# REMEDIAL ACTION WORK PLAN

149 Kent Avenue Site Number C224159

Prepared for

KENT & WYTHE OWNERS LLC 149 Kent Avenue Williamsburg Kings County, New York

# Remedial Engineering, P.C.

**Environmental Engineers** 

and ROUX ASSOCIATES, INC.

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# LIST OF ACRONYMS

EIGT OF HEROTT	
μg/kg	Micrograms per Kilogram
μg/L	Micrograms per Liter
$\mu g/m^3$	Micrograms per Cubic Meter
mg/kg	Milligrams per Kilogram
mg/L	Milligrams per liter
40 CFR	Title 40 of the Code of Federal Regulations
1,2-DCE	cis-1,2-dichloroethene
trans-12 DCE	trans-1,2-dichloroethene
4,4'-DDE	4,4'-Dichlorodiphenyldichloroethylene
4,4'-DDD	4,4-Dichlorodiphenyldichloroethane
4,4'-DDT	4,4-Dichlorodiphenyltrichloroethane
1,1,1-TCA	1,1,1 trichloroethane
AAR	Alternatives Analysis Report
AOCs	Areas of Concern
ARARs	Applicable or Relevant and Appropriate Requirements
AS/SVE	Air Sparging/Soil Vapor Extraction
AWQSGVs	Ambient Water Quality Standards and Guidance Values
BCP	Brownfield Cleanup Program
bfs	Below Floor Slab
bls	Below Land Surface
CAMP	Community Air Monitoring Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
EHASP	Environmental Health and Safety Plan
COCs	Contaminants of Concern
CP-51	Commissioner Policy-51
CPP	Citizen Participation Plan
CVOCs	Chlorinated Volatile Organic Compounds
DEC	Department of Environmental Conservation
DER-10	NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation
DNAPL	Dense Non Aqueous Phase Liquid
EC	Electrical Conductivity
ECD	Electron Capture Device

ELAP	Environmental Laboratory Approval Program
Ft	
FER	Final Engineering Report
GWP	
HAZWOPER	Hazardous Waste Operations and Emergency Response
HDPE	High Density Polyethylene
MIP	Membrane Interface Probe
MW	Monitoring Well
NOD	Natural Oxidant Demand
NYCDEP	New York City Department of Environmental Protection
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
O&M	Operation and Maintenance
OM&M	Operation, Maintenance and Monitoring
OSHA	Occupational Safety and Health Administration
PAHs	Polycyclic Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene (Perchloroethene)
PID	Photo Ionization Detector
POTW	Publicly Owned Treatment Works
PVC	Polyvinyl Chloride
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RAOs	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
SCG	Standards, Criteria and Guidance
SCOs	Soil Cleanup Objectives
SMP	Site Management Plan
SOE	Support of Excavation

SoMP ......Soil Management Plan SSDS ......Sub-Slab Depressurization System SVI.....Soil Vapor Intrusion SVOCs .....Semivolatile Organic Compounds TAGM.....Technical and Administrative Memorandum TAL.....Target Analyte List TCLP.....Toxicity Characteristics Leaching Procedure TBCs.....To Be Considered TCE.....Trichloroethene TOC ......Total Organic Carbon TOGS ......Technical and Operational Guidance Series TPH.....Total Petroleum Hydrocarbons UIC......Underground Injection Control USEPA......United States Environmental Protection Agency USGS ......United States Geological Survey VC.....Vinyl Chloride VOCs ......Volatile Organic Compounds

#### **CERTIFICATION**

I, Noelle M. Clarke, P.E., am currently a registered professional engineer licensed by the State of New York. I have primary direct responsibility for implementation of the remedial program for the Site located at 149 Kent Avenue, Brooklyn, New York (BCP Site Number C224159).

I certify that this Remedial Action Work Plan (RAWP) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

I certify that the Site description presented in this RAWP is identical to the Site descriptions presented in the Brownfield Cleanup Agreement and related amendments.

I certify that this plan includes proposed use restrictions, Institutional Controls, Engineering Controls, and plans for all operation and maintenance requirements applicable to the Site and provision for development of an Environmental Easement to be created and recorded pursuant ECL 71-3605. This RAWP requires that all affected local governments, as defined in ECL 71-3603, will be notified that such Easement has been recorded. This RAWP requires that a Site Management Plan must be submitted by the Applicant for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, for approval by the Department.

I certify that this RAWP has a plan for transport and disposal of all soil, fill, fluids and other material removed from the property under this Plan, and that all transport and disposal will be performed in accordance with all local, State and Federal laws and requirements. All exported material will be taken to facilities licensed to accept this material in full compliance with all Federal, State, and local laws.

I certify that this RAWP has a plan for import of all soils and other material from off-Site and that all activities of this type will be in accordance with all local, State and Federal laws and requirements.

I certify that that this RAWP has a plan for nuisance control during the remediation and all invasive development work, including a dust, odor and vector suppression plan and that such plan is sufficient to control dust, odors and vectors and will prevent nuisances from occurring.

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Noelle M. Clarke, P.E.

NYS Professional Engineer #072491

<u>September 19, 2013</u>

Date

It is a violation of Article 130 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 130, New York State Education Law.

1.0 INTRODUCTION

Roux Associates, Inc. (Roux Associates), and Remedial Engineering, P.C. (Remedial

Engineering), have prepared this Remedial Action Work Plan (RAWP) on behalf of Kent &

Wythe Owners LLC/149 Kent Avenue LLC/The Western Carpet and Linoleum Co. Inc.

(collectively, Volunteer), to detail the proposed Remedial Action for the property (Site) located

at 149 Kent Avenue, Brooklyn, New York (Figure 1). This Site is in the New York State

Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program, Site

No. C224159.

1.1 Purpose and Objectives

The purpose of this RAWP is to describe the proposed remedies to address onsite soil,

groundwater and soil vapor impacts. The primary objective of the proposed remedy is to

mitigate the volatile organic compound (VOC) concentrations in Site soil, groundwater and soil

vapor delineated during the Remedial Investigation (RI) and described herein.

This RAWP includes a description of the remedy selection process for each medium of concern

in Sections 5, 6 and 7 of this document. As required under the BCP, a minimum of two remedial

alternatives (one being an Unrestricted Use scenario) were evaluated for the onsite soil remedy

as discussed in Section 5. The remainder of this document consists of:

Section 1: Introduction

Section 2: Site Background

Section 3: Results of the Remedial Investigation

Section 4: Remedial Goals, SCGS, and Remedial Action Objectives

Section 5: Soil Remedy Selection Process

Section 6: Groundwater Remedy Selection Process

Section 7: Recommended Soil Vapor Remedy

Section 8: Remedial Action Implementation and Monitoring

Section 9: Remedial Design

Section 10: Final Engineering Report

Section 11: Citizen Participation Plan

Section 12: Schedule

#### 2.0 BACKGROUND

This section provides pertinent background information, including a description of the Site and its setting, the known history of the Site, and the results of preliminary environmental investigation work conducted at the Site.

#### 2.1 Site Description and Setting

The Site is located in the Williamsburg section of Brooklyn adjacent to the East River in the Borough of Brooklyn, City, and State of New York, and is identified as Section 3, Block 2333, Lot 1 on the New York City Tax Map. A United States Geological Survey (USGS) topographical quadrangle map (Figure 1) shows the Site location. The Site includes approximately 40,000 square feet (0.92 acres) bounded by multi-use commercial/residential buildings to the north, North 5<sup>th</sup> Street to the south, Kent Avenue to the west and Wythe Avenue to the east (Figure 2). A single building constructed of concrete block, exposed steel beams and exposed aluminum sheeting roof encompasses the entire Site. The building is a slab on grade structure that is planned for demolition prior to redevelopment of the Site. The Site building is currently vacant.

The elevation of the Site existing floor slab is approximately 16 feet above the Brooklyn Borough Topographical/Highway Datum. The Site topography slopes toward the southwest from Wythe Avenue to Kent Avenue. Depth to water at the Site has ranged from approximately 9 to13 feet below the existing floor slab (bfs) (or from approximately 2.8 to 6.7 foot elevation) between April and July 2013. The regional groundwater flow direction is southwest. Local groundwater flows generally toward the west-southwest based on water level information collected during the RI. A previous investigation near the Site indicated a depth to water ranging from 10 to 11 feet bfs and a west-southwesterly flow direction, towards the East River.

The lithology at the Site is complex. Beneath the floor slab is approximately 5 to 8 feet of fill material, underlain by layered glacial deposits that consist of silt and poorly sorted sand, gravel, cobbles, and boulders in a clay and silt matrix. Some zones consist primarily of fine to medium sands, with silt and gravel, where others have a higher percentage of silt and silt layers. There is a deeper fine to medium sand zone that contains less silt than the zones above and beneath this, a

continuous clay/silt confining unit is identified consistently across the entire Site ranging in depth from approximately 68 to 70 feet bfs. Bedrock was not encountered during the RI.

### 2.2 Site History

Sanborn fire insurance maps dating back to 1887 were reviewed as part of the development of the Remedial Investigation Work Plan (RIWP). Based on this review, the Site operated as a rail terminal for approximately 100 years prior to becoming a warehouse in 1988. The warehouse (i.e., the existing building) was used as a storage warehouse for carpet and flooring. The previous warehouse owner/operator has confirmed that no industrial or manufacturing operations were performed at the Site. This is consistent with the activities actually observed at the Site during a preliminary visit completed in May 30, 2009. The Site is currently vacant.

The Sanborn maps indicate that a former rail loading dock existed on the northwestern side of the Site from 1942 to 1979 and its approximate location is shown in Figure 2. Sanborn maps from 1965 to 1995 identify the operation at the adjacent 135 Kent Avenue property (on the northwestern corner of Kent Avenue) as "Dry Cleaners Supplies." Based on a review of the Sanborn maps, discussions with the prior owners of both 149 Kent Avenue and 135 Kent Avenue, and the previous investigation results, the former rail loading dock is on the property line and was associated with the operations at 135 Kent Avenue. There were no other structures on 149 Kent Avenue at the time (1942 to 1979) that could have made use of the former rail loading dock and the presence of doors between the two properties confirm that the loading dock served the building at 135 Kent.

The current adjacent property owner and former leasee/operator at 135 Kent Avenue, Mr. Lester Cohen, stated during a June 17, 2013 meeting/conference call at the NYSDEC offices that his operation (dating back to 1958) used the former rail loading dock, but did not receive bulk chemical shipments by rail and that the former rail loading dock was not used to transfer chemicals from rail cars to their building (but it was used for storage). The data suggest, however, that what the NYSDEC considers to be "source material" is present in the immediate area of the former rail loading dock. Furthermore, the extremely high detections of tetrachloroethene (PCE) in soil vapor samples taken from the upgradient side of the 135 Kent Avenue property, over 100 feet from the property boundary between 149 and 135 Kent Avenue,

strongly point to the likely presence of dense non aqueous phase (DNAPL) on the 135 Kent Avenue site.

#### 2.3 Site Environmental Conditions

Previous investigations performed at the Site over the past decade have documented the existence of several Areas of Concern (AOCs). The following section provides a brief overview of the results of previous environmental investigations at the Site. More detailed information regarding these investigations was previously reported in the RIWP dated January 30, 2013, and the Phase I Environmental Site Assessment dated February 21, 2013. Previous investigations have been performed by AKRF, Inc. (AKRF), Hydro Tech Corp. (Hydro Tech) and Roux Associates.

Prior investigations identified multiple contaminants of concern (COCs) including chlorinated volatile organic compounds (CVOCs) in soil, groundwater, and soil vapor likely attributable to historic onsite rail operations due to their proximity to a former rail loading dock used for unloading train cars. Concentrations of CVOCs detected dropped significantly with increased distance from the property line at the former rail loading dock area. Petroleum hydrocarbons were detected in one groundwater sample collected from the southeastern side of the Site. Several semivolatile organic compounds (SVOCs), primarily polycyclic aromatic hydrocarbons (PAHs), pesticides, and polychlorinated biphenyls (PCBs) were detected in shallow soil at the Site along with several metals including arsenic, chromium, copper, and lead among others, likely attributable to historic fill used to grade the Site and historic rail operations.

#### 2.4 Areas of Concern

Based on the previous investigations conducted at the Site, the following AOCs were identified for further investigation and delineation as part of the RI. The RI report (RIR) prepared by Roux Associates and dated August 5, 2013, addresses sampling of soil, soil vapor and groundwater from areas of impact that have been delineated through the RI in the following locations.

#### Property Line/Former Rail Loading Dock

The most significant CVOC (primarily PCE) impacts to soil, groundwater and soil vapor are detected in the vicinity of the property line at the former rail loading dock area in the northwestern corner of the Site. As described above in Section 2.3, the impacts may be

attributable to migration from the neighboring property and/or from activities associated with the former rail loading dock, as there is no other indication in the available Site history of any onsite usage, storage or other source for these compounds. During the RI, Roux Associates advanced 21 soil borings, installed nine monitoring wells and collected seven groundwater quality profiles to delineate the CVOCs in the former rail loading dock area.

### CVOCs Detected in Groundwater - MW-4

Several CVOC compounds were detected in groundwater collected from monitoring well MW-4 located on the southeastern side of the Site. During the RI, Roux Associates re-developed MW-4, collected a groundwater sample, and advanced three soil borings in the vicinity of MW-4 to investigate this AOC. The compounds detected in MW-4 groundwater are not detected in soil samples collected from the three soil borings surrounding this well, and are not detected in upgradient monitoring wells MW-6 and MW-13.

### Benzene Detected in Groundwater - MW-5

Monitoring well MW-5 is located in the southeastern corner of the Site. During the RI, Roux Associates collected a groundwater sample from this well to determine current groundwater conditions. Benzene is the only compound to exceed the NYSDEC Ambient Water Quality Standards and Guidance Values (AWQSGVs) in this well. In addition, two soil samples were collected in nearby soil boring RA-18 and benzene was not detected in one and detected at a concentration well below the Unrestricted Use and Protection of Groundwater Soil Cleanup Objectives (SCO) in the other. Due to its close proximity to the Site boundary, the absence of benzene detections in all other Site monitoring wells (with the exception of an estimated detection below the AWQSGV in nearby well MW-4), no benzene exceedances in any of the soil samples and no historical record of any petroleum use at the Site, this detection is attributed to an offsite source. Therefore, no remedial action is required for MW-5.

### Site-wide Historic Fill Material

The entire Site is situated over a former rail yard. Historic fill is present beneath the entire Site footprint. The majority of fill across the Site will be excavated as part of the work. A small portion of the fill will not be excavated under the current redevelopment plans, therefore during the RI, Roux Associates advanced three shallow soil borings to evaluate historic fill in the northeastern portion of the Site. Previous investigations detected metals and SVOCs, primarily

PAHs, in soil samples collected from shallow sample intervals (from 0-4 feet below the top of the floor slab). This is not unexpected given the Site history and that fill material would have been used to level the Site and bring it to the current grade.

### Onsite Migration of CVOCs from Contamination at the Neighboring Property

The historical Sanborn Map record shows that for at least the years 1965 to 1995, the neighboring property (135 Kent Avenue) was a "Dry Cleaners Supplies" facility. This, along with the lack of any historical indication of CVOC use or storage on the Site itself, indicates the possibility that the neighboring property is a contributing, and continuing, source of the CVOC contamination in soil, groundwater and soil vapor identified at the Site near the boundary between the two properties. During the RI, Roux Associates advanced six soil borings, installed four monitoring wells, and collected one groundwater profile along the boundary between the properties. Soil vapor samples were also collected from sampling locations in the sidewalk on Kent Avenue, adjacent to the Site, and North 6<sup>th</sup> Street, adjacent to 135 Kent Avenue.

The PCE result from the initial soil vapor sample collected from SV-1 on April 2, 2013 was  $15,400,000 \,\mu\text{g/m}^3$ . SV-1 is located on the upgradient side of the 135 Kent Avenue site, over 100 feet from the property boundary between 149 and 135 Kent Avenue. SV-1 was sampled a second time (confirmation sample) on April 23, 2013 and the result was  $25,300,000 \,\mu\text{g/m}^3$ . SV-1 is located near the truck loading dock of 135 Kent Avenue and according to the property owner that is where they received their PCE deliveries. The extremely high detections of PCE in SV-1 soil vapor strongly point to the likely presence of DNAPL on the 135 Kent Avenue site.

#### 3.0 RESULTS OF THE REMEDIAL INVESTIGATION

The following sections provide the results of the RI. Additional detail regarding the scope of work performed during the RI can be found in the RIR dated August 5, 2013.

A Supplement to the RIWP was submitted to NYSDEC on July 30, 2013 and approved by NYSDEC on July 31, 2013. The Supplement to the RIWP included the advancement of two additional soil borings along the northwestern property boundary (RA-35 and RA-36). A GeoProbe<sup>®</sup> direct push unit was used to advance the soil borings within 15 inches of the wall at each location, to a maximum depth of 20 feet below the top of the floor slab. A total of seven soil samples and associated QA/QC samples were collected and analyzed for Target Compound List (TLC) VOCs, TCL SVOCs, metals (including hexavalent chromium), pesticides, herbicides and PCBs. The results are provided in the following sections.

### 3.1 Membrane Interface Probe Soil Boring Results

Overall, the results of the MIP/ECD/EC soil borings were inconclusive at determining the extent of the onsite impacts due to refusals encountered at both soil boring locations before reaching the target depths. Similarly, the data gathered from the MIP borings were insufficient in aiding in determining the optimal screen intervals for the proposed deep groundwater monitoring wells. However, the MIP/ECD/EC data confirmed significant subsurface contamination in the vicinity of MW-2, within the former rail loading dock area. Due to the presence of refusals at RA-8 and RA-9, which were encountered at relatively close depth intervals, Roux Associates recommended not to conduct a third MIP/ECD/EC soil boring. NYSDEC was informed of abandoning the use of the MIP/ECD/EC apparatus in an email correspondence dated March 5, 2013. Based on the results of the MIP/ECD/EC, Roux Associates determined that soil borings RA-7/MW-7D, RA-8/MW-8D, RA-9/MW-9D and RA-12/RA-12D would be advanced below 58 feet bls (deepest MIP refusal depth) and until a confining unit or bedrock was encountered.

#### 3.2 Soil Sample Results

The following sections summarize the soil quality based on laboratory analytical data that was generated during the RI. A total of 98 soil samples and 6 duplicate samples were collected in accordance with the RIWP, the Supplement to the RIWP, and QAPP. A summary of sample locations and corresponding depth intervals is provided in Tables 1 through 6.

The soil laboratory analytical results were compared to NYSDEC Part 375 Criteria for the Protection of Groundwater SCOs, NYSDEC Part 375 restricted residential SCOs, and NYSDEC Part 375 Unrestricted Use SCOs. Laboratory analytical data for soil are summarized in Tables 1 through 6. Exceedances of Part 375 Unrestricted Use criteria are shown on Plate 1 and exceedances of Part 375 Restricted Residential and/or Protection of Groundwater criteria are shown on Plate 2.

### 3.2.1 Volatile Organic Compounds

Table 1 presents a summary of the VOC analytical data for soil samples collected during this investigation. A total of 104 soil samples were analyzed for VOCs. Analytical data for VOCs indicated detections above both the Part 375 Protection of Groundwater SCOs, NYSDEC Part 375 Restricted Residential SCOs, and Part 375 Unrestricted Use SCOs for only five compounds: acetone, cis-1,2-Dichloroethene (1,2-DCE), tetrachloroethene (PCE), trichloroethene (TCE) and vinyl chloride (VC). It should be noted that the Part 375 Unrestricted Use SCOs and Protection of Groundwater SCOs are the same for these five compounds. Only one compound (PCE) exceeded the Part 375 restricted residential SCO. Laboratory analytical data for soil exceedances for these compounds are shown on Plates 1 and 2. The results for these compounds are summarized below.

- Acetone was detected in 30 soil samples, ranging in concentration from 5.2  $\mu$ g/kg (estimated) to 196  $\mu$ g/kg (estimated). Acetone exceeded the SCOs (50  $\mu$ g/kg) at four locations, RA-3\_34-35, RA-9\_29-30, RA-10\_29-30 and RA-24\_38-40. Acetone concentrations ranged from 73.5  $\mu$ g/kg to 196  $\mu$ g/kg (estimated) as detected in RA-3\_34-35 and RA-10\_29-30, respectively.
- 1,2-DCE was detected in 46 soil samples, ranging in concentration from 0.4  $\mu$ g/kg (estimated) to 2,590  $\mu$ g/kg. 1,2-DCE exceeded the SCOs (250  $\mu$ g/kg) at two locations, RA-3\_10-12 and RA-4\_10-12 at concentrations of 2,590  $\mu$ g/kg and 616  $\mu$ g/kg, respectively.
- PCE was detected in 91 soil samples, ranging in concentration from 0.35 μg/kg (estimated) to 1,090,000 μg/kg. PCE exceeded the Unrestricted Use and Protection of Groundwater SCOs (1,300 μg/kg) in 15 samples collected at 11 locations, RA-1\_10-12, RA-1A\_22-24, RA-2\_10-12, RA-3-10-12 and RA-3\_34-35, RA-4\_10-12 and RA-4\_22-24, RA-7\_28-30, RA-8\_10-12 and RA-8\_22-24, RA-9\_10-12, RA-10\_29-30, RA-11B\_33-35, RA-12\_11-12.5, and RA-36\_8-10. PCE exceeded the restricted residential SCO (19,000 μg/kg) in six samples collected from five locations, RA-1\_10-12, RA-1A\_22-24, RA-2\_10-12, RA-3\_10-12, RA-8\_10-12, and RA-9\_10-12. PCE concentrations exceeding SCOs ranged from 1,370 μg/kg to 1,090,000 μg/kg as detected in samples RA-4\_22-24 and RA-1\_10-12, respectively.

- TCE was detected in 58 soil samples, ranging in concentration from  $0.31 \,\mu\text{g/kg}$  (estimated) to 1,650  $\,\mu\text{g/kg}$ . TCE exceeded the SCOs (470  $\,\mu\text{g/kg}$ ) at only one location, RA-3 10-12, at a concentration of 1,650  $\,\mu\text{g/kg}$ .
- VC was detected in only two (2) soil samples, at concentrations of 0.69 μg/kg (estimated) and 26.2 μg/kg (estimated).
   VC exceeded the SCOs (20 μg/kg) in only one location, RA-4 10-12, at an estimated concentration of 26.2 μg/kg.

### 3.2.2 Semivolatile Organic Compounds

Table 2 presents a summary of SVOC analytical data collected as part of this investigation. A total of 61 soil samples were analyzed for SVOCs. As shown on Plates 1 and 2, the majority of compounds that were analyzed for were reported at concentrations below the SCOs or not detected. Analytical data for SVOCs indicated detections above the SCOs for seven PAH compounds in only three locations (RA-14, RA-33, and RA-36): benzo[a]anthracene, benzo[b]fluoranthene, benzo[a]pyrene, chrysene, dibenzo[a,h]anthracene, and Indeno[1,2,3-cd]pyrenebenzo[k]fluoranthene, dibenzo[a,h]anthracene, and Indeno[1,2,3-cd]pyrene. The results for these compounds are summarized below.

- Benzo[a]anthracene was detected in 21 soil samples, ranging in concentration from 16.8 μg/kg (estimated) to 2,970 μg/kg (estimated and the highest concentration for any compound). Benzo[a]anthracene exceeded the Unrestricted Use, Protection of Groundwater, and Restricted Residential SCOs (SCOs are the same for this compound; 1,000 μg/kg) at two locations, RA-33\_4-6 at a concentration of 2,160 μg/kg and RA-14 11-13 at a concentration of 2,970 μg/kg (estimated).
- Benzo[b]fluoranthene was detected in 21 soil samples, ranging in concentration from 23.8 μg/kg (estimated) to 2,910 μg/kg. Benzo[b]fluoranthene exceeded both the Unrestricted Use and Restricted Residential SCOs (SCOs are the same for this compound;1,000 μg/kg) at three locations, RA-36\_8-10 at a concentration of 1,200 μg/kg, RA-14\_11-13 at a concentration of 2,140 μg/kg, and RA-33\_4-6 at a concentration of 2,910 μg/kg. Benzo[b]fluoranthene exceeded the Protection of Groundwater SCO (1,700 μg/kg) at two locations, RA-14\_11-13 at a concentration of 2,140 μg/kg, and RA-33\_4-6 at a concentration of 2,910 μg/kg. Benzo[a]pyrene was detected in 19 soil samples, ranging in concentration from 14.2 μg/kg (estimated) to 2,620 μg/kg (estimated). Benzo[a]pyrene did not exceed the Protection of Groundwater SCO (22,000 μg/kg) in any samples. Benzo[a]pyrene exceeded the Unrestricted Use and Restricted Residential SCOs (SCOs are the same for this compound;1,000 μg/kg) in two locations, RA-33\_4-6 at a concentration of 2,480 μg/kg, and RA-14\_11-13 at a concentration of 2,620 μg/kg (estimated).
- Chrysene was detected in 21 soil samples, ranging in concentration from 19.9 μg/kg (estimated) to 2,830 μg/kg (estimated). Chrysene exceeded the Unrestricted Use and Protection of Groundwater SCOs (SCOs are the same for this compound; 1,000 μg/kg) at

two locations, RA-33\_4-6 at a concentration of 2,000  $\mu$ g/kg and RA-14\_11-13 at a concentration of 2,830  $\mu$ g/kg (estimated).

- Benzo[k]fluoranthene was detected in 20 soil samples, ranging in concentration from 15.6 μg/kg (estimated) to 1,930 μg/kg (estimated). Benzo[k]fluoranthene exceeded both the Unrestricted Use SCO (800 μg/kg) and the Protection of Groundwater SCO (1,700 μg/kg) at one location, RA-14\_11-13 at a concentration of 1,930 μg/kg (estimated). Benzo[k]fluoranthene exceeded the Unrestricted Use SCO in one location, RA-33\_4-6 at a concentration of 1,120 μg/kg.
- Dibenzo[a,h]anthracene was detected in 13 soil samples, ranging in concentration from 15 μg/kg (estimated) to 632 μg/kg. Dibenzo[a,h]anthracene did not exceed the Protection of Groundwater SCO (1,000,000 μg/kg) in any samples. Dibenzo[a,h]anthracene exceeded the Unrestricted Use SCO (330 μg/kg) in one location, RA-14\_11-13 at a concentration of 632 μg/kg.
- Indeno[1,2,3-cd]pyrene was detected in 17 soil samples, ranging in concentration from 17.3 μg/kg (estimated) to 1570 μg/kg. Indeno[1,2,3-cd]pyrene did not exceed the Protection of Groundwater SCO (8,200 μg/kg) in any samples. Indeno[1,2,3-cd]pyrene exceeded the Unrestricted Use and Restricted Residential SCOs (SCOs are the same for this compound; 500 μg/kg) in three locations, RA-33\_4-6 at a concentration of 1,570 μg/kg, RA-14\_11-13 at a concentration of 1,370 μg/kg, and RA-36\_8-10 at a concentration of 748 μg/kg.

#### **3.2.3** Metals

Table 3 presents a summary of metals analytical data collected as part of this investigation. A total of 61 soil samples were analyzed for metals. Many metals are naturally occurring in soil. As shown, the lab reported low concentrations or non-detect for the majority of metals that were analyzed in the samples. As shown on Plates 1 and 2, analytical data for metals indicate six metals (Chromium, Copper, Lead, Mercury, Nickel and Zinc) were detected above criteria for Part 375 Unrestricted Use only. Two compounds, Hexavalent Chromium and Arsenic, were detected above criteria for both Part 375 Unrestricted Use SCOs and Part 375 Protection of Groundwater SCOs at one location (RA-33). Two compounds, Chromium and Arsenic, were also detected above the Part 375 Restricted Residential SCOs at one (1) location (RA-33). The results of these compounds are summarized below.

• Arsenic was detected in 42 soil samples, ranging in concentration from 2.1 mg/kg to 55.3 mg/kg as detected in RA-12\_23-25 and RA-33\_4-6, respectively. Arsenic exceeded the Unrestricted Use SCO (13 mg/kg) at two locations at concentrations of 13.4 mg/kg as detected in the Duplicate sample from RA-32\_4-6, and 55.3 as detected in RA-33\_4-6. Arsenic exceeded the Protection of Groundwater and Restricted Residential SCOs (SCOs

are the same for this compound;16  $\mu g/kg$ ) at one location at a concentration of 55.3 as detected in RA-33\_4-6.

- Chromium was detected in all 61 soil samples, ranging in concentration from 30.2 mg/kg to 396 mg/kg. Chromium exceeded the Unrestricted Use SCO (30 mg/kg) at 15 locations at concentrations ranging from 30.2 mg/kg to 396 mg/kg as detected in RA-3\_10-12 and RA-33\_4-6, respectively. Chromium exceeded the Restricted Residential SCO (180 mg/kg) at only one location, RA-33\_4-6 at a concentration of 396 mg/kg.
- Hexavalent Chromium was detected in 28 soil samples, ranging in concentration from 0.45 mg/kg to 33.2 mg/kg. Hexavalent Chromium exceeded the Unrestricted Use SCO (1 mg/kg) at six locations at concentrations ranging from 1.1 mg/kg (estimated) to 33.2 mg/kg (estimated) as detected in RA-6\_10-12 and RA-33\_4-6, respectively. Hexavalent Chromium exceeded the Protection of Groundwater SCO (19 mg/kg) at one location at an estimated concentration of 33.2 mg/kg as detected in RA-33\_4-6. Hexavalent Chromium did not exceed the Restricted Residential SCO (110 mg/kg) in any samples.
- Copper was detected in all 61 soil samples, ranging in concentration from 3.1 mg/kg to 140 mg/kg. Copper exceeded only the Unrestricted Use SCO (50 mg/kg) at one location at a concentration of 140 mg/kg as detected in RA-33 4-6.
- Mercury was detected in 10 soil samples, ranging in concentration from 0.034 mg/kg to 0.4 mg/kg. Mercury exceeded only the Unrestricted Use SCO (0.18 mg/kg) at three locations at concentrations of 0.26 mg/kg as detected in RA-32\_4-6, 0.4 mg/kg as detected in RA-33 4-6, and 0.23 mg/kg as detected in RA-36 8-10.
- Nickel was detected in 59 soil samples, ranging in concentration from 5.9 mg/kg to 33.9 mg/kg. Nickel exceeded only the Unrestricted Use SCO (30 mg/kg) at four locations at concentrations ranging from 31.7 mg/kg to 33.9 mg/kg as detected in RA-20\_11-13 and RA-23\_11-13, respectively.
- Zinc was detected in all 61 soil samples, ranging in concentration from 7.7 mg/kg to 289 mg/kg. Zinc exceeded the Unrestricted Use SCO (109 m/kg) at four locations at concentrations ranging from 116 mg/kg to 289 mg/kg as detected in RA-20\_11-13 and RA-36\_8-10, respectively.

### **3.2.4** Polychlorinated Biphenyls (PCBs)

Table 4 presents a summary of PCBs analytical data collected as part of this investigation. A total of 61 samples were analyzed for PCBs. As shown, PCBs were not detected in any of the soil samples collected during this investigation.

#### 3.2.5 Pesticides and Herbicides

Table 5 presents a summary of pesticides and herbicides analytical data collected as part of this investigation. A total of 61 soil samples were analyzed for pesticides and herbicides. As shown on Plates 1 and 2, analytical data for pesticides and herbicides indicated detections exceeding the criteria for Part 375 Unrestricted Use SCOs only for three compounds: 4,4'-DDD, 4,4'-DDE and 4,4'-DDT, as described below.

- 4,4'-DDD was detected in 13 samples, ranging in concentration from 1.1 μg/kg to 47.9 μg/kg. 4,4'-DDD exceeded the Unrestricted Use SCO (3.3 μg/kg) in 10 samples, at concentrations ranging from 4.4 μg/kg to 47.9 μg/kg, as detected in RA-12\_11-12.5 and RA-8 10-12, respectively.
- 4,4'-DDE was detected in 14 samples, ranging in concentration from 1 μg/kg to 41 μg/kg. 4,4'-DDE exceeded the Unrestricted Use SCO (3.3 μg/kg) in 10 samples, at concentrations ranging from 5.0 μg/kg to 41 μg/kg, as detected in RA-12\_11-12.5 and RA-8\_10-12, respectively.
- 4,4'-DDT was detected in 22 samples, ranging in concentration from 1.1 μg/kg to 1,070 μg/kg. 4,4'-DDT exceeded the Unrestricted Use SCO (3.3 μg/kg) in 19 samples, at concentrations ranging from 4.0 μg/kg (estimated) to 1,070 μg/kg as detected in RA-3\_23-25 and RA-2\_10-12, respectively.

There were no pesticide or herbicide detections exceeding the criteria for Part 375 Protection of Groundwater or Restricted Residential SCOs.

#### 3.2.6 Conclusions

Soil sample results confirm the 135 Kent Avenue property line/former rail loading dock area to be a contributing source for onsite CVOC contamination in soil. Soil sample results also indicate that PCE is the primary COC in Site soil, with lesser detections of TCE and PCE breakdown products. As described in earlier sections, the soil sample results indicate that the highest concentrations of PCE detected in Site soil is primarily limited to the property boundary area near the former rail loading dock, with concentrations decreasing significantly with increased distance from the 135 Kent Avenue property line and with depth. A significant portion of the most heavily impacted soil in the property line/former rail loading dock area will be removed during the anticipated excavation planned as part of the work. In this RAWP, the property line/former rail loading dock area is referred to as the "hot spot". The remainder of the

proposed remedy to address VOCs exceeding the protection of groundwater SCO is described in Section 5.

Soil sample results from the remainder of the Site indicate limited SVOC (PAH), pesticide, and metal detections attributable to historic fill used to level and bring the Site to its current grade. There are some pesticides in soil, presumably from use during railroad operations. PCBs were not detected in any of the soil samples collected during this investigation, although historical investigations reported PCB contamination in shallow soil. The majority of this historic fill will be removed during the anticipated excavation planned as part of the work.

### 3.3 Groundwater Gauging Results

Prior to the commencement of sampling activities in February 2013, the water level in all existing groundwater monitoring wells was measured with a Solinst Interface Probe.

Prior to any new monitoring well installation, the water level data collected in February was used to construct a Site groundwater elevation contour and flow pattern map to verify if the groundwater flow direction was to the west/southwest as previously reported. Since this gauging round verified the previously reported flow pattern, the monitoring wells proposed in the RIWP were installed at the locations as planned.

After the monitoring well installation phases were complete, a comprehensive groundwater gauging round was performed on June 11, 2013. In response to excessive rainfall amounts in the five day period prior to the comprehensive gauging round (over 6 inches of rainfall were recorded in this period), groundwater elevations and flow patterns were found to be different, including water levels in some wells rising over 3 feet and localized flow direction changes. As a result, Roux performed several comprehensive gauging rounds and the data are shown in Table 7. The gauging data appear to still be recovering from the significant rain event and as such the gauging data collected in February 2013 was used to construct a Site groundwater elevation contour and flow pattern map (Figure 3).

The February 2013 data, which is being used as the conceptual flow model for the Site, indicate flow toward the west/southwest. Following significantly above average rainfall in May (twice

the average rainfall) and June 2013 (more than twice the average rainfall, with 9.6 inches of rain falling within the first two weeks), wells MW-5, MW-6 and MW-15 began to exhibit anomalous results in June 2013. Based upon the locations of these wells adjacent to Wythe Avenue (MW-5 and MW-6) and Kent Avenue (MW-15), which both have storm sewers originally installed over 100 years ago and since the entire Site and surrounding community is impermeable to rainwater infiltration, the anomalous readings have been attributed to leaking storm sewers. Excluding these anomalous readings from the data for each of the gauging rounds results in an overall groundwater flow direction to the southwest, similar to that observed in February 2013 and consistent with the regional groundwater flow direction.

Additional groundwater gauging data was collected on August 5, 2013 and is included in Table 7.

### 3.4 Groundwater Sampling Results

The following sections summarize the groundwater quality based on laboratory analytical data that was generated during this investigation. A total of 17 groundwater samples and one duplicate sample were collected in accordance with the RIWP and QAPP. The groundwater laboratory analytical results were compared to NYSDEC Ambient Water-Quality Standards and Guidance Values (AWQSGVs) for Class GA groundwater (even though the groundwater at the Site is not used for drinking since the area is connected to the public water supply). Laboratory analytical data for groundwater are shown on Plates 3, 4, 5, and on the geologic cross sections provided on Plates 7, and 8, and a summarized in Tables 8 through 12.

### 3.4.1 Volatile Organic Compounds

A summary of laboratory analytical data for VOCs detected in groundwater is presented in Plates 3, 4, and 5, and summarized in Table 8. A total of 18 groundwater samples were analyzed for VOCs. As shown, the majority of compounds that were analyzed for were reported at low concentrations or not detected in any of the samples. Analytical data for VOCs indicated detections above NYSDEC AWQSGV for 10 compounds: 1,1,1-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, Benzene, Carbon tetrachloride, Chloroform, 1,2-DCE, PCE, TCE and Vinyl chloride. A summary of the detections are described below.

- 1,1,1-Trichloroethane, 1,1-Dichloroethane and 1,1-Dichloroethene were detected in only two locations. All three compounds exceeded the respective NYSDEC AWQSGV (5 μg/L) at only one location, MW-4, at concentrations of 411 μg/L, 26.7 μg/L, and 116 μg/L, respectively.
- Benzene was detected in only two locations. Benzene slightly exceeded the respective NYSDEC AWQSGV (1  $\mu$ g/l) at only one location, MW-5, at a concentration of 7.8  $\mu$ g/L.
- Carbon tetrachloride was detected at only three locations, MW-1, MW-2 and MW-4, and was detected above the NYSDEC AWQSGV (5  $\mu$ g/L) at concentrations of 156  $\mu$ g/L, 261  $\mu$ g/L and 40.4  $\mu$ g/L, respectively.
- Chloroform was detected in 8 locations. Chloroform exceeded the respective NYSDEC AWQSGV (5 μg/L) at only three locations, MW-2, MW-4 and MW-15, at a concentration of 13.1 μg/L (estimated), 10.7 μg/L and 24.5 μg/L, respectively.
- PCE was detected in all 18 groundwater samples collected. PCE was detected at concentrations ranging from 2.7 μg/L to 91,900 μg/L as detected in MW-13 and MW-1, respectively. PCE exceeded the respective NYSDEC AWQSGV (5 μg/L) at 11 locations, MW-1, MW-2, MW-3, MW-4, MW-8D, MW-8I, MW-8DI, MW-9D, MW-10, MW-12D, and MW-15.
- 1,2-DCE (a breakdown product of PCE) was detected in nine (9) locations. 1,2-DCE was detected at concentrations ranging from 0.49 μg/L (estimated) to 659 μg/L as detected in MW-8D and MW-2, respectively. 1,2-DCE exceeded the respective NYSDEC AWQSGV (5 μg/L) at seven locations, MW-1, MW-2, MW-4, MW-8I, MW-10, MW-11, and MW-15.
- TCE (a potential breakdown product of PCE) was detected in 11 locations. TCE was detected at concentrations ranging from 0.43 μg/L (estimated) to 435 μg/L (estimated) as in MW-15 and MW-8I, respectively. TCE exceeded the respective NYSDEC AWQSGV (5 μg/L) at nine locations, MW-1, MW-2, MW-3, MW-4, MW-8I, MW-8DI, MW-9D, MW-11, and MW-15.
- Vinyl chloride (a breakdown product of PCE) was only detected at one location, MW-2, at a concentration of 9  $\mu$ g/L (estimated), above the NYSDEC AWQSGV (2  $\mu$ g/L).

### 3.4.2 Semivolatile Organic Compounds

Table 9 presents a summary of SVOC analytical data collected as part of this investigation. A total of 10 groundwater samples were analyzed for SVOCs. As shown, almost no SVOCs were detected in any of the groundwater samples collected during this investigation. The only detections of SVOCs were Acenaphthene and Bis(2-ethylhexyl) phthalate in MW-5, and Napthalene in MW-1. None of these detections exceeded the NYSDEC AWQSGVs (20  $\mu$ g/L, 5  $\mu$ g/L and 10  $\mu$ g/L, respectively).

#### **3.4.3** Metals

A summary of laboratory analytical data for metals detected in groundwater samples is presented on Plate 4 and summarized in Table 10. A total of 10 groundwater samples were analyzed for metals. As shown, eight metals (Antimony, Beryllium, Cadmium, Chromium, Iron, Lead, Manganese and Sodium) were detected above NYSDEC AWQSGV criteria. Iron, manganese and sodium are naturally occurring in regional groundwater. A summary of the detections of Antimony, Beryllium, Cadmium, Chromium, and Lead are described below.

- Antimony, Beryllium, and Cadmium were only detected in the duplicate sample from MW-1, at concentrations of 6.2 μg/L (estimated), 5.4 μg/L (estimated), and 6 μg/L (estimated), respectively. The AWQSGVs for these compounds are 3 μg/L, 3 μg/L and 5 μg/L, respectively. Antimony, Beryllium, and Cadmium were not detected in the parent sample from MW-1 or any other groundwater sample (with the exception of Beryllium detected at 2.8 μg/L in MW-13, which is below the NYSDEC AWQSGV).
- Chromium was detected in four (4) locations. Chromium was detected at concentrations ranging from 11.4 μg/L to 158 μg/L. Chromium exceeded the respective NYSDEC AWQSGV (50 μg/L) at one two locations, MW-13 and MW-15, at concentrations of 158 μg/L and 69.6 μg/L, respectively.
- Lead was detected in seven locations. Lead was detected at concentrations ranging from 3.1  $\mu$ g/L to 69.2  $\mu$ g/L. Lead exceeded the respective NYSDEC AWQSGV (25  $\mu$ g/L) at three locations, MW-11, MW-13 and MW-15, at concentrations ranging from 32.2  $\mu$ g/L to 69.2  $\mu$ g/L.

#### **3.4.4** Polychlorinated Biphenyls (PCBs)

Table 11 presents a summary of PCB analytical data collected as part of this investigation. A total of 11 samples were analyzed for PCBs. PCBs were not detected in any of the groundwater samples collected during this investigation.

### 3.4.5 Pesticides and Herbicides

Table 12 presents a summary of pesticides and herbicides analytical data collected as part of this investigation. A total of 11 samples were analyzed for pesticides and six samples were analyzed for herbicides (MW-1 through MW-6). Samples from four monitoring wells were inadvertently not analyzed during the second round of groundwater sampling conducted in April. Two pesticides (4,4'-DDD and 4,4'-DDT) were detected in two locations, MW-2 and MW-10, at concentrations below the NYSDEC AWQSGV. No herbicides were detected in any of the groundwater samples collected during this investigation.

### **3.4.6** Groundwater Profile Sample Results

The laboratory analytical results for GWP samples generated during the RI are provided in summarized in Table 8 and PCE results are shown on Plate 3, in relationship to groundwater samples collected from adjacent and nearby wells. A total of 39 GWP samples and 2 duplicate GWP samples were collected as part of this investigation. GWP samples were only analyzed for VOCs. As shown, the majority of compounds that were analyzed for were reported at low concentrations or not detected in any of the samples. Analytical data for VOCs indicated detections above NYSDEC AWQSGV for nine compounds: 1,2-Dichloropropane, Acetone, Benzene, Carbon tetrachloride, Chloroform, 1,2-DCE, Toluene, PCE and TCE. A summary of the detections are described below.

- 1,2-Dichloropropane was detected at only one location, GWP-4\_13-15, above the NYSDEC AWQSGV (1  $\mu g/L$ ) at a concentration of 21.8  $\mu g/L$ .
- Acetone was detected in 11 samples, ranging in concentration from 3.4 μg/L (estimated) to 55.6 μg/L. Acetone exceeded the respective NYSDEC AWQSGV (50 μg/L) in two samples at only one location, GWP-1\_43-45 and GWP-1\_53-55, at concentrations of 51.3 μg/L and 55.6 μg/L, respectively.
- Benzene was detected in eight samples, ranging in concentration from  $0.25 \,\mu\text{g/L}$  (estimated) to  $2 \,\mu\text{g/L}$ . Benzene exceeded the respective NYSDEC AWQSGV (1  $\,\mu\text{g/L}$ ) at only one location, GWP-1 33-35, at a concentration of  $2 \,\mu\text{g/L}$ .
- Carbon tetrachloride was detected in three samples, ranging in concentration from 0.56  $\mu$ g/L (estimated) to 38.5  $\mu$ g/L. Carbon tetrachloride exceeded the respective NYSDEC AWQSGV (5  $\mu$ g/L) at only one location, GWP-3\_33-35, at a concentration of 38.5  $\mu$ g/L.
- Chloroform was detected in 38 samples, ranging in concentration from 0.98  $\mu$ g/L (estimated) to 79.3  $\mu$ g/L (estimated). Chloroform exceeded the respective NYSDEC AWQSGV (7  $\mu$ g/L) at all seven GWP locations, at concentrations ranging from 9.7  $\mu$ g/L to 79.3  $\mu$ g/L (estimated) as detected in GWP-6\_73-75 and GWP-5\_23-25, respectively.
- 1,2-DCE was detected in 22 samples, ranging in concentration from 0.37  $\mu$ g/L (estimated) to 280  $\mu$ g/L. 1,2-DCE exceeded the respective NYSDEC AWQSGV at four locations, at concentrations ranging from 8.4  $\mu$ g/L to 280  $\mu$ g/L as detected in GWP-1\_43-45 and GWP-5 23-25, respectively.
- PCE was detected in 36 samples, ranging in concentration from 0.37 μg/L (estimated) to 48,600 μg/L. PCE exceeded the respective NYSDEC AWQSGV (5 μg/L) at all seven GWP locations, at concentrations ranging from 5.1 μg/L to 48,600 μg/L as detected in GWP-4\_53-55 and GWP-5\_23-25, respectively.

• TCE was detected in 29 samples, ranging in concentration from 0.24 μg/L (estimated) to 234 μg/L. TCE exceeded the respective NYSDEC AWQSGV (5 μg/L) at all seven GWP locations, at concentrations ranging from 6.7 μg/L to 234 μg/L as in GWP-7\_13-15 and GWP-6\_43-45, respectively.

#### 3.4.7 Conclusions

Groundwater sample results indicate that the northwestern area of the Site in the vicinity of the 135 Kent Avenue property line/ former rail loading dock is a contributing source for the PCE contamination in groundwater on the Site; and the contamination is concentrated in the western portion of the Site in the vicinity and downgradient of the property line with 135 Kent Avenue former rail loading dock area. Groundwater sample results indicate that PCE is the primary COC in Site groundwater, with lesser detections of TCE and PCE breakdown products. As described in earlier sections, the PCE concentrations detected in Site groundwater generally decrease with increased distance from the former rail loading dock area. A significant portion of the most heavily impacted soil in the former rail loading dock area that is acting as one of the contributing sources of groundwater contamination will be removed during the anticipated excavation planned as part of the work. The remainder of the proposed remedy to reduce or eliminate the VOCs in groundwater is described in Section 6.

Limited and localized detections of other CVOCs in groundwater collected from MW-4 are not detected in soil samples collected from the three soil borings surrounding this well, and are not detected in upgradient monitoring wells MW-6 and MW-13. The CVOC detections in this monitoring well may be from an offsite source and are addressed Section 6.

The limited detection of benzene in groundwater collected from MW-5 is attributed to an offsite source. There are no other detections of benzene in Site monitoring wells (with the exception of an estimated detection below the AWQSGV in nearby well MW-4), no exceedances of benzene in Site soil and no historical record of any petroleum storage or use at the Site. Therefore, remediation is not required at MW-5 and it will not be discussed further in this RAWP.

### 3.5 Soil Vapor Results

The laboratory analytical results for soil vapor samples generated during the RI are summarized on Plate 6 and Table 13. A total of six soil vapor samples were collected from five sampling

locations as part of this investigation. Two samples (SS-6 and SS-7) were sub slab samples collected onsite and the remaining three sampling points (SV-1, SV-2, and SV-3) were soil vapor points collected beneath offsite sidewalks. Locations SV-2 and SV-3 are offsite, but located in the sidewalks immediately adjacent to the Site. It should be noted that SV-1 is located offsite over 100 feet from the property boundary between 149 and 135 Kent Avenue, north of the Site. As shown, the majority of compounds that were analyzed for were reported at low and/or estimated concentrations or not detected in any of the samples.

The following seven compounds are discussed because they are either COCs at the Site (namely PCE, TCE, and to a lesser extent 1,2-DCE) or due to their presence on the NYSDOH Guidance Soil Vapor Matrices. Matrix 1 provides guidance relative to Carbon Tetrachloride, TCE, and VC; and Matrix 2 provides guidance relative to 1,1,1- Trichloroethane, 1,1-Dichloroethene, 1,2-DCE, and PCE. No indoor air samples were collected as part of the RI, therefore; no direct comparison is made to the NYSDOH Matrices. A summary of the detections are described below. Additional compounds besides these seven were detected and are included Table 13.

### Matrix 1 Compounds

- Carbon tetrachloride was detected in two soil vapor samples, at concentrations of  $4.5~\mu g/m^3$  (estimated) and  $39~\mu g/m^3$ , in SS-6 and SS-7, respectively.
- TCE was detected in all six soil vapor samples, ranging in concentration from  $23 \mu g/m^3$  to  $10,400 \mu g/m^3$  as detected in SV-3 and SV-1, respectively. The TCE result from the confirmation sample collected from SV-1 on April 23, 2013 was  $8,710 \mu g/m^3$ .
- VC was detected in one soil vapor sample, at a concentration of  $2.8 \mu g/m^3$  as detected in SS-7.

#### Matrix 2 Compounds

- 1,1,1-Trichloroethane was detected in five soil vapor samples, ranging in concentrations from 2.7  $\mu g/m^3$  (estimated) to 2,840  $\mu g/m^3$  as detected in SV-3 and SV-1, respectively. 1,1,1- Trichloroethane was not detected in the confirmation sample collected from SV-1; however, this is likely due to significantly elevated detection limits in this sample.
- 1,1-Dichloroethene was only detected in one soil vapor sample at an estimated concentration of  $2.9 \,\mu\text{g/m}^3$  as detected in SS-7.
- 1,2-DCE was detected in three samples, ranging in concentration from 16  $\mu g/m^3$  in SS-7 to 6,820  $\mu g/m^3$  and 7,060  $\mu g/m^3$  (initial sample and confirmation sample, respectively) in SV-1.

• PCE was detected in all six soil vapor samples, ranging in concentration from 143  $\mu g/m^3$  to 25,300,000  $\mu g/m^3$  in samples SV-3 and SV-1 (confirmation sample), respectively. As previously mentioned, SV-1 was sampled a second time (confirmation sample) on April 23, 2013. The PCE result from the initial sample collected from SV-1 on April 2, 2013 was 15,400,000  $\mu g/m^3$ . It should be noted that SV-1 is located offsite, north of the Site, adjacent to 135 Kent Avenue on North 6<sup>th</sup> Street between Wythe Avenue and Kent Avenue.

#### 3.5.1 Conclusions

Soil vapor sample results indicate elevated CVOCs in soil vapor near the former rail loading dock area, and also beneath the sidewalk along both Kent Avenue (adjacent to the Site) and North 6<sup>th</sup> Street (adjacent to the 135 Kent Avenue property).

SV-1 is located on the upgradient side of the 135 Kent Avenue site, over 100 feet from the property boundary between 149 and 135 Kent Avenue. The PCE result from the initial soil vapor sample collected from SV-1 on April 2, 2013 was 15,400,000 μg/m3. SV-1 was sampled a second time (confirmation sample) on April 23, 2013 and the result was 25,300,000 μg/m3. SV-1 is located near the truck loading dock of 135 Kent Avenue and according to the property owner that is where they purportedly received their PCE deliveries. The extremely high detections of PCE in SV-1 soil vapor strongly point to the likely presence of DNAPL on the 135 Kent Avenue site. It should be noted that the concentrations of PCE, 111-TCA, TCE, 1,2-DCE and trans 1,2-DCE are orders of magnitude higher in SV-1 than in the other sampling locations

With regard to onsite (SS-6 and SS-7) and near-Site (SV-2 and SV-3) soil vapor results, PCE is the primary contaminant, with lesser detections of PCE breakdown products and other CVOCs contained within the NYSDOH Guidance Matrices. It is important to note that soil borings RA-14 and RA-16, adjacent to SS-7 and SS-6, respectively, had non-detect to low concentrations (orders of magnitude lower than the unrestricted SCOs) of the compounds identified in soil vapor at SS-6 and SS-7. This indicates that the source of the soil vapor impacts at these locations is not the soil in the immediate vicinity of the sample locations. Potential contributing sources are soil/groundwater/DNAPL that may exist below the 135 Kent Avenue property and/or onsite soil/groundwater impacts in the vicinity of the property line with 135 Kent Avenue/former rail loading dock. A significant portion of the most heavily impacted soil in the property boundary

with 135 Kent Avenue/former rail loading dock area that is a contributing source of onsite soil vapor contamination will be removed during the anticipated excavation planned as part of the work. The remainder of the proposed remedy to reduce or eliminate the VOCs in onsite soil vapor is described in Section 7.

### 4.0 REMEDIAL GOALS, SCGS, AND REMEDIAL ACTION OBJECTIVES

The proposed remedy will achieve a Track 4 cleanup that will be protective of human health and the environment.

#### 4.1 Remedial Goals

As described in Section 4.1 of the Draft BCP Guide, "the goal of the remedy selection process in the BCP is to select a remedy for a site that is fully protective of public health and the environment, taking into account the current, intended, and reasonably anticipated future land use of the site."

In order to achieve this goal, the Part 375 and Draft BCP Guide divide remedial actions into four Cleanup Tracks (Tracks 1 through 4). Each cleanup track can result in a remedy that is protective of public health and the environment, but the remedies for each track will differ in respect to extent of the cleanup, restrictions on future site use, the application of institutional controls/engineering controls, and the amount of site specific information required to support the remedy selection process. As required under the BCP, a minimum of two remedial alternatives (one being a Track 1 unrestricted remedy) were evaluated for the onsite soil remedy as discussed in Section 5.

### For Track 1 cleanup remedies:

- 6 NYCRR Part 375 and the Final Commissioner Policy-51 dated October 21, 2010 (CP-51) set forth soil cleanup objectives for Unrestricted Use remedies which allow the property to be put to any use;
- Restrictions on the use of the site are not permitted;
- Contaminated soil that exceeds the Unrestricted Use limits should be removed or treated; and
- Reliance upon institutional control/engineering controls to address exposure and achieve
  the RAOs for the site is not allowed, except one that allows for a groundwater use
  restriction.

### For Track 4 cleanup remedies:

• Exposed surface soils in a Track 4 remedy are required to be addressed to meet the set forth soil cleanup objectives for Restricted Use remedies presented in 6 NYCRR Part 375 and CP-51;

- Restrictions can be placed on the use of the site as residential or commercial and on the use of site groundwater;
- Reliance upon institutional control/engineering controls to address soil exposure and achieve the RAOs for the site is allowed; and
- A groundwater use restriction may be placed upon the site.

For this Site, the redevelopment plan includes a seven story mixed use (retail, commercial, residential) building with a ventilated garage located in the basement and part of the first floor, and retail and/or retail storage in portions of the basement level. The building will encompass the entire footprint of the property and therefore there will be no exposed soil present. Therefore, the remedial goals for soil at the Site are to:

- Meet the protection of groundwater criteria in order to eliminate, to the extent practicable, ongoing contributing onsite sources of impact to groundwater; and
- Meet the requirements for a restricted residential cleanup.

The remedial goals for groundwater are to reduce the VOC mass in onsite groundwater to the extent practicable and to reduce, to the extent practicable (considering a potential ongoing source on the neighboring property at 135 Kent Avenue), the migration from the Site of groundwater not attaining groundwater standards for VOCs.

The remedial goals for soil vapor are to:

- Protect the proposed onsite building occupants from potential soil vapor intrusion from identified onsite soil and groundwater impacts;
- Protect the proposed onsite building occupants from potential soil vapor intrusion from identified offsite soil vapor and suspected soil and groundwater impacts; and
- Avoid actively drawing impacted soil vapor from adjacent contributing sources toward the onsite building.

### 4.2 Standards, Criteria and Guidance

SCGs are promulgated requirements ("standards" and "criteria") and non-promulgated guidance ("guidance") that govern activities that may affect the environment and are used by the DER at various stages in the investigation and remediation of a site. SCGs incorporate both the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended

by the Superfund Amendments and Reauthorization Act of 1986 (CERCLA), concept of "applicable or relevant and appropriate requirements" (ARARs) and the United States Environmental Protection Agency's (USEPA) "to be considered" (TBCs) category of non-enforceable criteria or guidance. SCGs applicable to the Site are as follows:

#### 4.2.1 SCGs for Soil

#### 4.2.1.1 Part 375 SCGs

SCGs for soil at BCP sites are the numerical soil cleanup objectives presented in Part 375. The soil cleanup objectives are categorized into Unrestricted Use criteria and Restricted Use (Restricted Residential, Residential, Commercial, or Industrial) criteria, as well as criteria for Protection of Groundwater and Ecological Resources (which can also be satisfied by application of the Unrestricted Use criteria). The applicability of each category of soil cleanup objectives is determined based upon the current and reasonable anticipated future use of the site, as well as cleanup tracks being evaluated.

The proposed remedy will achieve a Track 4 Restricted Residential cleanup as set forth in 6 NYCRR Part 375 based on the intended future use at the Site. Based upon the evaluation of the current soil data discussed in the RI and the proposed future use of the Site, the SCOs for soil are:

- NYSDEC Part 375 Criteria for the Protection of Groundwater; and
- NYSDEC Part 375 Restricted Residential Use Criteria.

SCOs for the Protection of Ecological Resources were considered, but were determined not to be applicable based on Site-specific conditions. In accordance with the Part 375 Regulations, Protection of Ecological Resources SCOs do not and/or will not apply to sites or portions of sites where the condition of the land (e.g., paved, covered by impervious surfaces, buildings and other structures) precludes the existence of an ecological resource that constitutes an important component of the environment. The entire Site has been and will be paved or covered by buildings as part of the proposed future development; therefore, use of SCOs for Protection of Ecological Resources is not applicable.

#### 4.2.1.2 Hazardous Waste SCGs

# Solid Waste Determination Request

In a letter dated June 19, 2013, Roux Associates, on behalf of the Volunteer, requested a Solid Waste Classification Determination from the NYSDEC for waste generated at the Site. The request was made to determine whether solid waste from the Site, specifically soil impacted by tetrachloroethene (PCE) and to a lesser extent other chlorinated volatile organic compounds (CVOCs), should be classified as a listed hazardous waste.

### NYSDEC Response to Solid Waste Determination Request

In a letter dated July 2, 2013, NYSDEC responded to the request for a solid waste determination by stating that absent a specific 'contained in' determination by the Department, highly PCE-contaminated soil or groundwater at the Site would need to be classified as U210 listed hazardous waste in accordance with Title 40 of the Code of Federal Regulations (40 CFR) Part 261.33 based on the chlorinated solvents present. A 'contained-in' determination from DEC, however, would eliminate the U210 classification for some portion of those materials.

# "Contained-Out Determination Request"

In a letter dated July 25, 2013, Roux Associates/Remedial Engineering, on behalf of the Volunteer, submitted a "Contained-Out Determination Request" to the NYSDEC for lower concentrations of PCE 'contained in' the soil and groundwater waste streams that will be generated as part of the work. As directed by NYSDEC in a July 8, 2013 conference call, the request for a contained-out determination was made in accordance with the "action level" guidance provided in the NYSDEC Technical and Administrative Memorandum (TAGM) 3028 dated November 30, 1992.

The specifics of the request regarding soil are discussed in this section and the specifics regarding groundwater are discussed in Section 4.2.2.2.

# Soil Data and Contained-Out Request

Concentrations of chlorinated volatile organic compounds (CVOCs) observed in soil samples were compared to the "action levels" from TAGM 3028 and Plate 9 shows the locations of samples that exceed the TAGM 3028 "action levels" in two depth intervals:

- Less than 22 feet below the elevation of the existing slab.
- Equal to or greater than 22 feet below the elevation of the existing slab.

The two depth intervals were selected based on the fact that there are only two exceedances of the "action levels" in the lower interval, as compared to six exceedances in the shallower interval. As shown on Plate 9, the concentrations of PCE and other CVOCs are highest in the vicinity of the property line shared with the 135 Kent Avenue property/former rail loading dock. Based upon the comparison to the "action levels" in the two depth intervals described above, the Volunteer proposed to dispose of soil generated from within the "limits of soil to be handled as listed hazardous waste" shown on Plate 9 as U210 listed waste. The Volunteer therefore requested a contained-out determination for soil generated from all other locations onsite since concentrations are significantly lower and do not pose a sufficient health threat to be regulated as a Resource Conservation and Recovery Act (RCRA) listed hazardous waste.

The letter also stated that the Volunteer understands that even if a portion of the waste is excluded from handling as U210 listed hazardous waste based on the outcome of the request, that portion of the waste must be properly characterized for disposal purposes and may be considered characteristically hazardous based on laboratory results. The SCGs for soil to be considered as characteristic hazardous waste are presented in 40 CFR Part 261.24.

Waste will be disposed of in accordance with regulatory requirements based on the levels of contamination found to be present in waste characterization samples collected. It should be noted portions of the soil that will be generated during the work will meet the criteria for disposal at beneficial use sites or recycling facilities located in New Jersey or Pennsylvania.

# NYSDEC Response to "Contained-Out Determination Request" for Soil

NYSDEC responded to the "Contained-Out Determination Request" in an email dated August 5, 2013 that they required the following information to complete their review of the contained out determination:

• "For the soil, we need an outline how they propose to excavate and segregate the hazardous waste from the non-haz if they plan to excavate 22-ft below surface".

# Additional Information Requested

The requested information regarding soil excavation, segregation, and handling is included in this RAWP (Sections 5.3.1.4, 5.3.1.7, 5.4.1.4, and 5.4.1.7). The Volunteer requests that NYSDEC approve the contained out request for soil based upon the information provided in this RAWP. Since removal of soil above the water table (not requiring dewatering) is scheduled to be conducted early in the construction project (with dewatering required in later stages of the excavation), the Volunteer requests NYSDEC to provide a contained out determination for soil separately from the groundwater (if they cannot be provided concurrently) so that soil remediation may proceed without interruption.

#### **4.2.2** SCGs for Groundwater

## 4.2.2.1 NYSDEC SCGs

Although the groundwater beneath the Site is not used as a drinking water source, based upon the evaluation of the current groundwater data discussed in the RI, the following SCGs for the groundwater will be considered:

- New York State Groundwater Quality Standards 6 NYCRR Part 703; and
- NYSDEC AWQSGVs TOGS 1.1.1.

However, as discussed in a meeting at the NYSDEC offices on June 17, 2013, based on the concentrations of PCE in soil vapor at SV-1 (located to the north of the 135 Kent Avenue property), it is expected that there will be significant concentrations of CVOCs in soil and groundwater and potentially DNAPL beneath 135 Kent Avenue that could act as continuing sources of CVOC contamination to groundwater. Based upon the regional groundwater flow direction to the west/southwest, these offsite impacts are likely to re-contaminate groundwater beneath the Site. Since investigation activities on the 135 Kent Avenue property have not yet

begun and since remedial activities at 135 Kent Avenue will not be underway until after the Volunteer has completed their remediation and redevelopment of the Site, it is likely not feasible to achieve the groundwater SCG and it will not be practicable for the Volunteer to prevent migration from the 135 Kent Avenue property onto the Site or entirely eliminate offsite migration from their Site, due to the likelihood of a continuing source upgradient of the Site.

#### 4.2.2.2 Hazardous Waste SCGs

As discussed in Section 4.2.1.2, the "Contained-Out Determination Request" letter dated July 25, 2013 covered both soil and groundwater. The specifics of the request regarding groundwater are discussed in this section.

# Groundwater Data and Contained-Out Request

Concentrations of CVOCs observed in groundwater samples were compared to the "action levels" from TAGM 3028. Figure 4 shows the locations of samples that exceed the TAGM 3028 "action levels". As shown on Figure 4, the concentrations of PCE and other CVOCs are highest in the vicinity of the property line shared with the 135 Kent Avenue property/former rail loading dock and elsewhere on the western third of the Site. Concentrations generally decrease with depth.

Based upon the comparison to the "action levels", if onsite treatment is not warranted due to limited volume (i.e., volumes that could be reasonably trucked offsite), the Volunteer proposed to dispose of groundwater generated from within the "limits of groundwater to be handled as listed hazardous waste if not treated onsite" shown on Figure 4 as U210 listed hazardous waste.

The Volunteer therefore requested a contained-out determination for groundwater generated from all other locations onsite since concentrations are significantly lower and do not pose sufficient health threat to be regulated as a RCRA listed hazardous waste. This groundwater elsewhere onsite would be handled in accordance with the results of waste characterization samples.

The Volunteer also requested a contained-out determination for groundwater extracted from anywhere onsite and that will be treated onsite to meet the TAGM 3028 action levels prior to

discharge to the New York City sewer system. This water would be treated onsite and would be discharged as non-hazardous waste under a permit obtained from the New York City Department of Environmental Protection (NYCDEP).

# NYSDEC Response to "Contained-Out Determination Request"

NYSDEC responded to the "Contained-Out Determination Request" in an email dated August 5, 2013 that they required the following information to complete their review of the contained out determination:

• "For the groundwater, we need details about how the water will be treated before discharge to the City sewer system. We will need a copy of the permit before we can give you an approval."

## Additional Information Requested

The requested information (aside from the New York City Department of Environmental Protection [NYCDEP] discharge permit) regarding the groundwater is provided in this section.

Dewatering may be required in order to accomplish the anticipated excavation planned as part of the Site work. The dewatering system will be operated by a subcontractor that specializes in dewatering and may include well points and potentially localized dewatering sumps for deeper excavation areas. Unless water is disposed of offsite, treatment of the dewatering water to the "contained-in action levels" for chlorinated solvents and the NYCDEP sewer discharge limits for other parameters will also be required, which will be provided by an onsite water treatment system with discharge to the New York City sewer system.

The impacted groundwater will pumped to the temporary onsite treatment system for treatment. One or more storage tanks will be provided at the influent end of the system. Due to the concentration and type of VOCs in the groundwater on the western third of the Site, it is likely that air stripping followed by sand filtration and granular activated carbon (GAC) would be used for treatment. One or more storage tanks would be provided at the effluent end of the system to contain the treated water prior to discharge. It is anticipated that treatment of the vapor stream from the air strippers would be required. Details regarding the type, size and number of treatment units will be developed during the design and provided to NYCDEP in order to obtain the discharge permit.

The first batch of treated water will be held in the effluent storage tank until sample results indicate that the treated water meets the contained in "action levels" for CVOCs and the NYCDEP sewer discharge limits for other parameters. The results will be provided to NYSDEC/NYCDEP for review and approval prior to discharge. If the action levels or permit requirements are not met, the water will be pumped back to the head of the system, treated, and tested again to determine compliance. If necessary, modifications to the treatment system components will be made to meet the required discharge limits and a description of the modifications will be submitted to NYSDEC and/or NYCDEP. After the initial sampling and approval by the NYSDEC and/or NYCDEP, discharge would occur continuously, with sampling conducted on the frequency required by NYSDEC and/or NYCDEP. If an exceedance of discharge limits is noted during continuous discharge, discharge will be halted and the water in the effluent storage vessel(s) will be pumped back into the influent storage vessel(s) for additional treatment and a confirmatory sample will be collected. The confirmatory sample will be analyzed for those parameter(s) that exhibited an exceedance. After the exceedances have been remedied and confirmed by analytical results, the treated water will be discharged and operations will resume as described above (i.e., continuous discharge with sampling on the required frequency).

Based upon the information provided in this RAWP, the Volunteer requests that NYSDEC approve the contained out request for groundwater on the Site. The NYCDEP permit will be provided once it is obtained.

#### 4.2.3 SCGs for Soil Vapor

NYSDOH's Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 employs two Matrices to determine whether monitoring or mitigation of soil vapor levels are warranted, based on concentrations present in sub-slab and indoor air samples. Matrix 1 applies to TCE, VC and carbon tetrachloride and Matrix 2 applies to 1,2-DCE, 1,1-dichloroethene (1,1-DCE), PCE and 1,1,1 trichloroethane. Potential soil vapor impacts identified in accordance with the NYSDOH guidance will be addressed in this RAWP.

# 4.3 Remedial Action Objectives

The RAOs for the Site are established for the protection of public health and the environment and are developed based on the SCGs, described above.

As specified in DER-10, Section 4.1(c), RAOs are to be established by the following:

- 1. Identifying contaminants exceeding applicable SCGs and the environmental media impacted by the contaminants;
- 2. Identifying applicable SCGs, taking into consideration the current and, where applicable, future land use for the Site; and
- 3. Identifying all actual or potential public health and/or environmental exposures resulting from contaminants in environmental media at, or impacted by, the Site.

Based upon the identification of the contaminants and impacted media, as described in previous investigation reports, identification of the applicable SCGs, taking into consideration current and potential future land use and identification of the actual or potential public health and/or environmental exposures, the appropriate RAOs for the Site are:

- Eliminate potential exposure pathways by preventing human contact, ingestion or inhalation of contaminated environmental media;
- Remove the onsite contributing source of groundwater contamination, including impacted soil, to the extent technically and practicably feasible;
- Obtain mass reductions of VOCs in onsite groundwater, to the extent practicable; and
- Reduce, to the extent practicable (considering a likely ongoing source on the neighboring property at 135 Kent Avenue), migration of groundwater not attaining groundwater standards from the Site.

#### 5.0 SOIL REMEDY SELECTION PROCESS

# 5.1 Remedial Alternatives Analysis

The following is a detailed description of the alternatives analysis and remedy selection process to address impacted onsite soil in the vicinity of the northern property line with 135 Kent Avenue/former rail loading dock operations and from historic fill across the Site. This section of the RAWP was prepared in accordance with Section 4.4(c) of DER-10. As required, a minimum of two remedial alternatives (one being an Unrestricted Use scenario) are evaluated. However, it should be noted that for this Site, it is technically infeasible to excavate all of the soil along the north property line due to concerns regarding the structural stability of the adjacent aging buildings. The structural engineer for the project has indicated installation of support of excavation (SOE) and excavation cannot be completed any closer than 12 to 18 inches from the adjacent building foundations that share the property line with the Site. At the same time there are technical limitations to the equipment used to install the SOE that require the wall to be offset slightly from the adjacent structures. Therefore, in reality, a small portion of soil that has exceedances of the Unrestricted Use criteria would have to remain behind the SOE. However, for the purpose of this Track 1 evaluation; it has been assumed that all soil can be removed within the Site property limits, even though this is not technically feasible. In general terms, the remedial alternatives evaluated are as follows:

- One alternative that will achieve unrestricted use soil without the use of institutional or engineering controls; and
- One alternative assuming a restricted residential use scenario (which is consistent with the reasonably anticipated future use) based on the future use of the property as a mixed use building encompassing the entire property footprint, coupled with the use of institutional and engineering controls.

Specifically, the following remedial action alternatives for soil were developed based upon the remedial goals and RAOs identified in Section 4:

Remedial Alternative 1: Excavation and offsite disposal of soil exceeding the Unrestricted Use criteria presented in the Part 375 Regulations at any depth above or below the water table for all onsite areas in the vicinity of the northern property line with 135 Kent Avenue/former rail loading dock operations (the hot spot area) and in the vicinity of RA-7, and from historic fill across the site; and backfill of excavated areas.

Remedial Alternative 2: Excavation and offsite disposal of soil exceeding the Protection of Groundwater criteria for VOCs at any depth above or below the water table in areas in the vicinity of the northern property line with 135 Kent Avenue/former rail loading dock operations (referred to herein as the hot spot area), and in the vicinity of RA-7; backfill of excavated areas; and institutional and engineering controls to address remaining impacts above SCOs (including composite cap comprised of building foundation, waterproofing membrane, mud slab and gravel backfill; vapor barriers; passive sub-slab depressurization system [SSDS] along portions of the northern property line and ventilated garage.

#### 5.2 Evaluation Criteria

Each alternative was evaluated based on the following nine evaluation criteria presented in 6 NYCRR Part 375-1.8(f):

- Overall protection of public health and the environment;
- Standards, criteria and guidance;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume of contamination through treatment;
- Short-term impacts and effectiveness;
- Implementability;
- Cost;
- Community acceptance; and
- Land use, provided the Department determines that there is reasonable certainty associated with such use.

Each of the criteria is described below.

#### 5.2.1 Overall Protection of Human Health and the Environment

From DER-10: "This criterion is an evaluation of the ability of each alternative or the remedy to protect public health and the environment.

1. How each alternative would eliminate, reduce, or control through removal, treatment, containment, engineering controls or institutional controls any existing or potential human exposures or environmental impacts identified by the remedial investigation.

- 2. The ability of each alternative to achieve each of the RAOs.
- 3. Overall protection of human health and the environment draws on the assessments of other evaluation criteria, especially long term effectiveness and permanence, short term effectiveness, and compliance with SCGs."

# 5.2.2 Standards, Criteria and Guidance

From Part 375: "The remedy will:

- (i) conform to standards and criteria that are generally applicable, consistently applied, and officially promulgated, that are either directly applicable, or that are not directly applicable but are relevant and appropriate, unless good cause exists why conformity should be dispensed with. Good cause exists if any of the following is present:
  - (a) the proposed action is only part of a complete program or project that will conform to such standard or criterion upon completion;
  - (b) conformity to such standard or criterion will result in greater risk to the public health or to the environment than alternatives;
  - (c) conformity to such standard or criterion is technically impracticable from an engineering perspective;
  - (d) the program or project will attain a level of performance that is equivalent to that required by the standard or criterion through the use of another method or approach; and
- (ii) consider applicable Department guidance."

### **5.2.3** Long-term Effectiveness and Permanence

From Part 375: "A program or project that achieves a complete and permanent cleanup of the site is preferred over a program or project that does not do so."

# **5.2.4 Reduction in Toxicity, Mobility or Volume of Contamination** through Treatment

From Part 375: "Reduction in toxicity, mobility, or volume of contamination through treatment: a program or project that permanently and significantly reduces the toxicity, mobility, or volume of contamination is to be preferred over a program or project that does not do so. The following is the hierarchy of technologies ranked from the most preferable to the least preferable:

- i. destruction, onsite or offsite;
- ii. separation or treatment, onsite or offsite;

- iii. solidification or chemical fixation, onsite or offsite; and
- iv. control and isolation, onsite or offsite."

# **5.2.5** Short-Term Impacts and Effectiveness

From DER-10: "This criterion is an evaluation of the potential short term adverse environmental impacts and human exposures during the construction and/or implementation of an alternative or remedy.

- 1. Identify the potential human exposures, adverse environmental impacts, and nuisance conditions at the site resulting from the implementation of the remedy or alternative. Identify how they would be controlled and the effectiveness of the controls. The potential short term impacts to be evaluated include nuisance conditions or potential exposures resulting from increased traffic, including truck trips, detours or loss of the use of access to property, odors, vapors, dust, habitat disturbance, run off from the site, and noise.
- 2. A discussion of engineering controls that would be used to mitigate the short term impacts (i.e., dust control measures) should be included.
- 3. The length of time needed to implement the remedy or alternative including time to achieve the remedial objectives should be estimated.
- 4. While sustainability will be a consideration in remedy selection, as set forth in Section 1.14, it will not change any existing statute, regulation or guidance."

#### **5.2.6** Implementability

From DER-10: "This criterion is an evaluation of the technical and administrative feasibility of implementing an alternative or remedy.

- 1. Technical feasibility includes the difficulties associated with construction and the ability to monitor the effectiveness of an alternative or remedy.
- 2. Administrative feasibility is evaluated, which includes:
  - i. the availability of the necessary personnel and material; and
  - ii. potential difficulties in obtaining specific operating approvals, access for construction, etc.
- 3. The evaluation of the reliability and viability of implementation of the institutional or engineering controls necessary for a remedy, as detailed in subdivision 4.2(b)."

#### **5.2.7** Cost

From DER-10: "This criterion is an evaluation of the overall cost effectiveness of an alternative or remedy.

- 1. A remedy is cost effective if its costs are proportional to its overall effectiveness. To evaluate cost effectiveness:
  - i. the overall effectiveness of an alternative or remedy is determined by evaluating the criteria set forth in subdivisions (d), (e) and (f) above; and
  - ii. a comparison of the overall effectiveness is then made to the cost of the alternative or remedy; and
  - iii. an assessment is made as to whether the cost is proportional to the overall effectiveness, to determine whether it is cost effective.
- 2. Capital costs and costs associated with site management for each alternative are estimated in accordance with subparagraph 4.3(a)5.iii."

# **5.2.8 Community Acceptance**

From DER-10: "This criterion is evaluated after the public review of the remedy selection process as part of the final DER selection/approval of a remedy for the site.

- 1. Any public comment relative to these criteria will be considered by DER after the close of the public comment period.
- 2. Documentation of the public comments received is to be consistent with the citizen participation plan identified for a remedial program in accordance with applicable DEC policy."

# **5.2.9** Land Use (Provided the Department Determines that There Is Reasonable Certainty Associated with Such Use)

From Part 375: "In assessing reasonable certainty, the Department shall consider:

- (i) the current, intended, and reasonably anticipated future land uses of the site and its surroundings in the selection of the remedy for soil remediation under the brownfield cleanup and environmental restoration programs, and may consider land use in the State superfund program, where cleanup to pre-disposal conditions is determined not feasible;
- (ii) the Department's determination on the use of the site will be in accordance with subdivision 375-1.8(g);
- (iii) the reasonably anticipated future use of the site and its surroundings, which shall be documented in the analysis of alternatives, taking into consideration factors including, but not limited to, the following:
  - (a) current use and historical and/or recent development patterns;

- (b) applicable zoning laws and maps;
- (c) brownfield opportunity areas as designated set forth in GML 970-r;
- (d) applicable comprehensive community master plans, local waterfront revitalization plans as provided for in EL article 42, or any other applicable land use plan formally adopted by a municipality;
- (e) proximity to real property currently used for residential use, and to urban, commercial, industrial, agricultural, and recreational areas;
- (f) any written and oral comments submitted by members of the public on the proposed use as part of the activities performed pursuant to the citizen participation plan;
- (g) environmental justice concerns, which for purposes of this subpart, include the extent to which the proposed use may reasonably be expected to cause or increase a disproportionate burden on the community in which the site is located, including low-income minority communities, or to result in a disproportionate concentration of commercial or industrial uses in what has historically been a mixed use or residential community;
- (h) federal or State land use designations;
- (i) population growth patterns and projections;
- (i) accessibility to existing infrastructure;
- (k) proximity of the site to important cultural resources, including federal or State historic or heritage sites or native American religious sites;
- (l) natural resources, including proximity of the site to important federal, State or local natural resources, including waterways, wildlife refuges, wetlands, or critical habitats of endangered or threatened species;
- (m) potential vulnerability of groundwater to contamination that might emanate from the site, including proximity to wellhead protection and groundwater recharge areas and other areas identified by the Department and the State's comprehensive groundwater remediation and protection program established in ECL article 15, title 31;
- (n) proximity to flood plains;
- (o) geography and geology; and
- (p) current institutional controls applicable to the site."

# 5.3 Onsite Soil Remedial Alternative 1: Track 1 Scenario to Unrestricted Use Criteria via Excavation and Offsite Disposal

The following sections provide a description of Remedial Alternative 1. An evaluation based on the specific evaluation criteria is also presented below.

# **5.3.1 Description**

All activities will be performed as described in this section and in compliance with the following project plans, as applicable for Remedial Alternative 1:

- Quality Assurance Project Plan (QAPP; provided in the RIWP, January 31, 2013)
- Site Specific Environmental Health and Safety Plan (EHASP), which includes the Community Air Monitoring Plan (CAMP), and will be submitted to NYSDEC under separate cover.

Plate 10 shows the areas to be addressed under Remedial Alternative 1, which includes the following remedial elements:

- Site Mobilization, Site Preparation and Storm Water Management and Erosion Control;
- Dust and Odor Control Plans;
- Waste Characterization Sampling;
- Soil Excavation;
- Pre-Excavation Confirmation/Documentation Sampling;
- Dewatering and Water Treatment;
- Temporary Staging and Stockpiling;
- Transportation and Offsite Disposal;
- Backfilling;
- Site Restoration;
- Health and Safety and Community Air Monitoring; and
- Institutional Controls/ Environmental Easements.

Each of these elements is discussed in greater detail below.

# 5.3.1.1 Site Mobilization, Site Preparation and Storm Water Management and Erosion Control

A project kick-off meeting will be conducted with the Volunteer, Roux Associates/Remedial Engineering, and the selected Contractor prior to the commencement of any intrusive remedial activities. The Contractor shall supply any labor and materials required for the removal and disposal of contaminated soil. In addition, all necessary permits, insurance, bonds, and licenses required to complete all work shall be obtained and all fees necessary to obtain these permits shall be paid. Mobilization and Site preparation activities include:

- 1. Mobilization of equipment to the work area.
- 2. Installation of construction fencing and traffic barricades to delineate the work zone, act as a work Site security measure, and mark the truck loading and decontamination areas.
- 3. Installation of stabilized construction entrances at points of vehicle ingress and egress to the project work area. Truck routes and construction entrances will be detailed in the traffic control plan for the Site to be developed prior to construction.
- 4. Implementation of erosion and sediment control measures in accordance with the New York Guidelines for Urban Erosion and Sediment Control. As necessary, hay bales will be placed at locations upgradient of excavation areas to control stormwater runoff and surface water from entering or exiting the excavation. Catch basin inlets immediately adjacent to the work area will be protected to prevent disturbed soil from entering. Since according to the Volunteer the area of disturbance is not anticipated to exceed one acre, a Stormwater Pollution Prevention Plan (SWPPP) is not required.
- 5. Set-up of staging areas for excavated soil. Separate staging areas will be provided for hazardous soil and non-hazardous soil as described in Section 5.3.1.7.
- 6. Set-up of temporary facilities and decontamination facilities, including decontamination pad in order to decontaminate trucks and other vehicles/equipment. The decontamination pad will be constructed using 40-mil high density polyethylene (HDPE) liner with perimeter berms, sloped to a low-lying sump to contain any liquids. The decontamination pad shall be sized to accommodate the largest construction vehicle to be used, and located adjacent to the waste staging area.
- 7. Removal of existing concrete slab to access the soil excavation area.

### 5.3.1.2 Dust and Odor Control Plans

Odors and dust will be continually monitored during excavation activities and addressed using the measures discussed below.

#### 5.3.1.2.1 Odor Control Plan

This odor control plan will be capable of controlling emissions of nuisance odors offsite and onsite. Specific odor control methods to be used on a routine basis will include backfilling excavations within the hot spot area in a timely manner to the extent practicable, and maintaining covers over stockpiled impacted soils. If nuisance odors are identified, work in the particular affected work area will be halted and the source of odors will be identified and corrected. Work will not resume in this area until nuisance odors have been abated (work may continue in other, unrelated areas.). NYSDEC and NYSDOH will be notified of all odor events and of all other complaints about the project. The Volunteer's onsite representative, Roux Associates/Remedial Engineering, will be present during intrusive work and will monitor for nuisance odors and recommend measures for odor control, including but not limited to halting the work temporarily, as necessary to evaluate options. Implementation of all odor controls will be the responsibility of the Contractor.

As necessary, tarps will be employed to suppress vapor and odors from stockpiled soil in the staging area. Foam may also be used to suppress vapors and odors, if necessary. The foam unit, such as a Rusmar PFU-400, includes a self-contained 400-gallon tank for mixing foam concentrate. If needed, foam will be applied to stockpiled soil and excavation sidewalls. All necessary means will be employed to prevent onsite and offsite nuisances. If odors develop and cannot be otherwise controlled, additional means to eliminate nuisance odors will be evaluated.

In summary, if an odor complaint is received, the following procedure will be implemented:

- 1. Work in the affected area will be halted, and the source of odors will be identified.
- 2. NYSDEC, NYSDOH, and the Volunteer will be notified of the odor complaint.
- 3. Nuisance odors will be abated through the use of tarps to cover stockpiles, backfilling open excavations within the hot spot area in a timely manner, to the extent practicable; and/or use of a foam unit or other appropriate measures.
- 4. Work will resume in the affected area when the nuisance odors have been abated, as determined by the Roux Associates/Remedial Engineering onsite personnel.

#### 5.3.1.2.2 Dust Control Plan

A dust suppression plan that addresses dust management during invasive onsite work will include, as needed, any or all of the items listed below:

- Dust suppression may be achieved through the use of a dedicated onsite water truck for road wetting. The truck will be capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Gravel may be used on roadways to provide a clean and dust-free road surface.
- Onsite truck routes may be limited to minimize the area required for water truck sprinkling.

# 5.3.1.3 Waste Characterization Sampling and Monitoring Well Abandonment

# Waste Characterization Sampling

Waste characterization sampling will be performed by Roux Associates/Remedial Engineering for soil to be excavated onsite, as required by the disposal facilities. The specific parameter list and sample frequency will be ultimately determined by the permit requirements of the disposal facility; however, it is expected that the analyses will include VOCs, SVOCs, TAL metals, PCBs/pesticides, TCLP metals, total petroleum hydrocarbons (TPH), TCLP VOCs, TCLP SVOCs, TCLP PCBs/pesticides, and RCRA characteristics. The number of samples will be based on the estimated total volume of excavated soil and the facility sampling requirements.

It is anticipated that this sampling will be conducted *in situ* prior to implementation of the remedial action since this method has many potential benefits over the traditional method of stockpile-sample-then dispose, including:

- reduces double handling of material by direct loading the excavated soils into trucks to the extent practical, therefore increasing workload efficiency;
- expedites the excavation project because the waste characterization results can be reviewed and the soil accepted by disposal facilities before the project begins;
- saves space during construction by minimizing the need to stockpile the material; and
- provides greater certainty for planning waste disposal costs.

Construction wastewater (generated from personnel/equipment decontamination) and dewatering liquids (groundwater and surface runoff entering excavation areas) are anticipated to be

generated at the Site during implementation of the Remedial Action, and will be stored in fractionation (frac) tank(s) (a minimum of one 20,000 gallon tank will be used) and treated with an onsite water treatment system to meet to the "contained-in action levels" for chlorinated solvents (refer to Section 4.2.2.2) and the NYCDEP sewer discharge limits for other parameters prior to discharge. Alternatively extracted water may be disposed of offsite. Waste characterization sampling for water generated onsite that is treated onsite is not anticipated; however, sampling of this water in accordance with the NYCDEP sewer discharge permit and/or sampling to satisfy "contained-out" requirements will be completed. Sampling of any water to be disposed of offsite will be completed in accordance with disposal facility requirements.

Any wastewater treatment system-related wastes (i.e., sludge from frac tanks, spent filter media) generated after the treatment system is demobilized, will be sampled and submitted for analysis for disposal characterization by Roux Associates/Remedial Engineering. Based on the laboratory analytical results, the residual construction-related wastes will be disposed offsite at a permitted disposal facility.

Sampling and analytical methods, sampling frequency, analytical results, and QA/QC will be compiled in the Final Engineering Report.

#### Monitoring Well Abandonment

All wells at the Site will be properly abandoned. Prior to the start of Site demolition work, the majority of existing monitoring wells (excluding MW-2, MW-10, and MW-11) at the Site will be abandoned by grouting from the bottom up using the tremie method, to approximately 12 feet below the existing floor slab (the minimum depth of the planned Site-wide excavation). Shallow monitoring wells located within the "hot spot" excavation area (MW-2, MW-10, and MW-11) will be removed entirely during the excavation activities. Any groundwater displaced by the grouting activities will be containerized and stored onsite for future disposal, either by a licensed waste transporter, or by processing through the potential onsite dewatering/treatment system, if possible. Following grouting, the wells will be capped with a 2-inch PVC cap. The monitoring well curb boxes and top 12 feet of PVC casing will be removed and disposed of during Site demolition/excavation.

#### **5.3.1.4** Soil Excavation

Prior to excavation, areas designated as U210 listed hazardous waste, as shown on Plate 10, will be surveyed and staked in the field to provide visual reference. Stakes or flags will be maintained to the extent practicable and will be replaced, as necessary, as the work proceeds. The "contained in" action level for PCE (12,000  $\mu$ g/kg) is higher than the Part 375 Unrestricted Use criteria for PCE (1,300  $\mu$ g/kg). However, the limits presented in the July 25, 2013 "contained out" request and also shown on Plate 10, were drawn to endpoints meeting the "contained in" action level and are therefore shown as a larger area than that required to address exceedances of the Unrestricted Use criteria (hot spot). Soil from the areas designated as U210 listed hazardous waste, as described in Section 4.2.1.2, will be segregated and stockpiled separately from non-hazardous waste if they cannot be direct loaded into transport vehicles, and stockpiles will be labeled accordingly. Comingling of listed hazardous waste with non-hazardous soil will be avoided to the extent practicable through the use of tarps/liners over areas not identified to have hazardous waste present adjacent to areas with hazardous waste. If comingling of waste occurs the resulting waste will be considered U210 listed hazardous waste for disposal purposes.

Part 375 requires evaluation of a Track 1 remedy, which is presented in this section. However, it should be noted that for this Site, it is technically infeasible to excavate all of the soil along the north property line due to concerns regarding the structural stability of the adjacent aging buildings. The structural engineer for the project has indicated installation of support of excavation and excavation cannot be completed any closer than 12 to 18 inches from the adjacent building foundations that share the property line with the Site. At the same time there are technical limitations to the equipment used to install the SOE that require the wall to be offset slightly from the adjacent structures. Therefore, in reality, a small portion of soil that has exceedances of the Unrestricted Use criteria would have to remain behind the support of excavation (secant pile wall). However, for the purpose of this Track 1 evaluation; it has been assumed that all soil can be removed within the Site property limits,

Based on a comparison of the available data to the NYSDEC Part 375 Unrestricted Use SCOs, exceedances for VOCs, SVOCs, metals, pesticides and herbicides were detected at many soil boring locations at 10-14 feet bfs. A more limited number of exceedances were observed to

depths of 25 feet or greater bfs, primarily in the area of the property line/ former rail loading dock, where there are exceedances of the NYSDEC Part 375 Unrestricted Use SCOs at depths of up to 35 feet. This area of the Site is where some of the highest PCE concentrations were observed and will be referred to herein as the "hot spot". Exceedances of SCGs for VOCs within the hot spot were fewer with depth and concentrations generally decreased with depth and there was only one shallow exceedance for PCE in the 8-10 feet bfs interval at RA-36, east of RA-12.

Isolated exceedances of the Part 375 Unrestricted Use SCOs for chromium were observed at RA-22 (18-20 feet bfs) and RA-19 (22-24 feet bfs). Therefore, the remedial alternative to achieve unrestricted use of the Site assumes the following excavation areas, as shown on Plate 10:

- the entire extent of the Site (outside the hot spot area and the RA-7 area) will be excavated to 25 feet bfs;
- the hot spot area will be excavated in two depth ranges (0-10 feet bfs, and 0-35 feet bfs); and
- a 10 foot by 10 foot area around RA-7 will be excavated to 35 feet bfs.

Therefore, the estimated volume of soil to be removed to achieve unrestricted use of the Site will be 37,500 cubic yards. Of this total, approximately 2,375 cubic yards is considered to be hazardous waste (either U210 listed hazardous waste or characteristic hazardous waste). The remaining soil is assumed to be non-hazardous and may be sent for recycling, beneficial reuse, landfill cover, or direct landfilling at a Subtitle D facility, depending on waste characterization sample results.

SOE, potentially consisting of a secant pile wall, will be required around the entire site to accomplish the excavation to the proposed depths. Each pile for the secant pile wall will constructed by drilling and advancing a temporary steel casing from approximately 8 feet bfs (the assumed elevation of the footing for the adjacent building) to a maximum of 50 feet bfs to provide sufficient embedment depth for the proposed excavation (shallower for the portion that extends beyond RA-12 in the hot spot area to RA-36 where deeper excavation is not required for remedial purposes). The piles will consist of structural concrete. In the hot spot area, in order to reach the target depths of up to 35 feet and maintain stability of the adjacent building, soil may

be removed by augering shafts 30-36 inches in diameter. Shafts will be overlapped, as required, to remove all soil within the hot spot. Shafts will be backfilled as the augering proceeds using gravel or lean concrete/flowable fill, as described in Section 5.3.1.9. Alternatively soil within the hot spot will be removed by excavating trenches, which will be simultaneously backfilled with bentonite/slurry mix. The deeper soils in the vicinity of RA-7 will be removed using either of the methods described above.

Excavated material will be disposed offsite in accordance with applicable regulations. Appropriate disposal facilities will be selected based upon the results of waste characterization samples (i.e., Subtitle C hazardous waste facility, Subtitle D non-hazardous waste facility; recycling or beneficial reuse facility).

As described in Section 5.3.1.9, the excavated area will be backfilled with common fill that meets the Unrestricted Use criteria, gravel or crushed stone from an approved source, lean concrete (flowable fill), or bentonite slurry mix. Sampling of the backfill material, as required, will be conducted to confirm that it meets the Unrestricted Use criteria, as described further in Section 5.3.1.9.

### **5.3.1.5** Pre-Excavation Confirmation Sampling

Based upon the extensive sampling that has been completed at the Site, areas requiring excavation are generally well delineated, with the exception of a few localized areas. Therefore, the excavation areas will be based on removing soil to the locations of existing samples that meet the Unrestricted Use SCGs, as described in Section 5.3.1.4 and existing samples will comprise the majority of the required confirmation samples for the project. Supplemental sampling will be conducted prior to implementation of the remedial action to make up the number of confirmation samples required and to confirm the extent of excavation. A work plan will be submitted to NYSDEC separately detailing the proposed sampling so that this work may proceed during the public comment period on the RAWP.

#### **Bottom Sampling**

Bottom confirmation sampling to represent the quality of soil remaining after the excavation is complete will be conducted at a frequency of one sample per 3000 square feet of excavation

area. The frequency of bottom sampling proposed for this alternative is less frequent than the guidance provided in NYSDEC DER-10 5.4 for excavations 20 to 300 feet in perimeter since the total excavation area is larger than the referenced excavation and the guidance allows for different sampling frequencies to be negotiated for larger excavations and since there are numerous existing samples throughout the Site to demonstrate soil quality.

For Remedial Alternative 1, the bottom confirmation samples will be comprised of:

- existing samples in the 23-25 foot bfs interval which are representative of remaining soil conditions;
- supplemental samples collected from soil borings in this depth interval outside the hot spot to make up the required frequency across the Site; and
- One sample within the hot spot where the existing sample at RA-3 did not meet the Part 375 Unrestricted Use criteria at the proposed 35 feet bfs excavation depth. Additional samples will be collected at a deeper interval if an exceedance of the Unrestricted Use criteria is observed and the excavation depth in the vicinity of RA-3 will be adjusted, if necessary, based upon the results.

The supplemental samples will be collected prior to excavation activities from soil borings drilled to the required depth. Locations of proposed supplemental bottom samples are shown on Plate 10 based upon the excavation scenario described in Section 5.3.1.4.

# Sidewall Sampling

In general for this Site, confirmation sidewall samples at a frequency of one sample per 60 linear feet are proposed. Again, the proposed sampling frequency is less frequent than the guidance provided in DER-10 due to the reasons stated above.

Confirmation sampling will not be required around the perimeter of the Site for this Track 1 scenario since the entire footprint of the property will be excavated (see Section 5.3.1.4) and no soil exceeding SCGs will potentially remain on the Site.

In the hot spot area near the property line with 135 Kent Avenue, which will be excavated to up to 35 feet bfs, existing soil boring results (which are no more than 60 feet apart) will be used as sidewall confirmation samples to confirm that soil remaining after excavation meets the

Unrestricted Use criteria. In addition, the following supplemental confirmation samples will be collected from soil borings prior to implementation of the remedial action:

- One additional sidewall confirmation sample will be collected from the west sidewall of the hot spot at a depth of 10-12 feet bfs, based upon an exceedance of the SCGs at this depth interval at RA-2. If the results of this sample indicate an exceedance of SCGs, additional borings will be completed five feet further to the west until a sample with no exceedances of the SCGs is obtained or until existing boring RA-5 is reached, whichever is sooner. The excavation area will be extended laterally in the 0-23 feet bfs interval, if necessary, based upon these additional borings. The location of this first proposed boring is shown on Plate 10. The samples from RA-2 at 23-25 feet bfs and 33-35 feet bfs will be considered the documentation samples for the deeper portions of the hot spot excavation along the western sidewall.
- Confirmation samples in three depth intervals (10-12, 23-25, and 33-35 feet bfs) will be collected from a soil boring located along the southern sidewall of the hotspot between existing borings RA-24 and RA-27, due to exceedances of SCGs at RA-3 and RA-4. If exceedances are observed in these samples, the excavation will be extended to RA-26, which will be considered the documentation sample along the southern sidewall to 35 feet bfs.

Around the excavation area proposed at RA-7, four confirmation soil borings will be performed and sampled at 28 to 30 feet bfs to confirm that the exceedance of unrestricted use SCG for PCE at this boring was localized. If the results of these samples indicate an exceedance of the unrestricted use SCG for PCE, additional borings will be completed five feet further from the original location with any exceedances until a sample with no exceedances of the unrestricted use SCG is obtained or until the property line is reached. The excavation area will be extended (but not beyond the western and southern property lines), if necessary, based upon these additional borings. The location of this first four proposed borings in this area are shown on Plate 10.

Confirmation soil samples will be analyzed for only the parameters that exceeded SCGs during the investigation phase. All samples will be field screened with a PID and placed in laboratory-supplied containers, stored on ice, and transported to the laboratory under chain of custody procedures in accordance with the QAPP. Roux Associates/Remedial Engineering will perform all confirmation sampling.

### **5.3.1.6** Dewatering and Water Treatment

Dewatering may be required in order to accomplish the anticipated excavation planned as part of work. The dewatering system will be operated by a subcontractor that specializes in dewatering and may include well points and potentially localized dewatering sumps for deeper excavation areas. Unless water is disposed of offsite, treatment of the dewatering water to the "contained-in action levels" for chlorinated solvents (refer to Section 4.2.2.2) and the NYCDEP sewer discharge limits for other parameters will also be required, which will be provided by an onsite water treatment system with discharge to the New York City sewer system. A general description of the system is provided in Section 4.2.2.2. Specific details of the dewatering and water treatment system will be provided to NYCDEP in order to obtain the discharge permit. Copies of documentation regarding the water treatment system will be provided to NYSDEC in accordance with the request for additional information regarding the "contained-out" request.

# 5.3.1.7 Temporary Staging and Stockpiling

All impacted materials will be stockpiled in a designated area onsite, unless material can be direct loaded into trucks for disposal based on in situ waste characterization. Materials known to be hazardous waste will be staged separately from non-hazardous waste and stockpiles will be labeled accordingly. Material suspected to be hazardous (if any is encountered outside of the existing areas identified) will be stockpiled separately for waste characterization and stockpiles will be labeled as "results pending". Roux Associates/Remedial Engineering onsite personnel will be responsible for overseeing the waste segregation process and confirming that waste is segregated and stockpiled in the appropriate locations onsite. They will also be responsible for confirming that waste is loaded out into appropriate transport vehicles, manifested properly and sent to appropriate disposal facilities according to the waste types generated. The Contractor will be responsible for installation, operation, and maintenance of the staging area and Roux Associates/Remedial Engineering onsite personnel will be responsible for inspection and monitoring of the staging area and for recommending any corrective actions should issues be identified. In general, stockpiles will be constructed by the Contractor to provide a 12-mil polyethylene base liner below the excavated soil. Stockpiles will be kept covered at all times with appropriately anchored tarps of 12 mil thickness or greater. Stockpiles will be routinely inspected by Roux Associates/Remedial Engineering onsite personnel and damaged tarp covers will be promptly replaced by the Contractor.

Soil stockpiles will be continuously encircled with silt fences or bermed to control runoff. Hay bales will be used as needed near catch basins and other discharge points. Stockpiles will be inspected at a minimum of once each week and after every storm event by Roux Associates/Remedial Engineering. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. Dust and odor control for stockpile areas will be conducted in accordance with the procedures described in Section 5.3.1.2.

# **5.3.1.8** Transportation and Offsite Disposal

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations. Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with applicable Federal, State, and local requirements, depending on the waste type (and all other applicable transportation requirements).

A truck wash will be operated onsite. Roux Associates/Remedial Engineering will be responsible for ensuring that all outbound trucks are inspected and will be brushed or washed as required to remove loose soil at the truck wash before leaving the Site until the remedial construction is complete.

Truck routes and construction entrances will be detailed in the traffic control plan for the Site to be developed prior to construction. Queuing of trucks will be performed onsite, to the extent practicable, in order to minimize offsite disturbance.

All soil and liquids to be removed at the Site will be handled, transported, and disposed in accordance with applicable local, State, and Federal regulations.

## 5.3.1.9 Backfilling

When excavation and removal of the impacted soil is complete, the excavation will be backfilled and compacted using certified clean fill material meeting the requirements of 6 NYCRR Part 375 and CP-51 soil cleanup objectives for Unrestricted Use remedies. Backfill may be common fill gravel/ crushed stone or lean concrete (flowable fill) or bentonite slurry mix, depending on the soil removal method used. The backfill material will be free of extraneous debris or solid waste.

If the NYSDEC agrees that the material originated from a virgin source, then a minimum of one sample will be collected and analyzed per source. If the source is not virgin, the sampling frequency will comply with DER-10 Table 5.4(e)10 shown below:

DER-10 Table 5.4(e)10 Recommended Number of Soil Samples for Soil Imported To or Exported From a Site			
Contaminant	VOCs	SVOCs, Inorganics and PCBs/Pesticides	
Soil Quantity (cubic yards)	Discrete Samples	Composite	Discrete Samples/Composite
0-50	1	1	3-5 discrete samples from different locations in the fill being provided will comprise a composite sample for analysis
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	
500-800	6	2	
800-1000	7	2	
1000	Add an additional 2 VOC and 1 composite for each additional 1000 Cubic yards or consult with DER		

The source of the offsite fill must be documented by the supplier, including the location where the fill was obtained and a brief history of the site that is the source of the fill. Analytical results will be submitted to the NYSDEC prior to use of the backfill.

Approximately 17,800 cubic yards of common fill will be required to backfill the excavation. This material will be sampled in accordance with the table above, therefore approximately 41 VOC grab samples and 19 composite samples for the remaining parameters will be required.

In accordance with DER-10, the following material may be imported, without chemical testing, to be used as backfill beneath pavement, buildings or as part of the final site cover, provided that it contains less than 10% by weight material which would pass through a size 80 sieve and consists of:

• gravel, rock or stone, consisting of virgin material from a permitted mine or quarry; or

• recycled concrete or brick from a DEC registered construction and demolition debris processing facility if the material conforms to the requirements of Section 304 of the New York State Department of Transportation *Standard Specifications Construction and Materials Volume 1* (2002).

Approximately 2,750 cubic yards of gravel backfill meeting the above requirement for import without sampling will be used below the floor slab/footings and to backfill in the hot spot area. Lean concrete (flowable fill) or bentonite slurry mix may be used as backfill in some locations onsite, to be determined by the Contractor's means and methods. Sampling of this material will not be required.

#### **5.3.1.10** Site Restoration

Site construction activities are expected to occur concurrently with or immediately after remedial action activities are completed. The excavations will therefore not be completely backfilled and will be left open for construction of the building foundation. The contractor is responsible for Site control, including all fencing, barricades, signage, etc., required in accordance with applicable regulations. Following the completion of the remedial action activities, remedial construction equipment will be decontaminated in the onsite decontamination area and removed from the Site or used for the building construction.

#### 5.3.1.11 Health and Safety and Community Air Monitoring

All remediation activities will be performed in a manner consistent with 29 CFR 1910 and 1926 and with the EHASP (which also includes the CAMP) and will be submitted under separate cover.

#### **5.3.1.12 Institutional Controls**

Remedial Alternative 1 involves the excavation and off-site disposal of soil exceeding the Unrestricted Use criteria presented in the Part 375 Regulations at any depth above or below the water table for all onsite areas impacted from historic releases/historic fill and backfill of excavated areas. Therefore, no institutional controls will be required for Remedial Alternative 1 (with the exception of an institutional control to restrict the use of groundwater as described in Section 8.5).

#### 5.3.2 Evaluation

The following sections provide a detailed evaluation of Remedial Alternative 1 based on the specific evaluation criteria.

#### 5.3.2.1 Overall Protection of Human Health and the Environment

Remedial Alternative 1 will be protective of human health and the environment by eliminating the concentrations in soil of constituents due to the historic releases/historic fill through source removal. The potential for human and environmental exposure to theses constituents onsite will be eliminated by excavation of the impacted materials to a depth of 25 feet across most of the Site and a maximum of 35 feet near the property boundary with 135 Kent Avenue/former rail loading dock, disposing of impacted material offsite and backfilling the area with material meeting the Unrestricted Use criteria.

# 5.3.2.2 Standards, Criteria and Guidance

Remedial Alternative 1 achieves compliance with the Unrestricted Use criteria for onsite areas, in conjunction with the selected groundwater remedy using *in situ* injections and a permeable reactive barrier (PRB) treatment wall, as discussed in Section 6. Removal of soil impacted with CVOCs is expected to result in significant reductions in onsite groundwater concentrations with time. However, as stated above the contamination from 135 Kent Avenue may re-contaminate the groundwater beneath 149 Kent Avenue, and contaminated groundwater flowing from 135 Kent through the Site may be detected in the proposed offsite monitoring well cluster at the northeast corner of Kent Avenue and North 5<sup>th</sup> Street (refer to Section 8).

The excavation will be backfilled with material meeting the Track 1 Unrestricted Use criteria presented in the Part 375 Regulations.

#### **5.3.2.3** Long-term Effectiveness and Permanence

Remedial Alternative 1 removes all soil that was impacted by the historic releases/historic fill. Therefore, incremental risk from soil impacts will be eliminated, engineering and institutional controls are not necessary (except for a restriction on the use of onsite groundwater), and the remedy will continue to meet RAOs in the future, thus providing a permanent long-term solution for the Site. Removal of soil impacted with CVOCs is expected to result in significant

reductions in onsite groundwater concentrations with time. However, as stated above the contamination from 135 Kent Avenue may re-contaminate the groundwater beneath 149 Kent Avenue, and contaminated groundwater flowing from 135 Kent through the Site may be detected in the proposed offsite monitoring well cluster at the northeast corner of Kent Avenue and North 5<sup>th</sup> Street (refer to Section 8).

# **5.3.2.4** Reduction in Toxicity, Mobility or Volume of Contamination through Treatment

By removing all soil with concentrations that exceeded the Unrestricted Use criteria, Remedial Alternative 1 permanently eliminates the toxicity, mobility, and volume of contaminants within the Site. Removal of soil impacted with CVOCs is expected to result in significant reductions in onsite groundwater concentrations with time.

# **5.3.2.5** Short-term Impacts and Effectiveness

The health and environmental risks associated with implementation of Alternative 1 are minimal. The remedy implementation time (approximately four months) is relatively short and the potential adverse impacts to the community and workers (e.g., increased traffic or exposure to contaminants during soil excavation and transportation) can be mitigated with engineering controls. These potential impacts are addressed in the site-specific EHASP and NYSDOH generic CAMP (which will be submitted under separate cover), which also detail monitoring during the construction and will be mitigated through the implementation of engineering controls as necessary (e.g., dust suppression and traffic control).

# **5.3.2.6** Implementability

The materials, equipment, and personnel associated with the implementation of Remedial Alternative 1 are commercially available and have been proven effective and reliable for remediation of the media of concern at the Site under similar circumstances. It is not anticipated that future remedial action following the remedial construction will be required.

#### 5.3.2.7 Cost

The construction and equipment costs associated with Remedial Alternative 1 are estimated at approximately \$28,800,000. The following assumptions were made to develop this cost estimate:

- It is anticipated that long-term Operation, Maintenance and Monitoring (OM&M) related to the soil remedy are not required due to the nature of the remedy, which is anticipated to achieve the unrestricted use goal;
- Excavation depths will be approximately 25 feet bfs across the entire Site to meet the unrestricted SCGs;
- Excavation depths in the hot spot (near the property line/ former rail loading dock) will be a maximum of 35 feet bfs to meet protection of groundwater SCGs; and
- The excavated volume is estimated to be approximately 37,500 cubic yards (2,375 of which are considered to be hazardous waste); and
- The Volunteer's contained-out request will be granted.

# **5.3.2.8** Community Acceptance

Remedial Alternative 1 will be subject to public notice and comment, per the requirements of the BCP. Therefore, the community acceptance criterion cannot be fully evaluated until the public comment period is completed.

#### **5.3.2.9** Land Use

The current and reasonably anticipated future zoning of the Site is R6A (contextual district where the Quality Housing bulk regulations are mandatory)/ M1-2 (manufacturing districts)/ MX8 (special mixed use). The future use of the property is a seven story mixed use (retail, commercial, residential) building with a ventilated garage located in the basement level and part of the first floor, and retail and/or retail storage in portions of the basement level. Following implementation of the remedy and completion of Site construction, the backfilled area will be restored to unrestricted use conditions (with an institutional control to restrict the use of groundwater as discussed in Section 8.5), which is an upgrade with respect to the reasonably anticipated future land use. Therefore, the significant cost of implementing Remedial Alternative 1 to bring the Site to a condition to allow unrestricted use is not warranted.

# 5.4 Onsite Soil Remedial Alternative 2: Track 4 Scenario for Restricted Residential Use via Excavation and Off-Site Disposal, Backfilling and Composite Capping

The following sections provide a description of the Track 4 Alternative for a restricted residential use scenario. An evaluation based on the specific evaluation criteria is also presented below.

# 5.4.1 Description

All activities will be performed as described in this section and in compliance with the following project plans, as applicable for Remedial Alternative 2:

- Quality Assurance Project Plan (QAPP; provided in the RIWP, January 31, 2013)
- Site Specific Environmental Health and Safety Plan (EHASP), which includes the Community Air Monitoring Plan (CAMP), will be submitted to NYSDEC under separate cover.

Plate 11 shows the areas to be excavated and/or capped under Remedial Alternative 2, which includes the following remedial elements:

- Site Mobilization, Site Preparation and Storm Water Management and Erosion Control;
- Dust and Odor Control Plans;
- Waste Characterization Sampling;
- Soil Excavation;
- Pre-Excavation Confirmation/Documentation Sampling;
- Dewatering and Water Treatment;
- Temporary Staging and Stockpiling;
- Transportation and Offsite Disposal;
- Backfilling;
- Composite cap;
- Site Restoration:
- Health and Safety and Community Air Monitoring; and
- Institutional Controls/ Environmental Easements.

Each of these elements is discussed in greater detail below.

# 5.4.1.1 Site Mobilization, Site Preparation and Storm Water Management and Erosion Control

These elements are the same as described for Remedial Alternative 1 in Section 5.3.1.1.

#### **5.4.1.2 Dust and Odor Control Plans**

These elements are the same as described for Remedial Alternative 1 in Section 5.3.1.2.

# **5.4.1.3** Waste Characterization Sampling and Well Abandonment

This element is the same as described for Remedial Alternative 1 in Section 5.3.1.3.

#### **5.4.1.4** Soil Excavation

Prior to excavation, areas designated as U210 listed hazardous waste, as shown on Plate 11, will be surveyed and staked in the field to provide visual reference. Stakes or flags will be maintained to the extent practicable and will be re-surveyed and replaced, as necessary, as the work proceeds. The "contained in" action level for PCE (12,000 µg/kg) is higher than the Part 375 protection of groundwater criteria for PCE (1,300 µg/kg). However, the limits presented in the July 25, 2013 "contained out" request and also shown on Plate 11, were drawn to endpoints meeting the "contained in" action level and are therefore shown as a larger area than that required to address exceedances of the protection of groundwater criteria (hot spot). Soil from the areas designated as U210 listed hazardous waste, as described in Section 4.2.1.2, will be segregated and stockpiled separately from non-hazardous waste, as described in Section 5.3.1.4 and stockpiles will be labeled accordingly. Comingling of listed hazardous waste with non-hazardous soil will be avoided to the extent practicable through the use of tarps/liners over areas not identified to have hazardous waste present adjacent to areas with hazardous waste. If comingling of waste occurs the resulting waste will be considered U210 listed hazardous waste for disposal purposes.

Based on a comparison of the available soil data to Protection of Groundwater SCOs (Plate 2), exceedances for CVOCs were observed within the hot spot shown on Plate 11 (in the area of the property line/ former rail loading dock) and at RA-7 in the southwest corner of the Site. The number of exceedances of SCGs for VOCs within the hot spot decreased with depth, concentrations generally decreased with depth and there was only one shallow exceedance for PCE in the 8-10 ft bfs interval at RA-36, east of RA-12.

Exceedances of the NYSDEC Part 375 Restricted Residential Use SCOs (Plate 2) for VOCs were all within the hot spot identified above. Exceedances for SVOCs and/or metals were

observed at soil borings RA-14 (11-13 feet bfs) and RA-33 (4-6 feet bfs). Waste characterization sampling of the top ten feet of urban fill/soil, which was not sampled extensively for the RI, will determine the quality of the material for disposal purposes.

As discussed previously, the structural engineer for the project has indicated installation of SOE and excavation cannot be completed any closer than 12 to 18 inches from the adjacent building foundations that share the property line with the Site due to concerns with structural stability. At the same time there are technical limitations to the equipment used to install the SOE that require the wall to be offset slightly from the adjacent structures. Therefore, due to the need for SOE within the hot spot area to allow removal of soil to the proposed depths at and along the property line while protecting the adjacent aging building along the north wall, it will be technically impracticable to excavate soil within 12 to 18 inches from the property line that has exceedances of the protection of groundwater SCG for VOCs. In the hot spot area, SOE consists of a secant pile wall constructed of overlapping bored structural concrete piles such that the minimum wall thickness will be a minimum of 24 inches with the outer edge of the secant pile wall being approximately 12 to 18 inches from the property line/adjacent structure. The secant pile wall will be a minimum of 60 feet long. The approximate limits of the secant pile wall are shown on Plate 11. Each secant pile is constructed by drilling and advancing a temporary steel casing from approximately 8 feet bfs (the assumed elevation of the footing for the adjacent building) to a maximum of 35 feet bfs within the hot spot (shallower for the portion that extends beyond RA-12 in the hot spot area to RA-36 where deeper excavation is not required for remedial purposes). The secant pile wall will serve as SOE for removal of impacted soil from the hot spot, as well as the foundation wall for the proposed structure in the hot spot area. The proposed building foundation and slab configuration have been designed such that soil remaining in place will be adequately separated from building occupants in non-garage spaces through the use of the secant pile wall, additional concrete slabs, vapor barriers, and/or waterproofing membranes, which will be discussed further in Section 7.

In the hot spot area, in order to reach the target depths of up to 35 feet and maintain stability of the adjacent building, soil will be removed by augering shafts 30-36 inches in diameter. Shafts will be overlapped as required to removal all soil within the hot spot. Shafts will be backfilled as the augering proceeds using gravel or lean concrete/flowable fill, as described in Section 5.4.1.9.

Alternatively soil within the hot spot will be removed by excavating trenches, which will be simultaneously backfilled with a bentonite/slurry mix. The deeper soils in the vicinity of RA-7 will be removed using either of the methods described above.

The entire Site will be excavated to a minimum of 12 ft bfs to facilitate construction of the building's basement slab. Localized deeper excavations for construction of footings and elevator pits will be required. Excavation depths are approximately nine inches below the bottom of the concrete (slab or footing) to allow for placement of six inches of gravel and a two-inch mud slab. This first cut for the building will extend beyond the property boundary on the south, east and west sides by a maximum of five feet in order to install SOE consisting of soldier piles and lagging.

Along portions of the north wall of the proposed building, outside of the hot spot (that will have the secant pile wall SOE as described above), underpinning of adjacent structures may not be possible due to the elevation of the footings relative to the water table elevation. In these areas, either the secant pile wall may be extended or a wedge of soil may be left in place to support adjacent structures. If selected as the construction method, the wedge of soil will start approximately at the elevation of the bottom of the adjacent footing and the wedge will extend inward into the Site between five and nine feet from the property line depending on the distance to the adjacent structure at a one foot horizontal to one foot vertical slope. The only exceedances of SCGs within this wedge of soil are for metals and SVOCs that exceeded Protection of Groundwater and Restricted Residential SCGs for soil, but that were not observed in groundwater samples. These soils will be capped with a composite cap comprised of building foundations, a waterproofing membrane, a two inch mud slab, and six inches of gravel, as described in Section 5.4.1.10.

Therefore, the estimated volume of soil to be removed for this alternative will be approximately 21,500 cubic yards. Of this total, approximately 2,090 cubic yards is considered to be hazardous waste (either U210 listed hazardous waste or characteristic hazardous waste). The remaining soil is assumed to be non-hazardous and may be sent for recycling, beneficial reuse, landfill cover, or direct landfilling at a Subtitle D facility, depending on waste characterization sample results.

Backfill includes common fill that meets the restricted residential use criteria, gravel or crushed stone from an approved source, as described in Section 5.4.1.9, or lean concrete (flowable fill) or bentonite slurry mix, depending on the soil replacement method selected. Sampling of the backfill material, as required, will be conducted to confirm that it meets the restricted residential use criteria, as described further in Section 5.4.1.9.

# **5.4.1.5** Pre-Excavation Confirmation/Documentation Sampling

Based upon the extensive sampling that has been completed at the Site, areas requiring excavation are generally well delineated, with the exception of a few localized areas. Therefore, the excavation areas will be based on removing soil to the locations of existing samples that meet the Protection of Groundwater SCGs, as described in Section 5.4.1.4 and existing samples will comprise the majority of the required confirmation/documentation samples for the project. Supplemental sampling will be conducted prior to implementation of the remedial action to make up the number of confirmation/documentation samples required and to confirm the extent of excavation. A work plan will be submitted to NYSDEC separately detailing the proposed sampling so that this work may proceed during the public comment period on the RAWP.

#### **Bottom Sampling**

Bottom sampling to represent the quality of soil remaining at the after excavation is complete will be conducted at a frequency of one sample per 3000 square feet of excavation area. The frequency of bottom sampling proposed for this alternative is less frequent than the guidance provided in NYSDEC DER-10 5.4 for excavations 20 to 300 feet in perimeter since the total excavation area is larger than the referenced excavation and the guidance allows for different sampling frequencies to be negotiated for larger excavations and since there are numerous existing samples throughout the Site to demonstrate soil quality.

For Remedial Alternative 2, the bottom samples will be comprised of:

- existing samples in the 10 to 14 feet bfs interval which are representative of remaining soil conditions (documentation samples);
- three supplemental samples collected from soil borings in this depth interval outside the hot spot to make up the required frequency across the Site (documentation samples); and

• One sample within the hot spot where the existing sample at RA-3 did not meet the Part 375 protection of groundwater criteria at the proposed 35 feet bfs excavation depth. Additional samples will be collected at a deeper interval if an exceedance of the protection of groundwater criteria was observed and the excavation depth in the vicinity of RA-3will be adjusted, if necessary, based upon the results.

The supplemental samples will be collected prior to excavation activities from soil borings drilled to the required depth. Locations of proposed supplemental bottom samples are shown on Plate 11 based upon the excavation scenario described in Section 5.4.1.4.

### Sidewall Sampling

In general for this Site, sidewall samples at a frequency of one sample per 60 linear feet are proposed. Again, the proposed sampling frequency is less frequent than the guidance provided in DER-10 due to the reasons stated above.

Documentation sampling will not be required around western, southern and eastern walls of the Site for this Track 4 scenario since excavation will extend five feet beyond the property line in these directions (see Section 5.4.1.4) in order to install the required SOE and no soil exceeding SCGs will potentially remain onsite. Along the north wall, where some soil will be left in place, as described in Section 5.4.1.4, two supplemental samples (documentation samples) within the soil remaining will be collected from borings just inside the property line to make up the required frequency of one sample per 60 feet of wall. The locations of the proposed documentation samples are shown on Plate 11.

In the hot spot area near the property line with 135 Kent Avenue, which will be excavated to up to 35 feet bfs, existing soil boring results (which are no more than 60 feet apart) will be used as sidewall confirmation samples to confirm that the soil remaining meets the protection of groundwater SCGs. In addition, the following supplemental confirmation samples will be collected from soil borings prior to implementation of the remedial action:

• One additional sidewall confirmation sample will be collected from on the west sidewall of the hot spot at a depth of 10-12 feet, based upon an exceedance of the SCGs at this depth interval at RA-2. If the results of this sample indicate an exceedance of SCGs, additional borings will be completed five feet further to the west until a sample with no exceedances of the protection of groundwater SCGs is obtained or until existing boring RA-5 is reached, whichever is sooner. The excavation area will be extended laterally in

the 0-22 foot bfs interval, if necessary, based upon these additional borings. The location of this first proposed boring is shown on Plate 11. The samples from RA-2 at 23-25 feet bfs and 33-35 feet bfs will be considered the documentation sidewall samples for the deeper portions of the hot spot excavation along the western sidewall.

• Confirmation samples in three depth intervals (10-12, 23-25 and 33-35 feet bfs) will be collected from a soil boring located along the southern sidewall of the hotspot between existing borings RA-24 and RA-27, due to exceedances of SCGs at RA-3 and RA-4. If exceedances are observed in these samples, the excavation will be extended to RA-26, which will be considered the documentation sample along the southern sidewall to 35 feet bfs.

Around the excavation area proposed at RA-7, four soil borings will be performed and sampled at 28 to 30 feet below grade to confirm that the exceedance of the protection of groundwater SCGs at 28 to 30 feet bfs at this boring was localized. If the results of these confirmation samples indicate an exceedance of the protection of groundwater SCG, additional borings will be completed five feet further from the original location with exceedances until a sample with no exceedances of the protection of groundwater SCG is obtained or until the property line is reached. The excavation area will be extended, if necessary, based upon these additional borings. The location of this first four proposed borings in this area are shown on Plate 11.

Confirmation soil samples will only be analyzed for the parameter(s) that exceeded the protection of groundwater criteria during the RI. Documentation samples will be analyzed for all parameters listed in Part 375 Table 6.8 (b). All samples will be field screened with a PID and placed in laboratory-supplied containers, stored on ice, and transported to the laboratory under chain of custody procedures in accordance with the QAPP. Roux Associates/Remedial Engineering will perform all confirmation sampling.

## **5.4.1.6** Dewatering and Water Treatment

These elements are the same as described for Remedial Alternative 1 in Section 5.3.1.6.

# **5.4.1.7** Temporary Staging and Stockpiling

These elements are the same as described for Remedial Alternative 1 in Section 5.3.1.7.

# **5.4.1.8** Transportation and Offsite Disposal

These elements are the same as described for Remedial Alternative 1 in Section 5.3.1.8.

# **5.4.1.9** Backfilling

In general, the proposed types of backfill and sampling requirements are the same as described for Remedial Alternative 1 in Section 5.3.1.9, except that backfill will meet the Part 375 Restricted Residential criteria.

For Remedial Alternative 2, approximately 650 cubic yards of common fill will be required to backfill portions of the excavation onsite. This material will be sampled in accordance with the table in Section 5.3.1.9; therefore, approximately six VOC grab samples and two composite samples for the remaining parameters will be required.

Approximately 974 cubic yards of gravel or crushed stone backfill meeting the above requirement for import without sampling will be used below the floor slab/footings and to backfill the hot spot area.

Lean concrete (flowable fill) or bentonite slurry mix may be used as backfill in some locations onsite, to be determined by the Contractor's means and methods. Sampling of this material will not be required.

# **5.4.1.10** Composite Cap

Soil exceeding the Restricted Residential SCGs will all be covered by the composite cap under Remedial Alternative 2. The composite cap consists of the concrete slab/footings/basement walls (nine inches minimum), waterproofing membrane [W.R. Grace Preprufe], approximately six inches of clean gravel, and a two-inch mud slab installed below the concrete slab/footings. The composite cap will be a minimum thickness of 18 inches and will be thicker where footings are located.

#### **5.4.1.11 Site Restoration**

Site construction activities are expected to occur concurrently with or immediately after remedial action activities are completed. The excavations will therefore not be completely backfilled and will be left open for construction of the building foundation. The contractor is responsible for Site control, including all fencing, barricades, signage, etc., required in accordance with applicable regulations. Following the completion of the remedial action activities, remedial

construction equipment will be decontaminated in the onsite decontamination area and removed from the Site or used for the building construction.

# 5.4.1.12 Health and Safety and Community Air Monitoring

These elements are the same as described for Remedial Alternative 1 in Section 5.3.1.11.

#### **5.4.1.13 Institutional Controls**

Remedial Alternative 2 (Track 4 restricted residential scenario) involves the excavation and offsite disposal of soil exceeding the Protection of Groundwater criteria for VOCs presented in Part 375 at any depth above or below the water table for all onsite areas impacted from historic releases and backfill of excavated areas. However, soil exceeding the Unrestricted Use criteria remains across the Site and a limited amount of soil exceeding the Restricted Residential criteria remains below the composite cap (building foundation/waterproofing membrane, gravel bedding and mud slab). Therefore, institutional controls will be required for Remedial Alternative 2, as described in Section 8.5.

#### 5.4.2 Evaluation

The following sections provide a detailed evaluation of Remedial Alternative 2 to achieve a Track 4 restricted residential remedy based on the specific evaluation criteria.

## 5.4.2.1 Overall Protection of Human Health and the Environment

The Remedial Alternative 2 will be protective of human health and the environment by removing the soil above and below the water table that was impacted above the Protection of Groundwater SCOs. The potential for human and environmental exposure to these constituents onsite will be reduced by excavation of the impacted materials, disposing of impacted material off site and backfilling the area with material meeting the restricted residential SCOs. The composite cap provides protection for human health and environmental exposure from impacts remaining above the restricted residential criteria for constituents other than VOCs. However, as stated above the contamination from 135 Kent Avenue may re-contaminate the groundwater beneath 149 Kent Avenue, and contaminated groundwater flowing from 135 Kent through the Site may be detected in the proposed offsite monitoring well cluster at the northeast corner of Kent Avenue and North 5<sup>th</sup> Street (refer to Section 8).

## 5.4.2.2 Standards, Criteria and Guidance

SCGs for the proposed remedy are presented in Section 4.0. Remedial Alternative 2 will achieve compliance with the protection of groundwater criteria for VOCs at all depths above and below the water table, to the extent practicable (with localized impacts remaining after construction due to technical impracticability). Compliance with the Restricted Residential SCGs are met based on no exposed soil being present after building construction, which acts as a composite cap for the entire Site. Removal of soil impacted with CVOCs is expected to result in significant reductions in onsite groundwater concentrations with time. However, as stated above the contamination from 135 Kent Avenue may re-contaminate the groundwater beneath 149 Kent Avenue, and contaminated groundwater flowing from 135 Kent through the Site may be detected in the proposed offsite monitoring well cluster at the northeast corner of Kent Avenue and North 5<sup>th</sup> Street (refer to Section 8).

The excavation will be backfilled with material meeting the Part 375 Restricted Residential criteria.

# **5.4.2.3** Long-Term Effectiveness and Permanence

Remedial Alternative 2 removes all soil onsite that was impacted above the Protection of Groundwater criteria for VOCs and mitigates human health and environmental exposures through the composite cap. Remedial Alternative 2 returns the Site to conditions that are compatible with the zoning and future use of the Site as a seven story mixed use (retail, commercial, residential) building with a ventilated garage located in the basement level and part of the first floor, and retail and/or retail storage in portions of the basement level. As such, Remedial Alternative 2 provides a permanent long-term solution for the Site. However, as stated above the contamination from 135 Kent Avenue may re-contaminate the groundwater beneath 149 Kent Avenue, and contaminated groundwater flowing from 135 Kent through the Site may be detected in the proposed offsite monitoring well cluster at the northeast corner of Kent Avenue and North 5<sup>th</sup> Street (refer to Section 8).

# **5.4.2.4** Reduction in Toxicity, Mobility or Volume of Contamination through Treatment

By removing all soil above and below the water table impacted above Protection of Groundwater criteria for VOCs to the extent practicable (with localized impacts remaining after construction due to technical impracticability), Remedial Alternative 2 will permanently reduce the toxicity, mobility, and volume of contaminants at the Site and will result in groundwater quality improvement with time.

# **5.4.2.5** Short-term Impacts and Effectiveness

The health and environmental risks associated with implementation of Remedial Alternative 2 are minimal. The remedy implementation time is relatively short (approximately three to four months), which would occur simultaneously with excavation and construction activities and the potential adverse impacts to the community and workers (e.g., increased traffic and exposure to contaminants during soil excavation and transportation) can be mitigated with engineering controls. These potential impacts will be addressed in the site-specific EHASP and NYSDOH generic CAMP (which will be submitted under separate cover), which also detail monitoring during the construction. These risks will be mitigated through the implementation of engineering controls as necessary (i.e., dust suppression, odor control and traffic control).

## 5.4.2.6 Implementability

The materials, equipment, and personnel associated with the implementation of Remedial Alternative 2 are commercially available and have been proven effective and reliable for remediation of the media of concern at the Site under similar circumstances. Although proximity of utilities is still a concern, Remedial Alternative 2 is feasible. It is not anticipated that future remedial action for soil following the remedial construction will be required.

# 5.4.2.7 Cost

The construction and equipment costs associated with Remedial Alternative 2 are estimated at approximately \$12,400,000. The following assumptions were made to develop this cost estimate:

• It is anticipated that long-term Operation, Maintenance and Monitoring (OM&M) related to the soil remedy are not required due to the nature of the remedy.

- Excavation depths will be minimum of 12 feet bfs across the entire Site.
- Excavation depths in the hot spot (near the property line/ former rail loading dock) will be a maximum of 35 feet bfs to meet protection of groundwater SCGs.
- The excavated volume is estimated to be approximately 21,500 cubic yards (2,090 of which are considered to be hazardous waste).
- The composite cap consists of the building's concrete foundation, waterproofing membrane, two inch mud slab and six inch gravel bedding layer.
- The Volunteer's contained out request will be granted.

Operation and maintenance is not required due to the nature of the remedy; however, annual monitoring costs, including annual inspection and annual periodic review report, are estimated to be \$10,500 per year.

# **5.4.2.8** Community Acceptance

Remedial Alternative 2 will be subject to public notice and comment, per the requirements of the BCP. Therefore, the community acceptance criterion cannot be fully evaluated until the public comment period is completed.

## **5.4.2.9 Land Use**

The current and reasonably anticipated future zoning of the Site is R6A (contextual district where the Quality Housing bulk regulations are mandatory)/ M1-2 (manufacturing districts)/ MX8 (special mixed use). The future use of the property is a seven story mixed use (retail, commercial, residential) building with a ventilated garage located in the basement level and part of the first floor, and retail and/or retail storage in portions of the basement level. Following implementation of the remedy and completion of Site construction, the requirements for a restricted residential remedy will be met, which is consistent with the reasonably anticipated future land use and the zoning.

#### 5.5 Identification of Recommended Remedial Alternative for Soil

Remedial Alternative 2, including excavation and backfill of soil exceeding the protection of groundwater SCGs within the hot spot and urban fill across the Site, backfill with material

meeting the restricted residential SCGs and composite capping, is the recommended remedy for the soil at the Site.

Remedial Alternative 2 for soil was selected for implementation at the Site since it adequately meets each of the evaluation criteria, but costs significantly less than the additional excavation and offsite disposal required to achieve unrestricted use of the Site (which is not required based upon zoning or proposed use) as described for Remedial Alternative 1.

#### 6.0 GROUNDWATER REMEDY SELECTION PROCESS

The following is a description of the alternatives analysis and remedy selection process for onsite groundwater.

## **6.1 Remedial Alternatives Analysis**

Several potential remedial technologies have been considered for the impacted groundwater that may be applicable for the Site based on the results of the RI. The potential remedial technologies that will be evaluated for the Site are (1) pump and treat, (2) air sparging/soil vapor extraction (AS/SVE), (3) *in situ* zero valent iron (ZVI) injections, and (4) permeable reactive barrier (PRB) treatment wall. The following sections discuss an overview of each remedial technology.

## **6.1.1 Pump and Treat**

Pump and treat is a proven ex-situ remedial technology to hydraulically contain and treat contaminated groundwater. Pump and treat consists of the removal of impacted groundwater from the subsurface, aboveground treatment for the contaminants of concern, and discharge of treated water to a surface water body or Publicly Owned Treatment Works (POTW). The impacted groundwater is pumped to a treatment system via underground piping for treatment. Due to the concentration and type of VOCs in the groundwater on the western third of the Site, it is anticipated that air stripping followed by sand filtration and granular activated carbon (GAC) would be used for treatment. Air stripping uses countercurrent flows of air and water for removal of VOCs from the groundwater and GAC absorbs VOCs. It is anticipated that treatment of the vapor stream from the air strippers would be required.

During the RI, it was determined that the Site soils were relatively tight (significant amounts of silt and fine sand was observed) and it was difficult to extract groundwater from the subsurface. This, coupled with the potential need for a substantial treatment system and long-term treatment duration due to the concentrations of CVOCs in groundwater observed in the western third of the Site and those expected to be present beneath the 135 Kent Avenue property, a pump and treat system will not be technically practicable or cost effective as the remedy for groundwater.

In addition, a pump and treat system requires onsite equipment, and consequently a long-term commitment of valuable space within the proposed building, long term operation and

maintenance (O&M) activities and significant power usage. Pump and treat is not recommended for long term treatment of groundwater at the Site.

However, as described in Section 5.4.1.6, a dewatering system and associated water treatment system may be required temporarily for construction of the building foundation slab and footings. The system will be operated by a subcontractor specializing in dewatering. Unless water is disposed of offsite, treatment of the dewatering water to the "contained-in action levels" for chlorinated solvents and the NYCDEP sewer discharge limits for other parameters will be provided by an onsite water treatment system with discharge to the New York City sewer system, as described in Section 4.2.2.2.

Although it is not possible at this time to accurately determine the quantity of water that will be extracted or the mass of contaminants that will be removed through treatment, this temporary dewatering and water treatment system will effectively treat a portion of the shallow onsite impacted groundwater during its period of operation. Alternatively, extracted water may be disposed of offsite. As such, temporary groundwater extraction and treatment will be recommended as part of the remedy for groundwater.

## 6.1.2 Air Sparging/Soil Vapor Extraction

AS/SVE are proven remedial technologies which are used to remediate VOCs. Air sparging is an *in situ* mass transfer technology that can remove VOCs that are dissolved in groundwater, adsorbed to saturated zone soils, and trapped in soil pores. Removal of VOCs by air sparging is achieved by injecting compressed air into the saturated zone through one or more air sparging wells. During contact with the groundwater and the adsorbed (residual) phases, VOCs are transferred (stripped) to the vapor phase. Soil vapor extraction removes VOCs from the unsaturated zone by collecting VOC vapors in the soil and the VOCs from the unsaturated zone as a result of the volatilization caused by air sparging. The contaminants in the extracted soil vapors are then removed or destroyed by an off-gas treatment unit prior to discharge to the atmosphere. When used in combination, AS/SVE forms an effective system for remediation of VOCs in the subsurface.

The applicability of AS/SVE for the treatment of VOCs at the Site is highly dependent upon the type of soil. The ability of AS/SVE is greatly influenced by the ability to achieve significant air distribution within the target zone. Air distribution is controlled by aquifer hydraulic conductivity and homogeneity. The soils, comprised significantly of silts and fine sand, at the Site are not amenable to AS/SVE because they will result in a small radius of influence that will yield low mass transfer efficiencies and the need for closely spaced AS/SVE wells. The tight soils will also limit the ability to effectively capture vapors in the vadose zone. Therefore, AS/SVE system would not be technically practicable or cost effective and is not recommended for the Site.

# 6.1.3 In Situ Treatment Via Zero Valent Iron Injections in the Vicinity of MW-4

Although the sampling completed during the RI did not identify a source of VOCs in the immediate vicinity of MW-4, removal of a minimum of 12 feet of soil in this area for construction of the basement will likely remove any potential onsite sources (potentially due to surface spills from rail operations) that may have contributed to the concentrations of VOCs in groundwater at this location. If unidentified sources are present within the fill around this well, removal of this soil will likely improve groundwater quality over time.

In addition to source removal, treatment via *in situ* ZVI is proposed in the vicinity of this well.

ZVI is a reactive material that has successfully treated CVOCs in groundwater when injected into the subsurface. ZVI is also known by its trade name FEROX<sup>TM</sup>, and promotes degradation of CVOCs in groundwater through a variety of abiotic and biological processes reactions. ZVI has been known to treat CVOCs by:

- Direct reduction at the metal surface;
- Reduction by ferrous iron; and
- Reduction by hydrogen with catalysis.

The ZVI is proposed to be injected into the subsurface using a technique known as pneumatic fracturing (PF). The general approach of the PF technology is to create a network of artificial fractures for the injection of atomized ZVI. The objective of PF is to overcome the transport limitations that are inherent at many low permeability sites. PF is a process whereby a gas is

injected into the subsurface at pressures exceeding the natural *in situ* pressures (i.e., overburden pressure, cohesive stresses, etc.) and at flow volumes exceeding the natural permeability of the formation, which creates a fracture network within the subsurface. The result is the enhancement of existing fractures and planes of weakness and the propagation of a dense fracture network surrounding the injection well. In turn, this fracture network enhances the overall effective bulk permeability of the formation, which allows the ZVI to achieve more complete contact with impacted soil and groundwater, thus improving the effectiveness of the *in situ* treatment approach. ZVI typically continues to provide treatment for three to seven years.

The ZVI injections are proposed in the vicinity of monitoring well MW-4 in order to treat CVOCs in the groundwater. A pilot test is proposed to determine injection radius of influence, injection spacing, etc. A pilot test work plan will be submitted to the NYSDEC separately for review and approval, so this work can get underway as soon as possible. It is anticipated that the pilot test will also be initiated during the review and public comment period on the RAWP.

# **6.1.4** Permeable Reactive Barrier Treatment Wall

PRBs are a proven *in situ* remedial technology used to remediate CVOCs in groundwater. A PRB is a continuous, *in situ* permeable treatment zone designed to intercept and remediate a contaminant plume. The treatment zone may be created directly using reactive materials such as iron. PRBs are designed to be more permeable than the surrounding aquifer materials so that contaminants are treated as groundwater flows through without significantly altering groundwater hydrogeology. The reactive material proposed for use in the PRB at the Site is ZVI, which is also known by the trade name FEROX<sup>TM</sup>. ZVI promotes the degradation of CVOCs through various abiotic and biological processes, as discussed in Section 6.1.3.

Pneumatic fracturing injections, standard hydraulic pumping or a combination of the two will be used for installation of the PRB. ZVI typically continues to provide treatment for three to seven years.

A PRB is proposed for installation at the southwest corner of the Site where Kent Avenue and North 5<sup>th</sup> Street meet. The PRB will be situated downgradient of areas with known CVOC groundwater contamination (i.e., near monitoring well MW-1) on the western third of the Site in

order to prevent, to the extent practicable, offsite migration of contaminated groundwater from beneath the Site. Final adjustments will be made to the PRB design (i.e., radius of influence, injection point locations, etc.) during the design phase of the project. The PRB design currently anticipated includes a 150 foot wall installed in an "L" shape along the property line as described below:

- One side of the "L" will head north along Kent Avenue beginning at the corner of Kent Avenue and N. 5<sup>th</sup> Street for approximately 60 feet; and
- One side of the "L" will head east along N. 5<sup>th</sup> Street beginning at the corner of Kent Avenue and N. 5<sup>th</sup> Street for approximately 90 feet.

At the southwest corner of the property, two rows of injection points approximately 60 feet in length (30 feet in each direction) will be installed to treat relatively high concentrations of CVOCs observed groundwater near monitoring well MW-1. The remainder of wall length noted above in each direction will be comprised of a single row of injections. It is anticipated that the spacing between injection points will be 16 foot-on-center with an assumed radius of influence of 8 feet. The depth of the wall is anticipated to be between approximately 35 and 45 feet, which is the depth at which concentrations of CVOCs in onsite groundwater have been observed to significantly decrease, depending on sample location.

## **6.2 Recommended Groundwater Remedy**

In addition to the screening analysis above, the selection of remedial alternatives has also considered other factors such as industry experience in the various technologies' application, NYSDEC acceptance of the technologies, and logistics (e.g., construction for future development of property). Based on the technology screening process, and to complement the implementation of the removal of onsite contributing source areas of soil contamination above the water table and below, the proposed groundwater remedy includes:

- localized in situ ZVI injections in the vicinity of MW-4;
- extraction and treatment of shallow impacted groundwater during foundation construction using a temporary Site-wide dewatering and treatment system with discharge to the New York City sewer system (unless water is disposed offsite); and
- PRB treatment wall in the southwest portion of the Site to reduce concentrations in groundwater onsite and mitigate, to the extent practicable, offsite migration of impacted groundwater.

# **6.3** Evaluation of Proposed Groundwater Remedy

The purpose of this engineering evaluation is to demonstrate that the proposed remedy can achieve the cleanup objectives for the Site. This section fulfills the requirements stipulated in DER-10 by evaluating the proposed remedy against the factors given in 6 NYCRR 375-1.8(f). Prior to the injection events, an Underground Injection Control (UIC) notification will be sent to the USEPA.

## 6.3.1 Overall Protection of Human Health and the Environment

The groundwater impacts will be reduced onsite, to the extent possible (by the site-wide temporary dewatering and treatment system [or offsite disposal of extracted water] and the *in situ* ZVI injections around MW-4) combined with groundwater monitoring. In addition, the removal of soil exceeding the protection of groundwater criteria for VOCs will remove onsite contributing sources of contamination and improve groundwater quality with time.

The PRB treatment wall will mitigate offsite migration of impacted groundwater and protect human health and the environment, to the extent practicable, considering the likelihood of a continuing source of groundwater impacts migrating from the adjacent 135 Kent Avenue property that will not be addressed by the time the remediation and redevelopment of the Site is completed.

Contaminated groundwater flowing from 135 Kent through the Site may be detected in the proposed offsite monitoring well cluster at the northeast corner of Kent Avenue and North 5<sup>th</sup> Street (refer to Section 8). Groundwater monitoring will confirm the effectiveness of the remedy and will indicate if migration of contaminants from the adjacent property at 135 Kent is occurring and impacting Site groundwater quality (i.e., if an increase in groundwater concentrations is observed after an initial decrease).

## 6.3.2 Standards, Criteria and Guidance

The proposed remedy will utilize the temporary dewatering and treatment system (unless water is disposed of offsite) during building construction, *in situ* ZVI injections and PRB treatment wall with groundwater monitoring to reduce concentrations in the groundwater onsite and to mitigate off-site impacts to NYSDEC Water Quality Standards Class GA groundwater, to the

extent practicable, beyond the Site boundary. In addition, the removal of soil exceeding the protection of groundwater criteria for VOCs will remove onsite contributing sources of contamination and improve groundwater quality with time.

Since investigation activities on the 135 Kent Avenue property have not yet begun and since remedial activities at 135 Kent Avenue will not be underway until after the Volunteer has completed their remediation and redevelopment of the Site, it is likely not feasible to achieve the groundwater SCG and it will not be practicable for the Volunteer to prevent migration from the 135 Kent Avenue property onto the Site or to entirely eliminate offsite migration from their Site, due to the likelihood of a continuing offsite source beneath 135 Kent Avenue.

## **6.3.3** Short-Term Impacts and Effectiveness

The risks posed to the community, workers and environment due to the implementation of the proposed remedy are minimal:

- The temporary dewatering and water treatment (or offsite disposal of extracted water) and the *in situ* ZVI injections will be performed onsite within a defined construction zone and the PRB treatment wall will be installed within the sidewalk in the space between the SOE and the building foundation in the southwest portion of the Site. The treatment reagents will be temporarily stored within containers and injected into groundwater below land surface, thus minimizing the exposure to the injected reagents.
- It is possible that workers on the Site will be exposed to the groundwater during the dewatering and water treatment system operation (or offsite disposal of extracted water), in situ ZVI injections and installation of the PRB treatment wall. Other potential risks include material handling, electrical shock, off-gas vapor inhalation, general trip hazards, and noise. The workers will be trained in the safe operation and maintenance and the equipment and will be required to review and implement the requirements of the EHASP and CAMP prepared for the Site (which will be submitted under separate cover).

## **6.3.4** Long-Term Effectiveness and Permanence

The groundwater beneath the Site is not used as a drinking water source. The proposed remedy will utilize the temporary dewatering and treatment system (or offsite disposal of extracted water) during building construction, *in situ* ZVI injections and PRB treatment wall with groundwater monitoring to reduce concentrations in the groundwater onsite and to mitigate off-site impacts to the extent practicable, beyond the Site boundary. In addition, the removal of soil exceeding the protection of groundwater criteria for VOCs will remove onsite contributing

sources of contamination and improve groundwater quality with time. The proposed injections around MW-4 and the PRB treatment wall do not require any permanent features to remain in place after the injections are complete. In addition, they are passive in nature and do not require any long term operation and maintenance, only monitoring.

Long term exposure of occupants of the proposed building to potential vapor resulting from the impacted groundwater will be mitigated through the waterproofing, vapor barrier, ventilated garage and passive SSDS below portions of the Site, which are discussed further in Section 7.

However, since investigation activities on the 135 Kent Avenue property have not yet begun and since remedial activities at 135 Kent Avenue will not be underway until after the Volunteer has completed their remediation and redevelopment of the Site, it is likely not feasible to entirely prevent migration from the 135 Kent Avenue property onto the Site or to entirely eliminate offsite migration from their Site, due to the likelihood of an offsite continuing source beneath 135 Kent Avenue.

# **6.3.5** Reduction of Toxicity, Mobility, and Volume of Contamination through Treatment

The toxicity, mobility and volume of contamination in groundwater will be permanently reduced through treatment via the three proposed treatment components (temporary dewatering and treatment system (or offsite disposal of extracted water), *in situ* ZVI injections and PRB treatment wall). In addition, the removal of soil exceeding the protection of groundwater criteria for VOCs will remove onsite contributing sources of contamination and improve groundwater quality with time.

However, recontamination of the onsite groundwater may occur due to the potential for a continuing source of contamination on the neighboring property at 135 Kent Avenue. This cannot be practicably prevented on the Site given all of the circumstances described above.

# 6.3.6 Implementability

Subcontractors specializing in dewatering will operate the temporary Site-wide dewatering and water treatment system (unless extracted water is disposed of offsite). Dewatering and water treatment system components are standard and readily available. Environmental contractors and

personnel have experience in applications utilizing the proposed *in situ* ZVI treatment reagent (for the injections at MW-4 and the PRB treatment wall). Additional expertise in the *in situ* injections is readily available through product suppliers, literature, and local contractors. The supplies for the *in situ* injections are readily available.

#### **6.3.7** Cost

The implementation and monitoring costs associated with the groundwater remedy are estimated at approximately \$475,000. Long-term operation and maintenance is not required due to the temporary nature of the dewatering and treatment system (or offsite disposal of extracted water) during building construction, the temporary injection point procedures and the *in situ* nature of the remedy. Monitoring and reporting for the recommended remedy for groundwater is estimated at \$51,500 for the first year after implementation and is not anticipated to extend beyond that period.

# **6.3.8** Community Acceptance

The proposed remedy set forth herein will be subject to public notice and comment, per the requirements of the BCP. Therefore, the community acceptance criterion cannot be fully evaluated until the public comment period is completed.

#### **6.3.9 Land Use**

Following construction of the building slab and footings, the temporary dewatering and treatment system (if used) will be removed. No permanent features will remain in place after the remedy is complete thereby retaining compatibility with future land use.

# 7.0 RECOMMENDED SOIL VAPOR REMEDY

The recommended remedy for soil vapor focuses on reducing the concentrations of VOCs in soil vapor through onsite contributing source removal, eliminating exposure pathways within the proposed mixed use building to the extent practicable to protect human health and avoiding drawing in potentially contaminated soil vapor from the neighboring property at 135 Kent Avenue.

The majority of the basement and first floor of the building will be occupied by ventilated parking garage space. However, there are limited retail and/or retail storage spaces located in the basement level and first floor along portions the north wall where soil may remain in place depending upon the SOE methods selected, which is a potential concern related to soil vapor intrusion. The following sections describe the recommended remedy for soil vapor.

# 7.1 Summary of Recommended Soil Vapor Remedy

The recommended remedy includes source removal, building design features to limit potential human exposure to impacted soil vapor and engineering controls, as described below.

#### 7.1.1 Source Removal

The following elements of the remedy will remove the major onsite contributing sources of CVOC contamination based on data collected during the RI:

- proposed excavation and offsite disposal of CVOC impacted soil in the hot spot area (adjacent to the property line with 135 Kent Avenue/former rail loading dock) and in the vicinity of RA-7 above and below the water table to the extent practicable; and
- temporary extraction and treatment (or offsite disposal) of shallow impacted groundwater during dewatering for building construction.

Removal of these onsite contributing sources will significantly improve the quality of onsite soil vapor.

## 7.1.2 Foundation Configuration to Limit Potential Exposure to Soil Vapor

The proposed building foundation and slab configuration have been designed such that soil remaining in place above the water table will be adequately separated from building occupants in

non-garage spaces through the use of the secant pile wall, additional concrete slabs, vapor barriers, and/or waterproofing membranes, which will be discussed further in Section 7.

Two generic sections along the north wall that depict these features are presented on Figure 5 (Section 1-1 – Areas without Secant Pile Wall) and Figure 6 (Section 2-2 – Areas with Secant Pile Wall).

## Section 1-1 – Without Secant Pile Wall

This section shows a typical configuration of the foundation outside of the hot spot area where a wedge of soil may be left in place to support the adjacent building in lieu of a secant pile wall. The exact dimensions and configuration of the layout may vary along the length of the north wall where soil remains in place above the water table next to non-garage occupied spaces, but the general concept is consistent.

In these areas, an additional concrete slab (not required for structural stability) will be poured along the face of the wedge of soil and a waterproofing membrane will be installed below this slab, both of which have been included in the design specifically to limit the potential for vapor intrusion. The waterproofing membrane will extend below the entire basement floor slab/footings and it will extend vertically up the exterior foundation footing and exterior foundation wall to the first floor of the building above the first floor slab elevation. Specifics regarding the waterproofing are described in Section 7.1.3.

As an additional measure of protection against soil vapor intrusion, a 15-mil vapor barrier will be installed on the outside of the exterior basement wall and the underside of the first floor slab. The space ("void") created between the additional concrete slab, the exterior basement wall and the exterior foundation footing will be filled with clean common fill as described in Section 5.4.1.9, thus eliminating occupied space being immediately adjacent to soil remaining in place above the water table.

# Section 2-2 – With Secant Pile Wall SOE

Section 2-2 is located within the portion of the Site where the proposed secant pile wall will provide SOE for excavation of soil with exceedances of the protection of groundwater criteria for

VOCs up to 35 feet bfs and will serve as the foundation for the building. Although structural stability issues associated with the adjacent aging building make it technically impracticable to remove 12 to 18 inches of soil between the outer edge of the secant pile wall and the property line, additional measures have been included in the design to limit potential soil vapor intrusion. These measures, which have been specifically designed to maximize the distance between occupied non-garage spaces and soil remaining in place above the water table and limit the potential for soil vapor intrusion, include:

- the secant pile wall itself provides a physical barrier, a minimum of 24 inches thick, between the soil remaining in place and the exterior wall of the basement.
- extending the waterproofing membrane that will be installed beneath the entire basement floor slab up the exterior basement foundation wall, below the exterior foundation footing and along the exterior first floor foundation wall to above the level of the first floor slab; and
- filling the void space created between the exterior basement wall, the exterior footing, the exterior foundation wall and the first floor slab with concrete.

# 7.1.3 Installation of Redundant Layers of Waterproofing Membrane and Vapor Barrier

As described in Section 7.1.2, the building foundation has been designed to limit the potential for soil vapor- intrusion and maximize the distance between soil remaining in place above the water table and occupied non-garage spaces.

The design includes multiple, redundant layers of either waterproofing membrane and/or vapor barrier, depending upon the Site conditions, as shown on Figures 5 and 6.

# Waterproofing Membrane

The primary components of the proposed waterproofing system consist of factory-made high density polyethylene (HDPE) composite membranes rolled onto the prepared subgrade and vertical walls. Waterproofing products that will be used are likely to include Preprufe® Waterproofing System (Preprufe® 300R and 160R) as manufactured by W.R. Grace. HDPE tape and Bithuthene liquid membranes will be used to seal the seams between the segments of HDPE membranes. The installation contractor will be pre-certified by W.R. Grace as a trained applicator of their products.

## Vapor Barrier

A 15-mil vapor barrier will be used on the exterior wall of the basement and below the first floor slab, which are above the water table, as a redundant protective measure against soil vapor intrusion outside of the hot spot area. Stego Wrap, as manufactured by Stego Industries is a potential vapor barrier to be used for this purpose.

# 7.1.4 Ventilated Parking Garage

An active mechanical ventilation system in the first floor and basement garage areas will be installed as a component of the building and will be operated in accordance with the requirements of the New York City Department of Buildings. The majority of the cellar and a large portion of the first floor is occupied by the ventilated garage. The ventilated garage provides a level of protection from potential accumulation of vapors migrating from underlying soil in the garage areas in the unlikely event of a breach of the waterproofing membrane or vapor barrier.

# 7.1.5 Installation of Passive Sub-Slab Depressurization System

Since the majority of the Site (aside from some soil remaining along portions of the north wall) will be excavated and the basement slab will be installed below the water table, a SSDS is not possible below the majority of the building.

Based upon the soil vapor sampling results, which indicated a maximum concentration of PCE in soil vapor of over  $25,000,000 \,\mu\text{g/m}^3$  in the sidewalk to the north of the property at 135 Kent Avenue 100 feet from the property line of the Site, it is not prudent for the Volunteer to implement any measures that would potentially draw that highly impacted soil vapor toward the proposed building onsite.

Therefore, a SSDS will not be installed below the wedge of soil that will remain to support the adjacent buildings along portions of the north wall.

Instead, as a measure of protection in addition to the redundant waterproofing/vapor barriers, a passive SSDS will be installed in any areas that will not have a secant pile wall present and

where soil above the water table remains in place adjacent to potentially occupied non-garage space, as shown on Figure 5.

The passive SSDS will consist of four-inch diameter perforated PVC collection pipes embedded in a gravel layer wrapped in filter fabric. PVC vapor collection piping will be connected to the perforated piping and extended through one or more sealed penetrations in the first for slab and will be routed to the roof of the building to vent to the atmosphere.

The passive SSDS will be constructed in accordance with Section 4.2 of NYSDOH Guidance including the following provisions:

- The passive SSDS will be designed by a professional engineer;
- An information package documenting the design of the passive SSDS will be provided to the building tenants;
- The system piping will be sealed with the appropriate sealant to prevent migration of potential vapors into non-garage occupied spaces; and
- The collection pipe network will be below the proposed vapor barrier membrane, consisting of a vapor-resistant 15-mil thick polyethylene sheeting or equivalent.

Based upon the proposed onsite source removal, foundation features designed to limit potential vapor intrusion, redundant waterproofing/vapor barriers, ventilated garage, and passive SSDS it is not expected active vapor mitigation will ever be required for the proposed building. This will be confirmed through the soil vapor monitoring program proposed in Section 8. However, if mitigation is found to be necessary based on the results of the soil vapor monitoring program described in Section 8, the passive SSDS will be converted to an active SSDS. The active SSDS will be designed in accordance with all provisions of Section 4.2 of NYSDOH Guidance.

# 7.1.5.1 Post-mitigation Monitoring

If mitigation is found to be necessary and the proposed passive SSDS is converted to an active SSDS, post-mitigation monitoring of the onsite building will be conducted in accordance with all provisions of Section 4.3 of NYSDOH Guidance. Operation, maintenance and monitoring (OM&M) activities in accordance with Section 4.4 of the NYSDOH Guidance will be included in the Site Management Plan described in Section 8.5 below.

# 7.2 Evaluation of Proposed Soil Vapor Remedy

The purpose of this engineering evaluation is to demonstrate that the proposed soil vapor remedy will be protective of human health. This section fulfills the requirements stipulated in DER-10 by evaluating the proposed remedy against the factors given in 6 NYCRR 375-1.8(f) and Section 4.2 of DER-10.

#### 7.2.1 Overall Protection of Human Health and the Environment

The proposed onsite contributing source removal, foundation features designed to limit potential vapor intrusion, redundant waterproofing/vapor barriers, ventilated garage space and passive SSDS are protective of human health and the environment. This will be confirmed through the soil vapor monitoring program proposed in Section 8. Results indicating the need for active mitigation will require follow up confirmation sampling and potential conversion of the passive SSDS to an active SSDS, as described in Section 7.1.5.

## 7.2.2 Standards, Criteria and Guidance

The proposed remedy will mitigate the potential for soil vapor intrusion into occupied non-garage spaces of the building to below the NYSDOH guidance values (Matrices 1 and 2). The proposed monitoring plan will confirm the effectiveness of the mitigation measures in the non-garage occupied spaces.

## 7.2.3 Short-Term Impacts and Effectiveness

The risks posed to the community, workers, and environment due to the implementation of the proposed remedy are minimal:

• It is possible that workers on the Site will be exposed to soil vapor during the source removal, waterproofing/vapor barrier installation and passive SSDS installation. Other potential risks include material handling, electrical shock, off-gas vapor inhalation, general trip hazards, and noise. These hazards will be addressed by the implementation of the Site-specific EHASP and CAMP prepared for the Site (which will be submitted under separate cover).

## 7.2.4 Long-Term Effectiveness and Permanence

Onsite source removal (soil and shallow groundwater) will reduce the concentrations of CVOCs in the onsite soil vapor due to these contributing onsite sources. The materials of construction proposed for the waterproofing membrane, vapor barrier and passive SSDS are all standard

durable and reliable materials and are not expected to degrade over time. Compatibility of the waterproofing membrane with the Site groundwater constituents is not anticipated to be an issue, but will be evaluated by the vendor during the design. Therefore, no significant threats, exposure pathways or risks to the public or environment will be present at the Site in the long-term. The ventilated parking garage will be a permanent feature of the proposed building. However, it should be noted that the potential offsite sources of CVOC impacts on the neighboring property at 135 Kent Avenue could be a continuing source of impacted soil vapor.

# 7.2.5 Reduction of Toxicity, Mobility, and Volume of Contamination through Treatment

Onsite source removal, including soil and groundwater, impacted by CVOCs above SCGs will reduce the concentrations of CVOCs in soil vapor. Sample results indicating vapor intrusion into the void space where the passive SSDS will be installed will require confirmation sampling and potential conversion of the passive SSDS to an active system as described in Section 7.1.5.

# 7.2.6 Implementability

Materials of construction are standard and skilled personnel are readily available to construct the various elements proposed.

#### 7.2.7 Cost

The implementation costs associated with the proposed remedy for soil vapor are estimated at approximately \$522,000. Long-term operation and maintenance of the garage ventilation system are considered part of normal building maintenance and are not included as a remedial cost. Operation and maintenance of the other components are not required due to the passive nature of the remedy, however, costs would increase if the passive SSDS needed to be converted to an active system. Monitoring of the soil vapor remedy is estimated at approximately \$31,000 for the first year, after which the Volunteer will request to discontinue monitoring if no evidence of vapor intrusion is observed.

# 7.2.8 Community Acceptance

The proposed remedy set forth herein will be subject to public notice and comment, per the requirements of the BCP. Therefore, the community acceptance criterion cannot be fully evaluated until the public comment period is completed.

# **7.2.9 Land Use**

Following implementation of the remedy, there will be no compatibility issues with the building due to the subsurface nature of the waterproofing membrane/vapor barrier and the passive SSDS. The vapor collection piping will be incorporated into the building design and will not impact functionality of the building. The ventilated parking garage will be a permanent feature of the proposed building and is consistent with such a use.

# 8.0 REMEDIAL ACTION IMPLEMENTATION AND MONITORING

The following sections provide the plan for implementing and monitoring the recommended remedial action.

# 8.1 Implementation of the Recommended Remedial Alternative 2 (Track 4) Remedy for Soil

The implementation of the selected remedy for soil (Remedial Alternative 2) is described in detail in Section 5.4.

# 8.2 Implementation of the Selected Remedy for Groundwater

The implementation of the selected remedy for groundwater is described in detail in Section 6. Additional detail will be developed during the design phase.

# 8.3 Implementation of the Selected Remedy for Soil Vapor

The implementation of the selected remedy for soil vapor is described in detail in Section 7. Additional detail will be developed during the design phase.

# 8.4 Installation of New Offsite Monitoring Wells

No onsite monitoring wells are proposed for the Site due to the elevation of the basement floor slab being below the water table. Monitoring wells will be installed at two new offsite locations for post-remedial monitoring of groundwater quality leaving the Site. One location will be in the sidewalk near the northeast corner of North 5th Street and Kent Avenue downgradient of the PRB treatment wall and MW-1. The other location will be in the sidewalk on North 5th Street downgradient of MW-4, as shown on Plate 11.

A monitoring well cluster (consisting of a shallow water table monitoring well and one deeper well) will be installed downgradient of the PRB treatment wall and a single shallow water table monitoring well will be installed downgradient of the injections in the area of MW-4 to monitor the performance of the groundwater remedies.

As previously discussed, significant water table fluctuations were recently noted at the Site. To account for possible future water table rise while at the same time installing monitoring wells with proper seals, we propose to install the new shallow monitoring wells with 10-foot screen

zones approximately eight to 18 feet bfs. As the new monitoring wells will be installed in the sidewalk of North 5th Street and land surface is approximately four feet lower than the floor slab, groundwater will likely, at times, be at or less than five feet below the sidewalk surface. A monitoring well screen starting at eight feet bfs is approximately four feet below the sidewalk surface. It is our opinion that four feet is sufficient clearance to install a monitoring well with one to two feet of sand above the top of the well screen and a two to three-foot seal to prevent surface runoff from entering the well. It is possible that at some point the water table may temporarily rise above the top of the screened interval, however, there are no floating product issues as the compounds of concern at the Site are denser than water.

The deeper monitoring well downgradient of the PRB reactive wall will be screened from 25 to 35 feet bfs. The reactive barrier wall will be installed to a depth of 45 feet bfs as a precaution, but the majority of the PCE is located in the upper 35 feet bfs, with the highest concentration in the shallow interval (12.5 to 22.5 feet bfs). Previous deeper PCE results indicated 48,600  $\mu$ g/L at 23 to 25 feet bfs, 8700  $\mu$ g/L at 33 to 35 feet bfs and only 166  $\mu$ g/L at 43 to 45 feet bfs. The deeper groundwater is not being used for potable supply and does not present a potential to off gas PCE into soil vapor, as that will only take place at the air/water interface, therefore additional monitoring of deeper groundwater zones is not warranted.

# 8.5 Site Management Plan

Since the Remedial Action is not intended to meet Unrestricted Use criteria, some impacted soil will remain below/adjacent to the basement of the proposed building. In addition, groundwater may continue to exceed groundwater criteria and soil vapor may be a concern. For these reasons, a SMP will be developed and implemented. Potential future site owners/operators will be required to retain a copy of the SMP for reference. The primary components of the SMP will include:

- A Soil Management Plan (SoMP);
- Institutional and Engineering Controls Plan;
- A Monitoring Plan;
- An Operation and Maintenance Plan; and
- A Site Management Reporting Plan.

The SMP will be referred to in the Environmental Easement.

# 8.5.1 Soil Management Plan

The SoMP would be prepared and implemented to minimize the potential exposure of workers and the community to constituents in soil after the remediation is completed. Further, the SoMP would establish applicable management practices for the future disturbance/reuse of potentially impacted onsite soils.

Specifically, the SoMP will include:

- A description of the proper procedures for the management of excavated soil in a manner that would protect workers and the surrounding community from exposure (including health and safety procedures, dust control and CAMP); and
- A description of the proper procedures for repairing building floor slab and walls, vapor barrier and/or waterproofing.

The SoMP will provide requirements for the analytical testing of soil below remediated areas requiring excavation work as part of future Site activities. Soil will be returned to the void to the extent practicable and any excess soil will be contained and sampled for analytical testing. The SoMP will provide guidelines for workers to address offsite disposal. Soil will be sampled for waste characterization analyses as determined by the waste disposal facility.

## 8.5.2 Institutional and Engineering Controls Plan

Since impacted materials will remain onsite below the building, engineering controls and institutional controls will be implemented to protect public health and the environment in the future. The Institutional and Engineering Controls Plan will identify and describe the applicable engineering and institutional controls and the requirement for annual certifications of the controls. The plan will include:

- A description of the institutional controls including the Environmental Easement restricting the use of the Site and the use of groundwater;
- A description of the engineering controls, including the building floor slab/foundation, vapor barrier/waterproofing, passive SSDS, and ventilated garage; and
- A requirement that the property owner provide an Institutional Control/Engineering Control certification on an annual basis by a Professional Engineer licensed in New York State.

An Environmental Easement is an institutional control that subjects the Site to use restrictions or engineering controls that run with the land in perpetuity. An Environmental Easement is a form of institutional control that acts as an enforcement mechanism to ensure required institutional and engineering controls remain in place. The Environmental Easement will:

- Require compliance with the SMP;
- Restrict the use of the Site to commercial/residential uses:
- Identify areas of impacted materials remaining onsite that would be managed in place;
- Identify areas where the floor slab or walls, vapor barrier and/or waterproofing is to be maintained or restored in the event of intrusive work;
- Restrict the use of groundwater as a source of potable water; and
- Require an annual certification (by a licensed New York State Professional Engineer) that the institutional and engineering controls remain in place and that they remain effective for the protection of human health and the environment.

The Environmental Easement will be incorporated in all agreements regarding rights to use the land such as leases and licenses.

Any future development of the Site would need to be performed in accordance with NYSDEC regulations. Any future modifications to the Site would require submittal of a work plan and approval by the NYSDEC.

#### **8.5.3 Monitoring Plan**

Performance monitoring will be conducted to demonstrate the effectiveness of the remedy in achieving the RAOs. The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site. This Monitoring Plan may only be revised with the approval of NYSDEC. A formal Monitoring Plan for these components will be submitted as a component of the SMP.

## **8.5.3.1** Performance Monitoring for Groundwater

To assess the performance of the *in situ* ZVI injections and the PRB treatment wall, a groundwater monitoring program will be established. The groundwater monitoring program will include two components: baseline sampling and performance monitoring. The sampling, sample

handling, decontamination, and field instrument calibration procedures will be performed as per the Site procedures used during the RI.

# **Baseline Sampling**

Prior to installation of the PRB treatment wall and *in situ* ZVI injections, baseline groundwater sampling will be performed to evaluate levels of VOCs, metals, and naturally occurring biogeochemical conditions in the groundwater zone. During the baseline testing the proposed offsite monitoring wells will be sampled and analyzed for VOCs, dissolved and total iron and manganese and inorganic parameters (total organic carbon [TOC], sulfate, nitrate, iron, and manganese) to evaluate the biogeochemical environment in the groundwater around the well. Sampling for SVOCs, other metals, pesticides and PCBs will not be conducted. Prior to sample and data collection, the monitoring wells will be purged via low-flow means using a bladder pump. Samples and parameter readings will be collected using a flow-through cell to prevent sample contact with atmospheric air.

All laboratory samples will be submitted to a New York ELAP certified laboratory for analysis. Purge water from the sampling will be containerized so that it can be characterized and properly disposed off-site.

# Performance Sampling

Following completion of the installation of the PRB treatment wall, *in situ* ZVI injections and removal of soil, it is anticipated that groundwater concentrations leaving the Site will decrease significantly and the RAOs for groundwater will be met (i.e., mass reduction of VOCs in onsite groundwater and reduction of offsite migration from the Site). However, as described in Section 4.2.2, based on the likelihood of a continuing upgradient source on the 135 Kent Avenue property, it is likely not feasible to achieve the groundwater SCG and it will not be practicable for the Volunteer to prevent migration from their neighbor onto the Site or entirely eliminate offsite migration from their Site.

In order to evaluate offsite conditions, performance monitoring samples will be collected from the proposed monitoring wells twice during the first quarter after completion of the injections (one month and two months following injections). The wells will be sampled for the same parameters outlined in the baseline sampling. The performance monitoring results will be evaluated and the effectiveness of the PRB treatment wall and *in situ* ZVI injections at reducing the residual VOC concentrations in the groundwater leaving the Site will be summarized and submitted to the NYSDEC.

Performance monitoring will be conducted for three additional quarterly rounds, at which time the Volunteer will request to discontinue sampling if reductions are observed. If during the monitoring period an increase in concentrations is observed at the monitoring well cluster located near the corner of Kent Avenue and North 5<sup>th</sup> Street after concentrations were observed to decrease in this monitoring well, it will not be the responsibility of the Volunteer to pursue any additional remedial activities (due to the likelihood of an ongoing upgradient source). Any modification to the sampling schedule and any decision to discontinue groundwater monitoring will be subject to NYSDEC and NYSDOH approval

# 8.5.3.2 Performance Monitoring for Soil Vapor Intrusion

# Sampling Plan

Passive SSDS sampling will consist of one year of quarterly sampling.

The following is provided as guidance to effectively characterize the air quality below the first floor slab:

- Passive SSDS samples will be collected from each vapor collection pipe that extends to the roof of the building, assumed to be two pipes.
- One outside ambient air sample will be collected near the sidewalk along Kent Avenue.
   The air samples will be collected from a height of three to five feet above the ground surface.
- The air sampling will be conducted in general accordance with the "Final Guidance for Evaluating Soil Vapor Intrusion in New York," NYSDOH, October 2006". The air samples will be analyzed for VOCs using modified United States Environmental Protection (USEPA) Method TO-15 for all compounds. Samples will be collected in laboratory-supplied, certified-clean 6-liter capacity Summa canisters. The flow regulators will be calibrated by the analytical laboratory to collect the sample over an 8-hour period. After sample collection, the air samples will be shipped under proper chain-of-custody procedures via courier to a NYSDOH ELAP-certified laboratory.
- The NYSDEC and NYSDOH will require that the building's heating, ventilation, and air conditioning system(s) be operating when at least one round of the sampling is conducted

so that the data will represent the status of the building under normal operating conditions. In accordance with NYSDOH Guidance, it is expected that a minimum of two sampling rounds will be collected during the heating season.

- Flow rates for the passive SSDS and outdoor ambient samples will be identical, and samples will be collected concurrently.
- The field samplers will maintain a sample log sheet summarizing the sampling parameters.

# Review and Interpretation of Soil Vapor Intrusion Monitoring Results

All monitoring results will be submitted to NYSDEC and NYSDOH quarterly. If VOCs are observed in the passive SSDS samples, a second round of passive SSDS samples will be collected immediately to confirm the first set of results. Both sets of vapor intrusion results will be submitted to the NYSDEC and NYSDOH for evaluation.

If the initial and confirmatory passive SSDS results indicate vapor intrusion has occurred into the void space where the SSDS is located, indoor air sampling, in accordance with NYSDOH guidelines, will be conducted within non-garage occupied spaces to determine if vapor intrusion is occurring into these spaces. The results of these samples will be used to determine if active mitigation is necessary, and if so, the passive SSDS described in Section 7.1.5 will be converted to an active system.

If after one year of passive SSDS monitoring, no potential soil vapor intrusion is demonstrated, including during the heating season, discontinuing the soil vapor intrusion monitoring program will be proposed to NYSDEC/NYSDOH. Any modification to the sampling schedule and any decision to discontinue soil vapor monitoring at any location(s) will be subject to NYSDEC and NYSDOH approval.

# **8.5.4** Operation and Maintenance Plan

The active garage ventilation system will be operated and maintained as part of normal building maintenance and in accordance with applicable NYCDOB code requirements and will not be discussed in detail in the Operation and Maintenance plan. The proposed passive SSDS does not require operation and maintenance (only monitoring), unless it is converted to an active system based upon vapor intrusion sampling results in the future. Therefore, the Operation and

Maintenance Plan describes the measures necessary to inspect and maintain the composite cover engineering control (building foundation, waterproofing membrane/vapor barrier, mud slab and gravel bedding).

Maintenance reports and any other information generated during regular inspections at the Site will be kept on-file onsite. All reports, forms, and other relevant information generated will be available upon request to the NYSDEC and submitted as part of the Periodic Review Report,

# 8.5.4.1 Inspection/Repair of the Building Foundation and Associated Waterproofing Membranes/Vapor Barriers

Maintenance of the building foundation and associated waterproofing/vapor barriers includes annual visual inspection of the surface of the top of the basement slab and the basement foundation walls by a qualified environmental professional as approved by the NYSDEC. The inspection will include a visual examination of all visible building foundation floor surfaces and exposed wall surfaces for significant cracks or leaks. Since the building foundation is under hydrostatic pressure, the presence of a leak indicates failure of the foundation waterproofing/vapor barrier membrane. Inspections of these engineering controls will be performed annually.

If a leak is observed in the foundation of the structure, a qualified waterproofing contractor will be contacted to resolve the issue. All groundwater will be collected and containerized or removed with absorbent pads and disposed of properly. If leakage persists, a plan to correct the leakage will be prepared by the waterproofing contractor.

# 8.5.4.2 Inspection/Repair of the Mechanical Systems for the Ventilated Garage

Ventilation system inspections, operation and maintenance will be performed in accordance with NYCDOB code and permit requirements. Inspection frequency is subject to change with the approval of the NYSDEC. Unscheduled inspections and/or sampling may take place when a suspected failure of the active ventilation system has been reported or an emergency occurs that is deemed likely to affect the operation of the system or the protectiveness of the engineering controls.

# 8.5.5 Site Management Reporting Plan

Reporting requirements will be described in the Site Management Reporting Plan. Reporting requirements include quarterly documentation of sampling results for groundwater and soil vapor intrusion monitoring and a Periodic Review Report, to be submitted annually.

The Periodic Review Report compiles the results of the inspection and Site monitoring data and will include:

- Certification that institutional and engineering controls are in place, are performing properly, and remain effective;
- Confirmation that the Monitoring Plan is being implemented;
- Confirmation that operation and maintenance activities are being conducted properly; and
- Confirmation that the Site remedy continues to be protective of public health and the environment and is performing as designed.

# 9.0 REMEDIAL DESIGN

Based upon the level of detail provided in this RAWP for the soil portion of the recommended remedy, remedial design documents are not required. For the groundwater and soil vapor portions of the remedy, remedial design documents will be prepared and submitted to NYSDEC to provide additional detail.

#### 10.0 FINAL ENGINEERING REPORT

The Final Engineering Report (FER) will be prepared following completion of the remedial activities in accordance with Section 5.8 of DER-10. The FER will describe the work performed as part of the remediation and will include:

- Disposal documentation for all material removed from the Site, including excavated impacted/hazardous soil, solid waste, and fluids.
- Survey drawings and site maps including, but not limited to, excavation areas and injection point locations, location of the PRB treatment wall, location of passive SSDS location of monitoring points and site boundaries.
- A certification by a New York professional engineer that all construction activities completed during the remediation were performed in accordance with this RAWP, as approved by the NYSDEC, and that the activities were personally witnessed by a person under the direct supervision of the professional engineer.
- Any changes or modifications to the work, as well as any problems encountered during construction and their resolution, will be documented.
- A list of all remediation standards applied and results of the sampling compared to the restricted residential criteria and protection of groundwater criteria, as appropriate.
- A certification that the sampling data was usable and met the remedial requirements.
- A description of all backfill material used for site restoration, including source and quality.

# 11.0 CITIZEN PARTICIPATION PLAN

A Citizen Participation Plan (CPP) has been prepared in accordance with Section 2.10 and Section 8 of the Draft BCP Guide (NYSDEC 2004). The CPP was submitted and approved under separate cover.

The citizen participation activities relevant to approval and implementation of this RAWP, which are outlined in the CPP, include:

- Transmittal of a public notice and fact sheet regarding the availability of a draft RAWP to the Brownfield Site Contact List presented in the CPP.
- Placement of the RAWP in the Site's document repositories.
- Forty-five day comment period on the RAWP.

## 12.0 SCHEDULE

The Volunteer will submit work plans to the NYSDEC for pre-excavation sampling described in Section 5.4.1.5 and for pilot testing of *in situ* ZVI injections at MW-4 described in Section 6.1.3 during the review and public comment period on the RAWP, so this work can get underway as soon as possible. It is anticipated that the pilot test at MW-4 will also be initiated during the review/public comment period for the RAWP.

Excavation is anticipated to commence immediately upon final approval of the RAWP.

Installation of the waterproofing, vapor barriers and passive SSDS will occur concurrently with construction of the building.

Implementation of the PRB treatment wall will be commenced after the building foundation has been constructed and before the first floor walls have been constructed.

## **TABLES**

- 1. Summary of Volatile Organic Compounds in Soil Samples
- 2. Summary of Semivolatile Organic Compounds in Soil Samples
- 3. Summary of Metals in Soil Samples
- 4. Summary of Polychlorinated Biphenyls in Soil Samples
- 5. Summary of Pesticides and Herbicides in Soil Samples
- 6. Summary of General Chemistry in Soil Samples
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- 8. Summary of Volatile Organic Compounds in Groundwater Samples
- 9. Summary of Semivolatile Organic Compounds in Groundwater Samples
- 10. Summary of Metals in Groundwater Samples
- 11. Summary of Polychlorinated Biphenyls in Groundwater Samples
- 12. Summary of Pesticides and Herbicides in Groundwater Samples
- 13. Summary of Volatile Organic Compounds in Soil Vapor Samples

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC Part 375	NYSDEC Part 375	NYSDEC Part 375	Sample Designation: RA-			RA-1A	RA-2	RA-2	RA-2
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 3/19/2			2/11/2013			
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 7-	9 10-1	2 22-24	29-30	10-12	23-25	33-35
1,1,1-Trichloroethane	680	680	100000	5.9	U 310	U 430 U	6.1 U	300 U	7.3 U	6.8 U
1.1.2.2-Tetrachloroethane				5.9			6.1 U	300 U	7.3 U	6.8 U
1.1.2-Trichloroethane				5.9			6.1 U	300 U	7.3 U	6.8 U
1.1-Dichloroethane	270	270	26000	5.9			6.1 U	300 U	7.3 U	6.8 U
1,1-Dichloroethene	330	330	100000	5.9			6.1 U	300 U	7.3 U	6.8 U
1,2,3-Trichlorobenzene				5.9			6.1 U	300 U	7.3 U	6.8 U
1,2,4-Trichlorobenzene				5.9			6.1 U	300 U	7.3 U	6.8 U
1,2-Dibromoethane				1.2			1.2 U	59 U	1.5 U	1.4 U
1,2-Dichlorobenzene	1100	1100	100000	1.9			6.1 U	39.1 NJV	7.3 U	6.8 U
1,2-Dichloroethane	20	20	3100	1.2			1.2 U	59 U	1.5 U	1.4 U
1,2-Dichloropropane				5.9			6.1 U	300 U	7.3 U	6.8 U
1,3-Dichlorobenzene	2400	2400	49000	5.9			6.1 U	300 U	7.3 U	6.8 U
1,4-Dichlorobenzene	1800	1800	13000	0.5			6.1 U	300 U	7.3 U	6.8 U
1,4-Dioxane	100	100	13000	150			150 U	7400 U	180 U	170 U
2-Butanone (MEK)	120	120	100000	12 U			12 UJV	590 UJV	15 UJV	7.9 JV
2-Hexanone				5.9			6.1 U	300 U	7.3 U	6.8 U
4-Methyl-2-pentanone (MIBK)				5.9			6.1 U	300 U	7.3 U	6.8 U
Acetone	50	50	100000	12 U			12 UJV	590 UJV	15 UJV	49.1 JV
Benzene	60	60	4800	1.2			1.2 U	59 U	1.5 U	1.4 U
Bromochloromethane				5.9			6.1 U	300 U	7.3 U	6.8 U
Bromodichloromethane				5.9			6.1 U	300 U	7.3 U	6.8 U
Bromoform				5.9			6.1 U	300 U	7.3 U	6.8 U
Bromomethane				5.9			6.1 U	300 U	7.3 U	6.8 U
Carbon disulfide				5.9			6.1 U	300 U	7.3 U	13.2
Carbon tetrachloride	760	760	2400	5.9			6.1 U	300 U	7.3 U	6.8 U
Chlorobenzene	1100	1100	100000	5.9			6.1 U	300 U	7.3 U	6.8 U
Chloroethane				5.9			6.1 U	300 U	7.3 U	6.8 U
Chloroform	370	370	49000	5.9	U 310	U 430 U	6.1 U	300 U	7.3 U	6.8 U
Chloromethane				5.9 U			6.1 U	300 U	7.3 U	6.8 U
cis-1,2-Dichloroethene	250	250	100000	0.43			2.4 J	300 U	8.8	5.9 J
cis-1,3-Dichloropropene				5.9			6.1 U	300 U	7.3 U	6.8 U
Cyclohexane				5.9			6.1 U	300 U	7.3 U	6.8 U
Dibromochloromethane				5.9			6.1 U	300 U	7.3 U	6.8 U
Dibromochloropropane				12			12 U	590 U	15 U	14 U
Dichlorodifluoromethane				5.9 U			6.1 U	300 U	7.3 U	6.8 U
Ethylbenzene	1000	1000	41000	1.2			1.2 U	59 U	1.5 U	1.4 U
Freon 113				5.9			6.1 U	300 U	7.3 U	6.8 U
Isopropylbenzene				5.9			6.1 U	21 NJV	7.3 U	6.8 U
m+p-Xylene				1.2	U 62	J 85 U	1.2 U	59 U	1.5 U	1.4 U

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-1B	RA-1	RA-1A	RA-1A	RA-2	RA-2	RA-2
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	3/19/2013	2/11/2013	2/11/2013	2/11/2013	2/26/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	7-9	10-12	22-24	29-30	10-12	23-25	33-35
Methyl acetate					5.9 U	310 U	430 U	6.1 U	300 U	7.3 U	6.8 U
Methylcyclohexane					5.9 U	19.9 J	430 U	6.1 U	300 U	7.3 U	6.8 U
Methylene chloride	50	50	100000		5.9 U	310 U	430 U	6.1 U	300 U	7.3 U	6.8 U
MTBE	930	930	100000		1.2 U	62 U	85 U	1.2 U	59 U	1.5 U	1.4 U
o-Xylene					1.2 U	62 U	85 U	1.2 U	21.6 NJV	1.5 U	1.4 U
Styrene					5.9 U	310 U	430 U	6.1 U	300 U	7.3 U	6.8 U
Tetrachloroethene	1300	1300	19000		490	1090000	25100	165 J	1020000	258	145 JV
Toluene	700	700	100000		1.2 U	9.5 J	85 U	1.1 J	59 U	1.5 U	1.4 U
trans-1,2-Dichloroethene	190	190	100000		5.9 U	310 U	430 U	6.1 U	300 U	7.3 U	6.8 U
trans-1,3-Dichloropropene					5.9 U	310 U	430 U	6.1 U	300 U	7.3 U	6.8 U
Trichloroethene	470	470	21000		0.34 J	133 J	33.6 J	0.49 J	103 J	2.1 J	0.31 J
Trichlorofluoromethane					5.9 U	310 U	430 U	6.1 U	300 U	7.3 U	6.8 U
Vinyl chloride	20	20	900		5.9 U	310 U	430 U	6.1 U	300 U	7.3 U	6.8 U
Xylenes (total)	260	1600	100000		1.2 U	62 U	85 U	1.2 U	21.6 J	1.5 U	1.4 U
Total TIC, Volatile					0	19920 J	0	8.2 J	9520 J	0	0

J - Estimated value

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

DUP - Duplicate sample

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	<b>Sample Designation:</b> RA-3	RA-3	RA-3	RA-4	RA-4	RA-4	RA-5
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 2/25/201	3 2/25/2013	2/25/2013	2/25/2013	2/25/2013	2/25/2013	
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 10-12	23-25	34-35	10-12	22-24	33-35	7-9
1,1,1-Trichloroethane	680	680	100000	1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
1,1,2,2-Tetrachloroethane				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
1,1,2-Trichloroethane				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
1,1-Dichloroethane	270	270	26000	1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
1,1-Dichloroethene	330	330	100000	1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
1,2,3-Trichlorobenzene				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
1,2,4-Trichlorobenzene				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
1,2-Dibromoethane				320 U	1.4 U	5.4 U	5.9 U	1.5 U	1.3 U	1.3 U
1.2-Dichlorobenzene	1100	1100	100000	1600 U	7 U	2.7 J	29 U	7.6 U	6.5 U	6.4 U
1,2-Dichloroethane	20	20	3100	320 U	1.4 U	5.4 U	5.9 U	1.5 U	1.3 U	1.3 U
1,2-Dichloropropane	20 	20 	3100	1600 U	1.4 U 7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
1,3-Dichlorobenzene	2400	2400	49000	1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
1,4-Dichlorobenzene	1800	1800	13000	1600 U	7 U	27 U	29 U 29 U	7.6 U 7.6 U	6.5 U	6.4 U
,										
1,4-Dioxane	100	100	13000	39000 U		680 U	740 U	190 U	160 U	160 U
2-Butanone (MEK)	120	120	100000	3200 UJ		54 UJV	59 UJV	15 UJV	13 UJV	13 UJV
2-Hexanone				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
4-Methyl-2-pentanone (MIBK)				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Acetone	50	50	100000	3200 U	14 U	73.5	59 U	15 U	13 U	13 UJV
Benzene	60	60	4800	320 U	1.4 U	5.4 U	1.5 J	1.5 U	1.3 U	1.3 U
Bromochloromethane				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Bromodichloromethane				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Bromoform				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Bromomethane				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Carbon disulfide				1600 U	7 U	139	29 U	7.6 U	6.5 U	6.4 U
Carbon tetrachloride	760	760	2400	1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Chlorobenzene	1100	1100	100000	1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Chloroethane				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Chloroform	370	370	49000	1600 U	7 U	27 U	29 U	3.3 J	6.5 U	6.4 U
Chloromethane				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 UJV
cis-1,2-Dichloroethene	250	250	100000	2590	5.8 J	2.8 J	616	19.9	1.1 J	6.4 U
cis-1,3-Dichloropropene				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Cyclohexane				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Dibromochloromethane				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Dibromochloropropane				3200 U	14 U	54 U	59 U	15 U	13 U	13 U
Dichlorodifluoromethane				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Ethylbenzene	1000	1000	41000	320 U	1.4 U	5.4 U	5.9 U	1.5 U	1.3 U	1.3 U
Freon 113				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Isopropylbenzene				1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
				320 U	1.4 U	2.2 J	1.6 J	1.5 U	1.3 U	1.3 U

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-3	RA-3	RA-3	RA-4	RA-4	RA-4	RA-5
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/25/2013	2/25/2013	2/25/2013	2/25/2013	2/25/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	23-25	34-35	10-12	22-24	33-35	7-9
											_
Methyl acetate					1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Methylcyclohexane					1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Methylene chloride	50	50	100000		1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
MTBE	930	930	100000		320 U	1.4 U	5.4 U	5.9 U	1.5 U	1.3 U	1.3 U
o-Xylene					320 U	1.4 U	5.4 U	5.9 U	0.58 J	1.3 U	1.3 U
Styrene					1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Tetrachloroethene	1300	1300	19000	ĺ	36100	152 JV	2380	12800	1370	14.9	2 J
Toluene	700	700	100000	-	320 U	1.4 U	6.6	8.5	1.5 U	1.3 U	0.48 J
trans-1,2-Dichloroethene	190	190	100000		1600 U	7 U	27 U	19.3 J	7.6 U	6.5 U	6.4 U
trans-1,3-Dichloropropene					1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Trichloroethene	470	470	21000		1650	1.6 J	85.1	142	12.4	6.5 U	6.4 U
Trichlorofluoromethane					1600 U	7 U	27 U	29 U	7.6 U	6.5 U	6.4 U
Vinyl chloride	20	20	900		1600 U	7 U	27 U	26.2 J	7.6 U	6.5 U	6.4 U
Xylenes (total)	260	1600	100000		320 U	1.4 U	2.2 J	1.6 J	0.58 J	1.3 U	1.3 U
Total TIC, Volatile					0	0	0	0	0	0	0

J - Estimated value

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

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V - Value altered or qualifier added during data validation

DUP - Duplicate sample

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:		RA-5	RA-6	RA-6	RA-7	RA-7	RA-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	2/26/2013	2/14/2013	2/14/2013	2/21/2013	2/21/2013	3/13/2013
(Concentrations in μg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	7-9	18-20	10-12	23-25	11-12.5	22-24	28-30
1,1,1-Trichloroethane	680	680	100000		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
1,1,2,2-Tetrachloroethane					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
1,1,2-Trichloroethane					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
1,1-Dichloroethane	270	270	26000		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
1,1-Dichloroethene	330	330	100000		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
1,2,3-Trichlorobenzene					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
1,2,4-Trichlorobenzene					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
1,2-Dibromoethane					1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	82 U
1.2-Dichlorobenzene	1100	1100	100000		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
1,2-Dichloroethane	20	20	3100		1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	82 U
1,2-Dichloropropane					6.2 U	6.2 U	6.8 U	6.5 U	1.5 J	6.5 U	410 U
1.3-Dichlorobenzene	2400	2400	49000		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
1.4-Dichlorobenzene	1800	1800	13000		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
1.4-Dioxane	100	100	13000		160 U	160 U	170 U	160 U	170 U	160 U	10000 U
2-Butanone (MEK)	120	120	100000		100 U	12 UJV	170 U 14 UJV	13 UJV	170 U 13 UJV	13 UJV	820 UJV
2-Hexanone					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
4-Methyl-2-pentanone (MIBK)					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Acetone (WIBK)	50	50	100000		12 UJV	12 UJV	20.7 JV	13 UJV	13 UJV	13 UJV	820 UJV
Benzene	60	60	4800		1.2 U	1.2 U	20.7 J V 1.4 U	1.3 U	1.3 U	1.3 U	82 U
Bromochloromethane			4800		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Bromodichloromethane					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U 410 U
Bromoform					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U 6.7 U	6.5 U	410 U 410 U
Bromomethane					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Carbon disulfide	7.00	7.00	2400		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Carbon tetrachloride	760	760	2400		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Chlorobenzene	1100	1100	100000		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Chloroethane			40000		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Chloroform	370	370	49000		6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Chloromethane		 250			6.2 U	6.2 UJV	6.8 UJV	6.5 UJV	6.7 U	6.5 U	410 UJV
cis-1,2-Dichloroethene	250	250	100000		6.2 U	6.2 U	2.4 J	6.5 U	6.7 U	6.5 U	410 U
cis-1,3-Dichloropropene					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Cyclohexane					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Dibromochloromethane					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Dibromochloropropane					12 U	12 U	14 U	13 U	13 U	13 U	820 U
Dichlorodifluoromethane					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Ethylbenzene	1000	1000	41000		1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	82 U
Freon 113					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Isopropylbenzene					6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
m+p-Xylene					1.2 U	0.46 J	1.4 U	0.57 J	1.3 U	1.3 U	82 U

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation: RA-5 DUP	RA-5	RA-6	RA-6	RA-7	RA-7	RA-7
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 2/26/2013	2/26/2013	2/14/2013	2/14/2013	2/21/2013	2/21/2013	3/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 7-9	18-20	10-12	23-25	11-12.5	22-24	28-30
Methyl acetate				6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Methylcyclohexane				6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Methylene chloride	50	50	100000	6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
MTBE	930	930	100000	1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	82 U
o-Xylene				1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	82 U
Styrene				6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Tetrachloroethene	1300	1300	19000	1.9 J	9	5.5 J	26.2	47.7	4 J	1510
Toluene	700	700	100000	1.2 U	0.85 J	1.2 J	1.3	1.3 U	0.31 J	82 U
trans-1,2-Dichloroethene	190	190	100000	6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
trans-1,3-Dichloropropene				6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Trichloroethene	470	470	21000	6.2 U	6.2 U	6.8 U	6.5 U	2.4 J	6.5 U	410 U
Trichlorofluoromethane				6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Vinyl chloride	20	20	900	6.2 U	6.2 U	6.8 U	6.5 U	6.7 U	6.5 U	410 U
Xylenes (total)	260	1600	100000	1.2 U	0.46 J	1.4 U	0.57 J	1.3 U	1.3 U	82 U
Total TIC, Volatile				0	0	0	0	0	0	0

J - Estimated value

ft bls - Feet below land surface

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-- No NYSDEC Part 375 Commercial Standards available

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Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter   Parameter   Part 375   Part 375   Part 375   Sample Dates   1402   1402   1342   1352   1342013   342013   342013   342013   3262013   226201		NYSDEC	NYSDEC	NYSDEC							
Concentrations in µg/kg  Use   Groundwater   Residential   Sample Depth (ff bls):   78-80   10-12   22-24   28-30   73-75   10-12   22-24	_										
1,1,1-Trichloroethane					-						
1,1   1,1	(Concentrations in µg/kg)	Use	Groundwater		Sample Depth (ft bls): 78-80	10-12	22-24	28-30	73-75	10-12	22-24
1,1,2,2-Ternathloroethane	1 1 1-Trichloroethane	680	680		7311	590 II	0.46 I	5.8 U	65 U	300 H	75 II
1,12-Trichloroethane	* *										
1.1-Dichloroethane   270   270   26000   7.3 U   590 U   6.2 U   5.8 U   6.5 U   300 U   7.5 U   1.1-Dichloroethene   330   330   100000   7.3 U   590 U   6.2 U   5.8 U   6.5 U   300 U   7.5 U   1.2-Dichloroethene           7.3 U   590 U   6.2 U   5.8 U   6.5 U   300 U   7.5 U   1.2-Dichloroethane           7.3 U   590 U   6.2 U   5.8 U   6.5 U   300 U   7.5 U   1.2-Dichloroethane           1.5 U   1.2 U											
1.1-Dichloroethene   330   330   100000   7.5 U   5.9 U   5.8 U   6.5 U   300 U   7.5 U   1.2.3-Trichlorobenzene           7.3 U   5.9 U   5.8 U   6.5 U   300 U   7.5 U   1.2.4-Trichlorobenzene         1.5 U   5.9 U   5.8 U   6.5 U   300 U   7.5 U   1.2.4-Trichlorobenzene         1.5 U   1.2 U   1.2 U   1.2 U   1.3 U   5.9 U   1.5 U   1.2 U   1.2 U   1.2 U   1.3 U   1.5 U   1.2 U   1.3 U	* *										
1.2.3-Trichlorobenzene              7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           1.2.4-Trichlorobenzene             1.5 U         120 U         1.2 U         1.2 U         1.3 U         590 U         1.5 U         1.2 U         1.2 U         1.3 U         590 U         1.5 U         1.2 U         1.2 U         1.3 U         590 U         0.93 J         5.8 U         6.5 U         300 U         7.5 U         1.5 U         1.2 U         1.2 U         1.3 U         590 U         6.2 U         1.8 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U         1.5 U         1.2 U         1.2 U         1.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U         1.5 U         1.2 U         1.2 U         1.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U         1.5 U         1.4 U         1.5 U         1.0 U         1.5 U         1.5 U         1.0 U         1.5 U         1.5 U         1.0 U         1.5 U         1.5 U         1.5 U         1.5 U         1.5 U	,										
1.2.4 Trichlorobenzene	· · · · · · · · · · · · · · · · · · ·										
1.2-Dichloromethane         1.5 U   1.2 U   1.2 U   1.3 U   5.9 U   1.5 U   1.2-Dichloromethane   1100   1100   1000000   1.5 U   1.2 U   1.2 U   1.3 U   3.9 U   1.5 U   1.2-Dichloromethane   20   20   3100   1.5 U   1.2 U   1.2 U   1.3 U   5.9 U   1.5 U   1.2-Dichloromethane	* *										
1.2-Dichlorobenzene   1.100   1.100   1.100   1.100   1.500   1.5 U   1.2 U   1.2 U   1.2 U   1.2 U   1.3 U   1.5 U   1.2 U   1.2 U   1.2 U   1.3 U   1.5 U   1.2 U   1.2 U   1.3 U   1.5 U   1.2 U   1.2 U   1.2 U   1.3 U   1.5 U   1.2 U   1.3 U   1.5 U   1.2 U   1.3 U   1.5 U   1.5 U   1.2 U   1.3 U   1.5 U   1.5 U   1.3 U   1.3 U   1.3 U   1.5 U   1.3 U   1.3 U   1.5 U   1.3 U   1.3 U   1.5 U   1.4 U   1.3 U   1.3 U   1.5 U   1.4 U   1.4 U   1.3 U   1.5 U   1.4 U	, , ,										
1.2-Dichloroethane   20   20   3100   1.5 U   120 U   1.2 U   1.2 U   1.2 U   1.3 U   59 U   1.5 U   1.2-Dichloropropane	*										
1,2-Dichloropropane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           1,3-Dichlorobenzene         2400         2400         49000         7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           1,4-Dichlorobenzene         1800         1800         13000         180 U         1500 U         150 U         150 U         160 U         740 U         75 U           1,4-Dichorobenzene         100         100         13000         180 U         1500 U         150 U         150 U         160 U         740 U         190 U           2-Butanone (MEK)         120         1200000         15 UV         120 UV         12 UV         12 UV         13 UV         25 UV         2-U         13 UV         15 UV         22 UV         12 UV         13 UV         25 UV	· · · · · · · · · · · · · · · · · · ·										
1,3-Dichlorobenzene         2400         2400         49000         7,3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           1,4-Dichlorobenzene         1800         1800         13000         180 U         1500U         150 U         150 U         160 U         70 U         190 U           1,4-Dioxane         100         100         13000         180 U         1500U U         150 U         150 U         150 U         160 U         75 U           2-Butanone (MEK)         120         120         100000         15 UV         1200 UV         12 UV         12 UV         13 UV         590 UV         5.8 U         6.5 U         300 U         7.5 U           2-Hexanone             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           2-Hexanone             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           2-Hexanone              1.0 U         12 U         12 UV         13 UV         50 UV         1.0 U	<i>'</i>										
1,4-Dichlorobenzene   1800   1800   13000   13000   180   150											
1,4-Dioxane   100   100   13000   13000   180 U   1500 U   150 U   150 U   160 U   7400 U   190 U   2-Butanone (MEK)   120   120   100000   15 UJV   120UV   12 UJV   12 UJV   13 UJV   590 UJV   15 UJV   2-Hexanone   15 UJV   120 UJV   12 UJV   12 UJV   13 UJV   15 UJV   15 UJV   14 UJV   15 UJV	,-										
2-Butanone (MEK)         120         120         100000         15 UJV         120 UJV         12 UJV         13 UJV         590 UJV         15 UJV           2-Butanone (MEK)             7.3 U         590 U         6.2 RV         5.8 U         6.5 U         300 U         7.5 U           4-Methyl-2-pentanone (MIBK)           7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Acetone         50         50         100000         20 JV         120 U         12 UV         13 UJV         590 UJV         15 UJV           Benzene         60         60         4800         1.5 U         120 U         1.2 U         1.2 U         1.3 U         590 UJV         1.5 U           Bromodichloromethane            7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Bromodichloromethane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Bromodichloromethane <td>,</td> <td></td>	,										
2-Hexanone	,										
4-Methyl-2-pentanone (MIBK) <t< td=""><td>* *</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	* *										
Acetone         50         50         100000         20 JV         1200 U         12 U         12 UJV         13 UJV         590 UJV         15 UJV           Benzene         60         60         4800         1.5 U         120 U         1.2 U         1.2 U         1.3 U         59 U         1.5 U           Bromodichloromethane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Bromofichmethane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Bromomethane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Bromomethane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Carbon disulfide             7.3 U         590 U         13.2         5.8 U         6.5 U         300 U         7.5 U           Carbon tetrachlori											
Benzene         60         60         4800         1.5 U         120 U         1.2 U         1.2 U         1.3 U         59 U         1.5 U           Bromochloromethane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Bromoform            7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Bromomethane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Bromomethane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Carbon disulfide             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Carbon tetrachloride         760         760         2400         7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Chlorobenzene         -1	-										
Bromochloromethane											
Bromodichloromethane <td></td>											
Bromoform											
Bromomethane											
Carbon disulfide               7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Carbon tetrachloride         760         760         2400         7.3 U         590 U         13.2         5.8 U         6.5 U         300 U         2.3 J           Chlorobenzene         1100         1100         100000         7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Chlorobenzene             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Chlorobenzene         370         370         49000         7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U/V           Chloromethane            7.3 U         590 U         6.2 UJV         5.8 U         6.5 U         300 UJV         7.5 UJV           cis-1,2-Dichloropropene            7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Cy											
Carbon tetrachloride         760         760         2400         7.3 U         590 U         13.2         5.8 U         6.5 U         300 U         2.3 J           Chlorobenzene         1100         1100         100000         7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Chloroethane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Chloroform         370         370         49000         7.3 U         590 U         6.2 UJV         5.8 U         6.5 U         300 U         7.5 UJV           Chloromethane             7.3 U         590 U         6.2 UJV         5.8 U         6.5 U         300 UJV         7.5 UJV           cis-1,2-Dichloroethene         250         250         100000         7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         19.7           cis-1,3-Dichloropropene            7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Cyclohexane </td <td></td>											
Chlorobenzene         1100         1100         100000         7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Chloroethane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Chloroform         370         370         49000         7.3 U         590 U         1 J         5.8 U         6.5 U         300 U         0.54 J           Chloromethane             7.3 U         590 U         6.2 UJV         5.8 U         6.5 U         300 UJV         7.5 UJV           cis-1,2-Dichloroethene         250         250         100000         7.3 U         61.3 J         86.3 JV         5.8 U         6.5 U         300 U         19.7           cis-1,3-Dichloropropene             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Cyclohexane            7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Dibromochloropropane											
Chloroethane              7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Chloroform         370         370         49000         7.3 U         590 U         1 J         5.8 U         6.5 U         300 U         0.54 J           Chloromethane            7.3 U         590 U         6.2 UJV         5.8 U         6.5 U         300 UJV         7.5 UJV           cis-1,2-Dichloroethene         250         250         100000         7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         19.7           cis-1,3-Dichloropropene            7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Cyclohexane            7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Dibromochloromethane            7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Dibromochloropropane											
Chloroform         370         370         49000         7.3 U         590 U         1 J         5.8 U         6.5 U         300 U         0.54 J           Chloromethane             7.3 U         590 U         6.2 UJV         5.8 U         6.5 U         300 UJV         7.5 UJV           cis-1,2-Dichloroethene         250         250         100000         7.3 U         61.3 J         86.3 JV         5.8 U         6.5 U         300 U         19.7           cis-1,3-Dichloropropene             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Cyclohexane            7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Dibromochloromethane            7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Dibromochloropropane             15 U         1200 U         12 UJV         12 U         13 U         590 U         15 U											
Chloromethane											
cis-1,2-Dichloroethene         250         250         100000         7.3 U         61.3 J         86.3 JV         5.8 U         6.5 U         300 U         19.7           cis-1,3-Dichloropropene             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Cyclohexane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Dibromochloromethane             15 U         1200 U         12 UJV         12 U         13 U         590 U         15 U				49000							
cis-1,3-Dichloropropene           7.3 U       590 U       6.2 U       5.8 U       6.5 U       300 U       7.5 U         Cyclohexane          7.3 U       590 U       6.2 U       5.8 U       6.5 U       300 U       7.5 U         Dibromochloromethane          15 U       1200 U       12 UJV       12 UJV       12 UJ       13 U       590 U       15 U											
Cyclohexane           7.3 U       590 U       6.2 U       5.8 U       6.5 U       300 U       7.5 U         Dibromochloromethane           15 U       1200 U       12 UJV       12 UJV       12 UJV       13 U       590 U       15 U	,	250	250	100000							
Dibromochloromethane             7.3 U         590 U         6.2 U         5.8 U         6.5 U         300 U         7.5 U           Dibromochloropropane            15 U         1200 U         12 UJV         12 UJ         13 U         590 U         15 U											
Dibromochloropropane 15 U 1200 U 12 UJV 12 U 13 U 590 U 15 U	Cyclohexane										
							12 UJV				
Dichlorodifluoromethane 7.3 U 590 U 6.2 U 5.8 U 6.5 U 300 U 7.5 U	Dichlorodifluoromethane					590 U	6.2 U	5.8 U	6.5 U		
Ethylbenzene 1000 1000 41000 1.5 U 1.2 U 1.2 U 1.3 U 59 U 1.5 U	Ethylbenzene	1000	1000	41000	1.5 U	120 U	1.2 U	1.2 U	1.3 U	59 U	1.5 U
Freon 113 7.3 U 590 U 6.2 U 5.8 U 6.5 U 300 U 7.5 U	Freon 113				7.3 U	590 U	6.2 U	5.8 U	6.5 U	300 U	7.5 U
Isopropylbenzene 7.3 U 590 U 6.2 U 5.8 U 6.5 U 300 U 7.5 U	Isopropylbenzene				7.3 U	590 U	6.2 U	5.8 U	6.5 U	300 U	7.5 U
m+p-Xylene 1.5 U 120 U 1.2 U 1.3 U 59 U 0.65 J	m+p-Xylene				1.5 U	120 U	1.2 U	1.2 U	1.3 U	59 U	0.65 J

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-7	RA-8	RA-8	RA-8	RA-8A	RA-9	RA-9
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	3/14/2013	2/25/2013	2/25/2013	3/4/2013	3/5/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	78-80	10-12	22-24	28-30	73-75	10-12	22-24
Methyl acetate					7.3 U	590 U	6.2 UJV	5.8 U	6.5 U	300 U	7.5 U
Methylcyclohexane					7.3 U	590 U	6.2 U	5.8 U	6.5 U	300 U	7.5 U
Methylene chloride	50	50	100000		7.3 U	590 U	6.2 U	5.8 U	6.5 U	300 U	7.5 U
MTBE	930	930	100000		1.5 U	120 U	1.2 U	1.2 U	1.3 U	59 U	1.5 U
o-Xylene					1.5 U	120 U	0.38 J	1.2 U	1.3 U	59 U	0.29 J
Styrene					7.3 U	590 U	6.2 U	5.8 U	6.5 U	300 U	7.5 U
Tetrachloroethene	1300	1300	19000		7.3 U	21000	1980	10	6.5 U	41500	936
Toluene	700	700	100000		1.5 U	120 U	1.2 U	1.2 U	1.3 U	59 U	1.3 J
trans-1,2-Dichloroethene	190	190	100000		7.3 U	590 U	6.2 U	5.8 U	6.5 U	300 U	7.5 U
trans-1,3-Dichloropropene					7.3 U	590 U	6.2 U	5.8 U	6.5 U	300 U	7.5 U
Trichloroethene	470	470	21000		7.3 U	59.4 J	36.9	5.8 U	6.5 U	300 U	6.3 J
Trichlorofluoromethane					7.3 U	590 U	6.2 U	5.8 U	6.5 U	300 U	7.5 U
Vinyl chloride	20	20	900		7.3 U	590 U	0.69 J	5.8 U	6.5 U	300 U	7.5 U
Xylenes (total)	260	1600	100000		1.5 U	120 U	0.38 J	1.2 U	1.3 U	59 U	0.94 J
Total TIC, Volatile					0	0	0	0	0	0	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	17770555									
	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	<b>Sample Designation:</b> RA-9	RA-9	RA-10	RA-10	RA-10	RA-11A	RA-11B
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 2/26/2013		2/26/2013				
(Concentrations in μg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 29-30	68-70	10-12	23-25	29-30	10-12	23-25
1 1 1 Triable 4h	680	680	100000	29 U	6.9 U	(211	6.8 U	28 U	6 U	5.2 U
1,1,1-Trichloroethane				29 U 29 U		6.2 U				
1,1,2,2-Tetrachloroethane				29 U 29 U	6.9 U 6.9 U	6.2 U 6.2 U	6.8 U 6.8 U	28 U 28 U	6 U 6 U	5.2 U 5.2 U
1,1,2-Trichloroethane										
1,1-Dichloroethane	270	270	26000	29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
1,1-Dichloroethene	330	330	100000	29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
1,2,3-Trichlorobenzene				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
1,2,4-Trichlorobenzene				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
1,2-Dibromoethane				5.9 U	1.4 U	1.2 U	1.4 U	5.5 U	1.2 U	1 U
1,2-Dichlorobenzene	1100	1100	100000	3 J	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
1,2-Dichloroethane	20	20	3100	5.9 U	1.4 U	1.2 U	1.4 U	5.5 U	1.2 U	1 U
1,2-Dichloropropane				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
1,3-Dichlorobenzene	2400	2400	49000	29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
1,4-Dichlorobenzene	1800	1800	13000	29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
1,4-Dioxane	100	100	13000	740 U	170 U	160 U	170 U	690 U	150 U	130 U
2-Butanone (MEK)	120	120	100000	59 UJV	14 UJV	12 UJV	14 UJV	28.9 JV	12 UJV	10 UJV
2-Hexanone				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
4-Methyl-2-pentanone (MIBK)				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Acetone	50	50	100000	134 JV	21.3	12 UJV	14 UJV	196 JV	12 UJV	10 UJV
Benzene	60	60	4800	5.9 U	1.4 U	1.2 U	1.4 U	5.5 U	1.2 U	1 U
Bromochloromethane				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Bromodichloromethane				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Bromoform				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Bromomethane				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Carbon disulfide				256	6.9 U	6.2 U	6.8 U	270	6 U	5.2 U
Carbon tetrachloride	760	760	2400	29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Chlorobenzene	1100	1100	100000	29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Chloroethane				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Chloroform	370	370	49000	29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Chloromethane				29 UJV	6.9 U	6.2 UJV	6.8 UJV	28 UJV	6 U	5.2 UJV
cis-1,2-Dichloroethene	250	250	100000	10.8 J	6.9 U	6.2 U	2.8 J	21 J	6 U	1.4 J
cis-1,3-Dichloropropene				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Cyclohexane				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Dibromochloromethane				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Dibromochloropropane				59 U	14 U	12 U	14 U	55 U	12 U	10 U
Dichlorodifluoromethane				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Ethylbenzene	1000	1000	41000	2.2 J	1.4 U	1.2 U	1.4 U	1.6 J	1.2 U	1 U
Freon 113				2.2 J 29 U	6.9 U	6.2 U	6.8 U	28 UJV	6 U	5.2 U
Isopropylbenzene				29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
m+p-Xylene		 		8.4	1.4 U	0.2 U 0.8 NJV	1.4 U	5.4 J	1.2 U	1 U
m+p-xylene				0.4	1.4 0	0.0 INJ V	1.4 U	J.4 J	1.2 U	1 0

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-9	RA-9	RA-10	RA-10	RA-10	RA-11A	RA-11B
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	3/8/2013	2/26/2013	2/26/2013	2/26/2013	3/18/2013	3/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	29-30	68-70	10-12	23-25	29-30	10-12	23-25
Methyl acetate					29 U	6.9 U	6.2 U	6.8 U	28 U	34.6	5.2 U
Methylcyclohexane					29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Methylene chloride	50	50	100000		29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
MTBE	930	930	100000		5.9 U	1.4 U	1.2 U	1.4 U	5.5 U	1.2 U	1 U
o-Xylene					3 J	1.4 U	0.32 J	1.4 U	2.2 J	1.2 U	1 U
Styrene					29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Tetrachloroethene	1300	1300	19000		1030	1.8 J	101	140	2910	142	86.3
Toluene	700	700	100000		8.9	1.4 U	1.2	0.5 J	8.5	1.2 U	1 U
trans-1,2-Dichloroethene	190	190	100000		29 U	6.9 U	6.2 U	6.8 U	2.1 J	6 U	5.2 U
trans-1,3-Dichloropropene					29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Trichloroethene	470	470	21000		193	6.9 U	0.38 J	0.98 J	360	3.1 J	1.5 J
Trichlorofluoromethane					29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Vinyl chloride	20	20	900		29 U	6.9 U	6.2 U	6.8 U	28 U	6 U	5.2 U
Xylenes (total)	260	1600	100000		11.4	1.4 U	1.1 J	1.4 U	7.5	1.2 U	1 U
Total TIC, Volatile					0	8.5 J	230.7 J	0	0	80 J	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

-	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RA-11B DUP	RA-11B	RA-11B	RA-12	RA-12	RA-12 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	3/21/2013	3/21/2013	3/21/2013	2/21/2013	2/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	33-35	38-40	11-12.5	23-25	23-25
1,1,1-Trichloroethane	680	680	100000		5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
* *					5.6 U		6 U	6.7 U 6.7 U	7.1 U 7.1 U	6.9 U 6.9 U
1,1,2,2-Tetrachloroethane						6.4 U				6.9 U 6.9 U
1,1,2-Trichloroethane	270				5.6 U	6.4 U	6 U	6.7 U	7.1 U	
1,1-Dichloroethane	270	270	26000		5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
1,1-Dichloroethene	330	330	100000		5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
1,2,3-Trichlorobenzene					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
1,2,4-Trichlorobenzene					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
1,2-Dibromoethane					1.1 U	1.3 U	1.2 U	1.3 U	1.4 U	1.4 U
1,2-Dichlorobenzene	1100	1100	100000		5.6 U	0.81 J	6 U	6.7 U	7.1 U	6.9 U
1,2-Dichloroethane	20	20	3100		1.1 U	1.3 U	1.2 U	1.3 U	1.4 U	1.4 U
1,2-Dichloropropane					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
1,3-Dichlorobenzene	2400	2400	49000		5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
1,4-Dichlorobenzene	1800	1800	13000		5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
1,4-Dioxane	100	100	13000		140 U	160 U	150 U	170 U	180 U	170 U
2-Butanone (MEK)	120	120	100000		11 UJV	13 UJV	12 UJV	13 UJV	14 UJV	14 UJV
2-Hexanone					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
4-Methyl-2-pentanone (MIBK)					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Acetone	50	50	100000		11 UJV	13 UJV	9.9 JV	13 UJV	14 UJV	14 UJV
Benzene	60	60	4800		1.1 U	1.3 U	1.2 U	1.3 U	1.4 U	1.4 U
Bromochloromethane					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Bromodichloromethane					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Bromoform					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Bromomethane					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Carbon disulfide					5.6 U	5.6 J	0.6 J	6.7 U	7.1 U	6.9 U
Carbon tetrachloride	760	760	2400		5.6 U	6.4 U	6 U	6.7 U	1.2 J	2.3 J
Chlorobenzene	1100	1100	100000		5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Chloroethane					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Chloroform	370	370	49000		5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Chloromethane	370 		49000		5.6 UJV	6.4 UJV	6 UJV	6.7 U	7.1 U 7.1 U	6.9 U
		250	100000		1.3 J		0.58 J	6.7 U 1.9 J		6.9 U 3.7 J
cis-1,2-Dichloroethene	250					21.7			1.9 J	
cis-1,3-Dichloropropene					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Cyclohexane					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Dibromochloromethane					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Dibromochloropropane					11 U	13 U	12 U	13 U	14 U	14 U
Dichlorodifluoromethane					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Ethylbenzene	1000	1000	41000		1.1 U	1.3 U	1.2 U	1.3 U	1.4 U	1.4 U
Freon 113					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Isopropylbenzene					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
m+p-Xylene					1.1 U	1.3 U	1.2 U	0.39 J	0.45 J	0.37 J

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RA-11B DUP	RA-11B	RA-11B	RA-12	RA-12	RA-12 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	3/21/2013	3/21/2013	3/21/2013	2/21/2013	2/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	33-35	38-40	11-12.5	23-25	23-25
Methyl acetate					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Methylcyclohexane					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Methylene chloride	50	50	100000		5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
MTBE	930	930	100000		1.1 U	1.3 U	1.2 U	1.3 U	1.4 U	1.4 U
o-Xylene					1.1 U	1.3 U	1.2 U	1.3 U	1.4 U	1.4 U
Styrene					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Tetrachloroethene	1300	1300	19000		102	12200 JV	21.8	11600	155 JV	373 JV
Toluene	700	700	100000		1.1 U	1.3 U	1.2 U	1.9	1.1 J	$0.8 \mathrm{J}$
trans-1,2-Dichloroethene	190	190	100000		5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
trans-1,3-Dichloropropene					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Trichloroethene	470	470	21000		1.5 J	88.8	5.1 J	7.7	1.1 J	2.4 J
Trichlorofluoromethane					5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Vinyl chloride	20	20	900		5.6 U	6.4 U	6 U	6.7 U	7.1 U	6.9 U
Xylenes (total)	260	1600	100000		1.1 U	1.3 U	1.2 U	0.39 J	0.45 J	0.37 J
Total TIC, Volatile					0	0	0	0	0	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

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V - Value altered or qualifier added during data validation

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	<b>Sample Designation:</b> RA-12	RA-12B	RA-13	RA-13	RA-14	RA-14	RA-15
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 3/6/2013	3/12/2013	2/14/2013		2/12/2013	2/12/2013	2/14/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 32-34	71.5-73	11-13	23-25	11-13	23-25	11-13
1,1,1-Trichloroethane	680	680	100000	5.6 U	6.8 U	6.8 U	6 U	6.5 U	0.94 J	6.7 U
1,1,2,2-Tetrachloroethane				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
1,1,2-Trichloroethane				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
1,1-Dichloroethane	270	270	26000	5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
1,1-Dichloroethene	330	330	100000	5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
1,2,3-Trichlorobenzene				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
1,2,4-Trichlorobenzene				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
1,2-Dibromoethane				1.1 U	0.8 U 1.4 U	1.4 U	1.2 U	1.3 U	1.2 U	1.3 U
,	1100	1100	100000	5.6 U	6.8 U		1.2 U 6 U	6.5 U	5.9 U	6.7 U
1,2-Dichlorobenzene						6.8 U				
1,2-Dichloroethane	20	20	3100	1.1 U	1.4 U	1.4 U	1.2 U	1.3 U	1.2 U	1.3 U
1,2-Dichloropropane	2400	2400		5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
1,3-Dichlorobenzene	2400	2400	49000	5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
1,4-Dichlorobenzene	1800	1800	13000	5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
1,4-Dioxane	100	100	13000	140 U	170 U	170 U	150 U	160 U	150 U	170 U
2-Butanone (MEK)	120	120	100000	11 U	14 UJV	14 UJV	12 UJV	13 UJV	12 UJV	13 UJV
2-Hexanone				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
4-Methyl-2-pentanone (MIBK)				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Acetone	50	50	100000	11 U	14 U	14 UJV	12 UJV	11 JV	12 UJV	13 UJV
Benzene	60	60	4800	1.1 U	1.4 U	1.4 U	1.2 U	1.3 U	1.2 U	0.55 J
Bromochloromethane				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Bromodichloromethane				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Bromoform				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Bromomethane				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Carbon disulfide				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Carbon tetrachloride	760	760	2400	5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Chlorobenzene	1100	1100	100000	5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Chloroethane				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Chloroform	370	370	49000	5.6 U	6.8 U	6.8 U	6 U	0.87 JV	5.9 U	6.7 U
Chloromethane				5.6 U	6.8 U	6.8 UJV	6 UJV	6.5 U	5.9 U	6.7 UJV
cis-1,2-Dichloroethene	250	250	100000	9.3	6.8 U	6.8 U	6 U	6.5 U	0.97 J	6.7 U
cis-1,3-Dichloropropene				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Cyclohexane				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Dibromochloromethane				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Dibromochloropropane				11 U	14 U	14 U	12 U	13 U	12 U	13 U
Dichlorodifluoromethane				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Ethylbenzene	1000	1000	41000	1.1 U	1.4 U	1.4 U	1.2 U	1.3 U	1.2 U	1.3 U
Freon 113				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Isopropylbenzene				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
m+p-Xylene				1.1 U	1.4 U	0.5 J	0.45 J	1.3 U	1.2 U	0.92 J
m p rytene				1.1 0	1.7 0	0.5 3	U.T.J J	1.5 0	1.2 0	0.723

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation: RA-12	RA-12B	RA-13	RA-13	RA-14	RA-14	RA-15
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date: </b> 3/6/201	3 3/12/2013	2/14/2013	2/14/2013	2/12/2013	2/12/2013	2/14/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 32-34	71.5-73	11-13	23-25	11-13	23-25	11-13
Methyl acetate				12.3 JV	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Methylcyclohexane				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Methylene chloride	50	50	100000	5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
MTBE	930	930	100000	1.1 U	1.4 U	1.4 U	1.2 U	1.3 U	1.2 U	1.3 U
o-Xylene				1.1 U	1.4 U	1.4 U	1.2 U	1.3 U	1.2 U	0.4 J
Styrene				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Tetrachloroethene	1300	1300	19000	164 JV	6.8 U	0.58 J	0.53 J	8.3 JV	3.6 J	4.3 J
Toluene	700	700	100000	0.26 J	1.4 U	1.7	1.8	1.3 U	0.94 J	7.5
trans-1,2-Dichloroethene	190	190	100000	5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
trans-1,3-Dichloropropene				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Trichloroethene	470	470	21000	3 J	6.8 U	6.8 U	6 U	34.7 JV	0.9 J	0.4 J
Trichlorofluoromethane				5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Vinyl chloride	20	20	900	5.6 U	6.8 U	6.8 U	6 U	6.5 U	5.9 U	6.7 U
Xylenes (total)	260	1600	100000	1.1 U	1.4 U	0.5 J	0.45 J	1.3 U	1.2 U	1.3
Total TIC, Volatile				0	0	0	0	0	0	0

J - Estimated value

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

DUP - Duplicate sample

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RA-15	RA-16	RA-16	RA-17	RA-17	RA-17 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:			2/13/2013			2/12/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	11-13	23-25	10-12	23-25	10-12
(Concentrations in µg/kg)	Osc	Groundwater		Sample Depth (It bis).	23-23	11-13	23-23	10-12	23-23	10-12
1,1,1-Trichloroethane	680	680	100000		5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
1,1,2,2-Tetrachloroethane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
1,1,2-Trichloroethane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
1,1-Dichloroethane	270	270	26000		5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
1,1-Dichloroethene	330	330	100000		5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
1,2,3-Trichlorobenzene					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
1,2,4-Trichlorobenzene					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
1,2-Dibromoethane					1.1 U	1.5 U	1.4 U	1.3 U	1.2 U	1.1 U
1,2-Dichlorobenzene	1100	1100	100000		5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
1,2-Dichloroethane	20	20	3100		1.1 U	1.5 U	1.4 U	1.3 U	1.2 U	1.1 U
1,2-Dichloropropane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
1,3-Dichlorobenzene	2400	2400	49000		5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
1,4-Dichlorobenzene	1800	1800	13000		5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
1,4-Dioxane	100	100	13000		140 U	190 U	170 U	170 U	150 U	140 U
2-Butanone (MEK)	120	120	100000		11 UJV	15 UJV	14 UJV	13 UJV	12 UJV	11 UJV
2-Hexanone					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
4-Methyl-2-pentanone (MIBK)					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Acetone	50	50	100000		11 UJV	15 UJV	14 UJV	13 UJV	12 UJV	16.1 JV
Benzene	60	60	4800		1.1 U	1.5 U	1.4 U	1.3 U	1.2 U	1.1 U
Bromochloromethane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Bromodichloromethane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Bromoform					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Bromomethane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Carbon disulfide					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Carbon tetrachloride	760	760	2400		5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Chlorobenzene	1100	1100	100000		5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Chloroethane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Chloroform	370	370	49000		5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Chloromethane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
cis-1,2-Dichloroethene	250	250	100000		5.7 U	8.6	6.8 U	6.7 U	6.2 U	5.6 U
cis-1,3-Dichloropropene					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Cyclohexane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Dibromochloromethane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Dibromochloropropane					11 U	15 U	14 U	13 U	12 U	11 U
Dichlorodifluoromethane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Ethylbenzene	1000	1000	41000		1.1 U	1.5 U	1.4 U	1.3 U	1.2 U	1.1 U
Freon 113					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Isopropylbenzene					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
m+p-Xylene					1.1 U	1.5 U	1.4 U	1.3 U	1.2 U	0.39 J

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RA-15	RA-16	RA-16	RA-17	RA-17	RA-17 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/14/2013	2/13/2013	2/13/2013	2/12/2013	2/12/2013	2/12/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	11-13	23-25	10-12	23-25	10-12
Methyl acetate					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Methylcyclohexane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Methylene chloride	50	50	100000		5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
MTBE	930	930	100000		1.1 U	1.5 U	1.4 U	1.3 U	1.2 U	1.1 U
o-Xylene					1.1 U	1.5 U	1.4 U	1.3 U	1.2 U	1.1 U
Styrene					5.7 U	7.4 U	6.8 U	6.7 U	1.6 J	5.6 U
Tetrachloroethene	1300	1300	19000		0.43 J	0.89 J	1 J	6.7 U	2 J	5.6 U
Toluene	700	700	100000		1.2	0.31 J	0.29 J	1.3 U	3.6	1 J
trans-1,2-Dichloroethene	190	190	100000		5.7 U	0.96 J	6.8 U	6.7 U	6.2 U	5.6 U
trans-1,3-Dichloropropene					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Trichloroethene	470	470	21000		5.7 U	25.6	0.49 J	6.7 U	6.2 U	5.6 U
Trichlorofluoromethane					5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Vinyl chloride	20	20	900		5.7 U	7.4 U	6.8 U	6.7 U	6.2 U	5.6 U
Xylenes (total)	260	1600	100000		1.1 U	1.5 U	1.4 U	1.3 U	1.2 U	0.39 J
Total TIC, Volatile					6.6 J	0	0	9.9 J	0	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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V - Value altered or qualifier added during data validation

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC Part 375	NYSDEC Part 375	NYSDEC Part 375	Sample Designation:		RA-18	RA-19	RA-19	RA-20	RA-20	RA-21
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/15/2013						
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	11-13	23-25	12-14	22-24	11-13	23-25	10-12
1,1,1-Trichloroethane	680	680	100000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	4.5 J	5.6 U
1.1.2.2-Tetrachloroethane					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7.5 J	5.6 U
1.1.2-Trichloroethane		<u></u>			5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
1,1-Dichloroethane	270	270	26000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	0.71 J	5.6 U
1,1-Dichloroethene	330	330	100000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	1.5 J	5.6 U
1,2,3-Trichlorobenzene					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
1,2,4-Trichlorobenzene					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
1,2-Dibromoethane					1 U	1.2 U	1.4 U	1.5 U	1.5 U	1.4 U	1.1 U
1,2-Dichlorobenzene	1100	1100	100000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
1,2-Dichloroethane	20	20	3100		1 U	1.2 U	1.4 U	1.5 U	1.5 U	1.4 U	1.1 U
1,2-Dichloropropane	20		3100 		5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
1,3-Dichlorobenzene	2400	2400	49000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
1,4-Dichlorobenzene	1800	1800	13000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
1,4-Dioxane	100	100	13000		130 U	150 U	170 UJV	190 U	190 U	180 U	3.0 U 140 U
2-Butanone (MEK)	120	120	100000		10 UJV	130 U 12 UJV	170 UJV 14 UJV	190 U 15 UJV	190 U 15 UJV	14 UJV	140 U 11 UJV
` ,					5.2 U	12 UJ V 6 U	6.8 U	7.5 U	7.6 U	14 UJ V 7 U	5.6 U
2-Hexanone					5.2 U 5.2 U	6 U	6.8 U	7.5 U 7.5 U		7 U	5.6 U
4-Methyl-2-pentanone (MIBK)	 50	 50	100000						7.6 U		
Acetone	50	50	100000		34.6 JV	12 UJV	25.3 JV	15 UJV	15 UJV	14 UJV	11 UJV
Benzene	60	60	4800		1 U	3.3	1.4 U	1.5 U	1.5 U	1.4 U	1.1 U
Bromochloromethane					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Bromodichloromethane					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Bromoform					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Bromomethane					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Carbon disulfide					0.28 J	2.8 J	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Carbon tetrachloride	760	760	2400		5.2 U	6 U	6.8 U	7.5 U	7.6 U	0.37 J	5.6 U
Chlorobenzene	1100	1100	100000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Chloroethane					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Chloroform	370	370	49000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	0.39 J	5.6 U
Chloromethane					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
cis-1,2-Dichloroethene	250	250	100000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	3.1 J	5.6 U
cis-1,3-Dichloropropene					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Cyclohexane					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Dibromochloromethane					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Dibromochloropropane					10 U	12 U	14 U	15 U	15 U	14 U	11 U
Dichlorodifluoromethane					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Ethylbenzene	1000	1000	41000		1 U	2	1.4 U	1.5 U	1.5 U	1.4 U	1.1 U
Freon 113					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Isopropylbenzene					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
m+p-Xylene					0.21 J	0.54 J	1.4 U	1.5 U	1.5 U	1.4 U	0.58 J

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-18	RA-18	RA-19	RA-19	RA-20	RA-20	RA-21
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/15/2013	2/15/2013	2/12/2013	2/12/2013	2/13/2013	2/13/2013	3/15/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	11-13	23-25	12-14	22-24	11-13	23-25	10-12
Methyl acetate					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Methylcyclohexane					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Methylene chloride	50	50	100000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
MTBE	930	930	100000		1 U	1.2 U	1.4 U	1.5 U	1.5 U	1.4 U	1.1 U
o-Xylene					1 U	1.2 U	1.4 U	1.5 U	1.5 U	1.4 U	1.1 U
Styrene					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Tetrachloroethene	1300	1300	19000		5.2 U	6 U	1.7 J	7.5 U	7.6 U	18.5	1 J
Toluene	700	700	100000		0.37 J	0.69 J	2.1	1 J	1.5 U	0.89 J	1.1 U
trans-1,2-Dichloroethene	190	190	100000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
trans-1,3-Dichloropropene					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Trichloroethene	470	470	21000		5.2 U	6 U	6.8 U	7.5 U	7.6 U	2.5 J	5.6 U
Trichlorofluoromethane					5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Vinyl chloride	20	20	900		5.2 U	6 U	6.8 U	7.5 U	7.6 U	7 U	5.6 U
Xylenes (total)	260	1600	100000		0.21 J	0.54 J	1.4 U	1.5 U	1.5 U	1.4 U	0.58 J
Total TIC, Volatile					0	0	0	0	0	0	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC			<u> </u>		_		
	Part 375	Part 375	Part 375	Sample Designation: RA-21	RA-21	RA-21	RA-22	RA-22	RA-23	RA-23
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 3/15/2013	3/15/2013	3/15/2013	2/15/2013	2/15/2013	2/13/2013	
(Concentrations in μg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 23-25	28-30	35-37	7-9	18-20	11-13	23-25
1,1,1-Trichloroethane	680	680	100000	5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
1,1,2,2-Tetrachloroethane				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
1,1,2-Trichloroethane				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
1,1-Dichloroethane	270	270	26000	5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
1,1-Dichloroethene	330	330	100000	5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
1,2,3-Trichlorobenzene				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
1,2,4-Trichlorobenzene				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
1,2-Dibromoethane				1.1 U	1.1 U	1.2 U	1.1 U	1.6 U	1.5 U	1.3 U
1.2-Dichlorobenzene	1100	1100	100000	5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
1,2-Dichloroethane	20	20	3100	1.1 U	1.1 U	1.2 U	1.1 U	1.6 U	1.5 U	1.3 U
1,2-Dichloropropane			3100	5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
1.3-Dichlorobenzene	2400	2400	49000	5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
1.4-Dichlorobenzene	1800	1800	13000	5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
1.4-Dioxane	100	100	13000	140 U	140 U	160 U	140 U	200 U	180 U	160 U
2-Butanone (MEK)	120	120	100000	140 U 11 UJV	140 U 11 UJV	100 U 12 UJV	140 U 11 UJV	200 U 16 UJV	15 UJV	160 U 13 UJV
2-Butanone (WEK) 2-Hexanone	120	120		5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U 7.3 U	6.5 U
4-Methyl-2-pentanone (MIBK)	50	50	100000	3.5 U 11 UJV	3.7 U 11 UJV	23 JV	19.5 JV	7.8 U 16 UJV	7.5 U 15 UJV	0.5 U 13 UJV
Acetone	60	60								1.3 U
Benzene Bromochloromethane			4800	1.1 U	0.41 J 5.7 U	1.2 U 6.2 U	1.1 U	1.6 U 7.8 U	1.5 U 7.3 U	6.5 U
				5.5 U			5.6 U			
Bromodichloromethane				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Bromoform				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Bromomethane				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Carbon disulfide				5.5 U	5.7 U	0.98 J	5.6 U	7.8 U	7.3 U	6.5 U
Carbon tetrachloride	760	760	2400	5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Chlorobenzene	1100	1100	100000	5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Chloroethane				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Chloroform	370	370	49000	5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Chloromethane				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
cis-1,2-Dichloroethene	250	250	100000	5.5 U	5.7 U	2.8 J	5.6 U	7.8 U	7.3 U	6.5 U
cis-1,3-Dichloropropene				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Cyclohexane				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Dibromochloromethane				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Dibromochloropropane				11 U	11 U	12 U	11 U	16 U	15 U	13 U
Dichlorodifluoromethane				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Ethylbenzene	1000	1000	41000	1.1 U	1.1	1.2 U	1.1 U	1.6 U	1.5 U	1.3 U
Freon 113				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Isopropylbenzene				5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
m+p-Xylene				0.36 J	3.9	1.2 U	0.45 J	0.64 J	1.5 U	1.3 U

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-21	RA-21	RA-21	RA-22	RA-22	RA-23	RA-23
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	3/15/2013	3/15/2013	3/15/2013	2/15/2013	2/15/2013	2/13/2013	2/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	28-30	35-37	7-9	18-20	11-13	23-25
Methyl acetate					5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Methylcyclohexane					5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Methylene chloride	50	50	100000		5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
MTBE	930	930	100000		1.1 U	1.1 U	1.2 U	1.1 U	1.6 U	1.5 U	1.3 U
o-Xylene					1.1 U	0.46 J	1.2 U	1.1 U	1.6 U	1.5 U	1.3 U
Styrene					5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Tetrachloroethene	1300	1300	19000		6.5	34.1	5.9 J	0.39 J	0.35 J	0.38 J	3.3 J
Toluene	700	700	100000		1.1 U	1 J	1.2 U	1.2	1.5 J	0.36 J	0.4 J
trans-1,2-Dichloroethene	190	190	100000		5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
trans-1,3-Dichloropropene					5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Trichloroethene	470	470	21000		5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	0.71 J	0.5 J
Trichlorofluoromethane					5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Vinyl chloride	20	20	900		5.5 U	5.7 U	6.2 U	5.6 U	7.8 U	7.3 U	6.5 U
Xylenes (total)	260	1600	100000		0.36 J	4.4	1.2 U	0.45 J	0.64 J	1.5 U	1.3 U
Total TIC, Volatile					15 J	27 J	0	0	0	0	0

J - Estimated value

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

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NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

DUP - Duplicate sample

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation: RA-24	RA-24	RA-24	RA-24	RA-25	RA-25	RA-25
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 3/18/2013	3/18/2013	3/18/2013	3/18/2013	3/18/2013	3/18/2013	3/18/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 10-12	22-24	30-31	38-40	9-11	23-25	30-31
1,1,1-Trichloroethane	680	680	100000	5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
1,1,2,2-Tetrachloroethane				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
1,1,2-Trichloroethane				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
1,1-Dichloroethane	270	270	26000	5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
1,1-Dichloroethene	330	330	100000	5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
1,2,3-Trichlorobenzene				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
1,2,4-Trichlorobenzene				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
1,2-Dibromoethane				1.1 U	1.2 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U
1,2-Dichlorobenzene	1100	1100	100000	5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
· ·	20	20	3100	1.1 U	1.2 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U
1,2-Dichloroethane										5.8 U
1,2-Dichloropropane	2400	2400		5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	
1,3-Dichlorobenzene	2400	2400	49000	5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
1,4-Dichlorobenzene	1800	1800	13000	5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
1,4-Dioxane	100	100	13000	140 U	150 U	160 U	150 U	140 U	150 U	150 U
2-Butanone (MEK)	120	120	100000	11 UJV	12 UJV	13 UJV	12 UJV	11 UJV	12 UJV	12 UJV
2-Hexanone				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
4-Methyl-2-pentanone (MIBK)				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Acetone	50	50	100000	11 UJV	12 U	13 UJV	75.6	23.8	12 U	12 UJV
Benzene	60	60	4800	0.33 J	1.2 U	0.42 J	0.91 J	0.37 J	1.2 U	0.7 J
Bromochloromethane				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Bromodichloromethane				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Bromoform				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Bromomethane				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Carbon disulfide				5.5 U	5.8 U	6.4 U	27.8	5.6 U	5.8 U	5.8 U
Carbon tetrachloride	760	760	2400	5.5 U	5.8 U	1.3 J	5.8 U	5.6 U	5.8 U	5.8 U
Chlorobenzene	1100	1100	100000	5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Chloroethane				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Chloroform	370	370	49000	5.5 U	5.8 U	2.4 J	5.8 U	5.6 U	5.8 U	1.2 J
Chloromethane				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
cis-1,2-Dichloroethene	250	250	100000	10	5.8 U	43.1	5	1.5 J	5.8 U	18.9
cis-1,3-Dichloropropene				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Cyclohexane				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Dibromochloromethane				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Dibromochloropropane				11 U	12 U	13 U	12 U	11 U	12 U	12 U
Dichlorodifluoromethane				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Ethylbenzene	1000	1000	41000	1.1 U	1.2 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U
Freon 113				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Isopropylbenzene				5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
m+p-Xylene				1.1 U	1.2 U	1.3 U	0.69 J	1.1 U	0.62 J	1.2 U

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-24	RA-24	RA-24	RA-24	RA-25	RA-25	RA-25
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	3/18/2013	3/18/2013	3/18/2013	3/18/2013	3/18/2013	3/18/2013	3/18/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	30-31	38-40	9-11	23-25	30-31
Methyl acetate					5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Methylcyclohexane					5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Methylene chloride	50	50	100000		5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
MTBE	930	930	100000		1.1 U	1.2 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U
o-Xylene					1.1 U	1.2 U	1.3 U	0.29 J	1.1 U	0.19 J	1.2 U
Styrene					5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Tetrachloroethene	1300	1300	19000		527	210	737	9.1	93.3	19.7	534
Toluene	700	700	100000		0.42 J	1.2 U	0.5 J	2.8	0.86 J	0.94 J	1.4
trans-1,2-Dichloroethene	190	190	100000		5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
trans-1,3-Dichloropropene					5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Trichloroethene	470	470	21000		13.5	0.44 J	11.3	3.6 J	1.1 J	5.8 U	5.3 J
Trichlorofluoromethane					5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Vinyl chloride	20	20	900		5.5 U	5.8 U	6.4 U	5.8 U	5.6 U	5.8 U	5.8 U
Xylenes (total)	260	1600	100000		1.1 U	1.2 U	1.3 U	0.97 J	1.1 U	0.8 J	1.2 U
Total TIC, Volatile					0	320 J	0	58 J	0	50 J	250 J

J - Estimated value

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

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NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

DUP - Duplicate sample

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in μg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	Sample Designation: RA-25 Sample Date: 3/18/201 Sample Depth (ft bls): 38-40	RA-26 3 3/19/2013 10-12	RA-26 3/19/2013 21-23	RA-26 3/19/2013 29-30	RA-27 3/19/2013 10-12	RA-27 3/19/2013 23-25	RA-27 3/19/2013 26-27
(Concentrations in µg/kg)	Cic	Groundwater		bumple Depth (it bis). 30 40	10 12	21 23	27 30	10 12	23 23	20 21
1,1,1-Trichloroethane	680	680	100000	5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
1,1,2,2-Tetrachloroethane				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
1,1,2-Trichloroethane				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
1,1-Dichloroethane	270	270	26000	5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
1,1-Dichloroethene	330	330	100000	5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
1,2,3-Trichlorobenzene				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
1,2,4-Trichlorobenzene				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
1,2-Dibromoethane				1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.3 U
1,2-Dichlorobenzene	1100	1100	100000	5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
1,2-Dichloroethane	20	20	3100	1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.3 U
1,2-Dichloropropane				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
1,3-Dichlorobenzene	2400	2400	49000	5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
1.4-Dichlorobenzene	1800	1800	13000	5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
1,4-Dioxane	100	100	13000	140 U	130 U	130 U	140 U	140 U	160 U	160 U
2-Butanone (MEK)	120	120	100000	11 UJV	10 UJV	10 UJV	11 UJV	12 UJV	13 UJV	13 UJV
2-Hexanone				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
4-Methyl-2-pentanone (MIBK)				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Acetone (WIBIT)	50	50	100000	13.8	10 UJV	10 UJV	11 UJV	12 UJV	13 UJV	13 UJV
Benzene	60	60	4800	1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.3 U
Bromochloromethane				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Bromodichloromethane				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Bromoform				5.6 U	5.2 U	5.1 U	5.7 U	5.8 UJV	6.5 U	6.5 U
Bromomethane				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Carbon disulfide				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Carbon tetrachloride	760	760	2400	5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Chlorobenzene	1100	1100	100000	5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Chloroethane				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Chloroform	370	370	49000	5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Chloromethane	370 	370 	49000	5.6 U	5.2 UJV	5.1 UJV	5.7 U	5.8 U	6.5 U	6.5 U
cis-1,2-Dichloroethene	250	250	100000	5.6 U	5.2 UJ V	5.1 UJ V 5.1 U	5.7 U	5.8 U	6.5 U	0.3 U 1.4 J
*										
cis-1,3-Dichloropropene				5.6 U	5.2 U 5.2 U	5.1 U	5.7 U 5.7 U	5.8 U	6.5 U 6.5 U	6.5 U 6.5 U
Cyclohexane				5.6 U		5.1 U		5.8 U		
Dibromochloromethane				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Dibromochloropropane				11 U	10 U	10 U	11 U	12 U	13 U	13 U
Dichlorodifluoromethane	1000	1000	41000	5.6 U	5.2 UJV	5.1 UJV	5.7 U	5.8 U	6.5 U	6.5 U
Ethylbenzene	1000	1000	41000	1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.3 U
Freon 113				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Isopropylbenzene				5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
m+p-Xylene				0.37 J	0.39 J	1 U	1.1 U	1.2 U	1.3 U	1.3 U

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-25	RA-26	RA-26	RA-26	RA-27	RA-27	RA-27
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	3/18/2013	3/19/2013	3/19/2013	3/19/2013	3/19/2013	3/19/2013	3/19/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	38-40	10-12	21-23	29-30	10-12	23-25	26-27
Methyl acetate					5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Methylcyclohexane					5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Methylene chloride	50	50	100000		5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
MTBE	930	930	100000		1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.3 U
o-Xylene					1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.3 U
Styrene					5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Tetrachloroethene	1300	1300	19000		1 J	6.1	4.9 J	6.6	0.37 J	2.3 J	68.6
Toluene	700	700	100000		0.57 J	0.38 J	0.25 J	1.1 U	1.2 U	0.42 J	0.44 J
trans-1,2-Dichloroethene	190	190	100000		5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
trans-1,3-Dichloropropene					5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Trichloroethene	470	470	21000		0.62 J	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	0.68 J
Trichlorofluoromethane					5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Vinyl chloride	20	20	900		5.6 U	5.2 U	5.1 U	5.7 U	5.8 U	6.5 U	6.5 U
Xylenes (total)	260	1600	100000		0.37 J	0.39 J	1 U	1.1 U	1.2 U	1.3 U	1.3 U
Total TIC, Volatile					14 J	0	0	16 J	0	0	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Part 375         Part 375         Part 375         Part 375         Sample Designation:         RA-28         RA-29         RA-29         RA-29         RA-29         RA-30         5/8/2013         5	RA-30 3 5/8/2013 19-20 6.5 U 6.5 U 6.5 U 6.5 U 6.5 U
(Concentrations in μg/kg)         Use         Groundwater         Residential         Sample Depth (ft bls):         10-12         23-25         10-12         22-24         28-30         10-12           1,1,1-Trichloroethane         680         680         100000         5.9 U         6.7 U         5.6 U         5.7 U         5.8 U         6.5 U           1,1,2-Tetrachloroethane             5.9 U         6.7 U         5.6 U         5.7 U         5.8 U         6.5 U           1,1-2-Trichloroethane            5.9 U         6.7 U         5.6 U         5.7 U         5.8 U         6.5 U           1,1-Dichloroethane         270         270         26000         5.9 U         6.7 U         5.6 U         5.7 U         5.8 U         6.5 U	6.5 U 6.5 U 6.5 U 6.5 U 6.5 U
1,1,1-Trichloroethane       680       680       100000       5.9 U       6.7 U       5.6 U       5.7 U       5.8 U       6.5 U         1,1,2,2-Tetrachloroethane          5.9 U       6.7 U       5.6 U       5.7 U       5.8 U       6.5 U         1,1,2-Trichloroethane          5.9 U       6.7 U       5.6 U       5.7 U       5.8 U       6.5 U         1,1-Dichloroethane       270       270       26000       5.9 U       6.7 U       5.6 U       5.7 U       5.8 U       6.5 U	6.5 U 6.5 U 6.5 U 6.5 U
1,1,1-Trichloroethane       680       680       100000       5.9 U       6.7 U       5.6 U       5.7 U       5.8 U       6.5 U         1,1,2-Tetrachloroethane          5.9 U       6.7 U       5.6 U       5.7 U       5.8 U       6.5 U         1,1,2-Trichloroethane          5.9 U       6.7 U       5.6 U       5.7 U       5.8 U       6.5 U         1,1-Dichloroethane       270       270       26000       5.9 U       6.7 U       5.6 U       5.7 U       5.8 U       6.5 U	6.5 U 6.5 U 6.5 U
1,1,2-Trichloroethane          5.9 U       6.7 U       5.6 U       5.7 U       5.8 U       6.5 U         1,1-Dichloroethane       270       270       26000       5.9 U       6.7 U       5.6 U       5.7 U       5.8 U       6.5 U	6.5 U 6.5 U
1,1-Dichloroethane 270 270 26000 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
	6 5 I I
1,1-Dichloroethene 330 330 100000 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	0.5 U
1,2,3-Trichlorobenzene 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
1,2,4-Trichlorobenzene 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
1,2-Dibromoethane 1.2 U 1.3 U 1.1 U 1.1 U 1.2 U 1.3 U	1.3 U
1,2-Dichlorobenzene 1100 1100 100000 5.9 U 6.7 U 5.6 U 5.7 U 0.4 J 6.5 U	6.5 U
1,2-Dichloroethane 20 20 3100 1.2 U 1.3 U 1.1 U 1.1 U 1.2 U 1.3 U	1.3 U
1,2-Dichloropropane 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
1,3-Dichlorobenzene 2400 2400 49000 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
1,4-Dichlorobenzene 1800 1800 13000 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
1,4-Dioxane 100 100 13000 150 U 170 U 140 U 140 U 140 U 160 U	160 U
2-Butanone (MEK) 120 120 100000 12 UJV 13 UJV 11 UJV 11 UJV 12 UJV 13 UJ	13 UJV
2-Hexanone 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
4-Methyl-2-pentanone (MIBK) 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Acetone 50 50 100000 12 UJV 13 UJV 34.7 JV 36.4 JV 35.2 JV 34.6	6.9 J
Benzene 60 60 4800 1.2 U 1.3 U 1.1 U 1.1 U 1.2 U 1.3 U	1.3 U
Bromochloromethane 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Bromodichloromethane 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Bromoform 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Bromomethane 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Carbon disulfide 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Carbon tetrachloride 760 760 2400 5.9 U 6.7 U 5.6 U 5.7 U 8 6.5 U	6.5 U
Chlorobenzene 1100 1100 100000 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Chloroethane 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Chloroform 370 370 49000 5.9 U 1.5 J 5.6 U 5.7 U 3.3 J 6.5 U	6.5 U
Chloromethane 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
cis-1,2-Dichloroethene 250 250 100000 5.9 U 2.5 J 0.62 J 8.6 28.6 6.5 U	6.5 U
cis-1,3-Dichloropropene 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Cyclohexane 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Dibromochloromethane 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Dibromochloropropane 12 U 13 U 11 U 11 U 12 U 13 U	13 U
Dichlorodifluoromethane 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Ethylbenzene 1000 1000 41000 1.2 U 1.3 U 1.1 U 1.1 U 1.2 U 2.2	0.42 J
Freon 113 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
Isopropylbenzene 5.9 U 6.7 U 5.6 U 5.7 U 5.8 U 6.5 U	6.5 U
m+p-Xylene 1.2 U 1.3 U 1.1 U 1.1 U 1.2 U 11.2	1.8

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-28	RA-28	RA-29	RA-29	RA-29	RA-30	RA-30
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	3/19/2013	3/19/2013	5/8/2013	5/8/2013	5/8/2013	5/8/2013	5/8/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	23-25	10-12	22-24	28-30	10-12	19-20
Methyl acetate					5.9 U	6.7 U	5.6 U	5.7 U	5.8 U	6.5 U	6.5 U
Methylcyclohexane					5.9 U	6.7 U	5.6 U	5.7 U	5.8 U	6.5 U	6.5 U
Methylene chloride	50	50	100000		5.9 U	6.7 U	4.8 J	6.1	3.9 J	40.8	3.1 J
MTBE	930	930	100000		1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	0.49 J	1.3 U
o-Xylene					1.2 U	1.3 U	1.1 U	0.51 J	1.2 U	4	0.7 J
Styrene					5.9 U	6.7 U	5.6 U	5.7 U	5.8 U	6.5 U	6.5 U
Tetrachloroethene	1300	1300	19000		5.9 U	140	12.2	467	671	6.5 U	6.5 U
Toluene	700	700	100000		1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	2.4	0.42 J
trans-1,2-Dichloroethene	190	190	100000		5.9 U	6.7 U	5.6 U	5.7 U	5.8 U	6.5 U	6.5 U
trans-1,3-Dichloropropene					5.9 U	6.7 U	5.6 U	5.7 U	5.8 U	6.5 U	6.5 U
Trichloroethene	470	470	21000		5.9 U	1.6 J	0.52 J	2.6 J	12.7	6.5 U	6.5 U
Trichlorofluoromethane					5.9 U	6.7 U	5.6 U	5.7 U	5.8 U	6.5 U	6.5 U
Vinyl chloride	20	20	900		5.9 U	6.7 U	5.6 U	5.7 U	5.8 U	6.5 U	6.5 U
Xylenes (total)	260	1600	100000		1.2 U	1.3 U	1.1 U	0.51 J	1.2 U	15.2	2.5
Total TIC, Volatile					0	0	5.7 J	6.9 J	6.8 J	171.2 J	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC Part 375	NYSDEC Part 375	NYSDEC Part 375	Sample Designation: RA	۸ 31	RA-31	RA-32	RA-32 DUP	RA-33	RA-34	RA-35
Parameter	Unrestricted	Protection of	Restricted	Sample Designation: NA			4/26/2013	4/26/2013			
(Concentrations in µg/kg)	Use	Groundwater	Residential	<u>-</u>	)-12	24-25	4-6	4/20/2013	4/20/2013	4-6	4 - 6
(Concentrations in µg/kg)	Use	Groundwater		Sample Depth (It bis): 10	J-12	24-23	4-0	4-0	4-0	4-0	4 - 0
1,1,1-Trichloroethane	680	680	100000	7	7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
1,1,2,2-Tetrachloroethane				7	7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
1,1,2-Trichloroethane				7	7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
1,1-Dichloroethane	270	270	26000	7	7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
1,1-Dichloroethene	330	330	100000	7	7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
1,2,3-Trichlorobenzene					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
1,2,4-Trichlorobenzene				7	7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
1,2-Dibromoethane				1.4	4 U	1.3 U	1.3 U	1.3 U	1.6 U	1.4 U	1.2 U
1.2-Dichlorobenzene	1100	1100	100000		7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
1,2-Dichloroethane	20	20	3100		4 U	1.3 U	1.3 U	1.3 U	1.6 U	1.4 U	1.2 U
1,2-Dichloropropane					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
1.3-Dichlorobenzene	2400	2400	49000		7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
1.4-Dichlorobenzene	1800	1800	13000		7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
1.4-Dioxane	100	100	13000		70 U	160 U	160 U	160 U	200 U	170 U	150 U
2-Butanone (MEK)	120	120	100000		UJV	13 UJV	13 UJV	13 UJV	16 UJV	14 UJV	12 U
2-Hexanone					7 U	6.3 U	6.3 UJV	6.3 UJV	7.9 U	7 UJV	6 U
4-Methyl-2-pentanone (MIBK)					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Acetone	50	50	100000		.2 J	5.2 J	24.9 JV	20.4 JV	11.3 J	7.3 JV	12 U
Benzene	60	60	4800		4 U	1.3 U	0.7 NJV	0.5 J	1.6 U	0.73 J	1.2 U
Bromochloromethane					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Bromodichloromethane					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Bromoform					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Bromomethane					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Carbon disulfide					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Carbon tetrachloride	760	760	2400		7 U	6.3 U	6.3 U	6.3 U	2.7 J	7 U	6 U
Chlorobenzene	1100	1100	100000		7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Chloroethane					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Chloroform	370	370	49000		7 U	6.3 U	6.3 U	6.3 U	7.1 J	7 U	6 U
Chloromethane					7 U	6.3 U	6.3 U	6.3 U	7.1 J	7 U	6 U
cis-1,2-Dichloroethene	250	250	100000	-	7 U	6.3 U	0.61 J	0.4 J	0.79 J	7 U	1.5 J
cis-1,3-Dichloropropene					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Cyclohexane					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Dibromochloromethane					7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Dibromochloropropane					4 U	13 U	13 U	13 U	1.9 U	14 U	12 U
Dichlorodifluoromethane	 	 			7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Ethylbenzene	1000	1000	41000		49 J	0.89 J	0.93 J	0.5 J	1.6 U	0.89 J	1.2 U
Freon 113	1000		41000		493 7 U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Isopropylbenzene					7 U	6.3 U	6.3 U	6.3 U	7.9 U 7.9 U	7 U	6 U
m+p-Xylene					2.4	4.2	3	1.7	0.73 J	3.3	1.2 U
m-p-Ayiene				2	<b>4.4</b>	4.2	3	1./	0.73 J	3.3	1.2 U

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation: RA	<b>\</b> -31	RA-31	RA-32	RA-32 DUP	RA-33	RA-34	RA-35
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 5/8/2	2013 5	5/8/2013	4/26/2013	4/26/2013	4/26/2013	4/26/2013	8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 10-	-12	24-25	4-6	4-6	4-6	4-6	4 - 6
Methyl acetate				7	U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Methylcyclohexane				7	U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Methylene chloride	50	50	100000	7.	.6	20	9.7 JV	8.6 JV	14.7	8.1 JV	6 U
MTBE	930	930	100000	1.4	4 U	0.66 J	1.3 U	1.3 U	1.6 U	1.4 U	1.2 U
o-Xylene				0.9	98 J	1.8	1.1 J	0.64 J	1.6 U	1.1 J	1.2 U
Styrene				7	U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Tetrachloroethene	1300	1300	19000	7	U	0.43 J	3.1 J	1.8 J	33.6	3.1 J	130
Toluene	700	700	100000	0.6	59 J	1.3	1.2 J	0.66 J	0.44 J	1.2 J	1.2 U
trans-1,2-Dichloroethene	190	190	100000	7	U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
trans-1,3-Dichloropropene				7	U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Trichloroethene	470	470	21000	7	U	6.3 U	2.5 J	1.8 J	159	7 U	3 J
Trichlorofluoromethane				7	U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Vinyl chloride	20	20	900	7	U	6.3 U	6.3 U	6.3 U	7.9 U	7 U	6 U
Xylenes (total)	260	1600	100000	3.	.4	6	4	2.3	0.73 J	4.4	1.2 U
Total TIC, Volatile				(	0	0	0	0	0	0	

J - Estimated value

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

DUP - Duplicate sample

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC Part 375	NYSDEC Part 375	NYSDEC Part 375	Sample Designation: RA-35	RA-35	RA-36	RA-36	RA-36 DUP	RA-36	GWP-1
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 8/5/2013		8/5/2013	8/5/2013	8/5/2013		5/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Date: 8/3/2013  Sample Depth (ft bls): 6 - 8	14 - 16	8 - 10	10 - 12	10 - 12	18 - 20	34-35
(Concentrations in µg/kg)	Use	Groundwater		Sample Depth (It bis): 6 - 8	14 - 10	8 - 10	10 - 12	10 - 12	16 - 20	34-33
1,1,1-Trichloroethane	680	680	100000	6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
1,1,2,2-Tetrachloroethane				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
1,1,2-Trichloroethane				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
1,1-Dichloroethane	270	270	26000	6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
1,1-Dichloroethene	330	330	100000	6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
1,2,3-Trichlorobenzene				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
1,2,4-Trichlorobenzene				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
1,2-Dibromoethane				1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U
1,2-Dichlorobenzene	1100	1100	100000	6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
1,2-Dichloroethane	20	20	3100	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U
1,2-Dichloropropane				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
1.3-Dichlorobenzene	2400	2400	49000	6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
1.4-Dichlorobenzene	1800	1800	13000	6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
1.4-Dioxane	100	100	13000	150 U	150 U	150 U	140 U	150 U	140 U	150 U
2-Butanone (MEK)	120	120	100000	130 C	130 U	12 U	11 U	12 U	11 U	130 U
2-Hexanone				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
4-Methyl-2-pentanone (MIBK)				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Acetone (WIBIC)	50	50	100000	11.6 J	12 U	12 U	11 U	12 U	11 U	12 UJV
Benzene	60	60	4800	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U
Bromochloromethane				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Bromodichloromethane				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Bromoform				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Bromomethane				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Carbon disulfide		<u></u>		6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Carbon tetrachloride	760	760	2400	6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Chlorobenzene	1100	1100	100000	6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Chloroethane				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Chloroform	370	370	49000	6 U	5.8 U	0.24 J	5.7 U	5.9 U	5.6 U	6 U
Chloromethane				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
cis-1,2-Dichloroethene	250	250	100000	1.5 J	3.4 J	6 U	5.7 U	5.9 U	5.6 U	6 U
cis-1,3-Dichloropropene	250			6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Cyclohexane				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Dibromochloromethane				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Dibromochloropropane				12 U	12 U	12 U	3.7 U	12 U	3.0 U 11 U	12 U
Dichlorodifluoromethane				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Ethylbenzene	1000	1000	41000	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U
Freon 113	1000	1000	41000	6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Isopropylbenzene				6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
m+p-Xylene				1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U
m-p-Ayiene				1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.∠ U

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-35	RA-35	RA-36	RA-36	RA-36 DUP	RA-36	GWP-1
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013	5/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	6 - 8	14 - 16	8 - 10	10 - 12	10 - 12	18 - 20	34-35
Methyl acetate					6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Methylcyclohexane					6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Methylene chloride	50	50	100000		3.2 J	2.6 J	6 U	5.7 U	5.9 U	1.7 J	2.5 J
MTBE	930	930	100000		1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U
o-Xylene					1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U
Styrene					6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Tetrachloroethene	1300	1300	19000		158	12	5890	12.2	12.4	1 J	6.4
Toluene	700	700	100000		1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U
trans-1,2-Dichloroethene	190	190	100000		6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
trans-1,3-Dichloropropene					6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Trichloroethene	470	470	21000		2.4 J	0.74 J	12.1	5.7 U	0.39 J	5.6 U	1.1 J
Trichlorofluoromethane					6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Vinyl chloride	20	20	900		6 U	5.8 U	6 U	5.7 U	5.9 U	5.6 U	6 U
Xylenes (total)	260	1600	100000		1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U
Total TIC, Volatile											0

J - Estimated value

ft bls - Feet below land surface

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DUP - Duplicate sample

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in μg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	Sample Designation: GWP-5 Sample Date: 5/9/2013 Sample Depth (ft bls): 34-35
(Concentrations in µg/kg)	Ose	Groundwater		Sample Depth (It bis). 34-33
1,1,1-Trichloroethane	680	680	100000	6.8 U
1,1,2,2-Tetrachloroethane				6.8 U
1,1,2-Trichloroethane				6.8 U
1,1-Dichloroethane	270	270	26000	6.8 U
1,1-Dichloroethene	330	330	100000	6.8 U
1,2,3-Trichlorobenzene				6.8 U
1,2,4-Trichlorobenzene				6.8 U
1,2-Dibromoethane				1.4 U
1,2-Dichlorobenzene	1100	1100	100000	6.8 U
1,2-Dichloroethane	20	20	3100	1.4 U
1,2-Dichloropropane				6.8 U
1,3-Dichlorobenzene	2400	2400	49000	6.8 U
1,4-Dichlorobenzene	1800	1800	13000	6.8 U
1,4-Dioxane	100	100	13000	170 U
2-Butanone (MEK)	120	120	100000	14 UJV
2-Hexanone				6.8 U
4-Methyl-2-pentanone (MIBK)				6.8 U
Acetone (WIBIK)	50	50	100000	14 U
Benzene	60	60	4800	1.4 U
Bromochloromethane				6.8 U
Bromodichloromethane				6.8 U
Bromoform				6.8 U
Bromomethane				6.8 U
Carbon disulfide				6.8 U
Carbon tetrachloride	760	760	2400	6.8 U
Chlorobenzene	1100	1100	100000	6.8 U
Chloroethane				6.8 U
Chloroform	370	370	49000	6.8 U
Chloromethane	370 	370 	49000	6.8 U
cis-1,2-Dichloroethene	250	250	100000	6.8 U
cis-1,3-Dichloropropene	230	230	100000	6.8 U
Cyclohexane				6.8 U
Dibromochloromethane				
Dibromochloropropane  Dibromochloropropane				6.8 U 14 U
Dichlorodifluoromethane				6.8 U
	1000	1000	41000	
Ethylbenzene	1000	1000	41000	1.4 U
Freon 113				6.8 U
Isopropylbenzene				6.8 U
m+p-Xylene				1.8

Table 1. Summary of Volatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC	
	Part 375	Part 375	Part 375	Sample Designation: GWP-5
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 5/9/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 34-35
Methyl acetate				6.8 U
Methylcyclohexane				6.8 U
Methylene chloride	50	50	100000	6.8 U
MTBE	930	930	100000	1.4 U
o-Xylene				0.7 J
Styrene				6.8 U
Tetrachloroethene	1300	1300	19000	7.3
Toluene	700	700	100000	0.59 J
trans-1,2-Dichloroethene	190	190	100000	6.8 U
trans-1,3-Dichloropropene				6.8 U
Trichloroethene	470	470	21000	6.8 U
Trichlorofluoromethane				6.8 U
Vinyl chloride	20	20	900	6.8 U
Xylenes (total)	260	1600	100000	2.5
Total TIC, Volatile				0

J - Estimated value

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Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter   Parameter   Unrestricted   Protection of Restricted   Restricted   Sample Date:   2/11/201   2/11/201   2/26/2013   2/26/20		NYSDEC	NYSDEC	NYSDEC						
Concentrations in µg/kg)   Use		Part 375			Sample Designation:	RA-1	RA-1A	RA-2	RA-2	RA-3
1,1°Biphenyl	Parameter	Unrestricted	Protection of	Restricted	Sample Date: 2	2/11/2013	2/11/2013	2/26/2013	2/26/2013	2/25/2013
1,1-Bipheny	(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	23-25	10-12
1,2,4,5-Ternachloropenaree										
2.2-oxybis (1-chloropropane)             74 U         84 U         62 U         74 U         91 U         23.4 (6-Tertachlorophenol)              190 U         210 U         160 U         190 U         180 U         24.4 Description              190 U         210 U         160 U         190 U         180 U         24.4 Description              190 U         210 U         160 U         190 U         180 U         24.4 Description              190 U         210 U         160 U         190 U         180 U         24.4 Description             190 U         210 U         160 U         190 U         180 U         24.4 U         24.4 U         190 U         210 U         160 U         190 U         24.0	1,1'-Biphenyl					74 U	84 U	62 U	74 U	74 U
2.3.4.6-Tetrahlorophenol             190 U         210 U         160 U         190 U         180 U           2.4.6-Trichlorophenol           190 U         210 U         160 U         190 U         180 U           2.4.6-Trichlorophenol            190 U         210 U         160 U         190 U         180 U           2.4-Dinichlorophenol            190 U         210 U         160 U         190 U         180 U           2.4-Dinitrophenol            740 U         840 U         620 U         740 U         740 U         740 U         840 U         620 U	1,2,4,5-Tetrachlorobenzene					190 U	210 U	160 U	190 U	180 U
2.4,5-Trichlorophenol             190 U         210 U         160 U         190 U         180 U           2,4,5-Trichlorophenol           190 U         210 U         160 U         190 U         180 U           2,4-Dichlorophenol            190 U         210 U         160 U         190 U         180 U           2,4-Dinitrophenol            740 U         840 U         620 U         740 U	2,2'-oxybis (1-chloropropane)					74 U	84 U	62 U	74 U	74 U
2.4.6-Trichlorophenol            190 U         210 U         160 U         190 U         180 U           2.4-Dichlorophenol           190 U         210 U         160 U         190 U         180 U           2.4-Dimitrophenol            740 U         840 U         620 U         740 U         740 U           2.4-Dimitrotoluene            74 U         84 U         62 U         74 U         74 U           2.6-Dinitrotoluene            74 U         84 U         62 U         74 U         74 U           2Chlorophenol            74 U         84 U         62 U         74 U         74 U           2-Methylaphthalene            74 U         84 U         62 U         74 U         74 U           2-Methylaphthalene            74 U         84 U         62 U         74 U         74 U           2-Methylaphthalene            190 U         210 U         160 U         190 U         180 U <td< td=""><td>2,3,4,6-Tetrachlorophenol</td><td></td><td></td><td></td><td></td><td>190 U</td><td>210 U</td><td>160 U</td><td>190 U</td><td>180 U</td></td<>	2,3,4,6-Tetrachlorophenol					190 U	210 U	160 U	190 U	180 U
2.4-Dichlorophenol             190 U         210 U         160 U         190 U         180 U           2.4-Dimethylphenol             190 U         210 U         160 U         190 U         180 U           2.4-Dimitrophenol             74 U         84 U         62 U         74 U         74 U           2.4-Dimitrotoluene            74 U         84 U         62 U         74 U         74 U           2.6-Dinitrotoluene             74 U         84 U         62 U         74 U         74 U           2.6-Dinitrotoluene             74 U         84 U         62 U         74 U         74 U           2.6-Dinitrotoluene             74 U         84 U         62 U         74 U         74 U           2-Chlorophenol             74 U         84 U         62 U         74 U         74 U           2-Methylphenol         330         330         1000	2,4,5-Trichlorophenol					190 U	210 U	160 U	190 U	180 U
2,4-Dimethylphenol             190 U         210 U         160 U         190 U         180 U           2,4-Dimitrophenol             740 U         840 U         620 U         740 U         74	2,4,6-Trichlorophenol					190 U	210 U	160 U	190 U	180 U
2,4-Dinitrophenol              740 U         840 U         620 U         740 U         74	2,4-Dichlorophenol					190 U	210 U	160 U	190 U	180 U
2,4-Dinitrotoluene              74 U         84 U         62 U         74 U         74 U           2,6-Dinitrotoluene             74 U         84 U         62 U         74 U         74 U           2-Chloronaphthalene            190 U         210 U         160 U         190 U         210 U         160 U         190 U         210 U         160 U         74 U <td< td=""><td>2,4-Dimethylphenol</td><td></td><td></td><td></td><td></td><td>190 U</td><td>210 U</td><td>160 U</td><td>190 U</td><td>180 U</td></td<>	2,4-Dimethylphenol					190 U	210 U	160 U	190 U	180 U
2,6-Dinitrotoluene             74 U         84 U         62 U         74 U         74 U           2-Chloronaphthalene              190 U         210 U         160 U         190 U         180 U           2-Methylnaphthalene              74 U         84 U         62 U         74 U         74 U           2-Methylphenol         330         330         100000         74 U         84 U         62 U         74 U         74 U           2-Nitroaniline             190 U         210 U         160 U         190 U         180 U           2-Nitroaniline             190 U         210 U         160 U         190 U         180 U           3-S'-Dichlorobenzidine           100000         74 U         84 U         62 U         74 U         74 U           3-S'-Dichlorobenzidine            190 U         210 U         160 U         190 U         180 U           4-B-Dinitro-2-methylphenol	2,4-Dinitrophenol					740 U	840 U	620 U	740 U	740 U
2-Chloronaphthalene               74 U         84 U         62 U         74 U         190 U         190 U         210 U         160 U         190 U         180 U           2-Methylnaphthalene             74 U         84 U         62 U         74 U         74 U           2-Methylphenol         330         330         100000         74 U         84 U         62 U         74 U         74 U           2-Nitroaniline            190 U         210 U         160 U         190 U         180 U           3-Nitroaniline             190 U         210 U         160 U         190 U         180 U           3-Nitroaniline            190000         74 U         84 U         62 U         74 U	2,4-Dinitrotoluene					74 U	84 U	62 U	74 U	74 U
2-Chlorophenol               190 U         210 U         160 U         190 U         180 U           2-Methylnaphthalene            74 U         84 U         62 U         74 U         74 U           2-Methylphenol         330         330         100000         74 U         84 U         62 U         74 U         74 U           2-Nitrophenol            190 U         210 U         160 U         190 U         180 U           3&4-Methylphenol           100000         74 U         84 U         62 U         74 U         74 U           3,3'-Dichlorobenzidine            190 U         210 U         160 U         190 U         180 U           3,5'-Dichloro-2-methylphenol            190 U         210 U         160 U         190 U         180 U           4,6-Dinitro-2-methylphenol            74 U         84 U         62 U         74 U         47 U           4-Chloro-3-methylphenol            190 U         2	2,6-Dinitrotoluene					74 U	84 U	62 U	74 U	74 U
2-Methylnaphthalene             74 U         84 U         62 U         74 U         74 U           2-Methylphenol         330         330         100000         74 U         84 U         62 U         74 U         74 U           2-Nitropaniline            190 U         210 U         160 U         190 U         180 U           2-Nitrophenol           100000         74 U         84 U         62 U         74 U         74 U           3&4-Methylphenol           100000         74 U         84 U         62 U         74 U         74 U           3,3'-Dichlorobenzidine            190 U         210 U         160 U         190 U         180 U           3,-Nitroaniline            190 U         210 U         160 U         190 U         180 U           4,6-Dinitro-2-methylphenol            74 U         84 U         62 U         74 U         74 U           4-Bromophenyl phenyl ether            190 U         210 U         160 U         190 U	2-Chloronaphthalene					74 U	84 U	62 U	74 U	74 U
2-Methylphenol         330         330         100000         74 U         84 U         62 U         74 U         74 U           2-Nitroaniline             190 U         210 U         160 U         190 U         180 U           2-Nitrophenol            190 U         210 U         160 U         190 U         180 U           3&4-Methylphenol           100000         74 U         84 U         62 U         74 U         74 U           3,3'-Dichlorobenzidine            190 U         210 U         160 U         190 U         180 U           3-Nitroaniline            190 U         210 U         160 U         190 U         180 U           4-Bromophenyl phenyl ether            74 U         84 U         62 U         74 U         74 U           4-Chloro-3-methylphenol            190 U         210 U         160 U         190 U         180 U           4-Chlorophenyl phenyl ether             190 U         210 U <td< td=""><td>2-Chlorophenol</td><td></td><td></td><td></td><td></td><td>190 U</td><td>210 U</td><td>160 U</td><td>190 U</td><td>180 U</td></td<>	2-Chlorophenol					190 U	210 U	160 U	190 U	180 U
2-Methylphenol       330       330       100000       74 U       84 U       62 U       74 U       74 U         2-Nitroaniline           190 U       210 U       160 U       190 U       180 U         2-Nitrophenol          190 U       210 U       160 U       190 U       180 U         3&4-Methylphenol         100000       74 U       84 U       62 U       74 U       74 U         3,3-Dichlorobenzidine          190 U       210 U       160 U       190 U       180 U         3-Nitroaniline          190 U       210 U       160 U       190 U       180 U         4-Bromophenyl phenyl ether          74 U       84 U       62 U       74 U       74 U         4-Chloro-3-methylphenol          190 U       210 U       160 U       190 U       180 U         4-Chlorophenyl phenyl ether          190 U       210 U       160 U       190 U       180 U         4-Nitroaniline </td <td>2-Methylnaphthalene</td> <td></td> <td></td> <td></td> <td></td> <td>74 U</td> <td>84 U</td> <td>62 U</td> <td>74 U</td> <td>74 U</td>	2-Methylnaphthalene					74 U	84 U	62 U	74 U	74 U
2-Nitrophenol            190 U         210 U         160 U         190 U         180 U           3&4-Methylphenol           100000         74 U         84 U         62 U         74 U         74 U           3,3'-Dichlorobenzidine            190 U         210 U         160 U         190 U         180 U           3-Nitroaniline            190 U         210 U         160 U         190 U         180 U           4,6-Dinitro-2-methylphenol            74 U         84 U         62 U         74 U         74 U           4-Bromophenyl phenyl ether            74 U         84 U         62 U         74 U         74 U           4-Chloro-3-methylphenol            190 U         210 U         160 U         190 U         180 U           4-Chlorophenylphenol            190 U         210 U         160 U         190 U         180 U           4-Chlorophenyl phenyl ether            190 U         210 U         1	2-Methylphenol	330	330	100000		74 U	84 U	62 U	74 U	74 U
3&4-Methylphenol           100000         74 U         84 U         62 U         74 U         94 U         95 U	2-Nitroaniline					190 U	210 U	160 U	190 U	180 U
3,3'-Dichlorobenzidine 190 U 210 U 160 U 190 U 180 U 4,6-Dinitro-2-methylphenol 740 U 840 U 620 U 740 U 740 U 4-Bromophenyl phenyl ether 190 U 210 U 160 U 190 U 180 U 4-Chloro-3-methylphenol 190 U 210 U 160 U 190 U 180 U 4-Chlorophenyl phenyl ether 190 U 210 U 160 U 190 U 180 U 4-Chlorophenyl phenyl ether 190 U 210 U 160 U 190 U 180 U 4-Chlorophenyl phenyl ether 190 U 210 U 160 U 190 U 180 U 4-Nitrophenol 190 U 210 U 160 U 190 U 180 U 4-Nitrophenol 190 U 210 U 160 U 190 U 180 U 4-Nitrophenol 190 U 210 U 160 U 370 U 370 U 370 U Acenaphthene 20000 98000 100000 37 U 420 U 310 U 370 U 370 U Acenaphthylene 100000 107000 100000 37 U 42 U 31 U 37 U 37 U Acetophenone 190 U 210 U 160 U 190 U 180 U 4-Chlorophenone 190 U 210 U 160 U 190 U 180 U 4-Chlorophenone 190 U 210 U 160 U 190 U 180 U 4-Chlorophenone 190 U 210 U 160 U 190 U 180 U 4-Chlorophenone 190 U 210 U 160 U 190 U 180 U 4-Chlorophenone 190 U 210 U 160 U 190 U 180 U 4-Chlorophenone 190 U 210 U 160 U 190 U 180 U 4-Chlorophenone 190 U 210 U 160 U 190 U 180 U 4-Chlorophenone 190 U 210 U 160 U 190 U 180 U	2-Nitrophenol					190 U	210 U	160 U	190 U	180 U
3-Nitroaniline            190 U       210 U       160 U       190 U       180 U         4,6-Dinitro-2-methylphenol           740 U       840 U       620 U       740 U       740 U         4-Bromophenyl phenyl ether           74 U       84 U       62 U       74 U       74 U         4-Chloro-3-methylphenol           190 U       210 U       160 U       190 U       180 U         4-Chloroaniline            190 U       210 U       160 U       190 U       180 U         4-Chlorophenyl phenyl ether            74 U       84 U       62 U       74 U       74 U         4-Nitroaniline           190 U       210 U       160 U       190 U       180 U         4-Nitrophenol          370 U       420 U       310 U       370 U       37 U       Acenaphthylene       100000       107000       100000       37 U       42 U       31 U <td< td=""><td>3&amp;4-Methylphenol</td><td></td><td></td><td>100000</td><td></td><td>74 U</td><td>84 U</td><td>62 U</td><td>74 U</td><td>74 U</td></td<>	3&4-Methylphenol			100000		74 U	84 U	62 U	74 U	74 U
4,6-Dinitro-2-methylphenol          740 U       840 U       620 U       740 U <td>3,3'-Dichlorobenzidine</td> <td></td> <td></td> <td></td> <td></td> <td>190 U</td> <td>210 U</td> <td>160 U</td> <td>190 U</td> <td>180 U</td>	3,3'-Dichlorobenzidine					190 U	210 U	160 U	190 U	180 U
4-Bromophenyl phenyl ether          74 U       84 U       62 U       74 U       74 U         4-Chloro-3-methylphenol           190 U       210 U       160 U       190 U       180 U         4-Chloroaniline           190 U       210 U       160 U       190 U       180 U         4-Nitrophenyl phenyl ether           74 U       84 U       62 U       74 U       74 U         4-Nitrophenyl phenyl ether           190 U       210 U       160 U       190 U       180 U         4-Nitrophenol           190 U       210 U       160 U       190 U       370 UJV         Acenaphthene       20000       98000       100000       37 U       42 U       31 U       37 U       37 U         Acetophenone           190 U       210 U       160 U       190 U       180 U	3-Nitroaniline					190 U	210 U	160 U	190 U	180 U
4-Chloro-3-methylphenol          190 U       210 U       160 U       190 U       180 U         4-Chloroaniline           190 U       210 U       160 U       190 U       180 U         4-Chlorophenyl phenyl ether           74 U       84 U       62 U       74 U       74 U         4-Nitroaniline           190 U       210 U       160 U       190 U       180 U         4-Nitrophenol           370 U       420 U       310 U       370 U       37	4,6-Dinitro-2-methylphenol					740 U	840 U	620 U	740 U	740 U
4-Chloroaniline          190 U       210 U       160 U       190 U       180 U         4-Chlorophenyl phenyl ether           74 U       84 U       62 U       74 U       74 U         4-Nitroaniline          190 U       210 U       160 U       190 U       180 U         4-Nitrophenol           370 U       420 U       310 U       370 U       370 U         Acenaphthene       20000       98000       100000       37 U       42 U       31 U       37 U       37 U         Acetophenone           190 U       210 U       160 U       190 U       180 U	4-Bromophenyl phenyl ether					74 U	84 U	62 U	74 U	74 U
4-Chlorophenyl phenyl ether          74 U       84 U       62 U       74 U       74 U         4-Nitroaniline          190 U       210 U       160 U       190 U       180 U         4-Nitrophenol           370 U       420 U       310 U       370 U <td< td=""><td>4-Chloro-3-methylphenol</td><td></td><td></td><td></td><td></td><td>190 U</td><td>210 U</td><td>160 U</td><td>190 U</td><td>180 U</td></td<>	4-Chloro-3-methylphenol					190 U	210 U	160 U	190 U	180 U
4-Nitroaniline           190 U       210 U       160 U       190 U       180 U         4-Nitrophenol          370 U       420 U       310 U       370 U       370 UJV         Acenaphthene       20000       98000       100000       37 U       42 U       31 U       37 U       37 U         Acenaphthylene       100000       107000       100000       37 U       42 U       31 U       37 U       37 U         Acetophenone          190 U       210 U       160 U       190 U       180 U	4-Chloroaniline					190 U	210 U	160 U	190 U	180 U
4-Nitroaniline          190 U       210 U       160 U       190 U       180 U         4-Nitrophenol          370 U       420 U       310 U       370 U       370 UJV         Acenaphthene       20000       98000       100000       37 U       42 U       31 U       37 U       37 U         Acenaphthylene       100000       107000       100000       37 U       42 U       31 U       37 U       37 U         Acetophenone          190 U       210 U       160 U       190 U       180 U	4-Chlorophenyl phenyl ether					74 U	84 U	62 U	74 U	74 U
4-Nitrophenol           370 U       420 U       310 U       370 U       370 UJV         Acenaphthene       20000       98000       100000       37 U       42 U       31 U       37 U       37 U         Acenaphthylene       100000       107000       100000       37 U       42 U       31 U       37 U       37 U         Acetophenone          190 U       210 U       160 U       190 U       180 U						190 U	210 U	160 U	190 U	180 U
Acenaphthene       20000       98000       100000       37 U       42 U       31 U       37 U       37 U         Acenaphthylene       100000       107000       100000       37 U       42 U       31 U       37 U       37 U         Acetophenone          190 U       210 U       160 U       190 U       180 U						370 U	420 U	310 U	370 U	370 UJV
Acenaphthylene       100000       107000       100000       37 U       42 U       31 U       37 U       37 U         Acetophenone           190 U       210 U       160 U       190 U       180 U	÷	20000	98000	100000		37 U	42 U			37 U
Acetophenone 190 U 210 U 160 U 190 U 180 U	1			100000						
1										
	<u>-</u>	100000	1000000	100000		37 U	42 U		37 U	37 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-1	RA-1A	RA-2	RA-2	RA-3
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 2	2/11/2013	2/11/2013	2/26/2013	2/26/2013	2/25/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	23-25	10-12
Atrazine					190 U	210 U	160 U	190 U	180 U
Benzaldehyde					190 U	210 U	160 U	190 U	180 U
Benzo[a]anthracene	1000	1000	1000		37 U	42 U	24.8 J	37 U	56.5
Benzo[a]pyrene	1000	22000	1000		37 U	42 U	16.5 J	37 U	64.6
Benzo[b]fluoranthene	1000	1700	1000		37 U	42 U	74.8 NJV	37 U	76.4
Benzo[g,h,i]perylene	100000	1000000	100000		37 U	42 U	37.4 NJV	37 U	56.3
Benzo[k]fluoranthene	800	1700	3900		37 U	42 U	51.3 NJV	37 U	44.6
Bis(2-chloroethoxy)methane					74 U	84 U	62 U	74 U	74 U
Bis(2-chloroethyl) ether					74 U	84 U	62 U	74 U	74 U
Bis(2-ethylhexyl) phthalate					74 U	84 U	200	74 U	81.9
Butylbenzyl phthalate					74 U	84 U	62 U	74 U	74 U
Caprolactam					74 U	84 U	62 U	74 U	74 U
Carbazole					74 U	84 U	62 U	74 U	74 U
Chrysene	1000	1000	3900		37 U	42 U	64.2	37 U	63.2
Dibenzo[a,h]anthracene	330	1000000	330		37 U	42 U	15 J	37 U	21.5 J
Dibenzofuran	7000	210000	59000		74 U	84 U	62 U	74 U	74 U
Diethyl phthalate					74 U	84 U	62 U	74 U	74 U
Dimethyl phthalate					74 U	84 U	62 U	66.1 J	82.7
Di-n-butyl phthalate					74 U	84 U	62 U	74 U	74 U
Di-n-octyl phthalate					74 U	84 U	62 U	74 U	74 U
Fluoranthene	100000	1000000	100000		37 U	42 U	146	37 U	97
Fluorene	30000	386000	100000		37 U	42 U	31 U	37 U	37 U
Hexachlorobenzene	330	3200	1200		74 U	84 U	62 U	74 U	74 U
Hexachlorobutadiene					37 U	42 U	31 U	37 U	37 U
Hexachlorocyclopentadiene					370 U	420 U	310 U	370 U	370 U
Hexachloroethane					190 U	210 U	160 U	190 U	180 U
Indeno[1,2,3-cd]pyrene	500	8200	500		37 U	42 U	37.9	37 U	48.7
Isophorone					74 U	84 U	62 U	74 U	74 U
Naphthalene	12000	12000	100000		37 U	42 U	31 U	37 U	37 U
Nitrobenzene					74 U	84 U	62 U	74 U	74 U
n-Nitrosodi-n-propylamine					74 U	84 U	62 U	74 U	74 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-1	RA-1A	RA-2	RA-2	RA-3
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/11/2013	2/11/2013	2/26/2013	2/26/2013	2/25/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	23-25	10-12
n-Nitrosodiphenylamine					190 U	210 U	160 U	190 U	180 U
Pentachlorophenol	800	800	6700		370 U	420 U	310 U	370 U	370 U
Phenanthrene	100000	1000000	100000		37 U	42 U	37.5	37 U	40.4
Phenol	330	330	100000		74 U	84 U	62 U	74 U	74 U
Pyrene	100000	1000000	100000		37 U	42 U	108	37 U	81.3
Total TIC, Semi-Volatile					2250 J	0	25200 J	29040 J	390 J

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-3	RA-4	RA-4	RA-5	RA-5 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/25/2013	2/25/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	10-12	22-24	7-9	7-9
1,1'-Biphenyl					83 U	71 U	87 U	65 U	64 U
1,2,4,5-Tetrachlorobenzene					210 U	180 U	220 U	160 U	160 U
2,2'-oxybis (1-chloropropane)					83 U	71 U	87 U	65 U	64 U
2,3,4,6-Tetrachlorophenol					210 U	180 U	220 U	160 U	160 U
2,4,5-Trichlorophenol					210 U	180 U	220 U	160 U	160 U
2,4,6-Trichlorophenol					210 U	180 U	220 U	160 U	160 U
2,4-Dichlorophenol					210 U	180 U	220 U	160 U	160 U
2,4-Dimethylphenol					210 U	180 U	220 U	160 U	160 U
2,4-Dinitrophenol					830 U	710 U	870 U	650 U	640 U
2,4-Dinitrotoluene					83 U	71 U	87 U	65 U	64 U
2,6-Dinitrotoluene					83 U	71 U	87 U	65 U	64 U
2-Chloronaphthalene					83 U	71 U	87 U	65 U	64 U
2-Chlorophenol					210 U	180 U	220 U	160 U	160 U
2-Methylnaphthalene					83 U	71 U	87 U	65 U	64 U
2-Methylphenol	330	330	100000		83 U	71 U	87 U	65 U	64 U
2-Nitroaniline					210 U	180 U	220 U	160 U	160 U
2-Nitrophenol					210 U	180 U	220 U	160 U	160 U
3&4-Methylphenol			100000		83 U	71 U	87 U	65 U	64 U
3,3'-Dichlorobenzidine					210 U	180 U	220 U	160 U	160 U
3-Nitroaniline					210 U	180 U	220 U	160 U	160 U
4,6-Dinitro-2-methylphenol					830 U	710 U	870 U	650 U	640 U
4-Bromophenyl phenyl ether					83 U	71 U	87 U	65 U	64 U
4-Chloro-3-methylphenol					210 U	180 U	220 U	160 U	160 U
4-Chloroaniline					210 U	180 U	220 U	160 U	160 U
4-Chlorophenyl phenyl ether					83 U	71 U	87 U	65 U	64 U
4-Nitroaniline					210 U	180 U	220 U	160 U	160 U
4-Nitrophenol					420 UJV	360 UJV	430 UJV	330 U	320 U
Acenaphthene	20000	98000	100000		42 U	17.7 J	43 U	33 U	32 U
Acenaphthylene	100000	107000	100000		42 U	15.8 J	43 U	33 U	32 U
Acetophenone					210 U	180 U	220 U	160 U	160 U
Anthracene	100000	1000000	100000		42 U	38.3	43 U	33 U	32 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

_	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-3	RA-4	RA-4	RA-5	RA-5 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/25/2013	2/25/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	10-12	22-24	7-9	7-9
Atrazine					210 U	180 U	220 U	160 U	160 U
Benzaldehyde					210 U	180 U	220 U	160 U	160 U
Benzo[a]anthracene	1000	1000	1000		42 U	109	43 U	33 U	32 U
Benzo[a]pyrene	1000	22000	1000		42 U	119	43 U	33 U	32 U
Benzo[b]fluoranthene	1000	1700	1000		42 U	143	43 U	33 U	32 U
Benzo[g,h,i]perylene	100000	1000000	100000		42 U	90.3	43 U	33 U	32 U
Benzo[k]fluoranthene	800	1700	3900		42 U	89	43 U	33 U	32 U
Bis(2-chloroethoxy)methane					83 U	71 U	87 U	65 U	64 U
Bis(2-chloroethyl) ether					83 U	71 U	87 U	65 U	64 U
Bis(2-ethylhexyl) phthalate					83 U	349	87 U	65 U	64 U
Butylbenzyl phthalate					83 U	71 U	87 U	65 U	64 U
Caprolactam					83 U	71 U	87 U	65 U	64 U
Carbazole					83 U	71 U	87 U	65 U	64 U
Chrysene	1000	1000	3900		42 U	122	43 U	33 U	32 U
Dibenzo[a,h]anthracene	330	1000000	330		42 U	36.6	43 U	33 U	32 U
Dibenzofuran	7000	210000	59000		83 U	71 U	87 U	65 U	64 U
Diethyl phthalate					83 U	71 U	87 U	65 U	64 U
Dimethyl phthalate					83 U	147	67.9 J	44.5 J	42.2 J
Di-n-butyl phthalate					83 U	71 U	87 U	65 U	64 U
Di-n-octyl phthalate					83 U	71 U	87 U	65 U	64 U
Fluoranthene	100000	1000000	100000		42 U	233	43 U	33 U	32 U
Fluorene	30000	386000	100000		42 U	15.7 J	43 U	33 U	32 U
Hexachlorobenzene	330	3200	1200		83 U	71 U	87 U	65 U	64 U
Hexachlorobutadiene					42 U	36 U	43 U	33 U	32 U
Hexachlorocyclopentadiene					420 U	360 U	430 U	330 U	320 U
Hexachloroethane					210 U	180 U	220 U	160 U	160 U
Indeno[1,2,3-cd]pyrene	500	8200	500		42 U	80.1	43 U	33 U	32 U
Isophorone					83 U	71 U	87 U	65 U	64 U
Naphthalene	12000	12000	100000		42 U	36 U	43 U	33 U	32 U
Nitrobenzene					83 U	71 U	87 U	65 U	64 U
n-Nitrosodi-n-propylamine					83 U	71 U	87 U	65 U	64 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-3	RA-4	RA-4	RA-5	RA-5 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/25/2013	2/25/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	10-12	22-24	7-9	7-9
									_
n-Nitrosodiphenylamine					210 U	180 U	220 U	160 U	160 U
Pentachlorophenol	800	800	6700		420 U	360 U	430 U	330 U	320 U
Phenanthrene	100000	1000000	100000		42 U	156	43 U	33 U	32 U
Phenol	330	330	100000		83 U	71 U	87 U	65 U	64 U
Pyrene	100000	1000000	100000		42 U	188	43 U	33 U	32 U
Total TIC, Semi-Volatile					0	180 J	0	10320 J	4200 J

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-5	RA-6	RA-6	RA-7	RA-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	2/14/2013	2/14/2013	2/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	18-20	10-12	23-25	11-12.5	22-24
1,1'-Biphenyl					63 U	77 U	75 U	69 U	66 U
1,2,4,5-Tetrachlorobenzene					160 U	190 U	190 U	170 U	170 U
2,2'-oxybis (1-chloropropane)					63 U	77 U	75 U	69 U	66 U
2,3,4,6-Tetrachlorophenol					160 U	190 U	190 U	170 U	170 U
2,4,5-Trichlorophenol					160 U	190 U	190 U	170 U	170 U
2,4,6-Trichlorophenol					160 U	190 U	190 U	170 U	170 U
2,4-Dichlorophenol					160 U	190 U	190 U	170 U	170 U
2,4-Dimethylphenol					160 U	190 U	190 U	170 U	170 U
2,4-Dinitrophenol					630 U	770 U	750 U	690 U	660 U
2,4-Dinitrotoluene					63 U	77 U	75 U	69 U	66 U
2,6-Dinitrotoluene					63 U	77 U	75 U	69 U	66 U
2-Chloronaphthalene					63 U	77 U	75 U	69 U	66 U
2-Chlorophenol					160 U	190 U	190 U	170 U	170 U
2-Methylnaphthalene					63 U	77 U	75 U	69 U	66 U
2-Methylphenol	330	330	100000		63 U	77 U	75 U	69 U	66 U
2-Nitroaniline					160 U	190 U	190 U	170 U	170 U
2-Nitrophenol					160 U	190 U	190 U	170 U	170 U
3&4-Methylphenol			100000		63 U	77 U	75 U	69 U	66 U
3,3'-Dichlorobenzidine					160 U	190 U	190 U	170 U	170 U
3-Nitroaniline					160 U	190 U	190 U	170 U	170 U
4,6-Dinitro-2-methylphenol					630 U	770 U	750 U	690 U	660 U
4-Bromophenyl phenyl ether					63 U	77 U	75 U	69 U	66 U
4-Chloro-3-methylphenol					160 U	190 U	190 U	170 U	170 U
4-Chloroaniline					160 U	190 U	190 U	170 U	170 U
4-Chlorophenyl phenyl ether					63 U	77 U	75 U	69 U	66 U
4-Nitroaniline					160 U	190 U	190 U	170 U	170 U
4-Nitrophenol					320 U	390 U	380 U	340 U	330 U
Acenaphthene	20000	98000	100000		32 U	39 U	38 U	34 U	33 U
Acenaphthylene	100000	107000	100000		32 U	39 U	38 U	34 U	33 U
Acetophenone					160 U	190 U	190 U	170 U	170 U
Anthracene	100000	1000000	100000		32 U	39 U	38 U	34 U	33 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-5	RA-6	RA-6	RA-7	RA-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	2/14/2013	2/14/2013	2/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	18-20	10-12	23-25	11-12.5	22-24
									_
Atrazine					160 U	190 U	190 U	170 U	170 U
Benzaldehyde					160 U	190 U	190 U	170 U	170 U
Benzo[a]anthracene	1000	1000	1000		32 U	29.7 J	38 U	34 U	33 U
Benzo[a]pyrene	1000	22000	1000		32 U	39 U	38 U	34 U	33 U
Benzo[b]fluoranthene	1000	1700	1000		32 U	24.6 J	38 U	34 U	33 U
Benzo[g,h,i]perylene	100000	1000000	100000		32 U	39 U	38 U	34 U	33 U
Benzo[k]fluoranthene	800	1700	3900		32 U	16.9 J	38 U	34 U	33 U
Bis(2-chloroethoxy)methane					63 U	77 U	75 U	69 U	66 U
Bis(2-chloroethyl) ether					63 U	77 U	75 U	69 U	66 U
Bis(2-ethylhexyl) phthalate					63 U	146	69.3 J	69 U	66 U
Butylbenzyl phthalate					63 U	77 U	75 U	69 U	66 U
Caprolactam					63 U	77 U	75 U	69 U	66 U
Carbazole					63 U	77 U	75 U	69 U	66 U
Chrysene	1000	1000	3900		32 U	39.1	38 U	34 U	33 U
Dibenzo[a,h]anthracene	330	1000000	330		32 U	39 U	38 U	34 U	33 U
Dibenzofuran	7000	210000	59000		63 U	77 U	75 U	69 U	66 U
Diethyl phthalate					63 U	77 U	75 U	69 U	66 U
Dimethyl phthalate					42.5 J	77 U	75 U	69 U	66 U
Di-n-butyl phthalate					63 U	77 U	75 U	69 U	66 U
Di-n-octyl phthalate					63 U	77 U	75 U	69 U	66 U
Fluoranthene	100000	1000000	100000		32 U	49.7	38 U	34 U	33 U
Fluorene	30000	386000	100000		32 U	39 U	38 U	34 U	33 U
Hexachlorobenzene	330	3200	1200		63 U	77 U	75 U	69 U	66 U
Hexachlorobutadiene					32 U	39 U	38 U	34 U	33 U
Hexachlorocyclopentadiene					320 U	390 U	380 U	340 U	330 U
Hexachloroethane					160 U	190 U	190 U	170 U	170 U
Indeno[1,2,3-cd]pyrene	500	8200	500		32 U	39 U	38 U	34 U	33 U
Isophorone					63 U	77 U	75 U	69 U	66 U
Naphthalene	12000	12000	100000		32 U	39 U	38 U	34 U	33 U
Nitrobenzene					63 U	77 U	75 U	69 U	66 U
n-Nitrosodi-n-propylamine					63 U	77 U	75 U	69 U	66 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-5	RA-6	RA-6	RA-7	RA-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	2/14/2013	2/14/2013	2/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	18-20	10-12	23-25	11-12.5	22-24
n-Nitrosodiphenylamine					160 U	190 U	190 U	170 U	170 U
Pentachlorophenol	800	800	6700		320 U	390 U	380 U	340 U	330 U
Phenanthrene	100000	1000000	100000		32 U	39 U	38 U	34 U	33 U
Phenol	330	330	100000		63 U	77 U	75 U	69 U	66 U
Pyrene	100000	1000000	100000		32 U	48.5	38 U	34 U	33 U
Total TIC, Semi-Volatile					6540 J	620 J	220 J	450 J	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

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NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-8	RA-8	RA-9	RA-9	RA-10
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 2	2/25/2013	2/25/2013	2/26/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	22-24	10-12
1,1'-Biphenyl					72 U	78 U	61 U	76 U	63 U
1,2,4,5-Tetrachlorobenzene					180 U	200 U	150 U	190 U	160 U
2,2'-oxybis (1-chloropropane)					72 U	78 U	61 U	76 U	63 U
2,3,4,6-Tetrachlorophenol					180 U	200 U	150 U	190 U	160 U
2,4,5-Trichlorophenol					180 U	200 U	150 U	190 U	160 U
2,4,6-Trichlorophenol					180 U	200 U	150 U	190 U	160 U
2,4-Dichlorophenol					180 U	200 U	150 U	190 U	160 U
2,4-Dimethylphenol					180 U	200 U	150 U	190 U	160 U
2,4-Dinitrophenol					720 U	780 U	610 U	760 U	630 U
2,4-Dinitrotoluene					72 U	78 U	61 U	76 U	63 U
2,6-Dinitrotoluene					72 U	78 U	61 U	76 U	63 U
2-Chloronaphthalene					72 U	78 U	61 U	76 U	63 U
2-Chlorophenol					180 U	200 U	150 U	190 U	160 U
2-Methylnaphthalene					72 U	78 U	61 U	76 U	63 U
2-Methylphenol	330	330	100000		72 U	78 U	61 U	76 U	63 U
2-Nitroaniline					180 U	200 U	150 U	190 U	160 U
2-Nitrophenol					180 U	200 U	150 U	190 U	160 U
3&4-Methylphenol			100000		72 U	78 U	61 U	76 U	63 U
3,3'-Dichlorobenzidine					180 U	200 U	150 U	190 U	160 U
3-Nitroaniline					180 U	200 U	150 U	190 U	160 U
4,6-Dinitro-2-methylphenol					720 U	780 U	610 U	760 U	630 U
4-Bromophenyl phenyl ether					72 U	78 U	61 U	76 U	63 U
4-Chloro-3-methylphenol					180 U	200 U	150 U	190 U	160 U
4-Chloroaniline					180 U	200 U	150 U	190 U	160 U
4-Chlorophenyl phenyl ether					72 U	78 U	61 U	76 U	63 U
4-Nitroaniline					180 U	200 U	150 U	190 U	160 U
4-Nitrophenol					360 U	390 U	310 U	380 U	310 U
Acenaphthene	20000	98000	100000		36 U	39 U	31 U	38 U	31 U
Acenaphthylene	100000	107000	100000		36 U	39 U	31 U	38 U	31 U
Acetophenone					180 U	200 U	150 U	190 U	160 U
Anthracene	100000	1000000	100000		36 U	39 U	31 U	38 U	40.9

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-8	RA-8	RA-9	RA-9	RA-10
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/25/2013	2/26/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	22-24	10-12
Atrazine					180 U	200 U	150 U	190 U	160 U
Benzaldehyde					180 U	200 U	150 U	190 U	160 U
Benzo[a]anthracene	1000	1000	1000		30.5 J	39 U	16.8 J	38 U	91.9
Benzo[a]pyrene	1000	22000	1000		18.7 J	39 U	14.2 J	38 U	89.3
Benzo[b]fluoranthene	1000	1700	1000		48.5	39 U	19.9 J	38 U	83.6
Benzo[g,h,i]perylene	100000	1000000	100000		22.7 J	39 U	18.1 J	38 U	66
Benzo[k]fluoranthene	800	1700	3900		45.2	39 U	18 J	38 U	72.2
Bis(2-chloroethoxy)methane					72 U	78 U	61 U	76 U	63 U
Bis(2-chloroethyl) ether					72 U	78 U	61 U	76 U	63 U
Bis(2-ethylhexyl) phthalate					259	78 U	106	76 U	90.4
Butylbenzyl phthalate					72 U	78 U	61 U	76 U	63 U
Caprolactam					72 U	78 U	61 U	76 U	63 U
Carbazole					72 U	78 U	61 U	76 U	15.6 J
Chrysene	1000	1000	3900		62.7	39 U	19.9 J	38 U	93.5
Dibenzo[a,h]anthracene	330	1000000	330		36 U	39 U	31 U	38 U	29.2 J
Dibenzofuran	7000	210000	59000		20.1 J	78 U	61 U	76 U	63 U
Diethyl phthalate					72 U	78 U	61 U	76 U	63 U
Dimethyl phthalate					40.1 J	78 U	47.2 J	76 U	63 U
Di-n-butyl phthalate					72 U	78 U	61 U	76 U	63 U
Di-n-octyl phthalate					72 U	78 U	61 U	76 U	63 U
Fluoranthene	100000	1000000	100000		172	39 U	49	38 U	191
Fluorene	30000	386000	100000		36 U	39 U	31 U	38 U	12.9 J
Hexachlorobenzene	330	3200	1200		72 U	78 U	61 U	76 U	63 U
Hexachlorobutadiene					36 U	39 U	31 U	38 U	31 U
Hexachlorocyclopentadiene					360 U	390 U	310 U	380 U	310 U
Hexachloroethane					180 U	200 U	150 U	190 U	160 U
Indeno[1,2,3-cd]pyrene	500	8200	500		23.9 J	39 U	14.7 J	38 U	64.5
Isophorone					72 U	78 U	61 U	76 U	63 U
Naphthalene	12000	12000	100000		25.1 J	39 U	31 U	38 U	31 U
Nitrobenzene					72 U	78 U	61 U	76 U	63 U
n-Nitrosodi-n-propylamine					72 U	78 U	61 U	76 U	63 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-8	RA-8	RA-9	RA-9	RA-10
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/25/2013	2/26/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	22-24	10-12
n-Nitrosodiphenylamine					180 U	200 U	150 U	190 U	160 U
Pentachlorophenol	800	800	6700		360 U	390 U	310 U	380 U	310 U
Phenanthrene	100000	1000000	100000		131	39 U	31 U	38 U	133
Phenol	330	330	100000		72 U	78 U	61 U	76 U	63 U
Pyrene	100000	1000000	100000		108	39 U	41.8	38 U	171
Total TIC, Semi-Volatile					690 J	0	4720 J	5450 J	2470 J

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter   Parameter   Potestinoter   Potestino		NYSDEC	NYSDEC	NYSDEC						
Concentrations in µg/kg)   Use		Part 375			Sample Designation:	RA-10	RA-11A	RA-11B	RA-11B DUP	RA-12
1,1-Bipheny	Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	3/18/2013	3/21/2013	3/21/2013	2/21/2013
1,1-Biphenyl                 170         180 U         190 U         170 U         180 U         170 U         180 U         170 U         180 U         170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U	(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	10-12	23-25	23-25	11-12.5
1,2,4,5-Tetrakhlorobenzene                             170 U         180 U         190 U         170 U         170 U         24,5-Trichlorophenol            170 U         180 U         190 U         170 U         170 U         24,5-Trichlorophenol            170 U         180 U         190 U         170 U         170 U         24,5-Trichlorophenol            170 U         180 U         190 U         170 U         170 U         170 U         24,0-Dintrophenol										
2,2-oxybis (1-chloropropaner)               68 U         74 U         78 U         70 U         68 U           2,3.4,6-Terachlorophenol            170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U         180 U         190 U	1,1'-Biphenyl					69 U	74 U	78 U	70 U	68 U
2,3,4,6-Tetrachlorophenol               170 U         180 U         190 U         170 U         170 U           2,4,6-Trichlorophenol            170 U         180 U         190 U         170 U         170 U           2,4-Dichlorophenol            170 U         180 U         190 U         170 U         170 U           2,4-Dinitrophenol             170 U         180 U         190 U         170 U         170 U           2,4-Dinitrophenol             690 U         74 U         78 U         70 U         68 U           2,4-Dinitrophenol             69 U         74 U         78 U         70 U         68 U           2,4-Dinitrophenol            69 U         74 U         78 U         70 U         68 U           2,4-Dinitrophenol            69 U         74 U         78 U         70 U         68 U           2,Chlorophenol         30         30         100 U	1,2,4,5-Tetrachlorobenzene					170 U	180 U	190 U		170 U
2,4,5-Trichlorophenol             170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U	2,2'-oxybis (1-chloropropane)					69 U	74 U	78 U	70 U	68 U
2.4.6-Trichlorophenol           170 U       180 U       190 U       170 U       170 U       170 U       170 U       180 U       190 U       170 U       170 U       170 U       180 U       190 U       170 U       170 U       170 U       180 U       190 U       170 U       170 U       170 U       180 U       190 U       170 U       170 U       180 U       190 U       170 U       170 U       170 U       180 U       190 U       170 U       170 U       180 U       170 U       170 U       180 U       170 U       180 U       170 U       180 U       700 U       680 U       24-Dinitrotoluene          69 U       74 U       78 U       70 U       68 U       22-Chlorophenol          69 U       74 U       78 U       70 U       68 U       22-Chlorophenol          69 U       74 U       78 U       70 U       68 U       22-Chlorophenol       330       330       10000       69 U       74 U       78 U       70 U       68 U       22-Chlorophenol       330       330       10000       69 U       74 U       78 U       70 U       68 U       22-Chlorophenol	2,3,4,6-Tetrachlorophenol					170 U	180 U	190 U	170 U	170 U
2.4-Dichlorophenol             170 U         180 U         190 U         170 U         170 U           2.4-Dimethylphenol           170 U         180 U         190 U         170 U         680 U           2.4-Dinitrophenol           69 U         74 U         78 U         70 U         68 U           2.4-Dinitrotoluene           69 U         74 U         78 U         70 U         68 U           2.6-Dinitrotoluene            69 U         74 U         78 U         70 U         68 U           2-Chloroaphthalene            69 U         74 U         78 U         70 U         68 U           2-Methylaphthalene            69 U         74 U         78 U         70 U         68 U           2-Methylaphthalene            170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U	2,4,5-Trichlorophenol					170 U	180 U	190 U	170 U	170 U
2,4-Dimethylphenol             170 U         180 U         190 U         170 U         170 U         24. Dimitrophenol           690 U         740 U         780 U         700 U         680 U         24. Dimitrophenol           690 U         74 U         78 U         70 U         68 U         24. Dimitrophenol            69 U         74 U         78 U         70 U         68 U         25. Dimitrophenol            69 U         74 U         78 U         70 U         68 U         25. Dimitrophenol              170 U         180 U         190 U         170 U         180 U         25. Dimitrophenol   -	2,4,6-Trichlorophenol					170 U	180 U	190 U	170 U	170 U
2,4-Dinitrophenol	2,4-Dichlorophenol					170 U	180 U	190 U	170 U	170 U
2,4-Dinitrotoluene             69 U         74 U         78 U         70 U         68 U           2,6-Dinitrotoluene             69 U         74 U         78 U         70 U         68 U           2-Chloropaphthalene            69 U         74 U         78 U         70 U         68 U           2-Methylaphthalene           69 U         74 U         78 U         70 U         68 U           2-Methylaphthalene           69 U         74 U         78 U         70 U         68 U           2-Methylaphthalene           69 U         74 U         78 U         70 U         68 U           2-Methylphenol         330         330         100000         69 U         74 U         78 U         70 U         68 U           2-Mitroaniline            170 U         180 U         190 U         170 U         170 U	2,4-Dimethylphenol					170 U	180 U	190 U	170 U	170 U
2,6-Dinitrotoluene             69 U         74 U         78 U         70 U         68 U           2-Chloronaphthalene             69 U         74 U         78 U         70 U         68 U           2-Chlorophenol            170 U         180 U         190 U         170 U         180 U           2-Methylpaphthalene            69 U         74 U         78 U         70 U         68 U           2-Methylpaphthalene            69 U         74 U         78 U         70 U         68 U           2-Methylpaphthalene            170 U         180 U         190 U         170 U         170 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         170 U         170 U         170 U <t< td=""><td>2,4-Dinitrophenol</td><td></td><td></td><td></td><td></td><td>690 U</td><td>740 U</td><td>780 U</td><td>700 U</td><td>680 U</td></t<>	2,4-Dinitrophenol					690 U	740 U	780 U	700 U	680 U
2-Chloronaphthalene <td>2,4-Dinitrotoluene</td> <td></td> <td></td> <td></td> <td></td> <td>69 U</td> <td>74 U</td> <td>78 U</td> <td>70 U</td> <td>68 U</td>	2,4-Dinitrotoluene					69 U	74 U	78 U	70 U	68 U
2-Chlorophenol               170 U         180 U         190 U         170 U         170 U         2.Methylnaphthalene           69 U         74 U         78 U         70 U         68 U           2-Methylphenol         330         330         100000         69 U         74 U         78 U         70 U         68 U           2-Nitroaniline            170 U         180 U         190 U         170 U         170 U           3-Nitrophenol            170 U         180 U         190 U         170 U         170 U         384-Methylphenol           170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U         170 U         170 U         180 U         190 U         170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U	2,6-Dinitrotoluene					69 U	74 U	78 U	70 U	68 U
2-Methylnaphthalene              69 U         74 U         78 U         70 U         68 U           2-Methylphenol         330         330         100000         69 U         74 U         78 U         70 U         68 U           2-Nitroaniline            170 U         180 U         190 U         170 U         170 U           2-Nitrophenol            170 U         180 U         190 U         170 U         170 U           3&4-Methylphenol           100000         69 U         74 U         78 U         70 U         68 U           3-Nitroaniline             170 U         180 U         190 U         170 U         170 U           4-G-Dinitro-2-methylphenol             170 U         180 U         190 U         170 U         170 U           4-Bromophenyl phenyl ether             170 U         180 U         190 U         170 U         170 U           4-Chloro-3-methylphenol	2-Chloronaphthalene					69 U	74 U	78 U	70 U	68 U
2-Methylphenol         330         330         100000         69 U         74 U         78 U         70 U         68 U           2-Nitroaniline             170 U         180 U         190 U         170 U         170 U           2-Nitrophenol            170 U         180 U         190 U         170 U         170 U           3&4-Methylphenol           100000         69 U         74 U         78 U         70 U         68 U           3,3'-Dichlorobenzidine           100000         69 U         74 U         78 U         70 U         68 U           3-Nitroaniline            170 U         180 U         190 U         170 U         170 U         180 U         190 U         170 U         170 U         68 U         4-         4-         4-Bromophenyl phenyl ether            69 U         74 U         78 U         70 U         68 U         4-Chloro-3-methylphenol            170 U         180 U         190 U         170 U         170 U         4-Chloro-3-methylphenyl ether	2-Chlorophenol					170 U	180 U	190 U	170 U	170 U
2-Nitroaniline             170 U   180 U   190 U   170 U   170 U   170 U   2-Nitrophenol         100000   69 U   74 U   78 U   70 U   68 U   3,3'-Dichlorobenzidine           170 U   180 U   190 U   170 U   170 U   38.4'-Methylphenol         100000   69 U   74 U   78 U   70 U   170 U   3-Nitroaniline           170 U   180 U   190 U   170 U   170 U   170 U   3-Nitroaniline           170 U   180 U   190 U   170 U   170 U   4,6-Dinitro-2-methylphenol           170 U   180 U   190 U   170 U   170 U   4-Chloro-3-methylphenol         170 U   180 U   190 U   170 U   170 U   4-Chloro-3-methylphenol         170 U   180 U   190 U   170 U   170 U   4-Chlorophenyl phenyl ether         170 U   180 U   190 U   170 U   170 U   4-Chlorophenyl phenyl ether         170 U   180 U   190 U   170 U   170 U   4-Nitrophenol           340 U   37 U   39 U   35 U   35 U   34 U   4-Nitrophenol   10000   107000   100000   34 U   37 U   39 U   35 U   35 U   34 U   37 U   39 U   35 U   35 U   34 U   37 U   39 U   35 U   35 U   34 U   37 U   39 U   35 U   35 U   34 U   37 U   39 U   35 U   35 U   34 U   35 U	2-Methylnaphthalene					69 U	74 U	78 U	70 U	68 U
2-Nitrophenol          170 U       180 U       190 U       170 U       170 U       170 U       180 U       190 U       170 U       170 U       68 U       3.0 U       170 U       180 U       190 U       170 U       180 U       190 U       170 U       170 U       180 U       190 U       170 U <t< td=""><td>2-Methylphenol</td><td>330</td><td>330</td><td>100000</td><td></td><td>69 U</td><td>74 U</td><td>78 U</td><td>70 U</td><td>68 U</td></t<>	2-Methylphenol	330	330	100000		69 U	74 U	78 U	70 U	68 U
3&4-Methylphenol           100000         69 U         74 U         78 U         70 U         68 U           3,3'-Dichlorobenzidine            170 U         180 U         190 U         170 U         170 U           3-Nitroaniline            170 U         180 U         190 U         170 U         170 U           4,6-Dinitro-2-methylphenol            690 U         74 U         78 U         700 U         680 U           4-Bromophenyl phenyl ether            69 U         74 U         78 U         70 U         68 U           4-Chloro-3-methylphenol             69 U         74 U         78 U         70 U         68 U           4-Chloro-3-methylphenol             170 U         180 U         190 U         170 U	2-Nitroaniline					170 U	180 U	190 U	170 U	170 U
3,3'-Dichlorobenzidine 170 U 180 U 190 U 170 U 170 U 3-Nitroaniline 170 U 180 U 190 U 170 U 170 U 170 U 4,6-Dinitro-2-methylphenol 170 U 180 U 190 U 170 U 170 U 170 U 4-Bromophenyl phenyl ether 170 U 180 U 190 U 170 U 170 U 170 U 4-Chloro-3-methylphenol 170 U 180 U 190 U 170 U 170 U 170 U 170 U 4-Chloroaniline 170 U 180 U 190 U 170 U 170 U 170 U 4-Chlorophenyl phenyl ether 170 U 180 U 190 U 170 U 170 U 170 U 4-Chlorophenyl phenyl ether 170 U 180 U 190 U 170 U 170 U 170 U 4-Nitroaniline 170 U 180 U 190 U 170 U 170 U 170 U 4-Nitrophenol 170 U 180 U 190 U 170 U 170 U 170 U 4-Chlorophenyl phenyl ether 1000000	2-Nitrophenol					170 U	180 U	190 U	170 U	170 U
3-Nitroaniline           170 U       180 U       190 U       170 U       170 U         4,6-Dinitro-2-methylphenol           690 U       740 U       780 U       700 U       680 U         4-Bromophenyl phenyl ether           69 U       74 U       78 U       70 U       68 U         4-Chloro-3-methylphenol           170 U       180 U       190 U       170 U       170 U         4-Chlorophenyl phenyl ether           170 U       180 U       190 U       170 U       170 U         4-Nitroaniline            170 U       180 U       190 U       170 U       170 U         4-Nitroaniline            170 U       180 U       190 U       170 U       170 U         4-Nitroaniline           170 U       180 U       190 U       170 U       170 U         4-Nitroaniline           340 U       370 U </td <td>3&amp;4-Methylphenol</td> <td></td> <td></td> <td>100000</td> <td></td> <td>69 U</td> <td>74 U</td> <td>78 U</td> <td>70 U</td> <td>68 U</td>	3&4-Methylphenol			100000		69 U	74 U	78 U	70 U	68 U
4,6-Dinitro-2-methylphenol           690 U       740 U       780 U       700 U       680 U         4-Bromophenyl phenyl ether           69 U       74 U       78 U       70 U       68 U         4-Chloro-3-methylphenol           170 U       180 U       190 U       170 U       170 U         4-Chloroaniline           170 U       180 U       190 U       170 U       170 U         4-Chlorophenyl phenyl ether           69 U       74 U       78 U       70 U       68 U         4-Nitroaniline           170 U       180 U       190 U       170 U       170 U         4-Nitrophenol           340 U       370 U       390 U       350 U       340 U         Acenaphthene       20000       98000       100000       34 U       37 U       39 U       35 U       27.1 J         Acetophenone           170 U       180 U       190 U       170 U	3,3'-Dichlorobenzidine					170 U	180 U	190 U	170 U	170 U
4-Bromophenyl phenyl ether           69 U       74 U       78 U       70 U       68 U         4-Chloro-3-methylphenol            170 U       180 U       190 U       170 U       170 U         4-Chloroaniline            170 U       180 U       190 U       170 U       170 U         4-Nitroaniline            170 U       180 U       190 U       170 U       170 U         4-Nitrophenol            340 U       370 U       390 U       350 U       340 U         Acenaphthene       20000       98000       100000       34 U       37 U       39 U       35 U       27.1 J         Acetophenone           170 U       180 U       190 U       170 U       170 U	3-Nitroaniline					170 U	180 U	190 U	170 U	170 U
4-Chloro-3-methylphenol           170 U       180 U       190 U       170 U       170 U         4-Chloroaniline            170 U       180 U       190 U       170 U       170 U         4-Chlorophenyl phenyl ether            69 U       74 U       78 U       70 U       68 U         4-Nitroaniline            170 U       180 U       190 U       170 U       170 U         4-Nitrophenol             340 U       370 U       390 U       350 U       340 U         Acenaphthene       20000       98000       100000       34 U       37 U       39 U       35 U       34 U         Acetophenone            170 U       180 U       190 U       170 U       170 U	4,6-Dinitro-2-methylphenol					690 U	740 U	780 U	700 U	680 U
4-Chloroaniline           170 U       180 U       190 U       170 U       170 U       170 U       4-Out of the control of the con	4-Bromophenyl phenyl ether					69 U	74 U	78 U	70 U	68 U
4-Chlorophenyl phenyl ether           69 U       74 U       78 U       70 U       68 U         4-Nitroaniline           170 U       180 U       190 U       170 U       170 U         4-Nitrophenol           340 U       370 U       390 U       350 U       340 U         Acenaphthene       20000       98000       100000       34 U       37 U       39 U       35 U       27.1 J         Acetophenone           170 U       180 U       190 U       170 U       170 U	4-Chloro-3-methylphenol					170 U	180 U	190 U	170 U	170 U
4-Nitroaniline           170 U       180 U       190 U       170 U       170 U       170 U       4-Nitrophenol       170 U       180 U       190 U       170 U       170 U       340 U       370 U       390 U       350 U       340 U       370 U       390 U       350 U       27.1 J       350 U       27.1 J       370 U       390 U       350 U       27.1 J       370 U       390 U       350 U       340 U	4-Chloroaniline					170 U	180 U	190 U	170 U	170 U
4-Nitrophenol           340 U       370 U       390 U       350 U       340 U         Acenaphthene       20000       98000       100000       34 U       37 U       39 U       35 U       27.1 J         Acenaphthylene       100000       107000       34 U       37 U       39 U       35 U       34 U         Acetophenone           170 U       180 U       190 U       170 U       170 U	4-Chlorophenyl phenyl ether					69 U	74 U	78 U	70 U	68 U
4-Nitrophenol           340 U       370 U       390 U       350 U       340 U         Acenaphthene       20000       98000       100000       34 U       37 U       39 U       35 U       27.1 J         Acenaphthylene       100000       107000       34 U       37 U       39 U       35 U       34 U         Acetophenone           170 U       180 U       190 U       170 U       170 U	4-Nitroaniline					170 U	180 U	190 U	170 U	170 U
Acenaphthene       20000       98000       100000       34 U       37 U       39 U       35 U       27.1 J         Acenaphthylene       100000       107000       100000       34 U       37 U       39 U       35 U       34 U         Acetophenone           170 U       180 U       190 U       170 U       170 U						340 U	370 U	390 U	350 U	340 U
Acenaphthylene       100000       107000       100000       34 U       37 U       39 U       35 U       34 U         Acetophenone           170 U       180 U       190 U       170 U       170 U	<u>*</u>	20000	98000	100000						
Acetophenone 170 U 180 U 190 U 170 U 170 U	1	100000		100000						34 U
1										
	•	100000	1000000	100000		34 U	37 U	39 U	35 U	79.4

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-10	RA-11A	RA-11B	RA-11B DUP	RA-12
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	3/18/2013	3/21/2013	3/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	10-12	23-25	23-25	11-12.5
									_
Atrazine					170 U	180 U	190 U	170 U	170 U
Benzaldehyde					170 U	180 U	190 U	170 U	170 U
Benzo[a]anthracene	1000	1000	1000		34 U	37 U	39 U	35 U	196
Benzo[a]pyrene	1000	22000	1000		34 U	37 U	39 U	35 U	190
Benzo[b]fluoranthene	1000	1700	1000		34 U	37 U	39 U	35 U	219
Benzo[g,h,i]perylene	100000	1000000	100000		34 U	37 U	39 U	35 U	130
Benzo[k]fluoranthene	800	1700	3900		34 U	37 U	39 U	35 U	73.9
Bis(2-chloroethoxy)methane					69 U	74 U	78 U	70 U	68 U
Bis(2-chloroethyl) ether					69 U	74 U	78 U	70 U	68 U
Bis(2-ethylhexyl) phthalate					69 U	74 U	78 U	70 U	106 UV
Butylbenzyl phthalate					69 U	74 U	78 U	70 U	68 U
Caprolactam					69 U	74 U	78 U	70 U	68 U
Carbazole					69 U	74 U	78 U	70 U	27.7 J
Chrysene	1000	1000	3900		34 U	37 U	39 U	35 U	187
Dibenzo[a,h]anthracene	330	1000000	330		34 U	37 U	39 U	35 U	32.7 J
Dibenzofuran	7000	210000	59000		69 U	74 U	78 U	70 U	18 J
Diethyl phthalate					69 U	74 U	78 U	70 U	68 U
Dimethyl phthalate					69 U	74 U	78 U	70 U	68 U
Di-n-butyl phthalate					69 U	74 U	78 U	70 U	68 U
Di-n-octyl phthalate					69 U	74 U	78 U	70 U	68 U
Fluoranthene	100000	1000000	100000		34 U	37 U	39 U	35 U	409
Fluorene	30000	386000	100000		34 U	37 U	39 U	35 U	27.1 J
Hexachlorobenzene	330	3200	1200		69 U	74 U	78 U	70 U	68 U
Hexachlorobutadiene					34 U	37 U	39 U	35 U	34 U
Hexachlorocyclopentadiene					340 U	370 U	390 U	350 U	340 U
Hexachloroethane					170 U	180 U	190 U	170 U	170 U
Indeno[1,2,3-cd]pyrene	500	8200	500		34 U	37 U	39 U	35 U	112
Isophorone					69 U	74 U	78 U	70 U	68 U
Naphthalene	12000	12000	100000		34 U	37 U	39 U	35 U	19.2 J
Nitrobenzene					69 U	74 U	78 U	70 U	68 U
n-Nitrosodi-n-propylamine					69 U	74 U	78 U	70 U	68 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-10	RA-11A	RA-11B	RA-11B DUP	RA-12
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	3/18/2013	3/21/2013	3/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	10-12	23-25	23-25	11-12.5
n-Nitrosodiphenylamine					170 U	180 U	190 U	170 U	170 U
Pentachlorophenol	800	800	6700		340 U	370 U	390 U	350 U	340 U
Phenanthrene	100000	1000000	100000		34 U	37 U	39 U	35 U	334
Phenol	330	330	100000		69 U	74 U	78 U	70 U	68 U
Pyrene	100000	1000000	100000		34 U	37 U	39 U	35 U	374
Total TIC, Semi-Volatile					4100 J	970 J	230 J	0	260 J

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-12	RA-12 DUP	RA-13	RA-13	RA-14
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/21/2013	2/21/2013	2/14/2013	2/14/2013	2/12/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	23-25	11-13	23-25	11-13
1,1'-Biphenyl					73 U	71 U	84 U	67 U	31 J
1,2,4,5-Tetrachlorobenzene					180 U	180 U	210 U	170 U	210 U
2,2'-oxybis (1-chloropropane)					73 U	71 U	84 U	67 U	83 U
2,3,4,6-Tetrachlorophenol					180 U	180 U	210 U	170 U	210 U
2,4,5-Trichlorophenol					180 U	180 U	210 U	170 U	210 U
2,4,6-Trichlorophenol					180 U	180 U	210 U	170 U	210 U
2,4-Dichlorophenol					180 U	180 U	210 U	170 U	210 U
2,4-Dimethylphenol					180 U	180 U	210 U	170 U	210 U
2,4-Dinitrophenol					730 U	710 U	840 U	670 U	830 RV
2,4-Dinitrotoluene					73 U	71 U	84 U	67 U	83 U
2,6-Dinitrotoluene					73 U	71 U	84 U	67 U	83 U
2-Chloronaphthalene					73 U	71 U	84 U	67 U	83 U
2-Chlorophenol					180 U	180 U	210 U	170 U	210 U
2-Methylnaphthalene					73 U	71 U	84 U	67 U	56.1 J
2-Methylphenol	330	330	100000		73 U	71 U	84 U	67 U	83 U
2-Nitroaniline					180 U	180 U	210 U	170 U	210 U
2-Nitrophenol					180 U	180 U	210 U	170 U	210 U
3&4-Methylphenol			100000		73 U	71 U	84 U	67 U	83 U
3,3'-Dichlorobenzidine					180 U	180 U	210 U	170 U	210 U
3-Nitroaniline					180 U	180 U	210 U	170 U	210 U
4,6-Dinitro-2-methylphenol					730 U	710 U	840 U	670 U	830 RV
4-Bromophenyl phenyl ether					73 U	71 U	84 U	67 U	83 U
4-Chloro-3-methylphenol					180 U	180 U	210 U	170 U	210 U
4-Chloroaniline					180 U	180 U	210 U	170 U	210 U
4-Chlorophenyl phenyl ether					73 U	71 U	84 U	67 U	83 U
4-Nitroaniline					180 U	180 U	210 U	170 U	210 U
4-Nitrophenol					360 U	350 U	420 U	340 U	420 U
Acenaphthene	20000	98000	100000		36 U	35 U	42 U	34 U	466
Acenaphthylene	100000	107000	100000		36 U	35 U	42 U	34 U	288
Acetophenone					180 U	180 U	210 U	170 U	210 U
Anthracene	100000	1000000	100000		36 U	35 U	42 U	34 U	1790

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-12	RA-12 DUP	RA-13	RA-13	RA-14
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/21/2013	2/21/2013	2/14/2013	2/14/2013	2/12/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	23-25	11-13	23-25	11-13
Atrazine					180 U	180 U	210 U	170 U	210 U
Benzaldehyde					180 U	180 U	210 U	170 U	210 U
Benzo[a]anthracene	1000	1000	1000		36 U	35 U	42 U	34 U	2970 JV
Benzo[a]pyrene	1000	22000	1000		36 U	35 U	42 U	34 U	2620 JV
Benzo[b]fluoranthene	1000	1700	1000		36 U	35 U	42 U	34 U	2140
Benzo[g,h,i]perylene	100000	1000000	100000		36 U	35 U	42 U	34 U	1470
Benzo[k]fluoranthene	800	1700	3900		36 U	35 U	42 U	34 U	1930 JV
Bis(2-chloroethoxy)methane					73 U	71 U	84 U	67 U	83 U
Bis(2-chloroethyl) ether					73 U	71 U	84 U	67 U	83 U
Bis(2-ethylhexyl) phthalate					73 U	71 U	54.5 J	72.5	96.9
Butylbenzyl phthalate					73 U	71 U	84 U	67 U	83 U
Caprolactam					73 U	71 U	84 U	67 U	83 U
Carbazole					73 U	71 U	84 U	67 U	356
Chrysene	1000	1000	3900		36 U	35 U	42 U	34 U	2830 JV
Dibenzo[a,h]anthracene	330	1000000	330		36 U	35 U	42 U	34 U	632
Dibenzofuran	7000	210000	59000		73 U	71 U	84 U	67 U	388
Diethyl phthalate					73 U	71 U	84 U	67 U	83 U
Dimethyl phthalate					73 U	71 U	84 U	67 U	83 U
Di-n-butyl phthalate					73 U	71 U	84 U	67 U	83 U
Di-n-octyl phthalate					73 U	71 U	84 U	67 U	83 U
Fluoranthene	100000	1000000	100000		36 U	35 U	42 U	34 U	7930
Fluorene	30000	386000	100000		36 U	35 U	42 U	34 U	594
Hexachlorobenzene	330	3200	1200		73 U	71 U	84 U	67 U	83 U
Hexachlorobutadiene					36 U	35 U	42 U	34 U	42 U
Hexachlorocyclopentadiene					360 U	350 U	420 U	340 U	420 U
Hexachloroethane					180 U	180 U	210 U	170 U	210 U
Indeno[1,2,3-cd]pyrene	500	8200	500		36 U	35 U	42 U	34 U	1370
Isophorone					73 U	71 U	84 U	67 U	83 U
Naphthalene	12000	12000	100000		36 U	35 U	42 U	34 U	51.3
Nitrobenzene					73 U	71 U	84 U	67 U	83 U
n-Nitrosodi-n-propylamine					73 U	71 U	84 U	67 U	83 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-12	RA-12 DUP	RA-13	RA-13	RA-14
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/21/2013	2/21/2013	2/14/2013	2/14/2013	2/12/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	23-25	11-13	23-25	11-13
n-Nitrosodiphenylamine					180 U	180 U	210 U	170 U	210 U
Pentachlorophenol	800	800	6700		360 U	350 U	420 U	340 U	420 U
Phenanthrene	100000	1000000	100000		36 U	35 U	42 U	34 U	6330 JV
Phenol	330	330	100000		73 U	71 U	84 U	67 U	83 U
Pyrene	100000	1000000	100000		36 U	35 U	42 U	34 U	6580 JV
Total TIC, Semi-Volatile					440 J	370 J	240 J	230 J	17890 J

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation: I	RA-14	RA-15	RA-15	RA-16	RA-16
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 2/1	12/2013	2/14/2013	2/14/2013	2/13/2013	2/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	11-13	23-25	11-13	23-25
1,1'-Biphenyl					77 U	77 U	70 U	80 U	81 U
1,2,4,5-Tetrachlorobenzene				-	190 U	190 U	180 U	200 U	200 U
2,2'-oxybis (1-chloropropane)					77 U	77 U	70 U	80 U	81 U
2,3,4,6-Tetrachlorophenol					190 U	190 U	180 U	200 U	200 U
2,4,5-Trichlorophenol				1	190 U	190 U	180 U	200 U	200 U
2,4,6-Trichlorophenol				1	190 U	190 U	180 U	200 U	200 U
2,4-Dichlorophenol					190 U	190 U	180 U	200 U	200 U
2,4-Dimethylphenol					190 U	190 U	180 U	200 U	200 U
2,4-Dinitrophenol					770 U	770 U	700 U	800 U	810 U
2,4-Dinitrotoluene					77 U	77 U	70 U	80 U	81 U
2,6-Dinitrotoluene					77 U	77 U	70 U	80 U	81 U
2-Chloronaphthalene					77 U	77 U	70 U	80 U	81 U
2-Chlorophenol				1	190 U	190 U	180 U	200 U	200 U
2-Methylnaphthalene					77 U	77 U	70 U	80 U	81 U
2-Methylphenol	330	330	100000		77 U	77 U	70 U	80 U	81 U
2-Nitroaniline					190 U	190 U	180 U	200 U	200 U
2-Nitrophenol					190 U	190 U	180 U	200 U	200 U
3&4-Methylphenol			100000		77 U	77 U	70 U	80 U	81 U
3,3'-Dichlorobenzidine				]	190 U	190 U	180 U	200 U	200 U
3-Nitroaniline					190 U	190 U	180 U	200 U	200 U
4,6-Dinitro-2-methylphenol					770 U	770 U	700 U	800 U	810 U
4-Bromophenyl phenyl ether					77 U	77 U	70 U	80 U	81 U
4-Chloro-3-methylphenol					190 U	190 U	180 U	200 U	200 U
4-Chloroaniline					190 U	190 U	180 U	200 U	200 U
4-Chlorophenyl phenyl ether					77 U	77 U	70 U	80 U	81 U
4-Nitroaniline				1	190 U	190 U	180 U	200 U	200 U
4-Nitrophenol				3	380 U	380 U	350 U	400 U	400 U
Acenaphthene	20000	98000	100000		38 U	38 U	35 U	40 U	40 U
Acenaphthylene	100000	107000	100000		38 U	38 U	35 U	40 U	40 U
Acetophenone				]	190 U	190 U	180 U	200 U	200 U
Anthracene	100000	1000000	100000		38 U	38 U	35 U	40 U	40 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-14	RA-15	RA-15	RA-16	RA-16
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/12/2013	2/14/2013	2/14/2013	2/13/2013	2/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	11-13	23-25	11-13	23-25
									_
Atrazine					190 U	190 U	180 U	200 U	200 U
Benzaldehyde					190 U	190 U	180 U	200 U	200 U
Benzo[a]anthracene	1000	1000	1000		38 U	37.9 J	35 U	30 J	40 U
Benzo[a]pyrene	1000	22000	1000		38 U	41.2	35 U	25.1 NJV	40 U
Benzo[b]fluoranthene	1000	1700	1000		38 U	46.6	35 U	27.2 J	40 U
Benzo[g,h,i]perylene	100000	1000000	100000		38 U	36.3 J	35 U	21.1 J	40 U
Benzo[k]fluoranthene	800	1700	3900		38 U	36.7 J	35 U	18.1 J	40 U
Bis(2-chloroethoxy)methane					77 U	77 U	70 U	80 U	81 U
Bis(2-chloroethyl) ether					77 U	77 U	70 U	80 U	81 U
Bis(2-ethylhexyl) phthalate					77 U	123	93.6	291	134
Butylbenzyl phthalate					77 U	77 U	70 U	80 U	81 U
Caprolactam					77 U	77 U	70 U	80 U	81 U
Carbazole					77 U	77 U	70 U	80 U	81 U
Chrysene	1000	1000	3900		38 U	42.5	35 U	32.3 J	40 U
Dibenzo[a,h]anthracene	330	1000000	330		38 U	38 U	35 U	40 U	40 U
Dibenzofuran	7000	210000	59000		77 U	77 U	70 U	80 U	81 U
Diethyl phthalate					77 U	77 U	70 U	80 U	81 U
Dimethyl phthalate					77 U	77 U	70 U	80 U	81 U
Di-n-butyl phthalate					77 U	77 U	70 U	80 U	81 U
Di-n-octyl phthalate					77 U	77 U	70 U	80 U	81 U
Fluoranthene	100000	1000000	100000		38 U	65.9	35 U	43.1	40 U
Fluorene	30000	386000	100000		38 U	38 U	35 U	40 U	40 U
Hexachlorobenzene	330	3200	1200		77 U	77 U	70 U	80 U	81 U
Hexachlorobutadiene					38 U	38 U	35 U	40 U	40 U
Hexachlorocyclopentadiene					380 U	380 U	350 U	400 U	400 U
Hexachloroethane					190 U	190 U	180 U	200 U	200 U
Indeno[1,2,3-cd]pyrene	500	8200	500		38 U	29.5 J	35 U	17.3 J	40 U
Isophorone					77 U	77 U	70 U	80 U	81 U
Naphthalene	12000	12000	100000		38 U	38 U	35 U	40 U	40 U
Nitrobenzene					77 U	77 U	70 U	80 U	81 U
n-Nitrosodi-n-propylamine					77 U	77 U	70 U	80 U	81 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-14	RA-15	RA-15	RA-16	RA-16
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 2/	/12/2013	2/14/2013	2/14/2013	2/13/2013	2/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	11-13	23-25	11-13	23-25
n-Nitrosodiphenylamine					190 U	190 U	180 U	200 U	200 U
Pentachlorophenol	800	800	6700		380 U	380 U	350 U	400 U	400 U
Phenanthrene	100000	1000000	100000		38 U	36.2 J	35 U	26 J	40 U
Phenol	330	330	100000		77 U	77 U	70 U	80 U	81 U
Pyrene	100000	1000000	100000		38 U	62.1	35 U	49.4	40 U
Total TIC, Semi-Volatile					210 J	320 J	400 J	3200 J	1490 J

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter Parameter (Concentrations in μg/kg)         Part 375 Unrestricted Unrestricted Protection of Restricted Restricted Restricted Restricted Sample Date: 2/12/2013 2/12/2012/2013 2/12/201	RA-18 2/15/2013 11-13 76 U 190 U 76 U 190 U 190 U 190 U 190 U 190 U 760 U 760 U	RA-18 2/15/2013 23-25 80 U 200 U 80 U 200 U 200 U 200 U 200 U 200 U 800 U
Concentrations in μg/kg   Use   Groundwater   Residential   Sample Depth (ft bls):   10-12   23-25	76 U 190 U 76 U 190 U 190 U 190 U 190 U 190 U 760 U 76 U	80 U 200 U 80 U 200 U 200 U 200 U 200 U 200 U 200 U
1,1'-Biphenyl	76 U 190 U 76 U 190 U 190 U 190 U 190 U 190 U 760 U 76 U	80 U 200 U 80 U 200 U 200 U 200 U 200 U 200 U
1,1'-Biphenyl             1.2 (1.2,4,5-Tetrachlorobenzene)              1.80 U         1.90 UJV         180 U         1.20 U         190 UJV         180 U         2.20 voxybis (1-chloropropane)             81 U         74 UJV         180 U         180 U         2.4,5-Trichlorophenol            200 U         190 U         180 U         180 U         2.4-Dinchlorophenol            200 U         190 U         180 U         2.4-Dinchlorophenol            200 U         190 U         180 U         2.4-Dinchlorophenol            81 U         74 UJV	190 U 76 U 190 U 190 U 190 U 190 U 190 U 760 U 76 U	200 U 80 U 200 U 200 U 200 U 200 U 200 U
1,2,4,5-Tetrachlorobenzene              180 U         200 U         190 UJV         74 UJV         180 U         2,4,5-Trichlorophenol            200 U         190 U         180 U         2,4,6-Trichlorophenol            200 U         190 U         180 U         2,4-Dinklorophenol             200 U         190 U         180 U         2,4-Dinklorophenol             81 U         74 UJV         74 UJV         74 UJV         24 U         2,6-Dinklorobenol            81 U         74 UJV         74 UJV         74 UJV         24 U         2	190 U 76 U 190 U 190 U 190 U 190 U 190 U 760 U 76 U	200 U 80 U 200 U 200 U 200 U 200 U 200 U
2,2'-oxybis (1-chloropropane)             181 U         74 UJV         74 UJV         180 U         2,3,4,6-Tetrachlorophenol               180 U         140 U<	76 U 190 U 190 U 190 U 190 U 190 U 760 U 76 U	80 U 200 U 200 U 200 U 200 U 200 U
2,3,4,6-Tetrachlorophenol           180 U       190 U       190 U       180 U       2,4,5-Trichlorophenol           200 U       190 U       180 U       180 U       2,4,6-Trichlorophenol          200 U       190 U       180 U       2,4-Dichlorophenol          200 U       190 U       180 U       2,4-Dimethylphenol          810 U       74 UJV       74 UJV <td>190 U 190 U 190 U 190 U 190 U 760 U 76 U</td> <td>200 U 200 U 200 U 200 U 200 U</td>	190 U 190 U 190 U 190 U 190 U 760 U 76 U	200 U 200 U 200 U 200 U 200 U
2,4,5-Trichlorophenol           180 U       190 U       U       180 U       190 U       190 U       190 U       190 U	190 U 190 U 190 U 190 U 760 U 76 U	200 U 200 U 200 U 200 U
2,4,6-Trichlorophenol             180 U         190 U         180 U         190 U         180 U         2,4-Dichlorophenol            200 U         190 U         180 U         180 U         2,4-Dimethylphenol            200 U         190 U         180 U         740 U         2,4-Dimethylphenol           81 U         74 UJV	190 U 190 U 190 U 760 U 76 U	200 U 200 U 200 U
2,4-Dichlorophenol           180 U       190 U       180 U       2,4-Dimethylphenol       190 U       180 U       180 U       190 U       180 U       2,4-Dimethylphenol       190 U       180 U       190 U       190 U       180 U       190 U       180 U       190 U       190 U       180 U       190 U       190 U       190 U       180 U	190 U 190 U 760 U 76 U	200 U 200 U
2,4-Dimethylphenol           190 U       180 U       2,4-U       190 U       180 U       2,4-U       2,4-U       2,4-Dimitrophenol          810 U       74 UJV       74 U	190 U 760 U 76 U	200 U
2,4-Dinitrophenol           740 U       740 U <td< td=""><td>760 U 76 U</td><td></td></td<>	760 U 76 U	
2,4-Dinitrotoluene          81 U       74 UJV       74 U         2,6-Dinitrotoluene          81 U       74 UJV       74 U         2-Chloronaphthalene          81 U       74 UJV       74 U         2-Chlorophenol          200 U       190 U       180 U         2-Methylnaphthalene          81 U       74 UJV       74 U         2-Methylphenol       330       330       100000       81 U       74 U       74 U         2-Nitrophenol          200 U       190 UJV       180 U         2-Nitrophenol          200 U       190 UJV       180 U         3-Witrophenol         100000       81 U       74 U       74 U         3,3'-Dichlorobenzidine          200 U       190 UJV       180 U         3-Nitroaniline          200 U       190 UJV       180 U         4,6-Dinitro-2-methylphenol          810 U       74 UJV       74 UJV <td>76 U</td> <td>000 II</td>	76 U	000 II
2,6-Dinitrotoluene           74 UJV		800 U
2-Chloronaphthalene          81 U       74 UJV       74 UJV       74 UJV       74 UJV       74 UJV       180 U       2-One the phenol       190 U       180 U       180 U       180 U       190 U       180 U		80 U
2-Chlorophenol          200 U       190 U       180 U         2-Methylnaphthalene          81 U       74 UJV       74 U         2-Methylphenol       330       330       100000       81 U       74 U       74 U         2-Nitrophenol          200 U       190 UJV       180 U         2-Nitrophenol          200 U       190 UJ       180 U         3&4-Methylphenol         100000       81 U       74 U       74 U         3,3'-Dichlorobenzidine          200 U       190 UJV       180 U         3-Nitroaniline          200 U       190 UJV       180 U         4,6-Dinitro-2-methylphenol          810 U       740 U       740 U         4-Bromophenyl phenyl ether          81 U       74 UJV       74 UJV	76 U	80 U
2-Methylnaphthalene          81 U       74 UJV       74 U         2-Methylphenol       330       330       100000       81 U       74 U       74 U         2-Nitroaniline          200 U       190 UJV       180 U         2-Nitrophenol          200 U       190 UJ       180 U         3&4-Methylphenol         100000       81 U       74 U       74 U         3,3'-Dichlorobenzidine          200 U       190 UJV       180 U         3-Nitroaniline          200 U       190 UJV       180 U         4,6-Dinitro-2-methylphenol           810 U       740 U       740 U         4-Bromophenyl phenyl ether          81 U       74 UJV       74 UJV	76 U	80 U
2-Methylphenol       330       330       100000       81 U       74 U       74 U         2-Nitroaniline          200 U       190 UJV       180 U         2-Nitrophenol          200 U       190 U       180 U         3&4-Methylphenol         100000       81 U       74 U       74 U         3,3'-Dichlorobenzidine          200 U       190 UJV       180 U         3-Nitroaniline           200 U       190 UJV       180 U         4,6-Dinitro-2-methylphenol           810 U       740 U       740 U         4-Bromophenyl phenyl ether          81 U       74 UJV       74 U	190 U	200 U
2-Methylphenol       330       330       100000       81 U       74 U       74 U         2-Nitroaniline          200 U       190 UJV       180 U         2-Nitrophenol          200 U       190 U       180 U         3&4-Methylphenol         100000       81 U       74 U       74 U         3,3'-Dichlorobenzidine          200 U       190 UJV       180 U         3-Nitroaniline           200 U       190 UJV       180 U         4,6-Dinitro-2-methylphenol           81 U       74 U U       74 U         4-Bromophenyl phenyl ether          81 U       74 UJV       74 U	76 U	80 U
2-Nitroaniline           180 U         2-Nitrophenol           100000       81 U       74 U       74 U         3,3'-Dichlorobenzidine           200 U       190 UJV       180 U         3-Nitroaniline           200 U       190 UJV       180 U         4,6-Dinitro-2-methylphenol           810 U       740 U       740 U         4-Bromophenyl phenyl ether          81 U       74 UJV       74 UJV	76 U	80 U
3&4-Methylphenol         100000       81 U       74 U       74 U         3,3'-Dichlorobenzidine          200 U       190 UJV       180 U         3-Nitroaniline           200 U       190 UJV       180 U         4,6-Dinitro-2-methylphenol          810 U       740 U       740 U         4-Bromophenyl phenyl ether          81 U       74 UJV       74 UJV	190 U	200 U
3&4-Methylphenol         100000       81 U       74 U       74 U         3,3'-Dichlorobenzidine          200 U       190 UJV       180 U         3-Nitroaniline          200 U       190 UJV       180 U         4,6-Dinitro-2-methylphenol          810 U       740 U       740 U         4-Bromophenyl phenyl ether          81 U       74 UJV       74 U	190 U	200 U
3-Nitroaniline          200 U       190 UJV       180 U         4,6-Dinitro-2-methylphenol          810 U       740 U       740 U         4-Bromophenyl phenyl ether          81 U       74 UJV       74 U	76 U	80 U
3-Nitroaniline          200 U       190 UJV       180 U         4,6-Dinitro-2-methylphenol          810 U       740 U       740 U         4-Bromophenyl phenyl ether          81 U       74 UJV       74 U	190 U	200 U
4-Bromophenyl ether 81 U 74 UJV 74 U	190 U	200 U
4-Bromophenyl ether 81 U 74 UJV 74 U	760 U	800 U
	76 U	80 U
4-Chloro-3-methylphenol 200 U 190 U 180 U	190 U	200 U
4-Chloroaniline 200 U 190 UJV 180 U	190 U	200 U
4-Chlorophenyl phenyl ether 81 U 74 UJV 74 U	76 U	80 U
4-Nitroaniline 200 U 190 UJV 180 U	190 U	200 U
4-Nitrophenol 410 U 370 U 370 U	380 U	400 U
Acenaphthene 20000 98000 100000 41 U 37 UJV 37 U	38 U	40 U
Acenaphthylene 100000 107000 100000 41 U 37 UJV 37 U	38 U	40 U
Acetophenone 200 U 190 UJV 180 U	500	200 U
Anthracene 100000 1000000 100000 97.9 JV 37 UJV 37 U	190 U	40 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC					
	Part 375	Part 375	Part 375	Sample Designation: RA-17	RA-17 DUP	RA-17	RA-18	RA-18
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 2/12/201	3 2/12/2013	2/12/2013	2/15/2013	2/15/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 10-12	10-12	23-25	11-13	23-25
Atrazine				200 U	190 UJV	180 U	190 U	200 U
Benzaldehyde				200 U	190 UJV	180 U	190 U	200 U
Benzo[a]anthracene	1000	1000	1000	386 JV	37 UJV	37 U	21.9 J	26.7 J
Benzo[a]pyrene	1000	22000	1000	370 JV	37 UJV	37 U	17.9 J	28.7 J
Benzo[b]fluoranthene	1000	1700	1000	361 JV	37 UJV	37 U	38 U	23.8 J
Benzo[g,h,i]perylene	100000	1000000	100000	217 JV	37 UJV	37 U	38 U	40 U
Benzo[k]fluoranthene	800	1700	3900	223 JV	37 UJV	37 U	15.6 J	23.4 J
Bis(2-chloroethoxy)methane				81 U	74 UJV	74 U	76 U	80 U
Bis(2-chloroethyl) ether				81 U	74 UJV	74 U	76 U	80 U
Bis(2-ethylhexyl) phthalate				81 U	74 UJV	59.8 J	76 U	80 U
Butylbenzyl phthalate				81 U	74 UJV	74 U	76 U	80 U
Caprolactam				81 U	74 UJV	74 U	76 U	80 U
Carbazole				25.9 J	74 UJV	74 U	76 U	80 U
Chrysene	1000	1000	3900	368 JV	37 UJV	37 U	19.9 J	29.2 J
Dibenzo[a,h]anthracene	330	1000000	330	81	37 UJV	37 U	38 U	40 U
Dibenzofuran	7000	210000	59000	81 U	74 UJV	74 U	76 U	80 U
Diethyl phthalate				81 U	74 UJV	74 U	76 U	80 U
Dimethyl phthalate				65 J	74 UJV	74 U	76 U	80 U
Di-n-butyl phthalate				81 U	74 UJV	74 U	76 U	80 U
Di-n-octyl phthalate				81 U	74 UJV	74 U	76 U	80 U
Fluoranthene	100000	1000000	100000	818 JV	37 UJV	37 U	46.1	57.4
Fluorene	30000	386000	100000	41 U	37 UJV	37 U	38 U	40 U
Hexachlorobenzene	330	3200	1200	81 U	74 UJV	74 U	76 U	80 U
Hexachlorobutadiene				41 U	37 UJV	37 U	38 U	40 U
Hexachlorocyclopentadiene				410 U	370 UJV	370 U	380 U	400 U
Hexachloroethane				200 U	190 UJV	180 U	190 U	200 U
Indeno[1,2,3-cd]pyrene	500	8200	500	195 JV	37 UJV	37 U	38 U	40 U
Isophorone				81 U	74 UJV	74 U	76 U	80 U
Naphthalene	12000	12000	100000	41 U	37 UJV	37 U	38 U	40 U
Nitrobenzene				81 U	74 UJV	74 U	76 U	80 U
n-Nitrosodi-n-propylamine				81 U	74 UJV	74 U	76 U	80 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-17	RA-17 DUP	RA-17	RA-18	RA-18
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/12/2013	2/12/2013	2/12/2013	2/15/2013	2/15/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	10-12	23-25	11-13	23-25
n-Nitrosodiphenylamine					200 U	190 UJV	180 U	190 U	200 U
Pentachlorophenol	800	800	6700		410 U	370 U	370 U	380 U	400 U
Phenanthrene	100000	1000000	100000		344 JV	37 UJV	37 U	40.4	38.4 J
Phenol	330	330	100000		81 U	74 U	74 U	76 U	80 U
Pyrene	100000	1000000	100000		752 JV	37 UJV	37 U	39.2	53
Total TIC, Semi-Volatile					240 J	270 J	530 J	460 J	1230 J

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC					1
	Part 375	Part 375	Part 375	Sample Designation: RA	A-19 RA-19	RA-20	RA-20	RA-21
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 2/12	2/2013 2/12/2013	2/13/2013	2/13/2013	3/15/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 12	2-14 22-24	11-13	23-25	10-12
1,1'-Biphenyl				7.	3 U 78 U	90 U	81 U	75 RV
1,2,4,5-Tetrachlorobenzene				18	80 U 190 U	230 U	200 U	190 RV
2,2'-oxybis (1-chloropropane)				7	3 U 78 U	90 U	81 U	75 RV
2,3,4,6-Tetrachlorophenol				18	80 U 190 U	230 U	200 U	190 RV
2,4,5-Trichlorophenol				18	80 U 190 U	230 U	200 U	190 RV
2,4,6-Trichlorophenol				18	80 U 190 U	230 U	200 U	190 RV
2,4-Dichlorophenol				18	80 U 190 U	230 U	200 U	190 RV
2,4-Dimethylphenol				18	80 U 190 U	230 U	200 U	190 RV
2,4-Dinitrophenol				73	30 U 780 U	900 U	810 U	750 RV
2,4-Dinitrotoluene				7	3 U 78 U	90 U	81 U	75 RV
2,6-Dinitrotoluene				7.	3 U 78 U	90 U	81 U	75 RV
2-Chloronaphthalene				7.	3 U 78 U	90 U	81 U	75 RV
2-Chlorophenol				18	80 U 190 U	230 U	200 U	190 RV
2-Methylnaphthalene				7	3 U 78 U	90 U	81 U	75 RV
2-Methylphenol	330	330	100000	7	3 U 78 U	90 U	81 U	75 RV
2-Nitroaniline				18	80 U 190 U	230 U	200 U	190 RV
2-Nitrophenol				18	80 U 190 U	230 U	200 U	190 RV
3&4-Methylphenol			100000	7	3 U 78 U	90 U	81 U	75 RV
3,3'-Dichlorobenzidine				18	80 U 190 U	230 U	200 U	190 RV
3-Nitroaniline				18	80 U 190 U	230 U	200 U	190 RV
4,6-Dinitro-2-methylphenol				73	30 U 780 U	900 U	810 U	750 RV
4-Bromophenyl phenyl ether				7	3 U 78 U	90 U	81 U	75 RV
4-Chloro-3-methylphenol				18	80 U 190 U	230 U	200 U	190 RV
4-Chloroaniline				18	80 U 190 U	230 U	200 U	190 RV
4-Chlorophenyl phenyl ether				7	3 U 78 U	90 U	81 U	75 RV
4-Nitroaniline				18	80 U 190 U	230 U	200 U	190 RV
4-Nitrophenol				37	70 U 390 U	450 U	400 U	370 RV
Acenaphthene	20000	98000	100000	3	7 U 39 U	45 U	40 U	37 RV
Acenaphthylene	100000	107000	100000	3	7 U 18.6 J	45 U	40 U	37 RV
Acetophenone				18	30 U 190 U	230 U	200 U	190 RV
Anthracene	100000	1000000	100000	3	7 U 86.1	45 U	40 U	37 RV

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-19	RA-19	RA-20	RA-20	RA-21
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/12/2013	2/12/2013	2/13/2013	2/13/2013	3/15/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	12-14	22-24	11-13	23-25	10-12
Atrazine					180 U	190 U	230 U	200 U	190 RV
Benzaldehyde					180 U	190 U	230 U	200 U	190 RV
Benzo[a]anthracene	1000	1000	1000		21.6 J	353	45 U	40 U	37 RV
Benzo[a]pyrene	1000	22000	1000		37 U	338	45 U	40 U	37 RV
Benzo[b]fluoranthene	1000	1700	1000		37 U	293	45 U	40 U	37 RV
Benzo[g,h,i]perylene	100000	1000000	100000		37 U	201	45 U	40 U	37 RV
Benzo[k]fluoranthene	800	1700	3900		37 U	252	45 U	40 U	37 RV
Bis(2-chloroethoxy)methane					73 U	78 U	90 U	81 U	75 RV
Bis(2-chloroethyl) ether					73 U	78 U	90 U	81 U	75 RV
Bis(2-ethylhexyl) phthalate					73 U	78 U	139	106	75 RV
Butylbenzyl phthalate					73 U	78 U	90 U	81 U	75 RV
Caprolactam					73 U	78 U	90 U	81 U	75 RV
Carbazole					73 U	78 U	90 U	81 U	75 RV
Chrysene	1000	1000	3900		20.8 J	329	45 U	40 U	37 RV
Dibenzo[a,h]anthracene	330	1000000	330		37 U	73	45 U	40 U	37 RV
Dibenzofuran	7000	210000	59000		73 U	78 U	90 U	81 U	75 RV
Diethyl phthalate					73 U	78 U	90 U	81 U	75 RV
Dimethyl phthalate					38.2 J	78 U	90 U	81 U	75 RV
Di-n-butyl phthalate					73 U	78 U	90 U	81 U	75 RV
Di-n-octyl phthalate					73 U	78 U	90 U	81 U	75 RV
Fluoranthene	100000	1000000	100000		47.6	761	45 U	40 U	37 RV
Fluorene	30000	386000	100000		37 U	39 U	45 U	40 U	37 RV
Hexachlorobenzene	330	3200	1200		73 U	78 U	90 U	81 U	75 RV
Hexachlorobutadiene					37 U	39 U	45 U	40 U	37 RV
Hexachlorocyclopentadiene					370 U	390 U	450 U	400 U	370 RV
Hexachloroethane					180 U	190 U	230 U	200 U	190 RV
Indeno[1,2,3-cd]pyrene	500	8200	500		37 U	183	45 U	40 U	37 RV
Isophorone					73 U	78 U	90 U	81 U	75 RV
Naphthalene	12000	12000	100000		37 U	39 U	45 U	40 U	37 RV
Nitrobenzene					73 U	78 U	90 U	81 U	75 RV
n-Nitrosodi-n-propylamine					73 U	78 U	90 U	81 U	75 RV

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation: R	RA-19	RA-19	RA-20	RA-20	RA-21
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 2/1	12/2013	2/12/2013	2/13/2013	2/13/2013	3/15/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 1	12-14	22-24	11-13	23-25	10-12
									_
n-Nitrosodiphenylamine				1	180 U	190 U	230 U	200 U	190 RV
Pentachlorophenol	800	800	6700	3	370 U	390 U	450 U	400 U	370 RV
Phenanthrene	100000	1000000	100000	3	31.6 J	301	45 U	40 U	37 RV
Phenol	330	330	100000	5	73 U	78 U	90 U	81 U	75 RV
Pyrene	100000	1000000	100000	:	37.4	750	45 U	40 U	37 RV
Total TIC, Semi-Volatile				3	380 J	570 J	700 J	360 J	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-21	RA-22	RA-22	RA-23	RA-23
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 3	3/15/2013	2/15/2013	2/15/2013	2/13/2013	2/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	7-9	18-20	11-13	23-25
1,1'-Biphenyl					69 RV	74 U	95 UJV	74 U	76 U
1,2,4,5-Tetrachlorobenzene					170 RV	190 U	240 UJV	180 U	190 U
2,2'-oxybis (1-chloropropane)					69 RV	74 U	95 UJV	74 U	76 U
2,3,4,6-Tetrachlorophenol					170 U	190 U	240 UJV	180 U	190 U
2,4,5-Trichlorophenol					170 U	190 U	240 UJV	180 U	190 U
2,4,6-Trichlorophenol					170 U	190 U	240 UJV	180 U	190 U
2,4-Dichlorophenol					170 U	190 U	240 UJV	180 U	190 U
2,4-Dimethylphenol					170 U	190 U	240 UJV	180 U	190 U
2,4-Dinitrophenol					690 U	740 U	950 UJV	740 U	760 U
2,4-Dinitrotoluene					69 RV	74 U	95 UJV	74 U	76 U
2,6-Dinitrotoluene					69 RV	74 U	95 UJV	74 U	76 U
2-Chloronaphthalene					69 RV	74 U	95 UJV	74 U	76 U
2-Chlorophenol					170 U	190 U	240 UJV	180 U	190 U
2-Methylnaphthalene					69 RV	74 U	95 UJV	74 U	76 U
2-Methylphenol	330	330	100000		69 U	74 U	95 UJV	74 U	76 U
2-Nitroaniline					170 RV	190 U	240 UJV	180 U	190 U
2-Nitrophenol					170 U	190 U	240 UJV	180 U	190 U
3&4-Methylphenol			100000		69 U	74 U	95 UJV	74 U	76 U
3,3'-Dichlorobenzidine					170 RV	190 U	240 UJV	180 U	190 U
3-Nitroaniline					170 RV	190 U	240 UJV	180 U	190 U
4,6-Dinitro-2-methylphenol					690 U	740 U	950 UJV	740 U	760 U
4-Bromophenyl phenyl ether					69 RV	74 U	95 UJV	74 U	76 U
4-Chloro-3-methylphenol					170 U	190 U	240 UJV	180 U	190 U
4-Chloroaniline					170 RV	190 U	240 UJV	180 U	190 U
4-Chlorophenyl phenyl ether					69 RV	74 U	95 UJV	74 U	76 U
4-Nitroaniline					170 RV	190 U	240 UJV	180 U	190 U
4-Nitrophenol					340 U	370 U	480 UJV	370 U	380 U
Acenaphthene	20000	98000	100000		34 RV	37 U	48 UJV	37 U	38 U
Acenaphthylene	100000	107000	100000		34 RV	37 U	48 UJV	37 U	38 U
Acetophenone					170 RV	190 U	240 UJV	180 U	190 U
Anthracene	100000	1000000	100000		34 RV	37 U	48 UJV	37 U	38 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

-	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-21	RA-22	RA-22	RA-23	RA-23
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	3/15/2013	2/15/2013	2/15/2013	2/13/2013	2/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	7-9	18-20	11-13	23-25
Atrazine					170 RV	190 U	240 UJV	180 U	190 U
Benzaldehyde					170 RV	190 U	240 UJV	180 U	190 U
Benzo[a]anthracene	1000	1000	1000		34 RV	37 U	48 UJV	37 U	38 U
Benzo[a]pyrene	1000	22000	1000		34 RV	37 U	48 UJV	37 U	38 U
Benzo[b]fluoranthene	1000	1700	1000		34 RV	37 U	48 UJV	37 U	38 U
Benzo[g,h,i]perylene	100000	1000000	100000		34 RV	37 U	48 UJV	37 U	38 U
Benzo[k]fluoranthene	800	1700	3900		34 RV	37 U	48 UJV	37 U	38 U
Bis(2-chloroethoxy)methane					69 RV	74 U	95 UJV	74 U	76 U
Bis(2-chloroethyl) ether					69 RV	74 U	95 UJV	74 U	76 U
Bis(2-ethylhexyl) phthalate					69 RV	74 U	95 UJV	50.1 J	63.6 J
Butylbenzyl phthalate					69 RV	74 U	95 UJV	74 U	76 U
Caprolactam					69 RV	74 U	95 UJV	74 U	76 U
Carbazole					69 RV	74 U	95 UJV	74 U	76 U
Chrysene	1000	1000	3900		34 RV	37 U	48 UJV	37 U	38 U
Dibenzo[a,h]anthracene	330	1000000	330		34 RV	37 U	48 UJV	37 U	38 U
Dibenzofuran	7000	210000	59000		69 RV	74 U	95 UJV	74 U	76 U
Diethyl phthalate					69 RV	74 U	95 UJV	74 U	76 U
Dimethyl phthalate					69 RV	74 U	95 UJV	74 U	76 U
Di-n-butyl phthalate					69 RV	74 U	95 UJV	74 U	76 U
Di-n-octyl phthalate					69 RV	74 U	95 UJV	74 U	76 U
Fluoranthene	100000	1000000	100000		34 RV	37 U	48 UJV	37 U	38 U
Fluorene	30000	386000	100000		34 RV	37 U	48 UJV	37 U	38 U
Hexachlorobenzene	330	3200	1200		69 RV	74 U	95 UJV	74 U	76 U
Hexachlorobutadiene					34 RV	37 U	48 UJV	37 U	38 U
Hexachlorocyclopentadiene					340 RV	370 U	480 UJV	370 U	380 U
Hexachloroethane					170 RV	190 U	240 UJV	180 U	190 U
Indeno[1,2,3-cd]pyrene	500	8200	500		34 RV	37 U	48 UJV	37 U	38 U
Isophorone					69 RV	74 U	95 UJV	74 U	76 U
Naphthalene	12000	12000	100000		34 RV	37 U	48 UJV	37 U	38 U
Nitrobenzene					69 RV	74 U	95 UJV	74 U	76 U
n-Nitrosodi-n-propylamine					69 RV	74 U	95 UJV	74 U	76 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC					
	Part 375	Part 375	Part 375	Sample Designation: RA-	21 RA-22	RA-22	RA-23	RA-23
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 3/15/2	013 2/15/2013	2/15/2013	2/13/2013	2/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 23-2	25 7-9	18-20	11-13	23-25
n-Nitrosodiphenylamine				170 I	RV 190 U	240 UJV	180 U	190 U
Pentachlorophenol	800	800	6700	340	U 370 U	480 UJV	370 U	380 U
Phenanthrene	100000	1000000	100000	34 R	.V 37 U	48 UJV	37 U	38 U
Phenol	330	330	100000	69 1	J 74 U	95 UJV	74 U	76 U
Pyrene	100000	1000000	100000	34 R	.V 37 U	48 UJV	37 U	38 U
Total TIC, Semi-Volatile				0	740 J	350 J	$710\mathrm{J}$	250 J

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation: RA	A-32 R	A-32 DUP	RA-33	RA-34	RA-35
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 4/26	5/2013	4/26/2013	4/26/2013	4/26/2013	8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 4	4-6	4-6	4-6	4-6	4 - 6
1,1'-Biphenyl					7 U	75 U	80 U	77 U	73 U
1,2,4,5-Tetrachlorobenzene				19	90 U	190 U	200 U	190 U	180 U
2,2'-oxybis (1-chloropropane)				77	7 U	75 U	80 U	77 U	73 U
2,3,4,6-Tetrachlorophenol					90 U	190 U	200 U	190 U	180 U
2,4,5-Trichlorophenol				19	90 U	190 U	200 U	190 U	180 U
2,4,6-Trichlorophenol				19	90 U	190 U	200 U	190 U	180 U
2,4-Dichlorophenol				19	90 U	190 U	200 U	190 U	180 U
2,4-Dimethylphenol				19	90 U	190 U	200 U	190 U	180 U
2,4-Dinitrophenol				770	0 RV	750 U	800 U	770 U	730 U
2,4-Dinitrotoluene				77	7 U	75 U	80 U	77 U	73 U
2,6-Dinitrotoluene				77	7 U	75 U	80 U	77 U	73 U
2-Chloronaphthalene				77	7 U	75 U	80 U	77 U	73 U
2-Chlorophenol				19	90 U	190 U	200 U	190 U	180 U
2-Methylnaphthalene				77	7 U	75 U	80 U	77 U	73 U
2-Methylphenol	330	330	100000	77	7 U	75 U	80 U	77 U	73 U
2-Nitroaniline				19	90 U	190 U	200 U	190 U	180 U
2-Nitrophenol				19	90 U	190 U	200 U	190 U	180 U
3&4-Methylphenol			100000	77	7 U	75 U	80 U	77 U	73 U
3,3'-Dichlorobenzidine				19	90 U	190 U	200 U	190 U	180 U
3-Nitroaniline				19	90 U	190 U	200 U	190 U	180 U
4,6-Dinitro-2-methylphenol				770	0 RV	750 U	800 U	770 U	730 U
4-Bromophenyl phenyl ether				77	7 U	75 U	80 U	77 U	73 U
4-Chloro-3-methylphenol				19	90 U	190 U	200 U	190 U	180 U
4-Chloroaniline				19	90 U	190 U	200 U	190 U	180 U
4-Chlorophenyl phenyl ether				77	7 U	75 U	80 U	77 U	73 U
4-Nitroaniline				19	90 U	190 U	200 U	190 U	180 U
4-Nitrophenol				38	30 U	380 U	400 U	380 U	360 U
Acenaphthene	20000	98000	100000	38	8 U	38 U	31.7 J	38 U	36 U
Acenaphthylene	100000	107000	100000	38	8 U	38 U	40 U	38 U	36 U
Acetophenone				19	90 U	190 U	200 U	190 U	180 U
Anthracene	100000	1000000	100000	60	66.1	107	236	25.4 J	36 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter         Part 375         Part 375         Part 375         Part 375         Sample Designation: Sample Date: 4/26/2013         RA-32 4/26/2013         4/26/2013		NYSDEC	NYSDEC	NYSDEC					
Concentrations in µg/kg)   Use   Groundwater   Residential   Sample Depth (ft bils):   4-6   4		Part 375	Part 375	Part 375	<b>Sample Designation:</b> RA-32	RA-32 DUP	RA-33	RA-34	RA-35
Atrazine	Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 4/26/2011	3 4/26/2013	4/26/2013	4/26/2013	8/5/2013
Atrazine	(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 4-6	4-6	4-6	4-6	4 - 6
Benzaldchyde            190 U         190 U         200 U         190 U         180 U           Benzolajlamtracene         1000         1000         1000         2270 IV         304         2160         94.1         36 U           Benzolajpyrene         1000         1700         1000         416 IV         403         2910         128 0         36 U           Benzolgi,hilperylene         10000         100000         10000         198 IV         216         1360         93.2         36 U           Benzolgi,hilperylene         100000         100000         3900         151 IV         135         1120         49.5         36 U           Bis(2-chloroethoxy)methane            77 U         75 U         80 U         77 U         73 U           Bis(2-chloroethoxy)methalae            77 U         75 U         80 U         77 U         73 U           Bis(2-chloroethoxy)methalae            77 U         75 U         80 U         77 U         73 U           Bis(2-chloroethy) phthalate            77 U         75 U         80 U									
Benzo[a] anthracene         1000         1000         1000         270 JV         309         2160         94.1         36 VI           Benzo[a] pyrene         1000         22000         1000         292 JV         304         2480         109         36 UI           Benzo[g,h.i] perylene         100000         100000         100000         198 JV         216         1360         93.2         36 UI           Benzo[g,h.i] perylene         800         1700         3900         151 JV         135         1120         49.5         36 UI           Bis(2-chloreothxy) methane            77 U         75 U         80 U         77 U         73 U           Bis(2-chly phethalate            77 U         75 U         80 U         77 U         73 U           Bis(2-chly phethalate            77 U         75 U         80 U         77 U         73 U           Carbazole            77 U         75 U         80 U         77 U         73 U           Chlysene         1000         1000         3900         307 IV         40.8         280 U         16.8 J	Atrazine								
Benzo[a)pyrene         1000         22000         1000         292 JV         304         2480         109         36 U           Benzo[gh]fluoranthene         1000         1700         10000         416 JV         403         2910         128         36 U           Benzo[gh,i]perylene         100000         100000         100000         151 JV         216         130         93.2         36 U           Bis(2-chloroethoxy)methane            77 U         75 U         80 U         77 U         73 U           Bis(2-chloroethoxy)methane             77 U         75 U         80 U         77 U         73 U           Bis(2-chloroethy) ether            77 U         75 U         80 U         77 U         73 U           Bis(2-chloroethy) phthalate            77 U         75 U         80 U         77 U         73 U           Caprolactam             77 U         75 U         80 U         77 U         73 U           Chrysene         1000         1000         3900         307 JV         313         <	Benzaldehyde				190 U	190 U	200 U	190 U	180 U
Benzo[b]fluoranthene         1000         1700         10000         10000         100000         100000         100000         100000         198 JV         216         1360         93.2         36 U         Benzo[k] liperylene         100000         100000         151 JV         135         1120         49.5         36 U           Bis(2-chloroethoxy)methane             77 U         75 U         80 U         77 U         73 U           Bis(2-chloroethy) bether             77 U         75 U         80 U         77 U         73 U           Bis(2-chlyhlexyl) phthalate             77 U         75 U         80 U         77 U         73 U           Buylbenzyl phthalate              77 U         75 U         80 U         77 U         73 U           Carbazole              77 U         75 U         80 U         77 U         73 U           Chrysene         1000         1000         3900         307 JV         313         200         168 J         36 U	Benzo[a]anthracene	1000	1000	1000	270 JV	309	2160	94.1	36 U
Benzo[g,h,i]perylene         100000         1000000         100000         198 JV         216         1360         93.2         36 U           Benzo[g,h]fluoranthene         800         1700         3900         151 JV         135         1120         49.5         36 U           Bis(2-chloroethxy) ether            77 U         75 U         80 U         77 U         73 U           Bis(2-ethylhexyl) phthalate            77 U         75 U         80 U         77 U         73 U           Buyl benzyl phthalate             77 U         75 U         80 U         77 U         73 U           Carpolactan              77 U         75 U         80 U         77 U         73 U           Chrysene         1000         1000         3900         307 JV         313         2000         91.2         36 U           Dibenzo[a,h]anthracene         330         1000000         3900         307 JV         313         2000         91.2         36 U           Dibenzo[a,h]anthracene         330         100000         5900         77 U	Benzo[a]pyrene	1000	22000	1000	292 JV	304	2480	109	36 U
Benzo k fluoranthene         800         1700         3900         151 JV         135         1120         49.5         36 V           Bis(2-chloroethoxy)methane             77 U         75 U         80 U         77 U         73 U           Bis(2-chloroethoxy)methane            77 U         75 U         80 U         77 U         73 U           Bis(2-chloroethoxy) phthalate            77 U         58.4 J         80 U         77 U         73 U           Caprolactam             77 U         75 U         80 U         77 U         73 U           Carbazole             77 U         45.3 J         169         77 U         73 U           Chrysene         1000         1000         3900         307 JV         313         2000         91.2         36 U           Dibenzo[a,h]anthracene         330         10000         3900         37 U         75 U         80 U         77 U         73 U           Dibenzo[a,h]anthracene             77 U	Benzo[b]fluoranthene	1000	1700	1000	416 JV	403	2910	128	36 U
Bis(2-chloroethoxy)methane             77 U         75 U         80 U         77 U         73 U           Bis(2-chloroethyl) ether            77 U         75 U         80 U         77 U         73 U           Bis(2-chlylhexyl) phthalate            77 U         75 U         80 U         77 U         73 U           Butylbenzyl phthalate            77 U         75 U         80 U         77 U         73 U           Carbazole             77 U         45.3 J         169         77 U         73 U           Chrysene         1000         1000         3900         307 JV         40.8 J         280         16.8 J         36 U           Dibenzo[a,h]anthracene         330         100000         330         61.3 JV         40.8 J         280         16.8 J         36 U           Dibenzo[a,h]anthracene         330         100000         330         71 U         75 U         80 U         77 U         73 U         80 U         77 U         73 U         80 U         77 U         73 U         80 U         77	Benzo[g,h,i]perylene	100000	1000000	100000	198 JV	216	1360	93.2	36 U
Bis(2-chloroethyl) ether              77 U         75 U         80 U         77 U         73 U           Bis(2-ethylhexyl) phthalate             77 U         58.4 J         80 U         77 U         73 U           Butylbenzyl phthalate            77 U         75 U         80 U         77 U         73 U           Caprolactam            77 U         75 U         80 U         77 U         73 U           Carbazole            77 U         45.3 J         169         77 U         73 U           Chrysene         1000         1000         3900         307 JV         313         200         91.2         36 U           Dibenzofuran         7000         21000         5900         77 U         75 U         80 U         77 U         73 U           Diethyl phthalate            77 U         75 U         80 U         77 U         73 U           Di-n-octyl phthalate             77 U         75 U	Benzo[k]fluoranthene	800	1700	3900	151 JV	135	1120	49.5	36 U
Bis(2-ethylhexyl) phthalate	Bis(2-chloroethoxy)methane				77 U	75 U	80 U	77 U	73 U
Butylbenzyl phthalate               77 U         75 U         80 U         77 U         73 U           Carpolactam              77 U         75 U         80 U         77 U         73 U           Carbazole             77 U         45.3 J         169         77 U         73 U           Chrysene         1000         1000         3900         307 JV         313         2000         91.2 3 U           Dibenzofuran         7000         210000         59000         77 U         75 U         80 U         77 U         73 U           Dibenzofuran         7000         210000         59000         77 U         75 U         80 U         77 U         73 U           Dibenzofuran             77 U         75 U         80 U         77 U         73 U           Dibenzofuran             77 U         75 U         80 U         77 U         73 U           Dibenzofuran	Bis(2-chloroethyl) ether				77 U	75 U	80 U	77 U	73 U
Caprolactam	Bis(2-ethylhexyl) phthalate				77 U	58.4 J	80 U	77 U	73 U
Carbazole	Butylbenzyl phthalate				77 U	75 U	80 U	77 U	73 U
Chrysene         1000         1000         3900         307 JV         313         2000         91.2         36 U           Dibenzo[a,h]anthracene         330         1000000         330         61.3 JV         40.8         280         16.8 J         36 U           Dibenzofuran         7000         210000         59000         77 U         75 U         80 U         77 U         73 U           Diethyl phthalate            77 U         75 U         80 U         77 U         73 U           Di-n-butyl phthalate             77 U         75 U         80 U         77 U         73 U           Di-n-butyl phthalate             77 U         75 U         80 U         77 U         73 U           Di-n-octyl phthalate             77 U         75 U         80 U         77 U         73 U           Pluoranthene         100000         100000         100000         554 JV         694         2410         158         36 U           Fluorene         3300         38600         100000         38 U         38 U <t< td=""><td>Caprolactam</td><td></td><td></td><td></td><td>77 U</td><td>75 U</td><td>80 U</td><td>77 U</td><td>73 U</td></t<>	Caprolactam				77 U	75 U	80 U	77 U	73 U
Dibenzo[a,h]anthracene         330         1000000         330         61.3 JV         40.8         280         16.8 J         36 U           Dibenzofuran         7000         210000         59000         77 U         75 U         80 U         77 U         73 U           Diethyl phthalate             77 U         75 U         80 U         77 U         73 U           Dimethyl phthalate             77 U         75 U         80 U         77 U         73 U           Di-n-butyl phthalate             77 U         75 U         80 U         77 U         73 U           Di-n-octyl phthalate              77 U         75 U         80 U         77 U         73 U           Pluoranthene         100000         100000         100000         554 JV         694         2410         158         36 U           Fluorene         30000         386000         100000         38 U         38 U         38 U         38 U         38 U         38 U         36 U         77 U         73 U         78 U         78 U	Carbazole				77 U	45.3 J	169	77 U	73 U
Dibenzofuran         7000         210000         59000         77 U         75 U         80 U         77 U         73 U           Diethyl phthalate              77 U         75 U         80 U         77 U         73 U           Dimethyl phthalate             77 U         75 U         80 U         77 U         73 U           Di-n-octyl phthalate             77 U         75 U         80 U         77 U         73 U           Pluoranthene         100000         100000         100000         554 JV         694         2410         158         36 U           Fluoranthene         30000         386000         100000         38 U         38 U         26.6 J         38 U         36 U           Fluorene         30000         386000         100000         77 U         75 U         80 U         77 U         73 U           Hexachlorobenzene             380 U         38 U         40 U         38 U         36 U           Hexachlorocyclopentadiene	Chrysene	1000	1000	3900	307 JV	313	2000	91.2	36 U
Diethyl phthalate              77 U         75 U         80 U         77 U         73 U           Dimethyl phthalate             77 U         75 U         80 U         55.8 J         73 U           Di-n-butyl phthalate            77 U         75 U         80 U         77 U         73 U           Di-n-octyl phthalate             77 U         75 U         80 U         77 U         73 U           Fluoranthene         100000         100000         100000         554 JV         694         2410         158         36 U           Fluorene         30000         386000         100000         38 U         38 U         38 U         26.6 J         38 U         36 U           Hexachlorobenzene         330         3200         1200         77 U         75 U         80 U         77 U         73 U           Hexachlorocyclopentadiene            38 U         38 U         38 U         400 U         38 U         36 U           Hexachlorocyclopentadiene	Dibenzo[a,h]anthracene	330	1000000	330	61.3 JV	40.8	280	16.8 J	36 U
Dimethyl phthalate              77 U         75 U         80 U         55.8 J         73 U           Di-n-butyl phthalate            77 U         75 U         80 U         77 U         73 U           Di-n-octyl phthalate            77 U         75 U         80 U         77 U         73 U           Fluoranthene         100000         1000000         100000         554 JV         694         2410         158         36 U           Fluorene         3000         386000         100000         38 U         38 U         26.6 J         38 U         36 U           Hexachlorobenzene         330         3200         1200         77 U         75 U         80 U         77 U         73 U           Hexachlorocyclopentadiene            38 U         38 U         38 U         40 U         38 U         36 U           Hexachlorocyclopentadiene            190 U         190 U         200 U         190 U         180 U           Indeno[1,2,3-cd]pyrene         500         8200         500         204 JV	Dibenzofuran	7000	210000	59000	77 U	75 U	80 U	77 U	73 U
Di-n-butyl phthalate              77 U         75 U         80 U         77 U         73 U           Di-n-octyl phthalate              77 U         75 U         80 U         77 U         73 U           Fluoranthene         100000         100000         100000         554 JV         694         2410         158         36 U           Fluorene         30000         386000         100000         38 U         38 U         26.6 J         38 U         36 U           Hexachlorobenzene         330         3200         1200         77 U         75 U         80 U         77 U         73 U           Hexachlorobutadiene             38 U         38 U         38 U         40 U         38 U         36 U           Hexachlorocyclopentadiene               190 U         190 U         200 U         190 U         180 U           Indeno[1,2,3-cd]pyrene         500         8200         500         204 JV         227         1570         90.6         36 U           Is	Diethyl phthalate				77 U	75 U	80 U	77 U	73 U
Di-n-octyl phthalate             77 U         75 U         80 U         77 U         73 U           Fluoranthene         100000         1000000         100000         554 JV         694         2410         158         36 U           Fluorene         30000         386000         100000         38 U         38 U         26.6 J         38 U         36 U           Hexachlorobenzene         330         3200         1200         77 U         75 U         80 U         77 U         73 U           Hexachlorobutadiene             38 U         38 U         38 U         38 U         38 U         38 U         36 U           Hexachlorocyclopentadiene              380 U         380 U         380 U         380 U         380 U         360 U           Hexachlorocthane             190 U         190 U         200 U         190 U         180 U           Indeno[1,2,3-cd]pyrene         500         8200         500         204 JV         227         1570         90.6         36 U           Naphthalene <td>Dimethyl phthalate</td> <td></td> <td></td> <td></td> <td>77 U</td> <td>75 U</td> <td>80 U</td> <td>55.8 J</td> <td>73 U</td>	Dimethyl phthalate				77 U	75 U	80 U	55.8 J	73 U
Fluoranthene         100000         1000000         1000000         554 JV         694         2410         158         36 U           Fluorene         30000         386000         100000         38 U         38 U         26.6 J         38 U         36 U           Hexachlorobenzene         330         3200         1200         77 U         75 U         80 U         77 U         73 U           Hexachlorobutadiene             38 U         38 U         40 U         38 U         36 U           Hexachlorocyclopentadiene             380 U         380 U         400 U         380 U         360 U           Hexachlorocyclopentadiene             380 U         380 U         400 U         380 U         360 U           Hexachlorocyclopentadiene             190 U         190 U         200 U         190 U         180 U           Indeno[1,2,3-cd]pyrene         500         8200         500         204 JV         227         1570         90.6         36 U           Isophorone	Di-n-butyl phthalate				77 U	75 U	80 U	77 U	73 U
Fluorene         30000         386000         100000         38 U         38 U         26.6 J         38 U         36 U           Hexachlorobenzene         330         3200         1200         77 U         75 U         80 U         77 U         73 U           Hexachlorobutadiene             38 U         38 U         40 U         38 U         36 U           Hexachlorocyclopentadiene             380 U         380 U         400 U         380 U         360 U           Hexachlorocyclopentadiene             380 U         380 U         400 U         380 U         360 U           Hexachlorocyclopentadiene             190 U         190 U         200 U         190 U         180 U           Hexachlorocyclopentadiene            190 U         190 U         200 U         190 U         180 U           Indeno[1,2,3-cd]pyrene         500         8200         500         204 JV         227         1570         90.6         36 U           Isophorone	Di-n-octyl phthalate				77 U	75 U	80 U	77 U	73 U
Hexachlorobenzene         330         3200         1200         77 U         75 U         80 U         77 U         73 U           Hexachlorobutadiene             38 U         38 U         40 U         38 U         36 U           Hexachlorocyclopentadiene             380 U         380 U         400 U         380 U         360 U           Hexachlorocyclopentadiene            190 U         190 U         200 U         190 U         180 U           Indeno[1,2,3-cd]pyrene         500         8200         500         204 JV         227         1570         90.6         36 U           Isophorone             77 U         75 U         80 U         77 U         73 U           Naphthalene         12000         12000         100000         38 U         38 U         38 U         17.3 J         39.1         36 U           Nitrobenzene             77 U         75 U         80 U         77 U         73 U	Fluoranthene	100000	1000000	100000	554 JV	694	2410	158	36 U
Hexachlorobutadiene             38 U         38 U         40 U         38 U         36 U           Hexachlorocyclopentadiene             380 U         380 U         400 U         380 U         360 U           Hexachlorocyclopentadiene            190 U         190 U         200 U         190 U         180 U           Indeno[1,2,3-cd]pyrene         500         8200         500         204 JV         227         1570         90.6         36 U           Isophorone             77 U         75 U         80 U         77 U         73 U           Naphthalene         12000         12000         100000         38 U         38 U         38 U         17.3 J         39.1         36 U           Nitrobenzene             77 U         75 U         80 U         77 U         73 U	Fluorene	30000	386000	100000	38 U	38 U	26.6 J	38 U	36 U
Hexachlorocyclopentadiene             380 U         380 U         400 U         380 U         360 U           Hexachlorocthane             190 U         190 U         190 U         190 U         190 U         180 U           Indeno[1,2,3-cd]pyrene         500         8200         500         204 JV         227         1570         90.6         36 U           Isophorone            77 U         75 U         80 U         77 U         73 U           Naphthalene         12000         12000         100000         38 U         38 U         17.3 J         39.1         36 U           Nitrobenzene            77 U         75 U         80 U         77 U         73 U	Hexachlorobenzene	330	3200	1200	77 U	75 U	80 U	77 U	73 U
Hexachloroethane             190 U         180 U           Indeno[1,2,3-cd]pyrene         500         8200         500         204 JV         227         1570         90.6         36 U           Isophorone            77 U         75 U         80 U         77 U         73 U           Naphthalene         12000         12000         100000         38 U         38 U         17.3 J         39.1         36 U           Nitrobenzene            77 U         75 U         80 U         77 U         73 U	Hexachlorobutadiene				38 U	38 U	40 U	38 U	36 U
Indeno[1,2,3-cd]pyrene         500         8200         500         204 JV         227         1570         90.6         36 U           Isophorone             77 U         75 U         80 U         77 U         73 U           Naphthalene         12000         12000         100000         38 U         38 U         38 U         17.3 J         39.1         36 U           Nitrobenzene            77 U         75 U         80 U         77 U         73 U	Hexachlorocyclopentadiene				380 U	380 U	400 U	380 U	360 U
Isophorone             77 U         75 U         80 U         77 U         73 U           Naphthalene         12000         12000         100000         38 U         38 U         17.3 J         39.1         36 U           Nitrobenzene            77 U         75 U         80 U         77 U         73 U	Hexachloroethane				190 U	190 U	200 U	190 U	180 U
Isophorone             77 U         75 U         80 U         77 U         73 U           Naphthalene         12000         12000         100000         38 U         38 U         17.3 J         39.1         36 U           Nitrobenzene            77 U         75 U         80 U         77 U         73 U	Indeno[1,2,3-cd]pyrene	500	8200	500	204 JV	227		90.6	36 U
Naphthalene         12000         12000         100000         38 U         38 U         17.3 J         39.1         36 U           Nitrobenzene            77 U         75 U         80 U         77 U         73 U					77 U			77 U	73 U
Nitrobenzene 77 U 75 U 80 U 77 U 73 U	<u>*</u>	12000	12000	100000	38 U				36 U
	1						80 U	77 U	73 U
	n-Nitrosodi-n-propylamine				77 U	75 U	80 U	77 U	73 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-32	RA-32 DUP	RA-33	RA-34	RA-35
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/26/2013	4/26/2013	4/26/2013	4/26/2013	8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	4-6	4-6	4-6	4-6	4 - 6
n-Nitrosodiphenylamine					190 U	190 U	200 U	190 U	180 U
Pentachlorophenol	800	800	6700		380 U	380 U	400 U	380 U	360 U
Phenanthrene	100000	1000000	100000		295	472	801	88.8	36 U
Phenol	330	330	100000		77 U	75 U	80 U	77 U	73 U
Pyrene	100000	1000000	100000		536 JV	580	2890	153	36 U
Total TIC, Semi-Volatile					610 J	1130 J	4620 J	0	

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter   Par		NYSDEC	NYSDEC	NYSDEC					
Concentrations in µg/kg  Use   Groundwater   Residential   Sample Depth (R bls)   6 - 8   14 - 16   8 - 10   10 - 12   10 -		Part 375	Part 375	Part 375	<b>Sample Designation:</b> RA-35	RA-35	RA-36	RA-36	RA-36 DUP
1,1-Bipheny	Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013
1.1-Bipheny	(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 6 - 8	14 - 16	8 - 10	10 - 12	10 - 12
1,2,4,5-Tertachlorobenzene									
2,2-oxybis (1-chloropropane)              74 U         72 U         81 U         73 U         72 U         180 U         180 U         200 U         180 U         180 U         180 U         200 U         180 U         180 U         200 U         180 U	1,1'-Biphenyl				74 U	72 U	81 U	73 U	72 U
2.3.4.6-Tetrachlorophenol              180 U         180 U         200 U         180 U         U         180 U         180 U         220 U         220 U         180 U         220 U	1,2,4,5-Tetrachlorobenzene				180 U	180 U	200 U	180 U	180 U
2.4.5-Trichlorophenol              180 U         180 U         200 U         180 U         U         180 U         230 U         220 U         180 U         230 U         220 U <t< td=""><td>2,2'-oxybis (1-chloropropane)</td><td></td><td></td><td></td><td>74 U</td><td>72 U</td><td>81 U</td><td>73 U</td><td>72 U</td></t<>	2,2'-oxybis (1-chloropropane)				74 U	72 U	81 U	73 U	72 U
2,4,6-Trichlorophenol             180 U         200 U         180 U         720 U         220 U	2,3,4,6-Tetrachlorophenol				180 U	180 U	200 U	180 U	180 U
2.4-Dichlorophenol              180 U         180 U         200 U         180 U         180 U         200 U         2	2,4,5-Trichlorophenol				180 U	180 U	200 U	180 U	180 U
2,4-Dimethylphenol             180 U         180 U         200 U         180 U         730 U         720 U         200 U         720 U <t< td=""><td>2,4,6-Trichlorophenol</td><td></td><td></td><td></td><td>180 U</td><td>180 U</td><td>200 U</td><td>180 U</td><td>180 U</td></t<>	2,4,6-Trichlorophenol				180 U	180 U	200 U	180 U	180 U
2,4-Dinitrophenol             740 U         720 U         810 U         730 U         720 U           2,4-Dinitrotoluene             74 U         72 U         81 U         73 U         72 U           2,6-Dinitrotoluene            74 U         72 U         81 U         73 U         72 U           2-Chloropaphthalene            180 U         180 U         200 U         180 U         180 U         180 U         200 U         180 U         180 U         200 U         180 U         200 U         180 U         <	2,4-Dichlorophenol				180 U	180 U	200 U	180 U	180 U
2.4-Dinitroluene	2,4-Dimethylphenol				180 U	180 U	200 U	180 U	180 U
2,6-Dinitrotoluene             74 U         72 U         81 U         73 U         72 U           2-Chloronaphthalene             74 U         72 U         81 U         73 U         72 U           2-Chlorophenol            180 U         180 U         200 U         180 U         180 U           2-Methylphenol         330         330         100000         74 U         72 U         81 U         73 U         72 U           2-Nitroaniline            180 U         180 U         200 U         180 U         180 U           2-Nitrophenol             180 U         180 U         200 U         180 U         180 U           3&4-Methylphenol            180 U         180 U <td>2,4-Dinitrophenol</td> <td></td> <td></td> <td></td> <td>740 U</td> <td>720 U</td> <td>810 U</td> <td>730 U</td> <td>720 U</td>	2,4-Dinitrophenol				740 U	720 U	810 U	730 U	720 U
2-Chloronaphthalene <td>2,4-Dinitrotoluene</td> <td></td> <td></td> <td></td> <td>74 U</td> <td>72 U</td> <td>81 U</td> <td>73 U</td> <td>72 U</td>	2,4-Dinitrotoluene				74 U	72 U	81 U	73 U	72 U
2-Chlorophenol              180 U         180 U         200 U         180 U         180 U         180 U         200 U         180 U         180 U         72 U         200 U         180 U         72 U	2,6-Dinitrotoluene				74 U	72 U	81 U	73 U	72 U
2-Methylnaphthalene <td>2-Chloronaphthalene</td> <td></td> <td></td> <td></td> <td>74 U</td> <td>72 U</td> <td>81 U</td> <td>73 U</td> <td>72 U</td>	2-Chloronaphthalene				74 U	72 U	81 U	73 U	72 U
2-Methylphenol         330         330         100000         74 U         72 U         81 U         73 U         72 U           2-Nitroaniline            180 U         180 U         200 U         180 U         180 U           2-Nitrophenol            180 U         180 U         200 U         180 U         180 U           3&4-Methylphenol           100000         74 U         72 U         81 U         73 U         72 U           3,3'-Dichlorobenzidine            180 U         180 U         200 U         180 U         180 U           3-Nitroaniline            180 U         180 U         200 U         180 U         180 U           4-B-Dinitro-2-methylphenol            740 U         72 U         81 U         73 U         72 U           4-Bromophenyl ether            74 U         72 U         81 U         73 U         72 U           4-Chloro-3-methylphenol            180 U         180 U         200 U         180 U	2-Chlorophenol				180 U	180 U	200 U	180 U	180 U
2-Nitrophenol 180 U 180 U 200 U 180 U 180 U 2 180 U 3 1	2-Methylnaphthalene				74 U	72 U	81 U	73 U	72 U
2-Nitrophenol            180 U         180 U         200 U         180 U         180 U           3&4-Methylphenol           100000         74 U         72 U         81 U         73 U         72 U           3,3'-Dichlorobenzidine            180 U         180 U         200 U         180 U         180 U           3-Nitroaniline            180 U         180 U         200 U         180 U         180 U           4,6-Dinitro-2-methylphenol             740 U         72 U         81 U         73 U         72 U           4-Bromophenyl phenyl ether             74 U         72 U         81 U         73 U         72 U           4-Chloro-3-methylphenol              180 U         180 U         200 U         180 U         180 U           4-Chloro-3-methylphenol             180 U         180 U         200 U         180 U         180 U           4-Chloro-3-methylphenol	2-Methylphenol	330	330	100000	74 U	72 U	81 U	73 U	72 U
3&4-Methylphenol           100000         74 U         72 U         81 U         73 U         72 U           3,3'-Dichlorobenzidine             180 U         180 U         200 U         180 U         180 U           3-Nitroaniline             180 U         180 U         200 U         180 U         180 U           4,6-Dinitro-2-methylphenol             74 U         72 U         81 U         73 U         72 U           4-Bromophenyl phenyl ether             74 U         72 U         81 U         73 U         72 U           4-Chloro-3-methylphenol             180 U         180 U         200 U         180 U         180 U           4-Chloro-3-methylphenol             180 U         180 U         200 U         180 U         180 U           4-Chloro-3-methylphenol            180 U         180 U         200 U         180 U         180 U           4-Chloro-3-methylphenol </td <td>2-Nitroaniline</td> <td></td> <td></td> <td></td> <td>180 U</td> <td>180 U</td> <td>200 U</td> <td>180 U</td> <td>180 U</td>	2-Nitroaniline				180 U	180 U	200 U	180 U	180 U
3,3'-Dichlorobenzidine 180 U 180 U 200 U 180 U 180 U 4.6-Dinitro-2-methylphenol 180 U 740 U 720 U 810 U 730 U 720 U 4-Bromophenyl phenyl ether 180 U 180 U 180 U 730 U 720 U 4-Chloro-3-methylphenol 180 U 180 U 180 U 200 U 180 U 730 U 720 U 4-Chloro-3-methylphenol 180 U 180 U 180 U 200 U 180 U 180 U 4-Chlorophenyl phenyl ether 180 U 180 U 180 U 200 U 180 U 180 U 4-Chlorophenyl phenyl ether 180 U 180 U 180 U 200 U 180 U 180 U 4-Nitrophenol 180 U 180 U 180 U 200 U 180 U 180 U 4-Nitrophenol 180 U 180 U 360 U 400 U 360 U 360 U 400 U 4	2-Nitrophenol				180 U	180 U	200 U	180 U	180 U
3-Nitroaniline            180 U       180 U       200 U       180 U       180 U       4.0 U       4.0 U       720 U       4.0 U       730 U       720 U	3&4-Methylphenol			100000	74 U	72 U	81 U	73 U	72 U
4,6-Dinitro-2-methylphenol          740 U       720 U       810 U       730 U       720 U         4-Bromophenyl phenyl ether           74 U       72 U       81 U       73 U       72 U         4-Chloro-3-methylphenol           180 U       180 U       180 U       200 U       180 U       180 U         4-Chloroaniline           180 U       180 U       200 U       180 U       180 U         4-Nitroaniline            180 U       180 U       200 U       180 U       180 U         4-Nitrophenol           180 U       180 U       200 U       180 U       180 U         4-Nitrophenol           370 U       360 U       400 U       360 U       360 U         Acenaphthylene       100000       107000       100000       37 U       36 U       180 U       <	3,3'-Dichlorobenzidine				180 U	180 U	200 U	180 U	180 U
4-Bromophenyl phenyl ether           74 U       72 U       81 U       73 U       72 U         4-Chloro-3-methylphenol            180 U       72 U       40 U       72 U       81 U       73 U       72 U       72 U       40 U       72 U       81 U       73 U       72 U <t< td=""><td>3-Nitroaniline</td><td></td><td></td><td></td><td>180 U</td><td>180 U</td><td>200 U</td><td>180 U</td><td>180 U</td></t<>	3-Nitroaniline				180 U	180 U	200 U	180 U	180 U
4-Chloro-3-methylphenol          180 U       180 U       200 U       180 U       180 U         4-Chloroaniline           180 U       180 U       200 U       180 U       180 U         4-Chlorophenyl phenyl ether            74 U       72 U       81 U       73 U       72 U         4-Nitroaniline           180 U       180 U       200 U       180 U       180 U         4-Nitrophenol            370 U       360 U       400 U       360 U       360 U         Acenaphthylene       100000       107000       100000       37 U       36 U       199 36 U       36 U         Acetophenone           180 U       180 U       180 U       180 U       180 U	4,6-Dinitro-2-methylphenol				740 U	720 U	810 U	730 U	720 U
4-Chloroaniline           180 U       180 U       200 U       180 U       180 U       180 U       40 U       180 U       180 U       180 U       180 U       73 U       72 U       72 U       74 U       72 U       73 U       72	4-Bromophenyl phenyl ether				74 U	72 U	81 U	73 U	72 U
4-Chlorophenyl phenyl ether           74 U       72 U       81 U       73 U       72 U         4-Nitroaniline           180 U       180 U       200 U       180 U       180 U         4-Nitrophenol           370 U       360 U       400 U       360 U       360 U         Acenaphthene       20000       98000       100000       37 U       36 U       55.8       36 U       36 U         Acenaphthylene       100000       107000       100000       37 U       36 U       109       36 U       36 U         Acetophenone           180 U       180 U       200 U       180 U       180 U	4-Chloro-3-methylphenol				180 U	180 U	200 U	180 U	180 U
4-Nitroaniline           180 U       180 U       200 U       180 U       360 U       36	4-Chloroaniline				180 U	180 U	200 U	180 U	180 U
4-Nitrophenol           370 U       360 U       400 U       360 U       360 U         Acenaphthene       20000       98000       100000       37 U       36 U       55.8       36 U       36 U         Acenaphthylene       100000       107000       100000       37 U       36 U       109       36 U       36 U         Acetophenone          180 U       180 U       200 U       180 U       180 U	4-Chlorophenyl phenyl ether				74 U	72 U	81 U	73 U	72 U
Acenaphthene         20000         98000         100000         37 U         36 U         55.8         36 U         36 U           Acenaphthylene         100000         107000         100000         37 U         36 U         109         36 U         36 U           Acetophenone            180 U         180 U         200 U         180 U         180 U	4-Nitroaniline				180 U	180 U	200 U	180 U	180 U
Acenaphthene         20000         98000         100000         37 U         36 U         55.8         36 U         36 U           Acenaphthylene         100000         107000         100000         37 U         36 U         109         36 U         36 U           Acetophenone            180 U         180 U         200 U         180 U         180 U	4-Nitrophenol				370 U	360 U	400 U	360 U	360 U
Acenaphthylene       100000       107000       100000       37 U       36 U       109       36 U       36 U         Acetophenone           180 U       180 U       200 U       180 U       180 U	<u> </u>	20000	98000	100000	37 U	36 U	55.8	36 U	36 U
Acetophenone 180 U 180 U 200 U 180 U 180 U	•	100000	107000	100000	37 U	36 U	109	36 U	36 U
	ž				180 U	180 U	200 U	180 U	180 U
	<u>*</u>	100000	1000000	100000	37 U	36 U	220	36 U	36 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC					
	Part 375	Part 375	Part 375	<b>Sample Designation:</b> RA-35	RA-35	RA-36	RA-36	RA-36 DUP
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 6 - 8	14 - 16	8 - 10	10 - 12	10 - 12
Atrazine				180 U	180 U	200 U	180 U	180 U
Benzaldehyde				180 U	180 U	200 U	180 U	180 U
Benzo[a]anthracene	1000	1000	1000	37 U	36 U	878	36 U	36 U
Benzo[a]pyrene	1000	22000	1000	37 U	36 U	970	36 U	36 U
Benzo[b]fluoranthene	1000	1700	1000	37 U	36 U	1200	36 U	36 U
Benzo[g,h,i]perylene	100000	1000000	100000	37 U	36 U	706	36 U	36 U
Benzo[k]fluoranthene	800	1700	3900	37 U	36 U	464	36 U	36 U
Bis(2-chloroethoxy)methane				74 U	72 U	81 U	73 U	72 U
Bis(2-chloroethyl) ether				74 U	72 U	81 U	73 U	72 U
Bis(2-ethylhexyl) phthalate				74 U	72 U	85.1	73 U	72 U
Butylbenzyl phthalate				74 U	72 U	81 U	73 U	72 U
Caprolactam				74 U	72 U	81 U	73 U	72 U
Carbazole				74 U	72 U	91.6	73 U	72 U
Chrysene	1000	1000	3900	37 U	36 U	928	36 U	36 U
Dibenzo[a,h]anthracene	330	1000000	330	37 U	36 U	183	36 U	36 U
Dibenzofuran	7000	210000	59000	74 U	72 U	28.1 J	73 U	72 U
Diethyl phthalate				74 U	72 U	81 U	73 U	72 U
Dimethyl phthalate				74 U	72 U	81 U	73 U	72 U
Di-n-butyl phthalate				74 U	72 U	81 U	73 U	72 U
Di-n-octyl phthalate				74 U	72 U	81 U	73 U	72 U
Fluoranthene	100000	1000000	100000	37 U	36 U	1540	36 U	36 U
Fluorene	30000	386000	100000	37 U	36 U	53.6	36 U	36 U
Hexachlorobenzene	330	3200	1200	74 U	72 U	81 U	73 U	72 U
Hexachlorobutadiene				37 U	36 U	40 U	36 U	36 U
Hexachlorocyclopentadiene				370 U	360 U	400 U	360 U	360 U
Hexachloroethane				180 U	180 U	200 U	180 U	180 U
Indeno[1,2,3-cd]pyrene	500	8200	500	37 U	36 U	748	36 U	36 U
Isophorone				74 U	72 U	81 U	73 U	72 U
Naphthalene	12000	12000	100000	37 U	36 U	23.7 J	36 U	36 U
Nitrobenzene				74 U	72 U	81 U	73 U	72 U
n-Nitrosodi-n-propylamine				74 U	72 U	81 U	73 U	72 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC					
	Part 375	Part 375	Part 375	<b>Sample Designation:</b> RA-35	RA-35	RA-36	RA-36	RA-36 DUP
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 6 - 8	14 - 16	8 - 10	10 - 12	10 - 12
n-Nitrosodiphenylamine				180 U	180 U	200 U	180 U	180 U
Pentachlorophenol	800	800	6700	370 U	360 U	400 U	360 U	360 U
Phenanthrene	100000	1000000	100000	37 U	36 U	829	36 U	36 U
Phenol	330	330	100000	74 U	72 U	81 U	73 U	72 U
Pyrene	100000	1000000	100000	37 U	36 U	1410	36 U	36 U
Total TIC, Semi-Volatile								

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC	
	Part 375	Part 375	Part 375	<b>Sample Designation:</b> RA-36
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 18 - 20
, , ,				
1,1'-Biphenyl				70 U
1,2,4,5-Tetrachlorobenzene				170 U
2,2'-oxybis (1-chloropropane)				70 U
2,3,4,6-Tetrachlorophenol				170 U
2,4,5-Trichlorophenol				170 U
2,4,6-Trichlorophenol				170 U
2,4-Dichlorophenol				170 U
2,4-Dimethylphenol				170 U
2,4-Dinitrophenol				700 U
2,4-Dinitrotoluene				70 U
2,6-Dinitrotoluene				70 U
2-Chloronaphthalene				70 U
2-Chlorophenol				170 U
2-Methylnaphthalene				70 U
2-Methylphenol	330	330	100000	70 U
2-Nitroaniline				170 U
2-Nitrophenol				170 U
3&4-Methylphenol			100000	70 U
3,3'-Dichlorobenzidine				170 U
3-Nitroaniline				170 U
4,6-Dinitro-2-methylphenol				700 U
4-Bromophenyl phenyl ether				70 U
4-Chloro-3-methylphenol				170 U
4-Chloroaniline				170 U
4-Chlorophenyl phenyl ether				70 U
4-Nitroaniline				170 U
4-Nitrophenol				350 U
Acenaphthene	20000	98000	100000	35 U
Acenaphthylene	100000	107000	100000	35 U
Acetophenone				170 U
Anthracene	100000	1000000	100000	35 U

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC	·
	Part 375	Part 375	Part 375	<b>Sample Designation:</b> RA-36
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 18 - 20
				170 11
Atrazine				170 U
Benzaldehyde				170 U
Benzo[a]anthracene	1000	1000	1000	35 U
Benzo[a]pyrene	1000	22000	1000	35 U
Benzo[b]fluoranthene	1000	1700	1000	35 U
Benzo[g,h,i]perylene	100000	1000000	100000	35 U
Benzo[k]fluoranthene	800	1700	3900	35 U
Bis(2-chloroethoxy)methane				70 U
Bis(2-chloroethyl) ether				70 U
Bis(2-ethylhexyl) phthalate				70 U
Butylbenzyl phthalate				70 U
Caprolactam				70 U
Carbazole				70 U
Chrysene	1000	1000	3900	35 U
Dibenzo[a,h]anthracene	330	1000000	330	35 U
Dibenzofuran	7000	210000	59000	70 U
Diethyl phthalate				70 U
Dimethyl phthalate				70 U
Di-n-butyl phthalate				70 U
Di-n-octyl phthalate				70 U
Fluoranthene	100000	1000000	100000	35 U
Fluorene	30000	386000	100000	35 U
Hexachlorobenzene	330	3200	1200	70 U
Hexachlorobutadiene				35 U
Hexachlorocyclopentadiene				350 U
Hexachloroethane				170 U
Indeno[1,2,3-cd]pyrene	500	8200	500	35 U
Isophorone			500	70 U
Naphthalene	12000	12000	100000	35 U
Nitrobenzene	12000	12000	100000	70 U
n-Nitrosodi-n-propylamine	<del></del>			70 U
n-muosodi-ii-propyrainine				70 0

Table 2. Summary of Semivolatile Organic Compounds in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC	
	Part 375	Part 375	Part 375	Sample Designation: RA-36
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 18 - 20
n-Nitrosodiphenylamine				170 U
Pentachlorophenol	800	800	6700	350 U
Phenanthrene	100000	1000000	100000	35 U
Phenol	330	330	100000	70 U
Pyrene	100000	1000000	100000	35 U
Total TIC, Semi-Volatile				

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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Table 3. Summary of Metals in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-1	RA-1A	RA-2	RA-2	RA-3	RA-3	RA-4
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/11/2013	2/11/2013	2/26/2013	2/26/2013	2/25/2013	2/25/2013	2/25/2013
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	23-25	10-12	23-25	10-12
Aluminum					8690 JV	6020 JV	9470	9060	8590	4910	9430
Antimony					2.3 UJV	2.8 UJV	2.2 U	2 U	2.2 UJV	2 UJV	2.3 UJV
Arsenic	13	16	16		2.7	3.4	4.6	4.2	4	2.1	8.5
Barium	350	820	400		59.7	28 U	58.4	37.1	59.4	21.8	92.3
Beryllium	7.2	47	72		0.68	0.42	0.42	0.46	0.37	0.22	0.34
Cadmium	2.5	7.5	4.3		0.57 U	0.7 U	0.56 U	0.5 U	0.55 U	0.5 U	0.76
Calcium					1000	1100	796	897	1220	903	3240
Chromium, Hexavalent	1	19	110		0.45 RV	0.54 U	0.44 U	0.58	0.45 U	0.5 U	1.3
Chromium	30		180		25.6	15.5	27.6	22.7	30.2	12.2	35.6
Cobalt					8.3	7 U	7.9	6.9	7.7	5	8.5
Copper	50	1720	270		22.8	8.7	19	15.9	21.3	7.7	40.5
Iron					30300 JV	17300 JV	29400	20800	29400	12700	31600
Lead	63	450	400		7.6	6.4	9.8	9.3	25.7	4.4	52.9
Magnesium					2280	1740	2240	2220	2110	1380	3200
Manganese	1600	2000	2000		595	183	549	181	454	144	691
Mercury	0.18	0.73	0.81		0.035 U	0.043 U	0.033 U	0.042 U	0.035	0.036 U	0.12
Nickel	30	130	310		14	9.9	14.9	13.2	15.3	8.1	18.1
Potassium					1590	1400 U	1690	1560	1640	1000 U	1900
Selenium	3.9	4	180		2.3 U	2.8 U	2.2 U	2 U	2.2 U	2 U	2.3 U
Silver	2	8.3	180		0.57 U	0.7 U	0.56 U	0.5 U	0.55 U	0.5 U	0.58 U
Sodium					1100 U	1400 U	1100 U	1000 U	1100 U	1000 U	1200 U
Thallium					1.1 U	1.4 U	1.1 U	1 U	1.1 U	1 U	1.2 U
Vanadium					43.8	22	42.3	32.4	38.9	19.1	43.2
Zinc	109	2480	10000		40.5	27.9	40.3	45.1	57.5	24.2	128

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

DUP - Duplicate sample

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 3. Summary of Metals in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-4	RA-5	RA-5 DUP	RA-5	RA-6	RA-6	RA-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/26/2013	2/26/2013	2/26/2013	2/14/2013	2/14/2013	2/21/2013
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	22-24	7-9	7-9	18-20	10-12	23-25	11-12.5
Aluminum					7450	10500	9730	3470	13700 JV	8380 JV	14200
Antimony					2 UJV	2.3 U	2.2 U	2.4 U	2.4 UJV	2.3 UJV	2.5 UJV
Arsenic	13	16	16		2.4	5	4.7	2.6	8.1	2.5	3.8
Barium	350	820	400		39.3	41.8	38.3	24 U	86	55.6	69.9
Beryllium	7.2	47	72		0.28	0.38	0.23	0.24 U	0.56	0.45	0.43
Cadmium	2.5	7.5	4.3		0.51 U	0.57 U	0.56 U	0.59 U	0.59 U	0.59 U	0.62 U
Calcium					2180	674	643	644	1330	1080	1150
Chromium, Hexavalent	1	19	110		0.53 U	0.46 U	0.61	0.45 U	1.1 JV	0.72	0.86
Chromium	30		180		18	17.2	13.9	11.3	17.6	27.9	18
Cobalt					6.1	6	5.6 U	5.9 U	6.1	7.3	6.6
Copper	50	1720	270		10.9	15.8	14.8	8.2	12.8	18.9	10.9
Iron					14900	23600	21500	14900	17100 JV	29600 JV	16600
Lead	63	450	400		4.5	7.9	6.8	3.4	14.4	8.9	10.5
Magnesium					2680	2490	2320	936	2130	2250	2770
Manganese	1600	2000	2000		212	456	384	185	282	480	256
Mercury	0.18	0.73	0.81		0.042 U	0.038 U	0.033 U	0.033 U	0.055	0.035 U	0.04 U
Nickel	30	130	310		12.6	13.4	12.4	5.9	13.1	14.7	14.4
Potassium					1560	1420	1370	1200 U	1200 U	1780	1430
Selenium	3.9	4	180		2 U	2.3 U	2.2 U	2.4 U	2.4 U	2.3 U	2.5 U
Silver	2	8.3	180		0.51 U	0.57 U	0.56 U	0.59 U	0.6	0.87	0.62 U
Sodium					1000 U	1100 U	1100 U	1200 U	1200 U	1200 U	1200 U
Thallium					1 U	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U
Vanadium					25.4	29	22.2	18.6	20.5	53.7	22.6
Zinc	109	2480	10000		26	37.2	39.6	16.8	48.8	39.9	48

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UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

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μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Table 3. Summary of Metals in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-7	RA-8	RA-8	RA-9	RA-9	RA-10	RA-10
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/21/2013	2/25/2013	2/25/2013	2/26/2013	2/26/2013	2/26/2013	2/26/2013
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	22-24	10-12	22-24	10-12	22-24	10-12	23-25
Aluminum					6080	8970	5280	9190	4900	9700	2150
Antimony					2.3 UJV	2.2 UJV	2.5 UJV	2.2 U	1.9 U	2.4 U	2.3 U
Arsenic	13	16	16		2.3 U	2.5	2.8	3.6	3	3.7	2.5
Barium	350	820	400		40.3	61.4	27.9	53.5	20.6	58.4	23 U
Beryllium	7.2	47	72		0.24	0.28	0.26	0.22 U	0.2	0.41	0.23 U
Cadmium	2.5	7.5	4.3		0.58 U	0.56 U	0.62 U	0.55 U	0.48 U	0.6 U	0.57 U
Calcium					580 U	1330	630	1180	1010	1750	570 U
Chromium, Hexavalent	1	19	110		0.47 U	0.45 U	0.49	0.46	0.54 U	0.84	0.49 U
Chromium	30		180		12.6	27.9	13.8	18.3	13.2	28.5	10
Cobalt					7	7.9	6.2 U	5.5 U	4.8 U	7.5	5.7 U
Copper	50	1720	270		11.3	18.5	8.1	14.5	8.4	23.5	3.1
Iron					14200	28800	14600	22800	13900	24100	5720
Lead	63	450	400		4.3	23.4	5.9	12.5	4.8	16.5	2.3 U
Magnesium					1530	2730	1360	3620	1380	2360	570 U
Manganese	1600	2000	2000		560	579	274	493	133	508	42.4
Mercury	0.18	0.73	0.81		0.037 U	0.035 U	0.037 U	0.035 U	0.041 U	0.036 U	0.036 U
Nickel	30	130	310		10.4	13.8	10.7	9	8.3	15.7	4.6 U
Potassium					1200 U	2120	1200 U	4350	960 U	1510	1100 U
Selenium	3.9	4	180		2.3 U	2.2 U	2.5 U	2.2 U	1.9 U	2.4 U	2.3 U
Silver	2	8.3	180		0.58 U	0.56 U	0.62 U	0.55 U	0.48 U	0.6 U	0.57 U
Sodium					1200 U	1100 U	1200 U	1100 U	960 U	1200 U	1100 U
Thallium					1.2 U	1.1 U	1.2 U	1.1 U	0.96 U	1.2 U	1.1 U
Vanadium					26.5	53.2	20.4	33.3	19.8	38.8	10.5
Zinc	109	2480	10000		23.1	59.6	28.1	48.3	23.3	41.3	7.7

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

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μg/kg - Micrograms per kilogram

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Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Table 3. Summary of Metals in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RA-11A	RA-11B	RA-11B DUP	RA-12	RA-12	RA-12 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	3/18/2013	3/21/2013	3/21/2013	2/21/2013	2/21/2013	2/21/2013
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	23-25	23-25	11-12.5	23-25	23-25
Aluminum					6180 JV	3550 JV	3710 JV	12100	7820	5890
Antimony					2.2 UJV	1.9 UJV	2 UJV	2.5 UJV	2 UJV	2.5 UJV
Arsenic	13	16	16		2.2 U	1.9 U	2 U	3.6	2.1	2.5 U
Barium	350	820	400		47	21.1	20 U	82.5	40.2	32.1
Beryllium	7.2	47	72		0.51	0.19 U	0.2 U	0.39	0.25	0.25 U
Cadmium	2.5	7.5	4.3		0.54 U	0.48 U	0.5 U	0.62 U	0.5 U	0.64 U
Calcium					821	658	665	4470	1620	1270
Chromium, Hexavalent	1	19	110		0.89	0.48 U	0.47 U	1.5	0.51 U	0.5 U
Chromium	30		180		18.8	8.8	9.9	43.9	16.4	15.3
Cobalt					5.4 U	4.8 U	5 U	10.2	6.1	6.4 U
Copper	50	1720	270		12.9	7.1	6.7	24.8	11.6	9.7
Iron					27800	8690	9780	32000	14700	14800
Lead	63	450	400		7	2.5	2.5	30.1	4.6	4.2
Magnesium					1500	1230	1270	3360	2680	1960
Manganese	1600	2000	2000		572	128	162	650	227	150
Mercury	0.18	0.73	0.81		0.036 U	0.034 U	0.036 U	0.036 U	0.042 U	0.037 U
Nickel	30	130	310		11.2	6	6	18.9	13.8	9.6
Potassium					1300 JV	970 UJV	1000 UJV	2650	1740	1300 U
Selenium	3.9	4	180		2.2 U	1.9 U	2 U	2.5 U	2 U	2.5 U
Silver	2	8.3	180		0.54 U	0.48 U	0.5 U	0.62 U	0.5 U	0.64 U
Sodium					1100 U	970 U	1000 U	1200 U	1000 U	1300 U
Thallium					1.1 U	0.97 U	1 U	1.2 U	1 U	1.3 U
Vanadium					37.3	13.8	15.3	48.4	24.1	25.6
Zinc	109	2480	10000		31.4	15.3	14.8	77.3	27.9	24

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Table 3. Summary of Metals in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-13	RA-13	RA-14	RA-14	RA-15	RA-15	RA-16
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/14/2013	2/14/2013	2/12/2013	2/12/2013	2/14/2013	2/14/2013	2/13/2013
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	11-13	23-25	11-13	23-25	11-13	23-25	11-13
Aluminum					21400 JV	7210 JV	11100 JV	3800 JV	9580 JV	3580 JV	16700 JV
Antimony					2 UJV	2.2 UJV	2.6 UJV	2.2 UJV	2.2 UJV	2.2 UJV	2 UJV
Arsenic	13	16	16		4.5	2.2 U	8.5	2.6	8.8	2.2 U	3.2
Barium	350	820	400		180	35.7	70.9	22 U	58.7	22 U	114
Beryllium	7.2	47	72		0.8	0.28	0.85	0.26	0.33	0.22 U	0.42
Cadmium	2.5	7.5	4.3		0.49 U	0.55 U	0.65 U	0.55 U	0.55 U	0.55 U	0.5 U
Calcium					1330	927	3830	1210	1260	938	1130
Chromium, Hexavalent	1	19	110		0.82	0.46 U	3.6	0.58	1.1	0.66	0.54 U
Chromium	30		180		49.7	15.5	<b>78.2</b>	20.8	32.6	11.6	42.3
Cobalt					11.3	6.6	12.2	5.5 U	9.5	5.5 U	11.8
Copper	50	1720	270		42.2	13.2	33	35.3	34.4	7.6	26.2
Iron					32300 JV	14700 JV	42400 JV	19200 JV	23300 JV	9830 JV	32000 JV
Lead	63	450	400		13.6	5.1	24.9	4.5	32.3	2.5	13
Magnesium					7570	1640	2370	1780	3110	1350	5270
Manganese	1600	2000	2000		291	222	662	235	397	246	609
Mercury	0.18	0.73	0.81		0.041 U	0.034 U	0.13	0.036 U	0.037 U	0.036 U	0.043 U
Nickel	30	130	310		33.8	10.4	22.7	19.5	19.9	7.2	25.1
Potassium					5630	1100 U	1860	1100 U	1440	1100 U	4380
Selenium	3.9	4	180		2 U	2.2 U	2.6 U	2.2 U	2.2 U	2.2 U	2 U
Silver	2	8.3	180		0.61	0.59	0.65 U	0.55 U	0.8	0.55 U	0.89
Sodium					980 U	1100 U	1300 U	1100 U	1100 U	1100 U	1000 U
Thallium					0.98 U	1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1 U
Vanadium					61.3	24.5	54.4	16.7	36.1	15.5	55.6
Zinc	109	2480	10000		100	27.2	68.1	17.4	64.1	19.2	71.3

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Table 3. Summary of Metals in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-16	RA-17	RA-17 DUP	RA-17	RA-18	RA-18	RA-19
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/13/2013	2/12/2013	2/12/2013	2/12/2013	2/15/2013	2/15/2013	2/12/2013
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	10-12	10-12	23-25	11-13	23-25	12-14
Aluminum					3900 JV	15900 JV	3060 JV	3370 JV	10100	5760	8560 JV
Antimony					2.4 UJV	2.5 UJV	2.3 UJV	2.2 UJV	2.3 UJV	2.4 UJV	2.2 UJV
Arsenic	13	16	16		2.4 U	3.8	2.3 U	2.2 U	6.8	2.4 U	7.5
Barium	350	820	400		24 U	98.7 JV	23 UJV	22 U	50.9	28.4	22 U
Beryllium	7.2	47	72		0.24 U	0.87 JV	0.23 UJV	0.24	0.64	0.33	0.39
Cadmium	2.5	7.5	4.3		0.59 U	0.63 U	0.57 U	0.54 U	0.57 U	0.59 U	0.54 U
Calcium					889	2330 JV	710 JV	582	2920	1650	540 U
Chromium, Hexavalent	1	19	110		0.49 U	0.49 U	0.45 U	0.46 U	0.76 JV	0.48 U	0.83
Chromium	30		180		9.2	37 JV	8.6 JV	9.5	27.4	15.5	14.3
Cobalt					5.9 U	11.9 JV	5.7 UJV	5.4 U	8	5.9 U	5.4 U
Copper	50	1720	270		7.1	37.9 JV	7.3 JV	7.2	21.8	12	11.3
Iron					9330 JV	28000 JV	7610 JV	10800 JV	24900	13700	11600 JV
Lead	63	450	400		2.8	15 JV	2.3 JV	3	15.8	5.9	8.4
Magnesium					1200	5030 JV	989 JV	1040	3180	2030	2210
Manganese	1600	2000	2000		177	523 JV	94.6 JV	180	297	241	87.2
Mercury	0.18	0.73	0.81		0.039 U	0.041 U	0.034 U	0.038 U	0.035 U	0.037 U	0.035 U
Nickel	30	130	310		6.8	28.7 JV	6.1 JV	6.4	21.2	10.1	11.7
Potassium					1200 U	3580 JV	1100 UJV	1100 U	1590	1200 U	1100 U
Selenium	3.9	4	180		2.4 U	2.5 U	2.3 U	2.2 U	2.3 U	2.4 U	2.2 U
Silver	2	8.3	180		0.59 U	0.63 U	0.57 U	0.54 U	0.57 U	0.59 U	0.54 U
Sodium					1200 U	1300 U	1100 U	1100 U	1100 U	1200 U	1100 U
Thallium					1.2 U	1.3 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
Vanadium					18.1	45.9 JV	13.2 JV	14.9	40.1	21.8	21.6
Zinc	109	2480	10000		14.6	74 JV	11.4 JV	23	44.6	26	31.5

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Table 3. Summary of Metals in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RA-19	RA-20	RA-20	RA-21	RA-21	RA-22	RA-22
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/12/2013	2/13/2013	2/13/2013	3/15/2013	3/15/2013	2/15/2013	2/15/2013
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	22-24	11-13	23-25	10-12	23-25	7-9	18-20
Aluminum					14300 JV	20400 JV	3500 JV	17400 JV	7870 JV	9350	10700
Antimony					2.5 UJV	2 UJV	2 UJV	2.2 UJV	2.2 UJV	2.3 UJV	2 UJV
Arsenic	13	16	16		9.1	3.6	2 U	3.9	4	3.8	3.1
Barium	350	820	400		97.5	154	20 U	58.2	72.6	43.7	72
Beryllium	7.2	47	72		0.76	0.49	0.2 U	0.57	0.83	0.62	0.58
Cadmium	2.5	7.5	4.3		0.62 U	0.5 U	0.5 U	0.55 U	0.56 U	0.58 U	0.49 U
Calcium					2790	660	1060	1350	939	580 U	1820
Chromium, Hexavalent	1	19	110		0.61	0.54 U	0.5 U	0.52	0.49	0.45	1.3
Chromium	30		180		32.5	46.6	9.9	24.8	19.7	28.8	20.7
Cobalt					11.1	15.2	5 U	7.7	10.1	8.4	10.1
Copper	50	1720	270		28.7	39.1	7.7	13.1	21.8	19.7	19
Iron					25300 JV	35500 JV	9830 JV	21500	25300	26800	21300
Lead	63	450	400		37.4	12.2	2.6	9.3	9.2	8.2	8.3
Magnesium					4470	8350	1460	3160	1710	2730	4420
Manganese	1600	2000	2000		550	492	211	468	612	376	601
Mercury	0.18	0.73	0.81		0.041 U	0.04 U	0.04 U	0.034	0.035 U	0.034 U	0.047 U
Nickel	30	130	310		25.9	31.7	7.3	13.1	11.9	17.1	17.4
Potassium					3210	6280	1000 U	1520 JV	1180 JV	1620	1820
Selenium	3.9	4	180		2.5 U	2 U	2 U	2.2 U	2.2 U	2.3 U	2 U
Silver	2	8.3	180		0.62 U	0.86	0.5 U	0.55 U	0.56 U	0.58 U	0.49 U
Sodium					1200 U	1000 U	1000 U	1100 U	1100 U	1200 U	1120
Thallium					1.2 U	1 U	1 U	1.1 U	1.1 U	1.2 U	0.98 U
Vanadium					42.4	67.1	16.7	29.8	46.4	37	43.9
Zinc	109	2480	10000		76.4	116	15.8	48.3	45.9	45.7	43

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Table 3. Summary of Metals in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter	ricted Prote e Grou  3 0 8	ction of Indwater R 16 320	Part 375 Restricted Residential 16	Sample Designation: Sample Date: Sample Depth (ft bls):	11-13 19400 JV	RA-23 2/13/2013 23-25 3090 JV	RA-32 4/26/2013 4-6 8580	RA-32 DUP 4/26/2013 4-6	RA-33 4/26/2013 4-6	RA-34 4/26/2013 4-6	RA-35 8/5/2013 4 - 6
(Concentrations in mg/kg)  Aluminum  Antimony  Arsenic  Barium  Beryllium  Concentrations in mg/kg)  Us  13  13  13  15  15  15  15  15  15  15	e Grou	ndwater R 16 820	Residential 16	-	11-13 19400 JV	23-25	4-6	4-6	4-6	4-6	4 - 6
Aluminum Antimony Arsenic 13 Barium 356 Beryllium 7.2	3 0 2	  16 320	   16	Sample Depth (ft bls):	19400 JV						
Antimony Arsenic 13 Barium 356 Beryllium 7.2	3 0 2	 16 320	  16			3090 JV	8580	10000	6610	15400	0100
Antimony Arsenic 13 Barium 356 Beryllium 7.2	3 0 2	 16 320	 16			3090 JV	8580	10000	6610	15400	0100
Arsenic 13 Barium 356 Beryllium 7.2	3 0 8 2	16 320	16		○ T T T T 7						9180
Barium 350 Beryllium 7.2	0 8	320			2 UJV	2.3 UJV	2.4 UJV	2.3 UJV	8.5	2.4 UJV	2.3 U
Beryllium 7.2	2				4.3	2.3 U	10.4	13.4	55.3	6.5	2.3 U
•			400		126	23 U	129	112	114	51.4	70.7
C- 1	-	47	72		0.57	0.23 U	0.55	0.62	0.88	0.39	0.65
Cadmium 2.5	)	7.5	4.3		0.5 U	0.58 U	0.76	0.59	2 U	0.6 U	0.58 U
Calcium					1560	889	5790	5660	30300	2250	6270
Chromium, Hexavalent 1		19	110		0.53 U	0.47 U	0.47 U	0.93	33.2 JV	1.2	0.47 U
Chromium 30	)		180		50	9.6	43.9	50.1	396	19.6	28.2
Cobalt					18.7	5.8 U	7.4	8.1	13.1	6.4	9.7
Copper 50	) 1	720	270		30.2	6.9	36.1	38.1	140	31.4	20
Iron					33500 JV	9470 JV	21100 JV	23600 JV	91900 JV	21100 JV	29800
Lead 63	3 4	450	400		13	2.6	112	70	302	22.2	9.8
Magnesium					6660	1070	2530	3100	2300	3200	3740
Manganese 160	00 2	000	2000		720	267	300	330	600	178	632
Mercury 0.1	8 (	).73	0.81		0.042 U	0.036 U	0.26	0.24	0.4	0.1	0.038 U
Nickel 30	)	130	310		33.9	7.8	20.1	21.2	33.6	15.1	19.7
Potassium					4930	1200 U	1410	1660	1300 U	1200 U	1800
Selenium 3.9	9	4	180		2 U	2.3 U	2.4 U	2.3 U	7.8 U	2.4 U	2.3 U
Silver 2		8.3	180		0.97	0.58 U	0.61 U	0.59 U	2 U	0.6 U	0.58 U
Sodium					1000 U	1200 U	1200 U	1200 U	1300 U	1200 U	1200 U
Thallium					1 U	1.2 U	1.2 U	1.2 U	3.9 U	1.2 U	1.2 U
Vanadium					64.3	20.1	28.2	31.5	22	26.8	43.8
Zinc 10g	9 2	480	10000		107	15.6	122	110	179	88.4	45.4

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Table 3. Summary of Metals in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RA-35	RA-35	RA-36	RA-36	RA-36 DUP	RA-36
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	6 - 8	14 - 16	8 - 10	10 - 12	10 - 12	18 - 20
Aluminum					12200	2070	13500	5540	5340	3560
Antimony					2.5 U	2.4 U	2.5 U	2.3 U	2.4 U	2.3 U
Arsenic	13	16	16		2.5 U	2.4 U	6.4	2.3 U	2.4 U	2.3 U
Barium	350	820	400		76.3	27.2	81.5	51.5	33.4	23 U
Beryllium	7.2	47	72		0.75	0.24 U	0.63	0.33	0.38	0.23
Cadmium	2.5	7.5	4.3		0.62 U	0.59 U	1.3	0.57 U	0.6 U	0.58 U
Calcium					1550	590 U	2340	2810	1880	964
Chromium, Hexavalent	1	19	110		0.62	0.47 U	1.1	0.45 U	0.46 U	0.45 U
Chromium	30		180		33.4	10.2	27	13.8	14.5	9.4
Cobalt					9.7	5.9 U	9.6	7.6	6 U	5.8 U
Copper	50	1720	270		24.1	3 U	32.8	13.4	12.9	7.5
Iron					32600	4840	25800	14900	16300	8230
Lead	63	450	400		12.2	2.4 U	69.8	5.6	5.3	2.6
Magnesium					3330	590 U	3380	2340	2030	1300
Manganese	1600	2000	2000		466	56.1	618	776	391	206
Mercury	0.18	0.73	0.81		0.038 U	0.034 U	0.23	0.034 U	0.037 U	0.033 U
Nickel	30	130	310		18.8	4.7 U	27.1	12	10.2	7.4
Potassium					2330	1200 U	1680	1100 U	1200 U	1200 U
Selenium	3.9	4	180		2.5 U	2.4 U	2.5 U	2.3 U	2.4 U	2.3 U
Silver	2	8.3	180		0.82	0.59 U	0.61 U	0.57 U	0.6 U	0.58 U
Sodium					1200 U	1200 U	1200 U	1100 U	1200 U	1200 U
Thallium					1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U
Vanadium					49.1	10.4	41.2	26.1	25	14
Zinc	109	2480	10000		59.3	6.8	289	25.5	25.3	15.5

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Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-1	RA-1A	RA-2	RA-2	RA-3
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/11/2013	2/11/2013	2/26/2013	2/26/2013	2/25/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	23-25	10-12
Aroclor-1016					36 U	43 U	36 U	43 U	35 U
Aroclor-1221					36 U	43 U	36 U	43 U	35 U
Aroclor-1232					36 U	43 U	36 U	43 U	35 U
Aroclor-1242					36 U	43 U	36 U	43 U	35 U
Aroclor-1248					36 U	43 U	36 U	43 U	35 U
Aroclor-1254					36 U	43 U	36 U	43 U	35 U
Aroclor-1260					36 U	43 U	36 U	43 U	35 U
Aroclor-1262					36 U	43 U	36 U	43 U	35 U
Aroclor-1268					36 U	43 U	36 U	43 U	35 U
Total PCBs	100	3200	1000		0	0	0	0	0

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 $\mu g/kg$  - Micrograms per kilogram

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	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-3	RA-4	RA-4	RA-5	RA-5 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/25/2013	2/25/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	10-12	22-24	7-9	7-9
Aroclor-1016					40 U	35 U	44 U	36 U	37 U
Aroclor-1221					40 U	35 U	44 U	36 U	37 U
Aroclor-1232					40 U	35 U	44 U	36 U	37 U
Aroclor-1242					40 U	35 U	44 U	36 U	37 U
Aroclor-1248					40 U	35 U	44 U	36 U	37 U
Aroclor-1254					40 U	35 U	44 U	36 U	37 U
Aroclor-1260					40 U	35 U	44 U	36 U	37 U
Aroclor-1262					40 U	35 U	44 U	36 U	37 U
Aroclor-1268					40 U	35 U	44 U	36 U	37 U
Total PCBs	100	3200	1000		0	0	0	0	0

J - Estimated value

 $\mu g/kg$  - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-5	RA-6	RA-6	RA-7	RA-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	2/14/2013	2/14/2013	2/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	18-20	10-12	23-25	11-12.5	22-24
Aroclor-1016					34 U	43 U	35 U	40 U	39 U
Aroclor-1221					34 U	43 U	35 U	40 U	39 U
Aroclor-1232					34 U	43 U	35 U	40 U	39 U
Aroclor-1242					34 U	43 U	35 U	40 U	39 U
Aroclor-1248					34 U	43 U	35 U	40 U	39 U
Aroclor-1254					34 U	43 U	35 U	40 U	39 U
Aroclor-1260					34 U	43 U	35 U	40 U	39 U
Aroclor-1262					34 U	43 U	35 U	40 U	39 U
Aroclor-1268					34 U	43 U	35 U	40 U	39 U
Total PCBs	100	3200	1000		0	0	0	0	0

J - Estimated value

 $\mu g/kg$  - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-8	RA-8	RA-9	RA-9	RA-10
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/25/2013	2/26/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	22-24	10-12
Aroclor-1016					38 U	41 U	35 U	43 U	37 U
Aroclor-1221					38 U	41 U	35 U	43 U	37 U
Aroclor-1232					38 U	41 U	35 U	43 U	37 U
Aroclor-1242					38 U	41 U	35 U	43 U	37 U
Aroclor-1248					38 U	41 U	35 U	43 U	37 U
Aroclor-1254					38 U	41 U	35 U	43 U	37 U
Aroclor-1260					38 U	41 U	35 U	43 U	37 U
Aroclor-1262					38 U	41 U	35 U	43 U	37 U
Aroclor-1268					38 U	41 U	35 U	43 U	37 U
Total PCBs	100	3200	1000		0	0	0	0	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-10	RA-11A	RA-11B	RA-11B DUP	RA-12
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	3/18/2013	3/21/2013	3/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	10-12	23-25	23-25	11-12.5
Aroclor-1016					37 U	33 U	39 U	38 U	41 U
Aroclor-1221					37 U	33 U	39 U	38 U	41 U
Aroclor-1232					37 U	33 U	39 U	38 U	41 U
Aroclor-1242					37 U	33 U	39 U	38 U	41 U
Aroclor-1248					37 U	33 U	39 U	38 U	41 U
Aroclor-1254					37 U	33 U	39 U	38 U	41 U
Aroclor-1260					37 U	33 U	39 U	38 U	41 U
Aroclor-1262					37 U	33 U	39 U	38 U	41 U
Aroclor-1268					37 U	33 U	39 U	38 U	41 U
Total PCBs	100	3200	1000		0	0	0	0	0

J - Estimated value

NYSDEC - New York State Department of Environmental Conservation

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-12	RA-12 DUP	RA-13	RA-13	RA-14
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/21/2013	2/21/2013	2/14/2013	2/14/2013	2/12/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	23-25	11-13	23-25	11-13
Aroclor-1016					46 U	41 U	42 U	37 U	45 U
Aroclor-1221					46 U	41 U	42 U	37 U	45 U
Aroclor-1232					46 U	41 U	42 U	37 U	45 U
Aroclor-1242					46 U	41 U	42 U	37 U	45 U
Aroclor-1248					46 U	41 U	42 U	37 U	45 U
Aroclor-1254					46 U	41 U	42 U	37 U	45 U
Aroclor-1260					46 U	41 U	42 U	37 U	45 U
Aroclor-1262					46 U	41 U	42 U	37 U	45 U
Aroclor-1268					46 U	41 U	42 U	37 U	45 U
Total PCBs	100	3200	1000		0	0	0	0	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-14	RA-15	RA-15	RA-16	RA-16
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 2	2/12/2013	2/14/2013	2/14/2013	2/13/2013	2/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	11-13	23-25	11-13	23-25
Aroclor-1016					40 U	37 U	39 U	43 U	40 U
Aroclor-1221					40 U	37 U	39 U	43 U	40 U
Aroclor-1232					40 U	37 U	39 U	43 U	40 U
Aroclor-1242					40 U	37 U	39 U	43 U	40 U
Aroclor-1248					40 U	37 U	39 U	43 U	40 U
Aroclor-1254					40 U	37 U	39 U	43 U	40 U
Aroclor-1260					40 U	37 U	39 U	43 U	40 U
Aroclor-1262					40 U	37 U	39 U	43 U	40 U
Aroclor-1268					40 U	37 U	39 U	43 U	40 U
Total PCBs	100	3200	1000		0	0	0	0	0

J - Estimated value

 $\mu g/kg$  - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-17	RA-17 DUP	RA-17	RA-18	RA-18
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/12/2013	2/12/2013	2/12/2013	2/15/2013	2/15/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	10-12	23-25	11-13	23-25
Aroclor-1016					42 U	33 U	35 U	37 U	39 U
Aroclor-1221					42 U	33 U	35 U	37 U	39 U
Aroclor-1232					42 U	33 U	35 U	37 U	39 U
Aroclor-1242					42 U	33 U	35 U	37 U	39 U
Aroclor-1248					42 U	33 U	35 U	37 U	39 U
Aroclor-1254					42 U	33 U	35 U	37 U	39 U
Aroclor-1260					42 U	33 U	35 U	37 U	39 U
Aroclor-1262					42 U	33 U	35 U	37 U	39 U
Aroclor-1268					42 U	33 U	35 U	37 U	39 U
Total PCBs	100	3200	1000		0	0	0	0	0

J - Estimated value

NYSDEC - New York State Department of Environmental Conservation

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

 $<sup>\</sup>mu g/kg$  - Micrograms per kilogram

ft bls - Feet below land surface

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-19	RA-19	RA-20	RA-20	RA-21
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 2/	/12/2013	2/12/2013	2/13/2013	2/13/2013	3/15/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	12-14	22-24	11-13	23-25	10-12
Aroclor-1016					37 U	41 U	48 U	43 U	37 U
Aroclor-1221					37 U	41 U	48 U	43 U	37 U
Aroclor-1232					37 U	41 U	48 U	43 U	37 U
Aroclor-1242					37 U	41 U	48 U	43 U	37 U
Aroclor-1248					37 U	41 U	48 U	43 U	37 U
Aroclor-1254					37 U	41 U	48 U	43 U	37 U
Aroclor-1260					37 U	41 U	48 U	43 U	37 U
Aroclor-1262					37 U	41 U	48 U	43 U	37 U
Aroclor-1268					37 U	41 U	48 U	43 U	37 U
Total PCBs	100	3200	1000		0	0	0	0	0

J - Estimated value

 $\mu g/kg$  - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-21	RA-22	RA-22	RA-23	RA-23
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	3/15/2013	2/15/2013	2/15/2013	2/13/2013	2/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	7-9	18-20	11-13	23-25
Aroclor-1016					38 U	37 U	48 U	46 U	37 U
Aroclor-1221					38 U	37 U	48 U	46 U	37 U
Aroclor-1232					38 U	37 U	48 U	46 U	37 U
Aroclor-1242					38 U	37 U	48 U	46 U	37 U
Aroclor-1248					38 U	37 U	48 U	46 U	37 U
Aroclor-1254					38 U	37 U	48 U	46 U	37 U
Aroclor-1260					38 U	37 U	48 U	46 U	37 U
Aroclor-1262					38 U	37 U	48 U	46 U	37 U
Aroclor-1268					38 U	37 U	48 U	46 U	37 U
Total PCBs	100	3200	1000		0	0	0	0	0

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-32	RA-32 DUP	RA-33	RA-34	RA-35
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/26/2013	4/26/2013	4/26/2013	4/26/2013	8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	4-6	4-6	4-6	4-6	4 - 6
Aroclor-1016					38 U	39 U	43 U	38 U	37 U
Aroclor-1221					38 U	39 U	43 U	38 U	37 U
Aroclor-1232					38 U	39 U	43 U	38 U	37 U
Aroclor-1242					38 U	39 U	43 U	38 U	37 U
Aroclor-1248					38 U	39 U	43 U	38 U	37 U
Aroclor-1254					38 U	39 U	43 U	38 U	37 U
Aroclor-1260					38 U	39 U	43 U	38 U	37 U
Aroclor-1262					38 U	39 U	43 U	38 U	37 U
Aroclor-1268					38 U	39 U	43 U	38 U	37 U
Total PCBs	100	3200	1000		0	0	0	0	0

J - Estimated value

 $\mu g/kg$  - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-35	RA-35	RA-36	RA-36	RA-36 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	6 - 8	14 - 16	8 - 10	10 - 12	10 - 12
Aroclor-1016					35 U	37 U	40 U	35 U	37 U
Aroclor-1221					35 U	37 U	40 U	35 U	37 U
Aroclor-1232					35 U	37 U	40 U	35 U	37 U
Aroclor-1242					35 U	37 U	40 U	35 U	37 U
Aroclor-1248					35 U	37 U	40 U	35 U	37 U
Aroclor-1254					35 U	37 U	40 U	35 U	37 U
Aroclor-1260					35 U	37 U	40 U	35 U	37 U
Aroclor-1262					35 U	37 U	40 U	35 U	37 U
Aroclor-1268					35 U	37 U	40 U	35 U	37 U
Total PCBs	100	3200	1000		0	0	0	0	0

J - Estimated value

NYSDEC - New York State Department of Environmental Conservation

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

 $<sup>\</sup>mu g/kg$  - Micrograms per kilogram

ft bls - Feet below land surface

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 4. Summary of Polychlorinated Biphenyls in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC	
	Part 375	Part 375	Part 375	Sample Designation: RA-36
Parameter	Unrestricted	Protection of	Restricted	<b>Sample Date:</b> 8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 18 - 20
Aroclor-1016				37 U
Aroclor-1221				37 U
Aroclor-1232				37 U
Aroclor-1242				37 U
Aroclor-1248				37 U
Aroclor-1254				37 U
Aroclor-1260				37 U
Aroclor-1262				37 U
Aroclor-1268				37 U
Total PCBs	100	3200	1000	0

J - Estimated value

 $\mu g/kg$  - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

<sup>--</sup> No NYSDEC Part 375 Commercial Standards available

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-1	RA-1A	RA-2	RA-2	RA-3
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/11/2013	2/11/2013	2/26/2013	2/26/2013	2/25/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	23-25	10-12
2,4,5-T					3.5 U	4.2 U	3.5 U	4.3 U	3.6 U
2,4,5-TP	3800	3800	100000		3.5 U	4.2 U	3.5 U	4.3 U	3.6 U
2,4-D					18 U	21 U	17 U	21 U	18 U
2,4-DB					18 U	21 U	17 U	21 U	18 U
4,4'-DDD	3.3	14000	13000		9.9 NJV	0.86 U	26.3 JV	0.85 U	25
4,4'-DDE	3.3	17000	8900		5.7	0.86 U	15.6 JV	0.85 U	6.8
4,4'-DDT	3.3	136000	7900		340	8.9	1070	4.2 JV	28.9
Aldrin	5	190	97		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
alpha-BHC	20	20	480		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
alpha-Chlordane	94	2900	4200		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
beta-BHC	36	90	360		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
Dalapon					3.5 U	4.2 U	3.5 U	4.3 U	3.6 U
delta-BHC	40	250	100000		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
Dicamba					3.5 U	4.2 U	3.5 U	4.3 U	3.6 U
Dichloroprop					18 U	21 U	17 U	21 U	18 U
Dieldrin	5	100	200		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
Dinoseb					18 U	21 U	17 U	21 U	18 U
Endosulfan I	2400	102000	24000		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
Endosulfan II	2400	102000	24000		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
Endosulfan sulfate	2400	1000000	24000		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
Endrin aldehyde					0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
Endrin ketone					0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
Endrin	14	60	11000		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
gamma-BHC (Lindane)	100	100	1300		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
gamma-Chlordane					0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
Heptachlor epoxide					0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
Heptachlor	42	380	2100		0.73 U	0.86 U	0.72 U	0.85 U	0.71 U
MCPA					1800 U	2100 U	1700 U	2100 U	1800 U
MCPP					1800 U	2100 U	1700 U	2100 U	1800 U
Methoxychlor					1.5 U	1.7 U	1.4 U	1.7 U	1.4 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-1	RA-1A	RA-2	RA-2	RA-3
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/11/2013	2/11/2013	2/26/2013	2/26/2013	2/25/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	23-25	10-12
Pentachlorophenol	800	800	6700		1.8 U	2.1 U	1.7 U	2.1 U	1.8 U
Toxaphene					18 U	22 U	18 U	21 U	18 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

V - Value altered or qualifier added during data validation

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-3	RA-4	RA-4	RA-5	RA-5 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/25/2013	2/25/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	10-12	22-24	7-9	7-9
2,4,5-T					3.8 U	3.5 U	4.1 U	3.7 U	3.3 U
2,4,5-TP	3800	3800	100000		3.8 U	3.5 U	4.1 U	3.7 U	3.3 U
2,4-D					19 U	17 U	21 U	19 U	17 U
2,4-DB					19 U	17 U	21 U	19 U	17 U
4,4'-DDD	3.3	14000	13000		0.81 U	39.8	0.87 U	0.73 U	0.73 U
4,4'-DDE	3.3	17000	8900		0.81 U	9.3 JV	0.87 U	0.73 U	0.73 U
4,4'-DDT	3.3	136000	7900		4 JV	29.7	0.87 U	0.73 U	0.73 U
Aldrin	5	190	97		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
alpha-BHC	20	20	480		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
alpha-Chlordane	94	2900	4200		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
beta-BHC	36	90	360		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
Dalapon					3.8 U	3.5 U	4.1 U	3.7 U	3.3 U
delta-BHC	40	250	100000		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
Dicamba					3.8 U	3.5 U	4.1 U	3.7 U	3.3 U
Dichloroprop					19 U	17 U	21 U	19 U	17 U
Dieldrin	5	100	200		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
Dinoseb					19 U	17 U	21 U	19 U	17 U
Endosulfan I	2400	102000	24000		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
Endosulfan II	2400	102000	24000		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
Endosulfan sulfate	2400	1000000	24000		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
Endrin aldehyde					0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
Endrin ketone					0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
Endrin	14	60	11000		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
gamma-BHC (Lindane)	100	100	1300		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
gamma-Chlordane					0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
Heptachlor epoxide					0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
Heptachlor	42	380	2100		0.81 U	0.7 U	0.87 U	0.73 U	0.73 U
MCPA					1900 U	1700 U	2100 U	1900 U	1700 U
MCPP					1900 U	1700 U	2100 U	1900 U	1700 U
Methoxychlor					1.6 U	1.4 U	1.7 U	1.5 U	1.5 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	Sample Designation: Sample Date: Sample Depth (ft bls):	RA-3 2/25/2013 23-25	RA-4 2/25/2013 10-12	RA-4 2/25/2013 22-24	RA-5 2/26/2013 7-9	RA-5 DUP 2/26/2013 7-9
Pentachlorophenol Toxaphene	800	800	 6700 	•	1.9 U 20 U	1.7 U 17 U	2.1 U 22 U	1.9 U 18 U	1.7 U 18 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-5	RA-6	RA-6	RA-7	RA-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	2/14/2013	2/14/2013	2/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	18-20	10-12	23-25	11-12.5	22-24
2,4,5-T					3.7 U	3.7 U	3.8 U	3.5 U	3.5 U
2,4,5-TP	3800	3800	100000		3.7 U	3.7 U	3.8 U	3.5 U	3.5 U
2,4-D					18 U	18 U	19 U	17 U	18 U
2,4-DB					18 U	18 U	19 U	17 U	18 U
4,4'-DDD	3.3	14000	13000		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
4,4'-DDE	3.3	17000	8900		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
4,4'-DDT	3.3	136000	7900		0.68 U	1.3 NJV	0.7 U	1.1	0.77 U
Aldrin	5	190	97		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
alpha-BHC	20	20	480		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
alpha-Chlordane	94	2900	4200		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
beta-BHC	36	90	360		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
Dalapon					3.7 U	3.7 U	3.8 U	3.5 U	3.5 U
delta-BHC	40	250	100000		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
Dicamba					3.7 U	3.7 U	3.8 U	3.5 U	3.5 U
Dichloroprop					18 U	18 U	19 U	17 U	18 U
Dieldrin	5	100	200		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
Dinoseb					18 U	18 U	19 U	17 U	18 U
Endosulfan I	2400	102000	24000		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
Endosulfan II	2400	102000	24000		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
Endosulfan sulfate	2400	1000000	24000		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
Endrin aldehyde					0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
Endrin ketone					0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
Endrin	14	60	11000		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
gamma-BHC (Lindane)	100	100	1300		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
gamma-Chlordane					0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
Heptachlor epoxide					0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
Heptachlor	42	380	2100		0.68 U	0.87 U	0.7 U	0.83 U	0.77 U
MCPA					1800 U	1800 U	1900 U	1700 U	1800 U
MCPP					1800 U	1800 U	1900 U	1700 U	1800 U
Methoxychlor					1.4 U	1.7 U	1.4 U	1.7 U	1.5 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-5	RA-6	RA-6	RA-7	RA-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	2/14/2013	2/14/2013	2/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	18-20	10-12	23-25	11-12.5	22-24
									_
Pentachlorophenol	800	800	6700		1.8 U	1.8 U	1.9 U	1.7 U	1.8 U
Toxaphene					17 U	22 U	18 U	21 U	19 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-8	RA-8	RA-9	RA-9	RA-10
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/25/2013	2/26/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	22-24	10-12
2,4,5-T					3.5 U	4 U	3.6 U	3.9 U	3.5 U
2,4,5-TP	3800	3800	100000		3.5 U	4 U	3.6 U	3.9 U	3.5 U
2,4-D					17 U	20 U	18 U	19 U	18 U
2,4-DB					17 U	20 U	18 U	19 U	18 U
4,4'-DDD	3.3	14000	13000		47.9	2.5 JV	12 JV	0.86 U	5.7 JV
4,4'-DDE	3.3	17000	8900		41	0.8 U	9.1 JV	0.86 U	7.8
4,4'-DDT	3.3	136000	7900		1070	39.1	432 JV	0.86 U	181
Aldrin	5	190	97		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
alpha-BHC	20	20	480		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
alpha-Chlordane	94	2900	4200		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
beta-BHC	36	90	360		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
Dalapon					3.5 U	4 U	3.6 U	3.9 U	3.5 U
delta-BHC	40	250	100000		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
Dicamba					3.5 U	4 U	3.6 U	3.9 U	3.5 U
Dichloroprop					17 U	20 U	18 U	19 U	18 U
Dieldrin	5	100	200		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
Dinoseb					17 U	20 U	18 U	19 U	18 U
Endosulfan I	2400	102000	24000		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
Endosulfan II	2400	102000	24000		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
Endosulfan sulfate	2400	1000000	24000		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
Endrin aldehyde					0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
Endrin ketone					0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
Endrin	14	60	11000		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
gamma-BHC (Lindane)	100	100	1300		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
gamma-Chlordane					0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
Heptachlor epoxide					0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
Heptachlor	42	380	2100		0.72 U	0.8 U	0.69 U	0.86 U	0.73 U
MCPA					1700 U	2000 U	1800 U	1900 U	1800 U
MCPP					1700 U	2000 U	1800 U	1900 U	1800 U
Methoxychlor					1.4 U	1.6 U	1.4 U	1.7 U	1.5 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-8	RA-8	RA-9	RA-9	RA-10
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/25/2013	2/25/2013	2/26/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10-12	22-24	10-12	22-24	10-12
Pentachlorophenol	800	800	6700		1.7 U	2 U	1.8 U	1.9 U	1.8 U
Toxaphene					18 U	20 U	17 U	22 U	18 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC					
	Part 375	Part 375	Part 375	Sample Designation:	RA-10	RA-11A	RA-11B	RA-11B DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/26/2013	3/18/2013	3/21/2013	3/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	10-12	23-25	23-25
2,4,5-T					3.7 U	3.8 U	3.8 U	3.5 U
2,4,5-TP	3800	3800	100000		3.7 U	3.8 U	3.8 U	3.5 U
2,4-D					18 U	19 U	19 U	18 U
2,4-DB					18 U	19 U	19 U	18 U
4,4'-DDD	3.3	14000	13000		0.75 U	1.1	0.78 U	0.76 U
4,4'-DDE	3.3	17000	8900		0.75 U	1	0.78 U	0.76 U
4,4'-DDT	3.3	136000	7900		0.75 U	7.2	0.78 U	0.76 U
Aldrin	5	190	97		0.75 U	0.67 U	0.78 U	0.76 U
alpha-BHC	20	20	480		0.75 U	0.67 U	0.78 U	0.76 U
alpha-Chlordane	94	2900	4200		0.75 U	0.67 U	0.78 U	0.76 U
beta-BHC	36	90	360		0.75 U	0.67 U	0.78 U	0.76 U
Dalapon					3.7 U	3.8 U	3.8 U	3.5 U
delta-BHC	40	250	100000		0.75 U	0.67 U	0.78 U	0.76 U
Dicamba					3.7 U	3.8 U	3.8 U	3.5 U
Dichloroprop					18 U	19 U	19 U	18 U
Dieldrin	5	100	200		0.75 U	0.67 U	0.78 U	0.76 U
Dinoseb					18 U	19 U	19 U	18 U
Endosulfan I	2400	102000	24000		0.75 U	0.67 U	0.78 U	0.76 U
Endosulfan II	2400	102000	24000		0.75 U	0.67 U	0.78 U	0.76 U
Endosulfan sulfate	2400	1000000	24000		0.75 U	0.67 U	0.78 U	0.76 U
Endrin aldehyde					0.75 U	0.67 U	0.78 U	0.76 U
Endrin ketone					0.75 U	0.67 U	0.78 U	0.76 U
Endrin	14	60	11000		0.75 U	0.67 U	0.78 U	0.76 U
gamma-BHC (Lindane)	100	100	1300		0.75 U	0.67 U	0.78 U	0.76 U
gamma-Chlordane					0.75 U	0.67 U	0.78 U	0.76 U
Heptachlor epoxide					0.75 U	0.67 U	0.78 U	0.76 U
Heptachlor	42	380	2100		0.75 U	0.67 U	0.78 U	0.76 U
MCPA					1800 U	1900 U	1900 U	1800 U
MCPP					1800 U	1900 U	1900 U	1800 U
Methoxychlor					1.5 U	1.3 U	1.6 U	1.5 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	Sample Designation: Sample Date: Sample Depth (ft bls):				RA-11B DUP 3/21/2013 23-25
Pentachlorophenol Toxaphene	800	800	 6700 		1.8 U 19 U	1.9 U 17 U	1.9 U 19 U	1.8 U 19 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC					
	Part 375	Part 375	Part 375	Sample Designation:	RA-12	RA-12	RA-12 DUP	RA-13
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/21/2013	2/21/2013	2/21/2013	2/14/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	11-12.5	23-25	23-25	11-13
2,4,5-T					3.8 U	3.7 U	3.8 U	4.1 U
2,4,5-TP	3800	3800	100000		3.8 U	3.7 U	3.8 U	4.1 U
2,4-D					19 U	18 U	19 U	20 U
2,4-DB					19 U	18 U	19 U	20 U
4,4'-DDD	3.3	14000	13000		4.4 NJV	0.86 U	0.79 U	0.84 U
4,4'-DDE	3.3	17000	8900		5	0.86 U	0.79 U	0.84 U
4,4'-DDT	3.3	136000	7900		38.3	0.86 U	0.79 U	0.84 U
Aldrin	5	190	97		0.8 U	0.86 U	0.79 U	0.84 U
alpha-BHC	20	20	480		0.8 U	0.86 U	0.79 U	0.84 U
alpha-Chlordane	94	2900	4200		0.8 U	0.86 U	0.79 U	0.84 U
beta-BHC	36	90	360		0.8 U	0.86 U	0.79 U	0.84 U
Dalapon					3.8 U	3.7 U	3.8 U	4.1 U
delta-BHC	40	250	100000		0.8 U	0.86 U	0.79 U	0.84 U
Dicamba					3.8 U	3.7 U	3.8 U	4.1 U
Dichloroprop					19 U	18 U	19 U	20 U
Dieldrin	5	100	200		0.8 U	0.86 U	0.79 U	0.84 U
Dinoseb					19 U	18 U	19 U	20 U
Endosulfan I	2400	102000	24000		0.8 U	0.86 U	0.79 U	0.84 U
Endosulfan II	2400	102000	24000		0.8 U	0.86 U	0.79 U	0.84 U
Endosulfan sulfate	2400	1000000	24000		0.8 U	0.86 U	0.79 U	0.84 U
Endrin aldehyde					0.8 U	0.86 U	0.79 U	0.84 U
Endrin ketone					0.8 U	0.86 U	0.79 U	0.84 U
Endrin	14	60	11000		0.8 U	0.86 U	0.79 U	0.84 U
gamma-BHC (Lindane)	100	100	1300		0.8 U	0.86 U	0.79 U	0.84 U
gamma-Chlordane					0.8 U	0.86 U	0.79 U	0.84 U
Heptachlor epoxide					0.8 U	0.86 U	0.79 U	0.84 U
Heptachlor	42	380	2100		0.8 U	0.86 U	0.79 U	0.84 U
MCPA					1900 U	1800 U	1900 U	2000 U
MCPP					1900 U	1800 U	1900 U	2000 U
Methoxychlor					1.6 U	1.7 U	1.6 U	1.7 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	Sample Designation: Sample Date: Sample Depth (ft bls):	2/21/2013		RA-12 DUP 2/21/2013 23-25	RA-13 2/14/2013 11-13
Pentachlorophenol Toxaphene	800	800	 6700 		1.9 U 20 U	1.8 U 21 U	1.9 U 20 U	2 U 21 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-13	RA-14	RA-14	RA-15	RA-15
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/14/2013	2/12/2013	2/12/2013	2/14/2013	2/14/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	11-13	23-25	11-13	23-25
2,4,5-T					3.7 U	3.6 U	3.4 U	3.4 U	3.6 U
2,4,5-TP	3800	3800	100000		3.7 U	3.6 U	3.4 U	3.4 U	3.6 U
2,4-D					18 U	18 U	17 U	17 U	18 U
2,4-DB					18 U	18 U	17 U	17 U	18 U
4,4'-DDD	3.3	14000	13000		0.73 U	2.4	0.8 U	0.74 U	0.79 U
4,4'-DDE	3.3	17000	8900		0.73 U	2.8 UV	0.8 U	0.74 U	0.79 U
4,4'-DDT	3.3	136000	7900		0.73 U	14.2	0.8 U	2.9	0.79 U
Aldrin	5	190	97		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
alpha-BHC	20	20	480		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
alpha-Chlordane	94	2900	4200		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
beta-BHC	36	90	360		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
Dalapon					3.7 U	3.6 U	3.4 U	3.4 U	3.6 U
delta-BHC	40	250	100000		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
Dicamba					3.7 U	3.6 U	3.4 U	3.4 U	3.6 U
Dichloroprop					18 U	18 U	17 U	17 U	18 U
Dieldrin	5	100	200		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
Dinoseb					18 U	18 U	17 U	17 U	18 U
Endosulfan I	2400	102000	24000		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
Endosulfan II	2400	102000	24000		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
Endosulfan sulfate	2400	1000000	24000		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
Endrin aldehyde					0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
Endrin ketone					0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
Endrin	14	60	11000		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
gamma-BHC (Lindane)	100	100	1300		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
gamma-Chlordane					0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
Heptachlor epoxide					0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
Heptachlor	42	380	2100		0.73 U	0.91 U	0.8 U	0.74 U	0.79 U
MCPA					1800 U	1800 U	1700 U	1700 U	1800 U
MCPP					1800 U	1800 U	1700 U	1700 U	1800 U
Methoxychlor					1.5 U	1.8 U	1.6 U	1.5 U	1.6 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-13	RA-14	RA-14	RA-15	RA-15
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/14/2013	2/12/2013	2/12/2013	2/14/2013	2/14/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	11-13	23-25	11-13	23-25
Pentachlorophenol	800	800	6700		1.8 U	1.8 U	1.7 U	1.7 U	1.8 U
Toxaphene					18 U	23 U	20 U	19 U	20 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

V - Value altered or qualifier added during data validation

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in μg/kg)         Unrestricted (Groundwater (Residential))         Restricted (Residential)         Sample Depth (It bis)         2/13/2013         2/12/2014         2/12/2013         2/12/2013         2/12/2013         2/12/2014         2/12/2013         2/12/2013         2/12/2014		NYSDEC	NYSDEC	NYSDEC					
Concentrations in µg/kg  Use		Part 375	Part 375	Part 375	Sample Designation:	RA-16	RA-16	RA-17	RA-17 DUP
2,4,5-T	Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/13/2013	2/13/2013	2/12/2013	2/12/2013
2,4,5-T             4 U         3.6 U         3.6 U         3.3 U           2,4,5-TP         3800         3800         100000         4 U         3.6 U         3.3 U         3.3 U           2,4-DB             20 U         18 U         18 U         17 U           4,4'-DDD         3.3         14000         13000         0.86 U         0.81 U         0.85 U         0.67 U           4,4'-DDT         3.3         136000         7900         0.86 U         0.81 U         0.85 U         0.67 U           4,4'-DDT         3.3         136000         7900         0.86 U         0.81 U         0.85 U         0.67 U           4,4'-DDT         3.3         136000         7900         0.86 U         0.81 U         0.85 U         0.67 U           Aldrin         5         190         97         0.86 U         0.81 U         0.85 U         0.67 U           alpha-Chlordane         94         2900         4200         0.86 U         0.81 U         0.85 U         0.67 U           beta-BHC         36         90         360         0.86 U         0.81 U         0.85 U	(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	11-13	23-25	10-12	10-12
2.4.5-TP       3800       3800       100000       4 U       3.6 U       3.6 U       3.3 U         2.4-D           20 U       18 U       18 U       17 U         2.4-DB           20 U       18 U       18 U       17 U         4.4-DDD       3.3       14000       13000       0.86 U       0.81 U       0.85 U       0.67 U         4.4-DDT       3.3       17000       8900       0.86 U       0.81 U       0.85 U       0.67 U         4.4-DDT       3.3       136000       7900       0.86 U       0.81 U       0.85 U       0.67 U         4.10 Aldrin       5       190       97       0.86 U       0.81 U       0.85 U       0.67 U         alpha-BHC       20       20       480       0.86 U       0.81 U       0.85 U       0.67 U         beta-BHC       36       90       360       0.86 U       0.81 U       0.85 U       0.67 U         Dicamba           4 U       3.6 U       3.3 U         bicladrin       5       100       200       0.86 U       0.81 U       0.85 U									
2,4-D                17 U         24-DB	2,4,5-T					4 U	3.6 U	3.6 U	3.3 U
2,4-DB <t></t>	2,4,5-TP	3800	3800	100000		4 U	3.6 U	3.6 U	3.3 U
4,4'-DDD       3.3       14000       13000       0.86 U       0.81 U       0.85 U       0.67 U         4,4'-DDE       3.3       17000       8900       0.86 U       0.81 U       0.85 U       0.67 U         4,4'-DDT       3.3       136000       7900       0.86 U       0.81 U       0.85 U       0.67 U         Aldrin       5       190       97       0.86 U       0.81 U       0.85 U       0.67 U         alpha-BHC       20       20       480       0.86 U       0.81 U       0.85 U       0.67 U         alpha-Chlordane       94       2900       4200       0.86 U       0.81 U       0.85 U       0.67 U         beta-BHC       36       90       360       0.86 U       0.81 U       0.85 U       0.67 U         Dalapon          4 U       3.6 U       3.6 U       3.3 U         Dicalcrin       40       250       100000       0.86 U       0.81 U       0.85 U       0.67 U         Dicaldrin       5       100       200       0.86 U       0.81 U       0.85 U       0.67 U         Dicalcrin       5       100       200       0.86 U       0.81 U       0.85 U </td <td>2,4-D</td> <td></td> <td></td> <td></td> <td></td> <td>20 U</td> <td>18 U</td> <td>18 U</td> <td>17 U</td>	2,4-D					20 U	18 U	18 U	17 U
4,4'-DDE       3.3       17000       8900       0.86 U       0.81 U       0.85 U       0.67 U         4,4'-DDT       3.3       136000       7900       0.86 U       0.81 U       0.85 U       0.67 U         Aldrin       5       190       97       0.86 U       0.81 U       0.85 U       0.67 U         alpha-BHC       20       20       480       0.86 U       0.81 U       0.85 U       0.67 U         alpha-Chlordane       94       2900       4200       0.86 U       0.86 U       0.81 U       0.85 U       0.67 U         beta-BHC       36       90       360       0.86 U       0.81 U       0.85 U       0.67 U         Dalapon          4 U       3.6 U       3.6 U       3.3 U         Dicamba          4 U       3.6 U       3.6 U       3.3 U         Dichloroprop          4 U       3.6 U       3.6 U       3.3 U         Dichloroprop          20 U       18 U       18 U       17 U         Endosulfan I       2400       102000       24000       0.86 U       0.86 U       0.8	2,4-DB					20 U	18 U	18 U	17 U
4,4'-DDT       3.3       136000       7900       0.86 U       0.81 U       0.85 U       0.67 U         Aldrin       5       190       97       0.86 U       0.81 U       0.85 U       0.67 U         alpha-BHC       20       20       480       0.86 U       0.81 U       0.85 U       0.67 U         beta-BHC       36       90       360       0.86 U       0.81 U       0.85 U       0.67 U         Dalapon          4 U       3.6 U       0.85 U       0.67 U         Dicamba          4 U       3.6 U       3.6 U       3.3 U         Dichloroprop          4 U       3.6 U       0.85 U       0.67 U         Dicamba          4 U       3.6 U       3.6 U       3.3 U         Dichloroprop          4 U       3.6 U       3.8 U       17 U         Dicldrin       5       100       200       0.86 U       0.81 U       0.85 U       0.67 U         Endosulfan I       2400       102000       24000       0.86 U       0.81 U       0.85 U       0.67 U	4,4'-DDD	3.3	14000	13000		0.86 U	0.81 U	0.85 U	0.67 U
Aldrin         5         190         97         0.86 U         0.81 U         0.85 U         0.67 U           alpha-BHC         20         20         480         0.86 U         0.81 U         0.85 U         0.67 U           alpha-Chlordane         94         2900         4200         0.86 U         0.81 U         0.85 U         0.67 U           beta-BHC         36         90         360         0.86 U         0.81 U         0.85 U         0.67 U           Dalapon            4U         3.6 U         3.6 U         3.3 U           delta-BHC         40         250         100000         0.86 U         0.81 U         0.85 U         0.67 U           Dicamba             4U         3.6 U         3.6 U         3.3 U           Dichloroprop             20 U         18 U         18 U         17 U           Diclosulfan         5         100         200         0.86 U         0.81 U         0.85 U         0.67 U           Endosulfan I         2400         102000         24000         0.86 U         0.81 U         0.85 U         0	4,4'-DDE	3.3	17000	8900		0.86 U	0.81 U	0.85 U	0.67 U
alpha-BHC         20         20         480         0.86 U         0.81 U         0.85 U         0.67 U           alpha-Chlordane         94         2900         4200         0.86 U         0.81 U         0.85 U         0.67 U           beta-BHC         36         90         360         0.86 U         0.81 U         0.85 U         0.67 U           Dalapon            4 U         3.6 U         3.6 U         3.8 U           delta-BHC         40         250         100000         0.86 U         0.81 U         0.85 U         0.67 U           Dicamba             20 U         18 U         3.6 U         3.3 U           Dichloroprop             20 U         18 U         18 U         17 U           Dichlorin         5         100         200         0.86 U         0.81 U         0.85 U         0.67 U           Dinoseb            -         20 U         18 U         18 U         17 U           Endosulfan I         2400         102000         24000         0.86 U         0.81 U         0.85 U	4,4'-DDT	3.3	136000	7900		0.86 U	0.81 U	0.85 U	0.67 U
alpha-Chlordane         94         2900         4200         0.86 U         0.81 U         0.85 U         0.67 U           beta-BHC         36         90         360         0.86 U         0.81 U         0.85 U         0.67 U           Dalapon            4 U         3.6 U         3.6 U         3.3 U           delta-BHC         40         250         100000         0.86 U         0.81 U         0.85 U         0.67 U           Dicamba             4 U         3.6 U         3.3 U           Dichloroprop             20 U         18 U         18 U         17 U           Diciddrin         5         100         200         0.86 U         0.81 U         0.85 U         0.67 U           Dinoseb             20 U         18 U         18 U         17 U           Endosulfan I         2400         102000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endosulfan sulfate         2401         1000000         24000         0.86 U         0.81 U         0.85 U	Aldrin	5	190	97		0.86 U	0.81 U	0.85 U	0.67 U
beta-BHC         36         90         360         0.86 U         0.81 U         0.85 U         0.67 U           Dalapon             4 U         3.6 U         3.6 U         3.3 U           delta-BHC         40         250         100000         0.86 U         0.81 U         0.85 U         0.67 U           Dicamba             4 U         3.6 U         3.6 U         3.3 U           Dichloroprop             20 U         18 U         18 U         17 U           Diclostrin         5         100         200         0.86 U         0.81 U         0.85 U         0.67 U           Dinoseb              20 U         18 U         18 U         17 U           Endosulfan I         2400         102000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endosulfan II         2400         102000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endrin aldehyde            -	alpha-BHC	20	20	480		0.86 U	0.81 U	0.85 U	0.67 U
Dalapon                          0.67 U          0.67 U          0.67 U          0.67 U          0.67 U          18 U         3.6 U         3.3 U          0.67 U          18 U         17 U          18 U         17 U          18 U         17 U          18 U         17 U          18 U         18 U         17 U          18 U         18 U         17 U          18 U         18 U         17 U           18 U         18 U         17 U          18 U         18 U         17 U          18 U         18 U         18 U         17 U          18 U         18 U         17 U         18 U         18 U         17 U         18 U         18 U         17 U         18 U         18 U         17 U         18 U <td>alpha-Chlordane</td> <td>94</td> <td>2900</td> <td>4200</td> <td></td> <td>0.86 U</td> <td>0.81 U</td> <td>0.85 U</td> <td>0.67 U</td>	alpha-Chlordane	94	2900	4200		0.86 U	0.81 U	0.85 U	0.67 U
delta-BHC         40         250         100000         0.86 U         0.81 U         0.85 U         0.67 U           Dicamba              4 U         3.6 U         3.6 U         3.3 U           Dichloroprop              20 U         18 U         18 U         17 U           Dichloroprop         5         100         200         0.86 U         0.81 U         0.85 U         0.67 U           Dinoseb             20 U         18 U         18 U         17 U           Endosulfan I         2400         102000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endosulfan sulfate         2400         100000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endrin aldehyde              0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone              0.86 U         0.81 U         0.85 U         0.67 U <td< td=""><td>beta-BHC</td><td>36</td><td>90</td><td>360</td><td></td><td>0.86 U</td><td>0.81 U</td><td>0.85 U</td><td>0.67 U</td></td<>	beta-BHC	36	90	360		0.86 U	0.81 U	0.85 U	0.67 U
Dicamba <t< td=""><td>Dalapon</td><td></td><td></td><td></td><td></td><td>4 U</td><td>3.6 U</td><td>3.6 U</td><td>3.3 U</td></t<>	Dalapon					4 U	3.6 U	3.6 U	3.3 U
Dichloroprop              10         20 U         18 U         18 U         17 U         Dichlorin         5         100         200         0.86 U         0.81 U         0.85 U         0.67 U         Dichlorin         0.86 U         0.81 U         0.85 U         0.67 U         Dichlorin         18 U         17 U         18 U         17 U         17 U         18 U         18 U         17 U         18 U         17 U         18 U         17 U         18 U         18 U         17 U         18 U <th< td=""><td>delta-BHC</td><td>40</td><td>250</td><td>100000</td><td></td><td>0.86 U</td><td>0.81 U</td><td>0.85 U</td><td>0.67 U</td></th<>	delta-BHC	40	250	100000		0.86 U	0.81 U	0.85 U	0.67 U
Dieldrin         5         100         200         0.86 U         0.81 U         0.85 U         0.67 U           Dinoseb              20 U         18 U         18 U         17 U           Endosulfan I         2400         102000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endosulfan sulfate         2400         1000000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endrin aldehyde              0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone              0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone               0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone         14         60         11000         0.86 U         0.81 U         0.85 U         0.67 U           gamma-BHC (Lindane)         100         1300         0.86 U         0.81 U         0.85 U         0.67 U	Dicamba					4 U	3.6 U	3.6 U	3.3 U
Dinoseb <t< td=""><td>Dichloroprop</td><td></td><td></td><td></td><td></td><td>20 U</td><td>18 U</td><td>18 U</td><td>17 U</td></t<>	Dichloroprop					20 U	18 U	18 U	17 U
Endosulfan I         2400         102000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endosulfan II         2400         102000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endosulfan sulfate         2400         1000000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endrin aldehyde             0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone             0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone         14         60         11000         0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone         100         100         1300         0.86 U         0.81 U         0.85 U         0.67 U           gamma-BHC (Lindane)         100         100         1300         0.86 U         0.81 U         0.85 U         0.67 U           gamma-Chlordane            0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor         42         380         2100 <td>Dieldrin</td> <td>5</td> <td>100</td> <td>200</td> <td></td> <td>0.86 U</td> <td>0.81 U</td> <td>0.85 U</td> <td>0.67 U</td>	Dieldrin	5	100	200		0.86 U	0.81 U	0.85 U	0.67 U
Endosulfan II         2400         102000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endosulfan sulfate         2400         1000000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endrin aldehyde             0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone             0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone         14         60         11000         0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone         100         100         1300         0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone            0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone         14         60         11000         0.86 U         0.81 U         0.85 U         0.67 U           gamma-BHC (Lindane)         100         1300         0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor epoxide            -	Dinoseb					20 U	18 U	18 U	17 U
Endosulfan sulfate         2400         1000000         24000         0.86 U         0.81 U         0.85 U         0.67 U           Endrin aldehyde             0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone            0.86 U         0.81 U         0.85 U         0.67 U           Endrin         14         60         11000         0.86 U         0.81 U         0.85 U         0.67 U           gamma-BHC (Lindane)         100         1300         0.86 U         0.81 U         0.85 U         0.67 U           gamma-Chlordane            0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor epoxide            0.86 U         0.81 U         0.85 U         0.67 U           MCPA            0.86 U         0.81 U         0.85 U         0.67 U           MCPP            2000 U         1800 U         1800 U         1700 U	Endosulfan I	2400	102000	24000		0.86 U	0.81 U	0.85 U	0.67 U
Endrin aldehyde             0.86 U         0.81 U         0.85 U         0.67 U           Endrin ketone             0.86 U         0.81 U         0.85 U         0.67 U           Endrin         14         60         11000         0.86 U         0.81 U         0.85 U         0.67 U           gamma-BHC (Lindane)         100         1300         0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor epoxide            0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor         42         380         2100         0.86 U         0.81 U         0.85 U         0.67 U           MCPA              2000 U         1800 U         1800 U         1700 U           MCPP             2000 U         1800 U         1800 U         1700 U	Endosulfan II	2400	102000	24000		0.86 U	0.81 U	0.85 U	0.67 U
Endrin ketone               0.86 U         0.81 U         0.85 U         0.67 U           Endrin         14         60         11000         0.86 U         0.81 U         0.85 U         0.67 U           gamma-BHC (Lindane)         100         1300         0.86 U         0.81 U         0.85 U         0.67 U           gamma-Chlordane             0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor epoxide            0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor         42         380         2100         0.86 U         0.81 U         0.85 U         0.67 U           MCPA              2000 U         1800 U         1800 U         1700 U           MCPP             2000 U         1800 U         1800 U         1700 U	Endosulfan sulfate	2400	1000000	24000		0.86 U	0.81 U	0.85 U	0.67 U
Endrin         14         60         11000         0.86 U         0.81 U         0.85 U         0.67 U           gamma-BHC (Lindane)         100         100         1300         0.86 U         0.81 U         0.85 U         0.67 U           gamma-Chlordane             0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor epoxide            0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor         42         380         2100         0.86 U         0.81 U         0.85 U         0.67 U           MCPA             2000 U         1800 U         1800 U         1700 U           MCPP             2000 U         1800 U         1800 U         1700 U	Endrin aldehyde					0.86 U	0.81 U	0.85 U	0.67 U
gamma-BHC (Lindane)         100         100         1300         0.86 U         0.81 U         0.85 U         0.67 U           gamma-Chlordane             0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor epoxide             0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor         42         380         2100         0.86 U         0.81 U         0.85 U         0.67 U           MCPA            2000 U         1800 U         1800 U         1700 U           MCPP            2000 U         1800 U         1800 U         1700 U	Endrin ketone					0.86 U	0.81 U	0.85 U	0.67 U
gamma-Chlordane             0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor epoxide             0.86 U         0.81 U         0.85 U         0.67 U           Heptachlor         42         380         2100         0.86 U         0.81 U         0.85 U         0.67 U           MCPA            2000 U         1800 U         1800 U         1700 U           MCPP            2000 U         1800 U         1800 U         1700 U	Endrin	14	60	11000		0.86 U	0.81 U	0.85 U	0.67 U
Heptachlor epoxide           0.86 U       0.81 U       0.85 U       0.67 U         Heptachlor       42       380       2100       0.86 U       0.81 U       0.85 U       0.67 U         MCPA           2000 U       1800 U       1800 U       1700 U         MCPP          2000 U       1800 U       1800 U       1700 U	gamma-BHC (Lindane)	100	100	1300		0.86 U	0.81 U	0.85 U	0.67 U
Heptachlor       42       380       2100       0.86 U       0.81 U       0.85 U       0.67 U         MCPA           2000 U       1800 U       1800 U       1700 U         MCPP          2000 U       1800 U       1800 U       1700 U	gamma-Chlordane					0.86 U	0.81 U	0.85 U	0.67 U
MCPA 2000 U 1800 U 1800 U 1700 U MCPP 2000 U 1800 U 1800 U 1700 U	Heptachlor epoxide					0.86 U	0.81 U	0.85 U	0.67 U
MCPA 2000 U 1800 U 1800 U 1700 U MCPP 2000 U 1800 U 1800 U 1700 U	Heptachlor	42	380	2100		0.86 U	0.81 U	0.85 U	0.67 U
	<u> </u>					2000 U	1800 U	1800 U	1700 U
	MCPP					2000 U	1800 U	1800 U	1700 U
11. 5 11. 5 11. 6	Methoxychlor					1.7 U	1.6 U	1.7 U	1.3 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	Sample Designation: Sample Date: Sample Depth (ft bls):		RA-16 2/13/2013 23-25		RA-17 DUP 2/12/2013 10-12
Pentachlorophenol Toxaphene	800	800	 6700 		2 U 22 U	1.8 U 20 U	1.8 U 21 U	1.7 U 17 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

NJ - The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value

V - Value altered or qualifier added during data validation

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-17	RA-18	RA-18	RA-19	RA-19
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/12/2013	2/15/2013	2/15/2013	2/12/2013	2/12/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	11-13	23-25	12-14	22-24
2,4,5-T					3.3 U	3.8 U	3.8 U	3.7 U	4.1 U
2,4,5-TP	3800	3800	100000		3.3 U	3.8 U	3.8 U	3.7 U	4.1 U
2,4-D					16 U	19 U	19 U	19 U	20 U
2,4-DB					16 U	19 U	19 U	19 U	20 U
4,4'-DDD	3.3	14000	13000		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
4,4'-DDE	3.3	17000	8900		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
4,4'-DDT	3.3	136000	7900		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
Aldrin	5	190	97		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
alpha-BHC	20	20	480		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
alpha-Chlordane	94	2900	4200		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
beta-BHC	36	90	360		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
Dalapon					3.3 U	3.8 U	3.8 U	3.7 U	4.1 U
delta-BHC	40	250	100000		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
Dicamba					3.3 U	3.8 U	3.8 U	3.7 U	4.1 U
Dichloroprop					16 U	19 U	19 U	19 U	20 U
Dieldrin	5	100	200		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
Dinoseb					16 U	19 U	19 U	19 U	20 U
Endosulfan I	2400	102000	24000		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
Endosulfan II	2400	102000	24000		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
Endosulfan sulfate	2400	1000000	24000		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
Endrin aldehyde					0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
Endrin ketone					0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
Endrin	14	60	11000		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
gamma-BHC (Lindane)	100	100	1300		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
gamma-Chlordane					0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
Heptachlor epoxide					0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
Heptachlor	42	380	2100		0.7 U	0.75 U	0.78 U	0.74 U	0.81 U
MCPA					1600 U	1900 U	1900 U	1900 U	2000 U
MCPP					1600 U	1900 U	1900 U	1900 U	2000 U
Methoxychlor					1.4 U	1.5 U	1.6 U	1.5 U	1.6 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-17	RA-18	RA-18	RA-19	RA-19
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/12/2013	2/15/2013	2/15/2013	2/12/2013	2/12/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	23-25	11-13	23-25	12-14	22-24
Pentachlorophenol	800	800	6700		1.6 U	1.9 U	1.9 U	1.9 U	2 U
Toxaphene					17 U	19 U	19 U	19 U	20 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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V - Value altered or qualifier added during data validation

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-20	RA-20	RA-21	RA-21	RA-22
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/13/2013	2/13/2013	3/15/2013	3/15/2013	2/15/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	11-13	23-25	10-12	23-25	7-9
2,4,5-T					4.4 U	3.8 U	3.4 U	3.6 U	3.4 U
2,4,5-TP	3800	3800	100000		4.4 U	3.8 U	3.4 U	3.6 U	3.4 U
2,4-D					22 U	19 U	17 U	18 U	17 U
2,4-DB					22 U	19 U	17 U	18 U	17 U
4,4'-DDD	3.3	14000	13000		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
4,4'-DDE	3.3	17000	8900		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
4,4'-DDT	3.3	136000	7900		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
Aldrin	5	190	97		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
alpha-BHC	20	20	480		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
alpha-Chlordane	94	2900	4200		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
beta-BHC	36	90	360		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
Dalapon					4.4 U	3.8 U	3.4 U	3.6 U	3.4 U
delta-BHC	40	250	100000		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
Dicamba					4.4 U	3.8 U	3.4 U	3.6 U	3.4 U
Dichloroprop					22 U	19 U	17 U	18 U	17 U
Dieldrin	5	100	200		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
Dinoseb					22 U	19 U	17 U	18 U	17 U
Endosulfan I	2400	102000	24000		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
Endosulfan II	2400	102000	24000		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
Endosulfan sulfate	2400	1000000	24000		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
Endrin aldehyde					0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
Endrin ketone					0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
Endrin	14	60	11000		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
gamma-BHC (Lindane)	100	100	1300		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
gamma-Chlordane					0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
Heptachlor epoxide					0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
Heptachlor	42	380	2100		0.96 U	0.86 U	0.75 U	0.76 U	0.74 U
MCPA					2200 U	1900 U	1700 U	1800 U	1700 U
MCPP					2200 U	1900 U	1700 U	1800 U	1700 U
Methoxychlor					1.9 U	1.7 U	1.5 U	1.5 U	1.5 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-20	RA-20	RA-21	RA-21	RA-22
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/13/2013	2/13/2013	3/15/2013	3/15/2013	2/15/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	11-13	23-25	10-12	23-25	7-9
Pentachlorophenol	800	800	6700		2.2 U	1.9 U	1.7 U	1.8 U	1.7 U
Toxaphene					24 U	21 U	19 U	19 U	18 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC					
	Part 375	Part 375	Part 375	Sample Designation:	RA-22	RA-23	RA-23	RA-32
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/15/2013	2/13/2013	2/13/2013	4/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	18-20	11-13	23-25	4-6
2,4,5-T					4.8 U	4.1 U	3.6 U	3.9 U
2,4,5-TP	3800	3800	100000		4.8 U	4.1 U	3.6 U	3.9 U
2,4-D					24 U	20 U	18 U	19 U
2,4-DB					24 U	20 U	18 U	19 U
4,4'-DDD	3.3	14000	13000		0.97 U	0.92 U	0.75 U	23.2
4,4'-DDE	3.3	17000	8900		0.97 U	0.92 U	0.75 U	6.1 JV
4,4'-DDT	3.3	136000	7900		0.97 U	0.92 U	0.75 U	6.6 JV
Aldrin	5	190	97		0.97 U	0.92 U	0.75 U	0.75 U
alpha-BHC	20	20	480		0.97 U	0.92 U	0.75 U	0.75 U
alpha-Chlordane	94	2900	4200		0.97 U	0.92 U	0.75 U	0.75 U
beta-BHC	36	90	360		0.97 U	0.92 U	0.75 U	0.75 U
Dalapon					4.8 U	4.1 U	3.6 U	3.9 U
delta-BHC	40	250	100000		0.97 U	0.92 U	0.75 U	0.75 U
Dicamba					4.8 U	4.1 U	3.6 U	3.9 U
Dichloroprop					24 U	20 U	18 U	19 U
Dieldrin	5	100	200		0.97 U	0.92 U	0.75 U	0.75 U
Dinoseb					24 U	20 U	18 U	19 U
Endosulfan I	2400	102000	24000		0.97 U	0.92 U	0.75 U	0.75 U
Endosulfan II	2400	102000	24000		0.97 U	0.92 U	0.75 U	0.75 U
Endosulfan sulfate	2400	1000000	24000		0.97 U	0.92 U	0.75 U	0.75 U
Endrin aldehyde					0.97 U	0.92 U	0.75 U	0.75 U
Endrin ketone					0.97 U	0.92 U	0.75 U	0.75 U
Endrin	14	60	11000		0.97 U	0.92 U	0.75 U	0.75 U
gamma-BHC (Lindane)	100	100	1300		0.97 U	0.92 U	0.75 U	0.75 U
gamma-Chlordane					0.97 U	0.92 U	0.75 U	0.75 U
Heptachlor epoxide					0.97 U	0.92 U	0.75 U	0.75 U
Heptachlor	42	380	2100		0.97 U	0.92 U	0.75 U	0.75 U
MCPA					2400 U	2000 U	1800 U	1900 U
MCPP					2400 U	2000 U	1800 U	1900 U
Methoxychlor					1.9 U	1.8 U	1.5 U	1.5 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC Part 375	NYSDEC Part 375	NYSDEC Part 375	Sample Designation:	RA-22	RA-23	RA-23	RA-32
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	2/15/2013	2/13/2013	2/13/2013	4/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	18-20	11-13	23-25	4-6
Pentachlorophenol	800	800	6700		2.4 U	2 U	1.8 U	2.1
Toxaphene					24 U	23 U	19 U	19 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375	Sample Designation:	RA-32 DUP	RA-33	RA-34	RA-35	RA-35
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/26/2013	4/26/2013	4/26/2013	8/5/2013	8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	4-6	4-6	4-6	4 - 6	6 - 8
2,4,5-T					3.5 U	4.1 U	3.6 U	3.5 U	4 U
2,4,5-TP	3800	3800	100000		3.5 U	4.1 U	3.6 U	3.5 U	4 U
2,4-D					18 U	21 U	18 U	18 U	20 U
2,4-DB					18 U	21 U	18 U	NA	NA
4,4'-DDD	3.3	14000	13000		14.2 JV	0.87 U	0.76 U	0.74 U	0.71 U
4,4'-DDE	3.3	17000	8900		3.8 NJV	0.87 U	0.76 U	0.74 U	3
4,4'-DDT	3.3	136000	7900		4.4 NJV	5.2 NJV	0.76 U	0.74 U	25.2
Aldrin	5	190	97		0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
alpha-BHC	20	20	480		0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
alpha-Chlordane	94	2900	4200		0.9 NJV	0.87 U	0.76 U	0.74 U	0.71 U
beta-BHC	36	90	360		0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
Dalapon					3.5 U	4.1 U	3.6 U	NA	NA
delta-BHC	40	250	100000		0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
Dicamba					3.5 U	4.1 U	3.6 U	NA	NA
Dichloroprop					18 U	21 U	18 U	NA	NA
Dieldrin	5	100	200		0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
Dinoseb					18 U	21 U	18 U	NA	NA
Endosulfan I	2400	102000	24000		0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
Endosulfan II	2400	102000	24000		0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
Endosulfan sulfate	2400	1000000	24000		0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
Endrin aldehyde					0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
Endrin ketone					0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
Endrin	14	60	11000		0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
gamma-BHC (Lindane)	100	100	1300		0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
gamma-Chlordane					0.83 NJV	0.87 U	0.76 U	0.74 U	0.71 U
Heptachlor epoxide					1 JV	0.87 U	0.76 U	0.74 U	0.71 U
Heptachlor	42	380	2100		0.78 U	0.87 U	0.76 U	0.74 U	0.71 U
MCPA					1800 U	2100 U	1800 U	NA	NA
MCPP					1800 U	2100 U	1800 U	NA	NA
Methoxychlor					1.6 U	1.7 U	1.5 U	1.5 U	1.4 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	Sample Designation: Sample Date: Sample Depth (ft bls):		RA-33 4/26/2013 4-6	RA-34 4/26/2013 4-6	RA-35 8/5/2013 4 - 6	RA-35 8/5/2013 6 - 8
Pentachlorophenol Toxaphene	800	800	 6700 		2.2 20 U	2.1 U 22 U	1.8 U 19 U	NA 18 U	NA 18 U

J - Estimated value

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC Part 375	NYSDEC Part 375	NYSDEC Part 375	Sample Designation: RA-35	RA-36	RA-36	RA-36 DUP	RA-36
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 8/5/2013		8/5/2013	8/5/2013	8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 14 - 16	8 - 10	10 - 12	10 - 12	18 - 20
(Conconnations in ag. 11g)		O10 dilla () dilla			0 10	10 12	10 12	10 20
2,4,5-T				3.6 U	3.7 U	3.5 U	3.6 U	3.5 U
2,4,5-TP	3800	3800	100000	3.6 U	3.7 U	3.5 U	3.6 U	3.5 U
2,4-D				18 U	19 U	17 U	18 U	18 U
2,4-DB				NA	NA	NA	NA	NA
4,4'-DDD	3.3	14000	13000	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
4,4'-DDE	3.3	17000	8900	0.74 U	2.6	0.71 U	0.71 U	0.74 U
4,4'-DDT	3.3	136000	7900	0.74 U	17.5	0.71 U	0.71 U	0.74 U
Aldrin	5	190	97	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
alpha-BHC	20	20	480	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
alpha-Chlordane	94	2900	4200	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
beta-BHC	36	90	360	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
Dalapon				NA	NA	NA	NA	NA
delta-BHC	40	250	100000	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
Dicamba				NA	NA	NA	NA	NA
Dichloroprop				NA	NA	NA	NA	NA
Dieldrin	5	100	200	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
Dinoseb				NA	NA	NA	NA	NA
Endosulfan I	2400	102000	24000	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
Endosulfan II	2400	102000	24000	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
Endosulfan sulfate	2400	1000000	24000	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
Endrin aldehyde				0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
Endrin ketone				0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
Endrin	14	60	11000	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
gamma-BHC (Lindane)	100	100	1300	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
gamma-Chlordane				0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
Heptachlor epoxide				0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
Heptachlor	42	380	2100	0.74 U	0.81 U	0.71 U	0.71 U	0.74 U
MCPA				NA	NA	NA	NA	NA
MCPP				NA	NA	NA	NA	NA
Methoxychlor				1.5 U	1.6 U	1.4 U	1.4 U	1.5 U

Table 5. Summary of Pesticides and Herbicides in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC	Comple Device Africa DA 25	DA 26	D 4 26	DA 26 DUD	DA 26
	Part 375	Part 375	Part 375	Sample Designation: RA-35	RA-36	KA-30	RA-36 DUP	RA-36
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 8/5/201	8/5/2013	8/5/2013	8/5/2013	8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 14 - 16	8 - 10	10 - 12	10 - 12	18 - 20
Pentachlorophenol	800	800	6700	NA	NA	NA	NA	NA
Toxaphene				18 U	20 U	18 U	18 U	19 U

## J - Estimated value

DUP - Duplicate sample

μg/kg - Micrograms per kilogram

ft bls - Feet below land surface

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-1B	RA-1	RA-1A	RA-1A	RA-2
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	3/19/2013	2/11/2013	2/11/2013	2/11/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	7-9	10-12	22-24	29-30	10-12
Percent Solids				percent		88.8	89.6	74	87.6	91.7
pН				su		NA	5.59	5.54	NA	7.63
Redox Potential Vs H2				mv		NA	334	345	NA	313
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-2	RA-2	RA-3	RA-3	RA-3
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	2/26/2013	2/26/2013	2/25/2013	2/25/2013	2/25/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	23-25	33-35	10-12	23-25	34-35
Percent Solids				percent		76.5	82	88.8	79.4	84
pН				su		7.28	NA	7.88	7.11	NA
Redox Potential Vs H2				mv		332	NA	312	324	NA
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-4	RA-4	RA-4	RA-5	RA-5 DUP
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	2/25/2013	2/25/2013	2/25/2013	2/26/2013	2/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	10-12	22-24	33-35	7-9	7-9
Percent Solids				percent		84.9	75.1	87.4	86.2	89.6
pН				su		7.53	6.98	NA	7.14	6.92
Redox Potential Vs H2				mv		321	336	NA	336	342
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-5	RA-6	RA-6	RA-7	RA-7
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	2/26/2013	2/14/2013	2/14/2013	2/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	18-20	10-12	23-25	11-12.5	22-24
Percent Solids				percent		89.5	81.3	88	82.9	85.2
pН				su		7.64	8.15	7.62	8.21	7.51
Redox Potential Vs H2				mv		329	285	285	296	331
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-7	RA-7	RA-8	RA-8	RA-8
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	3/13/2013	3/14/2013	2/25/2013	2/25/2013	3/4/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	28-30	78-80	10-12	22-24	28-30
Percent Solids				percent		76.7	82.1	88.8	81.2	85.6
pН				su		NA	NA	8.29	7.16	NA
Redox Potential Vs H2				mv		NA	NA	288	334	NA
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

-	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-8A	RA-9	RA-9	RA-9	RA-9
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	3/5/2013	2/26/2013	2/26/2013	2/26/2013	3/8/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	73-75	10-12	22-24	29-30	68-70
Percent Solids				percent		77.4	91.5	74.2	77.2	76.8
pН				su		NA	8.3	7.2	NA	NA
Redox Potential Vs H2				mv		NA	314	319	NA	NA
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-10	RA-10	RA-10	RA-11A	RA-11B
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	2/26/2013	2/26/2013	2/26/2013	3/18/2013	3/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	10-12	23-25	29-30	10-12	23-25
Percent Solids				percent		89.1	81.3	82.2	88.2	84
pН				su		8.29	7.45	NA	8.23	7.63
Redox Potential Vs H2				mv		304	314	NA	288	231
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375		Sample Designation:	RA-11B DUP	RA-11B	RA-11B	RA-12
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	3/21/2013	3/21/2013	3/21/2013	2/21/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	23-25	33-35	38-40	11-12.5
									_
Percent Solids				percent		84.7	83.2	86.4	82.9
pН				su		7.26	NA	NA	8.14
Redox Potential Vs H2				mv		262	NA	NA	297
Total Organic Carbon				mg/kg		NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC				_			
	Part 375	Part 375	Part 375		Sample Designation:	RA-12	RA-12 DUP	RA-12	RA-12B	RA-13
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	2/21/2013	2/21/2013	3/6/2013	3/12/2013	2/14/2013
(Concentrations in μg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	23-25	23-25	32-34	71.5-73	11-13
Percent Solids				percent		77.9	80.3	80.8	76.9	74.8
pН				su		8.03	7.42	NA	NA	6.58
Redox Potential Vs H2				mv		322	331	NA	NA	317
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-13	RA-14	RA-14	RA-15	RA-15
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	2/14/2013	2/12/2013	2/12/2013	2/14/2013	2/14/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	23-25	11-13	23-25	11-13	23-25
Percent Solids				percent		87	79.7	84.8	86.2	87.6
pН				su		7.66	8.13	8.12	8.28	7.52
Redox Potential Vs H2				mv		327	330	338	284	319
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC						
	Part 375	Part 375	Part 375		Sample Designation:	RA-16	RA-16	RA-17	RA-17 DUP
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	2/13/2013	2/13/2013	2/12/2013	2/12/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	11-13	23-25	10-12	10-12
Percent Solids				percent		74.6	82.1	80.9	89.8
pН				su		8.27	7.71	8.08	7.77
Redox Potential Vs H2				mv		294	322	338	329
Total Organic Carbon				mg/kg		NA	NA	NA	NA

J - Estimated value

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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U - Indicates that the compound was analyzed for but not detected

Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-17	RA-18	RA-18	RA-19	RA-19
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	2/12/2013	2/15/2013	2/15/2013	2/12/2013	2/12/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	23-25	11-13	23-25	12-14	22-24
Percent Solids				percent		87.7	87.4	82.7	87.6	79.5
pН				su		7.93	8.89	8.82	7.13	8.03
Redox Potential Vs H2				mv		328	224	220	333	326
Total Organic Carbon				mg/kg		NA	1100 U	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-20	RA-21	RA-20	RA-21	RA-21
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	2/13/2013	3/15/2013	2/13/2013	3/15/2013	3/15/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	11-13	10-12	23-25	23-25	28-30
Percent Solids				percent		73.5	87.2	79.3	85.9	87.5
pН				su		5.82	7.83	7.03	7.28	NA
Redox Potential Vs H2				mv		376	418	358	395	NA
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-21	RA-22	RA-22	RA-23	RA-23
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	3/15/2013	2/15/2013	2/15/2013	2/13/2013	2/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	35-37	7-9	18-20	11-13	23-25
Percent Solids				percent		80.6	88.5	66.4	76	85.9
pН				su		NA	8.4	8.65	7.96	7.45
Redox Potential Vs H2				mv		NA	221	224	314	345
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-24	RA-24	RA-24	RA-24	RA-25
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	3/18/2013	3/18/2013	3/18/2013	3/18/2013	3/18/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	10-12	22-24	30-31	38-40	9-11
Percent Solids				percent		88.1	85.6	80.8	85.8	91.2
pН				su		NA	NA	NA	NA	NA
Redox Potential Vs H2				mv		NA	NA	NA	NA	NA
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-25	RA-25	RA-25	RA-26	RA-26
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	3/18/2013	3/18/2013	3/18/2013	3/19/2013	3/19/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	23-25	30-31	38-40	10-12	21-23
Percent Solids				percent		85.9	86.1	89	95.8	88.2
pН				su		NA	NA	NA	NA	NA
Redox Potential Vs H2				mv		NA	NA	NA	NA	NA
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-26	RA-27	RA-27	RA-27	RA-28
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	3/19/2013	3/19/2013	3/19/2013	3/19/2013	3/19/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	29-30	10-12	23-25	26-27	10-12
Percent Solids				percent		87.8	96.4	87.4	85.2	88.2
pН				su		NA	NA	NA	NA	NA
Redox Potential Vs H2				mv		NA	NA	NA	NA	NA
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-28	RA-29	RA-29	RA-29	RA-30
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	3/19/2013	5/8/2013	5/8/2013	5/8/2013	5/8/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	23-25	10-12	22-24	28-30	10-12
Percent Solids				percent		85.1	88.9	88.3	86.4	84.9
pН				su		NA	NA	NA	NA	NA
Redox Potential Vs H2				mv		NA	NA	NA	NA	NA
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-30	RA-31	RA-31	RA-32	RA-32 DUP
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	5/8/2013	5/8/2013	5/8/2013	4/26/2013	4/26/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	19-20	10-12	24-25	4-6	4-6
Percent Solids				percent		85.7	79.7	88.5	84.6	84.3
pH				su		NA	NA	NA	7.67	7.65
Redox Potential Vs H2				mv		NA	NA	NA	308	393
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375		Sample Designation:	RA-33	RA-34	RA-35	RA-35	RA-35
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	4/26/2013	4/26/2013	8/5/2013	8/5/2013	8/5/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	4-6	4-6	4 - 6	6 - 8	14 - 16
Percent Solids				percent		75	83.1	84.9	82.9	86
pH				su		7.47	7.76	7.83	7.95	8.25
Redox Potential Vs H2				mv		775	444	311	312	311
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC					_		
	Part 375	Part 375	Part 375		Sample Designation:	RA-36	RA-36	RA-36 DUP	RA-36	GWP-1
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	8/5/2013	8/5/2013	8/5/2013	8/5/2013	5/13/2013
(Concentrations in µg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	8 - 10	10 - 12	10 - 12	18 - 20	34-35
Percent Solids				percent		82.7	88.1	86.6	89.5	83.4
pН				su		7.89	8.49	8.55	7.89	NA
Redox Potential Vs H2				mv		317	296	285	309	NA
Total Organic Carbon				mg/kg		NA	NA	NA	NA	NA

J - Estimated value

DUP - Duplicate sample

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of General Chemistry in Soil Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	NYSDEC	NYSDEC					
	Part 375	Part 375	Part 375		Sample Designation:	GWP-5	FB-031813	FB-032113
Parameter	Unrestricted	Protection of	Restricted	Units	Sample Date:	5/9/2013	3/18/2013	3/21/2013
(Concentrations in μg/kg)	Use	Groundwater	Residential		Sample Depth (ft bls):	34-35	Soil FB	Soil FB
Percent Solids				percent		81.2	NA	NA
pH				su		NA	8.47	8.11
Redox Potential Vs H2				mv		NA	NA	NA
Total Organic Carbon				mg/kg		NA	NA	NA

J - Estimated value

mg/kg - Milligrams per kilogram

su - Standard units

mv - Millivolts

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Commercial Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

U - Indicates that the compound was analyzed for but not detected

Table 7. Summary of Water Level Data, 149 Kent Avenue, Brooklyn, New York

		Feb 20	0,2013	June 11	1, 2013 <sup>1</sup>	July 5	5, 2013	July 1	1, 2013	July 1	8, 2013
Well	MPE (brooklyn datum)	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE
MW-1	15.564	12.72	2.84	11.90	3.66	12.05	3.51	12.03	3.53	12.09	3.47
MW-2	15.511	12.62	2.89	11.90	3.61	11.94	3.57	11.81	3.70	12.01	3.50
MW-3	15.6	12.67	2.93	11.95	3.65	11.97	3.63	11.92	3.68	12.00	3.60
MW-4	15.896	12.95	2.95	12.27	3.63	12.32	3.58	12.27	3.63	12.35	3.55
MW-5	15.818	12.76	3.06	9.13	6.69	11.13	4.69	11.62	4.20	11.62	4.20
MW-6	15.795	12.42	3.38	11.79	4.01	11.27	4.53	11.41	4.39	11.49	4.31
MW-10*	15.397	NM	NM	11.33	4.07	11.66	3.74	11.71	3.69	11.75	3.65
MW-11*	15.564	NM	NM	11.91	3.65	11.93	3.63	11.91	3.65	11.98	3.58
MW-13*	15.828	NM	NM	11.65	4.18	11.84	3.99	11.87	3.96	11.91	3.92
MW-15*	15.427	NM	NM	10.54	4.89	11.44	3.99	11.62	3.81	11.42	4.01

## Notes

MPE- measuring point elevation (top of well casing) - ft relative to Brooklyn Borough Topographical Datum

DTW- depth to water (ft)

GWE- groundwater elevation (ft-relative to Brooklyn Borough Topographical Datum)

NM- Not Measured

<sup>&</sup>lt;sup>1</sup> - Wells gauged on 6/11/13 after heavy rain event: 4.16" of rain recorded on 6/7/13, 0.48" of rain recorded on 6/8/13, & 1.38" of rain recorded on 6/10/13 -wunderground.com Tidal influence: observed an average of 0.1' difference in water level throughout the day at wells MW-1 through MW-6

<sup>\*-</sup> MW-10, MW-11, MW-13 & MW-15 installed by Roux Associates in March 2013.

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: Sample Date: Sample Depth (ft bls):	GWP-1 5/13/2013 23 - 25	GWP-1 5/13/2013 33 - 35	GWP-1 5/13/2013 43 - 45	GWP-1 5/13/2013 53 - 55	GWP-2 4/25/2013 33 - 35	GWP-2 4/25/2013 43 - 45	GWP-2 4/26/2013 53 - 55
1,1,1-Trichloroethane	5		10 U	2 U	1 U	1 U	1 U	100 U	5 U
1,1,2,2-Tetrachloroethane	5		10 U	2 U	1 U	1 U	1 U	100 U	5 U
1,1,2-Trichloroethane	1		10 U	2 U	1 U	1 U	1 U	100 U	5 U
1,1-Dichloroethane	5		10 U	2.4	1 U	1 U	1 U	100 U	5 U
1,1-Dichloroethene	5		10 U	2 UV	1 U	1 U	1 U	100 U	5 U
1,2,3-Trichlorobenzene	5		50 U	10 U	5 U	5 U	5 U	500 U	25 U
1,2,4-Trichlorobenzene	5		50 U	10 U	5 U	5 U	5 U	500 U	25 U
1,2-Dibromoethane			20 U	4 U	2 U	2 U	2 U	200 U	10 U
1,2-Dichlorobenzene	3		10 U	2 U	1 U	1 U	1 U	100 U	5 U
1,2-Dichloroethane	0.6		10 U	2 U	1 U	1 U	1 U	100 U	5 U
1,2-Dichloropropane	1		10 U	2 U	1 U	1 U	1 U	100 U	5 U
1,3-Dichlorobenzene	3		10 U	2 U	1 U	1 U	1 U	100 U	5 U
1,4-Dichlorobenzene	3		10 U	2 U	1 U	1 U	1 U	100 U	5 U
1,4-Dioxane			1300 U	250 U	130 U	130 U	130 U	13000 U	630 U
2-Butanone (MEK)	50		100 U	20 U	10 U	10 U	10 U	1000 U	50 U
2-Hexanone	50		50 U	10 U	5 U	5 U	5 U	500 U	25 U
4-Methyl-2-pentanone (MIBK)			50 U	10 U	5 U	5 U	5 U	500 U	25 U
Acetone	50		100 U	20 U	51.3	55.6	23.9	1000 U	50 U
Benzene	1		10 U	2	1 U	0.38 J	1 U	100 U	5 U
Bromochloromethane	5		50 U	10 U	5 U	5 U	5 U	500 U	25 U
Bromodichloromethane	50		3.1 J	2 U	2.7	1 U	2.8	100 U	2.8 J
Bromoform	50		40 U	8 U	4 U	4 U	4 U	400 U	20 U
Bromomethane	5		20 U	4 U	2 U	2 U	2 U	200 U	10 U
Carbon disulfide	60		20 U	4 U	0.52 J	2 U	2 U	200 U	10 U
Carbon tetrachloride	5		10 U	2 U	1 U	1 U	1 U	100 U	5 U
Chlorobenzene	5		10 U	2 U	1 U	1 U	1 U	100 U	5 U
Chloroethane	5		10 U	2 U	1 U	1 U	1 U	100 U	5 U
Chloroform	7		31.3	2.4	30	12.1	25.4	100 U	33.1
Chloromethane			10 U	2 U	1 U	1 U	1 U	100 U	5 U
cis-1,2-Dichloroethene	5		6.6 J	125	8.4	0.66 J	2.1	100 U	2.4 J
cis-1,3-Dichloropropene	5		10 U	2 U	1 U	1 U	1 U	100 U	5 U
Cyclohexane			50 U	10 U	5 U	5 U	5 U	500 U	25 U
Dibromochloromethane	50		10 U	2 U	1 U	1 U	1 U	100 U	5 U
Dibromochloropropane			100 U	20 U	10 U	10 U	10 U	1000 U	50 U
Dichlorodifluoromethane	5		50 U	10 U	5 U	5 U	5 U	500 U	25 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	GWP-1	GWP-1	GWP-1	GWP-1	GWP-2	GWP-2	GWP-2
Parameter	AWQSGVs	Sample Date:	5/13/2013	5/13/2013	5/13/2013	5/13/2013	4/25/2013	4/25/2013	4/26/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	23 - 25	33 - 35	43 - 45	53 - 55	33 - 35	43 - 45	53 - 55
Ethylbenzene	5		10 U	2 U	1 U	1 U	1 U	100 U	5 U
Freon 113			50 U	10 U	5 U	5 U	5 U	500 U	25 U
Isopropylbenzene	5		20 U	4 U	2 U	2 U	2 U	200 U	10 U
m+p-Xylene	5		10 U	2 U	1 U	1 U	1 U	100 U	5 U
Methyl acetate			50 U	10 U	5 U	5 U	5 U	500 U	25 U
Methylcyclohexane			50 U	10 U	5 U	5 U	5 U	500 U	25 U
Methylene chloride	5		20 U	4 U	2 U	1.8 J	2 U	200 U	10 U
MTBE	10		10 U	0.9 J	1 U	1 U	1 U	100 U	5 U
o-Xylene	5		10 U	2 U	1 U	1 U	1 U	100 U	5 U
Styrene	5		50 U	10 U	5 U	5 U	5 U	500 U	25 U
Tetrachloroethene	5		2770	305	71	15.4	179	13500	995
Toluene	5		10 U	2 U	1 U	0.28 J	5.3	100 U	2.9 J
trans-1,2-Dichloroethene	5		10 U	1 J	1 U	1 U	1 U	100 U	5 U
trans-1,3-Dichloropropene			10 U	2 U	1 U	1 U	1 U	100 U	5 U
Trichloroethene	5		2.2 J	222	16.9	1.5	1.8	201	10.3
Trichlorofluoromethane	5		50 U	10 U	5 U	5 U	5 U	500 U	25 U
Vinyl chloride	2		10 U	2 U	1 U	1 U	1 U	100 U	5 U
Xylenes (total)	5		10 U	2 U	1 U	1 U	1 U	100 U	5 U
Total TIC, Volatile			0	0	0	22 J	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

DUP - Duplicate

- - No NYSDEC AWQSGV available

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Parameter	NYSDEC AWQSGVs	Sample Designation: Sample Date:	4/26/2013	GWP-3 5/8/2013	GWP-3 DUP 5/8/2013	GWP-3 5/8/2013	GWP-3 5/8/2013	GWP-3 5/8/2013	GWP-3 5/9/2013	
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	53 - 55	23 - 25	23 - 25	33 - 35	43 - 45	53 - 55	63 - 65	72 - 74
	-		40.77	4 **	4 **	27.77	4 **	4 **	4 **	4 **
1,1,1-Trichloroethane	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane			20 U	2 U	2 U	50 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
1,4-Dioxane			1300 U	130 U	130 U	3100 U	130 U	130 U	130 U	130 U
2-Butanone (MEK)	50		100 U	10 U	10 U	250 U	10 U	10 U	10 U	10 U
2-Hexanone	50		50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
Acetone	50		100 U	10 U	10 U	250 U	10 U	10 U	10 U	10 U
Benzene	1		10 U	1 U	1 U	25 U	0.25 J	1 U	1 U	1 U
Bromochloromethane	5		50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		2.3 J	3.7	3.9	25 U	3.4	3.6	1 U	1 U
Bromoform	50		40 U	4 U	4 U	100 U	4 U	4 U	4 U	4 U
Bromomethane	5		20 U	2 U	2 U	50 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		20 U	2 U	2 U	50 U	0.68 J	2 U	0.25 J	0.46 J
Carbon tetrachloride	5		10 U	1 U	1 U	38.5	1 U	1 U	1 U	1 U
Chlorobenzene	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
Chloroethane	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
Chloroform	7		28.7	28.4	31.8	28.3	29.3	29.5	3.1	1 U
Chloromethane			10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		10 U	0.56 J	0.37 J	129	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
Cyclohexane			50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
Dibromochloropropane			100 U	10 U	10 U	250 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	5		50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
211110101111101101110111011	2		200	5 0	5 0	150 0	5 0	5 0	5 0	5 0

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	GWP-2 DUP	GWP-3	GWP-3 DUP	GWP-3	GWP-3	GWP-3	GWP-3	GWP-3
Parameter	AWQSGVs	Sample Date:	4/26/2013	5/8/2013	5/8/2013	5/8/2013	5/8/2013	5/8/2013	5/9/2013	5/9/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	53 - 55	23 - 25	23 - 25	33 - 35	43 - 45	53 - 55	63 - 65	72 - 74
Ethylbenzene	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
Freon 113			50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		20 U	2 U	2 U	50 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
Methyl acetate			50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
Methylcyclohexane			50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
Methylene chloride	5		20 U	2 U	2 U	50 U	2 U	2 U	2 U	2 U
MTBE	10		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
o-Xylene	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
Styrene	5		50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		1010	33.3	36.9	3460	8.9	2.6	1 U	1 U
Toluene	5		3.3 J	1 U	1 U	25 U	1 U	$0.42 \; J$	1 U	1 U
trans-1,2-Dichloroethene	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
Trichloroethene	5		8.7 J	1 U	1 U	109	0.24 J	1 U	1 U	1 U
Trichlorofluoromethane	5		50 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	0	0	0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

_	NYSDEC	Sample Designation:	GWP-4	GWP-4	GWP-4	GWP-4	GWP-4	GWP-4	GWP-4	GWP-5
Parameter	AWQSGVs	Sample Date:			5/1/2013	5/1/2013	5/1/2013	5/1/2013		5/9/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	13 - 15	23 - 25	33 - 35	43 - 45	53 - 55	63 - 65	73 - 75	23 - 25
1 1 1 Twishlam of the co	E		1 11	1 11	1 11	1 11	1 11	1 11	1 11	250 11
1,1,1-Trichloroethane	5		1 U	1 U	1 U	1 U	1 U 1 U	1 U	1 U	250 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	1 U		1 U	1 U	250 U
1,1,2-Trichloroethane	1		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
1,1-Dichloroethane	5		1.6	1 U	1 U	1 U	1 U	1 U	1 U	250 U
1,1-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
1,2,3-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U	1300 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U	1300 U
1,2-Dibromoethane			2 U	2 U	2 U	2 U	2 U	2 U	2 U	500 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
1,2-Dichloropropane	1		21.8	1 U	1 U	1 U	1 U	1 U	1 U	250 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
1,4-Dioxane			130 U	130 U	130 U	130 U	130 U	130 U	130 U	31000 U
2-Butanone (MEK)	50		10 U	10 U	10 U	10 U	10 U	2.5 J	10 U	2500 U
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U	5 U	5 U	1300 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	5 U	5 U	5 U	5 U	1300 U
Acetone	50		8.1 J	10 U	10 U	10 U	10 U	15.1	4.8 J	2500 U
Benzene	1		1 U	1 U	1 U	1 U	0.34 J	0.41 J	1 U	250 U
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U	1300 U
Bromodichloromethane	50		1 U	2.5	1 U	2.8	1 U	0.42 J	1.8	250 U
Bromoform	50		4 U	4 U	4 U	4 U	4 U	4 U	4 U	1000 U
Bromomethane	5		2 U	2 U	2 U	2 U	2 U	2 U	2 U	500 U
Carbon disulfide	60		0.53 J	2 U	2 U	0.69 J	2 U	0.31 J	0.9 J	500 U
Carbon tetrachloride	5		1 U	1	1 U	1 U	1 U	1 U	1 U	250 U
Chlorobenzene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
Chloroform	7		25.5	21.4	34.2	34.6	4	6.6	22	79.3 J
Chloromethane			1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
cis-1,2-Dichloroethene	5		3.9	3.3	4.9	2.9	1 U	1 U	1 U	280
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
Cyclohexane			5 U	5 U	5 U	5 U	5 U	5 U	5 U	1300 U
Dibromochloromethane	50		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
Dibromochloropropane			10 U	10 U	10 U	10 U	10 U	10 U	10 U	2500 U
				5 U	5 U	5 U		5 U		1300 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	GWP-4	GWP-4	GWP-4	GWP-4	GWP-4	GWP-4	GWP-4	GWP-5
Parameter	AWQSGVs	Sample Date:	4/30/2013	4/30/2013	5/1/2013	5/1/2013	5/1/2013	5/1/2013	5/1/2013	5/9/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	13 - 15	23 - 25	33 - 35	43 - 45	53 - 55	63 - 65	73 - 75	23 - 25
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
Freon 113			5 U	5 U	5 U	5 U	5 U	5 U	5 U	1300 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U	2 U	2 U	500 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U	5 U	5 U	1300 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U	5 U	5 U	1300 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U	2 U	2 U	500 U
MTBE	10		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
Styrene	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U	1300 U
Tetrachloroethene	5		408	545	559	73.7	5.1	<b>5.7</b>	1.2	48600
Toluene	5		$0.74 \; J$	1 U	$0.68 \mathrm{J}$	0.23 J	$0.27 \; J$	0.36 J	1 U	250 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
Trichloroethene	5		7.8	2.3	3.2	3.2	1 U	0.27 J	1 U	232 J
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U	1300 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U	1 U	1 U	250 U
Xylenes (total)	5		1 U	1 U	0.3 J	1 U	1 U	1 U	1 U	250 U
Total TIC, Volatile			14 J	0	0	0	0	100.9 J	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

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DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

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<b>D</b>	NYSDEC	Sample Designation:	GWP-5	GWP-5	GWP-5	GWP-5	GWP-6	GWP-6	GWP-6	GWP-6
Parameter	AWQSGVs	Sample Date:				5/10/2013		4/26/2013	4/26/2013	4/26/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	33 - 35	43 - 45	53 - 55	63 - 65	13 - 15	23 - 25	33 - 35	43 - 45
1.1.1.0.1.1	~		<b>50 I</b> I	1 77	1.77	1 77	1 77	1 77	1 77	50 TT
1,1,1-Trichloroethane	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
1,1,2,2-Tetrachloroethane	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
1,1,2-Trichloroethane	1		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
1,1-Dichloroethane	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
1,1-Dichloroethene	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
1,2,3-Trichlorobenzene	5		250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
1,2,4-Trichlorobenzene	5		250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
1,2-Dibromoethane			100 U	2 U	2 U	2 U	2 U	2 U	2 U	100 U
1,2-Dichlorobenzene	3		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
1,2-Dichloroethane	0.6		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
1,2-Dichloropropane	1		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
1,3-Dichlorobenzene	3		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
1,4-Dichlorobenzene	3		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
1,4-Dioxane			6300 U	130 U	130 U	130 U	130 U	130 U	130 U	6300 U
2-Butanone (MEK)	50		500 U	10 U	10 U	10 U	10 U	10 U	10 U	500 U
2-Hexanone	50		250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
4-Methyl-2-pentanone (MIBK)			250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
Acetone	50		500 U	10 U	10 U	10 U	7.3 J	10 U	10 U	500 U
Benzene	1		50 U	1 U	1 U	0.46 J	1 U	1 U	1 U	50 U
Bromochloromethane	5		250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
Bromodichloromethane	50		50 U	2.8	1.6	1 U	1 U	2	1.9	50 U
Bromoform	50		200 U	4 U	4 U	4 U	4 U	4 U	4 U	200 U
Bromomethane	5		100 U	2 U	2 U	2 U	2 U	2 U	2 U	100 U
Carbon disulfide	60		100 U	2 U	2 U	2 U	1 J	2 U	2 U	100 U
Carbon tetrachloride	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
Chlorobenzene	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
Chloroethane	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
Chloroform	7		32 J	24.2	17.2	4	19.6	15.4	23.4	50 U
Chloromethane			50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
cis-1,2-Dichloroethene	5		129	2.2	1 U	1 U	0.9 J	1 U	0.62 J	129
cis-1,3-Dichloropropene	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
Cyclohexane			250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
Dibromochloromethane	50		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
Dibromochloropropane			500 U	10 U	10 U	10 U	10 U	10 U	10 U	500 U
Dichlorodifluoromethane	5		250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
2 ichiorodhiuoromethune	5		2300	3.0	5.0	3.0	5 0	5.0	3.0	250 0

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	GWP-5	GWP-5	GWP-5	GWP-5	GWP-6	GWP-6	GWP-6	GWP-6
Parameter	AWQSGVs	Sample Date:	5/10/2013	5/10/2013	5/10/2013	5/10/2013	4/30/2013	4/26/2013	4/26/2013	4/26/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	33 - 35	43 - 45	53 - 55	63 - 65	13 - 15	23 - 25	33 - 35	43 - 45
Ethylbenzene	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
Freon 113			250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
Isopropylbenzene	5		100 U	2 U	2 U	2 U	2 U	2 U	2 U	100 U
m+p-Xylene	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
Methyl acetate			250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
Methylcyclohexane			250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
Methylene chloride	5		100 U	2 U	2 U	2 U	0.84 J	2 U	2 U	100 U
MTBE	10		50 U	1 U	1 U	1 U	1 U	0.42 J	1 U	50 U
o-Xylene	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
Styrene	5		250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
Tetrachloroethene	5		8700	166	24.1	9.1	117	16.2	190	5320
Toluene	5		50 U	1 U	1 U	0.32 J	0.65 J	0.33 J	0.94 J	50 U
trans-1,2-Dichloroethene	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
trans-1,3-Dichloropropene			50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
Trichloroethene	5		54.5	1.8	$0.24 \; J$	1 U	3.3	2.4	1.2	234
Trichlorofluoromethane	5		250 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
Vinyl chloride	2		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
Xylenes (total)	5		50 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U
Total TIC, Volatile			0	0	0	12 J	13 J	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	GWP-6	GWP-6	GWP-6	GWP-7	GWP-7	GWP-7	GWP-7	GWP-7
Parameter	AWQSGVs	Sample Date:			4/29/2013			5/2/2013		
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	53 - 55	63 - 65	73 - 75	13 - 15	23 - 25	33 - 35	43 - 45	53 - 55
1 1 1 Twishlamathan	=		1 11	1 11	1 11	1 11	1 11	1 11	1 11	1 11
1,1,1-Trichloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U
2-Butanone (MEK)	50		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50		7.4 J	3.8 J	7.7 J	10 U	10 U	10 U	10 U	3.4 J
Benzene	1		1 U	1 U	0.81 J	1 U	1 U	1 U	1 U	0.48 J
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		2.7	2	1 U	1 U	4.9	1 U	4.9	0.46 J
Bromoform	50		4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		0.43 J	0.31 J	2 U	2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	1 U	1 U	1 U	0.56 J	1 U	1 U
Chlorobenzene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7		27.1	32.8	9.7	1.9	47.7	0.98 J	47.4	35.1
Chloromethane			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	1 U	1.3	1 U	1.8	1 U	0.56 J
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloropropane			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	GWP-6	GWP-6	GWP-6	GWP-7	GWP-7	GWP-7	GWP-7	GWP-7
Parameter	AWQSGVs	Sample Date:	4/29/2013	4/29/2013	4/29/2013	5/2/2013	5/2/2013	5/2/2013	5/2/2013	5/3/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	53 - 55	63 - 65	73 - 75	13 - 15	23 - 25	33 - 35	43 - 45	53 - 55
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.99 J
MTBE	10		1 U	1 U	1 U	1 U	1 U	0.22 J	1 U	1 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		15.5	12	4.5	33.7	1 U	98.4	3.1	31
Toluene	5		1.6	1	0.87 J	1 U	1 U	1 U	1 U	0.46 J
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5		0.69 J	0.94 J	0.33 J	6.7	1 U	3.7	1 U	3.3
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	5.5 J	40.8 J	0	6.7 J	0	0	20.6 J

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

P	NYSDEC	Sample Designation:		GWP-7	MW-1	MW-1 DUP	MW-2	MW-3	MW-4	MW-5
Parameter	AWQSGVs	Sample Date:				2/20/2013	4/1/2013	2/20/2013	2/20/2013	2/21/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	63 - 65	73 - 75	-	=	-	-	-	
1,1,1-Trichloroethane	5		1 U	1 U	100 U	100 U	25 U	0.52 J	411	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	100 U	100 U	25 U	0.52 J 1 U	1 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	100 U	100 U	25 U	0.28 J	26.7	1 U
1,1-Dichloroethene	5		1 U	1 U	100 U	100 U	25 U	0.28 J 0.37 J	20.7 116	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	500 UJV	500 UJV	130 U	5 UJV	5 UJV	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	500 UJ V	500 U V	130 U	5 U	5 U	5 U
1,2-Dibromoethane			2 U	2 U	200 U	200 U	50 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	2 U 1 U	200 U	200 U	25 U	2 U 1 U	0.82 J	2 U 1 U
1,2-Dichloroethane	0.6		1 U	1 U	100 U	100 U	25 U	1 U	0.82 J 1 U	1 U
			1 U	1 U	100 U	100 U	25 U	1 U	0.8 J	1 U
1,2-Dichloropropane	1		1 U	1 U	100 U 100 U	100 U	25 U 25 U	1 U 1 U	0.8 J 1 U	1 U
1,3-Dichlorobenzene	3 3		1 U	1 U	100 U 100 U	100 U	25 U 25 U	1 U 1 U	0.31 J	1 U
1,4-Dichlorobenzene			130 U							
1,4-Dioxane				130 U	13000 U	13000 U	3100 U	130 U	130 U	130 U
2-Butanone (MEK)	50		10 U	10 U	1000 U	1000 U	250 UJV	10 U	10 U	10 U
2-Hexanone	50		5 U	5 U	500 U	500 U	130 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	500 U	500 U	130 U	5 U	5 U	5 U
Acetone	50		10 U	10 U	1000 U	1000 U	250 UJV	10 U	10 U	10 U
Benzene	1 5		1 U	1 U	100 U	100 U	25 U	1 U	0.79 J	<b>7.8</b>
Bromochloromethane			5 U	5 U	500 U	500 U	130 U	5 U	5 U	5 U
Bromodichloromethane	50		1 U	0.51 J	100 U	100 U	25 U	1 U	1 U	1 U
Bromoform	50		4 U	4 U	400 U	400 U	100 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	200 U	200 U	50 U	2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	200 U	200 U	50 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	156	160	261	1 U	40.4	1 U
Chlorobenzene	5		1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
Chloroform	7		1.6	11.5	100 U	100 U	13.1 J	1.5	10.7	1 U
Chloromethane			1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	537	548	659	4.6	44.2	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	500 U	500 U	130 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
Dibromochloropropane	<del></del>		10 U	10 U	1000 U	1000 U	250 U	10 U	10 U	10 U
Dichlorodifluoromethane	5		5 U	5 U	500 U	500 U	130 U	5 U	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	GWP-7	GWP-7	MW-1	MW-1 DUP	MW-2	MW-3	MW-4	MW-5
Parameter	AWQSGVs	Sample Date:	5/3/2013	5/6/2013	2/20/2013	2/20/2013	4/1/2013	2/20/2013	2/20/2013	2/21/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	63 - 65	73 - 75	-	-	-	-	-	=
Ethylbenzene	5		1 U	1 U	100 U	100 U	25 U	1 U	1 U	0.24 J
Freon 113			5 U	5 U	500 U	500 U	130 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	200 U	200 U	50 U	2 U	2 U	1.1 J
m+p-Xylene	5		1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	500 U	500 U	130 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	500 U	500 U	130 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	200 U	200 U	50 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	500 U	500 U	130 U	5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	91900	94000	33500	26	394	2.8
Toluene	5		1 U	0.27 J	100 U	100 U	25 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	323	330	335	23.1	39.1	1 U
Trichlorofluoromethane	5		5 U	5 U	500 U	500 U	130 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	100 U	100 U	9 J	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	100 U	100 U	25 U	1 U	1 U	1 U
Total TIC, Volatile			0	0	0	0	0	0	0	20 J

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Parameter	NYSDEC AWQSGVs	Sample Designation: Sample Date:	MW-6 2/21/2013	MW-7D 4/1/2013	MW-8D 4/1/2013	MW-8DI 5/21/2013	MW-8I 4/1/2013	MW-9D 4/1/2013	MW-10 4/1/2013	MW-11 4/2/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	5		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
1,1,2-Trichloroethane	1		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
1,1-Dichloroethane	5		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
1,1-Dichloroethene	5		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
1,2,3-Trichlorobenzene	5		5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U
1,2-Dibromoethane			2 U	2 U	2 U	200 U	1000 U	2 U	1000 U	50 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
1,2-Dichloroethane	0.6		1 U	0.42 J	0.29 J	100 U	500 U	1 U	500 U	25 U
1,2-Dichloropropane	1		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
1,4-Dioxane			130 U	130 U	130 U	13000 U	63000 U	130 U	63000 U	3100 U
2-Butanone (MEK)	50		10 U	10 UJV	10 UJV	1000 UJV	5000 UJV	10 UJV	5000 UJV	250 UJV
2-Hexanone	50		5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U
Acetone	50		10 U	10 UJV	16.1 JV	1000 U	5000 UJV	10 UJV	5000 UJV	250 UJV
Benzene	1		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
Bromochloromethane	5		5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U
Bromodichloromethane	50		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
Bromoform	50		4 U	4 U	4 U	400 U	2000 U	4 U	2000 U	100 U
Bromomethane	5		2 U	2 U	2 U	200 U	1000 U	2 U	1000 U	50 U
Carbon disulfide	60		2 U	0.52 J	0.71 J	200 U	1000 U	2 U	1000 U	50 U
Carbon tetrachloride	5		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
Chlorobenzene	5		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
Chloroethane	5		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
Chloroform	7		1 U	1.2	0.77 J	100 U	500 U	1.2	500 U	25 U
Chloromethane			1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
cis-1,2-Dichloroethene	5		1 U	1 U	0.49 J	100 U	407 J	1 U	553	27.3
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
Cyclohexane			5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U
Dibromochloromethane	50		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
Dibromochloropropane			10 U	10 U	10 U	1000 U	5000 U	10 U	5000 U	250 U
Dichlorodifluoromethane	5		5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	MW-6	MW-7D	MW-8D	MW-8DI	MW-8I	MW-9D	MW-10	MW-11
Parameter	<b>AWQSGVs</b>	Sample Date:	2/21/2013	4/1/2013	4/1/2013	5/21/2013	4/1/2013	4/1/2013	4/1/2013	4/2/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	-	-	-	-	-	-	-	-
Ethylbenzene	5		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
Freon 113			5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U
Isopropylbenzene	5		2 U	2 U	2 U	200 U	1000 U	2 U	1000 U	50 U
m+p-Xylene	5		1 U	0.76 J	1 U	100 U	500 U	0.84 J	500 U	25 U
Methyl acetate			5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U
Methylcyclohexane			5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U
Methylene chloride	5		2 U	2 U	2 U	200 U	1000 U	2 U	1000 U	50 U
MTBE	10		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
o-Xylene	5		1 U	0.26 J	1 U	100 U	500 U	0.32 J	500 U	25 U
Styrene	5		5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U
Tetrachloroethene	5		4.8	3.6	189	12600	89600	42.8	61100	3480
Toluene	5		1 U	0.53 J	1 U	100 U	500 U	0.49 J	500 U	25 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
Trichloroethene	5		1 U	1 U	1.9	203	435 J	0.43 J	123 J	35
Trichlorofluoromethane	5		5 U	5 U	5 U	500 U	2500 U	5 U	2500 U	130 U
Vinyl chloride	2		1 U	1 U	1 U	100 U	500 U	1 U	500 U	25 U
Xylenes (total)	5		1 U	1	1 U	100 U	500 U	1.2	500 U	25 U
Total TIC, Volatile			0	0	0	2900 J	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:		MW-13		FB-022013			
Parameter	AWQSGVs	Sample Date:	4/1/2013	4/2/2013	4/2/2013	2/20/2013	4/1/2013	4/2/2013	4/25/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	-	-	-	GW FB	GW FB	GW FB	GW FB
	_								
1,1,1-Trichloroethane	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	50 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	50 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane			2 U	2 U	20 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U	130 U	1300 U	130 U	130 U	130 U	130 U
2-Butanone (MEK)	50		10 UJV	10 UJV	100 UJV	10 U	10 U	10 U	10 U
2-Hexanone	50		5 U	5 U	50 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	50 U	5 U	5 U	5 U	5 U
Acetone	50		10 UJV	10 UJV	100 UJV	10 U	10 U	10 U	10 U
Benzene	1		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Bromochloromethane	5		5 U	5 U	50 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Bromoform	50		4 U	4 U	40 U	4 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	20 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	20 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Chlorobenzene	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Chloroform	7		3	1 U	24.5	1 U	1 U	1 U	1 U
Chloromethane			1 U	1 UJV	10 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	77.8	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	50 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Dibromochloropropane			10 U	10 U	100 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	5		5 U	5 U	50 U	5 U	5 U	5 U	5 U
	-								

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	MW-12D	MW-13	MW-15	FB-022013	FB-040113	FB-040213	FB-042510
Parameter	AWQSGVs	Sample Date:	4/1/2013	4/2/2013	4/2/2013	2/20/2013	4/1/2013	4/2/2013	4/25/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	-	-	-	GW FB	GW FB	GW FB	GW FB
Ethylbenzene	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	50 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	20 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	50 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	50 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	20 U	2 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	10 U	1 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	50 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		11.3	2.7	1530	1 U	1 U	1 U	1 U
Toluene	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	10 U	1 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	22.9	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	50 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	10 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	6.3 J	0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

- J Estimated Value
- U Compound was analyzed for but not detected
- UJ The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise
- R The data are unusable. The analyte may or may not be present
- V Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:							
Parameter	AWQSGVs	Sample Date:		4/30/2013	5/1/2013	5/2/2013	5/3/2013	5/6/2013	5/8/2013
(Concentrations in µg/L)	(μg/L)	Sample Depth (ft bls):	GW FB	GW FB	GW FB	GW FB	GW FB	GW FB	GW FB
444 5014	_		4 **	4 **	4 **	4 **	4 **	4 **	4.77
1,1,1-Trichloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane			2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U	130 U	130 U	130 U	130 U	130 U	130 U
2-Butanone (MEK)	50		10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50		10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	1		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50		4 U	4 U	4 U	4 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane			1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloropropane			10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	FB-042913	FB-043013	FB-050113	FB-050213	FB-050313	FB-050613	FB-050813
Parameter	AWQSGVs	Sample Date:	4/29/2013	4/30/2013	5/1/2013	5/2/2013	5/3/2013	5/6/2013	5/8/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	GW FB						
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	0	0	0	0	6.3 J	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

- U Compound was analyzed for but not detected
- UJ The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise
- R The data are unusable. The analyte may or may not be present
- V Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (μg/L)	Sample Designation: Sample Date: Sample Depth (ft bls):	FB-050913 5/9/2013 GW FB	FB-051013 5/10/2013 GW FB	FB-051313 5/13/2013 GW FB	FB-052113 5/21/2013 GW FB	FB-021113 2/11/2013 Soil FB	FB-021413 2/14/2013 Soil FB
1,1,1-Trichloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane			1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	4.2	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	4.2 5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	<i>-</i> -		2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	2 U	2 U 1 U	2 U 1 U	2 U 1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	0.6		1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U	130 U	130 U	130 U	130 U	130 U
	 50		10 U	130 U 10 U	130 U	10 U	10 U	130 U
2-Butanone (MEK) 2-Hexanone	50 50		5 U	5 U	5 U	5 U	5 U	5 U
			5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	 50		10 U	10 U	5.1 J		10 U	3 U 10 U
Acetone Benzene	50 1		10 U	10 U	5.1 J 1 U	10 U 1 U	10 U	10 U
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	5 50		1 U	1 U	1 U	1 U	1 U	3 U
Bromoform	50		4 U	4 U	4 U	4 U	4 U	4 U
Bromomethane	5		4 U	4 U 2 U	4 U 2 U	4 U 2 U	4 U 2 U	2 U
Carbon disulfide	5 60		2 U	2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		2 U 1 U	2 U 1 U	2 U 1 U	2 U 1 U	2 U 1 U	2 U 1 U
Carbon tetracmoride Chlorobenzene	<i>5</i>		1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 7		1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	/		1 U	1 U	1 U	1 U	1 U	1 U
							1 U	1 U
cis-1,2-Dichloroethene	5 5		1 U 1 U	1 U 1 U	1 U 1 U	1 U 1 U	1 U 1 U	1 U 1 U
cis-1,3-Dichloropropene Cyclohexane	3 		5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U	3 U 1 U	1 U	3 U 1 U
Dibromochloropropane	50 		10 U	10 U	10 U	10 U	10 U	1 U 10 U
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U	5 U
Diemorountuoromethane	3		3 0	3 U	3 0	3 0	3 U	3 0

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	FB-050913	FB-051013	FB-051313	FB-052113	FB-021113	FB-021413
Parameter	AWQSGVs	Sample Date:	5/9/2013	5/10/2013	5/13/2013	5/21/2013	2/11/2013	2/14/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	GW FB	GW FB	GW FB	GW FB	Soil FB	Soil FB
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5		1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	0	22 J	34.7 J	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Parameter	AMOGOM	Sample Designation:	FB-022113	FB-022513	FB-022613	FB-030513	FB-030813
(0	AWQSGVs	Sample Date:	2/21/2013	2/25/2013	2/26/2013	3/5/2013	3/8/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	Soil FB				
1,1,1-Trichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	<i>3</i>		2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		2 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U				
2-Butanone (MEK)	50		10 U				
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	5 U	5 U
Acetone (WIBK)	50		10 U				
Benzene	1		1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		1 U	1 U	1 U	1 U	1 U
Bromoform	50		4 U	4 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5		1 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U
Chloroform	7		1 U	1 U	1 U	1 U	1 U
Chloromethane			1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U	1 U	1 U
Dibromochloropropane			10 U				
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	FB-022113	FB-022513	FB-022613	FB-030513	FB-030813
Parameter	AWQSGVs	Sample Date:	2/21/2013	2/25/2013	2/26/2013	3/5/2013	3/8/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	Soil FB				
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	1 U	1 U	1 U
Toluene	5		1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

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DUP - Duplicate

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Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in µg/L)  1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,3-Trichlorobenzene	AWQSGVs (μg/L) 5 5	Sample Date: Sample Depth (ft bls):	3/12/2013 Soil FB	3/13/2013 Soil FB	3/14/2013 Soil FB	3/15/2013 Soil FB	3/18/2013 Soil FB
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene	5 5 1	2					
1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene	5 1		1 U				201112
1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene	1			1 U	1 U	1 U	1 U
1,1-Dichloroethane 1,1-Dichloroethene	_		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	_		1 U	1 U	1 U	1 U	1 U
*	5		1 U	1 U	1 U	1 U	1 U
1 2 2 Triablanchangana	5		1 U	1 U	1 U	1 U	1 U
1,2,5-1110110100e11ze11e	5		5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane			2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U				
2-Butanone (MEK)	50		10 U				
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	5 U	5 U
Acetone	50		10 U				
Benzene	1		1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		1 U	1 U	1 U	1 U	1 U
Bromoform	50		4 U	4 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5		1 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U
Chloroform	7		1 U	1 U	1 U	1 U	1 U
Chloromethane			1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U	1 U	1 U
Dibromochloropropane			10 U				
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Parameter	NYSDEC AWQSGVs	Sample Designation: Sample Date:	FB-031213 3/12/2013	FB-031313 3/13/2013	FB-031413 3/14/2013	FB-031513 3/15/2013	FB-031813 3/18/2013
(Concentrations in µg/L)	_	Sample Date. Sample Depth (ft bls):	Soil FB				
(Concentrations in µg/L)	(µg/L)	Sample Depth (It bis).	3011 1 1	SOILLD	Soli I-D	Soli I.D	3011 1 1
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	1 U	1 U	1 U
Toluene	5		1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

- J Estimated Value
- U Compound was analyzed for but not detected
- UJ The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise
- R The data are unusable. The analyte may or may not be present
- V Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	FB-031913	FB-032113		TRIP BLANK	TRIP BLANK
Parameter	AWQSGVs	Sample Date:	3/19/2013	3/21/2013	4/26/2013	2/20/2013	2/21/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	Soil FB	Soil FB	Soil FB	GW Trip Blank	GW Trip Blank
1,1,1-Trichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane			2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U	130 U	130 U	130 U	130 U
2-Butanone (MEK)	50		10 U	10 U	10 U	10 U	10 U
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	5 U	5 U
Acetone	50		10 U	10 U	10 U	10 U	10 U
Benzene	1		1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		1 U	1 U	1 U	1 U	1 U
Bromoform	50		4 U	4 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5		1 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U
Chloroform	7		1 U	1 U	1 U	1 U	1 U
Chloromethane			1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U	1 U	1 U
Dibromochloropropane			10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U
Diemoroaniaoromenane	5		5 0	5 0	3 0	5 0	3.0

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	FB-031913	FB-032113	FB-042613	TRIP BLANK	TRIP BLANK
Parameter	AWQSGVs	Sample Date:	3/19/2013	3/21/2013	4/26/2013	2/20/2013	2/21/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	Soil FB	Soil FB	Soil FB	GW Trip Blank	GW Trip Blank
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	1 U	1 U	1 U
Toluene	5		1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	1 U	1 U	1 U
Total TIC, Volatile	J		0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

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R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

<b>D</b>	NYSDEC	Sample Designation:		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Parameter	AWQSGVs	Sample Date:	3/18/2013	4/1/2013	4/2/2013	4/30/2013	5/1/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	GW Trip Blank				
1,1,1-Trichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
	5						
1,2,3-Trichlorobenzene			5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane			2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U				
2-Butanone (MEK)	50		10 U				
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	5 U	5 U
Acetone	50		10 U				
Benzene	1		1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		1 U	1 U	1 U	1 U	1 U
Bromoform	50		4 U	4 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5		1 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U
Chloroform	7		1 U	1 U	1 U	1 U	1 U
Chloromethane			1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U	1 U	1 U
Dibromochloropropane			10 U				
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	TRIP BLANK				
Parameter	AWQSGVs	Sample Date:	3/18/2013	4/1/2013	4/2/2013	4/30/2013	5/1/2013
(Concentrations in $\mu g/L$ )	$(\mu g/L)$	Sample Depth (ft bls):	GW Trip Blank				
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	1 U	1 U	1 U
Toluene	5		1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

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- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

D	NYSDEC	Sample Designation:		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Parameter	AWQSGVs	Sample Date:	5/10/2013	5/13/2013	5/2/2013	5/21/2013	5/3/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	GW Trip Blank				
1,1,1-Trichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	1 U	1 U
			1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1						
1,1-Dichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane			2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U				
2-Butanone (MEK)	50		10 U				
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	5 U	5 U
Acetone	50		10 U				
Benzene	1		1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		1 U	1 U	1 U	1 U	1 U
Bromoform	50		4 U	4 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5		1 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U
Chloroform	7		1 U	1 U	1 U	1 U	1 U
Chloromethane			1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U	1 U	1 U
Dibromochloropropane			10 U				
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	TRIP BLANK				
Parameter	AWQSGVs	Sample Date:	5/10/2013	5/13/2013	5/2/2013	5/21/2013	5/3/2013
(Concentrations in $\mu g/L$ )	$(\mu g/L)$	Sample Depth (ft bls):	GW Trip Blank				
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	1 U	1 U	1 U
Toluene	5		1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	0	0	33.2 J	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in μg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: Sample Date: Sample Depth (ft bls):	5/6/2013	TRIP BLANK 5/8/2013 GW Trip Blank	TRIP BLANK 2/11/2013 Soil Trip Blank	TRIP BLANK 2/12/2013 Soil Trip Blank	TRIP BLANK 2/13/2013 Soil Trip Blank
1,1,1-Trichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	<del></del>		2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U	130 U	130 U	130 U	130 U
2-Butanone (MEK)	50		10 U	10 U	10 U	10 U	10 U
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	5 U	5 U
Acetone	50		10 U	10 U	10 U	10 U	10 U
Benzene	1		1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		1 U	1 U	1 U	1 U	1 U
Bromoform	50		4 U	4 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5		1 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U
Chloroform	7		1 U	1 U	1 U	1 U	1 U
Chloromethane			1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U	1 U	1 U
Dibromochloropropane			10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Downston	NYSDEC	Sample Designation:	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Parameter	AWQSGVs	Sample Date:	5/6/2013	5/8/2013	2/11/2013	2/12/2013	2/13/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	GW Trip Blank	GW Trip Blank	Soil Trip Blank	Soil Trip Blank	Soil Trip Blank
F-1 - 11	_		1.77	4.77	4.77	4.77	1.77
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	1 U	1 U	1 U
Toluene	5		1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U
-						_	_
Xylenes (total)	5		1 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

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R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Daramatar	NYSDEC	Sample Designation: Sample Date:	TRIP BLANK 2/14/2013	TRIP BLANK 2/15/2013	TRIP BLANK 2/21/2013	TRIP BLANK 2/25/2013	TRIP BLANK 2/26/2013
Parameter (Concentrations in ug/L)	AWQSGVs	_			2/21/2013 Soil Trip Blank	2/25/2013 Soil Trip Blank	2/26/2013 Soil Trip Blank
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	Soil Trip Blank	Son Trip Blank	Son Trip Blank	Son Trip Blank	Son Trip Blank
1,1,1-Trichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane			2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U	130 U	130 U	130 U	130 U
2-Butanone (MEK)	50		10 U	10 U	10 U	10 U	10 U
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	5 U	5 U
Acetone	50		10 U	10 U	10 U	10 U	10 U
Benzene	1		1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		1 U	1 U	1 U	1 U	1 U
Bromoform	50		4 U	4 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5		1 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U
Chloroform	7		1 U	1 U	1 U	1 U	1 U
Chloromethane			1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U	1 U	1 U
Dibromochloropropane			10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

-	NYSDEC	Sample Designation:	TRIP BLANK				
Parameter	AWQSGVs	Sample Date:	2/14/2013	2/15/2013	2/21/2013	2/25/2013	2/26/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	Soil Trip Blank				
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	1 U	1 U	1 U
Toluene	5		1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be present

V - Value altered or qualifier added during data validation

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Parameter	NYSDEC AWQSGVs	Sample Designation: Sample Date:	TRIP BLANK 3/12/2013	TRIP BLANK 3/14/2013	TRIP BLANK 3/15/2013	TRIP BLANK 3/19/2013	TRIP BLANK 3/21/2013
(Concentrations in $\mu$ g/L)	(µg/L)	Sample Depth (ft bls):			Soil Trip Blank	Soil Trip Blank	Soil Trip Blank
1,1,1-Trichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane			2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U	1 U	1 U
1,4-Dioxane			130 U				
2-Butanone (MEK)	50		10 U				
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U	5 U	5 U
Acetone	50		10 U				
Benzene	1		1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5		5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50		1 U	1 U	1 U	1 U	1 U
Bromoform	50		4 U	4 U	4 U	4 U	4 U
Bromomethane	5		2 U	2 U	2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5		1 U	1 U	1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U	1 U	1 U
Chloroform	7		1 U	1 U	1 U	1 U	1 U
Chloromethane			1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	1 U	1 U	1 U
Cyclohexane			5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U	1 U	1 U
Dibromochloropropane			10 U				
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	TRIP BLANK				
Parameter	AWQSGVs	Sample Date:	3/12/2013	3/14/2013	3/15/2013	3/19/2013	3/21/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	Soil Trip Blank				
Ethylbenzene	5		1 U	1 U	1 U	1 U	1 U
Freon 113			5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U	2 U	2 U
MTBE	10		1 U	1 U	1 U	1 U	1 U
o-Xylene	5		1 U	1 U	1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	1 U	1 U	1 U
Toluene	5		1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	1 U	1 U	1 U
Total TIC, Volatile			0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

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Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	TRIP BLANK	TRIP BLANK	TRIP BLANK
Parameter	AWQSGVs	Sample Date:	3/5/2013	3/6/2013	4/26/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	Soil Trip Blank	Soil Trip Blank	Soil Trip Blank
1,1,1-Trichloroethane	5		1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	1 U
1,1-Dichloroethane	5		1 U	1 U	1 U
1,1-Dichloroethene	5		1 U	1 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	5 U
1,2-Dibromoethane			2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	1 U
1,4-Dioxane			130 U	130 U	130 U
2-Butanone (MEK)	50		10 U	10 U	10 U
2-Hexanone	50		5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)			5 U	5 U	5 U
Acetone	50		10 U	10 U	10 U
Benzene	1		1 U	1 U	1 U
Bromochloromethane	5		5 U	5 U	5 U
Bromodichloromethane	50		1 U	1 U	1 U
Bromoform	50		4 U	4 U	4 U
Bromomethane	5		2 U	2 U	2 U
Carbon disulfide	60		2 U	2 U	2 U
Carbon tetrachloride	5		1 U	1 U	1 U
Chlorobenzene	5		1 U	1 U	1 U
Chloroethane	5		1 U	1 U	1 U
Chloroform	7		1 U	1 U	1 U
Chloromethane			1 U	1 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	1 U
Cyclohexane			5 U	5 U	5 U
Dibromochloromethane	50		1 U	1 U	1 U
Dibromochloropropane			10 U	10 U	10 U
Dichlorodifluoromethane	5		5 U	5 U	5 U

Table 8. Summary of Volatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	•	•		•	
	NYSDEC	Sample Designation:		TRIP BLANK	TRIP BLANK
Parameter	AWQSGVs	Sample Date:	3/5/2013	3/6/2013	4/26/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	Soil Trip Blank	Soil Trip Blank	Soil Trip Blank
Ethylbenzene	5		1 U	1 U	1 U
Freon 113			5 U	5 U	5 U
Isopropylbenzene	5		2 U	2 U	2 U
m+p-Xylene	5		1 U	1 U	1 U
Methyl acetate			5 U	5 U	5 U
Methylcyclohexane			5 U	5 U	5 U
Methylene chloride	5		2 U	2 U	2 U
MTBE	10		1 U	1 U	1 U
o-Xylene	5		1 U	1 U	1 U
Styrene	5		5 U	5 U	5 U
Tetrachloroethene	5		1 U	1 U	1 U
Toluene	5		1 U	1 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	1 U
trans-1,3-Dichloropropene			1 U	1 U	1 U
Trichloroethene	5		1 U	1 U	1 U
Trichlorofluoromethane	5		5 U	5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	1 U
Total TIC, Volatile			0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

ft bls - Feet below land surface

J - Estimated Value

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DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 9. Summary of Semivolatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:		MW-1 DUP	MW-2	MW-3	MW-4	MW-5	MW-6	MW-11	MW-13
Parameter	AWQSGVs	Sample Date:	2/20/2013	2/20/2013	2/21/2013	2/20/2013	2/20/2013	2/21/2013	2/21/2013	4/2/2013	4/2/2013
(Concentrations in µg/L)	(µg/L)		-	-	-	-	-	-	-	-	-
1 U Dinkanal			1 1 11	1 1 11	1 1 11	1 11	1 1 11	1 1 11	1 1 11	1 11	1 11
1,1'-Biphenyl			1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
1,2,4,5-Tetrachlorobenzene			2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
2,2'-oxybis (1-chloropropane)	5		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
2,3,4,6-Tetrachlorophenol			5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
2,4,5-Trichlorophenol			5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
2,4,6-Trichlorophenol			5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
2,4-Dichlorophenol	5		5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
2,4-Dimethylphenol	50		5.3 UJV	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
2,4-Dinitrophenol	10		21 U	22 U	21 U	21 U	22 U	21 U	22 U	20 U	20 U
2,4-Dinitrotoluene	5		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
2,6-Dinitrotoluene	5		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
2-Chloronaphthalene	10		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
2-Chlorophenol			5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
2-Methylnaphthalene			1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
2-Methylphenol			2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
2-Nitroaniline	5		5.3 RV	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
2-Nitrophenol			5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
3&4-Methylphenol			2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
3,3'-Dichlorobenzidine	5		5.3 RV	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
3-Nitroaniline	5		5.3 RV	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
4,6-Dinitro-2-methylphenol			21 U	22 U	21 U	21 U	22 U	21 U	22 U	20 U	20 U
4-Bromophenyl phenyl ether			2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
4-Chloro-3-methylphenol			5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
4-Chloroaniline	5		5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
4-Chlorophenyl phenyl ether			2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
4-Nitroaniline	5		5.3 RV	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
4-Nitrophenol			11 U	11 U	11 U	10 U	11 U	11 U	11 U	10 U	10 U
Acenaphthene	20		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.2	1.1 U	1 U	1 U
Acenaphthylene	20		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Acetophenone			2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
Anthracene	50		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Atrazine			5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
Benzaldehyde			5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
Benzo[a]anthracene	0.002		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Benzo[a]pyrene	0.002		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 UJV	1 U
Benzo[b]fluoranthene	0.002		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 UJV	1 U
Benzo[g,h,i]perylene	0.002		1.1 U 1.1 U	1.1 U 1.1 U	1.1 U 1.1 U	1 U	1.1 U 1.1 U	1.1 U 1.1 U	1.1 U 1.1 U	1 UJV 1 UJV	1 U
Benzo[k]fluoranthene	0.002		1.1 U 1.1 U	1.1 U 1.1 U	1.1 U 1.1 U	1 U	1.1 U 1.1 U	1.1 U 1.1 U	1.1 U 1.1 U	1 UJV 1 UJV	1 U
	0.002 5		2.1 U	1.1 U 2.2 U		2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
Bis(2-chloroethoxy)methane					2.1 U						
Bis(2-chloroethyl) ether	 E		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
Bis(2-ethylhexyl) phthalate	5		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.4	2.2 U	2 U	2 U
Butylbenzyl phthalate	50		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U

Table 9. Summary of Semivolatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	MW-1	MW-1 DUP	MW-2	MW-3	MW-4	MW-5	MW-6	MW-11	MW-13
Parameter	AWQSGVs	Sample Date:	2/20/2013	2/20/2013	2/21/2013	2/20/2013	2/20/2013	2/21/2013	2/21/2013	4/2/2013	4/2/2013
(Concentrations in µg/L)	(µg/L)		-	-	-	-	-	-	-	-	-
Caprolactam			2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
Carbazole			1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Chrysene	0.002		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Dibenzo[a,h]anthracene			1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 UJV	1 U
Dibenzofuran			5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
Diethyl phthalate	50		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
Dimethyl phthalate	50		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
Di-n-butyl phthalate	50		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
Di-n-octyl phthalate			2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 UJV	2 U
Fluoranthene	50		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Fluorene	50		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Hexachlorobenzene	0.04		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Hexachlorobutadiene	0.5		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Hexachlorocyclopentadiene	5		11 U	11 U	11 UJV	10 U	11 U	11 UJV	11 UJV	10 U	10 U
Hexachloroethane	5		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
Indeno[1,2,3-cd]pyrene	0.002		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 UJV	1 U
Isophorone	50		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
Naphthalene	10		3.3	4	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Nitrobenzene	0.4		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
n-Nitrosodi-n-propylamine			2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
n-Nitrosodiphenylamine	50		5.3 U	5.4 U	5.3 U	5.2 U	5.5 U	5.3 U	5.6 U	5 U	5 U
Pentachlorophenol	1		11 U	11 U	11 U	10 U	11 U	11 U	11 U	10 U	10 U
Phenanthrene	50		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Phenol	1		2.1 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2 U
Pyrene	50		1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U
Total TIC, Semi-Volatile			69.1 J	105.4 J	5 J	0	18.3 J	12 J	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

DUP - Duplicate

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be presen

V - Value altered or qualifier added during data validation

<sup>- -</sup> No NYSDEC AWQSGV available

Table 9. Summary of Semivolatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation: MW-15	FB-022013	FB-040213	FB-021113	FB-021413	FB-022113	FB-022513	FB-022613	FB-031513
Parameter	AWQSGVs	<b>Sample Date:</b> 4/2/2013		4/2/2013	2/11/2013		2/21/2013	2/25/2013	2/26/2013	3/15/2013
(Concentrations in µg/L)	(μg/L)	Sumple Bute: 1/2/2013	GW FB	GW FB	Soil FB	Soil FB	Soil FB	Soil FB	Soil FB	Soil FB
(Concentrations in µg/L)	(μg/L)		GWIB	GWIB	БонтВ	Bon i B	БонтВ	BOILLE	BOILLE	Boll I B
1,1'-Biphenyl		1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
1,2,4,5-Tetrachlorobenzene		2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
2,2'-oxybis (1-chloropropane)	5	2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
2,3,4,6-Tetrachlorophenol		5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
2,4,5-Trichlorophenol		5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
2,4,6-Trichlorophenol		5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
2,4-Dichlorophenol	5	5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
2,4-Dimethylphenol	50	5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
2,4-Dinitrophenol	10	21 U	20 U	20 U	20 U	20 U	22 U	20 U	22 U	21 U
2,4-Dinitrotoluene	5	2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
2,6-Dinitrotoluene	5	2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
2-Chloronaphthalene	10	2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
2-Chlorophenol		5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
2-Methylnaphthalene		1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
2-Methylphenol		2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
2-Nitroaniline	5	5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
2-Nitrophenol		5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
3&4-Methylphenol		2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
3,3'-Dichlorobenzidine	5	5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
3-Nitroaniline	5	5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
4,6-Dinitro-2-methylphenol		21 U	20 U	20 U	20 U	20 U	22 U	20 U	22 U	21 U
4-Bromophenyl phenyl ether		2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
4-Chloro-3-methylphenol		5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
4-Chloroaniline	5	5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
4-Chlorophenyl phenyl ether		2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
4-Nitroaniline	5	5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
4-Nitrophenol		11 U	10 U	10 U	10 U	10 U	11 U	10 U	11 U	11 U
Acenaphthene	20	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Acenaphthylene	20	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Acetophenone		2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
Anthracene	50	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Atrazine		5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
Benzaldehyde		5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
Benzo[a]anthracene	0.002	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Benzo[a]pyrene	0	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Benzo[b]fluoranthene	0.002	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Benzo[g,h,i]perylene		1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Benzo[k]fluoranthene	0.002	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Bis(2-chloroethoxy)methane	5	2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
Bis(2-chloroethyl) ether		2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
Bis(2-ethylhexyl) phthalate	5	2.1 U	2 U	2 U	2 U	2 U	1.3 JB	2 U	2.2 U	2.1 U
Butylbenzyl phthalate	50	2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U

Table 9. Summary of Semivolatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation: MW-1	5 FB-022013	FB-040213	FB-021113	FB-021413	FB-022113	FB-022513	FB-022613	FB-031513
Parameter	AWQSGVs	Sample Date: 4/2/20	3 2/20/2013	4/2/2013	2/11/2013	2/14/2013	2/21/2013	2/25/2013	2/26/2013	3/15/2013
(Concentrations in µg/L)	$(\mu g/L)$	-	GW FB	GW FB	Soil FB	Soil FB	Soil FB	Soil FB	Soil FB	Soil FB
Caprolactam		2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
Carbazole		1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Chrysene	0.002	1.1 U		1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Dibenzo[a,h]anthracene		1.1 U		1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Dibenzofuran		5.3 U		5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
Diethyl phthalate	50	2.1 U		2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
Dimethyl phthalate	50	2.1 U		2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
Di-n-butyl phthalate	50	2.1 U		2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
Di-n-octyl phthalate		2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
Fluoranthene	50	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Fluorene	50	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Hexachlorobenzene	0.04	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Hexachlorobutadiene	0.5	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Hexachlorocyclopentadiene	5	11 U	10 U	10 U	10 U	10 U	11 U	10 U	11 U	11 U
Hexachloroethane	5	2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
Indeno[1,2,3-cd]pyrene	0.002	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Isophorone	50	2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
Naphthalene	10	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Nitrobenzene	0.4	2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
n-Nitrosodi-n-propylamine		2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
n-Nitrosodiphenylamine	50	5.3 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5.6 U	5.3 U
Pentachlorophenol	1	11 U	10 U	10 U	10 U	10 U	11 U	10 U	11 U	11 U
Phenanthrene	50	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Phenol	1	2.1 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U
Pyrene	50	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Total TIC, Semi-Volatile		0	13.6 J	0	0	0	15.6 J	0	0	6.3 J

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

DUP - Duplicate

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be presen

V - Value altered or qualifier added during data validation

<sup>- -</sup> No NYSDEC AWQSGV available

Table 9. Summary of Semivolatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

		1		*	
	NYSDEC	Sample Designation:			FB-042613
Parameter	AWQSGVs	Sample Date:	3/18/2013	3/21/2013	4/26/2013
(Concentrations in µg/L)	$(\mu g/L)$		Soil FB	Soil FB	Soil FB
1,1'-Biphenyl			1.1 U	1 U	1 U
1,2,4,5-Tetrachlorobenzene			2.2 U	2 U	2 U
2,2'-oxybis (1-chloropropane)	5		2.2 U	2 U	2 U
2,3,4,6-Tetrachlorophenol			5.4 U	5 U	5 U
2,4,5-Trichlorophenol			5.4 U	5 U	5 U
2,4,6-Trichlorophenol			5.4 U	5 U	5 U
2,4-Dichlorophenol	5		5.4 U	5 U	5 U
2,4-Dimethylphenol	50		5.4 U	5 U	5 U
2,4-Dinitrophenol	10		22 U	20 U	20 U
2,4-Dinitrotoluene	5		2.2 U	2 U	2 U
2,6-Dinitrotoluene	5		2.2 U	2 U	2 U
2-Chloronaphthalene	10		2.2 U	2 U	2 U
2-Chlorophenol			5.4 U	5 U	5 U
2-Methylnaphthalene			1.1 U	1 U	1 U
2-Methylphenol			2.2 U	2 U	2 U
2-Nitroaniline	5		5.4 U	5 U	5 U
2-Nitrophenol			5.4 U	5 U	5 U
3&4-Methylphenol			2.2 U	2 U	2 U
3,3'-Dichlorobenzidine	5		5.4 U	5 U	5 U
3-Nitroaniline	5		5.4 U	5 U	5 U
4,6-Dinitro-2-methylphenol			22 U	20 U	20 U
4-Bromophenyl phenyl ether			2.2 U	2 U	2 U
4-Chloro-3-methylphenol			5.4 U	5 U	5 U
4-Chloroaniline	5		5.4 U	5 U	5 U
4-Chlorophenyl phenyl ether			2.2 U	2 U	2 U
4-Nitroaniline	5		5.4 U	5 U	5 U
4-Nitrophenol			11 U	10 U	10 U
Acenaphthene	20		1.1 U	1 U	1 U
Acenaphthylene	20		1.1 U	1 U	1 U
Acetophenone			2.2 U	2 U	2 U
Anthracene	50		1.1 U	1 U	1 U
Atrazine			5.4 U	5 U	5 U
Benzaldehyde			5.4 U	5 U	5 U
Benzo[a]anthracene	0.002		1.1 U	1 U	1 U
Benzo[a]pyrene	0		1.1 U	1 U	1 U
Benzo[b]fluoranthene	0.002		1.1 U	1 U	1 U
Benzo[g,h,i]perylene			1.1 U	1 U	1 U
Benzo[k]fluoranthene	0.002		1.1 U	1 U	1 U
Bis(2-chloroethoxy)methane	5		2.2 U	2 U	2 U
Bis(2-chloroethyl) ether			2.2 U	2 U	2 U
Bis(2-ethylhexyl) phthalate	5		2.2 U	2 U	2 U
Butylbenzyl phthalate	50		2.2 U	2 U	2 U
J 7 F				-	-

Table 9. Summary of Semivolatile Organic Compounds in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

•	U	-	1	· *	· · · · · · · · · · · · · · · · · · ·
	NYSDEC	Sample Designation:	FB-031813	FB-032113	FB-042613
Parameter	AWQSGVs	Sample Date:	3/18/2013	3/21/2013	4/26/2013
(Concentrations in µg/L)	$(\mu g/L)$		Soil FB	Soil FB	Soil FB
			2211	2.11	2.11
Caprolactam			2.2 U	2 U	2 U
Carbazole			1.1 U	1 U	1 U
Chrysene	0.002		1.1 U	1 U	1 U
Dibenzo[a,h]anthracene			1.1 U	1 U	1 U
Dibenzofuran			5.4 U	5 U	5 U
Diethyl phthalate	50		2.2 U	2 U	2 U
Dimethyl phthalate	50		2.2 U	2 U	2 U
Di-n-butyl phthalate	50		2.2 U	2 U	2 U
Di-n-octyl phthalate			2.2 U	2 U	2 U
Fluoranthene	50		1.1 U	1 U	1 U
Fluorene	50		1.1 U	1 U	1 U
Hexachlorobenzene	0.04		1.1 U	1 U	1 U
Hexachlorobutadiene	0.5		1.1 U	1 U	1 U
Hexachlorocyclopentadiene	5		11 U	10 U	10 U
Hexachloroethane	5		2.2 U	2 U	2 U
Indeno[1,2,3-cd]pyrene	0.002		1.1 U	1 U	1 U
Isophorone	50		2.2 U	2 U	2 U
Naphthalene	10		1.1 U	1 U	1 U
Nitrobenzene	0.4		2.2 U	2 U	2 U
n-Nitrosodi-n-propylamine			2.2 U	2 U	2 U
n-Nitrosodiphenylamine	50		5.4 U	5 U	5 U
Pentachlorophenol	1		11 U	10 U	10 U
Phenanthrene	50		1.1 U	1 U	1 U
Phenol	1		2.2 U	2 U	2 U
Pyrene	50		1.1 U	1 U	1 U
Total TIC, Semi-Volatile	20		31.2 J	82.5 J	132.3 J

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

DUP - Duplicate

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

R - The data are unusable. The analyte may or may not be presen

V - Value altered or qualifier added during data validation

<sup>- -</sup> No NYSDEC AWQSGV available

Table 10. Summary of Metals in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

Parameter (Concentrations in μg/L) (μg/ Aluminum	L) Sample Depth (ft bls):	- 270 JV 6 UJV	2/20/2013 - 308 JV	2/21/2013 - 2870 JV	2/20/2013 - 3190 JV	-	2/21/2013	2/21/2013	4/1/2013	4/2/2013
Aluminum		270 JV 6 UJV						-	-	-
Antimony 3		6 UJV		2870 JV	2100 11/					
Antimony 3		6 UJV		2870 JV	2100 117	4400 ***				
			< A TT7		3190 J V	1190 JV	4770 JV	1440 JV	518	10500
Arsenic 25			6.2 JV	6 UJV	6 UJV	6 UJV	6 UJV	6 UJV	6 U	6 U
7 Histilic 25	Λ.	3 UJV	6.9 JV	3 U	3 U	4.2	5.7	3 U	3 U	3.2
Barium 100	0	200 U	200 U	200 U	200 U	200 U	201	200 U	200 U	200 U
Beryllium 3		1 UJV	5.4 JV	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cadmium 5		3 UJV	6 JV	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Calcium		101000	99900	113000	73500	67900	174000	85400	159000	55200
Chromium, Hexavalent 50		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chromium 50		10 U	10 U	10 U	10 U	10 U	11.4	10 U	10 U	28.6
Cobalt		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Copper 20		10 UJV	10 UJV	10 UJV	13.4 JV	10 UJV	15.8 JV	10 UJV	10 U	21.4
Iron 30		403	427	5720	6930	2860	23200	3080	<b>753</b>	19600
Lead 25		3 U	6.3	4.5	3.1	3 U	5.1	3 U	3 U	32.2
Magnesium		23500	23400	28500	12400	19700	25900	20400	37500	20300
Manganese 30	)	433	434	422	1180	2410	1370	148	1110	1320
Mercury 0.	•	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel 10	)	10 U	10 U	11.3	10 U	11.3	10 U	10 U	10 U	21.9
Potassium		10200 JV	10300 JV	13300 JV	12200 JV	10000 UJV	29600 JV	10000 UJV	10200	10000 U
Selenium 10		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Silver 50		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Sodium 200		155000	152000	168000	111000	72600	641000	23500	129000	111000
Thallium 0.5	<b>i</b>	10 U	10 U	10 U	10 U	10 U	10 U	10 U	2 U	10 U
Vanadium		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Zinc 200	0	20 U	20 U	20 U	20 U	20 U	20.4	20 U	20 U	49.3

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

ft bls - Feet below land surface

μg/L -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

NA - Not analyzed

DUP - Duplicate

<sup>- -</sup> No NYSDEC AWQSGV available

Table 10. Summary of Metals in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	MW-13	MW-15	FB-022013	FB-040113	FB-040213	FB-021113	FB-021413	FB-022113	FB-022513
Parameter	AWQSGVs	Sample Date:	4/2/2013	4/2/2013	2/20/2013	4/1/2013	4/2/2013	2/11/2013	2/14/2013	2/21/2013	2/25/2013
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):	-	-	GW FB	GW FB	GW FB	Soil FB	Soil FB	Soil FB	Soil FB
											_
Aluminum			75500	24700	200 U						
Antimony	3		12 U	12 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Arsenic	25		23	19.8	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Barium	1000		569	400 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Beryllium	3		2.8	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cadmium	5		6 U	6 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Calcium			125000	147000	5000 U						
Chromium, Hexavalent	50		10 U	10 U	10 U	10 U	10 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium	50		158	69.6	10 U						
Cobalt			100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Copper	200		133	51.6	10 U						
Iron	300		151000	49100	100 U						
Lead	25		69.2	56.8	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Magnesium			31200	34000	5000 U						
Manganese	300		5020	2330	15 U						
Mercury	0.7		1.2 U	0.6 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100		123	37	10 U						
Potassium			24200	20000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U
Selenium	10		20 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Silver	50		20 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Sodium	20000		30400	186000	10000 U						
Thallium	0.5		20 U	20 U	10 U	2 U	20 U	2 U	2 U	10 U	2 U
Vanadium			195	100 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Zinc	2000		349	119	20 U						

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

ft bls - Feet below land surface

μg/L -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

NA - Not analyzed

DUP - Duplicate

<sup>- -</sup> No NYSDEC AWQSGV available

Table 10. Summary of Metals in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	FB-022613	FB-031513	FB-031813	FB-032113	FB-042613
Parameter	AWQSGVs	Sample Date:	2/26/2013	3/15/2013	3/18/2013	3/21/2013	4/26/2013
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):	Soil FB				
Aluminum			200 U				
Antimony	3		6 U	6 U	6 U	6 U	6 U
Arsenic	25		3 U	3 U	3 U	3 U	3 U
Barium	1000		200 U				
Beryllium	3		1 U	1 U	1 U	1 U	1 U
Cadmium	5		3 U	3 U	3 U	3 U	3 U
Calcium			5000 U				
Chromium, Hexavalent	50		0.01 U				
Chromium	50		10 U				
Cobalt			50 U				
Copper	200		10 U				
Iron	300		100 U				
Lead	25		3 U	3 U	3 U	3 U	3 U
Magnesium			5000 U				
Manganese	300		15 U				
Mercury	0.7		0.2 U				
Nickel	100		10 U				
Potassium			10000 U				
Selenium	10		10 U				
Silver	50		10 U				
Sodium	20000		10000 U				
Thallium	0.5		2 U	2 U	2 U	2 U	2 U
Vanadium			50 U				
Zinc	2000		20 U				

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

ft bls - Feet below land surface

μg/L -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

UJ - The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise

V - Value altered or qualifier added during data validation

NA - Not analyzed

DUP - Duplicate

<sup>- -</sup> No NYSDEC AWQSGV available

Table 11. Summary of Polychlorinated Biphenyls in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	MW-1	MW-1 DUP	MW-2	MW-3	MW-4	MW-5	MW-6	MW-10
Parameter	<b>AWQSGVs</b>	Sample Date:	2/20/2013	2/20/2013	2/21/2013	2/20/2013	2/20/2013	2/21/2013	2/21/2013	4/1/2013
(Concentrations in µg/L)	$(\mu g/L)$		-	-	-	-	-	-	-	-
Aroclor-1016			0.53 U	0.52 U	0.56 U	0.5 U	0.56 U	0.55 U	0.56 U	0.5 U
Aroclor-1221			0.53 U	0.52 U	0.56 U	0.5 U	0.56 U	0.55 U	0.56 U	0.5 U
Aroclor-1232			0.53 U	0.52 U	0.56 U	0.5 U	0.56 U	0.55 U	0.56 U	0.5 U
Aroclor-1242			0.53 U	0.52 U	0.56 U	0.5 U	0.56 U	0.55 U	0.56 U	0.5 U
Aroclor-1248			0.53 U	0.52 U	0.56 U	0.5 U	0.56 U	0.55 U	0.56 U	0.5 U
Aroclor-1254			0.53 U	0.52 U	0.56 U	0.5 U	0.56 U	0.55 U	0.56 U	0.5 U
Aroclor-1260			0.53 U	0.52 U	0.56 U	0.5 U	0.56 U	0.55 U	0.56 U	0.5 U
Aroclor-1262			0.53 U	0.52 U	0.56 U	0.5 U	0.56 U	0.55 U	0.56 U	0.5 U
Aroclor-1268			0.53 U	0.52 U	0.56 U	0.5 U	0.56 U	0.55 U	0.56 U	0.5 U
Total PCBs	0.09		0	0	0	0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

 $\mu g/L$  -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

PCBs - Polychlorinated Biphenyls

Table 11. Summary of Polychlorinated Biphenyls in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	MW-11	MW-13	MW-15	FB-022013	FB-040113	FB-040213	FB-021113	FB-021413
Parameter	<b>AWQSGVs</b>	Sample Date:	4/2/2013	4/2/2013	4/2/2013	2/20/2013	4/1/2013	4/2/2013	2/11/2013	2/14/2013
(Concentrations in µg/L)	$(\mu g/L)$		-	-	-	GW FB	GW FB	GW FB	Soil FB	Soil FB
Aroclor-1016			0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.6 U	0.53 U
Aroclor-1221			0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.6 U	0.53 U
Aroclor-1232			0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.6 U	0.53 U
Aroclor-1242			0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.6 U	0.53 U
Aroclor-1248			0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.6 U	0.53 U
Aroclor-1254			0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.6 U	0.53 U
Aroclor-1260			0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.6 U	0.53 U
Aroclor-1262			0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.6 U	0.53 U
Aroclor-1268			0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.6 U	0.53 U
Total PCBs	0.09		0	0	0	0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

 $\mu g/L$  -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

PCBs - Polychlorinated Biphenyls

Table 11. Summary of Polychlorinated Biphenyls in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	FB-022113	FB-022513	FB-022613	FB-031513	FB-031813	FB-032113	FB-042613
Parameter	AWQSGVs	Sample Date:	2/21/2013	2/25/2013	2/26/2013	3/15/2013	3/18/2013	3/21/2013	4/26/2013
(Concentrations in µg/L)	$(\mu g/L)$		Soil FB						
Aroclor-1016			0.51 U	0.5 U	0.5 U	0.54 U	0.5 U	0.57 U	0.5 U
Aroclor-1221			0.51 U	0.5 U	0.5 U	0.54 U	0.5 U	0.57 U	0.5 U
Aroclor-1232			0.51 U	0.5 U	0.5 U	0.54 U	0.5 U	0.57 U	0.5 U
Aroclor-1242			0.51 U	0.5 U	0.5 U	0.54 U	0.5 U	0.57 U	0.5 U
Aroclor-1248			0.51 U	0.5 U	0.5 U	0.54 U	0.5 U	0.57 U	0.5 U
Aroclor-1254			0.51 U	0.5 U	0.5 U	0.54 U	0.5 U	0.57 U	0.5 U
Aroclor-1260			0.51 U	0.5 U	0.5 U	0.54 U	0.5 U	0.57 U	0.5 U
Aroclor-1262			0.51 U	0.5 U	0.5 U	0.54 U	0.5 U	0.57 U	NA
Aroclor-1268			0.51 U	0.5 U	0.5 U	0.54 U	0.5 U	0.57 U	NA
Total PCBs	0.09		0	0	0	0	0	0	0

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

 $\mu g/L$  -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

PCBs - Polychlorinated Biphenyls

Table 12. Summary of Pesticides and Herbicides in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

-	NYSDEC	Sample Designation:	MW-1	MW-1 DUP	MW-2	MW-3	MW-4	MW-5	MW-6	MW-10
Parameter	AWQSGVs	Sample Date:	2/20/2013	2/20/2013	2/21/2013	2/20/2013	2/20/2013	2/21/2013	2/21/2013	4/1/2013
(Concentrations in µg/L)	$(\mu g/L)$		-	-	-	-	-	-	-	
2,4,5-T			0.1 U	NA						
2,4,5-TP	0.26		0.1 U	NA						
2,4-D	50		0.5 U	NA						
2,4-DB			0.5 U	NA						
4,4'-DDD	0.3		0.011 U	0.01 U	0.025	0.01 U	0.011 U	0.011 U	0.011 U	0.044
4,4'-DDE	0.2		0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
4,4'-DDT	0.2		0.011 U	0.01 U	0.19	0.01 U	0.011 U	0.011 U	0.011 U	0.18
Aldrin	0		0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
alpha-BHC			0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
alpha-Chlordane			0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
beta-BHC			0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
Dalapon			0.1 U	NA						
delta-BHC			0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
Dicamba			0.1 U	NA						
Dichloroprop			0.5 U	NA						
Dieldrin	0.004		0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
Dinoseb			0.5 U	NA						
Endosulfan I			0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
Endosulfan II			0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
Endosulfan sulfate			0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
Endrin aldehyde	5		0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
Endrin ketone			0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
Endrin	0		0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
gamma-BHC (Lindane)			0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
gamma-Chlordane	0		0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
Heptachlor epoxide	0.03		0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
Heptachlor	0.04		0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.01 U
MCPA			50 U	NA						
MCPP			50 U	NA						

Table 12. Summary of Pesticides and Herbicides in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	MW-1	MW-1 DUP	MW-2	MW-3	MW-4	MW-5	MW-6	MW-10
Parameter	AWQSGVs	Sample Date:	2/20/2013	2/20/2013	2/21/2013	2/20/2013	2/20/2013	2/21/2013	2/21/2013	4/1/2013
(Concentrations in µg/L)	$(\mu g/L)$		-	-	=	-	-	-	-	-
Methoxychlor	35		0.021 U	0.021 U	0.022 U	0.02 U	0.022 U	0.022 U	0.022 U	0.02 U
Pentachlorophenol	1		0.05 U	NA						
Toxaphene	0.06		0.26 U	0.26 U	0.28 U	0.25 U	0.28 U	0.27 U	0.28 U	0.25 U
_										

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

U - Compound was analyzed for but not detected

NA - Not analyzed

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 12. Summary of Pesticides and Herbicides in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

-	NYSDEC	Sample Designation:	MW-11	MW-13	MW-15	FB-022013	FB-040113	FB-040213	FB-021113	FB-021413
Parameter	AWQSGVs	Sample Date:	4/2/2013	4/2/2013	4/2/2013	2/20/2013	4/1/2013	4/2/2013	2/11/2013	2/14/2013
(Concentrations in µg/L)	(µg/L)		-	-	-	GW FB	GW FB	GW FB	Soil FB	Soil FB
2,4,5-T			NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
2,4,5-TP	0.26		NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
2,4-D	50		NA	NA	NA	0.5 U	NA	NA	0.52 U	0.5 U
2,4-DB			NA	NA	NA	0.5 U	NA	NA	0.52 U	0.5 U
4,4'-DDD	0.3		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
4,4'-DDE	0.2		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
4,4'-DDT	0.2		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
Aldrin	0		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
alpha-BHC			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
alpha-Chlordane			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
beta-BHC			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
Dalapon			NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
delta-BHC			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
Dicamba			NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
Dichloroprop			NA	NA	NA	0.5 U	NA	NA	0.52 U	0.5 U
Dieldrin	0.004		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
Dinoseb			NA	NA	NA	0.5 U	NA	NA	0.52 U	0.5 U
Endosulfan I			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
Endosulfan II			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
Endosulfan sulfate			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
Endrin aldehyde	5		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
Endrin ketone			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
Endrin	0		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
gamma-BHC (Lindane)			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
gamma-Chlordane	0		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
Heptachlor epoxide	0.03		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
Heptachlor	0.04		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.011 U
MCPA			NA	NA	NA	50 U	NA	NA	52 U	50 U
MCPP			NA	NA	NA	50 U	NA	NA	52 U	50 U

Table 12. Summary of Pesticides and Herbicides in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	MW-11	MW-13	MW-15	FB-022013	FB-040113	FB-040213	FB-021113	FB-021413
Parameter	AWQSGVs	Sample Date:	4/2/2013	4/2/2013	4/2/2013	2/20/2013	4/1/2013	4/2/2013	2/11/2013	2/14/2013
(Concentrations in µg/L)	$(\mu g/L)$		-	-	-	GW FB	GW FB	GW FB	Soil FB	Soil FB
Methoxychlor	35		0.02 U	0.02 U	0.02 U	0.021 U	0.02 U	0.02 U	0.024 U	0.021 U
Pentachlorophenol	1		NA	NA	NA	0.05 U	NA	NA	0.052 U	0.05 U
Toxaphene	0.06		0.25 U	0.25 U	0.25 U	0.26 U	0.25 U	0.25 U	0.3 U	0.26 U
-										

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

U - Compound was analyzed for but not detected

NA - Not analyzed

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 12. Summary of Pesticides and Herbicides in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	FB-022113	FB-022513	FB-022613	FB-031513	FB-031813	FB-032113	FB-042613
Parameter	AWQSGVs	Sample Date:	2/21/2013	2/25/2013	2/26/2013	3/15/2013	3/18/2013	3/21/2013	4/26/2013
(Concentrations in µg/L)	$(\mu g/L)$		Soil FB						
2,4,5-T			0.1 U	1 U	0.11 U				
2,4,5-TP	0.26		0.1 U	1 U	0.11 U				
2,4-D	50		0.5 U	0.5 U	0.51 U	0.52 U	0.5 U	5 U	0.54 U
2,4-DB			0.5 U	0.5 U	0.51 U	0.52 U	0.5 U	5 U	0.54 U
4,4'-DDD	0.3		0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
4,4'-DDE	0.2		0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
4,4'-DDT	0.2		0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
Aldrin	0		0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
alpha-BHC			0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
alpha-Chlordane			0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
beta-BHC			0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
Dalapon			0.1 U	1 U	0.11 U				
delta-BHC			0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
Dicamba			0.1 U	1 U	0.11 U				
Dichloroprop			0.5 U	0.5 U	0.51 U	0.52 U	0.5 U	5 U	0.54 U
Dieldrin	0.004		0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
Dinoseb			0.5 U	0.5 U	0.51 U	0.52 U	0.5 U	5 U	0.54 U
Endosulfan I			0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
Endosulfan II			0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
Endosulfan sulfate			0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
Endrin aldehyde	5		0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
Endrin ketone			0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
Endrin	0		0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
gamma-BHC (Lindane)			0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
gamma-Chlordane	0		0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
Heptachlor epoxide	0.03		0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
Heptachlor	0.04		0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.01 U	0.01 U
MCPA			50 U	50 U	51 U	52 U	50 U	500 U	54 U
MCPP			50 U	50 U	51 U	52 U	50 U	500 U	54 U

Table 12. Summary of Pesticides and Herbicides in Groundwater Samples, 149 Kent Avenue, Brooklyn, New York

	NYSDEC	Sample Designation:	FB-022113	FB-022513	FB-022613	FB-031513	FB-031813	FB-032113	FB-042613
Parameter	AWQSGVs	Sample Date:	2/21/2013	2/25/2013	2/26/2013	3/15/2013	3/18/2013	3/21/2013	4/26/2013
(Concentrations in µg/L)	$(\mu g/L)$		Soil FB						
									_
Methoxychlor	35		0.02 U	0.02 U	0.02 U	0.021 U	0.02 U	0.021 U	0.02 U
Pentachlorophenol	1		0.05 U	0.05 U	0.051 U	0.052 U	0.05 U	0.5 U	0.054 U
Toxaphene	0.06		0.26 U	0.25 U	0.25 U	0.26 U	0.25 U	0.26 U	0.25 U
•									

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

μg/L -Micrograms per liter

U - Compound was analyzed for but not detected

NA - Not analyzed

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 13. Summary of Volatile Organic Compounds in Soil Vapor Samples, 149 Kent Avenue, Brooklyn, New York

Analyte (Concentrations in µg/m³)	Sample Designation: Sample Date:	SS-6 4/2/2013	SS-7 4/2/2013	SV-1 4/2/2013	SV-1 4/23/2013	SV-2 4/2/2013	SV-3 4/2/2013
Carbon tetrachloride		4.5 J	39	3600 U	17000 U	5 U	5 U
Tetrachloroethene		443	268	15400000	25300000	4790	143
1,1,1-Trichloroethane		6.5	33	2840 J	15000 U	424	2.7 J
Trichloroethene		90.8	455	10400	8710	48	23
1,1,2,2-Tetrachloroethane		5.5 U	5.5 U	4000 U	19000 U	5.5 U	5.5 U
1,1,2-Trichloroethane		4.4 U	4.4 U	3200 U	15000 U	4.4 U	4.4 U
1,1-Dichloroethane		3.2 U	3.2 U	2300 U	11000 U	3.2 U	3.2 U
1,1-Dichloroethene		3.2 U	2.9 J	2300 U	11000 U	3.2 U	3.2 U
1,2,4-Trichlorobenzene		5.9 U	5.9 U	4300 U	20000 U	5.9 U	5.9 U
1,2,4-Trimethylbenzene		6.4	4.6	2900 U	13000 U	11	3.9 U
1,2-Dibromoethane		6.1 U	6.1 U	4500 U	21000 U	6.1 U	6.1 U
1,2-Dichlorobenzene		4.8 U	4.8 U	3500 U	16000 U	4.8 U	4.8 U
1,2-Dichloroethane		3.2 U	3.2 U	2300 U	11000 U	3.2 U	3.2 U
1,2-Dichloropropane		3.7 U	3.7 U	2700 U	12000 U	3.7 U	3.7 U
1,3,5-Trimethylbenzene		2.1 J	3.9 U	2900 U	13000 U	3.6 J	3.9 U
1,3-Butadiene		1.8 U	1.8 U	1300 U	6000 U	1.8 U	1.8 U
1,3-Dichlorobenzene		4.8 U	4.8 U	3500 U	16000 U	4.8 U	4.8 U
1,4-Dichlorobenzene		4.8 U	4.8 U	3500 U	16000 U	4.8 U	4.8 U
1,4-Dioxane		2.9 U	2.9 U	2100 U	9700 U	2.9 U	2.9 U
2-Butanone (MEK)		2.4 U	2.4 U	1700 U	8000 U	2.4 U	2.4 U
2-Chlorotoluene		4.1 U	4.1 U	3000 U	14000 U	4.1 U	4.1 U
2-Hexanone		3.3 U	3.3 U	2400 U	11000 U	3.3 U	3.3 U
3-Chloropropene		2.5 U	2.5 U	1800 U	8500 U	2.5 U	2.5 U
4-Ethyltoluene		2.1 J	3.9 U	2900 U	13000 U	4.5	3.9 U
4-Methyl-2-pentanone (MIBK)		3.3 U	3.3 U	2400 U	11000 U	3.3 U	3.3 U
Acetone		<b>5.7</b>	12	1400 U	6400 U	4.3	14
Benzene		2.6 U	2.6 U	1900 U	8600 U	1.4 J	2.6 U
Benzyl chloride		4.1 U	4.1 U	3000 U	14000 U	4.1 U	4.1 U
Bromodichloromethane		5.4 U	5.4 U	3900 U	18000 U	5.4 U	5.4 U
Bromoethene		3.5 U	3.5 U	2500 U	12000 U	3.5 U	3.5 U
Bromoform		8.3 U	8.3 U	6000 U	28000 U	8.3 U	8.3 U

Table 13. Summary of Volatile Organic Compounds in Soil Vapor Samples, 149 Kent Avenue, Brooklyn, New York

Analyte (Concentrations in μg/m³)	Sample Designation: Sample Date:	SS-6 4/2/2013	SS-7 4/2/2013	SV-1 4/2/2013	SV-1 4/23/2013	SV-2 4/2/2013	SV-3 4/2/2013
Bromomethane		3.1 U	3.1 U	2300 U	10000 U	3.1 U	3.1 U
Carbon disulfide		2.5 U	2.5 U	1800 U	8400 U	45.2	2.5 U
Chlorobenzene		3.7 U	3.7 U	2700 U	12000 U	3.7 U	3.7 U
Chloroethane		2.1 U	2.1 U	1500 U	7100 U	2.1 U	2.1 U
Chloroform		3.9 U	19	2800 U	13000 U	21	3.9 U
Chloromethane		1.7 U	1.7 U	1200 U	5600 U	1.7 U	1.7 U
cis-1,2-Dichloroethene		3.2 U	16	6820	7060 J	3.2 U	3.2 U
cis-1,3-Dichloropropene		3.6 U	3.6 U	2600 U	12000 U	3.6 U	3.6 U
Cyclohexane		2.8 U	2.8 U	2000 U	9300 U	2.8 U	2.8 U
Dibromochloromethane		6.8 U	6.8 U	4900 U	23000 U	6.8 U	6.8 U
Dichlorodifluoromethane		7.4	4 U	2900 U	13000 U	47	2.7 J
Ethanol		3.8 U	18	2800 U	13000 U	3.8 U	3.8 U
Ethyl Acetate		2.9 U	2.9 U	2100 U	9700 U	2.9 U	2.9 U
Ethylbenzene		8.3	<b>8.7</b>	2500 U	12000 U	13	3.5 U
Freon 113		6.1 U	27	4400 U	21000 U	6.1 U	6.1 U
Freon 114		5.6 U	5.6 U	4100 U	19000 U	5.6 U	5.6 U
Heptane		2.5 J	3.3 U	2400 U	11000 U	6.6	3.3 U
Hexachlorobutadiene		8.5 U	8.5 U	6200 U	29000 U	8.5 U	8.5 U
Hexane		2.8 U	2.8 U	2000 U	9500 U	2.2 J	2.8 U
Isooctane		3.7 U	3.7 U	2700 U	13000 U	3.7 U	3.7 U
Isopropanol		2 U	2 U	1400 U	6600 U	2 U	2 U
m+p-Xylene		31	31	2500 U	12000 U	56	3.5 U
Methyl Methacrylate		3.3 U	3.3 U	2400 U	11000 U	3.3 U	3.3 U
Methylene chloride		4.5	3.4	2000 U	9400 U	4.9	11
MTBE		2.9 U	2.9 U	2100 U	9700 U	2.9 U	2.9 U
o-Xylene		8.7	7.8	2500 U	12000 U	15	3.5 U
Propene		3.4 U	3.4 U	2600 U	12000 U	3.4 U	3.4 U
Styrene		3.4 U	3.4 U	2500 U	11000 U	3.4 U	3.4 U
t-Butyl Alcohol		2.4 U	2.4 U	1800 U	8200 U	2.4 U	2.4 U
Tetrahydrofuran		2.4 U	2.4 U	1700 U	8000 U	2.4 U	2.4 U
Toluene		9	7.2	2350	10000 U	29	3 U
trans-1,2-Dichloroethene		3.2 U	1.8 J	2300 U	11000 U	3.2 U	3.2 U

Table 13. Summary of Volatile Organic Compounds in Soil Vapor Samples, 149 Kent Avenue, Brooklyn, New York

Analyte (Concentrations in μg/m³)	Sample Designation: Sample Date:		SS-7 4/2/2013	SV-1 4/2/2013	SV-1 4/23/2013	SV-2 4/2/2013	SV-3 4/2/2013
trans-1,3-Dichloropropene		3.6 U	3.6 U	2600 U	12000 U	3.6 U	3.6 U
Trichlorofluoromethane		8.4	9.6	3300 U	15000 U	11	3 J
Vinyl Acetate		2.8 U	2.8 U	2000 U	9500 U	2.8 U	2.8 U
Vinyl chloride		2 U	2.8	1500 U	6900 U	2 U	2 U
Xylenes (total)		40	39	2500 U	12000 U	70.8	3.5 U

J - Estimated value

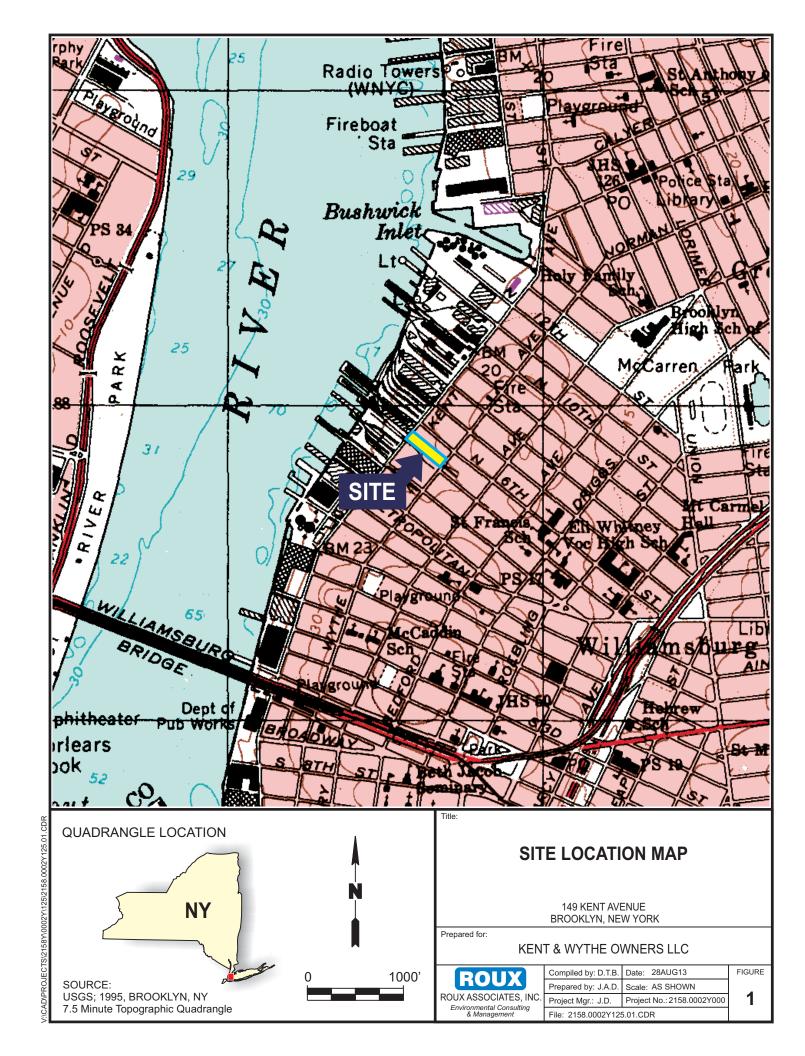
Bold data indicates that parameter was detected

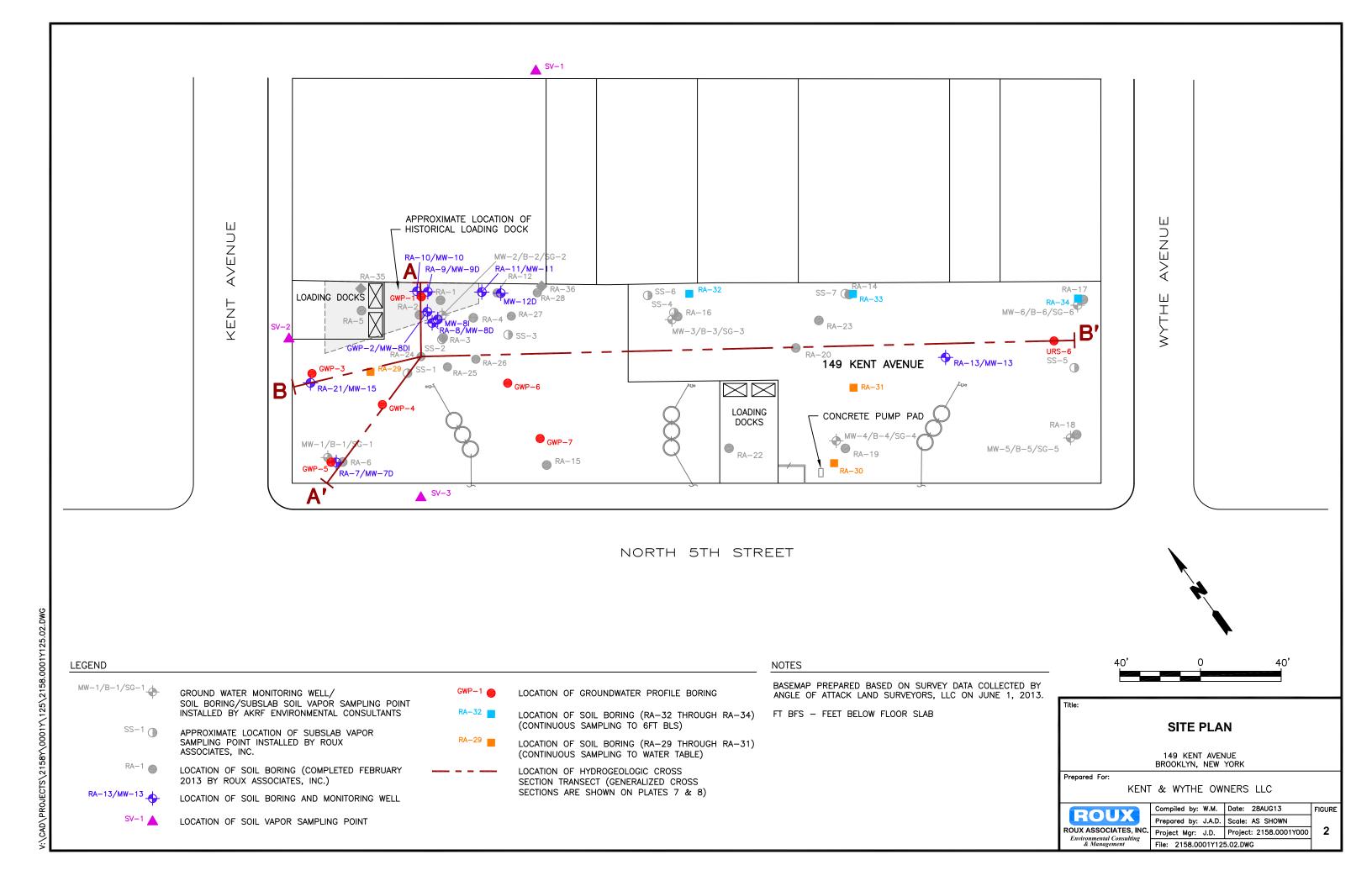
U - Indicates that the compound was analyzed for but not detected

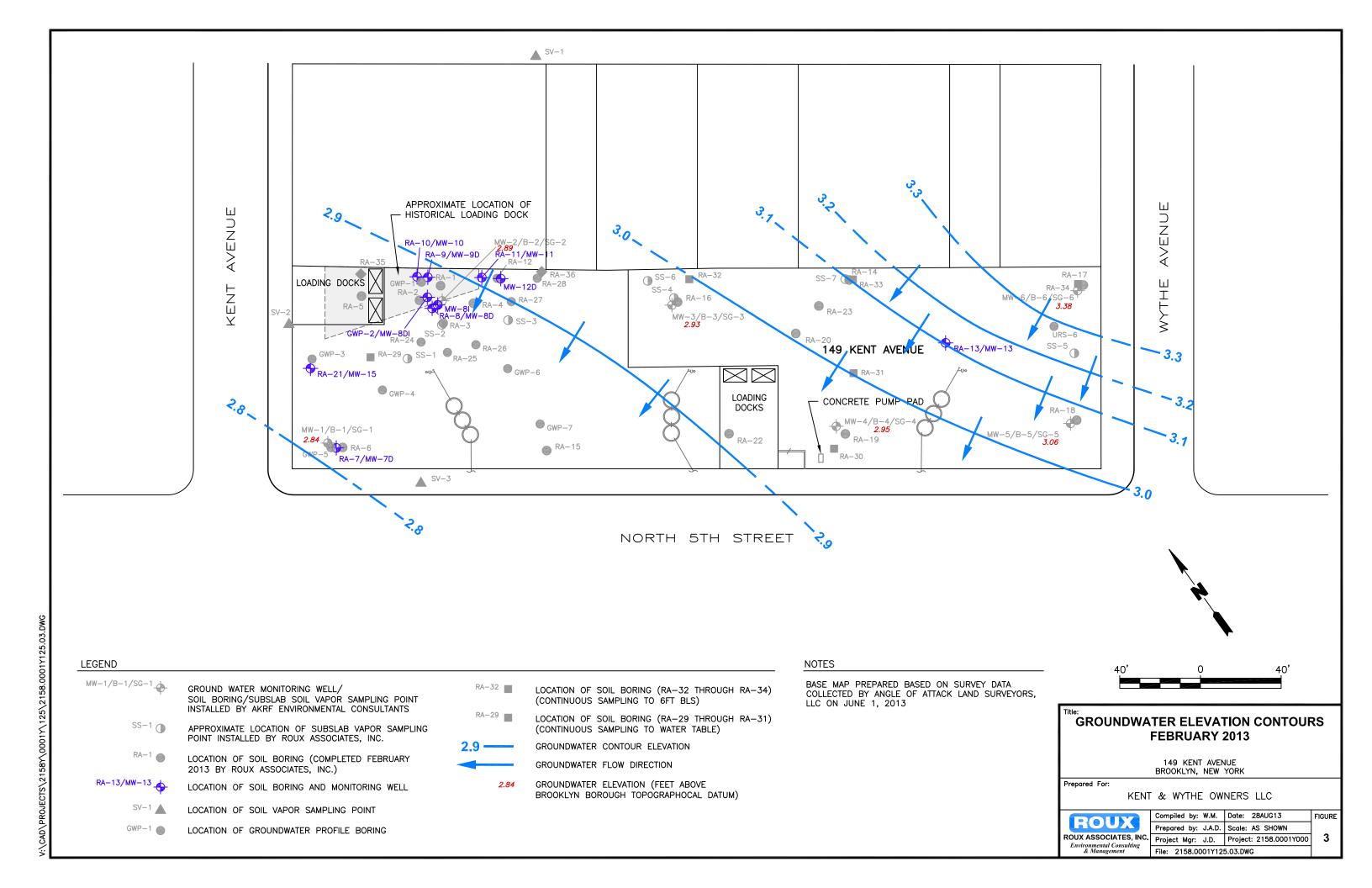
ug/m3 - Micrograms per cubic meter

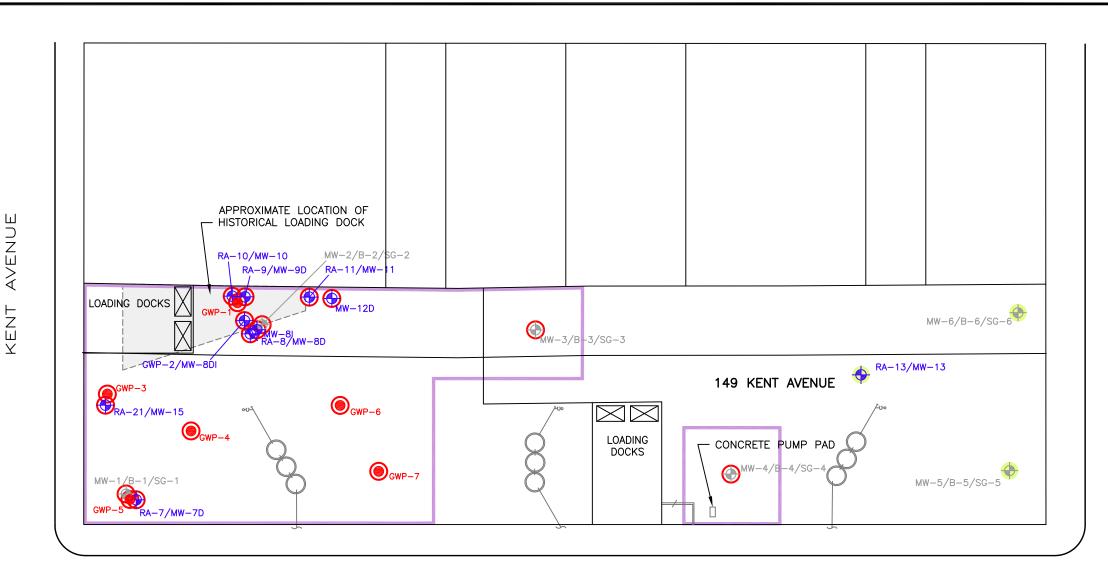
### **FIGURES**

- 1. Site Location Map
- 2. Site Plan
- 3. Groundwater Elevation Contours
- 4. Groundwater Quality Data Compared to "Contained-In" Action Levels for Chlorinated Volatile Organic Compounds
- 5. Section 1-1 Outside Hot Spot Area
- 6. Section 2-2 Inside Hot Spot Area









NORTH 5TH STREET



MW-1/B-1/SG-1

GROUNDWATER MONITORING WELL/ SOIL BORING/SUBSLAB SOIL VAPOR SAMPLING POINT INSTALLED BY AKRF ENVIRONMENTAL CONSULTANTS



LOCATION OF SOIL BORING AND MONITORING WELL



LOCATION OF GROUNDWATER PROFILE BORING



CONCENTRATIONS OF ALL CVOCs ARE BELOW "CONTAINED—IN" ACTION LEVELS



CONCENTRATIONS OF ONE OR MORE CVOCS EXCEED "CONTAINED-IN" ACTION LEVELS

LIMITS OF GROUNDWATER TO BE HANDLED AS LISTED HAZARDOUS WASTE IF NOT TREATED ONSITE

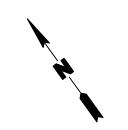
#### NOTES

- "CONTAINED-IN" ACTION LEVELS FOR CVOCs IN GROUNDWATER ARE PRESENTED ON TABLE 2.
- "CONTAINED—IN" ACTION LEVELS ARE FROM THE NOVEMBER 1992 NYSDEC TAGM 3028 THAT HAS BEEN RESCINDED BUT NOT YET REPLACED.
- 3. BASEMAP PREPARED BASED ON SURVEY DATA COLLECTED BY ANGLE OF ATTACK LAND SURVEYORS, LLC ON JUNE 1, 2013.

CVOC = CHLORINATED VOLATILE ORGANIC COMPOUND

 $\begin{array}{lll} {\sf NYSDEC} &= & {\sf NEW} \ \, {\sf YORK} \ \, {\sf STATE} \ \, {\sf DEPARTMENT} \ \, {\sf OF} \ \, {\sf ENVIRONMENTAL} \\ {\sf CONSERVATION} \end{array}$ 

TAGM = TECHNICAL ADMINISTRATIVE GUIDANCE MEMORANDUM



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# GROUNDWATER QUALITY DATA COMPARED TO "CONTAINED-IN" ACTION LEVELS FOR CHLORINATED VOLATILE ORGANIC COMPOUNDS 149 KENT AVENUE, BROOKLYN, NEW YORK

Prepared For:

KENT & WYTHE OWNERS LLC



Compiled by: W.M.	Date: 28AUG13	FIGUR						
Prepared by: J.A.D.	Scale: AS SHOWN							
Project Mgr: J.D.	Project: 2158.0001Y000	4						
File: 2158.0001Y125.04.DWG								

NOTE

THIS DETAIL APPLIES TO AREAS ALONG THE NORTHERN PROPERTY WITHOUT A SECANT WALL AND WITH SOIL REMAINING ABOVE THE WATER TABLE ADJACENT TO OCCUPIED NON-GARAGE SPACES.

#### Title: **SECTION 1-1 AREAS WITHOUT SECANT PILE WALL**

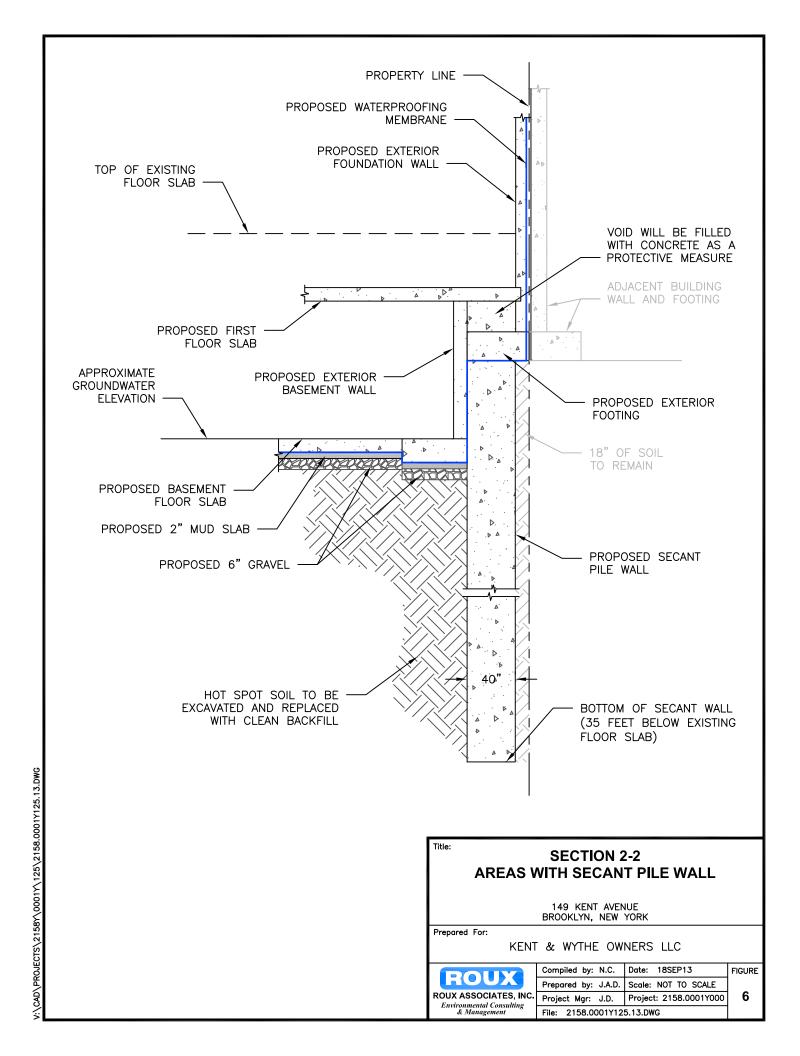
149 KENT AVENUE BROOKLYN, NEW YORK

Prepared For:

KENT & WYTHE OWNERS LLC

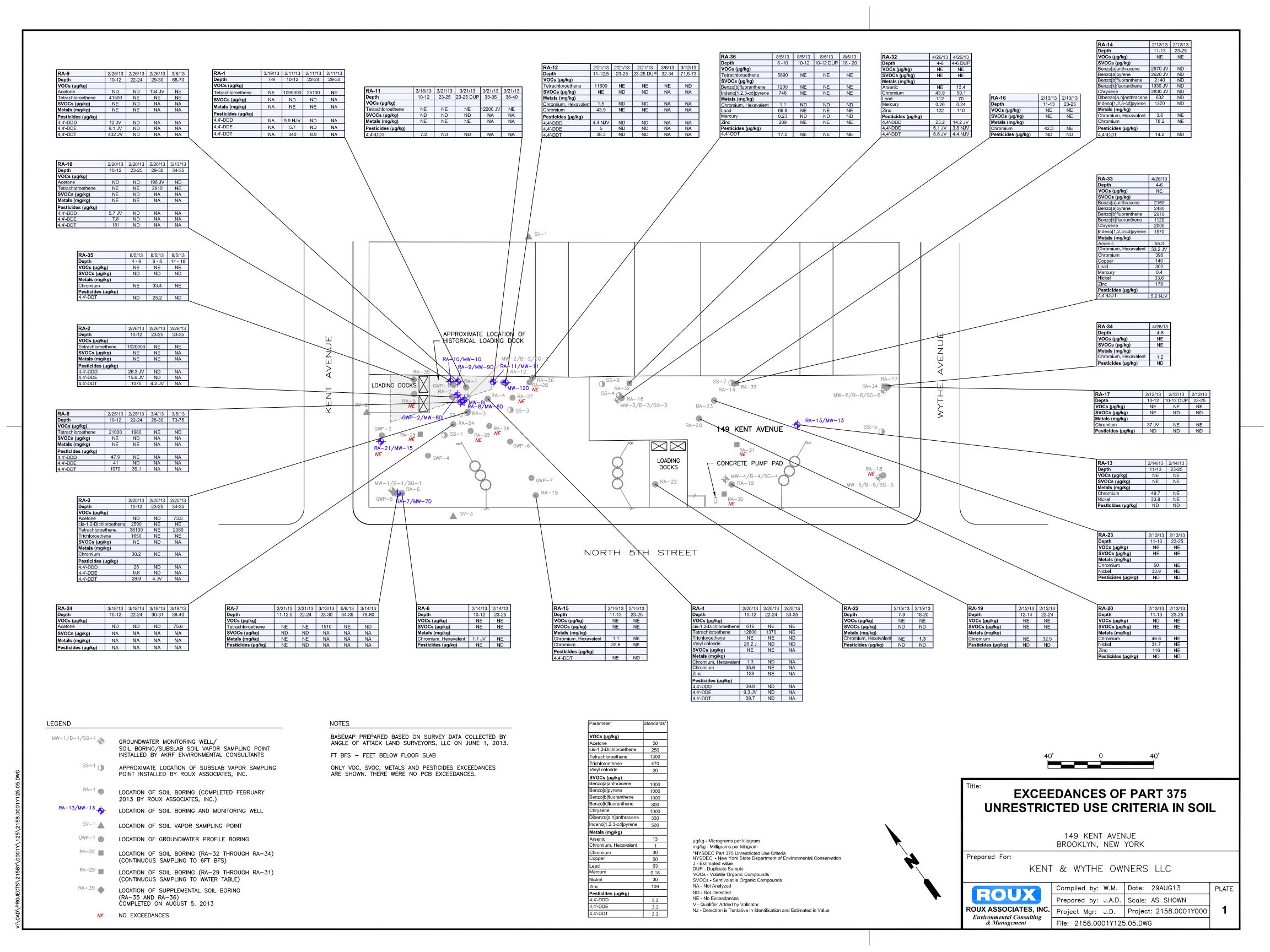


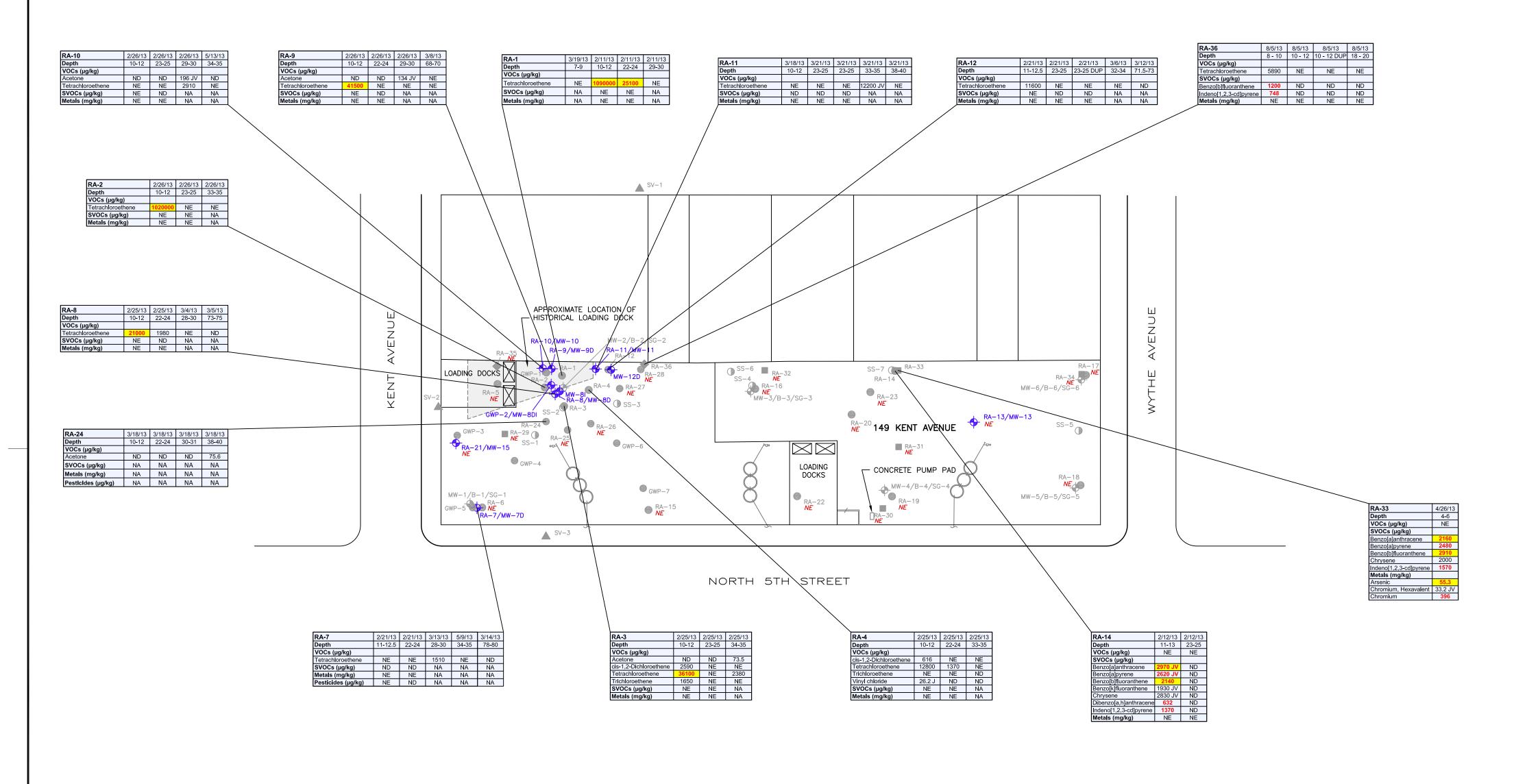
Compiled by: N.C.	Date: 18SEP13	FIGURE
Prepared by: J.A.D.	Scale: NOT TO SCALE	
Project Mgr: J.D.	Project: 2158.0001Y000	5
File: 2158.0001Y12	5.13.DWG	

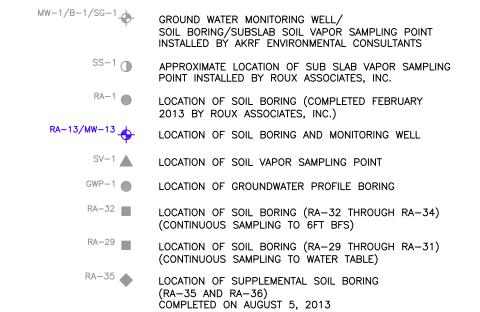


### **PLATES**

- 1. Exceedances of Part 375 Unrestricted Criteria in Soil
- 2. Exceedances of Part 375 Protection of Groundwater and/or Restricted Residential Criteria in Soil
- 3. Tetrachloroethene Exceedances in Groundwater Profile Samples
- 4. Shallow and Intermediate Groundwater Sample Exceedances
- 5. Deep Groundwater Sample Exceedances
- 6. Soil Vapor Sample Results
- 7. Generalized Hydrogeologic Cross Section (A-A<sup>1</sup>)
- 8. Generalized Hydrogeologic Cross Section (B-B<sup>1</sup>)
- 9. Soil Quality Data Compared to "Contained-In" Action Levels for Chlorinated Volatile Organic Compounds
- 10. Remedial Alternative 1 Track 1 Unrestricted Use Remedy
- 11. Remedial Alternative 2 Track 2 Restricted Residential Use Remedy







NO EXCEEDANCES

LEGEND

NOTES

BASEMAP PREPARED BASED ON SURVEY DATA COLLECTED BY ANGLE OF ATTACK LAND SURVEYORS, LLC ON JUNE 1, 2013.

FT BFS — FEET BELOW FLOOR SLAB

ONLY VOC, SVOC AND METALS EXCEEDANCES ARE SHOWN. THERE WERE NO PESTICIDE OR PCB EXCEEDANCES.

Parameter	Standards*	Standards
VOCs (µg/kg)		
Acetone	50	100000
cis-1,2-Dichloroethene	250	100000
Tetrachloroethene	1300	19000
Trichloroethene	470	21000
Vinyl chloride	20	900
SVOCs (µg/kg)		
Benzo[a]anthracene	1000	1000
Benzo[a]pyrene	22000	1000
Benzo[b]fluoranthene	1700	1000
Benzo[g,h,i]perylene	1000000	100000
Benzo[k]fluoranthene	1700	3900
Chrysene	1000	3900
Dibenzo[a,h]anthracene	1000000	330
Indeno[1,2,3-cd]pyrene	8200	500
Metals (mg/kg)		
Arsenic	16	16
Chromium, Hexavalent	19	110
Chromium		180

Results shown in black type exceed Part 375 Protection of Groundwater Criteria
 Results shown in red type exceed Part 375 Restricted Residential Criteria
 Results in red type with yellow background exceed both criteria.

μg/kg - Micrograms per kilogram mg/kg - Milligrams per kilogram \*NYSDEC Part 375 Protection of Groundwater Criteria \*\*NYSDEC Part 375 Restricted Residential Criteria NYSDEC - New York State Department of Environmental Conservation

NYSDEC - New York State Department of E J - Estimated value DUP - Duplicate Sample VOCs - Volatile Organic Compounds SVOCs - Semivolatile Organic Compounds

ND - Not Detected NE - No Exceedances V - Qualifier Added by Validator

NA - Not Analyzed



EXCEEDANCES OF PART 375
RESTRICTED AND/OR PROTECTION OF
GROUNDWATER CRITERIA IN SOIL

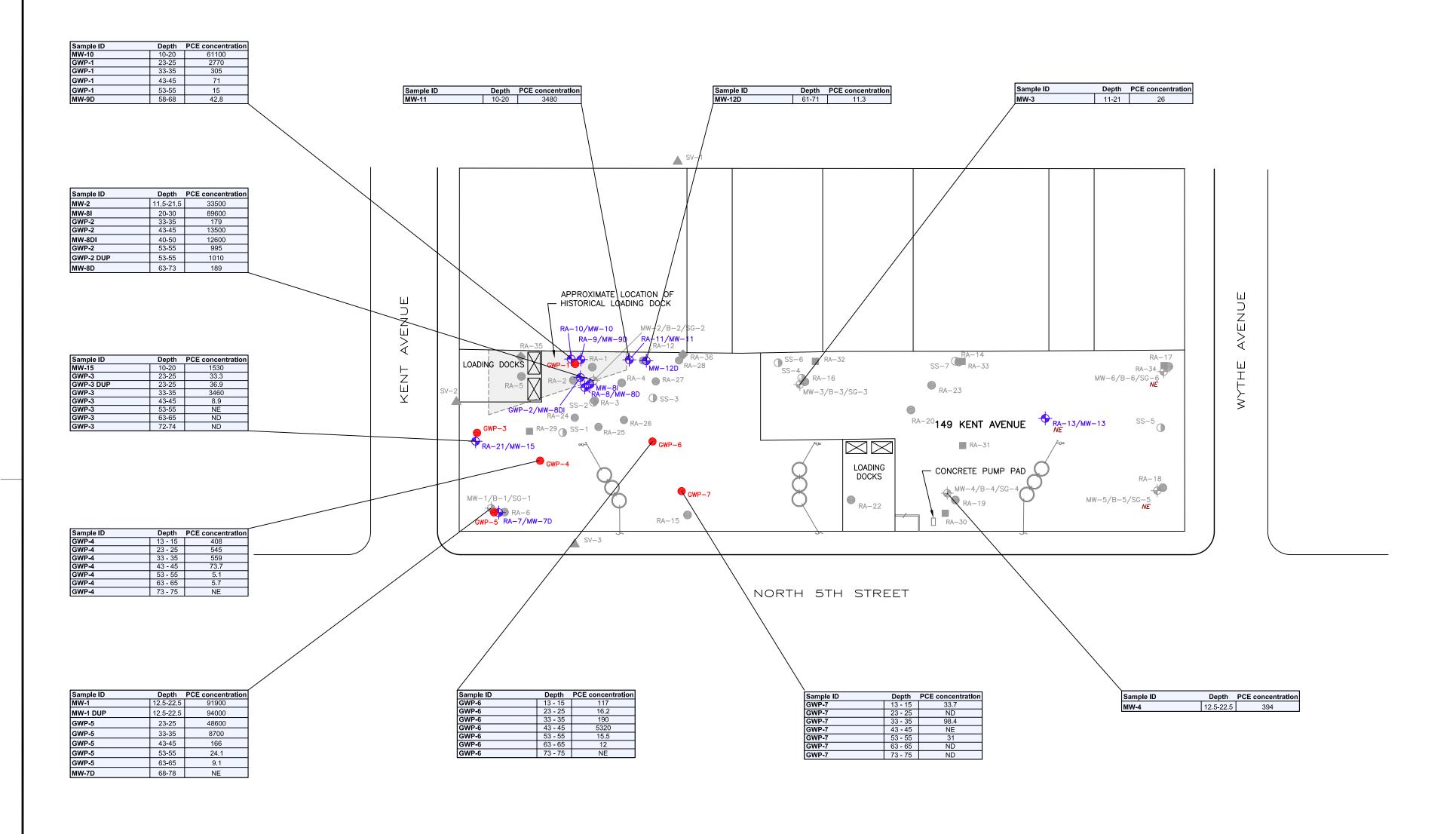
149 KENT AVENUE BROOKLYN, NEW YORK

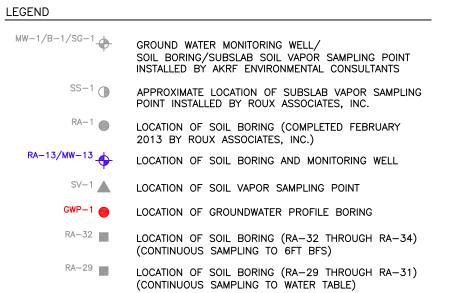
Prepared For:

KENT & WYTHE OWNERS LLC



Compiled by: W.M.	Date: 29AUG13	PLATE
Prepared by: J.A.D.	Scale: AS SHOWN	
Project Mgr: J.D.	Project: 2158.0001Y000	2
File: 2158.0001Y125	5.06.DWG	





NE NO EXCEEDANCES

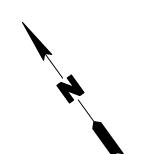
BASEMAP PREPARED BASED ON SURVEY DATA COLLECTED BY ANGLE OF ATTACK LAND SURVEYORS, LLC ON JUNE 1, 2013.

FT BFS - FEET BELOW FLOOR SLAB

NOTES

Concentrations in µg/L μg/L -Micrograms per liter \*NYSDEC AWQSGVs NYSDEC - New York State Department of Environmental Conservation AWQSGVs - Ambient Water-Quality Standards and Guidance Values VOCs - Volatile Organic Compounds ND - Not Detected NE - No exceedances

Tetrachloroethene



# TETRACHLOROETHENE EXCEEDANCES

IN GROUNDWATER PROFILE SAMPLES

Prepared For:

KENT & WYTHE OWNERS LLC

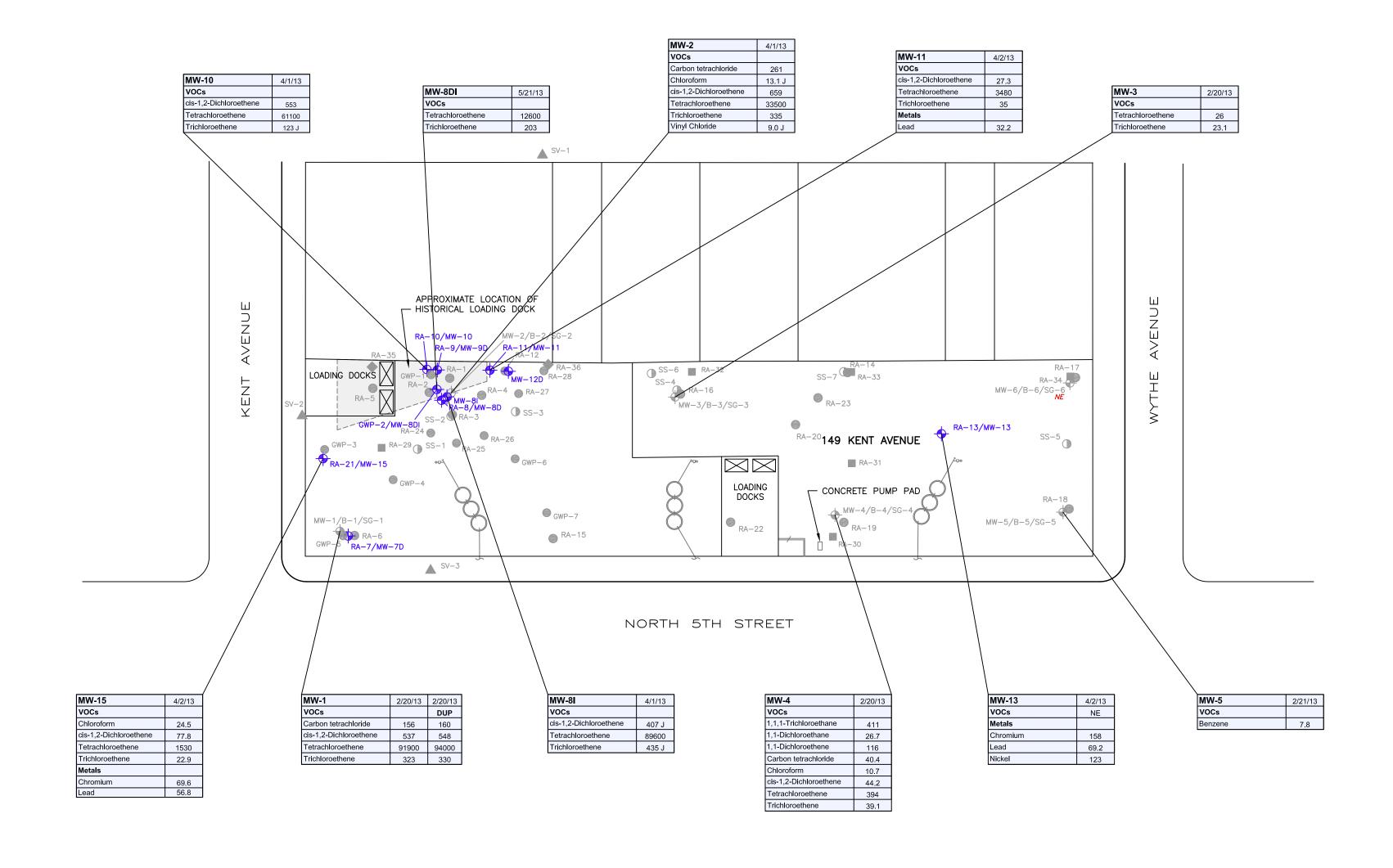
149 KENT AVENUE

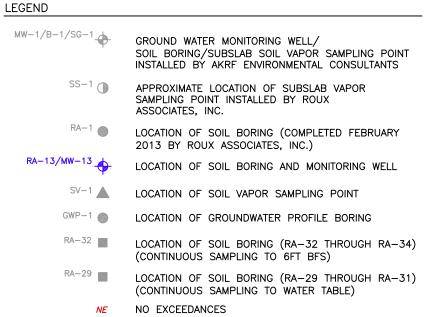
BROOKLYN, NEW YORK



Compiled by: W.M. | Date: 29AUG13 PLATE Prepared by: J.A.D. Scale: AS SHOWN ROUX ASSOCIATES, INC. Project Mgr: J.D. Project: 2158.0001Y000 3 File: 2158.0001Y125.07.DWG







NOTES

BASEMAP PREPARED BASED ON SURVEY DATA COLLECTED BY ANGLE OF ATTACK LAND SURVEYORS, LLC ON JUNE 1, 2013.

FT BFS - FEET BELOW FLOOR SLAB

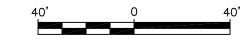
TETRACHLOROETHENE IN GROUNDWATER PROFILE SAMPLES

(Concentrations in μg/L)	(µg/L)
VOCs	
1,1,1-Trichloroethane	5
1,1-Dichloroethane	5
1,1-Dichloroethene	5
Benzene	1
Chloroform	7
Carbon tetrachloride	5
cis-1,2-Dichloroethene	5
Tetrachloroethene	5
Trichloroethene	5
Vinyl Chloride	2
Metals	
Chromium	50
Lead	25
Nickel	100

Standards\*

Parameter

Concentrations in µg/L
µg/L -Micrograms per liter
\*NYSDEC AWQSGVs
NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
J - Estimated value
VOCs - Volatile Organic Compounds
VOCs - Volatile Organic Compounds
NE - No Exceedances



SHALLOW AND INTERMEDIATE
GROUNDWATER SAMPLE EXCEEDANCES

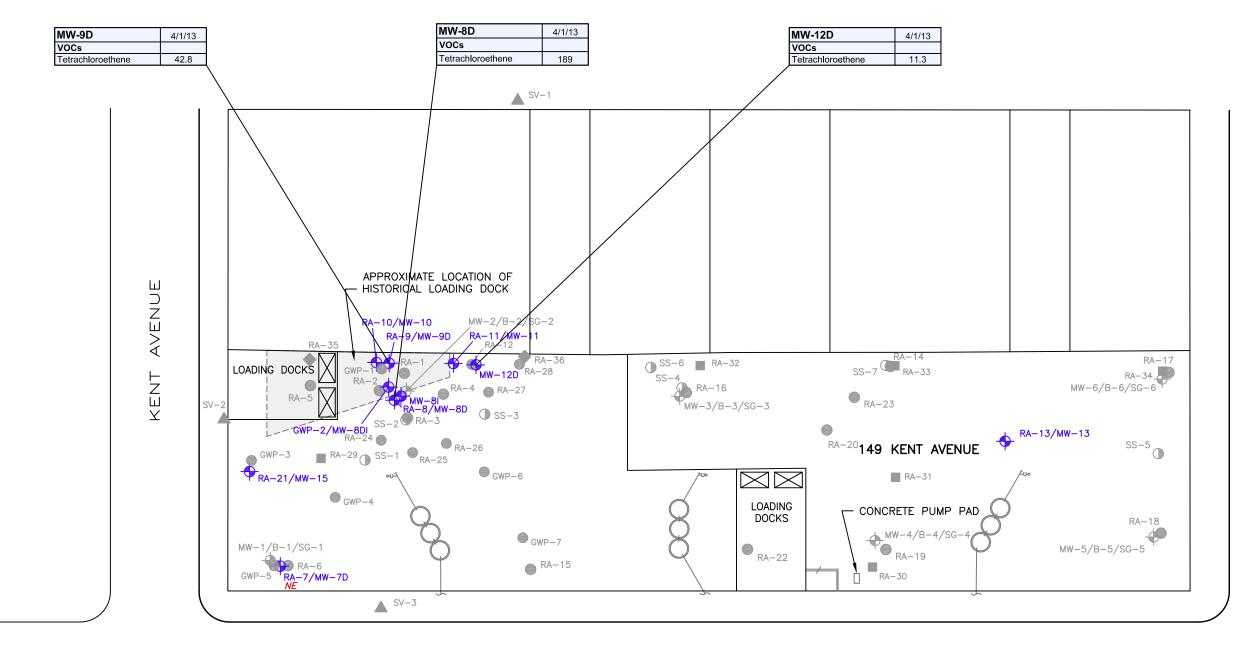
149 KENT AVENUE BROOKLYN, NEW YORK

Prepared For:

KENT & WYTHE OWNERS LLC



Compiled by: W.M.	Date: 29AUG13	PLATE
Prepared by: J.A.D.	Scale: AS SHOWN	
Project Mgr: J.D.	Project: 2158.0001Y000	4
File: 2158.0001Y125	5.08.DWG	



NORTH 5TH STREET



GROUND WATER MONITORING WELL/
SOIL BORING/SUBSLAB SOIL VAPOR SAMPLING POINT
INSTALLED BY AKRF ENVIRONMENTAL CONSULTANTS

APPROXIMATE LOCATION OF SUBSLAB VAPOR SAMPLING POINT INSTALLED BY ROUX ASSOCIATES, INC.

LOCATION OF SOIL BORING (COMPLETED FEBRUARY 2013 BY ROUX ASSOCIATES, INC.)

LOCATION OF SOIL BORING AND MONITORING WELL

SV-1 LOCATION OF SOIL VAPOR SAMPLING POINT

GWP-1 ■ LOCATION OF GROUNDWATER PROFILE BORING

LOCATION OF SOIL BORING (RA-32 THROUGH RA-34) (CONTINUOUS SAMPLING TO 6FT BFS)

LOCATION OF SOIL BORING (RA-29 THROUGH RA-31)
(CONTINUOUS SAMPLING TO WATER TABLE)

NE NO EXCEEDANCES

### NOTES

BASEMAP PREPARED BASED ON SURVEY DATA COLLECTED BY ANGLE OF ATTACK LAND SURVEYORS, LLC ON JUNE 1, 2013.

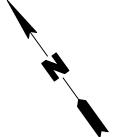
FT BFS - FEET BELOW FLOOR SLAB

ONLY EXCEEDANCES ARE SHOWN.

TETRACHLOROETHENE IN GROUNDWATER PROFILE SAMPLES SHOWN ON PLATE 3

Parameter	Standards*
(Concentrations in µg/L)	(µg/L)
VOCs	
Tetrachloroethene	5

Concentrations in µg/L µg/L -Micrograms per liter \*NYSDEC AWQSGVs NYSDEC - New York State Department of Environmental Conservation AWQSGVs - Ambient Water-Quality Standards and Guidance Values VOCs - Volatile Organic Compounds



AVENUE

WYTHE



# DEEP GROUNDWATER SAMPLE EXCEEDANCES

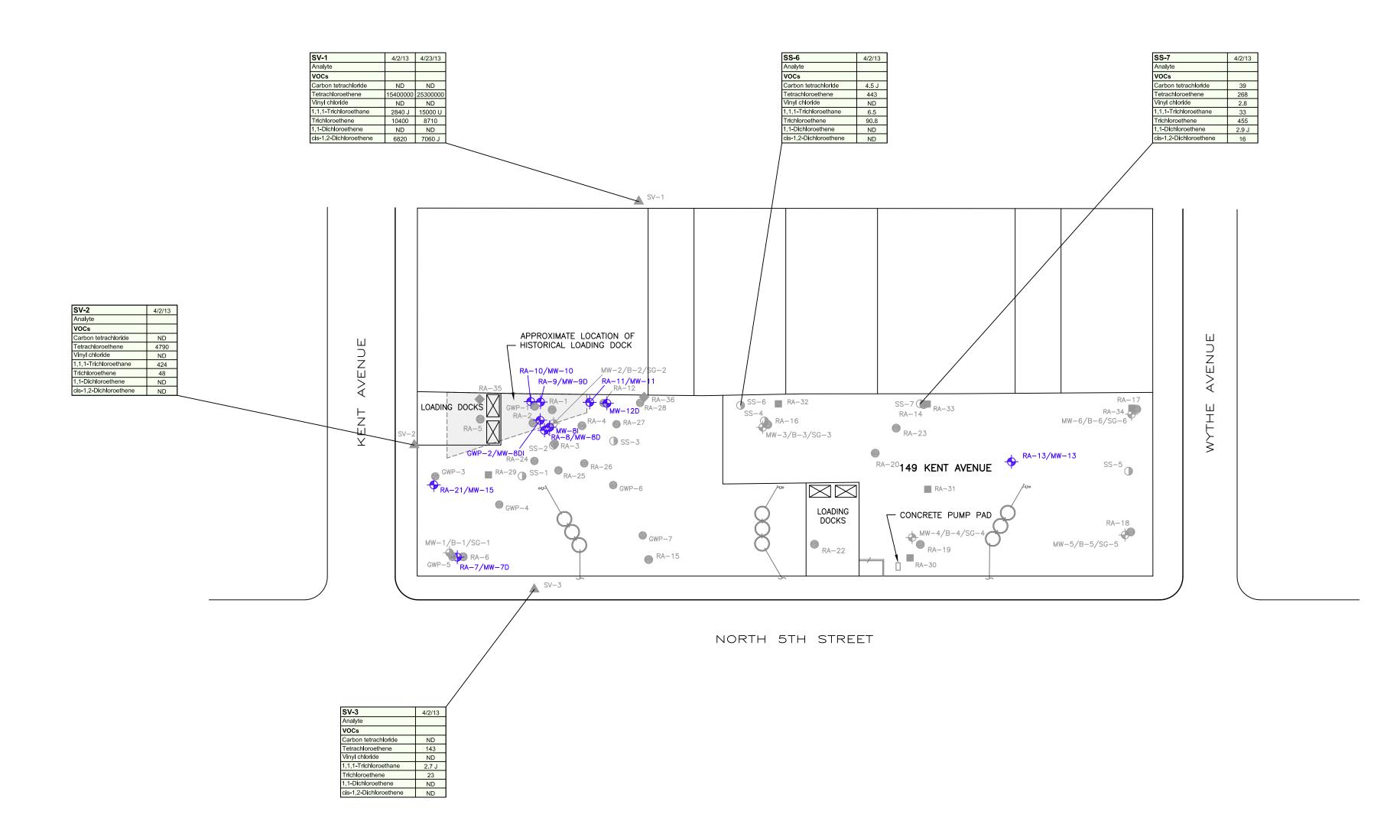
149 KENT AVENUE BROOKLYN, NEW YORK

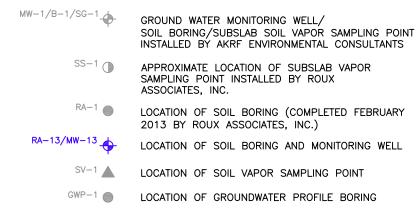
Prepared For:

KENT & WYTHE OWNERS LLC



Compiled by: W.M.	Date: 28AUG13	PLATE
Prepared by: J.A.D.	Scale: AS SHOWN	
Project Mgr: J.D.	Project: 2158.0001Y000	5
File: 2158.0001Y125	5.09.DWG	





RA-32 LOCATION OF SOIL BORING (RA-32 THROUGH RA-34) (CONTINUOUS SAMPLING TO 6FT BFS) RA-29 ■ LOCATION OF SOIL BORING (RA-29 THROUGH RA-31)

(CONTINUOUS SAMPLING TO WATER TABLE)

NOTES

BASE MAP PREPARED BASED ON SURVEY DATA COLLECTED BY ANGLE OF ATTACK LAND SURVEYORS, LLC ON JUNE 1, 2013

ONLY COMPOUNDS ADDRESSED IN THE NEW YORK STATE DEPARTMENT OF HEALTH FINAL GUIDANCE FOR EVALUATING SOIL VAPOR INTRUSION IN NEW YORK STATE ARE SHOWN.

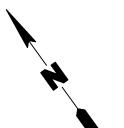
FT BFS - FEET BELOW FLOOR SLAB

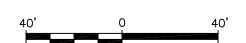
CONCENTRATIONS IN μg/m³

μg/m³ - MICROGRAMS PER CUBIC METER

VOCs - VOLATILE ORGANIC COMPOUNDS

J - ESTIMATED VALUE ND - NOT DETECTED





### **SOIL VAPOR SAMPLE RESULTS**

149 KENT AVENUE BROOKLYN, NEW YORK

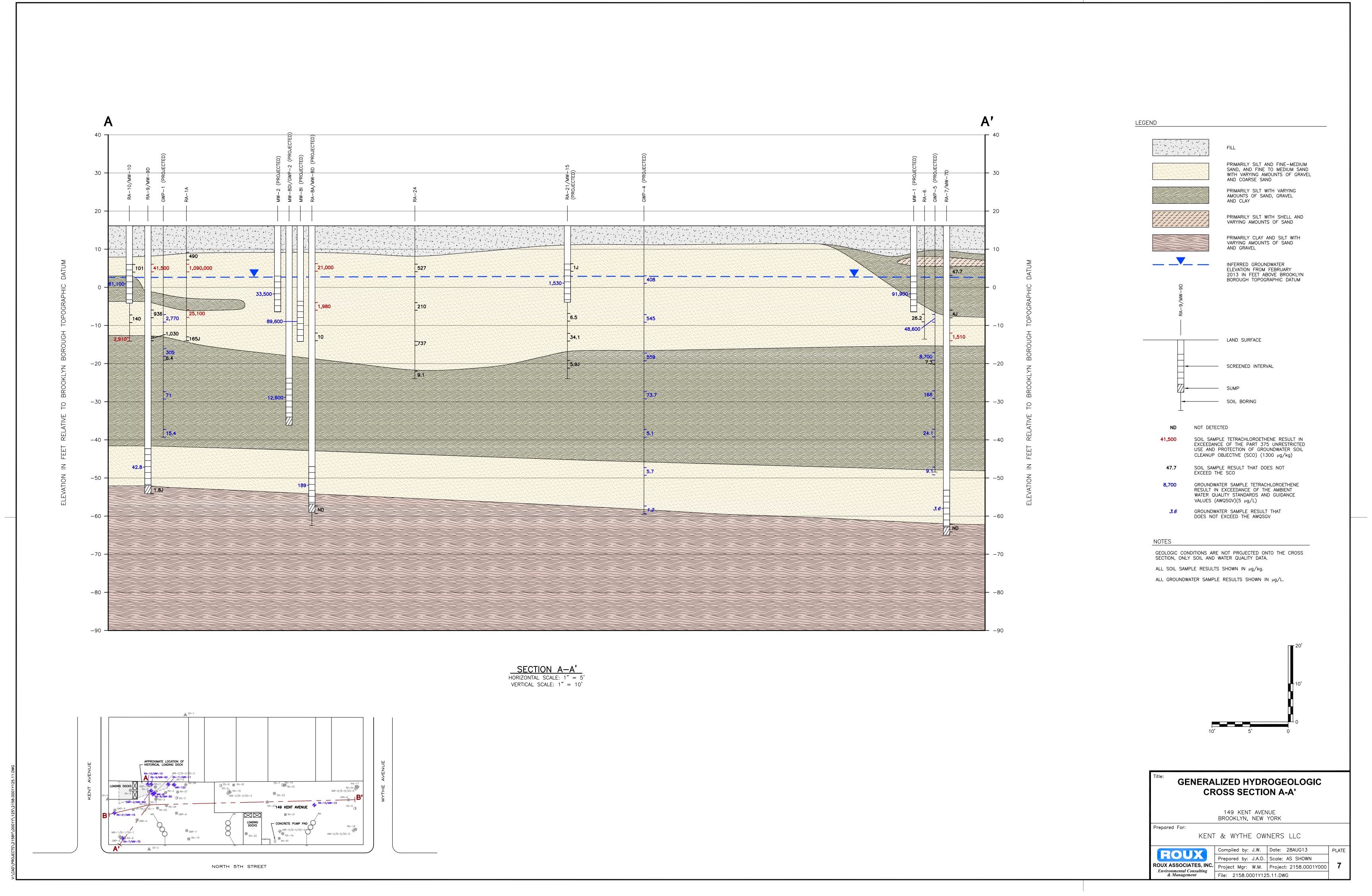
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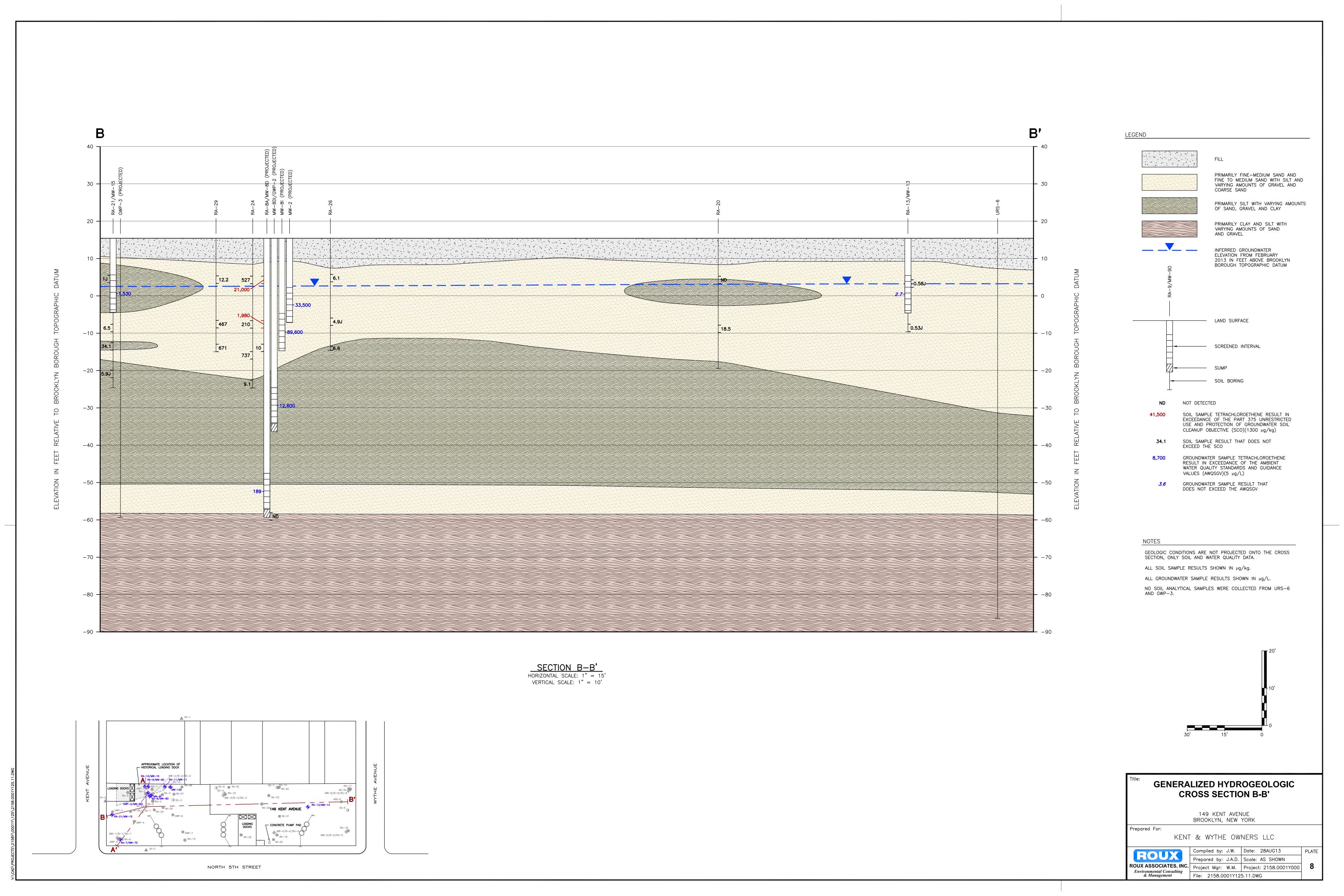
KENT & WYTHE OWNERS LLC



Compiled by: W.M. | Date: 29AUG13 PLATE Prepared by: J.A.D. Scale: AS SHOWN ROUX ASSOCIATES, INC. Project Mgr: J.D. Project: 2158.0001Y000 6 File: 2158.0001Y125.10.DWG

LEGEND





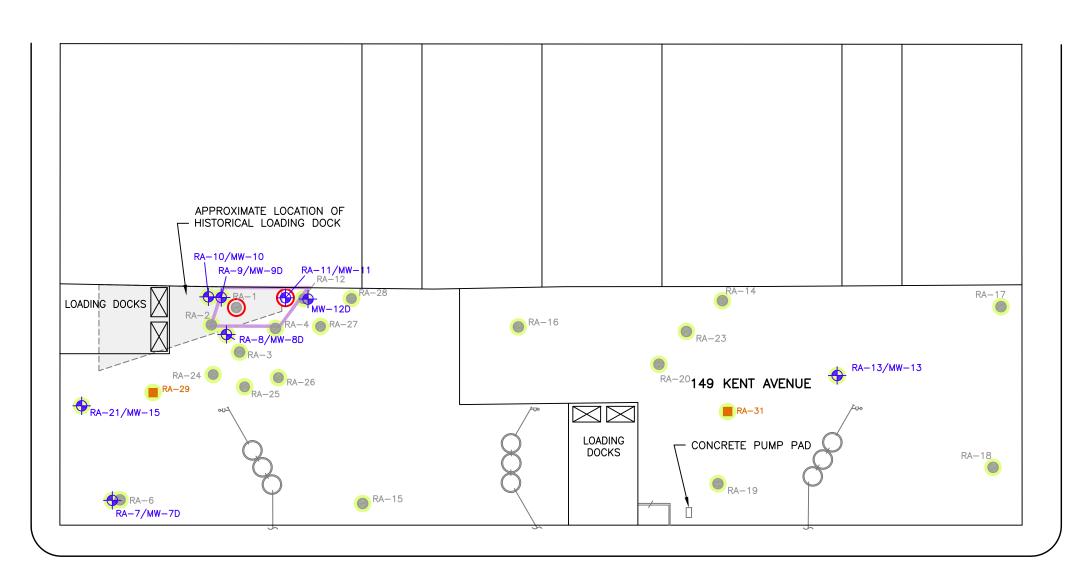
KENT AVENUE

APPROXIMATE LOCATION OF HISTORICAL LOADING DOCK RA-9/MW-9D RA-11/MW-/ RA-12 LOADING DOCKS RA-16 RA-13/MW-13 RA-20149 KENT AVENUE RA-21/MW-15  $\boxtimes$ RA-31 LOADING CONCRETE PUMP PAD DOCKS RA-18 RA-22 RA-19 RA-15 RA-6 RA-7/MW-7D

NORTH 5TH STREET

## DEPTH INTERVAL: EQUAL TO OR GREATER THAN 22 FEET BELOW EXISTING SLAB

KENT AVENUE



NORTH 5TH STREET

LEGEND

RA-1

LOCATION OF SOIL BORING (COMPLETED FEBRUARY 2013 BY ROUX ASSOCIATES, INC.)

RA-13/MW-13 RA-32

LOCATION OF SOIL BORING AND MONITORING WELL

LOCATION OF SOIL BORING
(CONTINUOUS SAMPLING TO 6FT BLS)

CONCENTRATIONS OF ALL CVOCs ARE BELOW "CONTAINED—IN" ACTION LEVELS

CONCENTRATIONS OF ONE OR MORE CVO

LOCATION OF SOIL BORING (CONTINUOUS SAMPLING TO WATER TABLE) CONCENTRATIONS OF ALL CVOCs ARE

CONCENTRATIONS OF ONE OR MORE CVOCS EXCEED "CONTAINED—IN" ACTION LEVELS
LIMITS OF SOIL TO BE HANDLED AS LISTED

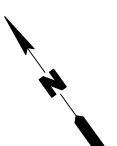
HAZARDOUS WASTE

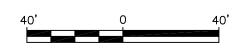
NOTES

- "CONTAINED-IN" ACTION LEVELS FOR CVOCs IN SOIL ARE PRESENTED ON TABLE 1.
- 2. "CONTAINED—IN" ACTION LEVELS ARE FROM THE NOVEMBER 1992 NYSDEC TAGM 3028 THAT HAS BEEN RESCINDED BUT NOT YET REPLACED.
- 3. BASEMAP PREPARED BASED ON SURVEY DATA COLLECTED BY ANGLE OF ATTACK LAND SURVEYORS, LLC ON JUNE 1, 2013.

  CVOC = CHLORINATED VOLATILE ORGANIC COMPOUND

  NYSDEC = NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.
- TAGM = TECHNICAL ADMINISTRATIVE GUIDANCE MEMORANDUM





'ENUE

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MYTH

/ENUE

WYTHE

SOIL QUALITY DATA COMPARED
TO "CONTAINED-IN " ACTION LEVELS
FOR CHLORINATED VOLATILE
ORGANIC COMPOUNDS

149 KENT AVENUE, BROOKLYN, NEW YORK

Prepared For:

KENT & WYTHE OWNERS LLC



Compiled by: W.M. Date: 28AUG13 PLATE

Prepared by: J.A.D. Scale: AS SHOWN

Project Mgr: J.D. Project: 2158.0001Y000

File: 2158.0001Y125.12.DWG

