromochloromethane	ND		ug/kg	5.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	5.0	0.22	1
1,2-Dibromoethane	ND		ug/kg	4.0	0.18	1
1,3-Dichloropropane	ND		ug/kg	5.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.99	0.32	1
Bromobenzene	ND		ug/kg	5.0	0.21	1
n-Butylbenzene	ND		ug/kg	0.99	0.20	1
sec-Butylbenzene	ND		ug/kg	0.99	0.20	1
tert-Butylbenzene	ND		ug/kg	5.0	0.56	1
o-Chlorotoluene	ND		ug/kg	5.0	0.16	1
p-Chlorotoluene	ND		ug/kg	5.0	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.78	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.42	1
Isopropylbenzene	ND		ug/kg	0.99	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.99	0.19	1
Naphthalene	ND		ug/kg	5.0	0.76	1
Acrylonitrile	ND		ug/kg	9.9	0.24	1
n-Propylbenzene	ND		ug/kg	0.99	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.78	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57	1
1,4-Dioxane	ND		ug/kg	99	17.	1
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16	1
4-Ethyltoluene	ND		ug/kg	4.0	0.12	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-05 Date Collected: 06/06/13 13:54

Client ID: GW1 (0-2') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13	1
Ethyl ether	ND		ug/kg	5.0	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-06	Date Collected:	06/06/13 13:57
Client ID:	GW1 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/10/13 17:31		
Analyst:	BN		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	8.6	1.7	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.15	1
Chloroform	ND		ug/kg	1.3	0.32	1
Carbon tetrachloride	ND		ug/kg	0.86	0.18	1
1,2-Dichloropropane	ND		ug/kg	3.0	0.20	1
Dibromochloromethane	ND		ug/kg	0.86	0.26	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.26	1
Tetrachloroethene	ND		ug/kg	0.86	0.12	1
Chlorobenzene	ND		ug/kg	0.86	0.30	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.10	1
1,2-Dichloroethane	ND		ug/kg	0.86	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	0.86	0.10	1
Bromodichloromethane	ND		ug/kg	0.86	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	0.86	0.10	1
cis-1,3-Dichloropropene	ND		ug/kg	0.86	0.11	1
1,1-Dichloropropene	ND		ug/kg	4.3	0.39	1
Bromoform	ND		ug/kg	3.4	0.36	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.86	0.15	1
Benzene	ND		ug/kg	0.86	0.10	1
Toluene	ND		ug/kg	1.3	0.10	1
Ethylbenzene	ND		ug/kg	0.86	0.13	1
Chloromethane	ND		ug/kg	4.3	0.68	1
Bromomethane	ND		ug/kg	1.7	0.29	1
Vinyl chloride	ND		ug/kg	1.7	0.12	1
Chloroethane	ND		ug/kg	1.7	0.27	1
1,1-Dichloroethene	ND		ug/kg	0.86	0.18	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.18	1
Trichloroethene	ND		ug/kg	0.86	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	4.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.3	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	4.3	0.21	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-06 Date Collected: 06/06/13 13:57

Client ID: GW1 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.7	0.09	1
p/m-Xylene	ND		ug/kg	1.7	0.28	1
o-Xylene	ND		ug/kg	1.7	0.23	1
cis-1,2-Dichloroethene	ND		ug/kg	0.86	0.13	1
Dibromomethane	ND		ug/kg	8.6	0.14	1
Styrene	ND		ug/kg	1.7	0.27	1
Dichlorodifluoromethane	ND		ug/kg	8.6	0.19	1
Acetone	ND		ug/kg	8.6	2.7	1
Carbon disulfide	ND		ug/kg	8.6	1.7	1
2-Butanone	ND		ug/kg	8.6	0.31	1
Vinyl acetate	ND		ug/kg	8.6	0.41	1
4-Methyl-2-pentanone	ND		ug/kg	8.6	0.21	1
1,2,3-Trichloropropane	ND		ug/kg	8.6	0.19	1
2-Hexanone	ND		ug/kg	8.6	0.16	1
Bromochloromethane	ND		ug/kg	4.3	0.17	1
2,2-Dichloropropane	ND		ug/kg	4.3	0.19	1
1,2-Dibromoethane	ND		ug/kg	3.4	0.15	1
1,3-Dichloropropane	ND		ug/kg	4.3	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.86	0.27	1
Bromobenzene	ND		ug/kg	4.3	0.18	1
n-Butylbenzene	ND		ug/kg	0.86	0.17	1
sec-Butylbenzene	ND		ug/kg	0.86	0.18	1
tert-Butylbenzene	ND		ug/kg	4.3	0.48	1
o-Chlorotoluene	ND		ug/kg	4.3	0.14	1
p-Chlorotoluene	ND		ug/kg	4.3	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	0.68	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.36	1
Isopropylbenzene	ND		ug/kg	0.86	0.14	1
p-Isopropyltoluene	ND		ug/kg	0.86	0.16	1
Naphthalene	ND		ug/kg	4.3	0.66	1
Acrylonitrile	ND		ug/kg	8.6	0.20	1
n-Propylbenzene	ND		ug/kg	0.86	0.11	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.3	0.14	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.3	0.68	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.3	0.12	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.3	0.49	1
1,4-Dioxane	ND		ug/kg	86	15.	1
1,4-Diethylbenzene	ND		ug/kg	3.4	0.14	1
4-Ethyltoluene	ND		ug/kg	3.4	0.10	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-06 Date Collected: 06/06/13 13:57

Client ID: GW1 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.4	0.11	1
Ethyl ether	ND		ug/kg	4.3	0.23	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.3	0.39	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	101		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-07	Date Collected:	06/06/13 14:20
Client ID:	GW1 (43-45')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	06/10/13 17:58		
Analyst:	BN		
Percent Solids:	93%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	11	2.2	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.19	1
Chloroform	ND		ug/kg	1.6	0.40	1
Carbon tetrachloride	ND		ug/kg	1.1	0.23	1
1,2-Dichloropropane	ND		ug/kg	3.8	0.24	1
Dibromochloromethane	ND		ug/kg	1.1	0.33	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.1	0.15	1
Chlorobenzene	ND		ug/kg	1.1	0.37	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.13	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.16	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.25	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
1,1-Dichloropropene	ND		ug/kg	5.4	0.49	1
Bromoform	ND		ug/kg	4.3	0.45	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.18	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.6	0.12	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	5.4	0.84	1
Bromomethane	ND		ug/kg	2.2	0.36	1
Vinyl chloride	ND		ug/kg	2.2	0.15	1
Chloroethane	ND		ug/kg	2.2	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.23	1
Trichloroethene	ND		ug/kg	1.1	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	5.4	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	5.4	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	5.4	0.26	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-07 Date Collected: 06/06/13 14:20

Client ID: GW1 (43-45') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.2	0.11	1
p/m-Xylene	ND		ug/kg	2.2	0.35	1
o-Xylene	ND		ug/kg	2.2	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	11	0.18	1
Styrene	ND		ug/kg	2.2	0.33	1
Dichlorodifluoromethane	ND		ug/kg	11	0.23	1
Acetone	5.3	J	ug/kg	11	3.3	1
Carbon disulfide	ND		ug/kg	11	2.2	1
2-Butanone	ND		ug/kg	11	0.38	1
Vinyl acetate	ND		ug/kg	11	0.52	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.26	1
1,2,3-Trichloropropane	ND		ug/kg	11	0.24	1
2-Hexanone	ND		ug/kg	11	0.20	1
Bromochloromethane	ND		ug/kg	5.4	0.21	1
2,2-Dichloropropane	ND		ug/kg	5.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	4.3	0.19	1
1,3-Dichloropropane	ND		ug/kg	5.4	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.1	0.34	1
Bromobenzene	ND		ug/kg	5.4	0.22	1
n-Butylbenzene	ND		ug/kg	1.1	0.21	1
sec-Butylbenzene	ND		ug/kg	1.1	0.22	1
tert-Butylbenzene	ND		ug/kg	5.4	0.60	1
o-Chlorotoluene	ND		ug/kg	5.4	0.17	1
p-Chlorotoluene	ND		ug/kg	5.4	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.4	0.85	1
Hexachlorobutadiene	ND		ug/kg	5.4	0.45	1
Isopropylbenzene	ND		ug/kg	1.1	0.18	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.20	1
Naphthalene	ND		ug/kg	5.4	0.83	1
Acrylonitrile	ND		ug/kg	11	0.26	1
n-Propylbenzene	ND		ug/kg	1.1	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.4	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.4	0.85	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.4	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.4	0.62	1
1,4-Dioxane	ND		ug/kg	110	19.	1
1,4-Diethylbenzene	ND		ug/kg	4.3	0.17	1
4-Ethyltoluene	ND		ug/kg	4.3	0.12	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-07 Date Collected: 06/06/13 14:20

Client ID: GW1 (43-45') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.3	0.14	1
Ethyl ether	ND		ug/kg	5.4	0.28	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	0.48	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	100		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-08	Date Collected:	06/06/13 00:00
Client ID:	TB2	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	06/13/13 15:01		
Analyst:	RY		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-08 Date Collected: 06/06/13 00:00

Client ID: TB2 Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	2.0	J	ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	76.	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-08 Date Collected: 06/06/13 00:00

Client ID: TB2 Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	108		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-09	Date Collected:	06/06/13 16:50
Client ID:	GW1	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	06/13/13 15:35		
Analyst:	RY		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-09 Date Collected: 06/06/13 16:50

Client ID: GW1 Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	0.70	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	76.	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-09 Date Collected: 06/06/13 16:50

Client ID: GW1 Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	110		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-10	Date Collected:	06/06/13 16:20
Client ID:	FB02	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	06/13/13 14:26		
Analyst:	RY		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-10 Date Collected: 06/06/13 16:20

Client ID: FB02 Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.0	J	ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	76.	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-10 Date Collected: 06/06/13 16:20

Client ID: FB02 Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	107		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/10/13 08:21
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-07 Batch: WG613993-3					
Methylene chloride	ND		ug/kg	10	2.0
1,1-Dichloroethane	ND		ug/kg	1.5	0.18
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.31
2-Chloroethylvinyl ether	ND		ug/kg	20	0.62
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.12
1,2-Dichloroethane	ND		ug/kg	1.0	0.15
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.23
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13
1,1-Dichloropropene	ND		ug/kg	5.0	0.46
Bromoform	ND		ug/kg	4.0	0.41
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.11
Ethylbenzene	ND		ug/kg	1.0	0.15
Chloromethane	ND		ug/kg	5.0	0.78
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.14
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.20
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.15
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/10/13 08:21
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-07 Batch: WG613993-3					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24
Methyl tert butyl ether	ND		ug/kg	2.0	0.10
p/m-Xylene	ND		ug/kg	2.0	0.32
o-Xylene	ND		ug/kg	2.0	0.27
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.31
Dichlorodifluoromethane	ND		ug/kg	10	0.22
Acetone	ND		ug/kg	10	3.1
Carbon disulfide	ND		ug/kg	10	2.0
2-Butanone	ND		ug/kg	10	0.36
Vinyl acetate	ND		ug/kg	10	0.48
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.22
2-Hexanone	ND		ug/kg	10	0.19
Bromochloromethane	ND		ug/kg	5.0	0.20
2,2-Dichloropropane	ND		ug/kg	5.0	0.22
1,2-Dibromoethane	ND		ug/kg	4.0	0.18
1,3-Dichloropropane	ND		ug/kg	5.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.20
sec-Butylbenzene	ND		ug/kg	1.0	0.20
tert-Butylbenzene	ND		ug/kg	5.0	0.56
o-Chlorotoluene	ND		ug/kg	5.0	0.16
p-Chlorotoluene	ND		ug/kg	5.0	0.15
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79
Hexachlorobutadiene	ND		ug/kg	5.0	0.42
Isopropylbenzene	ND		ug/kg	1.0	0.17
p-Isopropyltoluene	ND		ug/kg	1.0	0.19
Naphthalene	ND		ug/kg	5.0	0.77

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/10/13 08:21
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-07 Batch: WG613993-3					
Acrylonitrile	ND		ug/kg	10	0.24
Isopropyl Ether	ND		ug/kg	4.0	0.14
tert-Butyl Alcohol	ND		ug/kg	60	0.91
n-Propylbenzene	ND		ug/kg	1.0	0.12
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57
Methyl Acetate	ND		ug/kg	20	0.76
Ethyl Acetate	ND		ug/kg	20	0.82
Acrolein	ND		ug/kg	25	9.2
Cyclohexane	ND		ug/kg	20	1.1
1,4-Dioxane	ND		ug/kg	100	17.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	20	0.27
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16
4-Ethyltoluene	ND		ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Tetrahydrofuran	ND		ug/kg	20	0.38
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.45
Methyl cyclohexane	ND		ug/kg	4.0	1.3
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	0.42
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	0.58

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/10/13 08:21
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-07 Batch: WG613993-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	101		70-130

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/13/13 10:28
Analyst: RY

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08-10 Batch: WG614562-6					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.16
1,2-Dichloropropane	ND		ug/l	1.0	0.30
Dibromochloromethane	ND		ug/l	0.50	0.19
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.16
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.18
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/13/13 10:28
Analyst: RY

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08-10 Batch: WG614562-6					
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.0
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	1.0	J	ug/l	5.0	1.0
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/13/13 10:28
Analyst: RY

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08-10 Batch: WG614562-6					
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	76.
1,4-Diethylbenzene	ND		ug/l	2.0	0.70
4-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-07 Batch: WG613993-1 WG613993-2								
Methylene chloride	88		87		70-130	1		30
1,1-Dichloroethane	92		89		70-130	3		30
Chloroform	89		87		70-130	2		30
Carbon tetrachloride	86		83		70-130	4		30
1,2-Dichloropropane	90		88		70-130	2		30
Dibromochloromethane	82		84		70-130	2		30
2-Chloroethylvinyl ether	77		81			5		30
1,1,2-Trichloroethane	86		88		70-130	2		30
Tetrachloroethene	84		80		70-130	5		30
Chlorobenzene	85		83		70-130	2		30
Trichlorofluoromethane	97		90		70-139	7		30
1,2-Dichloroethane	90		91		70-130	1		30
1,1,1-Trichloroethane	88		84		70-130	5		30
Bromodichloromethane	88		88		70-130	0		30
trans-1,3-Dichloropropene	86		88		70-130	2		30
cis-1,3-Dichloropropene	87		86		70-130	1		30
1,1-Dichloropropene	88		84		70-130	5		30
Bromoform	80		84		70-130	5		30
1,1,2,2-Tetrachloroethane	82		86		70-130	5		30
Benzene	88		86		70-130	2		30
Toluene	84		82		70-130	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-07 Batch: WG613993-1 WG613993-2								
Ethylbenzene	87		84		70-130	4		30
Chloromethane	96		79		52-130	19		30
Bromomethane	100		94		57-147	6		30
Vinyl chloride	91		86		67-130	6		30
Chloroethane	113		98		50-151	14		30
1,1-Dichloroethene	85		82		65-135	4		30
trans-1,2-Dichloroethene	86		83		70-130	4		30
Trichloroethene	89		85		70-130	5		30
1,2-Dichlorobenzene	82		82		70-130	0		30
1,3-Dichlorobenzene	83		83		70-130	0		30
1,4-Dichlorobenzene	83		82		70-130	1		30
Methyl tert butyl ether	80		84		66-130	5		30
p/m-Xylene	88		85		70-130	3		30
o-Xylene	87		85		70-130	2		30
cis-1,2-Dichloroethene	86		84		70-130	2		30
Dibromomethane	85		87		70-130	2		30
Styrene	88		86		70-130	2		30
Dichlorodifluoromethane	78		73		30-146	7		30
Acetone	124		105		54-140	17		30
Carbon disulfide	89		85		59-130	5		30
2-Butanone	93		92		70-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-07 Batch: WG613993-1 WG613993-2								
Vinyl acetate	92		94		70-130	2		30
4-Methyl-2-pentanone	79		85		70-130	7		30
1,2,3-Trichloropropane	81		85		68-130	5		30
2-Hexanone	83		85		70-130	2		30
Bromochloromethane	89		87		70-130	2		30
2,2-Dichloropropane	90		87		70-130	3		30
1,2-Dibromoethane	81		84		70-130	4		30
1,3-Dichloropropane	84		86		69-130	2		30
1,1,1,2-Tetrachloroethane	85		84		70-130	1		30
Bromobenzene	82		82		70-130	0		30
n-Butylbenzene	89		85		70-130	5		30
sec-Butylbenzene	85		83		70-130	2		30
tert-Butylbenzene	84		81		70-130	4		30
o-Chlorotoluene	86		84		70-130	2		30
p-Chlorotoluene	86		84		70-130	2		30
1,2-Dibromo-3-chloropropane	78		83		68-130	6		30
Hexachlorobutadiene	80		78		67-130	3		30
Isopropylbenzene	84		82		70-130	2		30
p-Isopropyltoluene	85		83		70-130	2		30
Naphthalene	77		81		70-130	5		30
Acrylonitrile	91		94		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-07 Batch: WG613993-1 WG613993-2								
Isopropyl Ether	91		92		66-130	1		30
tert-Butyl Alcohol	76		84		70-130	10		30
n-Propylbenzene	86		84		70-130	2		30
1,2,3-Trichlorobenzene	80		81		70-130	1		30
1,2,4-Trichlorobenzene	81		81		70-130	0		30
1,3,5-Trimethylbenzene	86		84		70-130	2		30
1,2,4-Trimethylbenzene	86		85		70-130	1		30
Methyl Acetate	86		91		51-146	6		30
Ethyl Acetate	85		91		70-130	7		30
Acrolein	81		86		70-130	6		30
Cyclohexane	95		88		59-142	8		30
1,4-Dioxane	102		109		65-136	7		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	89		84		50-139	6		30
1,4-Diethylbenzene	85		83		70-130	2		30
4-Ethyltoluene	86		84		70-130	2		30
1,2,4,5-Tetramethylbenzene	84		84		70-130	0		30
Tetrahydrofuran	82		91		66-130	10		30
Ethyl ether	84		85		67-130	1		30
trans-1,4-Dichloro-2-butene	88		93		70-130	6		30
Methyl cyclohexane	88		82		70-130	7		30
Ethyl-Tert-Butyl-Ether	88		89		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-07 Batch: WG613993-1 WG613993-2								
Tertiary-Amyl Methyl Ether	83		85		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		103		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	98		100		70-130
Dibromofluoromethane	99		99		70-130

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-10 Batch: WG614562-4 WG614562-5								
Methylene chloride	92		90		70-130	2		20
1,1-Dichloroethane	97		97		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	103		105		63-132	2		20
1,2-Dichloropropane	90		92		70-130	2		20
Dibromochloromethane	94		99		63-130	5		20
1,1,2-Trichloroethane	83		89		70-130	7		20
Tetrachloroethene	102		104		70-130	2		20
Chlorobenzene	93		95		75-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-10 Batch: WG614562-4 WG614562-5								
Trichlorofluoromethane	107		108		62-150	1		20
1,2-Dichloroethane	97		100		70-130	3		20
1,1,1-Trichloroethane	109		110		67-130	1		20
Bromodichloromethane	99		101		67-130	2		20
trans-1,3-Dichloropropene	89		94		70-130	5		20
cis-1,3-Dichloropropene	94		95		70-130	1		20
1,1-Dichloropropene	101		100		70-130	1		20
Bromoform	80		84		54-136	5		20
1,1,2,2-Tetrachloroethane	76		80		67-130	5		20
Benzene	94		94		70-130	0		20
Toluene	91		94		70-130	3		20
Ethylbenzene	97		100		70-130	3		20
Chloromethane	93		91		64-130	2		20
Bromomethane	71		68		39-139	4		20
Vinyl chloride	116		114		55-140	2		20
Chloroethane	112		111		55-138	1		20
1,1-Dichloroethene	96		96		61-145	0		20
trans-1,2-Dichloroethene	94		94		70-130	0		20
Trichloroethene	97		98		70-130	1		20
1,2-Dichlorobenzene	88		91		70-130	3		20
1,3-Dichlorobenzene	90		91		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-10 Batch: WG614562-4 WG614562-5								
1,4-Dichlorobenzene	88		91		70-130	3		20
Methyl tert butyl ether	89		91		63-130	2		20
p/m-Xylene	99		101		70-130	2		20
o-Xylene	97		100		70-130	3		20
cis-1,2-Dichloroethene	91		95		70-130	4		20
Dibromomethane	94		98		70-130	4		20
1,2,3-Trichloropropane	79		84		64-130	6		20
Acrylonitrile	80		83		70-130	4		20
Styrene	97		99		70-130	2		20
Dichlorodifluoromethane	97		99		36-147	2		20
Acetone	128		120		58-148	6		20
Carbon disulfide	87		87		51-130	0		20
2-Butanone	122		112		63-138	9		20
Vinyl acetate	84		87		70-130	4		20
4-Methyl-2-pentanone	81		83		59-130	2		20
2-Hexanone	100		94		57-130	6		20
Bromochloromethane	97		96		70-130	1		20
2,2-Dichloropropane	120		118		63-133	2		20
1,2-Dibromoethane	95		98		70-130	3		20
1,3-Dichloropropane	87		89		70-130	2		20
1,1,1,2-Tetrachloroethane	99		105		64-130	6		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-10 Batch: WG614562-4 WG614562-5								
Bromobenzene	89		92		70-130	3		20
n-Butylbenzene	93		94		53-136	1		20
sec-Butylbenzene	94		95		70-130	1		20
tert-Butylbenzene	95		96		70-130	1		20
o-Chlorotoluene	89		91		70-130	2		20
p-Chlorotoluene	90		91		70-130	1		20
1,2-Dibromo-3-chloropropane	76		79		41-144	4		20
Hexachlorobutadiene	92		93		63-130	1		20
Isopropylbenzene	100		103		70-130	3		20
p-Isopropyltoluene	96		96		70-130	0		20
Naphthalene	74		78		70-130	5		20
n-Propylbenzene	93		95		69-130	2		20
1,2,3-Trichlorobenzene	76		79		70-130	4		20
1,2,4-Trichlorobenzene	83		86		70-130	4		20
1,3,5-Trimethylbenzene	93		96		64-130	3		20
1,2,4-Trimethylbenzene	92		95		70-130	3		20
1,4-Dioxane	106		102		56-162	4		20
1,4-Diethylbenzene	89		91		70-130	2		20
4-Ethyltoluene	92		94		70-130	2		20
1,2,4,5-Tetramethylbenzene	93		94		70-130	1		20
Ethyl ether	90		90		59-134	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-10 Batch: WG614562-4 WG614562-5								
trans-1,4-Dichloro-2-butene	89		93		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		106		70-130
Toluene-d8	97		99		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	108		106		70-130

SEMIVOLATILES

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-01	Date Collected:	06/06/13 09:15
Client ID:	SB2 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/08/13 00:51
Analytical Date:	06/12/13 22:29		
Analyst:	JB		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	39.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	62.	1
Hexachlorobenzene	ND		ug/kg	110	35.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	53.	1
2-Chloronaphthalene	ND		ug/kg	190	62.	1
1,2-Dichlorobenzene	ND		ug/kg	190	62.	1
1,3-Dichlorobenzene	ND		ug/kg	190	60.	1
1,4-Dichlorobenzene	ND		ug/kg	190	58.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	41.	1
2,6-Dinitrotoluene	ND		ug/kg	190	48.	1
Fluoranthene	ND		ug/kg	110	35.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	58.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	44.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	67.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	57.	1
Hexachlorobutadiene	ND		ug/kg	190	53.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	120	1
Hexachloroethane	ND		ug/kg	150	34.	1
Isophorone	ND		ug/kg	170	50.	1
Naphthalene	ND		ug/kg	190	63.	1
Nitrobenzene	ND		ug/kg	170	45.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	40.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	56.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	50.	1
Butyl benzyl phthalate	ND		ug/kg	190	37.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	46.	1
Diethyl phthalate	ND		ug/kg	190	40.	1
Dimethyl phthalate	ND		ug/kg	190	48.	1
Benzo(a)anthracene	ND		ug/kg	110	37.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-01 Date Collected: 06/06/13 09:15

Client ID: SB2 (0-2') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	38.	1
Benzo(k)fluoranthene	ND		ug/kg	110	36.	1
Chrysene	ND		ug/kg	110	37.	1
Acenaphthylene	ND		ug/kg	150	35.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	39.	1
Fluorene	ND		ug/kg	190	54.	1
Phenanthrene	ND		ug/kg	110	37.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	37.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	42.	1
Pyrene	ND		ug/kg	110	37.	1
Biphenyl	ND		ug/kg	430	62.	1
4-Chloroaniline	ND		ug/kg	190	50.	1
2-Nitroaniline	ND		ug/kg	190	53.	1
3-Nitroaniline	ND		ug/kg	190	52.	1
4-Nitroaniline	ND		ug/kg	190	51.	1
Dibenzofuran	ND		ug/kg	190	63.	1
2-Methylnaphthalene	ND		ug/kg	230	60.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	59.	1
Acetophenone	ND		ug/kg	190	59.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
P-Chloro-M-Cresol	ND		ug/kg	190	55.	1
2-Chlorophenol	ND		ug/kg	190	57.	1
2,4-Dichlorophenol	ND		ug/kg	170	61.	1
2,4-Dimethylphenol	ND		ug/kg	190	56.	1
2-Nitrophenol	ND		ug/kg	410	59.	1
4-Nitrophenol	ND		ug/kg	260	61.	1
2,4-Dinitrophenol	ND		ug/kg	910	260	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	69.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	190	56.	1
2-Methylphenol	ND		ug/kg	190	61.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	62.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	61.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	41.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-01	Date Collected:	06/06/13 09:15
Client ID:	SB2 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	72		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	85		0-136
4-Terphenyl-d14	58		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-02	Date Collected:	06/06/13 09:20
Client ID:	SB2 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/08/13 00:51
Analytical Date:	06/12/13 22:56		
Analyst:	JB		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	39.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	63.	1
Hexachlorobenzene	ND		ug/kg	110	36.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	54.	1
2-Chloronaphthalene	ND		ug/kg	190	62.	1
1,2-Dichlorobenzene	ND		ug/kg	190	63.	1
1,3-Dichlorobenzene	ND		ug/kg	190	60.	1
1,4-Dichlorobenzene	ND		ug/kg	190	58.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	41.	1
2,6-Dinitrotoluene	ND		ug/kg	190	49.	1
Fluoranthene	ND		ug/kg	110	35.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	58.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	44.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	67.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	58.	1
Hexachlorobutadiene	ND		ug/kg	190	54.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	120	1
Hexachloroethane	ND		ug/kg	150	35.	1
Isophorone	ND		ug/kg	170	51.	1
Naphthalene	ND		ug/kg	190	64.	1
Nitrobenzene	ND		ug/kg	170	46.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	40.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	57.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	50.	1
Butyl benzyl phthalate	ND		ug/kg	190	37.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	47.	1
Diethyl phthalate	ND		ug/kg	190	40.	1
Dimethyl phthalate	ND		ug/kg	190	49.	1
Benzo(a)anthracene	ND		ug/kg	110	38.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-02 Date Collected: 06/06/13 09:20

Client ID: SB2 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	47.	1
Benzo(b)fluoranthene	ND		ug/kg	110	39.	1
Benzo(k)fluoranthene	ND		ug/kg	110	36.	1
Chrysene	ND		ug/kg	110	38.	1
Acenaphthylene	ND		ug/kg	150	36.	1
Anthracene	ND		ug/kg	110	32.	1
Benzo(ghi)perylene	ND		ug/kg	150	40.	1
Fluorene	ND		ug/kg	190	55.	1
Phenanthrene	ND		ug/kg	110	37.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	37.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	42.	1
Pyrene	ND		ug/kg	110	37.	1
Biphenyl	ND		ug/kg	440	63.	1
4-Chloroaniline	ND		ug/kg	190	50.	1
2-Nitroaniline	ND		ug/kg	190	54.	1
3-Nitroaniline	ND		ug/kg	190	53.	1
4-Nitroaniline	ND		ug/kg	190	52.	1
Dibenzofuran	ND		ug/kg	190	64.	1
2-Methylnaphthalene	ND		ug/kg	230	61.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	59.	1
Acetophenone	ND		ug/kg	190	59.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
P-Chloro-M-Cresol	ND		ug/kg	190	56.	1
2-Chlorophenol	ND		ug/kg	190	58.	1
2,4-Dichlorophenol	ND		ug/kg	170	62.	1
2,4-Dimethylphenol	ND		ug/kg	190	57.	1
2-Nitrophenol	ND		ug/kg	410	60.	1
4-Nitrophenol	ND		ug/kg	270	62.	1
2,4-Dinitrophenol	ND		ug/kg	920	260	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	70.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	57.	1
2-Methylphenol	ND		ug/kg	190	62.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	63.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	62.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	ND		ug/kg	190	41.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-02 Date Collected: 06/06/13 09:20

Client ID: SB2 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	83		0-136
4-Terphenyl-d14	71		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-03	Date Collected:	06/06/13 12:29
Client ID:	SB3 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/08/13 00:51
Analytical Date:	06/12/13 23:23		
Analyst:	JB		
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	60.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	51.	1
2-Chloronaphthalene	ND		ug/kg	180	60.	1
1,2-Dichlorobenzene	ND		ug/kg	180	60.	1
1,3-Dichlorobenzene	ND		ug/kg	180	58.	1
1,4-Dichlorobenzene	ND		ug/kg	180	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	39.	1
2,6-Dinitrotoluene	ND		ug/kg	180	47.	1
Fluoranthene	ND		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	56.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	64.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	55.	1
Hexachlorobutadiene	ND		ug/kg	180	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	120	1
Hexachloroethane	ND		ug/kg	150	33.	1
Isophorone	ND		ug/kg	160	48.	1
Naphthalene	ND		ug/kg	180	61.	1
Nitrobenzene	ND		ug/kg	160	43.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	38.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	54.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	48.	1
Butyl benzyl phthalate	ND		ug/kg	180	36.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	45.	1
Diethyl phthalate	ND		ug/kg	180	39.	1
Dimethyl phthalate	ND		ug/kg	180	46.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-03 Date Collected: 06/06/13 12:29

Client ID: SB3 (0-2') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	37.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	ND		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	150	34.	1
Anthracene	ND		ug/kg	110	30.	1
Benzo(ghi)perylene	ND		ug/kg	150	38.	1
Fluorene	ND		ug/kg	180	52.	1
Phenanthrene	ND		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	35.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	40.	1
Pyrene	ND		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	420	60.	1
4-Chloroaniline	ND		ug/kg	180	48.	1
2-Nitroaniline	ND		ug/kg	180	52.	1
3-Nitroaniline	ND		ug/kg	180	50.	1
4-Nitroaniline	ND		ug/kg	180	49.	1
Dibenzofuran	ND		ug/kg	180	61.	1
2-Methylnaphthalene	ND		ug/kg	220	58.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	56.	1
Acetophenone	ND		ug/kg	180	57.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
P-Chloro-M-Cresol	ND		ug/kg	180	53.	1
2-Chlorophenol	ND		ug/kg	180	55.	1
2,4-Dichlorophenol	ND		ug/kg	160	59.	1
2,4-Dimethylphenol	ND		ug/kg	180	54.	1
2-Nitrophenol	ND		ug/kg	390	57.	1
4-Nitrophenol	ND		ug/kg	260	59.	1
2,4-Dinitrophenol	ND		ug/kg	880	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	67.	1
Pentachlorophenol	ND		ug/kg	150	39.	1
Phenol	ND		ug/kg	180	54.	1
2-Methylphenol	ND		ug/kg	180	59.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	60.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	59.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	39.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-03	Date Collected:	06/06/13 12:29
Client ID:	SB3 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	86		0-136
4-Terphenyl-d14	66		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-04	Date Collected:	06/06/13 12:31
Client ID:	SB3 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/08/13 00:51
Analytical Date:	06/12/13 23:49		
Analyst:	JB		
Percent Solids:	91%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	37.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	59.	1
Hexachlorobenzene	ND		ug/kg	110	33.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	50.	1
2-Chloronaphthalene	ND		ug/kg	180	58.	1
1,2-Dichlorobenzene	ND		ug/kg	180	59.	1
1,3-Dichlorobenzene	ND		ug/kg	180	56.	1
1,4-Dichlorobenzene	ND		ug/kg	180	54.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	39.	1
2,6-Dinitrotoluene	ND		ug/kg	180	46.	1
Fluoranthene	ND		ug/kg	110	33.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	54.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	41.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	63.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	54.	1
Hexachlorobutadiene	ND		ug/kg	180	50.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	120	1
Hexachloroethane	ND		ug/kg	140	32.	1
Isophorone	ND		ug/kg	160	48.	1
Naphthalene	ND		ug/kg	180	60.	1
Nitrobenzene	ND		ug/kg	160	43.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	38.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	53.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	47.	1
Butyl benzyl phthalate	ND		ug/kg	180	35.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	44.	1
Diethyl phthalate	ND		ug/kg	180	38.	1
Dimethyl phthalate	ND		ug/kg	180	46.	1
Benzo(a)anthracene	ND		ug/kg	110	35.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-04 Date Collected: 06/06/13 12:31

Client ID: SB3 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	36.	1
Benzo(k)fluoranthene	ND		ug/kg	110	34.	1
Chrysene	ND		ug/kg	110	35.	1
Acenaphthylene	ND		ug/kg	140	34.	1
Anthracene	ND		ug/kg	110	30.	1
Benzo(ghi)perylene	ND		ug/kg	140	37.	1
Fluorene	ND		ug/kg	180	51.	1
Phenanthrene	ND		ug/kg	110	35.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	35.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	40.	1
Pyrene	ND		ug/kg	110	35.	1
Biphenyl	ND		ug/kg	410	59.	1
4-Chloroaniline	ND		ug/kg	180	47.	1
2-Nitroaniline	ND		ug/kg	180	50.	1
3-Nitroaniline	ND		ug/kg	180	49.	1
4-Nitroaniline	ND		ug/kg	180	48.	1
Dibenzofuran	ND		ug/kg	180	60.	1
2-Methylnaphthalene	ND		ug/kg	220	57.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	56.	1
Acetophenone	ND		ug/kg	180	56.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
P-Chloro-M-Cresol	ND		ug/kg	180	52.	1
2-Chlorophenol	ND		ug/kg	180	54.	1
2,4-Dichlorophenol	ND		ug/kg	160	58.	1
2,4-Dimethylphenol	ND		ug/kg	180	53.	1
2-Nitrophenol	ND		ug/kg	390	56.	1
4-Nitrophenol	ND		ug/kg	250	58.	1
2,4-Dinitrophenol	ND		ug/kg	860	240	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	66.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	180	53.	1
2-Methylphenol	ND		ug/kg	180	58.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	59.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	58.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ug/kg	180	38.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-04 Date Collected: 06/06/13 12:31

Client ID: SB3 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	86		0-136
4-Terphenyl-d14	67		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-05	Date Collected:	06/06/13 13:54
Client ID:	GW1 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/08/13 00:51
Analytical Date:	06/13/13 00:16		
Analyst:	JB		
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	37.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	59.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	51.	1
2-Chloronaphthalene	ND		ug/kg	180	59.	1
1,2-Dichlorobenzene	ND		ug/kg	180	59.	1
1,3-Dichlorobenzene	ND		ug/kg	180	57.	1
1,4-Dichlorobenzene	ND		ug/kg	180	55.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	39.	1
2,6-Dinitrotoluene	ND		ug/kg	180	46.	1
Fluoranthene	120		ug/kg	110	33.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	55.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	64.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	55.	1
Hexachlorobutadiene	ND		ug/kg	180	51.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	120	1
Hexachloroethane	ND		ug/kg	140	33.	1
Isophorone	ND		ug/kg	160	48.	1
Naphthalene	ND		ug/kg	180	60.	1
Nitrobenzene	ND		ug/kg	160	43.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	38.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	54.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	47.	1
Butyl benzyl phthalate	ND		ug/kg	180	35.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	44.	1
Diethyl phthalate	ND		ug/kg	180	38.	1
Dimethyl phthalate	ND		ug/kg	180	46.	1
Benzo(a)anthracene	53	J	ug/kg	110	35.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-05 Date Collected: 06/06/13 13:54

Client ID: GW1 (0-2') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	64	J	ug/kg	110	36.	1
Benzo(k)fluoranthene	ND		ug/kg	110	34.	1
Chrysene	52	J	ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	140	34.	1
Anthracene	ND		ug/kg	110	30.	1
Benzo(ghi)perylene	ND		ug/kg	140	38.	1
Fluorene	ND		ug/kg	180	52.	1
Phenanthrene	120		ug/kg	110	35.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	35.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	40.	1
Pyrene	100	J	ug/kg	110	35.	1
Biphenyl	ND		ug/kg	410	60.	1
4-Chloroaniline	ND		ug/kg	180	48.	1
2-Nitroaniline	ND		ug/kg	180	51.	1
3-Nitroaniline	ND		ug/kg	180	50.	1
4-Nitroaniline	ND		ug/kg	180	49.	1
Dibenzofuran	ND		ug/kg	180	60.	1
2-Methylnaphthalene	ND		ug/kg	220	58.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	56.	1
Acetophenone	ND		ug/kg	180	56.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
P-Chloro-M-Cresol	ND		ug/kg	180	52.	1
2-Chlorophenol	ND		ug/kg	180	54.	1
2,4-Dichlorophenol	ND		ug/kg	160	58.	1
2,4-Dimethylphenol	ND		ug/kg	180	54.	1
2-Nitrophenol	ND		ug/kg	390	56.	1
4-Nitrophenol	ND		ug/kg	250	58.	1
2,4-Dinitrophenol	ND		ug/kg	870	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	66.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	54.	1
2-Methylphenol	ND		ug/kg	180	58.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	59.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	58.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	39.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-05	Date Collected:	06/06/13 13:54
Client ID:	GW1 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	67		0-136
4-Terphenyl-d14	63		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-06	Date Collected:	06/06/13 13:57
Client ID:	GW1 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/08/13 00:51
Analytical Date:	06/13/13 00:43		
Analyst:	JB		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	60.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	51.	1
2-Chloronaphthalene	ND		ug/kg	180	60.	1
1,2-Dichlorobenzene	ND		ug/kg	180	60.	1
1,3-Dichlorobenzene	ND		ug/kg	180	58.	1
1,4-Dichlorobenzene	ND		ug/kg	180	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	39.	1
2,6-Dinitrotoluene	ND		ug/kg	180	47.	1
Fluoranthene	ND		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	56.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	64.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	55.	1
Hexachlorobutadiene	ND		ug/kg	180	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	120	1
Hexachloroethane	ND		ug/kg	150	33.	1
Isophorone	ND		ug/kg	160	48.	1
Naphthalene	ND		ug/kg	180	61.	1
Nitrobenzene	ND		ug/kg	160	43.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	38.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	54.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	48.	1
Butyl benzyl phthalate	ND		ug/kg	180	36.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	45.	1
Diethyl phthalate	ND		ug/kg	180	39.	1
Dimethyl phthalate	ND		ug/kg	180	46.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-06 Date Collected: 06/06/13 13:57

Client ID: GW1 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	37.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	ND		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	150	34.	1
Anthracene	ND		ug/kg	110	30.	1
Benzo(ghi)perylene	ND		ug/kg	150	38.	1
Fluorene	ND		ug/kg	180	52.	1
Phenanthrene	ND		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	35.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	40.	1
Pyrene	ND		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	420	60.	1
4-Chloroaniline	ND		ug/kg	180	48.	1
2-Nitroaniline	ND		ug/kg	180	52.	1
3-Nitroaniline	ND		ug/kg	180	50.	1
4-Nitroaniline	ND		ug/kg	180	49.	1
Dibenzofuran	ND		ug/kg	180	61.	1
2-Methylnaphthalene	ND		ug/kg	220	58.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	56.	1
Acetophenone	ND		ug/kg	180	57.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
P-Chloro-M-Cresol	ND		ug/kg	180	53.	1
2-Chlorophenol	ND		ug/kg	180	55.	1
2,4-Dichlorophenol	ND		ug/kg	160	59.	1
2,4-Dimethylphenol	ND		ug/kg	180	54.	1
2-Nitrophenol	ND		ug/kg	390	57.	1
4-Nitrophenol	ND		ug/kg	260	59.	1
2,4-Dinitrophenol	ND		ug/kg	880	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	67.	1
Pentachlorophenol	ND		ug/kg	150	39.	1
Phenol	ND		ug/kg	180	54.	1
2-Methylphenol	ND		ug/kg	180	59.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	60.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	59.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	39.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-06 Date Collected: 06/06/13 13:57

Client ID: GW1 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	92		0-136
4-Terphenyl-d14	73		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-07	Date Collected:	06/06/13 14:20
Client ID:	GW1 (43-45')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	06/08/13 00:51
Analytical Date:	06/13/13 01:10		
Analyst:	JB		
Percent Solids:	93%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	36.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	58.	1
Hexachlorobenzene	ND		ug/kg	100	33.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	49.	1
2-Chloronaphthalene	ND		ug/kg	180	57.	1
1,2-Dichlorobenzene	ND		ug/kg	180	58.	1
1,3-Dichlorobenzene	ND		ug/kg	180	55.	1
1,4-Dichlorobenzene	ND		ug/kg	180	53.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	38.	1
2,6-Dinitrotoluene	ND		ug/kg	180	45.	1
Fluoranthene	ND		ug/kg	100	32.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	53.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	62.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	53.	1
Hexachlorobutadiene	ND		ug/kg	180	50.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	110	1
Hexachloroethane	ND		ug/kg	140	32.	1
Isophorone	ND		ug/kg	160	47.	1
Naphthalene	ND		ug/kg	180	58.	1
Nitrobenzene	ND		ug/kg	160	42.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	37.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	52.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	46.	1
Butyl benzyl phthalate	ND		ug/kg	180	34.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	43.	1
Diethyl phthalate	ND		ug/kg	180	37.	1
Dimethyl phthalate	ND		ug/kg	180	45.	1
Benzo(a)anthracene	ND		ug/kg	100	34.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-07 Date Collected: 06/06/13 14:20

Client ID: GW1 (43-45') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	100	36.	1
Benzo(k)fluoranthene	ND		ug/kg	100	34.	1
Chrysene	ND		ug/kg	100	34.	1
Acenaphthylene	ND		ug/kg	140	33.	1
Anthracene	ND		ug/kg	100	29.	1
Benzo(ghi)perylene	ND		ug/kg	140	36.	1
Fluorene	ND		ug/kg	180	50.	1
Phenanthrene	ND		ug/kg	100	34.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	34.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	39.	1
Pyrene	ND		ug/kg	100	34.	1
Biphenyl	ND		ug/kg	400	58.	1
4-Chloroaniline	ND		ug/kg	180	46.	1
2-Nitroaniline	ND		ug/kg	180	50.	1
3-Nitroaniline	ND		ug/kg	180	48.	1
4-Nitroaniline	ND		ug/kg	180	47.	1
Dibenzofuran	ND		ug/kg	180	59.	1
2-Methylnaphthalene	ND		ug/kg	210	56.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	54.	1
Acetophenone	ND		ug/kg	180	54.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
P-Chloro-M-Cresol	ND		ug/kg	180	51.	1
2-Chlorophenol	ND		ug/kg	180	53.	1
2,4-Dichlorophenol	ND		ug/kg	160	57.	1
2,4-Dimethylphenol	ND		ug/kg	180	52.	1
2-Nitrophenol	ND		ug/kg	380	55.	1
4-Nitrophenol	ND		ug/kg	250	57.	1
2,4-Dinitrophenol	ND		ug/kg	840	240	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	64.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	180	52.	1
2-Methylphenol	ND		ug/kg	180	57.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	58.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	57.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	ND		ug/kg	180	38.	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-07 Date Collected: 06/06/13 14:20

Client ID: GW1 (43-45') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	90		0-136
4-Terphenyl-d14	82		18-120

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-09	Date Collected:	06/06/13 16:50
Client ID:	GW1	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	06/09/13 09:29
Analytical Date:	06/13/13 04:25		
Analyst:	RC		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-09 Date Collected: 06/06/13 16:50

Client ID: GW1 Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	56		23-120
2-Fluorobiphenyl	55		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	69		41-149

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-09	Date Collected:	06/06/13 16:50
Client ID:	GW1	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	06/09/13 09:29
Analytical Date:	06/10/13 13:46		
Analyst:	AS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	56		23-120
2-Fluorobiphenyl	55		15-120
2,4,6-Tribromophenol	56		10-120
4-Terphenyl-d14	60		41-149

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-10	Date Collected:	06/06/13 16:20
Client ID:	FB02	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	06/09/13 09:29
Analytical Date:	06/13/13 04:52		
Analyst:	RC		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-10 Date Collected: 06/06/13 16:20

Client ID: FB02 Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	27		21-120
Phenol-d6	16		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	50		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	68		41-149

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-10	Date Collected:	06/06/13 16:20
Client ID:	FB02	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	06/09/13 09:29
Analytical Date:	06/10/13 14:11		
Analyst:	AS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	22		21-120
Phenol-d6	14		10-120
Nitrobenzene-d5	49		23-120
2-Fluorobiphenyl	48		15-120
2,4,6-Tribromophenol	48		10-120
4-Terphenyl-d14	58		41-149

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/09/13 22:02
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 06/08/13 00:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG613621-1					
Acenaphthene	ND		ug/kg	130	34.
Benzidine	ND		ug/kg	550	130
n-Nitrosodimethylamine	ND		ug/kg	330	54.
1,2,4-Trichlorobenzene	ND		ug/kg	170	54.
Hexachlorobenzene	ND		ug/kg	100	31.
Bis(2-chloroethyl)ether	ND		ug/kg	150	46.
2-Chloronaphthalene	ND		ug/kg	170	54.
1,2-Dichlorobenzene	ND		ug/kg	170	54.
1,3-Dichlorobenzene	ND		ug/kg	170	52.
1,4-Dichlorobenzene	ND		ug/kg	170	50.
3,3'-Dichlorobenzidine	ND		ug/kg	170	44.
2,4-Dinitrotoluene	ND		ug/kg	170	36.
2,6-Dinitrotoluene	ND		ug/kg	170	42.
Fluoranthene	ND		ug/kg	100	30.
4-Chlorophenyl phenyl ether	ND		ug/kg	170	50.
4-Bromophenyl phenyl ether	ND		ug/kg	170	38.
Azobenzene	ND		ug/kg	170	44.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	58.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	50.
Hexachlorobutadiene	ND		ug/kg	170	47.
Hexachlorocyclopentadiene	ND		ug/kg	480	110
Hexachloroethane	ND		ug/kg	130	30.
Isophorone	ND		ug/kg	150	44.
Naphthalene	ND		ug/kg	170	55.
Nitrobenzene	ND		ug/kg	150	40.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	35.
n-Nitrosodi-n-propylamine	ND		ug/kg	170	50.
Bis(2-Ethylhexyl)phthalate	90	J	ug/kg	170	44.
Butyl benzyl phthalate	ND		ug/kg	170	32.
Di-n-butylphthalate	ND		ug/kg	170	32.
Di-n-octylphthalate	ND		ug/kg	170	41.

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/09/13 22:02
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 06/08/13 00:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG613621-1					
Diethyl phthalate	ND		ug/kg	170	35.
Dimethyl phthalate	ND		ug/kg	170	42.
Benzo(a)anthracene	ND		ug/kg	100	32.
Benzo(a)pyrene	ND		ug/kg	130	41.
Benzo(b)fluoranthene	ND		ug/kg	100	34.
Benzo(k)fluoranthene	ND		ug/kg	100	32.
Chrysene	ND		ug/kg	100	33.
Acenaphthylene	ND		ug/kg	130	31.
Anthracene	ND		ug/kg	100	28.
Benzo(ghi)perylene	ND		ug/kg	130	34.
Fluorene	ND		ug/kg	170	48.
Phenanthrene	ND		ug/kg	100	32.
Dibenzo(a,h)anthracene	ND		ug/kg	100	32.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	37.
Pyrene	ND		ug/kg	100	32.
Biphenyl	ND		ug/kg	380	55.
Aniline	ND		ug/kg	200	34.
4-Chloroaniline	ND		ug/kg	170	44.
2-Nitroaniline	ND		ug/kg	170	47.
3-Nitroaniline	ND		ug/kg	170	46.
4-Nitroaniline	ND		ug/kg	170	45.
Dibenzofuran	ND		ug/kg	170	55.
2-Methylnaphthalene	ND		ug/kg	200	53.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	51.
Acetophenone	ND		ug/kg	170	51.
2,4,6-Trichlorophenol	ND		ug/kg	100	31.
P-Chloro-M-Cresol	ND		ug/kg	170	48.
2-Chlorophenol	ND		ug/kg	170	50.
2,4-Dichlorophenol	ND		ug/kg	150	54.
2,4-Dimethylphenol	ND		ug/kg	170	50.
2-Nitrophenol	ND		ug/kg	360	52.

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/09/13 22:02
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 06/08/13 00:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG613621-1					
4-Nitrophenol	ND		ug/kg	230	54.
2,4-Dinitrophenol	ND		ug/kg	800	230
4,6-Dinitro-o-cresol	ND		ug/kg	430	61.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	170	49.
2-Methylphenol	ND		ug/kg	170	53.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	54.
2,4,5-Trichlorophenol	ND		ug/kg	170	54.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	170	51.
Carbazole	ND		ug/kg	170	36.
Benzaldehyde	ND		ug/kg	220	67.
Caprolactam	ND		ug/kg	170	46.
Atrazine	ND		ug/kg	130	38.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	170	28.
Pyridine	ND		ug/kg	660	59.
Parathion, ethyl	ND		ug/kg	170	66.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	76		0-136
4-Terphenyl-d14	98		18-120

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/10/13 18:42
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 06/09/13 09:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 09-10 Batch: WG613718-1					
Acenaphthene	ND		ug/l	2.0	0.55
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67
Hexachlorobenzene	ND		ug/l	2.0	0.65
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chloronaphthalene	ND		ug/l	2.0	0.47
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46
Fluoranthene	ND		ug/l	2.0	0.51
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40
Hexachlorobutadiene	ND		ug/l	2.0	0.81
Hexachlorocyclopentadiene	ND		ug/l	20	2.1
Hexachloroethane	ND		ug/l	2.0	0.66
Isophorone	ND		ug/l	5.0	0.35
Naphthalene	ND		ug/l	2.0	0.72
Nitrobenzene	ND		ug/l	2.0	0.50
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Butyl benzyl phthalate	ND		ug/l	5.0	0.46
Di-n-butylphthalate	ND		ug/l	5.0	0.54
Di-n-octylphthalate	ND		ug/l	5.0	0.53
Diethyl phthalate	ND		ug/l	5.0	0.45
Dimethyl phthalate	ND		ug/l	5.0	0.45
Benzo(a)anthracene	ND		ug/l	2.0	0.82

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/10/13 18:42
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 06/09/13 09:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 09-10 Batch: WG613718-1					
Benzo(a)pyrene	ND		ug/l	2.0	0.48
Benzo(b)fluoranthene	ND		ug/l	2.0	0.48
Benzo(k)fluoranthene	ND		ug/l	2.0	0.48
Chrysene	ND		ug/l	2.0	0.56
Acenaphthylene	ND		ug/l	2.0	0.50
Anthracene	ND		ug/l	2.0	0.47
Benzo(ghi)perylene	ND		ug/l	2.0	0.53
Fluorene	ND		ug/l	2.0	0.49
Phenanthrene	ND		ug/l	2.0	0.49
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.48
Indeno(1,2,3-cd)Pyrene	ND		ug/l	2.0	0.48
Pyrene	ND		ug/l	2.0	0.44
Biphenyl	ND		ug/l	2.0	0.50
4-Chloroaniline	ND		ug/l	5.0	0.83
2-Nitroaniline	ND		ug/l	5.0	0.40
3-Nitroaniline	ND		ug/l	5.0	0.59
4-Nitroaniline	ND		ug/l	5.0	0.55
Dibenzofuran	ND		ug/l	2.0	0.47
2-Methylnaphthalene	ND		ug/l	2.0	0.55
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65
Acetophenone	ND		ug/l	5.0	0.55
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.34
2,4-Dichlorophenol	ND		ug/l	5.0	0.43
2,4-Dimethylphenol	ND		ug/l	5.0	1.2
2-Nitrophenol	ND		ug/l	10	0.48
4-Nitrophenol	ND		ug/l	10	1.2
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59
Pentachlorophenol	ND		ug/l	10	1.2

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/10/13 18:42
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 06/09/13 09:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 09-10 Batch: WG613718-1					
Phenol	ND		ug/l	5.0	0.26
2-Methylphenol	ND		ug/l	5.0	0.53
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.53
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	80		41-149

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 06/10/13 11:45
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 06/09/13 09:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 09-10 Batch: WG613719-1					
Acenaphthene	ND		ug/l	0.20	0.06
2-Chloronaphthalene	ND		ug/l	0.20	0.07
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.20	0.06
Benzo(a)anthracene	ND		ug/l	0.20	0.06
Benzo(a)pyrene	ND		ug/l	0.20	0.07
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07
Chrysene	ND		ug/l	0.20	0.05
Acenaphthylene	ND		ug/l	0.20	0.05
Anthracene	ND		ug/l	0.20	0.06
Benzo(ghi)perylene	ND		ug/l	0.20	0.07
Fluorene	ND		ug/l	0.20	0.06
Phenanthrene	ND		ug/l	0.20	0.06
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08
Pyrene	ND		ug/l	0.20	0.06
2-Methylnaphthalene	ND		ug/l	0.20	0.06
Pentachlorophenol	ND		ug/l	0.80	0.19
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.07

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 06/10/13 11:45
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 06/09/13 09:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 09-10 Batch: WG613719-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	25		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	63		10-120
4-Terphenyl-d14	66		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG613621-2 WG613621-3								
Acenaphthene	92		83		31-137	10		50
Benzidine	47		42			11		50
n-Nitrosodimethylamine	79		68			15		50
1,2,4-Trichlorobenzene	91		80		38-107	13		50
Hexachlorobenzene	91		82		40-140	10		50
Bis(2-chloroethyl)ether	85		74		40-140	14		50
2-Chloronaphthalene	91		83		40-140	9		50
1,2-Dichlorobenzene	87		75		40-140	15		50
1,3-Dichlorobenzene	85		74		40-140	14		50
1,4-Dichlorobenzene	86		74		28-104	15		50
3,3'-Dichlorobenzidine	81		71		40-140	13		50
2,4-Dinitrotoluene	**91**	Q	84		28-89	8		50
2,6-Dinitrotoluene	100		89		40-140	12		50
Fluoranthene	102		92		40-140	10		50
4-Chlorophenyl phenyl ether	91		84		40-140	8		50
4-Bromophenyl phenyl ether	95		87		40-140	9		50
Azobenzene	89		82		40-140	8		50
Bis(2-chloroisopropyl)ether	86		75		40-140	14		50
Bis(2-chloroethoxy)methane	83		74		40-117	11		50
Hexachlorobutadiene	97		86		40-140	12		50
Hexachlorocyclopentadiene	104		95		40-140	9		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG613621-2 WG613621-3								
Hexachloroethane	91		80		40-140	13		50
Isophorone	84		75		40-140	11		50
Naphthalene	92		81		40-140	13		50
Nitrobenzene	104		92		40-140	12		50
NitrosoDiPhenylAmine(NDPA)/DPA	96		88			9		50
n-Nitrosodi-n-propylamine	90		79		32-121	13		50
Bis(2-Ethylhexyl)phthalate	104		94		40-140	10		50
Butyl benzyl phthalate	101		90		40-140	12		50
Di-n-butylphthalate	110		100		40-140	10		50
Di-n-octylphthalate	109		97		40-140	12		50
Diethyl phthalate	96		88		40-140	9		50
Dimethyl phthalate	94		85		40-140	10		50
Benzo(a)anthracene	93		85		40-140	9		50
Benzo(a)pyrene	101		92		40-140	9		50
Benzo(b)fluoranthene	87		80		40-140	8		50
Benzo(k)fluoranthene	104		94		40-140	10		50
Chrysene	91		83		40-140	9		50
Acenaphthylene	97		89		40-140	9		50
Anthracene	105		96		40-140	9		50
Benzo(ghi)perylene	99		89		40-140	11		50
Fluorene	92		85		40-140	8		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG613621-2 WG613621-3								
Phenanthrene	97		88		40-140	10		50
Dibenzo(a,h)anthracene	92		83		40-140	10		50
Indeno(1,2,3-cd)Pyrene	73		66		40-140	10		50
Pyrene	100		91		35-142	9		50
Biphenyl	88		80			10		50
Aniline	64		56		40-140	13		50
4-Chloroaniline	58		56		40-140	4		50
2-Nitroaniline	95		86		47-134	10		50
3-Nitroaniline	56		48		26-129	15		50
4-Nitroaniline	87		78		41-125	11		50
Dibenzofuran	93		85		40-140	9		50
2-Methylnaphthalene	89		80		40-140	11		50
1,2,4,5-Tetrachlorobenzene	84		76		40-117	10		50
Acetophenone	86		76		14-144	12		50
2,4,6-Trichlorophenol	98		89		30-130	10		50
P-Chloro-M-Cresol	**107**	Q	96		26-103	11		50
2-Chlorophenol	94		82		25-102	14		50
2,4-Dichlorophenol	101		90		30-130	12		50
2,4-Dimethylphenol	86		78		30-130	10		50
2-Nitrophenol	96		85		30-130	12		50
4-Nitrophenol	107		96		11-114	11		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG613621-2 WG613621-3								
2,4-Dinitrophenol	99		96		4-130	3		50
4,6-Dinitro-o-cresol	96		90		10-130	6		50
Pentachlorophenol	89		81		17-109	9		50
Phenol	90		82		26-90	9		50
2-Methylphenol	94		83		30-130.	12		50
3-Methylphenol/4-Methylphenol	98		86		30-130	13		50
2,4,5-Trichlorophenol	102		94		30-130	8		50
Benzoic Acid	34		48			34		50
Benzyl Alcohol	91		82		40-140	10		50
Carbazole	101		90		54-128	12		50
Benzaldehyde	78		69			12		50
Caprolactam	108		96			12		50
Atrazine	118		107			10		50
2,3,4,6-Tetrachlorophenol	103		94			9		50
Pyridine	65		56		10-93	15		50
Parathion, ethyl	122		110		40-140	10		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG613621-2 WG613621-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	100		88		25-120
Phenol-d6	100		88		10-120
Nitrobenzene-d5	97		86		23-120
2-Fluorobiphenyl	100		90		30-120
2,4,6-Tribromophenol	104		95		0-136
4-Terphenyl-d14	110		99		18-120

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-10 Batch: WG613718-2 WG613718-3								
Acenaphthene	86		89		37-111	3		30
1,2,4-Trichlorobenzene	49		66		39-98	30		30
Hexachlorobenzene	96		95		40-140	1		30
Bis(2-chloroethyl)ether	57		74		40-140	26		30
2-Chloronaphthalene	77		88		40-140	13		30
1,2-Dichlorobenzene	44		62		40-140	**34**	Q	30
1,3-Dichlorobenzene	42		59		40-140	**34**	Q	30
1,4-Dichlorobenzene	43		62		36-97	**36**	Q	30
3,3'-Dichlorobenzidine	**12**	Q	90		40-140	**153**	Q	30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-10 Batch: WG613718-2 WG613718-3								
2,4-Dinitrotoluene	**110**	Q	**111**	Q	24-96	1		30
2,6-Dinitrotoluene	106		108		40-140	2		30
Fluoranthene	105		105		40-140	0		30
4-Chlorophenyl phenyl ether	92		95		40-140	3		30
4-Bromophenyl phenyl ether	100		99		40-140	1		30
Bis(2-chloroisopropyl)ether	55		69		40-140	23		30
Bis(2-chloroethoxy)methane	66		81		40-140	20		30
Hexachlorobutadiene	41		62		40-140	**41**	Q	30
Hexachlorocyclopentadiene	**27**	Q	**34**	Q	40-140	23		30
Hexachloroethane	**37**	Q	57		40-140	**43**	Q	30
Isophorone	72		86		40-140	18		30
Naphthalene	55		73		40-140	28		30
Nitrobenzene	64		82		40-140	25		30
NitrosoDiPhenylAmine(NDPA)/DPA	91		97		40-140	6		30
n-Nitrosodi-n-propylamine	68		84		29-132	21		30
Bis(2-Ethylhexyl)phthalate	101		106		40-140	5		30
Butyl benzyl phthalate	108		110		40-140	2		30
Di-n-butylphthalate	102		104		40-140	2		30
Di-n-octylphthalate	104		110		40-140	6		30
Diethyl phthalate	102		102		40-140	0		30
Dimethyl phthalate	99		103		40-140	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-10 Batch: WG613718-2 WG613718-3								
Benzo(a)anthracene	98		104		40-140	6		30
Benzo(a)pyrene	105		104		40-140	1		30
Benzo(b)fluoranthene	104		101		40-140	3		30
Benzo(k)fluoranthene	116		109		40-140	6		30
Chrysene	99		102		40-140	3		30
Acenaphthylene	83		92		45-123	10		30
Anthracene	98		100		40-140	2		30
Benzo(ghi)perylene	97		101		40-140	4		30
Fluorene	95		97		40-140	2		30
Phenanthrene	100		99		40-140	1		30
Dibenzo(a,h)anthracene	104		103		40-140	1		30
Indeno(1,2,3-cd)Pyrene	100		102		40-140	2		30
Pyrene	102		103		26-127	1		30
Biphenyl	73		81			10		30
4-Chloroaniline	**18**	Q	72		40-140	**120**	Q	30
2-Nitroaniline	96		102		52-143	6		30
3-Nitroaniline	40		80		25-145	**67**	Q	30
4-Nitroaniline	84		110		51-143	27		30
Dibenzofuran	90		94		40-140	4		30
2-Methylnaphthalene	64		78		40-140	20		30
1,2,4,5-Tetrachlorobenzene	58		72		2-134	22		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-10 Batch: WG613718-2 WG613718-3								
Acetophenone	70		89		39-129	24		30
2,4,6-Trichlorophenol	95		98		30-130	3		30
P-Chloro-M-Cresol	**99**	Q	**104**	Q	23-97	5		30
2-Chlorophenol	61		76		27-123	22		30
2,4-Dichlorophenol	85		92		30-130	8		30
2,4-Dimethylphenol	83		94		30-130	12		30
2-Nitrophenol	67		84		30-130	23		30
4-Nitrophenol	80		**89**	Q	10-80	11		30
2,4-Dinitrophenol	80		83		20-130	4		30
4,6-Dinitro-o-cresol	100		103		20-164	3		30
Pentachlorophenol	95		98		9-103	3		30
Phenol	33		42		12-110	24		30
2-Methylphenol	61		77		30-130	23		30
3-Methylphenol/4-Methylphenol	66		74		30-130	11		30
2,4,5-Trichlorophenol	104		103		30-130	1		30
Benzoic Acid	26		25			4		30
Benzyl Alcohol	61		77			23		30
Carbazole	96		106		55-144	10		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-10 Batch: WG613718-2 WG613718-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	42		53		21-120
Phenol-d6	32		39		10-120
Nitrobenzene-d5	65		82		23-120
2-Fluorobiphenyl	79		89		15-120
2,4,6-Tribromophenol	97		99		10-120
4-Terphenyl-d14	100		100		41-149

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 09-10 Batch: WG613719-2 WG613719-3								
Acenaphthene	65		67		37-111	3		40
2-Chloronaphthalene	65		66		40-140	2		40
Fluoranthene	80		82		40-140	2		40
Hexachlorobutadiene	58		55		40-140	5		40
Naphthalene	62		62		40-140	0		40
Benzo(a)anthracene	75		78		40-140	4		40
Benzo(a)pyrene	69		72		40-140	4		40
Benzo(b)fluoranthene	73		74		40-140	1		40
Benzo(k)fluoranthene	82		91		40-140	10		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 09-10 Batch: WG613719-2 WG613719-3								
Chrysene	70		72		40-140	3		40
Acenaphthylene	70		71		40-140	1		40
Anthracene	76		77		40-140	1		40
Benzo(ghi)perylene	77		78		40-140	1		40
Fluorene	78		81		40-140	4		40
Phenanthrene	70		70		40-140	0		40
Dibenzo(a,h)anthracene	78		80		40-140	3		40
Indeno(1,2,3-cd)Pyrene	78		79		40-140	1		40
Pyrene	75		78		26-127	4		40
2-Methylnaphthalene	60		60		40-140	0		40
Pentachlorophenol	78		80		9-103	3		40
Hexachlorobenzene	77		79		40-140	3		40
Hexachloroethane	57		54		40-140	5		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	41		42		21-120
Phenol-d6	27		28		10-120
Nitrobenzene-d5	65		67		23-120
2-Fluorobiphenyl	66		69		15-120
2,4,6-Tribromophenol	72		73		10-120
4-Terphenyl-d14	77		79		41-149

PCBS

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-01	Date Collected:	06/06/13 09:15
Client ID:	SB2 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/07/13 10:01
Analytical Date:	06/10/13 18:34	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/08/13
Percent Solids:	87%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/08/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	37.4	7.39	1
Aroclor 1221	ND		ug/kg	37.4	11.3	1
Aroclor 1232	ND		ug/kg	37.4	7.95	1
Aroclor 1242	ND		ug/kg	37.4	7.10	1
Aroclor 1248	ND		ug/kg	37.4	4.53	1
Aroclor 1254	ND		ug/kg	37.4	5.90	1
Aroclor 1260	ND		ug/kg	37.4	6.50	1
Aroclor 1262	ND		ug/kg	37.4	2.77	1
Aroclor 1268	ND		ug/kg	37.4	5.43	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	77		30-150
Decachlorobiphenyl	49		30-150
2,4,5,6-Tetrachloro-m-xylene	79		30-150
Decachlorobiphenyl	66		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-02	Date Collected:	06/06/13 09:20
Client ID:	SB2 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/07/13 10:01
Analytical Date:	06/10/13 18:47	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/08/13
Percent Solids:	85%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/08/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	38.1	7.52	1
Aroclor 1221	ND		ug/kg	38.1	11.5	1
Aroclor 1232	ND		ug/kg	38.1	8.08	1
Aroclor 1242	ND		ug/kg	38.1	7.22	1
Aroclor 1248	ND		ug/kg	38.1	4.60	1
Aroclor 1254	ND		ug/kg	38.1	6.00	1
Aroclor 1260	ND		ug/kg	38.1	6.61	1
Aroclor 1262	ND		ug/kg	38.1	2.82	1
Aroclor 1268	ND		ug/kg	38.1	5.52	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	105		30-150
Decachlorobiphenyl	82		30-150
2,4,5,6-Tetrachloro-m-xylene	109		30-150
Decachlorobiphenyl	109		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-03	Date Collected:	06/06/13 12:29
Client ID:	SB3 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/07/13 10:01
Analytical Date:	06/10/13 19:01	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/08/13
Percent Solids:	90%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/08/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.2	6.95	1
Aroclor 1221	ND		ug/kg	35.2	10.6	1
Aroclor 1232	ND		ug/kg	35.2	7.48	1
Aroclor 1242	ND		ug/kg	35.2	6.68	1
Aroclor 1248	ND		ug/kg	35.2	4.26	1
Aroclor 1254	ND		ug/kg	35.2	5.55	1
Aroclor 1260	ND		ug/kg	35.2	6.11	1
Aroclor 1262	ND		ug/kg	35.2	2.60	1
Aroclor 1268	ND		ug/kg	35.2	5.11	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	97		30-150
Decachlorobiphenyl	79		30-150
2,4,5,6-Tetrachloro-m-xylene	100		30-150
Decachlorobiphenyl	105		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-04	Date Collected:	06/06/13 12:31
Client ID:	SB3 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/07/13 10:01
Analytical Date:	06/10/13 19:14	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/08/13
Percent Solids:	91%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/08/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	34.6	6.84	1
Aroclor 1221	ND		ug/kg	34.6	10.4	1
Aroclor 1232	ND		ug/kg	34.6	7.36	1
Aroclor 1242	ND		ug/kg	34.6	6.57	1
Aroclor 1248	ND		ug/kg	34.6	4.19	1
Aroclor 1254	ND		ug/kg	34.6	5.46	1
Aroclor 1260	ND		ug/kg	34.6	6.01	1
Aroclor 1262	ND		ug/kg	34.6	2.56	1
Aroclor 1268	ND		ug/kg	34.6	5.02	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	104		30-150
Decachlorobiphenyl	76		30-150
2,4,5,6-Tetrachloro-m-xylene	106		30-150
Decachlorobiphenyl	99		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-05	Date Collected:	06/06/13 13:54
Client ID:	GW1 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/07/13 10:01
Analytical Date:	06/10/13 19:27	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/08/13
Percent Solids:	90%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/08/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	36.8	7.26	1
Aroclor 1221	ND		ug/kg	36.8	11.1	1
Aroclor 1232	ND		ug/kg	36.8	7.81	1
Aroclor 1242	ND		ug/kg	36.8	6.98	1
Aroclor 1248	ND		ug/kg	36.8	4.45	1
Aroclor 1254	ND		ug/kg	36.8	5.80	1
Aroclor 1260	ND		ug/kg	36.8	6.38	1
Aroclor 1262	ND		ug/kg	36.8	2.72	1
Aroclor 1268	ND		ug/kg	36.8	5.33	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	110		30-150
Decachlorobiphenyl	85		30-150
2,4,5,6-Tetrachloro-m-xylene	111		30-150
Decachlorobiphenyl	110		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-06	Date Collected:	06/06/13 13:57
Client ID:	GW1 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/07/13 10:01
Analytical Date:	06/10/13 19:40	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/08/13
Percent Solids:	89%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/08/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	36.1	7.13	1
Aroclor 1221	ND		ug/kg	36.1	10.9	1
Aroclor 1232	ND		ug/kg	36.1	7.67	1
Aroclor 1242	ND		ug/kg	36.1	6.85	1
Aroclor 1248	ND		ug/kg	36.1	4.37	1
Aroclor 1254	ND		ug/kg	36.1	5.69	1
Aroclor 1260	ND		ug/kg	36.1	6.26	1
Aroclor 1262	ND		ug/kg	36.1	2.67	1
Aroclor 1268	ND		ug/kg	36.1	5.24	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	112		30-150
Decachlorobiphenyl	81		30-150
2,4,5,6-Tetrachloro-m-xylene	115		30-150
Decachlorobiphenyl	107		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-07	Date Collected:	06/06/13 14:20
Client ID:	GW1 (43-45')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	06/07/13 10:01
Analytical Date:	06/10/13 19:53	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/08/13
Percent Solids:	93%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/08/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	34.2	6.76	1
Aroclor 1221	ND		ug/kg	34.2	10.3	1
Aroclor 1232	ND		ug/kg	34.2	7.27	1
Aroclor 1242	ND		ug/kg	34.2	6.49	1
Aroclor 1248	ND		ug/kg	34.2	4.14	1
Aroclor 1254	ND		ug/kg	34.2	5.39	1
Aroclor 1260	ND		ug/kg	34.2	5.94	1
Aroclor 1262	ND		ug/kg	34.2	2.53	1
Aroclor 1268	ND		ug/kg	34.2	4.96	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	109		30-150
Decachlorobiphenyl	88		30-150
2,4,5,6-Tetrachloro-m-xylene	111		30-150
Decachlorobiphenyl	115		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-09	Date Collected:	06/06/13 16:50
Client ID:	GW1	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8082A	Extraction Date:	06/08/13 11:26
Analytical Date:	06/10/13 13:27	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/09/13
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/09/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.083	0.055	1
Aroclor 1221	ND		ug/l	0.083	0.053	1
Aroclor 1232	ND		ug/l	0.083	0.031	1
Aroclor 1242	ND		ug/l	0.083	0.060	1
Aroclor 1248	ND		ug/l	0.083	0.051	1
Aroclor 1254	ND		ug/l	0.083	0.034	1
Aroclor 1260	ND		ug/l	0.083	0.032	1
Aroclor 1262	ND		ug/l	0.083	0.029	1
Aroclor 1268	ND		ug/l	0.083	0.038	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	64		30-150
Decachlorobiphenyl	43		30-150
2,4,5,6-Tetrachloro-m-xylene	98		30-150
Decachlorobiphenyl	44		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-10	Date Collected:	06/06/13 16:20
Client ID:	FB02	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8082A	Extraction Date:	06/08/13 11:26
Analytical Date:	06/10/13 13:40	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	06/09/13
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/09/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.083	0.055	1
Aroclor 1221	ND		ug/l	0.083	0.053	1
Aroclor 1232	ND		ug/l	0.083	0.031	1
Aroclor 1242	ND		ug/l	0.083	0.060	1
Aroclor 1248	ND		ug/l	0.083	0.051	1
Aroclor 1254	ND		ug/l	0.083	0.034	1
Aroclor 1260	ND		ug/l	0.083	0.032	1
Aroclor 1262	ND		ug/l	0.083	0.029	1
Aroclor 1268	ND		ug/l	0.083	0.038	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	64		30-150
Decachlorobiphenyl	47		30-150
2,4,5,6-Tetrachloro-m-xylene	67		30-150
Decachlorobiphenyl	48		30-150

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/10/13 20:46
Analyst: KB

Extraction Method: EPA 3546
Extraction Date: 06/07/13 10:01
Cleanup Method1: EPA 3665A
Cleanup Date1: 06/08/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 06/08/13

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-07 Batch: WG613437-1					
Aroclor 1016	ND		ug/kg	32.8	6.48
Aroclor 1221	ND		ug/kg	32.8	9.90
Aroclor 1232	ND		ug/kg	32.8	6.97
Aroclor 1242	ND		ug/kg	32.8	6.23
Aroclor 1248	ND		ug/kg	32.8	3.97
Aroclor 1254	ND		ug/kg	32.8	5.18
Aroclor 1260	ND		ug/kg	32.8	5.70
Aroclor 1262	ND		ug/kg	32.8	2.43
Aroclor 1268	ND		ug/kg	32.8	4.76

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	135		30-150
Decachlorobiphenyl	112		30-150
2,4,5,6-Tetrachloro-m-xylene	120		30-150
Decachlorobiphenyl	116		30-150

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/10/13 15:02
Analyst: KB

Extraction Method: EPA 3510C
Extraction Date: 06/08/13 11:26
Cleanup Method1: EPA 3665A
Cleanup Date1: 06/09/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 06/09/13

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 09-10 Batch: WG613664-1					
Aroclor 1016	ND		ug/l	0.083	0.055
Aroclor 1221	ND		ug/l	0.083	0.053
Aroclor 1232	ND		ug/l	0.083	0.031
Aroclor 1242	ND		ug/l	0.083	0.060
Aroclor 1248	ND		ug/l	0.083	0.051
Aroclor 1254	ND		ug/l	0.083	0.034
Aroclor 1260	ND		ug/l	0.083	0.032
Aroclor 1262	ND		ug/l	0.083	0.029
Aroclor 1268	ND		ug/l	0.083	0.038

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	55		30-150
Decachlorobiphenyl	57		30-150
2,4,5,6-Tetrachloro-m-xylene	57		30-150
Decachlorobiphenyl	57		30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG613437-2 WG613437-3								
Aroclor 1016	95		98		40-140	3		50
Aroclor 1260	100		106		40-140	6		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	104		106		30-150
Decachlorobiphenyl	87		87		30-150
2,4,5,6-Tetrachloro-m-xylene	106		109		30-150
Decachlorobiphenyl	114		117		30-150

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 09-10 Batch: WG613664-2 WG613664-3								
Aroclor 1016	71		82		40-140	15		50
Aroclor 1260	70		81		40-140	15		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	61		70		30-150
Decachlorobiphenyl	62		73		30-150
2,4,5,6-Tetrachloro-m-xylene	62		72		30-150
Decachlorobiphenyl	64		73		30-150

PESTICIDES

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-01	Date Collected:	06/06/13 09:15
Client ID:	SB2 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/07/13 14:31
Analytical Date:	06/10/13 18:45	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
4,4'-DDT	2.19	J	ug/kg	3.42	1.46	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	53		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-01	Date Collected:	06/06/13 09:15
Client ID:	SB2 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/07/13 14:31
Analytical Date:	06/10/13 18:45	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.82	0.357	1
Lindane	ND		ug/kg	0.760	0.340	1
Alpha-BHC	ND		ug/kg	0.760	0.216	1
Beta-BHC	ND		ug/kg	1.82	0.691	1
Heptachlor	ND		ug/kg	0.911	0.409	1
Aldrin	ND		ug/kg	1.82	0.642	1
Heptachlor epoxide	ND		ug/kg	3.42	1.02	1
Endrin	ND		ug/kg	0.760	0.311	1
Endrin ketone	ND		ug/kg	1.82	0.469	1
Dieldrin	ND		ug/kg	1.14	0.570	1
4,4'-DDE	0.608	J	ug/kg	1.82	0.422	1
4,4'-DDD	1.04	J	ug/kg	1.82	0.650	1
Endosulfan I	ND		ug/kg	1.82	0.431	1
Endosulfan II	ND		ug/kg	1.82	0.609	1
Endosulfan sulfate	ND		ug/kg	0.760	0.347	1
Methoxychlor	ND		ug/kg	3.42	1.06	1
Toxaphene	ND		ug/kg	34.2	9.57	1
cis-Chlordane	ND		ug/kg	2.28	0.635	1
trans-Chlordane	ND		ug/kg	2.28	0.602	1
Chlordane	ND		ug/kg	14.8	6.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	53		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-02	Date Collected:	06/06/13 09:20
Client ID:	SB2 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/07/13 14:31
Analytical Date:	06/10/13 18:58	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.84	0.360	1
Lindane	ND		ug/kg	0.766	0.342	1
Alpha-BHC	ND		ug/kg	0.766	0.217	1
Beta-BHC	ND		ug/kg	1.84	0.697	1
Heptachlor	ND		ug/kg	0.919	0.412	1
Aldrin	ND		ug/kg	1.84	0.647	1
Heptachlor epoxide	ND		ug/kg	3.44	1.03	1
Endrin	ND		ug/kg	0.766	0.314	1
Endrin ketone	ND		ug/kg	1.84	0.473	1
Dieldrin	ND		ug/kg	1.15	0.574	1
4,4'-DDE	ND		ug/kg	1.84	0.425	1
4,4'-DDD	ND		ug/kg	1.84	0.655	1
4,4'-DDT	ND		ug/kg	3.44	1.48	1
Endosulfan I	ND		ug/kg	1.84	0.434	1
Endosulfan II	ND		ug/kg	1.84	0.614	1
Endosulfan sulfate	ND		ug/kg	0.766	0.350	1
Methoxychlor	ND		ug/kg	3.44	1.07	1
Toxaphene	ND		ug/kg	34.4	9.65	1
cis-Chlordane	ND		ug/kg	2.30	0.640	1
trans-Chlordane	ND		ug/kg	2.30	0.606	1
Chlordane	ND		ug/kg	14.9	6.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	103		30-150	A
Decachlorobiphenyl	95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-03	Date Collected:	06/06/13 12:29
Client ID:	SB3 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/07/13 14:31
Analytical Date:	06/10/13 19:11	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.76	0.344	1
Lindane	ND		ug/kg	0.732	0.327	1
Alpha-BHC	ND		ug/kg	0.732	0.208	1
Beta-BHC	ND		ug/kg	1.76	0.666	1
Heptachlor	ND		ug/kg	0.878	0.394	1
Aldrin	ND		ug/kg	1.76	0.618	1
Heptachlor epoxide	ND		ug/kg	3.29	0.988	1
Endrin	ND		ug/kg	0.732	0.300	1
Endrin ketone	ND		ug/kg	1.76	0.452	1
Dieldrin	ND		ug/kg	1.10	0.549	1
4,4'-DDE	ND		ug/kg	1.76	0.406	1
4,4'-DDD	ND		ug/kg	1.76	0.626	1
4,4'-DDT	ND		ug/kg	3.29	1.41	1
Endosulfan I	ND		ug/kg	1.76	0.415	1
Endosulfan II	ND		ug/kg	1.76	0.587	1
Endosulfan sulfate	ND		ug/kg	0.732	0.334	1
Methoxychlor	ND		ug/kg	3.29	1.02	1
Toxaphene	ND		ug/kg	32.9	9.22	1
cis-Chlordane	ND		ug/kg	2.20	0.612	1
trans-Chlordane	ND		ug/kg	2.20	0.580	1
Chlordane	ND		ug/kg	14.3	5.82	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	91		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-04	Date Collected:	06/06/13 12:31
Client ID:	SB3 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/07/13 14:31
Analytical Date:	06/10/13 19:24	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	91%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.69	0.330	1
Lindane	ND		ug/kg	0.703	0.314	1
Alpha-BHC	ND		ug/kg	0.703	0.200	1
Beta-BHC	ND		ug/kg	1.69	0.640	1
Heptachlor	ND		ug/kg	0.843	0.378	1
Aldrin	ND		ug/kg	1.69	0.594	1
Heptachlor epoxide	ND		ug/kg	3.16	0.949	1
Endrin	ND		ug/kg	0.703	0.288	1
Endrin ketone	ND		ug/kg	1.69	0.434	1
Dieldrin	ND		ug/kg	1.05	0.527	1
4,4'-DDE	ND		ug/kg	1.69	0.390	1
4,4'-DDD	ND		ug/kg	1.69	0.602	1
4,4'-DDT	ND		ug/kg	3.16	1.36	1
Endosulfan I	ND		ug/kg	1.69	0.398	1
Endosulfan II	ND		ug/kg	1.69	0.564	1
Endosulfan sulfate	ND		ug/kg	0.703	0.321	1
Methoxychlor	ND		ug/kg	3.16	0.984	1
Toxaphene	ND		ug/kg	31.6	8.86	1
cis-Chlordane	ND		ug/kg	2.11	0.588	1
trans-Chlordane	ND		ug/kg	2.11	0.557	1
Chlordane	ND		ug/kg	13.7	5.59	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-05	Date Collected:	06/06/13 13:54
Client ID:	GW1 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/07/13 14:31
Analytical Date:	06/10/13 19:49	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.69	0.331	1
Lindane	ND		ug/kg	0.703	0.314	1
Alpha-BHC	ND		ug/kg	0.703	0.200	1
Beta-BHC	ND		ug/kg	1.69	0.640	1
Heptachlor	ND		ug/kg	0.844	0.378	1
Aldrin	ND		ug/kg	1.69	0.594	1
Heptachlor epoxide	ND		ug/kg	3.16	0.950	1
Endrin	ND		ug/kg	0.703	0.288	1
Endrin ketone	ND		ug/kg	1.69	0.435	1
Dieldrin	ND		ug/kg	1.06	0.528	1
4,4'-DDE	ND		ug/kg	1.69	0.390	1
4,4'-DDD	ND		ug/kg	1.69	0.602	1
Endosulfan I	ND		ug/kg	1.69	0.399	1
Endosulfan II	ND		ug/kg	1.69	0.564	1
Endosulfan sulfate	ND		ug/kg	0.703	0.321	1
Methoxychlor	ND		ug/kg	3.16	0.985	1
Toxaphene	ND		ug/kg	31.6	8.86	1
cis-Chlordane	ND		ug/kg	2.11	0.588	1
trans-Chlordane	ND		ug/kg	2.11	0.557	1
Chlordane	ND		ug/kg	13.7	5.59	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-05	Date Collected:	06/06/13 13:54
Client ID:	GW1 (0-2')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/07/13 14:31
Analytical Date:	06/10/13 19:49	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
4,4'-DDT	2.40	J	ug/kg	3.16	1.36	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-06	Date Collected:	06/06/13 13:57
Client ID:	GW1 (8-10')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/07/13 14:31
Analytical Date:	06/10/13 20:02	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.75	0.343	1
Lindane	ND		ug/kg	0.730	0.326	1
Alpha-BHC	ND		ug/kg	0.730	0.207	1
Beta-BHC	ND		ug/kg	1.75	0.664	1
Heptachlor	ND		ug/kg	0.876	0.393	1
Aldrin	ND		ug/kg	1.75	0.617	1
Heptachlor epoxide	ND		ug/kg	3.28	0.985	1
Endrin	ND		ug/kg	0.730	0.299	1
Endrin ketone	ND		ug/kg	1.75	0.451	1
Dieldrin	ND		ug/kg	1.09	0.547	1
4,4'-DDE	ND		ug/kg	1.75	0.405	1
4,4'-DDD	ND		ug/kg	1.75	0.625	1
4,4'-DDT	ND	P	ug/kg	3.28	1.41	1
Endosulfan I	ND		ug/kg	1.75	0.414	1
Endosulfan II	ND		ug/kg	1.75	0.585	1
Endosulfan sulfate	ND		ug/kg	0.730	0.334	1
Methoxychlor	ND		ug/kg	3.28	1.02	1
Toxaphene	ND		ug/kg	32.8	9.20	1
cis-Chlordane	ND		ug/kg	2.19	0.610	1
trans-Chlordane	ND		ug/kg	2.19	0.578	1
Chlordane	ND		ug/kg	14.2	5.80	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		30-150	A
Decachlorobiphenyl	100		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-07	Date Collected:	06/06/13 14:20
Client ID:	GW1 (43-45')	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	06/07/13 14:31
Analytical Date:	06/10/13 20:15	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13
Percent Solids:	93%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/kg	1.65	0.324	1
Lindane	ND		ug/kg	0.689	0.308	1
Alpha-BHC	ND		ug/kg	0.689	0.196	1
Beta-BHC	ND		ug/kg	1.65	0.627	1
Heptachlor	ND		ug/kg	0.827	0.371	1
Aldrin	ND		ug/kg	1.65	0.582	1
Heptachlor epoxide	ND		ug/kg	3.10	0.930	1
Endrin	ND		ug/kg	0.689	0.283	1
Endrin ketone	ND		ug/kg	1.65	0.426	1
Dieldrin	ND		ug/kg	1.03	0.517	1
4,4'-DDE	ND		ug/kg	1.65	0.382	1
4,4'-DDD	ND		ug/kg	1.65	0.590	1
4,4'-DDT	ND		ug/kg	3.10	1.33	1
Endosulfan I	ND		ug/kg	1.65	0.391	1
Endosulfan II	ND		ug/kg	1.65	0.553	1
Endosulfan sulfate	ND		ug/kg	0.689	0.315	1
Methoxychlor	ND		ug/kg	3.10	0.965	1
Toxaphene	ND		ug/kg	31.0	8.68	1
cis-Chlordane	ND		ug/kg	2.07	0.576	1
trans-Chlordane	ND		ug/kg	2.07	0.546	1
Chlordane	ND		ug/kg	13.4	5.48	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	98		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-09	Date Collected:	06/06/13 16:50
Client ID:	GW1	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8081B	Extraction Date:	06/07/13 18:19
Analytical Date:	06/10/13 18:20	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/l	0.020	0.005	1
Lindane	ND		ug/l	0.020	0.004	1
Alpha-BHC	ND		ug/l	0.020	0.004	1
Beta-BHC	ND		ug/l	0.020	0.006	1
Heptachlor	ND		ug/l	0.020	0.003	1
Aldrin	ND		ug/l	0.020	0.002	1
Heptachlor epoxide	ND		ug/l	0.020	0.004	1
Endrin	ND		ug/l	0.040	0.004	1
Endrin ketone	ND		ug/l	0.040	0.005	1
Dieldrin	ND		ug/l	0.040	0.004	1
4,4'-DDE	ND		ug/l	0.040	0.004	1
4,4'-DDD	ND		ug/l	0.040	0.005	1
4,4'-DDT	ND		ug/l	0.040	0.004	1
Endosulfan I	ND		ug/l	0.020	0.003	1
Endosulfan II	ND		ug/l	0.040	0.005	1
Endosulfan sulfate	ND		ug/l	0.040	0.005	1
Methoxychlor	ND		ug/l	0.200	0.007	1
Toxaphene	ND		ug/l	0.200	0.063	1
cis-Chlordane	ND		ug/l	0.020	0.007	1
trans-Chlordane	ND		ug/l	0.020	0.006	1
Chlordane	ND		ug/l	0.200	0.046	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	51		30-150	B

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID:	L1310351-10	Date Collected:	06/06/13 16:20
Client ID:	FB02	Date Received:	06/06/13
Sample Location:	CHARLESTON, STATEN ISLAND	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8081B	Extraction Date:	06/07/13 18:19
Analytical Date:	06/10/13 18:33	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	06/08/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
Delta-BHC	ND		ug/l	0.020	0.005	1
Lindane	ND		ug/l	0.020	0.004	1
Alpha-BHC	ND		ug/l	0.020	0.004	1
Beta-BHC	ND		ug/l	0.020	0.006	1
Heptachlor	ND		ug/l	0.020	0.003	1
Aldrin	ND		ug/l	0.020	0.002	1
Heptachlor epoxide	ND		ug/l	0.020	0.004	1
Endrin	ND		ug/l	0.040	0.004	1
Endrin ketone	ND		ug/l	0.040	0.005	1
Dieldrin	ND		ug/l	0.040	0.004	1
4,4'-DDE	ND		ug/l	0.040	0.004	1
4,4'-DDD	ND		ug/l	0.040	0.005	1
4,4'-DDT	ND		ug/l	0.040	0.004	1
Endosulfan I	ND		ug/l	0.020	0.003	1
Endosulfan II	ND		ug/l	0.040	0.005	1
Endosulfan sulfate	ND		ug/l	0.040	0.005	1
Methoxychlor	ND		ug/l	0.200	0.007	1
Toxaphene	ND		ug/l	0.200	0.063	1
cis-Chlordane	ND		ug/l	0.020	0.007	1
trans-Chlordane	ND		ug/l	0.020	0.006	1
Chlordane	ND		ug/l	0.200	0.046	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/09/13 12:21
Analyst: SH

Extraction Method: EPA 3546
Extraction Date: 06/07/13 14:31
Cleanup Method1: EPA 3620B
Cleanup Date1: 06/08/13

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-07 Batch: WG613519-1					
Delta-BHC	ND		ug/kg	1.56	0.306
Lindane	ND		ug/kg	0.651	0.291
Alpha-BHC	ND		ug/kg	0.651	0.185
Beta-BHC	ND		ug/kg	1.56	0.592
Heptachlor	ND		ug/kg	0.781	0.350
Aldrin	ND		ug/kg	1.56	0.550
Heptachlor epoxide	ND		ug/kg	2.93	0.878
Endrin	ND		ug/kg	0.651	0.267
Endrin ketone	ND		ug/kg	1.56	0.402
Dieldrin	ND		ug/kg	0.976	0.488
4,4'-DDE	ND		ug/kg	1.56	0.361
4,4'-DDD	ND		ug/kg	1.56	0.557
4,4'-DDT	ND		ug/kg	2.93	1.26
Endosulfan I	ND		ug/kg	1.56	0.369
Endosulfan II	ND		ug/kg	1.56	0.522
Endosulfan sulfate	ND		ug/kg	0.651	0.297
Methoxychlor	ND		ug/kg	2.93	0.911
Toxaphene	ND		ug/kg	29.3	8.20
cis-Chlordane	ND		ug/kg	1.95	0.544
trans-Chlordane	ND		ug/kg	1.95	0.515
Chlordane	ND		ug/kg	12.7	5.17

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	103		30-150	A
Decachlorobiphenyl	46		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	118		30-150	B

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/09/13 15:09
Analyst: SH

Extraction Method: EPA 3510C
Extraction Date: 06/07/13 18:19
Cleanup Method1: EPA 3620B
Cleanup Date1: 06/08/13

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 09-10 Batch: WG613576-1					
Delta-BHC	ND		ug/l	0.020	0.005
Lindane	ND		ug/l	0.020	0.004
Alpha-BHC	ND		ug/l	0.020	0.004
Beta-BHC	ND		ug/l	0.020	0.006
Heptachlor	ND		ug/l	0.020	0.003
Aldrin	ND		ug/l	0.020	0.002
Heptachlor epoxide	ND		ug/l	0.020	0.004
Endrin	ND		ug/l	0.040	0.004
Endrin ketone	ND		ug/l	0.040	0.005
Dieldrin	ND		ug/l	0.040	0.004
4,4'-DDE	ND		ug/l	0.040	0.004
4,4'-DDD	ND		ug/l	0.040	0.005
4,4'-DDT	ND		ug/l	0.040	0.004
Endosulfan I	ND		ug/l	0.020	0.003
Endosulfan II	ND		ug/l	0.040	0.005
Endosulfan sulfate	ND		ug/l	0.040	0.005
Methoxychlor	ND		ug/l	0.200	0.007
Toxaphene	ND		ug/l	0.200	0.063
cis-Chlordane	ND		ug/l	0.020	0.007
trans-Chlordane	ND		ug/l	0.020	0.006
Chlordane	ND		ug/l	0.200	0.046

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	47		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	115		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG613519-2 WG613519-3								
Delta-BHC	70		74		30-150	6		30
Lindane	73		76		30-150	4		30
Alpha-BHC	75		77		30-150	3		30
Beta-BHC	83		84		30-150	1		30
Heptachlor	71		74		30-150	4		30
Aldrin	74		76		30-150	3		30
Heptachlor epoxide	71		74		30-150	4		30
Endrin	76		78		30-150	3		30
Endrin ketone	65		68		30-150	5		30
Dieldrin	70		73		30-150	4		30
4,4'-DDE	69		72		30-150	4		30
4,4'-DDD	64		67		30-150	5		30
4,4'-DDT	62		65		30-150	5		30
Endosulfan I	68		71		30-150	4		30
Endosulfan II	62		64		30-150	3		30
Endosulfan sulfate	64		66		30-150	3		30
Methoxychlor	69		72		30-150	4		30
cis-Chlordane	70		73		30-150	4		30
trans-Chlordane	68		70		30-150	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG613519-2 WG613519-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	108		105		30-150	A
Decachlorobiphenyl	52		49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		77		30-150	B
Decachlorobiphenyl	107		102		30-150	B

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 09-10 Batch: WG613576-2 WG613576-3								
Delta-BHC	93		89		30-150	5		20
Lindane	97		93		30-150	4		20
Alpha-BHC	100		95		30-150	5		20
Beta-BHC	100		92		30-150	7		20
Heptachlor	81		79		30-150	2		20
Aldrin	80		79		30-150	1		20
Heptachlor epoxide	92		91		30-150	1		20
Endrin	98		99		30-150	1		20
Endrin ketone	84		86		30-150	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 09-10 Batch: WG613576-2 WG613576-3								
Dieldrin	92		92		30-150	0		20
4,4'-DDE	89		88		30-150	1		20
4,4'-DDD	82		83		30-150	0		20
4,4'-DDT	80		81		30-150	1		20
Endosulfan I	90		89		30-150	1		20
Endosulfan II	80		82		30-150	2		20
Endosulfan sulfate	82		84		30-150	2		20
Methoxychlor	91		101		30-150	11		20
cis-Chlordane	89		90		30-150	1		20
trans-Chlordane	84		84		30-150	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		84		30-150	A
Decachlorobiphenyl	39		38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		60		30-150	B
Decachlorobiphenyl	90		95		30-150	B

METALS

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310351
Project Number: 12043
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-01
Client ID: SB2 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 87%

Date Collected: 06/06/13 09:15
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	7500		mg/kg	8.7	1.7	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Antimony, Total	9.4		mg/kg	4.3	0.87	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Arsenic, Total	15		mg/kg	0.87	0.26	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Barium, Total	54		mg/kg	0.87	0.26	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Beryllium, Total	0.32	J	mg/kg	0.43	0.04	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Cadmium, Total	0.42	J	mg/kg	0.87	0.05	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Calcium, Total	620		mg/kg	8.7	1.7	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Chromium, Total	14		mg/kg	0.87	0.17	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Cobalt, Total	4.9		mg/kg	1.7	0.43	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Copper, Total	84		mg/kg	0.87	0.43	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Iron, Total	14000		mg/kg	4.3	1.7	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Lead, Total	93		mg/kg	4.3	0.26	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Magnesium, Total	1500		mg/kg	8.7	3.5	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Manganese, Total	160		mg/kg	0.87	0.17	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Mercury, Total	0.06	J	mg/kg	0.07	0.02	1	06/13/13 09:57	06/13/13 11:44	EPA 7471B	1,7471B	MC
Nickel, Total	9.6		mg/kg	2.2	0.35	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Potassium, Total	300		mg/kg	220	69.	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Selenium, Total	1.2	J	mg/kg	1.7	0.26	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Silver, Total	0.77	J	mg/kg	0.87	0.17	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Sodium, Total	ND		mg/kg	170	69.	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.52	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Vanadium, Total	34		mg/kg	0.87	0.17	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG
Zinc, Total	41		mg/kg	4.3	0.43	2	06/12/13 11:20	06/13/13 11:57	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310351
Project Number: 12043
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-02
Client ID: SB2 (8-10')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 85%

Date Collected: 06/06/13 09:20
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	4000		mg/kg	8.8	1.8	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.4	0.88	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Arsenic, Total	2.2		mg/kg	0.88	0.26	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Barium, Total	68		mg/kg	0.88	0.26	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Beryllium, Total	0.35	J	mg/kg	0.44	0.04	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Cadmium, Total	0.26	J	mg/kg	0.88	0.05	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Calcium, Total	860		mg/kg	8.8	1.8	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Chromium, Total	12		mg/kg	0.88	0.18	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Cobalt, Total	6.6		mg/kg	1.8	0.44	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Copper, Total	11		mg/kg	0.88	0.44	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Iron, Total	14000		mg/kg	4.4	1.8	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Lead, Total	6.9		mg/kg	4.4	0.26	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Magnesium, Total	2000		mg/kg	8.8	3.5	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Manganese, Total	250		mg/kg	0.88	0.18	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/13/13 09:57	06/13/13 11:51	EPA 7471B	1,7471B	MC
Nickel, Total	12		mg/kg	2.2	0.35	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Potassium, Total	560		mg/kg	220	71.	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.8	0.26	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.88	0.18	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Sodium, Total	72	J	mg/kg	180	71.	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.8	0.53	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Vanadium, Total	18		mg/kg	0.88	0.18	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG
Zinc, Total	28		mg/kg	4.4	0.44	2	06/12/13 11:20	06/13/13 12:47	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-03 Date Collected: 06/06/13 12:29

Client ID: SB3 (0-2') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	8000		mg/kg	8.6	1.7	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.3	0.86	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Arsenic, Total	3.8		mg/kg	0.86	0.26	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Barium, Total	47		mg/kg	0.86	0.26	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Beryllium, Total	0.50		mg/kg	0.43	0.03	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Cadmium, Total	0.46	J	mg/kg	0.86	0.05	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Calcium, Total	380		mg/kg	8.6	1.7	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Chromium, Total	19		mg/kg	0.86	0.17	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Cobalt, Total	10		mg/kg	1.7	0.43	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Copper, Total	20		mg/kg	0.86	0.43	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Iron, Total	22000		mg/kg	4.3	1.7	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Lead, Total	10		mg/kg	4.3	0.26	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Magnesium, Total	3300		mg/kg	8.6	3.4	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Manganese, Total	290		mg/kg	0.86	0.17	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.09	0.02	1	06/13/13 09:57	06/13/13 11:56	EPA 7471B	1,7471B	MC
Nickel, Total	15		mg/kg	2.2	0.34	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Potassium, Total	720		mg/kg	220	69.	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.26	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.86	0.17	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Sodium, Total	71	J	mg/kg	170	69.	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.52	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Vanadium, Total	29		mg/kg	0.86	0.17	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG
Zinc, Total	45		mg/kg	4.3	0.43	2	06/12/13 11:20	06/13/13 12:51	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310351
Project Number: 12043
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-04
Client ID: SB3 (8-10')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 91%

Date Collected: 06/06/13 12:31
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	7800		mg/kg	8.5	1.7	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.2	0.85	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Arsenic, Total	1.7		mg/kg	0.85	0.26	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Barium, Total	110		mg/kg	0.85	0.26	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Beryllium, Total	0.51		mg/kg	0.42	0.03	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Cadmium, Total	0.26	J	mg/kg	0.85	0.05	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Calcium, Total	540		mg/kg	8.5	1.7	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Chromium, Total	11		mg/kg	0.85	0.17	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Cobalt, Total	5.2		mg/kg	1.7	0.42	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Copper, Total	8.0		mg/kg	0.85	0.42	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Iron, Total	13000		mg/kg	4.2	1.7	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Lead, Total	6.4		mg/kg	4.2	0.26	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Magnesium, Total	1900		mg/kg	8.5	3.4	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Manganese, Total	330		mg/kg	0.85	0.17	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/13/13 09:57	06/13/13 11:58	EPA 7471B	1,7471B	MC
Nickel, Total	11		mg/kg	2.1	0.34	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Potassium, Total	540		mg/kg	210	68.	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.26	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.85	0.17	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Sodium, Total	ND		mg/kg	170	68.	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.51	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Vanadium, Total	17		mg/kg	0.85	0.17	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG
Zinc, Total	24		mg/kg	4.2	0.42	2	06/12/13 11:20	06/13/13 12:54	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-05
Client ID: GW1 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 90%
Date Collected: 06/06/13 13:54
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	5400		mg/kg	8.3	1.7	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Antimony, Total	1.8	J	mg/kg	4.2	0.83	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Arsenic, Total	5.0		mg/kg	0.83	0.25	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Barium, Total	48		mg/kg	0.83	0.25	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Beryllium, Total	0.42		mg/kg	0.42	0.03	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Cadmium, Total	0.35	J	mg/kg	0.83	0.05	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Calcium, Total	6100		mg/kg	8.3	1.7	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Chromium, Total	13		mg/kg	0.83	0.17	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Cobalt, Total	6.4		mg/kg	1.7	0.42	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Copper, Total	33		mg/kg	0.83	0.42	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Iron, Total	15000		mg/kg	4.2	1.7	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Lead, Total	28		mg/kg	4.2	0.25	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Magnesium, Total	2400		mg/kg	8.3	3.3	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Manganese, Total	340		mg/kg	0.83	0.17	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Mercury, Total	0.09		mg/kg	0.08	0.02	1	06/13/13 09:57	06/13/13 11:59	EPA 7471B	1,7471B	MC
Nickel, Total	11		mg/kg	2.1	0.33	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Potassium, Total	600		mg/kg	210	67.	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.25	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.83	0.17	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Sodium, Total	85	J	mg/kg	170	67.	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.50	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Vanadium, Total	21		mg/kg	0.83	0.17	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG
Zinc, Total	33		mg/kg	4.2	0.42	2	06/12/13 11:20	06/13/13 12:58	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-06 Date Collected: 06/06/13 13:57

Client ID: GW1 (8-10') Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	3100		mg/kg	8.7	1.7	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.4	0.87	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Arsenic, Total	2.2		mg/kg	0.87	0.26	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Barium, Total	26		mg/kg	0.87	0.26	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Beryllium, Total	0.35	J	mg/kg	0.44	0.04	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Cadmium, Total	0.16	J	mg/kg	0.87	0.05	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Calcium, Total	2900		mg/kg	8.7	1.7	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Chromium, Total	6.8		mg/kg	0.87	0.17	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Cobalt, Total	4.5		mg/kg	1.7	0.44	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Copper, Total	13		mg/kg	0.87	0.44	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Iron, Total	8100		mg/kg	4.4	1.7	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Lead, Total	12		mg/kg	4.4	0.26	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Magnesium, Total	1400		mg/kg	8.7	3.5	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Manganese, Total	160		mg/kg	0.87	0.17	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.07	0.02	1	06/13/13 09:57	06/13/13 12:01	EPA 7471B	1,7471B	MC
Nickel, Total	6.3		mg/kg	2.2	0.35	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Potassium, Total	400		mg/kg	220	70.	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.26	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.87	0.17	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Sodium, Total	ND		mg/kg	170	70.	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.52	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Vanadium, Total	15		mg/kg	0.87	0.17	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG
Zinc, Total	19		mg/kg	4.4	0.44	2	06/12/13 11:20	06/13/13 13:01	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310351
Project Number: 12043
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-07
Client ID: GW1 (43-45')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Percent Solids: 93%

Date Collected: 06/06/13 14:20
Date Received: 06/06/13
Field Prep: Not Specified

Total Metals - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Aluminum, Total	500		mg/kg	8.4	1.7	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.2	0.84	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Arsenic, Total	3.2		mg/kg	0.84	0.25	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Barium, Total	3.0		mg/kg	0.84	0.25	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Beryllium, Total	0.08	J	mg/kg	0.42	0.03	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Cadmium, Total	0.08	J	mg/kg	0.84	0.05	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Calcium, Total	120		mg/kg	8.4	1.7	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Chromium, Total	9.8		mg/kg	0.84	0.17	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Cobalt, Total	0.48	J	mg/kg	1.7	0.42	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Copper, Total	3.0		mg/kg	0.84	0.42	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Iron, Total	4400		mg/kg	4.2	1.7	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Lead, Total	0.98	J	mg/kg	4.2	0.25	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Magnesium, Total	38		mg/kg	8.4	3.3	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Manganese, Total	4.6		mg/kg	0.84	0.17	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/13/13 09:57	06/13/13 12:03	EPA 7471B	1,7471B	MC
Nickel, Total	0.64	J	mg/kg	2.1	0.33	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Potassium, Total	ND		mg/kg	210	67.	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.25	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.84	0.17	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Sodium, Total	ND		mg/kg	170	67.	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.50	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Vanadium, Total	19		mg/kg	0.84	0.17	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG
Zinc, Total	6.6		mg/kg	4.2	0.42	2	06/12/13 11:20	06/13/13 13:05	EPA 3050B	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-09 Date Collected: 06/06/13 16:50

Client ID: GW1 Date Received: 06/06/13

Sample Location: CHARLESTON, STATEN ISLAND Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	0.249		mg/l	0.0100	0.00200	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Antimony, Total	0.00035	J	mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Arsenic, Total	0.00204		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Barium, Total	0.09751		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Beryllium, Total	0.00044	J	mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Cadmium, Total	0.00008	J	mg/l	0.00050	0.00005	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Calcium, Total	41.2		mg/l	0.100	0.0320	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Chromium, Total	0.00618		mg/l	0.00100	0.00020	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Cobalt, Total	0.02144		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Copper, Total	0.00506		mg/l	0.00100	0.00010	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Iron, Total	4.10		mg/l	0.0500	0.0130	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Lead, Total	0.00088	J	mg/l	0.00100	0.00020	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Magnesium, Total	10.2		mg/l	0.100	0.0230	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Manganese, Total	0.1434		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Mercury, Total	ND		mg/l	0.00020	0.00006	1	06/09/13 13:45	06/10/13 11:20	EPA 7470A	1,7470A	JH
Nickel, Total	0.02774		mg/l	0.00100	0.00010	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Potassium, Total	1.79		mg/l	0.100	0.0270	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Selenium, Total	0.00116	J	mg/l	0.00500	0.00030	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Thallium, Total	0.00008	J	mg/l	0.00050	0.00003	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Vanadium, Total	0.00154	J	mg/l	0.00500	0.00010	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Zinc, Total	0.05223		mg/l	0.01000	0.00120	1	06/07/13 10:30	06/11/13 16:40	EPA 3005A	1,6020A	AK
Dissolved Metals - Westborough Lab											
Aluminum, Dissolved	0.0134		mg/l	0.0100	0.00200	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Antimony, Dissolved	0.00082		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Arsenic, Dissolved	ND		mg/l	0.00050	0.00020	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Barium, Dissolved	0.07899		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Cadmium, Dissolved	ND		mg/l	0.00050	0.00005	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Calcium, Dissolved	47.2		mg/l	0.100	0.0320	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310351
Project Number: 12043
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-09
Client ID: GW1
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Water

Date Collected: 06/06/13 16:50
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Chromium, Dissolved	0.00046	J	mg/l	0.00100	0.00020	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Cobalt, Dissolved	0.02878		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Copper, Dissolved	0.00100		mg/l	0.00100	0.00010	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Iron, Dissolved	3.52		mg/l	0.0500	0.0130	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Lead, Dissolved	ND		mg/l	0.00100	0.00020	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Magnesium, Dissolved	11.4		mg/l	0.100	0.0230	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	06/12/13 07:37	06/12/13 12:37	EPA 7470A	1,7470A	JH
Nickel, Dissolved	0.04550		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Potassium, Dissolved	2.56		mg/l	0.100	0.0270	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Selenium, Dissolved	0.00038	J	mg/l	0.00500	0.00030	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Silver, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Thallium, Dissolved	ND		mg/l	0.00050	0.00003	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Vanadium, Dissolved	ND		mg/l	0.00500	0.00010	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK
Zinc, Dissolved	0.04218		mg/l	0.01000	0.00120	1	06/07/13 06:36	06/13/13 12:56	NA	1,6020A	AK

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310351
Project Number: 12043
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-09 D
Client ID: GW1
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Water

Date Collected: 06/06/13 16:50
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Sodium, Total	51.4		mg/l	1.00	0.150	10	06/07/13 10:30	06/11/13 16:57	EPA 3005A	1,6020A	AK
Dissolved Metals - Westborough Lab											
Manganese, Dissolved	0.4980		mg/l	0.00500	0.00100	10	06/07/13 06:36	06/13/13 12:49	NA	1,6020A	AK
Sodium, Dissolved	50.3		mg/l	1.00	0.150	10	06/07/13 06:36	06/13/13 12:49	NA	1,6020A	AK

Project Name: CHARLESTON, STATEN ISLAND
Lab Number: L1310351
Project Number: 12043
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-10
Client ID: FB02
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Water
Date Collected: 06/06/13 16:20
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	ND		mg/l	0.0100	0.00200	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Antimony, Total	0.00035	J	mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Arsenic, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Barium, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00050	0.00005	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Calcium, Total	ND		mg/l	0.100	0.0320	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Chromium, Total	ND		mg/l	0.00100	0.00020	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Cobalt, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Copper, Total	0.00011	J	mg/l	0.00100	0.00010	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Iron, Total	ND		mg/l	0.0500	0.0130	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Lead, Total	ND		mg/l	0.00100	0.00020	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Magnesium, Total	ND		mg/l	0.100	0.0230	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Manganese, Total	0.00014	J	mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Mercury, Total	ND		mg/l	0.00020	0.00006	1	06/09/13 13:45	06/10/13 11:22	EPA 7470A	1,7470A	JH
Nickel, Total	ND		mg/l	0.00100	0.00010	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Potassium, Total	ND		mg/l	0.100	0.0270	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.00500	0.00030	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Sodium, Total	0.0200	J	mg/l	0.100	0.0150	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Thallium, Total	ND		mg/l	0.00050	0.00003	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Vanadium, Total	ND		mg/l	0.00500	0.00010	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK
Zinc, Total	ND		mg/l	0.01000	0.00120	1	06/07/13 10:30	06/11/13 16:36	EPA 3005A	1,6020A	AK

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 09-10 Batch: WG613421-1										
Aluminum, Total	ND		mg/l	0.0100	0.00200	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Antimony, Total	0.00038	J	mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Arsenic, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Barium, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00050	0.00005	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Calcium, Total	ND		mg/l	0.100	0.0320	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Chromium, Total	ND		mg/l	0.00100	0.00020	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Cobalt, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Copper, Total	0.00025	J	mg/l	0.00100	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Iron, Total	ND		mg/l	0.0500	0.0130	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Lead, Total	ND		mg/l	0.00100	0.00020	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Magnesium, Total	ND		mg/l	0.100	0.0230	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Manganese, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Nickel, Total	ND		mg/l	0.00100	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Potassium, Total	ND		mg/l	0.100	0.0270	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Selenium, Total	ND		mg/l	0.00500	0.00030	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Silver, Total	ND		mg/l	0.00050	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Sodium, Total	ND		mg/l	0.100	0.0150	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Thallium, Total	ND		mg/l	0.00050	0.00003	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Vanadium, Total	ND		mg/l	0.00500	0.00010	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK
Zinc, Total	ND		mg/l	0.01000	0.00120	1	06/07/13 10:30	06/11/13 16:29	1,6020A	AK

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 09-10 Batch: WG613729-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	06/09/13 13:45	06/10/13 10:56	1,7470A	JH

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 09 Batch: WG614119-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00200	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Antimony, Dissolved	0.00018	J	mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Arsenic, Dissolved	ND		mg/l	0.00050	0.00020	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Barium, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Cadmium, Dissolved	ND		mg/l	0.00050	0.00005	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Calcium, Dissolved	ND		mg/l	0.100	0.0320	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Chromium, Dissolved	ND		mg/l	0.00100	0.00020	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Cobalt, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Copper, Dissolved	ND		mg/l	0.00100	0.00010	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Iron, Dissolved	ND		mg/l	0.0500	0.0130	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Lead, Dissolved	ND		mg/l	0.00100	0.00020	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Magnesium, Dissolved	ND		mg/l	0.100	0.0230	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Manganese, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Nickel, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Potassium, Dissolved	ND		mg/l	0.100	0.0270	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Selenium, Dissolved	ND		mg/l	0.00500	0.00030	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Silver, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Sodium, Dissolved	ND		mg/l	0.100	0.0150	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Thallium, Dissolved	ND		mg/l	0.00050	0.00003	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Vanadium, Dissolved	ND		mg/l	0.00500	0.00010	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK
Zinc, Dissolved	ND		mg/l	0.01000	0.00120	1	06/07/13 06:36	06/13/13 12:38	1,6020A	AK

Prep Information

Digestion Method: NA

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 09 Batch: WG614446-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	06/12/13 07:37	06/12/13 12:34	1,7470A	JH

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-07 Batch: WG614469-1										
Aluminum, Total	ND		mg/kg	4.0	0.80	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Antimony, Total	ND		mg/kg	2.0	0.40	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Arsenic, Total	ND		mg/kg	0.40	0.12	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Barium, Total	ND		mg/kg	0.40	0.12	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Beryllium, Total	ND		mg/kg	0.20	0.02	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Cadmium, Total	ND		mg/kg	0.40	0.02	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Calcium, Total	ND		mg/kg	4.0	0.80	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Chromium, Total	ND		mg/kg	0.40	0.08	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Cobalt, Total	ND		mg/kg	0.80	0.20	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Copper, Total	ND		mg/kg	0.40	0.20	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Iron, Total	ND		mg/kg	2.0	0.80	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Lead, Total	ND		mg/kg	2.0	0.12	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Magnesium, Total	ND		mg/kg	4.0	1.6	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Manganese, Total	ND		mg/kg	0.40	0.08	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Nickel, Total	ND		mg/kg	1.0	0.16	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Potassium, Total	ND		mg/kg	100	32.	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Selenium, Total	ND		mg/kg	0.80	0.12	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Silver, Total	ND		mg/kg	0.40	0.08	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Sodium, Total	ND		mg/kg	80	32.	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Thallium, Total	ND		mg/kg	0.80	0.24	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Vanadium, Total	ND		mg/kg	0.40	0.08	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG
Zinc, Total	ND		mg/kg	2.0	0.20	1	06/12/13 11:20	06/13/13 11:50	1,6010C	MG

Project Name: CHARLESTON, STATEN ISLAND **Lab Number:** L1310351

Project Number: 12043 **Report Date:** 06/17/13

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-07 Batch: WG614544-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	06/13/13 09:57	06/13/13 11:40	1,7471B	MC

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 09-10 Batch: WG613421-2								
Aluminum, Total	99		-		80-120	-		
Antimony, Total	96		-		80-120	-		
Arsenic, Total	107		-		80-120	-		
Barium, Total	96		-		80-120	-		
Beryllium, Total	95		-		80-120	-		
Cadmium, Total	111		-		80-120	-		
Calcium, Total	101		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Cobalt, Total	101		-		80-120	-		
Copper, Total	104		-		80-120	-		
Iron, Total	95		-		80-120	-		
Lead, Total	102		-		80-120	-		
Magnesium, Total	100		-		80-120	-		
Manganese, Total	105		-		80-120	-		
Nickel, Total	103		-		80-120	-		
Potassium, Total	101		-		80-120	-		
Selenium, Total	110		-		80-120	-		
Silver, Total	97		-		80-120	-		
Sodium, Total	108		-		80-120	-		
Thallium, Total	102		-		80-120	-		
Vanadium, Total	103		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 09-10 Batch: WG613421-2					
Zinc, Total	112	-	80-120	-	
Total Metals - Westborough Lab Associated sample(s): 09-10 Batch: WG613729-2					
Mercury, Total	110	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 09 Batch: WG614119-2					
Aluminum, Dissolved	101	-	80-120	-	
Antimony, Dissolved	92	-	80-120	-	
Arsenic, Dissolved	101	-	80-120	-	
Barium, Dissolved	94	-	80-120	-	
Beryllium, Dissolved	94	-	80-120	-	
Cadmium, Dissolved	110	-	80-120	-	
Calcium, Dissolved	96	-	80-120	-	
Chromium, Dissolved	93	-	80-120	-	
Cobalt, Dissolved	95	-	80-120	-	
Copper, Dissolved	100	-	80-120	-	
Iron, Dissolved	88	-	80-120	-	
Lead, Dissolved	101	-	80-120	-	
Magnesium, Dissolved	99	-	80-120	-	
Manganese, Dissolved	94	-	80-120	-	
Nickel, Dissolved	96	-	80-120	-	
Potassium, Dissolved	97	-	80-120	-	
Selenium, Dissolved	105	-	80-120	-	
Silver, Dissolved	95	-	80-120	-	
Sodium, Dissolved	112	-	80-120	-	
Thallium, Dissolved	90	-	80-120	-	
Vanadium, Dissolved	94	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 09 Batch: WG614119-2					
Zinc, Dissolved	117	-	80-120	-	
Dissolved Metals - Westborough Lab Associated sample(s): 09 Batch: WG614446-2					
Mercury, Dissolved	100	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 Batch: WG614469-2 SRM Lot Number: 0518-10-02					
Aluminum, Total	82	-	29-171	-	
Antimony, Total	117	-	4-196	-	
Arsenic, Total	104	-	81-119	-	
Barium, Total	100	-	83-118	-	
Beryllium, Total	98	-	83-117	-	
Cadmium, Total	98	-	82-117	-	
Calcium, Total	92	-	83-117	-	
Chromium, Total	97	-	80-119	-	
Cobalt, Total	105	-	83-117	-	
Copper, Total	101	-	83-117	-	
Iron, Total	101	-	51-150	-	
Lead, Total	100	-	80-120	-	
Magnesium, Total	92	-	74-126	-	
Manganese, Total	95	-	83-117	-	
Nickel, Total	104	-	82-117	-	
Potassium, Total	99	-	74-126	-	
Selenium, Total	106	-	80-120	-	
Silver, Total	102	-	66-134	-	
Sodium, Total	100	-	74-127	-	
Thallium, Total	106	-	79-120	-	
Vanadium, Total	98	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310351

Report Date: 06/17/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 Batch: WG614469-2 SRM Lot Number: 0518-10-02					
Zinc, Total	97	-	82-119	-	
Total Metals - Westborough Lab Associated sample(s): 01-07 Batch: WG614544-2 SRM Lot Number: 0518-10-02					
Mercury, Total	127	-	67-133	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 09-10 QC Batch ID: WG613421-4 QC Sample: L1310351-09 Client ID: GW1												
Aluminum, Total	0.249	2	2.65	120		-	-		80-120	-		20
Antimony, Total	0.00035J	0.5	0.4560	91		-	-		80-120	-		20
Arsenic, Total	0.00204	0.12	0.1136	93		-	-		80-120	-		20
Barium, Total	0.09751	2	1.982	94		-	-		80-120	-		20
Beryllium, Total	0.00044J	0.05	0.04613	92		-	-		80-120	-		20
Cadmium, Total	0.00008J	0.051	0.05580	109		-	-		80-120	-		20
Calcium, Total	41.2	10	49.6	84		-	-		80-120	-		20
Chromium, Total	0.00618	0.2	0.2015	98		-	-		80-120	-		20
Cobalt, Total	0.02144	0.5	0.5241	100		-	-		80-120	-		20
Copper, Total	0.00506	0.25	0.2617	103		-	-		80-120	-		20
Iron, Total	4.10	1	4.62	**52**	Q	-	-		80-120	-		20
Lead, Total	0.00088J	0.51	0.5210	102		-	-		80-120	-		20
Magnesium, Total	10.2	10	9.32	**0**	Q	-	-		80-120	-		20
Manganese, Total	0.1434	10	10.51	104		-	-		80-120	-		20
Nickel, Total	0.02774	0.5	0.5259	100		-	-		80-120	-		20
Potassium, Total	1.79	10	11.7	99		-	-		80-120	-		20
Selenium, Total	0.00116J	0.12	0.102	85		-	-		80-120	-		20
Silver, Total	ND	0.05	0.04816	96		-	-		80-120	-		20
Sodium, Total	51.4	10	62.0	106		-	-		80-120	-		20
Thallium, Total	0.00008J	0.12	0.1110	92		-	-		80-120	-		20
Vanadium, Total	0.00154J	0.5	0.5168	103		-	-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 09-10 QC Batch ID: WG613421-4 QC Sample: L1310351-09 Client ID: GW1									
Zinc, Total	0.05223	0.5	0.6023	110	-	-	80-120	-	20
Total Metals - Westborough Lab Associated sample(s): 09-10 QC Batch ID: WG613729-4 QC Sample: L1310001-01 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00596	119	-	-	70-130	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 09 QC Batch ID: WG614119-4 QC Sample: L1310351-09 Client ID: GW1										
Aluminum, Dissolved	0.0134	2	2.00	99		-	-	80-120	-	20
Antimony, Dissolved	0.00082	0.5	0.4491	90		-	-	80-120	-	20
Arsenic, Dissolved	ND	0.12	0.1162	97		-	-	80-120	-	20
Barium, Dissolved	0.07899	2	1.839	88		-	-	80-120	-	20
Beryllium, Dissolved	ND	0.05	0.04601	92		-	-	80-120	-	20
Cadmium, Dissolved	ND	0.051	0.05532	108		-	-	80-120	-	20
Calcium, Dissolved	47.2	10	50.9	**37**	Q	-	-	80-120	-	20
Chromium, Dissolved	0.00046J	0.2	0.1809	90		-	-	80-120	-	20
Cobalt, Dissolved	0.02878	0.5	0.4986	94		-	-	80-120	-	20
Copper, Dissolved	0.00100	0.25	0.2426	97		-	-	80-120	-	20
Iron, Dissolved	3.52	1	4.24	**72**	Q	-	-	80-120	-	20
Lead, Dissolved	ND	0.51	0.5021	98		-	-	80-120	-	20
Magnesium, Dissolved	11.4	10	19.6	82		-	-	80-120	-	20
Manganese, Dissolved	0.4980	0.5	0.9422	89		-	-	80-120	-	20
Nickel, Dissolved	0.04550	0.5	0.5184	94		-	-	80-120	-	20
Potassium, Dissolved	2.56	10	11.8	92		-	-	80-120	-	20
Selenium, Dissolved	0.00038J	0.12	0.120	100		-	-	80-120	-	20
Silver, Dissolved	ND	0.05	0.04683	94		-	-	80-120	-	20
Sodium, Dissolved	50.3	10	59.4	91		-	-	80-120	-	20
Thallium, Dissolved	ND	0.12	0.1067	89		-	-	80-120	-	20
Vanadium, Dissolved	ND	0.5	0.4707	94		-	-	80-120	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 09 QC Batch ID: WG614119-4 QC Sample: L1310351-09 Client ID: GW1									
Zinc, Dissolved	0.04218	0.5	0.5643	104	-	-	80-120	-	20
Dissolved Metals - Westborough Lab Associated sample(s): 09 QC Batch ID: WG614446-4 QC Sample: L1310407-01 Client ID: MS Sample									
Mercury, Dissolved	ND	0.005	0.00543	109	-	-	70-130	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG614469-4 QC Sample: L1310351-01 Client ID: SB2 (0-2')										
Aluminum, Total	7500	177	9000	**849**	Q	-	-	75-125	-	35
Antimony, Total	9.4	44.2	55	103		-	-	75-125	-	35
Arsenic, Total	15.	10.6	29	**132**	Q	-	-	75-125	-	35
Barium, Total	54.	177	220	94		-	-	75-125	-	35
Beryllium, Total	0.32J	4.42	4.4	100		-	-	75-125	-	35
Cadmium, Total	0.42J	4.5	4.8	106		-	-	75-125	-	35
Calcium, Total	620	883	1500	100		-	-	75-125	-	35
Chromium, Total	14.	17.7	31	96		-	-	75-125	-	35
Cobalt, Total	4.9	44.2	48	98		-	-	75-125	-	35
Copper, Total	84.	22.1	130	**208**	Q	-	-	75-125	-	35
Iron, Total	14000	88.3	15000	**1130**	Q	-	-	75-125	-	35
Lead, Total	93.	45	160	**149**	Q	-	-	75-125	-	35
Magnesium, Total	1500	883	2200	79		-	-	75-125	-	35
Manganese, Total	160	44.2	210	113		-	-	75-125	-	35
Nickel, Total	9.6	44.2	53	98		-	-	75-125	-	35
Potassium, Total	300	883	1200	102		-	-	75-125	-	35
Selenium, Total	1.2J	10.6	11	104		-	-	75-125	-	35
Silver, Total	0.77J	26.5	27	102		-	-	75-125	-	35
Sodium, Total	ND	883	860	97		-	-	75-125	-	35
Thallium, Total	ND	10.6	9.9	93		-	-	75-125	-	35
Vanadium, Total	34.	44.2	77	97		-	-	75-125	-	35

Matrix Spike Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG614469-4 QC Sample: L1310351-01 Client ID: SB2 (0-2')										
Zinc, Total	41.	44.2	84	97		-	-	75-125	-	35
Total Metals - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG614544-4 QC Sample: L1310351-01 Client ID: SB2 (0-2')										
Mercury, Total	0.06J	0.176	0.26	**147**	Q	-	-	70-130	-	35

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 09-10 QC Batch ID: WG613421-3 QC Sample: L1310351-09 Client ID: GW1						
Aluminum, Total	0.249	0.249	mg/l	0		20
Antimony, Total	0.00035J	0.00025J	mg/l	NC		20
Arsenic, Total	0.00204	0.00193	mg/l	6		20
Barium, Total	0.09751	0.09856	mg/l	1		20
Beryllium, Total	0.00044J	0.00045J	mg/l	NC		20
Cadmium, Total	0.00008J	0.00009J	mg/l	NC		20
Calcium, Total	41.2	42.0	mg/l	2		20
Chromium, Total	0.00618	0.00615	mg/l	0		20
Cobalt, Total	0.02144	0.02188	mg/l	2		20
Copper, Total	0.00506	0.00479	mg/l	6		20
Iron, Total	4.10	4.08	mg/l	0		20
Lead, Total	0.00088J	0.00089J	mg/l	NC		20
Magnesium, Total	10.2	10.6	mg/l	4		20
Manganese, Total	0.1434	0.1452	mg/l	1		20
Nickel, Total	0.02774	0.02834	mg/l	2		20
Potassium, Total	1.79	1.82	mg/l	2		20
Selenium, Total	0.00116J	0.00113J	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Thallium, Total	0.00008J	0.00009J	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 09-10 QC Batch ID: WG613421-3 QC Sample: L1310351-09 Client ID: GW1					
Vanadium, Total	0.00154J	0.00133J	mg/l	NC	20
Zinc, Total	0.05223	0.05252	mg/l	1	20
Total Metals - Westborough Lab Associated sample(s): 09-10 QC Batch ID: WG613421-3 QC Sample: L1310351-09 Client ID: GW1					
Sodium, Total	51.4	52.2	mg/l	2	20
Total Metals - Westborough Lab Associated sample(s): 09-10 QC Batch ID: WG613729-3 QC Sample: L1310001-01 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/l	NC	20
Dissolved Metals - Westborough Lab Associated sample(s): 09 QC Batch ID: WG614119-3 QC Sample: L1310351-09 Client ID: GW1					
Manganese, Dissolved	0.4980	0.4957	mg/l	0	20
Sodium, Dissolved	50.3	50.4	mg/l	0	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 09 QC Batch ID: WG614119-3 QC Sample: L1310351-09 Client ID: GW1						
Aluminum, Dissolved	0.0134	0.0294	mg/l	**75**	Q	20
Antimony, Dissolved	0.00082	0.00063	mg/l	**27**	Q	20
Arsenic, Dissolved	ND	ND	mg/l	NC		20
Barium, Dissolved	0.07899	0.07918	mg/l	0		20
Beryllium, Dissolved	ND	ND	mg/l	NC		20
Cadmium, Dissolved	ND	ND	mg/l	NC		20
Calcium, Dissolved	47.2	47.6	mg/l	1		20
Chromium, Dissolved	0.00046J	0.00049J	mg/l	NC		20
Cobalt, Dissolved	0.02878	0.02896	mg/l	1		20
Copper, Dissolved	0.00100	0.00089J	mg/l	NC		20
Iron, Dissolved	3.52	3.51	mg/l	0		20
Lead, Dissolved	ND	ND	mg/l	NC		20
Magnesium, Dissolved	11.4	11.5	mg/l	1		20
Nickel, Dissolved	0.04550	0.04603	mg/l	1		20
Potassium, Dissolved	2.56	2.57	mg/l	0		20
Selenium, Dissolved	0.00038J	0.00035J	mg/l	NC		20
Silver, Dissolved	ND	ND	mg/l	NC		20
Thallium, Dissolved	ND	ND	mg/l	NC		20
Vanadium, Dissolved	ND	ND	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 09 QC Batch ID: WG614119-3 QC Sample: L1310351-09 Client ID: GW1					
Zinc, Dissolved	0.04218	0.04248	mg/l	1	20
Dissolved Metals - Westborough Lab Associated sample(s): 09 QC Batch ID: WG614446-3 QC Sample: L1310407-01 Client ID: DUP Sample					
Mercury, Dissolved	ND	ND	mg/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG614469-3 QC Sample: L1310351-01 Client ID: SB2 (0-2')					
Aluminum, Total	7500	7800	mg/kg	4	35
Antimony, Total	9.4	10	mg/kg	6	35
Arsenic, Total	15.	14	mg/kg	7	35
Barium, Total	54.	59	mg/kg	9	35
Beryllium, Total	0.32J	0.30J	mg/kg	NC	35
Cadmium, Total	0.42J	0.41J	mg/kg	NC	35
Calcium, Total	620	670	mg/kg	8	35
Chromium, Total	14.	13	mg/kg	7	35
Cobalt, Total	4.9	4.3	mg/kg	13	35
Copper, Total	84.	100	mg/kg	17	35
Iron, Total	14000	13000	mg/kg	7	35
Lead, Total	93.	100	mg/kg	7	35
Magnesium, Total	1500	1300	mg/kg	14	35
Manganese, Total	160	160	mg/kg	0	35
Nickel, Total	9.6	9.4	mg/kg	2	35
Potassium, Total	300	300	mg/kg	0	35
Selenium, Total	1.2J	1.2J	mg/kg	NC	35
Silver, Total	0.77J	0.94	mg/kg	NC	35
Sodium, Total	ND	ND	mg/kg	NC	35

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG614469-3 QC Sample: L1310351-01 Client ID: SB2 (0-2')					
Thallium, Total	ND	ND	mg/kg	NC	35
Vanadium, Total	34.	31	mg/kg	9	35
Zinc, Total	41.	43	mg/kg	5	35
Total Metals - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG614544-3 QC Sample: L1310351-01 Client ID: SB2 (0-2')					
Mercury, Total	0.06J	0.09	mg/kg	NC	35

INORGANICS
&
MISCELLANEOUS

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-01
Client ID: SB2 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/06/13 09:15
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.9		%	0.100	NA	1	-	06/07/13 02:31	30,2540G	RD

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-02
Client ID: SB2 (8-10')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/06/13 09:20
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.3		%	0.100	NA	1	-	06/07/13 02:31	30,2540G	RD

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-03
Client ID: SB3 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/06/13 12:29
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.6		%	0.100	NA	1	-	06/07/13 02:31	30,2540G	RD

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-04
Client ID: SB3 (8-10')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/06/13 12:31
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.8		%	0.100	NA	1	-	06/07/13 02:31	30,2540G	RD

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-05
Client ID: GW1 (0-2')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/06/13 13:54
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.8		%	0.100	NA	1	-	06/07/13 02:31	30,2540G	RD

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-06
Client ID: GW1 (8-10')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/06/13 13:57
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.2		%	0.100	NA	1	-	06/07/13 02:31	30,2540G	RD

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310351
Report Date: 06/17/13

SAMPLE RESULTS

Lab ID: L1310351-07
Client ID: GW1 (43-45')
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil
Date Collected: 06/06/13 14:20
Date Received: 06/06/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.0		%	0.100	NA	1	-	06/07/13 02:31	30,2540G	RD

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG613348-1 QC Sample: L1310262-01 Client ID: DUP Sample						
Solids, Total	93.6	93.4	%	0		20

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 06/07/2013 00:48

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310351-01A	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-01B	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-01C	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-01D	Vial MeOH preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-01E	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-01F	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-01G	Plastic 2oz unpreserved for TS	A	N/A	2.1	Y	Absent	TS(7)
L1310351-01H	Amber 500ml unpreserved	A	N/A	2.1	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310351-02A	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-02B	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-02C	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-02D	Vial MeOH preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-02E	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-02F	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-02G	Plastic 2oz unpreserved for TS	A	N/A	2.1	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310351-02H	Amber 500ml unpreserved	A	N/A	2.1	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310351-03A	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-03B	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-03C	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-03D	Vial MeOH preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-03E	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-03F	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-03G	Plastic 2oz unpreserved for TS	A	N/A	2.1	Y	Absent	TS(7)
L1310351-03H	Amber 500ml unpreserved	A	N/A	2.1	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310351-04A	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-04B	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-04C	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-04D	Vial MeOH preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-04E	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-04F	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-04G	Plastic 2oz unpreserved for TS	A	N/A	2.1	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310351-04H	Amber 500ml unpreserved	A	N/A	2.1	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310351-05A	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-05B	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-05C	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-05D	Vial MeOH preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-05E	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-05F	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-05G	Plastic 2oz unpreserved for TS	A	N/A	2.1	Y	Absent	TS(7)
L1310351-05H	Amber 500ml unpreserved	A	N/A	2.1	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310351-06A	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-06B	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-06C	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-06D	Vial MeOH preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-06E	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-06F	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-06G	Plastic 2oz unpreserved for TS	A	N/A	2.1	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310351-06H	Amber 500ml unpreserved	A	N/A	2.1	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310351-07A	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-07B	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-07C	5 gram Encore Sampler	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(2)
L1310351-07D	Vial MeOH preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-07E	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-07F	Vial Water preserved split	A	N/A	2.1	Y	Absent	NYTCL-8260HLW(14)
L1310351-07G	Plastic 2oz unpreserved for TS	A	N/A	2.1	Y	Absent	TS(7)
L1310351-07H	Amber 500ml unpreserved	A	N/A	2.1	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1310351-08A	Vial HCl preserved	A	N/A	2.1	Y	Absent	NYTCL-8260(14)
L1310351-08B	Vial HCl preserved	A	N/A	2.1	Y	Absent	NYTCL-8260(14)
L1310351-09A	Vial HCl preserved	B	N/A	3.5	Y	Absent	NYTCL-8260(14)
L1310351-09B	Vial HCl preserved	B	N/A	3.5	Y	Absent	NYTCL-8260(14)
L1310351-09C	Vial HCl preserved	B	N/A	3.5	Y	Absent	NYTCL-8260(14)
L1310351-09D	Amber 1000ml unpreserved	B	7	3.5	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1310351-09E	Amber 1000ml unpreserved	B	7	3.5	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1310351-09F	Amber 1000ml unpreserved	B	7	3.5	Y	Absent	NYTCL-8081(7)
L1310351-09G	Amber 1000ml unpreserved	B	7	3.5	Y	Absent	NYTCL-8081(7)
L1310351-09H	Amber 1000ml unpreserved	B	7	3.5	Y	Absent	NYTCL-8082-1200ML(7)
L1310351-09I	Amber 1000ml unpreserved	B	7	3.5	Y	Absent	NYTCL-8082-1200ML(7)

*Values in parentheses indicate holding time in days

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310351
Report Date: 06/17/13

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310351-09J	Plastic 500ml HNO3 preserved	B	<2	3.5	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1310351-09K	Plastic 250ml unpreserved split	C	7	2.3	Y	Absent	-
L1310351-09X	Plastic 500ml HNO3 preserved spl	C	<2	2.3	Y	Absent	CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1310351-09Z	Plastic 500ml HNO3 preserved	C	<2	2.3	Y	Absent	-
L1310351-10A	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1310351-10B	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1310351-10C	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1310351-10D	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1310351-10E	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1310351-10F	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8081(7)
L1310351-10G	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8081(7)
L1310351-10H	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8082-1200ML(7)
L1310351-10I	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8082-1200ML(7)
L1310351-10J	Plastic 500ml HNO3 preserved	C	<2	2.3	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1310351-10K	Plastic 500ml unpreserved split	C	7	2.3	Y	Absent	-
L1310351-10X	Plastic 500ml HNO3 preserved spl	C	<2	2.3	Y	Absent	-

*Values in parentheses indicate holding time in days

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310351
Project Number:	12043	**Report Date:**	06/17/13

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

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

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: DU Report with "J" Qualifiers

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310351
Project Number:	12043	**Report Date:**	06/17/13

Data Qualifiers

due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with "J" Qualifiers

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310351
Project Number:	12043	**Report Date:**	06/17/13

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised December 19, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012B, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C,

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C,

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

CHAIN OF CUSTODY

PAGE 1 OF 3

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 6/7/13

ALPHA Job #: L1310351

Client Information

Client: EPM, Inc.
Address: 1983 Marcus Ave., Ste 109
Lake Success, NY 11042
Phone: 516-328-1194
Fax:
Email: jlebow@epmco.com, rhart@epmco.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Charleston, Staten Island
Project Location: Charleston, Staten Island
Project #: 12043
Project Manager: Richard Hart
ALPHA Quote #: 2013595

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 6/13/13 Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

*QAQC samples contained in glass (8260) and plastic (6010B/7471)
†QAQC samples preserved with HCl (8260) and HNO3 (6010)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs (8260/5035)	TCL SVOCs (8270)	PCBs (8082)	TAL Metals (6010B/7471)	TCL Pesticides (8081A)								Sample Specific Comments	TOTAL # BOTTLES
10351 -01	SB2 (0-2')	6/6/13	0915	S	JA	X	X	X	X	X									
-02	SB2 (8-10')	6/6/13	0920	S	JA	X	X	X	X	X									
-03	SB3 (0-2')	6/6/13	1229	S	JA	X	X	X	X	X									
-04	SB3 (8-10')	6/6/13	1231	S	JA	X	X	X	X	X									
-05	GW1 (0-2')	6/6/13	1354	S	JA	X	X	X	X	X									
-06	GW1 (8-10')	6/6/13	1357	S	JA	X	X	X	X	X									
-07	GW1 (43-45')	6/6/13	1420	S	JA	X	X	X	X	X									
-08	TB2	6/6/13	—	W	JA	X													
					J														

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	P+	G	G	G+	G
Preservative	A†	A	A	A†	A

Relinquished By:	Date/Time	Received By:	Date/Time
	6/6/2013 - 1724		6/6/13 17:35
	6/6/13 19:50		6/6/13 19:50
	6/7/13 00:20		6/7/13 00:20

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

CHAIN OF CUSTODY

PAGE 3 OF 3

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 6/7/13

ALPHA Job #: L1310351

Client Information

Client: EPM, Inc.
Address: 1983 Marcus Ave., Ste 109
Lake Success, NY 11042
Phone: 516-328-1194
Fax:
Email: jlebow@epmco.com, rhart@epmco.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Charleston, Staten Island
Project Location: Charleston, Staten Island
Project #: 12043
Project Manager: Richard Hart
ALPHA Quote #: 2013595

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 6/13/13 Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☑ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs (8260)	TCL SVOCs (8270)	PCBs (8082)	TAL Metals (6010/6020/7470)	TCL Pesticides (8081)	Sample Specific Comments	TOTAL # BOTTLES
10351 -09	GW1	6/6/2013	1650	GW	JL	X	X	X	X	X		11
-10	FB02	6/6/2013	1620	W	JL	X	X	X	X	X		

Container Type	G	G	G	P	G
Preservative	B	A	A	A/C	A

Relinquished By:	Date/Time	Received By:	Date/Time
	6/6/2013 1934		6/6/13 17:35
	6/6/13 19:50		6/6/13 19:50
	6/7/13 00:20		6/7/13 00:20

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L1310368
Client:	Environmental Planning and Management 1983 Marcus Avenue Suite 109 Lake Success, NY 11042
ATTN:	Rick Hart
Phone:	(516) 328-1194
Project Name:	CHARLESTON, STATEN ISLAND
Project Number:	12043
Report Date:	06/18/13

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310368
Report Date: 06/18/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1310368-01	SG2	CHARLESTON, STATEN ISLAND	06/06/13 13:07

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310368
Project Number:	12043	**Report Date:**	06/18/13

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310368
Project Number:	12043	**Report Date:**	06/18/13

Case Narrative (continued)

REISSUE

Report Submission

This report replaces the report previously issued on June 13, 2013. At the request of the client this report has been revised to change the sample ID from the original ID listed on the chain of custody to SG2. Additionally the spelling of 1,3,5- Trimethylbenzene needed to be corrected on the results pages.

Volatile Organics in Air

Canisters were released from the laboratory on May 30, 2013. The canister certification results are provided as an addendum.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 06/18/13

AIR

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310368
Report Date: 06/18/13

SAMPLE RESULTS

Lab ID: L1310368-01
Client ID: SG2
Sample Location: CHARLESTON, STATEN ISLAND
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 06/12/13 02:26
Analyst: MB

Date Collected: 06/06/13 13:07
Date Received: 06/06/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Propylene	31.3	0.500	--	53.9	0.861	--		1
Dichlorodifluoromethane	0.238	0.200	--	1.18	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	1.27	0.200	--	2.81	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	53.9	1.00	--	128	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	1.38	1.00	--	4.79	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	1.39	0.200	--	4.33	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	1.45	0.200	--	4.28	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310368
Report Date: 06/18/13

SAMPLE RESULTS

Lab ID: L1310368-01
Client ID: SG2
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/06/13 13:07
Date Received: 06/06/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	2.06	0.200	--	7.26	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.346	0.200	--	1.11	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.793	0.200	--	3.25	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.765	0.200	--	2.88	0.754	--		1
2-Hexanone	0.283	0.200	--	1.16	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.585	0.400	--	2.54	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310368
Report Date: 06/18/13

SAMPLE RESULTS

Lab ID: L1310368-01
Client ID: SG2
Sample Location: CHARLESTON, STATEN ISLAND
Date Collected: 06/06/13 13:07
Date Received: 06/06/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.249	0.200	--	1.08	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.380	0.200	--	1.87	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	89		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	90		60-140

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310368
Report Date: 06/18/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/11/13 14:16

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG614304-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310368
Report Date: 06/18/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/11/13 14:16

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG614304-4								
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043
Lab Number: L1310368
Report Date: 06/18/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/11/13 14:16

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG614304-4								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310368

Report Date: 06/18/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG614304-3								
Chlorodifluoromethane	88		-		70-130	-		
Propylene	100		-		70-130	-		
Propane	82		-		70-130	-		
Dichlorodifluoromethane	96		-		70-130	-		
Chloromethane	100		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	94		-		70-130	-		
Methanol	97		-		70-130	-		
Vinyl chloride	93		-		70-130	-		
1,3-Butadiene	95		-		70-130	-		
Butane	97		-		70-130	-		
Bromomethane	88		-		70-130	-		
Chloroethane	89		-		70-130	-		
Ethyl Alcohol	103		-		70-130	-		
Dichlorofluoromethane	87		-		70-130	-		
Vinyl bromide	87		-		70-130	-		
Acrolein	74		-		70-130	-		
Acetone	109		-		70-130	-		
Acetonitrile	96		-		70-130	-		
Trichlorofluoromethane	95		-		70-130	-		
iso-Propyl Alcohol	96		-		70-130	-		
Acrylonitrile	83		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310368

Report Date: 06/18/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG614304-3								
Pentane	94		-		70-130	-		
Ethyl ether	98		-		70-130	-		
1,1-Dichloroethene	95		-		70-130	-		
tert-Butyl Alcohol	82		-		70-130	-		
Methylene chloride	102		-		70-130	-		
3-Chloropropene	101		-		70-130	-		
Carbon disulfide	92		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	97		-		70-130	-		
trans-1,2-Dichloroethene	84		-		70-130	-		
1,1-Dichloroethane	92		-		70-130	-		
Methyl tert butyl ether	86		-		70-130	-		
Vinyl acetate	104		-		70-130	-		
2-Butanone	94		-		70-130	-		
cis-1,2-Dichloroethene	98		-		70-130	-		
Ethyl Acetate	84		-		70-130	-		
Chloroform	89		-		70-130	-		
Tetrahydrofuran	89		-		70-130	-		
2,2-Dichloropropane	80		-		70-130	-		
1,2-Dichloroethane	90		-		70-130	-		
n-Hexane	97		-		70-130	-		
Isopropyl Ether	90		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310368

Report Date: 06/18/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG614304-3								
Ethyl-Tert-Butyl-Ether	91		-		70-130	-		
1,1,1-Trichloroethane	100		-		70-130	-		
1,1-Dichloropropene	99		-		70-130	-		
Benzene	98		-		70-130	-		
Carbon tetrachloride	102		-		70-130	-		
Cyclohexane	98		-		70-130	-		
Tertiary-Amyl Methyl Ether	89		-		70-130	-		
Dibromomethane	98		-		70-130	-		
1,2-Dichloropropane	104		-		70-130	-		
Bromodichloromethane	97		-		70-130	-		
1,4-Dioxane	94		-		70-130	-		
Trichloroethene	100		-		70-130	-		
2,2,4-Trimethylpentane	102		-		70-130	-		
Methyl methacrylate	**136**	Q	-		70-130	-		
Heptane	106		-		70-130	-		
cis-1,3-Dichloropropene	107		-		70-130	-		
4-Methyl-2-pentanone	108		-		70-130	-		
trans-1,3-Dichloropropene	90		-		70-130	-		
1,1,2-Trichloroethane	104		-		70-130	-		
Toluene	90		-		70-130	-		
1,3-Dichloropropane	89		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310368

Report Date: 06/18/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG614304-3								
2-Hexanone	96		-		70-130	-		
Dibromochloromethane	83		-		70-130	-		
1,2-Dibromoethane	92		-		70-130	-		
Butyl Acetate	83		-		70-130	-		
Octane	83		-		70-130	-		
Tetrachloroethene	86		-		70-130	-		
1,1,1,2-Tetrachloroethane	85		-		70-130	-		
Chlorobenzene	91		-		70-130	-		
Ethylbenzene	91		-		70-130	-		
p/m-Xylene	91		-		70-130	-		
Bromoform	76		-		70-130	-		
Styrene	88		-		70-130	-		
1,1,2,2-Tetrachloroethane	98		-		70-130	-		
o-Xylene	93		-		70-130	-		
1,2,3-Trichloropropane	91		-		70-130	-		
Nonane (C9)	98		-		70-130	-		
Isopropylbenzene	88		-		70-130	-		
Bromobenzene	87		-		70-130	-		
o-Chlorotoluene	85		-		70-130	-		
n-Propylbenzene	84		-		70-130	-		
p-Chlorotoluene	84		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND

Project Number: 12043

Lab Number: L1310368

Report Date: 06/18/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG614304-3								
4-Ethyltoluene	79		-		70-130	-		
1,3,5-Trimethylbenzene	89		-		70-130	-		
tert-Butylbenzene	87		-		70-130	-		
1,2,4-Trimethylbenzene	94		-		70-130	-		
Decane (C10)	92		-		70-130	-		
Benzyl chloride	72		-		70-130	-		
1,3-Dichlorobenzene	91		-		70-130	-		
1,4-Dichlorobenzene	89		-		70-130	-		
sec-Butylbenzene	88		-		70-130	-		
p-Isopropyltoluene	80		-		70-130	-		
1,2-Dichlorobenzene	91		-		70-130	-		
n-Butylbenzene	92		-		70-130	-		
1,2-Dibromo-3-chloropropane	92		-		70-130	-		
Undecane	98		-		70-130	-		
Dodecane (C12)	105		-		70-130	-		
1,2,4-Trichlorobenzene	94		-		70-130	-		
Naphthalene	88		-		70-130	-		
1,2,3-Trichlorobenzene	91		-		70-130	-		
Hexachlorobutadiene	89		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310368
Report Date: 06/18/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG614304-5 QC Sample: L1310244-01 Client ID: DUP Sample						
Propylene	17.9	18.7	ppbV	4		25
Dichlorodifluoromethane	0.487	0.541	ppbV	11		25
Chloromethane	ND	ND	ppbV	NC		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	1.62	1.69	ppbV	4		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	16.6	16.3	ppbV	2		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	120	125	ppbV	4		25
Trichlorofluoromethane	0.229	0.232	ppbV	1		25
iso-Propyl Alcohol	1.96	1.96	ppbV	0		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	1.31	1.30	ppbV	1		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	0.967	1.02	ppbV	5		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310368
Report Date: 06/18/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG614304-5 QC Sample: L1310244-01 Client ID: DUP Sample					
1,1-Dichloroethane	ND	ND	ppbV	NC	25
Methyl tert butyl ether	ND	ND	ppbV	NC	25
Vinyl acetate	ND	ND	ppbV	NC	25
2-Butanone	16.6	17.4	ppbV	5	25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	25
Ethyl Acetate	0.627	0.696	ppbV	10	25
Chloroform	ND	ND	ppbV	NC	25
Tetrahydrofuran	1.59	1.69	ppbV	6	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
n-Hexane	0.518	0.570	ppbV	10	25
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
Benzene	0.821	0.886	ppbV	8	25
Carbon tetrachloride	ND	ND	ppbV	NC	25
Cyclohexane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
1,4-Dioxane	ND	ND	ppbV	NC	25
Trichloroethene	ND	ND	ppbV	NC	25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310368
Report Date: 06/18/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG614304-5 QC Sample: L1310244-01 Client ID: DUP Sample					
Heptane	0.615	0.618	ppbV	0	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	2.24	2.40	ppbV	7	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	1.63	1.61	ppbV	1	25
2-Hexanone	2.48	2.49	ppbV	0	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	0.424	0.435	ppbV	3	25
p/m-Xylene	1.58	1.56	ppbV	1	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	0.658	0.672	ppbV	2	25
4-Ethyltoluene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	0.361	0.349	ppbV	3	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310368
Report Date: 06/18/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG614304-5 QC Sample: L1310244-01 Client ID: DUP Sample					
1,2,4-Trimethylbenzene	1.28	1.29	ppbV	1	25
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: CHARLESTON, STATEN ISLAND

Lab Number: L1310368

Project Number: 12043

Report Date: 06/18/13

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1310368-01	SG2	0217	#30 SV	06/06/13	89399		-	-	-	Pass	200	209	4
L1310368-01	SG2	1655	6.0L Can	05/30/13	88951	L1308218-03	Pass	-29.5	-5.3	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/18/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 05/09/13 20:01
Analyst: RY

Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.200	--	ND	0.361	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1308218

Project Number: CANISTER QC BAT **Report Date:** 06/18/13

Air Canister Certification Results

Lab ID: L1308218-03 Date Collected: 05/08/13 14:22

Client ID: CAN 1689 SHELF 43 Date Received: 05/09/13

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/18/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/18/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethybenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	**Qualifier**	**Units**	**RDL**	**Dilution Factor**
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/18/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	84		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1308218
Report Date: 06/18/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 05/09/13 20:01
Analyst: RY

Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	2.00	--	ND	4.75	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1308218
Report Date: 06/18/13

Air Canister Certification Results

Lab ID: L1308218-03
Client ID: CAN 1689 SHELF 43
Sample Location:

Date Collected: 05/08/13 14:22
Date Received: 05/09/13
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.500	--	ND	2.46	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.500	--	ND	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	ND	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.500	--	ND	2.74	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1308218

Project Number: CANISTER QC BAT **Report Date:** 06/18/13

Air Canister Certification Results

Lab ID: L1308218-03 Date Collected: 05/08/13 14:22

Client ID: CAN 1689 SHELF 43 Date Received: 05/09/13

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	84		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	87		60-140

Project Name: CHARLESTON, STATEN ISLAND
Project Number: 12043

Lab Number: L1310368
Report Date: 06/18/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**
Cooler
N/A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1310368-01A	Canister - 6 Liter	N/A	N/A		Y	Absent	TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310368
Project Number:	12043	**Report Date:**	06/18/13

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

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

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: Data Usability Report

Project Name:	CHARLESTON, STATEN ISLAND	**Lab Number:**	L1310368
Project Number:	12043	**Report Date:**	06/18/13

Data Qualifiers

due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised August 3, 2012 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable). Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Titanium, Vanadium, Zinc, Total Organic Carbon, Corrosivity, TCLP 1311, SPLP 1312. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020A, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C, 8270D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 1311, 3050B, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C, 8270D.)

Biological Tissue (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C, 8270D.)

Air & Emissions (EPA TO-15.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 180.1, 1631E, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B, 3020A, . Organic Parameters: EPA 3510C, 3630C, 3640A, 3660B, 8081B, 8082A, 8270C, 8270D, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 3050B, 3051A, 6020A, 7471B, 9040B, 9045C. Organic Parameters: SW-846 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8015D, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3020A, SM2320B, SM2540D, 2540G, 4500H-B, EPA 180.1, 1631E, SW-846 7470A, 9040C, 6020A, 9050A. Organic Parameters: SW-846 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 6020A, 7471B, 7474, 9040B, 9040C, 9045C, 9045D, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8081B, 8082A, 8270C, 8270D, 8015D.)

Atmospheric Organic Parameters (EPA 3C, TO-15, TO-10A, TO-13A-SIM.)

Biological Tissue (Inorganic Parameters: SW-846 6020A. Organic Parameters: SW-846 8270C, 8270D, 3510C, 3570, 3610C, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, 6020A, 1631E, 7470A, 9050A, EPA 180.1, 3020A. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 3510C.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020A, 7471B, 7474, 9040C, 9045D. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 1311, 3050B, 3580A, 3570, 3051A.)

Air & Emissions (EPA TO-15, TO-10A.)

Pennsylvania Certificate/Lab ID: 68-02089 ***NELAP Accredited***

Non-Potable Water (Inorganic Parameters: 1312, 1631E, 180.1, 3020A, 6020A, 7470A, 9040B, 9050A, 2320B, 2540D, 2540G, SM4500H+-B. Organic Parameters: 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D .)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3051A, 6020A, 7471B, 7474 9040B, 9045C, 9060. Organic Parameters: EPA3050B, 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8270D, 8081B, 8015D, 8082A.)

Rhode Island Department of Health Certificate/Lab ID: LAO00299. ***NELAP Accredited via NJ-DEP.***

Refer to NJ-DEP Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. ***NELAP Accredited.***

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8081, 8082.)

Air (Organic Parameters: EPA TO-15)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID:460194. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters:EPA 3020A, 6020A, 245.7, 9040B. Organic Parameters: EPA 3510C, 3640A, 3660B, 3665A, 8270C, 8270D, 8082A, 8081B, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020A,7470A,7471B,9040B,9045C,3050B,3051, 9060. Organic Parameters: EPA 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 3570, 8270C, 8270D, 8081B, 8082A, 8015D.)

Washington State Department of Ecology Certificate/Lab ID: C954. *Non-Potable Water* (Inorganic Parameters: SM2540D, 180.1, 1631E.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 7474, 9045C, 9050A, 9060. Organic Parameters: EPA 8081, 8082, 8015, 8270.)

U.S. Army Corps of Engineers

Department of Defense, L-A-B Certificate/Lab ID: L2217.01.

Non-Potable Water (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH, 8082A, 8081B, 8015D-SHC, 8015D.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH 8082A, 8081B, 8015D-SHC, 8015D.

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **8270C:** Biphenyl. **TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 2-Methylnaphthalene, 1-Methylnaphthalene.

AIR ANALYSIS

PAGE 2 OF 3

CHAIN OF CUSTODY

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab:

ALPHA Job #: L1310368

Client Information

Client: Environmental Planning & Management, Inc.
Address: 1983 Marcus Avenue, Suite 109
New Hyde Park, NY 11042
Phone: 516-328-1194
Fax:
Email: jlebow@epmco.com, rhart@epmco.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Charleston, Staten Island
Project Location: Charleston, Staten Island
Project #: 12043
Project Manager: Richard Hart
ALPHA Quote #: 2013595

Turn-Around Time

☐ Standard ☐ RUSH *(only confirmed if pre-approved!)*
Date Due: **Time:**

Report Information - Data Deliverables

☐ FAX
■ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
■ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

■ Same as Client info PO #: 12043

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria
NYSDOH		

Other Project Specific Requirements/Comments:

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	ANALYSIS TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
10368-01	SG	6/6/13	1241	1307	-29.83	-5	SV	JA	6L	1655	0217		X						

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: CS

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to ALPHA's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
	6/6/2013 1734		6-6-13 17:35
	6/6/13 19:50		6/6/13 19:50
	6/7/13 0020		6/7/13 00:20
	6/7/13 0400	Mansfield Lab	6/7/13 04:00

Form No: 101-02 (19-Jun-09)

APPENDIX C

LABORATORY DATA REPORT AND CHAIN-OF-CUSTODY FORM – LEAD PAINT SAMPLES

14-26 28th Avenue Long Island City, NY 11102
Tel.: (718) 482-7525 Fax: (718) 482-7524 www.alphalabsllc.com

ANALYSIS REPORT FOR LEAD IN PAINT FILM

Client: Environmental Planning & Management Inc.,1983 Marcus Avenue, Suite 109, Lake Success, NY 11042
Building Address: Charleston, Staten Island
Project #: 12043
Date: 06/28/13

Client Sample #	Location	Description	Detection Limit (% Pb w/w)	Result (% Pb w/w)	Lab Sample #
CH-01	Metal Gate – East Side	Yellow paint	0.04%	0.37%	LP 13-06-069-01
CH-02	Metal Gate – West Side	Yellow paint	0.15%	1.69%	LP 13-06-069-02

Analysis by: Flame AAS
Method: ASTM D3335- 85A

Date Received: 06/28/2013
Date of Analysis: 07/01/2013
Date of Report: 07/01/2013

Analyst: M. Pawlowska
Malgorzata Pawlowska

Lab Director:
Dimitri Molohides

Collection procedures, protocols and sample locations are based on information provided by the client submitting the samples; and as such, ALPHA Labs LLC disclaims any knowledge of and liability for the accuracy and completeness of this information.

NYS-DOH ELAP # : 11833

LP13-06-69

ENVIRONMENTAL PLANNING & MANAGEMENT, INC.
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042
(516) 328- 1194 Fax (516) 328-1381

CHAIN-OF-CUSTODY

PHONE/FAX/MAIL/OVERNIGHT RESULTS TO: Richard Hart Rhart@epmco.com

TURNAROUND TIME: 48 Hours

PROJECT NO.: 12043

CLIENT: NYC EDC

LOCATION: Charleston, Staten Island

SPECIAL INSTRUCTIONS TO LABORATORY:

ANALYSIS REQUESTED: LEAD - AAS

SAMPLE NUMBER	DATE SAMPLED	SAMPLE LOCATION	DESCRIPTION / COLOR
CH - 01	6/28/2013	Metal Gate - East Side	Yellow Paint
CH - 02		Metal Gate - West Side	Yellow Paint

Collected By: Phillip Lorica

Collector's Signature:

Relinquished By: Phillip Lorica Date/Time: 6/28/2013 1437

Received By: 6/29/13 2:45 pm.

Method of shipment:

Sample Condition Upon Receipt:

Comments:

Acceptable: Other (Explain):