White Plains Mall

200 HAMILTON AVENUE, WHITE PLAINS, NEW YORK

Spill Investigation

NYSDEC Spill Number 1706297

AKRF Project Number: 170029

Prepared for:

SWD II, LLC dba Street-Works Development
168-A Irving Avenue, Suite 200K
Port Chester, NY 10573

Prepared by:

AKRF
34 South Broadway, Suite 401
White Plains, New York 10601
914-949-7336

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1.0 INTRODUCTION

AKRF, Inc. (AKRF) was retained by SWD II, LLC dba Street-Works Development to perform a Spill Investigation (SI) at the property located at 200 Hamilton Avenue in the City of White Plains, Westchester County, New York (the "Site"). The 3.86-acre Site, as shown on Figure 1, includes the two-story White Plains Mall and associated asphalt-paved parking lot, and is identified as Tax Map ID Section 125.67, Block 5, Lot 1 on the City of White Plains tax map. The Site is bounded by Barker Avenue to the north followed by offices, a hotel, and commercial development; Cottage Place to the east followed by a Gulf service station and commercial buildings; Hamilton Avenue to the south followed by commercial and government buildings; and Dr. Martin Luther King Jr. Boulevard to the west followed by commercial development. The fieldwork associated with the SI was completed between February 6 and 26, 2018.

The purpose of the SI was to further assess petroleum-related contamination identified in the southeastern and southern portions of the Site during a Subsurface (Phase II) Investigation. As reported in the *Subsurface (Phase II) Investigation Report* (dated October 2017), field observations and laboratory results indicated evidence of a historic petroleum release or releases, resulting in the presence of petroleum-related volatile organic compounds (VOCs) detected in groundwater at concentrations above the New York State Department of Environmental Conservation (NYSDEC) Ambient Water Quality Standards and Guidance Values (AWQSs). The petroleum-related groundwater contamination was reported to the NYSDEC Spills division, and Spill Number 1706297 was assigned to the Site. This SI was designed to further delineate the extent of the petroleum-related contamination and to evaluate potential source(s).

The SI scope included a geophysical survey, the advancement of 10 soil borings, installation of three permanent groundwater monitoring wells, and the collection of soil and groundwater samples for field-screening and laboratory analysis. In addition, four of the six groundwater monitoring wells previously installed at the Site by others were sampled for laboratory analysis. All nine on-site wells (three newly installed and six previously installed) were surveyed and gauged, and groundwater contour maps were prepared. This report describes the methods and results of the SI conducted by AKRF, and provides recommendations and a conceptual remedial plan to address the residual petroleum-related contamination that was identified. The locations of the soil borings and monitoring wells (including the locations from the 2017 Phase II) are depicted on Figure 2. A photographic log documenting the field activities is provided as Appendix A.

2.0 SITE DESCRIPTION

The Site consists of a two-story shopping mall and an east-adjacent asphalt-paved parking lot, with additional parking on the building roof, accessed by a ramp on the northern side of the building. Based on a May 4, 2017 topographic survey prepared by Insite Engineering, Surveying & Landscape Architecture, P.C. (Insite), the topography surrounding the Site slopes downward to the west from approximately 200 feet along Cottage Place to approximately 190 feet along Martin Luther King Jr. Boulevard. Due to this change in elevation, the upper floor of the mall is at street level on the eastern side of the building, and the lower level is at street level on the western side. A retaining wall is present along the southeastern portion of the Site, where the Hamilton Avenue sidewalk is situated approximately 6 to 8 feet lower than the parking lot. The soil sampling depths and depths to groundwater referenced in this report are reported relative to existing ground surface at the corresponding boring and monitoring well locations.

3.0 PREVIOUS INVESTIGATIONS

Subsurface Exploration and Geotechnical Engineering Report, White Plains Mall, White Plains, New York; prepared by GZA GeoEnvironmental of New York, prepare for Exclusive Management, LLC - November 20, 2015.

GZA GeoEnvironmental of New York (GZA) conducted a geotechnical investigation at the Site to develop preliminary engineering recommendations for potential redevelopment. The investigation included the advancement of four soil borings around the Site perimeter to termination depths between 25 and 26 feet below ground surface (bgs), installation of an observation well at each boring, and collection of water level measurements from the wells. Based on logging of soil samples from the borings, GZA identified a fill layer present to depths of 6 to 8 feet bgs, consisting of sand with gravel, silt, and occasional construction debris (brick, crushed stone fragments). The fill layer was underlain by clay, silt, and sand. Groundwater was encountered in the observation wells at varying depths, generally between approximately 10 and 18 feet bgs. The observation wells installed by GZA were sampled during AKRF's 2017 Phase II investigation, and were designated as GT-1 through GT-4 (these wells have subsequently been re-designated as MW-1 through MW-4, respectively, as shown on Figure 2).

Phase I Environmental Site Assessment (ESA), 200 Hamilton Avenue, AKRF, Inc. – May 2017

AKRF conducted a Phase I ESA that was detailed in a May 2017 report. The objective of the Phase I ESA was to evaluate the Site for Recognized Environmental Conditions (RECs) and environmental concerns resulting from past or current uses of the Site and neighboring properties. The Phase I ESA identified the following RECs:

On-Site Recognized Environmental Conditions

- Based on review of historic records, two gasoline service stations were located on the Site prior to construction of the White Plains Mall. Historic Sanborn (fire insurance) maps depicted a gasoline station with three gas tanks on the 1930 through 1950 maps at the corner of Hamilton Avenue and William Street (230 Hamilton Avenue), and a second gasoline station with greasing operations and four gasoline tanks at the corner of Hamilton Avenue and Cottage Place (250 Hamilton Avenue). These gasoline stations may have been present until construction of the current building in approximately 1970. Over 20 private dwellings were shown within the current building footprint on historic Sanborn maps from 1894 to 1950. Based on these findings, the Phase I ESA identified the potential for abandoned underground storage tanks (USTs) and/or associated petroleum contamination in the Site subsurface associated with the gasoline service stations and/or heating oil for the residential dwellings.
- The Site was identified in the EDR Historic Cleaners database from 2004 to 2011 and potential dry cleaners ("Mall Cleaners" and "White Plains Mall Cleaners") were listed in the City Directories at 200 Hamilton Avenue in 1992, 1995, 1999, and 2008. The Site was not listed on the Resource Conservation and Recovery Act (RCRA) generator report or any other database.

Off-Site Recognized Environmental Conditions

- The regulatory database, historic city directories, site reconnaissance, and Sanborn maps identified an east-adjacent operating gasoline filling station with an open NYSDEC Spill (Spill No. 97-07887), and also listed on the petroleum bulk storage (PBS), RCRA, and Historic Auto databases.
- The regulatory database and Sanborn maps identified facilities in the surrounding area with some potential to have affected the Site subsurface, including: RCRA generators, Spills, PBS facilities, an NYSDEC Brownfield Cleanup (BCP) site and a NYSDEC Voluntary Cleanup (VCP) site.

In addition to the on-site and off-site REC's described above, the Phase I assessment identified on-site environmental concerns for consideration ahead of future redevelopment work, including: the presence of a historic fill layer identified during the 2015 geotechnical investigation; the presence of electric and hydraulic equipment that may contain polychlorinated biphenyl (PCB)- or mercury-containing components or oils; and suspect asbestos-containing materials (ACM) and lead-based paint (LBP) associated with the on-site structure.

Preliminary Geotechnical Engineering Report, 200 Hamilton Avenue, AKRF, Inc. – August 27, 2017

AKRF completed a preliminary geotechnical investigation in the parking lot in the eastern portion of the Site to evaluate subsurface conditions for the proposed redevelopment work. This geotechnical investigation was conducted concurrently with AKRF's 2017 Phase II investigation, described below. The geotechnical investigation included the advancement of four soil borings to depths between 24 and 55 feet below existing surface grade, including rock coring to confirm the presence of bedrock. Results of the investigation indicated that the Site is underlain by a layer of uncontrolled fill consisting mainly of brown, fine to coarse sand and gravel with varying amounts of silt and other miscellaneous fill including wood and asphalt fragments. A layer of brown, fine to coarse sand with varying amounts of silt and gravel was encountered below the uncontrolled fill material in all borings. Bedrock was encountered beneath the sand at depths ranging from approximately 13 feet below existing grade in the northeastern portion of the parking lot to approximately 37 feet below existing grade in the central portion of the parking lot. The AKRF geotechnical engineer gauged groundwater levels in the previously installed GZA monitoring wells and in the temporary wells installed as part of the Phase II investigation. Depth to groundwater measurements ranging from 9.9 feet bgs at B-03 (GT-3, re-designated MW-3), located at the lower elevation area along Martin Luther King Boulevard, to 23 feet bgs at TW-1, located in the higher elevation area in the asphalt-paved parking lot, were reported.

Subsurface (Phase II) Investigation, 200 Hamilton Avenue, AKRF, Inc. – October 2017

AKRF conducted a Phase II investigation at the Site that was detailed in the Phase II Report (dated October 2017). The objectives of the Phase II investigation were to further assess the RECs and other environmental concerns identified during AKRF's May 2017 Phase I ESA of the Site. The scope of the Phase II investigation included a soil boring and groundwater sampling program to characterize soil, soil vapor, and groundwater in the area of RECs and areas that would be disturbed during the proposed future redevelopment activities at the Site. Based on the field observations and laboratory analytical results, the following conclusions were presented:

- A historical petroleum release or releases was identified that affected groundwater beneath the Site, resulting in the presence of petroleum-related VOCs above the NYSDEC AWQSs. Although no obvious on-site source area (e.g., separate phase oil on the water table, grossly contaminated soil at the anticipated depth of potential former underground storage tanks) was identified, the observed groundwater contamination was attributed to the former on-site gasoline stations. The presence of MTBE in groundwater suggested that an off-site source (e.g., the existing gas station across Cottage Place) also contributed to the contamination, since the on-site gasoline stations closed before 1970 (before MTBE was used in New York State). Field evidence of petroleum contamination observed in the "smear zone" in soil borings SB-4 and SB-5, and petroleum-related VOCs detected above New York State Department of Health (NYSDOH) background levels in soil vapor were attributed to the groundwater contamination and any residual soil contamination. AKRF reported the groundwater contamination to the NYSDEC Spills division and the case was assigned spill #1706297.
- The chlorinated solvent trichloroethene (TCE) was detected above the NYSDOH Air Guidance Value (AGV) in two sub-slab vapor samples, but was not detected above the regulatory standards or guidance values in any soil or groundwater samples collected during the Phase II. Although TCE

may have been used by one of the potential former on-site dry cleaners identified in the May 2017 Phase I ESA, the levels detected in soil vapor were not considered to be indicative of a widespread release or on-site source area.

- Based on the Phase II field observations, metals and semivolatile organic compounds (SVOCs) that were detected in soil at levels above their respective Part 375 Unrestricted and/or Restricted Residential Use Soil Cleanup Objectives were attributable to likely contaminants in the shallow fill layer observed in the Site subsurface or to background conditions, and not likely to an on-site release or other source area.

The Phase II Report concluded with a recommendation to conduct a Spill Investigation (SI) to assess the extent of the petroleum-related contamination in groundwater and to further investigate potential on-site source area(s).

4.0 FIELD ACTIVITIES

4.1 Geophysical Survey and Utility Mark-Outs

On February 13, 2018, a geophysical survey was conducted across accessible indoor and outdoor areas of the Site to clear the proposed soil boring locations for subsurface utilities and/or structures. During the survey, accessible areas around the proposed borings were scanned for potential buried storage tanks to the extent feasible. The geophysical survey included electromagnetic (EM), radio-detection (RD), and ground penetrating radar (GPR) methods. The Geophysical Investigation Report is attached as Appendix B.

In addition to the geophysical survey, Cascade Drilling, Inc. (Cascade), the drilling contractor, notified Dig Safely New York prior to the start of the intrusive investigation work.

4.2 Soil Sampling

A total of 10 soil borings (SB-10 through SB-18, and MW-9) were advanced at the Site between February 6 and 9, 2018 by Cascade at the locations shown on Figure 2. Soil borings SB-10 through SB-14, and SB-18 were advanced in the southeastern portion of the Site, in and adjacent to the footprint of the former gasoline station in this area. Soil borings SB-15 through SB-17 were advanced in the southern portion of the Site, in and adjacent to the footprint of the former gasoline station in this area. It should be noted that due to access restrictions (an active fitness center exists in this area), soil borings SB-16 and SB-17 were advanced outside of the Site building, along the southern edge of the footprint of the former gasoline station, and SB-15 was advanced in a main corridor inside of the Site building to the west (downgradient). Soil boring MW-9 was advanced in the southwestern corner of the Site, downgradient of the former on-site gasoline stations. Soil borings SB-10 through SB-14, SB-18, and MW-9 were advanced with a track-mounted Geoprobe® 6620DT direct push probe (DPP) unit. Due to limited access, SB-15 through SB-17 were advanced with a bobcat-mounted Geoprobe® 540MT DPP unit. The soil borings were advanced to depths ranging from 12 to 30 feet bgs. The locations and depths of the soil borings are summarized in the following table:

Soil Boring Locations and Depths

Soil Boring	Soil Boring Depth (feet bgs)	Soil Boring Location
SB-10 to SB-14, and SB-18	12-30	Southeastern portion of the Site, within footprint of a former gas station at 250 Hamilton Avenue
SB-15	16	Inside southern portion of the mall building, west of former gas station footprint at 230 Hamilton Avenue
SB-16 and SB-17	20	In concrete walkway south-adjacent to the mall building, within footprint of a former gas station at 230 Hamilton Avenue
MW-9	15	Southwestern (presumed downgradient) corner of the Site

Notes:
bgs – below ground surface

Continuous soil samples were collected from the soil borings using 2-inch diameter macrocore piston rod samplers fitted with dedicated acetate liners. The soil samples at soil borings SB-10 through SB-14, SB-18, and MW-9 were collected with 5-foot long samplers and the samples at soil borings SB-15 through SB-17 were collected using 4-foot long samplers.

Each macrocore sample liner was split lengthwise and all samples were logged by AKRF field personnel. Logging consisted of describing the soil according to the modified Burmister Classification System; describing any evidence of contamination (e.g., staining, sheens, odors); and field-screening the soil for organic vapors using a photoionization detector (PID) in 6-inch intervals. Soil boring logs are provided in Appendix C. The PID was calibrated each day prior to on-site use using isobutylene gas in accordance with the manufacturer's specifications.

In general, two soil samples were selected for laboratory analysis from each boring: one from a 2-foot interval from between 0 to 10 feet below ground surface; and one from the 2-foot interval exhibiting the greatest evidence of contamination (or from the groundwater interface if no evidence of contamination was observed). Only one sample was selected for laboratory analysis from SB-18, which was added to the field program based on field evidence of contamination observed in SB-13; and no laboratory samples were selected from MW-9, which was advanced only for the purposes of installing groundwater monitoring well MW-9.

Samples selected for laboratory analysis were placed in laboratory-supplied containers and a chilled cooler in accordance with EPA protocols and transported via courier with appropriate chain of custody (COC) documentation to Alpha Analytical, Inc., a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory, in Westborough, Massachusetts. All soil samples were analyzed for the VOCs listed in Table 2 – Soil Cleanup Levels for Gasoline-Contaminated Soil presented in the NYSDEC Commissioner Policy, *CP-51: Soil Cleanup Guidance* by EPA Method 8260. In addition, the soil samples collected from the shallower suspected historic fill layer were also analyzed for the SVOCs listed in CP-51 Table 3 – Soil Cleanup Levels for Fuel Oil-Contaminated Soil by EPA Method 8270, and Resource Conservation and Recovery Act (RCRA) 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) plus zinc by the EPA's 6000/7000 series Methods. A summary of soil sampling depths and corresponding laboratory analysis is presented in the following table:

Soil Sample Depths

Soil Boring	Sample Depths (feet bgs)	CP-51 VOCs	CP-51 SVOCs	RCRA 8 metals + Zn
SB-10	3-5	X	X	X
	20-22	X		
SB-11	5-7	X	X	X
	17-19	X		
SB-12	2-4	X	X	X
	15-16	X		
SB-13	3-5	X	X	X
	10-12	X		
SB-14	2-4	X	X	X
	15-16	X		
SB-15	2-4	X	X	X
	10-11	X		
SB-16	2-4	X	X	X
	12-13	X		
SB-17	5-7	X	X	X
	8-9	X		
SB-18	12-14	X		
MW-9	NA			

Notes:
bgs – below ground surface
NA –No samples collected

4.3 Monitoring Well Installation

Three permanent groundwater monitoring wells (MW-7 through MW-9) were installed in soil borings SB-14, SB-15, and MW-9, respectively, for the collection of groundwater samples for laboratory analysis. Monitoring wells MW-7 and MW-8 were constructed with 10 feet of pre-packed wells screen and MW-9 was constructed with 15 feet of pre-packed well screen. The pre-packed well screen consisted of standard, slotted PVC well screen surrounded by stainless steel mesh, with sand packed between the slotted PVC well screen and the stainless steel mesh. Solid PVC well riser pipe was used to bring each monitoring well to grade surface. The exterior monitoring wells (MW-7 and MW-9) were installed by advancing 3.75-inch O.D. hollow casing into the corresponding open bore hole using the track-mounted Geoprobe® 6620DT DPP unit to install 2-inch diameter wells. The interior monitoring well (MW-8) was installed by advancing 3.25-inch O.D. hollow casing into the corresponding bore hole using the bobcat-mounted Geoprobe® 540MT DPP unit to install a 1-inch diameter well. Once the target depth was achieved, the pre-packed well screen was lowered into the hollow casing with threaded PVC well riser pipe, and the casing was removed. Morie #2 sand was used to extend the sand pack to approximately 1 foot above the well screen, followed by a 1-foot bentonite well seal, and cement grout to the surface. The monitoring wells were completed with a locking well cap, and a bolt-down, flush-with-grade gate box set in concrete.

Following installation, the monitoring wells were developed by pumping and surging with a whale pump (MW-7 and MW-9) and a peristaltic pump (MW-8) to ensure that sedimentation/turbidity was reduced, to the extent practical, in each well. Turbidity was monitored during the development utilizing a LaMotte 2020we Turbidity Meter. Development continued until turbidity was less than 10 nephelometric turbidity units (NTU) at MW-8 and MW-9, with approximately 4 gallons and 12 gallons removed, respectively. Due to slow recharge, development at MW-7 occurred over the course of two days with turbidity reaching 98.3 NTU after removing a total of approximately 4.5 gallons. The development water was containerized in DOT-approved 55-gallon labeled drums staged in the loading dock area pending transportation and disposal at a licensed off-site disposal facility.

4.4 Groundwater Sampling

AKRF returned to the Site on February 16, 2018 to collect groundwater samples from seven of the nine on-site monitoring wells, including the following:

- Two of the four monitoring wells installed during the 2015 GZA geotechnical investigation. These monitoring wells were referred to as GT-1 and GT-2 in previous reports, but have been re-designated MW-1 and MW-2 for the purposes of this SI. Monitoring wells MW-3 (previously GT-3) and MW-4 (previously GT-4) were not sampled as part of this SI;
- Two monitoring wells located near the eastern property boundary, which are suspected to be associated with the investigation of NYSDEC Spill Number 9707887 at the existing gasoline station across Cottage Place from the Site. These monitoring wells were referred to as GW-3 and GW-4 in AKRF's 2017 Phase II report, but have been re-designated as MW-5 and MW-6, respectively, for the purpose of this investigation.
- The three newly installed monitoring wells, MW-7, MW-8, and MW-9.

The locations of the groundwater monitoring wells are shown on Figure 2.

Prior to collecting the samples, the headspace at each monitoring well was screened for the presence of VOCs using a calibrated PID after removing the well cap. The depth to groundwater and the total well depth were then measured in each well using an oil-water interface probe attached to a measuring tape accurate to 0.01 feet.

Low-flow sampling techniques and dedicated tubing were utilized to purge the monitoring wells prior to sample collection. The purged water was monitored for turbidity and water quality indicators (i.e., pH, temperature, dissolved oxygen, oxidation-reduction potential, and specific conductivity) with measurements collected approximately every five minutes. Purging of the wells continued until the turbidity was less than 50 NTU for three successive readings and water quality indicators had stabilized to the extent practicable (MW-1, MW-6, MW-8, and MW-9). If turbidity and/or water quality indicators did not stabilize after two hours, purging was discontinued and samples were collected (MW-2, MW-5, and MW-7). Groundwater sampling logs are provided in Appendix C.

Groundwater samples were collected in laboratory-supplied glassware and placed in a chilled cooler in accordance with EPA protocols. The samples were transported via courier with appropriate COC documentation to Alpha Analytical, Inc. The groundwater samples were analyzed for the VOCs listed in CP-51, Table 2 by EPA Method 8260.

Purge water generated during monitoring well sampling was containerized in the DOT-approved 55-gallon labeled drums staged in the loading dock area pending transportation and disposal at a licensed off-site disposal facility.

4.5 Monitoring Well Surveying and Fluid Level Gauging

Insite Engineering, Surveying & Landscape Architecture, P.C. (Insite), a New York State-licensed surveyor, met with AKRF staff during the groundwater sampling activities on February 16, 2018 to survey the nine on-site monitoring wells. Elevation measurements were taken at three points for each well location: the ground surface beside the well; the rim of the gate box; and the top of the PVC well casing. The elevations were referenced to the North American Vertical Datum of 1988 (NAVD 88).

Gauging of the nine wells was conducted on February 16, 2018 during the groundwater sampling activities and again on February 26, 2018 to determine the groundwater elevations and to check for the presence of light non-aqueous phase liquid (LNAPL). AKRF recorded the depth to groundwater and the total well depth in each well using an oil-water interface probe attached to a measuring tape accurate to 0.01 feet. Results from the well survey and water level gauging are described in Section 5.5.

5.0 INVESTIGATION RESULTS

5.1 Geophysical Survey and Utility Mark Outs

During the geophysical survey, linear anomalies consistent with subsurface utilities were marked out with spray paint prior to drilling and soil boring locations were adjusted accordingly. No evidence of buried tanks was identified in the areas that were scanned during the geophysical survey. The Geophysical Investigation Report is attached as Appendix B.

5.2 Field Observations

Soils encountered during this investigation included historic fill extending from just below ground surface to depths ranging from 5 to 12 feet bgs. This fill layer included sand, silt, organics (wood/grass), brick, asphalt, gravel, and rubber. Apparent native soils composed of varying amounts of sand, silt, and gravel were identified underlying the fill layer extending to approximately 30 feet bgs (the maximum boring depth). Evidence of petroleum contamination was noted in seven of the 10 soil borings advanced during the investigation (SB-11, and SB-13 through SB-18), as summarized in the following table:

Evidence of Petroleum Contamination

Soil Boring	Depth (ft bgs)	Moisture	Field Observations	PID Readings (PPM)
SB-11	12-22	Dry	Petroleum-like odors	0.5 – 53.2
SB-13	8-15	Dry	Petroleum-like odors	3.1 – 881.4
SB-14	0-5	Dry	Septic-like odors	0.2 – 4.5
	5-16	Dry	Petroleum- and Septic-like odors	1.0 – 1370
	16-30	Wet	Petroleum-like odors	4.2 – 1264
SB-15	10.5-11.5	Moist	Petroleum-like odors	10.2 – 895
	11.5-16	Wet	Petroleum-like odors	12.8 – 1101
SB-16	12-13	Moist	Petroleum-like odors	2.8 – 5.5
	13-19	Wet	Petroleum-like odors	0.1 – 5.8
SB-17	8-9	Dry	Petroleum-like odors	24.3 – 298
	9-19	Wet	Petroleum-like odors	0.5 – 15.7
SB-18	11-19	Dry	Petroleum-like odors	6.1 - 752

Notes:
ft bgs = feet below ground surface
PPM = parts per million

No evidence of petroleum-like contamination or elevated PID readings were detected in the remaining soil borings. Soil descriptions, observations, and PID readings are detailed in the soil boring logs provided in Appendix C.

The depths to groundwater measured in the on-site monitoring wells were shallower in the southern and western portions of the Site (along Hamilton Avenue and Martin Luther King Boulevard) and deeper in the eastern portion of the Site (along Cottage Place), consistent with the elevation changes across the Site. No LNAPL was detected during sampling or fluid level gauging of the monitoring wells; however, petroleum-like odors were noted on purge water during sampling at MW-2, MW-6, MW-7, and MW-8. Results from the well survey and corresponding groundwater elevation calculations are described in Section 5.5.

5.3 Soil Analytical Results

The analytical results from the 17 soil samples that were submitted to the laboratory from this investigation were compared to the Unrestricted Use Soil Cleanup Objectives (UUSCOs) and the Restricted Residential Soil Cleanup Objectives (RRSCOs) listed in Sections 6.8(a) and 6.8(b) of 6 NYCRR Part 375. In addition, the VOC and SVOC results were compared to the Soil Cleanup Levels (SCLs) for gasoline- and fuel oil-contaminated soil listed in Table 2 and Table 3 of the NYSDEC Commissioner Policy, *CP-51: Soil Cleanup Guidance*. Soil analytical results are summarized in Tables 1 through 3. The complete laboratory analytical report is provided as Appendix D. Exceedances of the NYSDEC SCOs and SCLs are summarized on Figure 5. The analytical results from the soil sampling are discussed below:

Volatile Organic Compounds (VOCs)

All 16 petroleum-related VOCs analyzed for were detected in one or more of the soil samples at concentrations ranging from 0.00018 to 100 milligrams per kilogram (mg/kg). As summarized in the following table, eight VOCs (1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, ethylbenzene, isopropylbenzene, n-propylbenzene, toluene, and total xylenes) were detected at concentrations exceeding the UUSCOs and CP-51 SCLs, and one VOC (1,2,4-trimethylbenzene) was detected at a concentration above its RRSCO.

Volatile Organic Compounds Detected in Soil Above the Part 375 SCOs and CP-51 SCLs

Boring ID **Depth (ft bgs)** **Date Sampled** **Dilution Factor** **Units = mg/kg**	***Part 375 UUSCO/ CP-51 SCL***	***Part 375 RRSCO***	**SB-11 (17-19) 2/6/2018 10**	**SB-13 (10-12) 2/6/2018 10**	**SB-14 (15-16) 2/6/2018 10**	**SB-18 (12-14) 2/6/2018 20**
1,2,4-Trimethylbenzene	***3.6***	***52***	**60**	**69**	**19**	**100**
1,3,5-Trimethylbenzene	***8.4***	***52***	**17**	**22**	**11**	**34**
Benzene	***0.06***	***4.8***	0.1 U	0.11 U	**0.12 J**	0.18 U
Ethylbenzene	***1***	***41***	**11**	**14**	**4.9**	**11**
Isopropylbenzene	***2.3***	***NS***	**4.1**	**3.1**	**2.5**	**2.4**
n-Propylbenzene	***3.9***	***100***	**15**	**12**	**4.1**	**7.2**
Toluene	***0.7***	***100***	0.11 U	**0.87**	0.12 U	0.28 J
Xylenes, Total	***0.26***	***100***	**18**	**68**	**17 J**	**78**

Notes:
Bold = Exceeds Unrestricted Use Soil Cleanup Objective (UUSCO)/CP-51 Table 2 Soil Cleanup Level (SCL)
Highlighted = Exceeds Restricted Residential Soil Cleanup Objective (RRSCO)
ft bgs = feet below ground surface
mg/kg = milligram per kilogram
U = The analyte was not detected at the indicated concentration

J = The concentration given is an estimated value

Based on the field observations and the historic presence of a gasoline station at the Site in the vicinity of these soil sampling locations, the VOC detections in unsaturated soil are likely attributable to a historic release or releases from USTs associated with the former gasoline station. The complete analytical results for VOCs in soil are summarized in Table 1.

Semivolatile Organic Compounds (SVOCs)

All 16 petroleum-related SVOCs analyzed for were detected in one or more of the soil samples at concentrations ranging from 0.018 to 3.3 mg/kg. As summarized in the following table, seven SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene] were detected in one sample [SB-17 (5'-7')] at concentrations exceeding their respective UUSCOs/CP-51 SCLs and/or RRSCOs:

Semi-Volatile Organic Compounds Detected in Soil
Above the Part 375 SCOs and CP-51 SCLs

Boring ID **Depth (ft bgs)** **Date Sampled** **Dilution Factor** **Units = mg/kg**	***Part 375 UUSCO/ CP-51 SCL***	***Part 375 RRSCO***	**SB-17 (5-7) 2/9/2018 1**
Benzo(a)anthracene	***1***	***1***	**2.8**
Benzo(a)pyrene	***1***	***1***	**2.4**
Benzo(b)fluoranthene	***1***	***1***	**3.3**
Benzo(k)fluoranthene	***0.8***	***3.9***	**0.85**
Chrysene	***1***	***3.9***	**2.2**
Dibenzo(a,h)anthracene	***0.33***	***0.33***	**0.41**
Indeno(1,2,3-cd)pyrene	***0.5***	***0.5***	**1.8**

Notes:
Bold = Exceeds Unrestricted Use Soil Cleanup Objective (UUSCO)/CP-51 Table 3 Soil Cleanup Level (SCL)
Highlighted = Exceeds Restricted Residential Soil Cleanup Objective (RRSCO)
ft bgs = feet below ground surface
mg/kg = milligram per kilogram

Based on the field observations and the Site history, the SVOC detections are likely attributable to the historic fill material observed in the soil borings, and not to a release or other source area. The complete analytical results for SVOCs in soil are summarized in Table 2.

Metals

Eight of the nine metals analyzed for were detected in one or more of the soil samples at concentrations ranging from 0.03 to 292 mg/kg. The detected metals included arsenic, barium, cadmium, chromium, lead, mercury, selenium, and zinc. As summarized in the following table, chromium lead, and mercury were detected at concentrations above their respective UUSCOs, but below their RRSCOs.

Metals Detected in Soil Above the Part 375 SCOs

Boring ID **Depth (ft bgs)** **Date Sampled** **Dilution Factor** **Units = mg/kg**	***Part 375 UUSCO***	***Part 375 RRSCO***	**SB-10 (3-5) 2/7/2018 1**	**SB-12 (2-4) 2/6/2018 1**	**SB-14 (2-4) 2/6/2018 1**	**SB-15 (2-4) 2/9/2018 1**
Chromium	***30****	***180****	**39.5**	**113**	19.9	14.7
Lead	***63***	***400***	10.2	6.66	**140**	40.9
Mercury	***0.18***	***0.81***	0.01 U	0.02 U	0.09	**0.4**

Notes:
Bold = Exceeds Unrestricted Use Soil Cleanup Objective (UUSCO); ft bgs = feet below ground surface
mg/kg = milligram per kilogram; * = Standard reflects trivalent chromium, not total chromium
U = The analyte was not detected at the indicated concentration

Based on the field observations and the Site history, the metal detections are likely attributable to the historic fill material observed in the borings and/or background conditions, and not to a release or other source area. The complete analytical results for metals in soil are summarized in Table 3.

5.4 Groundwater Analytical Results

The analytical results from the seven groundwater samples and the associated trip blank were compared to the NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (AWQSs) as listed in the NYSDEC Division of Water Technical Operational and Guidance Series (TOGS)1.1.1. The groundwater analytical results are summarized in Table 4. The complete laboratory analytical report is provided as Appendix D. Exceedances of the NYSDEC AWQSs are summarized on Figure 6. The analytical results from the groundwater sampling are discussed below:

VOCs

Fifteen (15) of the 16 petroleum-related VOCs analyzed for were detected in one or more of the groundwater samples at concentrations ranging from 0.67 to 1,800 micrograms per liter (µg/L). As summarized in the following table, 12 VOCs (1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, isopropylbenzene, MTBE, n-butylbenzene, n-propylbenzene, naphthalene, o-xylene, p/m-xylene, p-isopropyltoluene, and sec-butylbenzene) were detected at concentrations exceeding the AWQSs.

Volatile Organic Compounds Detected in Groundwater Above the Class GA AWQSs

Sample ID **Date Sampled** **Dilution Factor** **Units = µg/L**	***Class GA AWQS***	**MW-2 2/16/2018 10**	**MW-7 2/16/2018 2**	**MW-8 2/16/2018 2**	**MW-9 2/16/2018 1**
1,2,4-Trimethylbenzene	***5***	7 U	**110**	4.8 J	0.7 U
1,3,5-Trimethylbenzene	***5***	7 U	**56**	**57**	0.7 U
Ethylbenzene	***5***	7 U	**92**	**33**	0.7 U
Isopropylbenzene	***5***	7 U	**14**	**44**	0.7 U
MTBE	***10***	**1,800**	**15**	**20**	**34**
Naphthalene	***10***	7 U	**14**	**23**	0.7 U
n-Butylbenzene	***5***	7 U	1.9 J	**36**	0.7 U
n-Propylbenzene	***5***	7 U	**14**	**130**	0.7 U
o-Xylene	***5***	7 U	**28**	1.4 U	0.7 U
p/m-Xylene	***5***	7 U	**290**	**22**	0.7 U

Sample ID **Date Sampled** **Dilution Factor** **Units = µg/L**	***Class GA AWQS***	**MW-2** **2/16/2018** **10**	**MW-7** **2/16/2018** **2**	**MW-8** **2/16/2018** **2**	**MW-9** **2/16/2018** **1**
p-Isopropyltoluene	***5***	7 U	4.5 J	**8.3**	0.7 U
sec-Butylbenzene	***5***	7 U	2.7 J	**25**	0.7 U

Notes:
Bold = Exceeds the Class GA AWQS
µg/L = microgram per liter
U = The analyte was not detected at the indicated concentration
J = The concentration given is an estimated value

Monitoring wells MW-2, MW-7, and MW-8 are located within or immediately downgradient of the footprints of the former on-site gasoline stations in the southeastern and southern portions of the Site, while MW-9 is located near the downgradient boundary of the Site. All four of these monitoring wells are located downgradient of the existing off-site gasoline station located east of the Site, on the corner of Cottage Pace and Hamilton Avenue. As discussed further in Section 6.0, the identified groundwater contamination is likely attributable to a combination of historic petroleum releases from both the on-site and off-site facilities. The complete analytical results for VOCs in groundwater are summarized in Table 4.

5.5 Fluid Level Gauging Results

The water table was measured in the nine on-site groundwater monitoring wells at depths ranging from 9.93 to 23.90 feet bgs on February 16, 2018 and from 9.58 to 22.51 feet bgs on February 26, 2018. The shallower groundwater depths were noted in those wells in the southern and western portions of the Site (along Hamilton Avenue and Martin Luther King Boulevard) and at deeper depths in the eastern portion of the Site (along Cottage Place), consistent with the elevation changes across the Site. The surveyed monitoring well elevations and the corresponding depth to water measurements were used to calculate the groundwater elevations in each well, as summarized in Table 5. Contour maps of the groundwater elevations measured for each event are provided as Figures 3 and 4. The contour maps indicate that groundwater flows in a southwesterly direction across the Site, with groundwater elevations ranging from 178.70 to 181.89 feet above mean sea level (referenced to NAVD 88).

6.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

AKRF performed a Spill Investigation (SI) at the property located at 200 Hamilton Avenue in the City of White Plains, Westchester County, New York, as shown on Figure 1, between February 6 and 26, 2018. The purpose of the SI was to further assess petroleum-related contamination identified in the southeastern and southern portions of the Site during a Subsurface (Phase II) investigation. As reported in the *Subsurface (Phase II) Investigation Report* (dated October 2017), field observations and laboratory results indicated evidence of a historic petroleum release or releases, resulting in the presence of petroleum-related volatile organic compounds (VOCs) in groundwater at concentrations above the New York State Department of Environmental Conservation (NYSDEC) Ambient Water Quality Standards and Guidance Values (AWQSs). The SI scope included a soil boring and groundwater sampling program to further delineate the extent of the petroleum-related contamination associated with NYSDEC Spill Number 1706297 and to evaluate potential source(s).

The SI scope included a geophysical survey, the advancement of 10 soil borings, installation of three permanent groundwater monitoring wells, and the collection of soil and groundwater samples for field-screening and laboratory analysis. In addition, four of the six groundwater monitoring wells previously installed at the Site by others were sampled for laboratory analysis. The locations of the soil borings and monitoring wells (including the locations from the 2017 Phase II) are depicted on Figure 2. All nine on-site wells (three newly installed and six previously installed) were surveyed and gauged, and groundwater contour maps were prepared.

Consistent with the findings from the 2017 Phase II, a shallow fill layer was encountered in the 10 soil borings to depths ranging from approximately 5 to 12 feet below ground surface (bgs). The fill material was generally underlain by apparent native sand and silt to approximately 30 feet bgs (the maximum soil boring depth).

Evidence of petroleum contamination (petroleum-like odors and staining) and elevated photoionization detector (PID) readings as high as 1,370 parts per million (ppm) were noted above the saturated zone, as shallow as 8 feet bgs, in soil borings advanced within the footprint of the former gasoline station in the southeastern portion of the Site (SB-11, SB-13, SB-14, and SB-18). Refusal was encountered prior to reaching groundwater at soil borings SB-11, SB-13, and SB-18; however, contamination was observed to extend into the saturated zone below the observed groundwater interface at soil boring SB-14.

Evidence of contamination and elevated PID readings as high as 1,101 ppm were observed just above and within the saturated zone in soil borings advanced within the footprint of the former gasoline station in the southern portion of the Site (SB-15, SB-16, and SB-17).

Analytical results for the soil samples identified petroleum-related VOCs at concentrations above the New York State Department of Environmental Conservation (NYSDEC) Unrestricted Use Soil Cleanup Objectives (UUSCOs) and the Restricted Residential Soil Cleanup Objectives (RRSCOs) listed in Sections 6.8(a) and 6.8(b) of 6 NYCRR Part 375, and the Soil Cleanup Levels (SCLs) for gasoline-contaminated soil listed in Table 2 of the NYSDEC Commissioner Policy, *CP-51: Soil Cleanup Guidance.* The VOC exceedances were in samples collected from above the water table from soil borings SB-11, SB-13, SB-14, and SB-18, advanced in the footprint of the former gasoline station in the southeastern portion of the Site. Semivolatile organic compounds (SVOCs) above the NYSDEC UUSCOs and RRSCOs, and the CP-51 SCLs were noted in the samples collected from above the water table in soil boring SB-17. Three metals (chromium, lead, and mercury) were detected above the NYSDEC UUSCOs in samples collected from the shallow fill layer in SB-10, SB-12, SB-14, and SB-15. Soil analytical results are summarized in Tables 1 through 3. Exceedances of the NYSDEC SCOs and SCLs are summarized on Figure 5.

The water table was measured in the nine on-site groundwater monitoring wells at depths ranging from 9.58 to 23.90 feet bgs during two gauging events. Groundwater was noted to be shallower in the southern and western portions of the Site (along Hamilton Avenue and Martin Luther King Boulevard), and deeper in the eastern portion of the Site (along Cottage Place), consistent with the elevation changes across the Site. Groundwater elevations ranged from 181.89 to 179.70 feet above mean sea level [referenced to the North American Vertical Datum of 1988 (NAVD 88)] during the two gauging events, and groundwater elevation contours maps indicate that groundwater at the Site flows in a southwesterly direction. The elevations of each of the monitoring wells and the corresponding groundwater elevations from gauging events are summarized in Table 5, and the groundwater contours and flow directions are shown on Figures 3 and 4. No separate phase product was detected in the on-site monitoring wells; however, evidence of petroleum-like odors was noted on groundwater during sampling at MW-2, MW-6, MW-7, and MW-8.

Analytical results identified petroleum-related VOCs, including trimethylbenzenes, ethylbenzene, propylbenzenes, butylbenzenes, naphthalene, xylenes, and p-isopropyltoluene, above their respective NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (AWQSs) in the groundwater samples from monitoring wells MW-7 (installed at soil boring SB-14) and MW-8 (installed at soil boring SB-15). Methyl tert-butyl ether (MTBE), an oxygenate that was used as a gasoline additive in New York State between 1979 and 2004, was detected above its AWQS of 10 micrograms per liter (µg/L) in four groundwater samples, MW-2 (1,800 µg/L), MW-7 (14 µg/L), MW-8 (20 µg/L), and MW-9 (34 µg/L). The groundwater analytical results are summarized in Table 4. Exceedances of the NYSDEC AWQSs are summarized on Figure 6.

6.1 Conclusions

Based on the findings of the SI, AKRF concludes the following:

- Petroleum-contaminated soil is present in the unsaturated zone and extending below the water table within the footprint of the former gasoline station in the southeastern portion of the Site. The evidence of contamination included field observations of staining and odors as shallow as 5 feet bgs, and detection of petroleum-related VOCs exceeding the NYSDEC CP-51 Soil Cleanup Levels in samples as shallow as 10 feet bgs from soil borings in this area. This contamination is likely the result of a historic petroleum release or releases from the former gasoline station in this area and represents an on-site source of the documented groundwater contamination at the Site.
- Field evidence of petroleum-contamination was noted just above and extending into the saturated zone in soil borings located within the footprint and immediately downgradient of former on-site gasoline station in the southern portion of the site; however, VOCs were not detected above the NYSDEC CP-51 SCLs in soil samples collected from this area. The contamination observed in this area, which was primarily in the "smear zone" (i.e., the zone just above the water table that is intermittently saturate during periods of higher groundwater levels) is likely associated with groundwater contamination identified at the Site. It is inconclusive whether this contamination is indicative of a second on-site release area. However, a source of petroleum contamination may be present in areas of the former gas station footprint that were not accessible during this investigation.
- The presence of MTBE in groundwater suggests that an off-site source (e.g., the existing gas station across Cottage Place) has contributed to the documented on-site groundwater contamination. MTBE is an oxygenate that was used as a gasoline additive in New York State between 1979 and 2004, and since the on-site gasoline stations were closed prior to 1970, the source of the MTBE contamination could not have originated on-site. Therefore, it is likely that the groundwater contamination at the Site represents a comingled plume from historic releases from both the former on-site and existing off-site

gasoline stations. It appears that the original source of the MTBE contamination is no longer present, since the highest levels were detected over 300 feet downgradient of the off-site gasoline station.

- Based on the SI field observations, the metals and SVOCs detected in soil at levels above their respective Part 375 UUSCOs and RRSCOs, and CP-51 SCLs are likely attributable to contaminants in the shallow fill layer observed in the Site subsurface or to background conditions, and not likely to an on-site release or other source area.

6.2 Recommendations

AKRF understands that SWD II, LLC is proposing to redevelop the entire Site footprint with a mixed use development that includes four high-rise residential buildings set on a "Public Platform" that will include specialty retail, restaurant and office space, and dynamic programmed public open space.

Based on the conclusions presented above in conjunction with the scope of the proposed redevelopment work, AKRF recommends applying to enroll in the NYSDEC Brownfield Cleanup Program (BCP). If the Site is accepted into the BCP, the open Spill case could be addressed and closed under the program, and qualified remediation costs and a portion of the redevelopment costs could be eligible for New York State tax credits. The NYSDEC BCP includes multiple phases including the Application and Agreement Phase, a Remedial Investigation Phase to delineate the nature and extent of contamination, and a Remediation Phase to select a remedy and complete the cleanup of the Site.

A full-scale remedial investigation phase may not be required for the Site based on the data generated from the Phase II and SI; however, some level of remedial investigation to further delineate the extent of contamination, and to provide additional data to integrate the designs for the proposed remediation and redevelopment is recommended. After completing the Remedial Investigation (RI), a Remedial Action Work Plan (RAWP) would be prepared to outline measures for addressing the Site contamination in conjunction with the proposed Site redevelopment. It is anticipated that the RAWP would include the following elements:

- Installation of a "cut-off wall" (e.g., steel sheeting with water-proofed joints) along the southeastern Site boundary to prevent migration of groundwater contamination onto the Site from the documented petroleum spill at the east-adjacent gasoline station. This wall could also serve as support-of-excavation for remedial excavations and any excavation required for Site redevelopment in this area.
- Excavation and off-site disposal of petroleum-contaminated soil from the southeastern and southern portions of the Site to remove "hot-spot" areas of contamination, with collection of post-excavation endpoint samples to demonstrate that the remedial action objectives have been achieved. The estimated extent of hot-spot remediation would be determined during the remedial investigation phase.
- Injection or application of a chemical oxidation and/or oxygen releasing product directly to groundwater in the open excavation areas to address residual groundwater contamination.
- Proper characterization, management, and off-site disposal of all soil excavated during site redevelopment, including the shallow fill layer observed at the Site and potential residual petroleum-contaminated soil near the groundwater interface in deeper excavations.
- Pre-treatment and appropriate discharge of any dewatering fluids pumped from the hot-spot excavations and other deeper excavations required for building foundations. Dewatering may also assist in remediating the groundwater contamination at the Site. It is anticipated that discharge of dewatering fluids to the municipal storm-water sewer system will require approval by the NYSDEC Division of Water under the BCP, which may take up to 4 or 5 months to obtain.

- Appropriate testing of any required backfill and top soil to ensure that it meets the import criteria specified in the RAWP.
- Implementation of appropriate Health and Safety and air monitoring measures during all excavation activities to ensure the protection of on-site workers and the surrounding community.
- Protection of existing and/or installation of new permanent groundwater monitoring wells for the collection of post-remedial groundwater samples to demonstrate that remedial action objectives have been achieved.
- Contingency measures for addressing any underground storage tanks and/or unexpected contaminated soil that may be encountered during excavation for Site redevelopment.

In addition to the remedial measures described above, the New York State Department of Health (NYSDOH) may also require installation of vapor mitigation measures under the new buildings. It is anticipated that these measures would not be required for the majority of the area under the public platform, which will consist of separately ventilated loading area/parking garage and storage areas. However, installation of a sub-slab depressurization system (e.g., slotted PVC piping installed in a permeable gravel layer under the building slab connected to vertical risers that vent to the building roof) may be required for some of the retail spaces that are not underlain by the garage/storage areas.

Alternatively, to the extent that the new foundations approach and/or extend into the water table, a waterproofing membrane (e.g., Grace Preprufe) may satisfy any vapor mitigation requirements. To the extent that waterproofing will be installed as part of the development activities, such costs may not be classified by the NYSDEC as "remediation costs" eligible for tax credits under the BCP.

7.0 LIMITATIONS

The findings set forth in this report are strictly limited in scope and time to the date of the evaluation described herein. The conclusions and recommendations presented in the report are based solely on the services and any limitations described in this report.

This report may contain conclusions that are based on the analysis of data collected at the time and locations noted in the report through intrusive or non-intrusive sampling. However, further investigation might reveal additional data or variations of the current data, which may differ from our understanding of the conditions presented in this report and require the enclosed recommendations to be reevaluated or modified.

Chemical analyses may have been performed for specific parameters during the course of this investigation, as summarized in the text and tables. It should be noted that additional chemical constituents, not searched for during this investigation, may be present at the site. Due to the nature of the investigation and the limited data available, no warranty, expressed or implied, shall be construed with respect to undiscovered liabilities. The presence of biological hazards, radioactive materials, lead-based paint and asbestos-containing materials was not investigated, unless specified in the report.

Interpretations of the data, including comparison to regulatory standards, guidelines or background values, are not opinions that these comparisons are legally applicable. Furthermore, any conclusions or recommendations should not be construed as legal advice. For such advice, the client is recommended to seek appropriate legal counsel. Disturbance, handling, transportation, storage and disposal of known or potentially contaminated materials is subject to all applicable laws, which may or may not be fully described as part of this report.

The analytical data, conclusions, and/or recommendations provided in this report should not be construed in any way as a classification of waste that may be generated during future disturbance of the project site. Waste(s) generated at the site including excess fill may be considered regulated solid waste and potentially hazardous waste. Requirements for intended disposal facilities should be determined beforehand as the data provided in this report may be insufficient and could vary following additional sampling.

This report may be based solely or partially on data collected, conducted, and provided by, AKRF and/or others. No warranty is expressed or implied by usage of such data. Such data may be included in other investigation reports or documentation. In addition, these reports may have been based upon available previous reports, historical records, documentation from federal, state and local government agencies, personal interviews, and geological mapping. This report is subject, at a minimum, to the limitations of the previous reports, historical documents, availability and accuracy of collected documentation, and personal recollection of those persons interviewed. In certain instances, AKRF has been required to assume that the information provided is accurate with limited or no corroboratory evidence.

This report is intended for the use solely by SWD II, LLC. Reliance by third parties on the information and opinions contained herein is strictly prohibited and requires the written consent of AKRF. AKRF accepts no responsibility for damages incurred by third parties for any decisions or actions taken based on this report. This report must be used, interpreted, and presented in its entirety.

8.0 SOIL DISPOSAL ISSUES

In addition to the discussions in the Conclusions, Recommendations, and Limitations Sections (Sections 6.0 and 7.0), the issue of appropriate management of off-site disposal of soil warrants careful consideration. Any material being disposed of off-site is a regulated waste, and disposal must be in accordance with:

- Requirements of the specific receiving facility;
- Requirements of any agencies overseeing the cleanup/excavation; and
- Federal and state requirements (sometimes in both the state where the soil is generated and where disposal will occur).

For hazardous wastes and petroleum-contaminated soil (and other 'clearly contaminated' materials), the requirements are usually fairly well defined. It is in the situation where contamination is not readily apparent (e.g., so called "historic or urban fill" or "construction and demolition debris" or material that may have been formerly identified as "clean fill") that present the greatest potential for problems and cost overruns. Even on sites where no contamination requiring remediation is identified, it is common that most of the excavated material is considered "contaminated" for purposes of waste disposal. Concentrations of the various contaminants in historic fill can be highly variable, and upon further testing, the material could contain higher contaminant concentrations than outlined in this investigation. Portions of this material could be classified as hazardous waste.

It is important that the intended disposal facility (or facilities) be identified in advance of off-site disposal. Agency approval is sometimes required for disposal, and the facility will frequently require additional testing prior to (and sometimes at the time of) accepting material. Material must conform to a lengthy list of requirements based on both chemical composition and sometimes numerous other parameters (related to size, percentage of liquids, presence of odors, etc.) for acceptance at the facility. Assuming (or allowing a contractor to assume) that all, or even most, of the soil from a site can be disposed of at minimal cost may result in unanticipated and expensive change orders.

For these reasons, we recommend that professional advice be sought prior to preparing bid documents and contracts incorporating soil disposal.

TABLES

Table 1
200 Hamilton Avenue
White Plains, NY
Spill Investigation Soil Analytical Results
Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled Dilution Analyte	CP-51 Soil Cleanup Level SCL mg/kg	NYSDEC Part 375 Unrestricted SCO mg/kg	NYSDEC Part 375 Restricted Residential SCO mg/kg	SB-10 (20-22) L1804131-10 2/7/2018 1	SB-10 (3-5) L1804131-11 2/7/2018 1	SB-11 (17-19) L1804131-01 2/6/2018 10	SB-11 (5-7) L1804131-02 2/6/2018 1	SB-12 (2-4) L1804131-08 2/6/2018 1	SB-12 (15-16) L1804131-09 2/6/2018 1
1,2,4-Trimethylbenzene	**3.6**	**3.6**	**52**	0.00018 U	0.00017 U	**60**	0.0002 U	0.00031 J	0.00017 U
1,3,5-Trimethylbenzene	**8.4**	**8.4**	**52**	0.00016 U	0.00015 U	**17**	0.00017 U	0.00016 U	0.00015 U
Benzene	**0.06**	**0.06**	**4.8**	0.00019 U	0.00018 U	0.1 U	0.0002 U	0.0002 U	0.00018 U
Ethylbenzene	**1**	**1**	**41**	0.00016 U	0.00016 U	**11**	0.00018 U	0.00019 J	0.00016 U
Isopropylbenzene	**2.3**	**NS**	**NS**	0.00019 U	0.00018 U	**4.1**	0.00021 U	0.0002 U	0.00018 U
Methyl tert butyl ether	**0.93**	**0.93**	**100**	0.00015 U	0.00014 U	0.084 U	0.00016 U	0.00016 U	0.00014 U
Naphthalene	**12**	**12**	**100**	0.00013 U	0.00013 U	3.4	0.00015 U	0.00032 J	0.00013 U
n-Butylbenzene	**12**	**12**	**100**	0.00022 U	0.00021 U	4	0.00024 U	0.00023 U	0.00021 U
n-Propylbenzene	**3.9**	**3.9**	**100**	0.00021 U	0.0002 U	**15**	0.00023 U	0.00022 U	0.0002 U
o-Xylene	**0.26 TS**	**0.26 TS**	**100 TS**	0.00033 U	0.00031 U	**1.4**	0.00036 U	0.00035 U	0.00031 U
p/m-Xylene	**0.26 TS**	**0.26 TS**	**100 TS**	0.00034 U	0.00033 U	**17**	0.00037 U	0.00049 J	0.00033 U
p-Isopropyltoluene	**10**	**NS**	**NS**	0.0002 U	0.00019 U	1	0.00022 U	0.00021 U	0.00019 U
sec-Butylbenzene	**11**	**11**	**100**	0.00021 U	0.0002 U	2.3	0.00023 U	0.00022 U	0.0002 U
tert-Butylbenzene	**5.9**	**5.9**	**100**	0.00024 U	0.00023 U	0.14 U	0.00026 U	0.00025 U	0.00023 U
Toluene	**0.7**	**0.7**	**100**	0.00019 U	0.00018 U	0.11 U	0.00021 U	0.0002 U	0.00018 U
Xylenes, Total	**0.26**	**0.26**	**100**	0.00033 U	0.00031 U	**18**	0.00036 U	0.00049 J	0.00031 U

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Client ID Lab Sample ID Date Sampled Dilution Analyte	CP-51 Soil Cleanup Level SCL mg/kg	NYSDEC Part 375 Unrestricted SCO mg/kg	NYSDEC Part 375 Restricted Residential SCO mg/kg	SB-13 (10-12) L1804131-03 2/6/2018 10	SB-13 (3-5) L1804131-04 2/6/2018 1	SB-14 (2-4) L1804131-06 2/6/2018 1	SB-14 (15-16) L1804131-07 2/6/2018 10	SB-15 (10-11) L1804131-12 2/9/2018 1	SB-15 (2-4) L1804131-13 2/9/2018 1
1,2,4-Trimethylbenzene	**3.6**	**3.6**	**52**	**69**	0.00032 J	0.0008 J	**19**	0.00054 J	0.00022 U
1,3,5-Trimethylbenzene	**8.4**	**8.4**	**52**	**22**	0.00016 U	0.0003 J	**11**	0.0011 J	0.00019 U
Benzene	**0.06**	**0.06**	**4.8**	0.11 U	0.00019 U	0.00018 U	**0.12 J**	0.00023 U	0.00023 U
Ethylbenzene	**1**	**1**	**41**	**14**	0.00017 U	0.00018 J	**4.9**	0.00036 J	0.0002 U
Isopropylbenzene	**2.3**	**NS**	**NS**	**3.1**	0.00019 U	0.00018 U	**2.5**	0.0014	0.00023 U
Methyl tert butyl ether	**0.93**	**0.93**	**100**	0.085 U	0.00015 U	0.00014 U	0.094 U	0.0024	0.00018 U
Naphthalene	**12**	**12**	**100**	5.8	0.00014 U	0.00085 J	2.8 J	0.0019 J	0.00016 U
n-Butylbenzene	**12**	**12**	**100**	4.1	0.00022 U	0.00021 U	1.4	0.0064	0.00027 U
n-Propylbenzene	**3.9**	**3.9**	**100**	**12**	0.00021 U	0.0002 U	**4.1**	0.0048	0.00025 U
o-Xylene	**0.26 TS**	**0.26 TS**	**100 TS**	**14**	0.00033 U	0.00031 U	**0.54 J**	0.0004 U	0.0004 U
p/m-Xylene	**0.26 TS**	**0.26 TS**	**100 TS**	**54**	0.00035 U	0.00066 J	**16**	0.00041 U	0.00041 U
p-Isopropyltoluene	**10**	**NS**	**NS**	0.95	0.0002 U	0.00019 U	1.3	0.00091 J	0.00024 U
sec-Butylbenzene	**11**	**11**	**100**	2.1	0.00021 U	0.00022 J	0.99	0.0037	0.00026 U
tert-Butylbenzene	**5.9**	**5.9**	**100**	0.14 U	0.00024 U	0.00058 J	0.19 J	0.00031 J	0.00029 U
Toluene	**0.7**	**0.7**	**100**	**0.87**	0.00019 U	0.00018 U	0.12 U	0.00023 U	0.00027 J
Xylenes, Total	**0.26**	**0.26**	**100**	**68**	0.00033 U	0.00066 J	**17**	0.0004 U	0.0004 U

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White Plains, NY
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Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled Dilution Analyte	CP-51 Soil Cleanup Level SCL mg/kg	NYSDEC Part 375 Unrestricted SCO mg/kg	NYSDEC Part 375 Restricted Residential SCO mg/kg	SB-16 (12-13) L1804131-14 2/9/2018 1	SB-16 (2-4) L1804131-15 2/9/2018 1	SB-17 (8-9) L1804131-16 2/9/2018 1	SB-17 (5-7) L1804131-17 2/9/2018 1	SB-18 (12-14) L1804131-05 2/6/2018 20
1,2,4-Trimethylbenzene	**3.6**	**3.6**	**52**	0.0002 U	0.0005 J	0.00056 J	0.00033 J	**100**
1,3,5-Trimethylbenzene	**8.4**	**8.4**	**52**	0.00017 U	0.00069 J	0.00024 J	0.0002 J	**34**
Benzene	**0.06**	**0.06**	**4.8**	0.00021 U	0.00023 U	0.00023 U	0.0002 U	0.18 U
Ethylbenzene	**1**	**1**	**41**	0.00018 U	0.0002 U	0.0002 U	0.00018 U	**11**
Isopropylbenzene	**2.3**	**NS**	**NS**	0.00021 U	0.00023 U	0.0011 J	0.0002 U	**2.4**
Methyl tert butyl ether	**0.93**	**0.93**	**100**	0.037	0.00018 U	0.00018 U	0.00016 U	0.14 U
Naphthalene	**12**	**12**	**100**	0.00015 U	0.00025 J	0.0028 J	0.00014 U	6.6
n-Butylbenzene	**12**	**12**	**100**	0.00024 U	0.00028 U	0.00027 U	0.00024 U	5.2
n-Propylbenzene	**3.9**	**3.9**	**100**	0.00023 U	0.00026 U	0.0007 J	0.00022 U	**7.2**
o-Xylene	**0.26 TS**	**0.26 TS**	**100 TS**	0.00036 U	0.00041 U	0.0004 U	0.00035 U	**2.3**
p/m-Xylene	**0.26 TS**	**0.26 TS**	**100 TS**	0.00038 U	0.00042 U	0.00041 U	0.00037 U	**76**
p-Isopropyltoluene	**10**	**NS**	**NS**	0.00022 U	0.00024 U	0.00024 U	0.00021 U	1.4
sec-Butylbenzene	**11**	**11**	**100**	0.00025 J	0.00026 U	0.00026 U	0.00023 U	2.9
tert-Butylbenzene	**5.9**	**5.9**	**100**	0.00026 U	0.0003 U	0.00034 J	0.00026 U	0.23 U
Toluene	**0.7**	**0.7**	**100**	0.0003 J	0.00026 J	0.00023 U	0.00047 J	0.28 J
Xylenes, Total	**0.26**	**0.26**	**100**	0.00036 U	0.00041 U	0.0004 U	0.00035 U	**78**

Table 2
200 Hamilton Avenue
White Plains, NY
Spill Investigation Soil Analytical Results
Semivolatile Organic Compounds

Client ID Lab Sample ID Date Sampled Analyte	CP-51 Soil Cleanup Level SCL mg/kg	NYSDEC Part 375 Unrestricted SCO mg/kg	NYSDEC Part 375 Restricted Residential SCO mg/kg	SB-10 (3-5) L1804131-11 2/7/2018	SB-11 (5-7) L1804131-02 2/6/2018	SB-12 (2-4) L1804131-08 2/6/2018	SB-13 (3-5) L1804131-04 2/6/2018	SB-14 (2-4) L1804131-06 2/6/2018	SB-15 (2-4) L1804131-13 2/9/2018	SB-16 (2-4) L1804131-15 2/9/2018	SB-17 (5-7) L1804131-17 2/9/2018
Acenaphthene	**20**	**20**	**100**	0.018 U	0.019 U	0.019 U	0.02 U	0.035 J	0.019 U	0.02 U	0.088 J
Acenaphthylene	**100**	**100**	**100**	0.028 U	0.029 U	0.028 U	0.029 U	0.047 J	0.028 U	0.089 J	0.43
Anthracene	**100**	**100**	**100**	0.035 U	0.036 U	0.036 U	0.037 U	0.088 J	0.036 U	0.068 J	0.96
Benzo(a)anthracene	**1**	**1**	**1**	0.02 U	0.021 U	0.02 U	0.021 U	0.24	0.036 J	0.24	**2.8**
Benzo(a)pyrene	**1**	**1**	**1**	0.044 U	0.046 U	0.045 U	0.046 U	0.24	0.045 U	0.23	**2.4**
Benzo(b)fluoranthene	**1**	**1**	**1**	0.03 U	0.032 U	0.031 U	0.032 U	0.33	0.05 J	0.32	**3.3**
Benzo(ghi)perylene	**100**	**100**	**100**	0.021 U	0.022 U	0.022 U	0.022 U	0.19	0.028 J	0.16	1.5
Benzo(k)fluoranthene	**0.8**	**0.8**	**3.9**	0.028 U	0.03 U	0.029 U	0.03 U	0.095 J	0.029 U	0.12	**0.85**
Chrysene	**1**	**1**	**3.9**	0.018 U	0.019 U	0.019 U	0.02 U	0.21	0.03 J	0.21	**2.2**
Dibenzo(a,h)anthracene	**0.33**	**0.33**	**0.33**	0.021 U	0.022 U	0.021 U	0.022 U	0.051 J	0.021 U	0.048 J	**0.41**
Fluoranthene	**100**	**100**	**100**	0.02 U	0.022 U	0.024 J	0.022 U	0.55	0.038 J	0.44	5.3
Fluorene	**30**	**30**	**100**	0.017 U	0.018 U	0.018 U	0.018 U	0.018 J	0.018 U	0.03 J	0.19
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**0.5**	0.025 U	0.026 U	0.025 U	0.026 U	0.2	0.03 J	0.19	**1.8**
Naphthalene	**12**	**12**	**100**	0.022 U	0.023 U	0.022 U	0.023 U	0.03 J	0.022 U	0.023 U	0.05 J
Phenanthrene	**100**	**100**	**100**	0.022 U	0.023 U	0.022 U	0.023 U	0.12	0.022 U	0.24	2.7
Pyrene	**100**	**100**	**100**	0.018 U	0.019 U	0.024 J	0.019 U	0.44	0.039 J	0.37	4.2

Table 3
200 Hamilton Avenue
White Plains, NY
Spill Investigation Soil Analytical Results
Metals

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	NYSDEC Part 375 Restricted Residential SCO mg/kg	SB-10 (3-5) L1804131-11 2/7/2018	SB-11 (5-7) L1804131-02 2/6/2018	SB-12 (2-4) L1804131-08 2/6/2018	SB-13 (3-5) L1804131-04 2/6/2018	SB-14 (2-4) L1804131-06 2/6/2018	SB-15 (2-4) L1804131-13 2/9/2018	SB-16 (2-4) L1804131-15 2/9/2018	SB-17 (5-7) L1804131-17 2/9/2018
Arsenic, Total	**13**	**16**	2.05	1.3	1.77	1.73	2.04	1.46	1.69	1.92
Barium, Total	**350**	**400**	158	80.5	292	95.6	92.7	55.3	59.8	56.6
Cadmium, Total	**2.5**	**4.3**	0.041 U	0.043 U	0.041 U	0.044 U	0.042 U	0.439	0.526	0.574
Chromium, Total	**30***	**180***	**39.5**	18.5	**113**	21	19.9	14.7	12.8	12
Lead, Total	**63**	**400**	10.2	4.32	6.66	14.1	**140**	40.9	8.19	16.5
Mercury, Total	**0.18**	**0.81**	0.01 U	0.02 U	0.02 U	0.04 J	0.09	**0.4**	0.03 J	0.05 J
Selenium, Total	**3.9**	**180**	0.116 J	0.113 U	0.108 U	0.117 U	0.111 U	0.11 U	0.117 U	0.108 J
Silver, Total	**2**	**180**	0.117 U	0.124 U	0.119 U	0.128 U	0.122 U	0.121 U	0.128 U	0.114 U
Zinc, Total	**109**	**10,000**	56.1	32.3	59.2	42	66.5	41.4	26.9	38.8

Table 4
200 Hamilton Avenue
White Plains, NY
Spill Investigation Groundwater Analytical Results
Volatile Organic Compounds

Client ID	NYSDEC	MW-1	MW-2	MW-5	MW-6	MW-7	MW-8	MW-9	TB-1
Lab Sample ID	Class GA	L1805675-01	L1805675-05	L1805675-02	L1805675-03	L1805675-04	L1805675-08	L1805675-06	L1805675-07
Date Sampled	Ambient	2/16/2018	2/16/2018	2/16/2018	2/16/2018	2/16/2018	2/16/2018	2/16/2018	2/16/2018
Units	Standard	1	10	2.5	1	2	2	1	1
Analyte	µg/L								
1,2,4-Trimethylbenzene	5	0.7 U	7 U	1.8 U	0.7 U	**110**	4.8 J	0.7 U	0.7 U
1,3,5-Trimethylbenzene	5	0.7 U	7 U	1.8 U	0.7 U	**56**	**57**	0.7 U	0.7 U
Benzene	1	0.16 U	1.6 U	0.4 U	0.67	0.94 J	0.32 U	0.16 U	0.16 U
Ethylbenzene	5	0.7 U	7 U	1.8 U	0.7 U	**92**	**33**	0.7 U	0.7 U
Isopropylbenzene	5	0.7 U	7 U	1.8 U	0.7 U	**14**	**44**	0.7 U	0.7 U
Methyl tert butyl ether	10	0.7 U	**1,800**	1.8 U	1.2 J	**15**	**20**	**34**	0.7 U
Naphthalene	10	0.7 U	7 U	1.8 U	0.7 U	**14**	**23**	0.7 U	0.7 U
n-Butylbenzene	5	0.7 U	7 U	1.8 U	0.7 U	1.9 J	**36**	0.7 U	0.7 U
n-Propylbenzene	5	0.7 U	7 U	1.8 U	0.7 U	**14**	**130**	0.7 U	0.7 U
o-Xylene	5	0.7 U	7 U	1.8 U	0.7 U	**28**	1.4 U	0.7 U	0.7 U
p/m-Xylene	5	0.7 U	7 U	1.8 U	0.7 U	**290**	**22**	0.7 U	0.7 U
p-Isopropyltoluene	5	0.7 U	7 U	1.8 U	0.7 U	4.5 J	**8.3**	0.7 U	0.7 U
sec-Butylbenzene	5	0.7 U	7 U	1.8 U	0.7 U	2.7 J	**25**	0.7 U	0.7 U
tert-Butylbenzene	5	0.7 U	7 U	1.8 U	0.7 U	1.4 U	1.4 U	0.7 U	0.7 U
Toluene	5	0.7 U	7 U	1.8 U	0.7 U	2.3 J	1.4 U	0.7 U	0.7 U
Xylenes, Total	NS	0.7 U	7 U	1.8 U	0.7 U	320	22	0.7 U	0.7 U

Tables 1-4
200 Hamilton Avenue
White Plains, NY
Spill Investigation Analytical Results
Notes

GENERAL

NS : No standard.

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

J : The concentration given is an estimated value.

TS : Value represents a sum total standard.

SOIL

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

CP-51 Soil Cleanup Levels : Soil Cleanup Levels for Gasoline Contaminated Soils listed in Table 2 of NYSDEC "CP-51/Soil Cleanup Guidance."

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

Metals

*** :** Standard reflects trivalent, not total, Chromium.

Exceedances of Part 375 Unrestricted Soil Cleanup Objectives (UUSCO) and CP-51 Soil Cleanup Levels (SCL) are highlighted in bold font.
Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives (RRSCO) are highlighted in gray.

GROUNDWATER

NYSDEC Class GA Ambient Standard : New York State Department of Environmental Conservation Technical and Operational Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values.

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

Exceedances of NYSDEC Class GA Ambient Standards are highlighted in bold font.

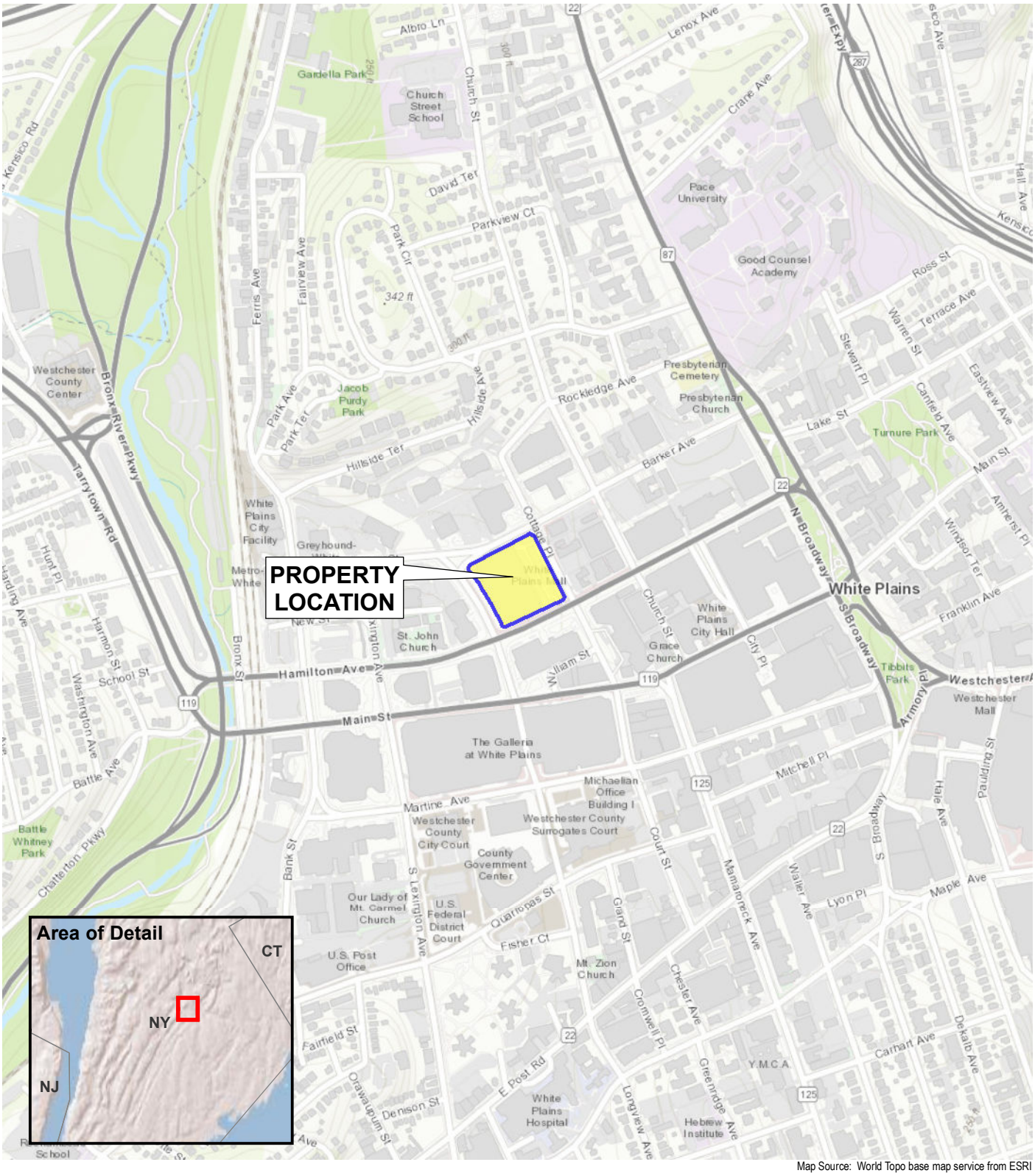
Table 5
200 Hamilton Avenue
200 Hamilton Avenue, White Plains, New York
Groundwater Elevations

Monitor Well ID	Top of Well Casing Elevation (feet NAVD)	2/16/2018		2/26/2018	
		DTW (feet)	Groundwater Elevation (feet NAVD)	DTW (feet)	Groundwater Elevation (feet NAVD)
MW-1	199.58	18.38	181.20	17.69	181.89
MW-2	192.02	12.42	179.60	12.06	179.96
MW-3	189.92	10.09	179.83	9.71	180.21
MW-4	191.25	10.53	180.72	10.26	180.99
MW-5	201.36	21.41	179.95	20.80	180.56
MW-6	202.21	23.12	179.09	22.51	179.70
MW-7	202.60	23.90	178.70	22.39	180.21
MW-8	189.58	9.93	179.65	9.58	180.00
MW-9	191.35	11.82	179.53	11.45	179.90

Notes:

All elevations relative to North American Vertical Datum of 1988 (NAVD 88).
DTW - Depth to Water

FIGURES



AKRF
440 Park Avenue South, New York, NY 10016

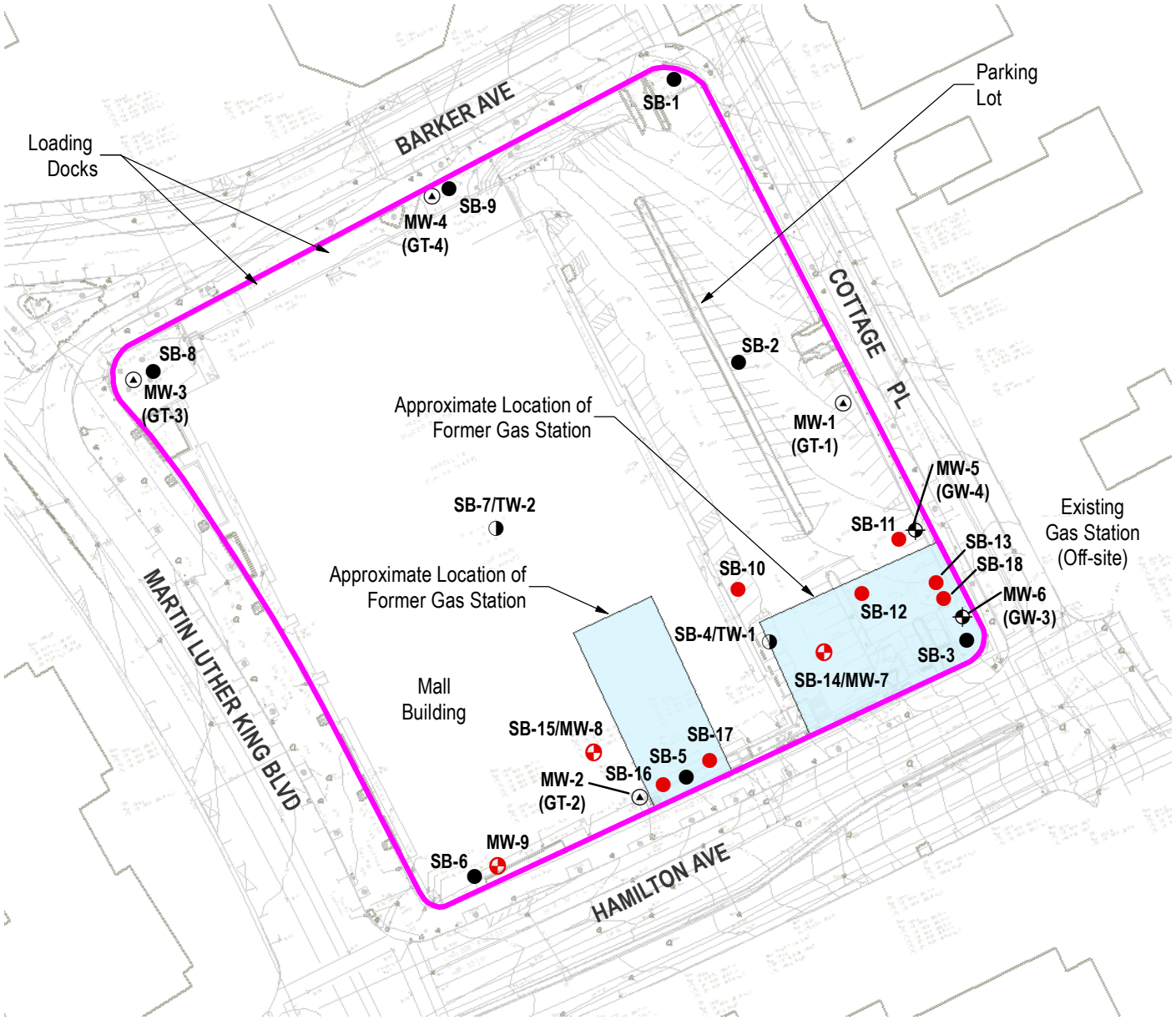
200 Hamilton Avenue
White Plains, New York

PROPERTY LOCATION

DATE
2/14/2018

PROJECT NO.
170029

FIGURE
1



Map Source:
Insite Engineering, Surveying & Landscape Architecture, P.C.
May 4, 2017.

LEGEND

- PROPERTY BOUNDARY
- EXISTING MONITORING WELL LOCATION (FROM 2015 GEOTECHNICAL INVESTIGATION)
- EXISTING MONITORING WELL (UNKNOWN)
- SOIL BORING/TEMPORARY WELL (FROM 2017 PHASE II INVESTIGATION)
- SOIL BORING LOCATION (FROM 2017 PHASE II INVESTIGATION)
- SOIL BORING/MONITORING WELL LOCATION
- SOIL BORING LOCATION

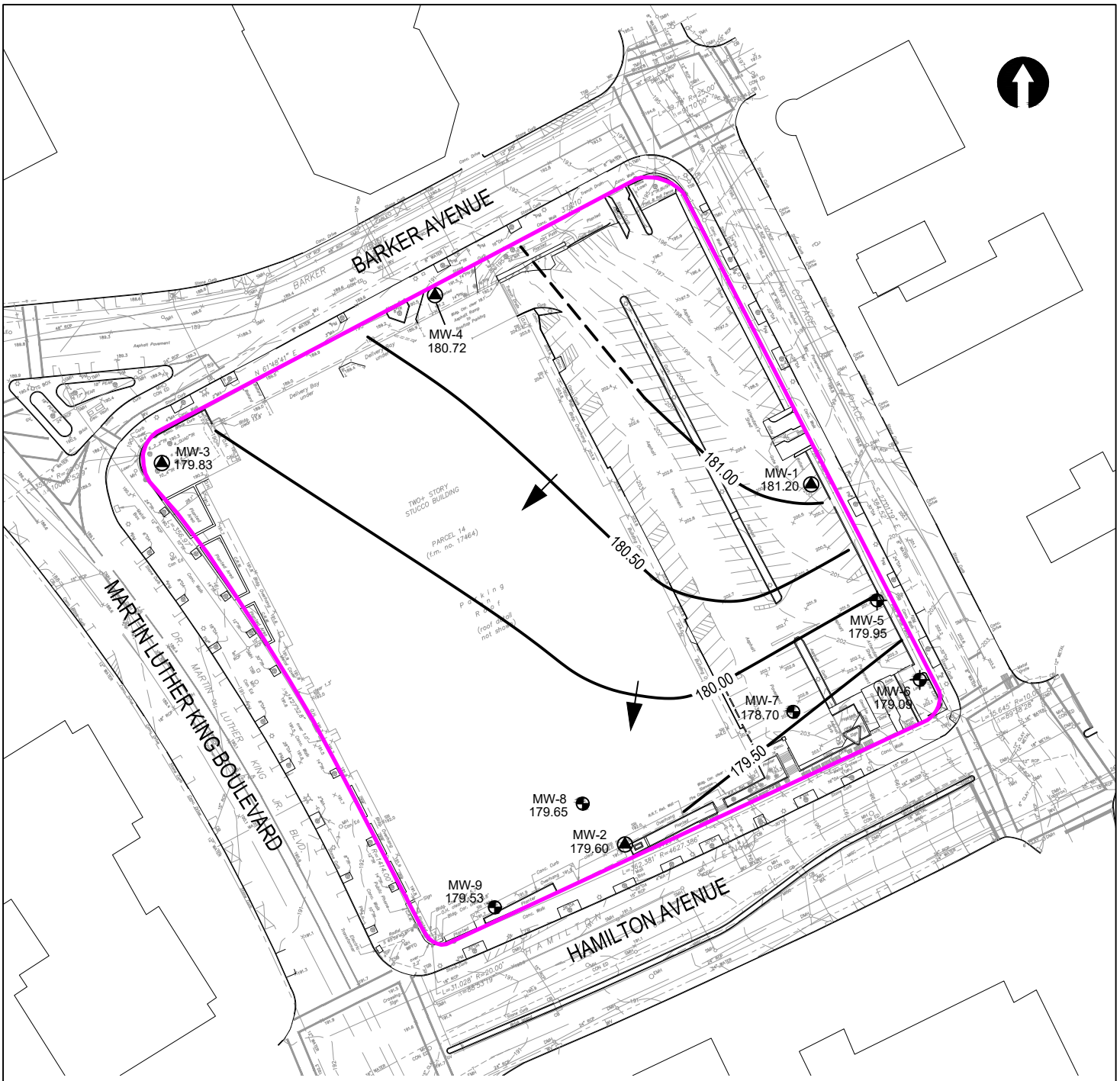
0 100 200
SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

200 Hamilton Avenue
White Plains, New York

SITE MAP WITH SAMPLE LOCATIONS

DATE
3/20/2018
PROJECT NO.
170029
FIGURE
2



LEGEND

- PROPERTY BOUNDARY
- EXISTING MONITORING WELL LOCATION (FROM 2015 GEOTECHNICAL INVESTIGATION)
- EXISTING MONITORING WELL (UNKNOWN)
- MONITORING WELL (2018 SPILL INVESTIGATION)
- 180.00 CONTOUR IN FEET (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

NOTE: ELEVATION DATA FROM MW-7 NOT USED IN CREATING CONTOURS DUE TO SLOW RECHARGE IN THIS WELL.

Map Source: Insite Engineering, Surveying & Landscaping Architecture, P.C. May 4, 2017.

0 50 100 200

SCALE IN FEET

GROUNDWATER ELEVATION

AKRF

440 Park Avenue South, New York, NY 10016

200 Hamilton Avenue

White Plains, New York

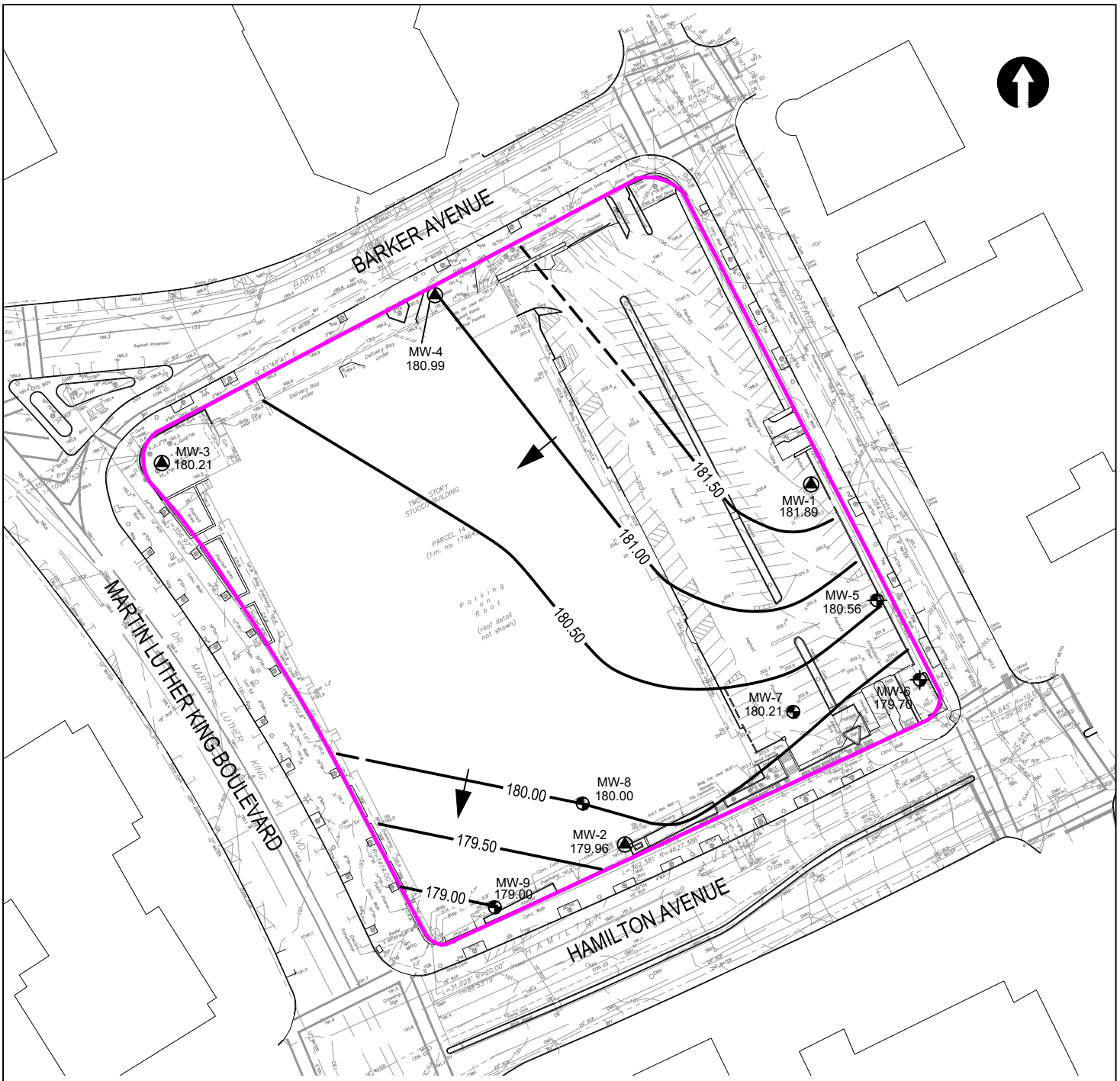
GROUNDWATER CONTOUR MAP
FEBRUARY 16, 2018

DATE
4/13/2018

PROJECT NO.
170029

FIGURE
3

 Q:\Projects\170029 - 200 HAMILTON AVENUE\Technical\Hazmat\Spill Investigation\CAD\170029 Fig 3 GW Contour Map.dwg last save: mveilleux 4/13/2018 4:21 PM



Map Source: Insite Engineering, Surveying & Landscaping Architecture, P.C. May 4, 2017.

LEGEND

- PROPERTY BOUNDARY
- EXISTING MONITORING WELL LOCATION (FROM 2015 GEOTECHNICAL INVESTIGATION)
- EXISTING MONITORING WELL (UNKNOWN)
- MONITORING WELL (2018 SPILL INVESTIGATION)
- 180.00 GROUNDWATER ELEVATION CONTOUR IN FEET (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

0 50 100 200

SCALE IN FEET

AKRF

440 Park Avenue South, New York, NY 10016

200 Hamilton Avenue

White Plains, New York

GROUNDWATER CONTOUR MAP
FEBRUARY 26, 2018

DATE
4/13/2018

PROJECT NO.
170029

FIGURE
4

Sample ID Date Sampled	NYSDEC UUSCO/ CP-51 SCL	NYSDEC RRSCO	SB-11 (17-19) 2/6/2018
VOCs	mg/kg	mg/kg	mg/kg
1,2,4-Trimethylbenzene	3.6	52	60
1,3,5-Trimethylbenzene	8.4	52	17
Benzene	0.06	4.8	NE
Ethylbenzene	1	41	11
Isopropylbenzene	2.3	NS	4.1
n-Propylbenzene	3.9	100	15
Toluene	0.7	100	NE
Xylenes, Total	0.26	100	18

Sample ID Date Sampled	NYSDEC UUSCO/ CP-51 SCL	NYSDEC RRSCO	SB-13 (10-12) 2/6/2018
VOCs	mg/kg	mg/kg	mg/kg
1,2,4-Trimethylbenzene	3.6	52	69
1,3,5-Trimethylbenzene	8.4	52	22
Ethylbenzene	1	41	14
Isopropylbenzene	2.3	NS	3.1
n-Propylbenzene	3.9	100	12
Toluene	0.7	100	0.87
Xylenes, Total	0.26	100	68

Client ID Date Sampled	NYSDEC UUSCO/ CP-51 SCL	NYSDEC RRSCO	SB-18 (12-14) 2/6/2018
VOCs	mg/kg	mg/kg	mg/kg
1,2,4-Trimethylbenzene	3.6	52	100
1,3,5-Trimethylbenzene	8.4	52	34
Ethylbenzene	1	41	11
Isopropylbenzene	2.3	NS	2.4
n-Propylbenzene	3.9	100	7.2
Xylenes, Total	0.26	100	78

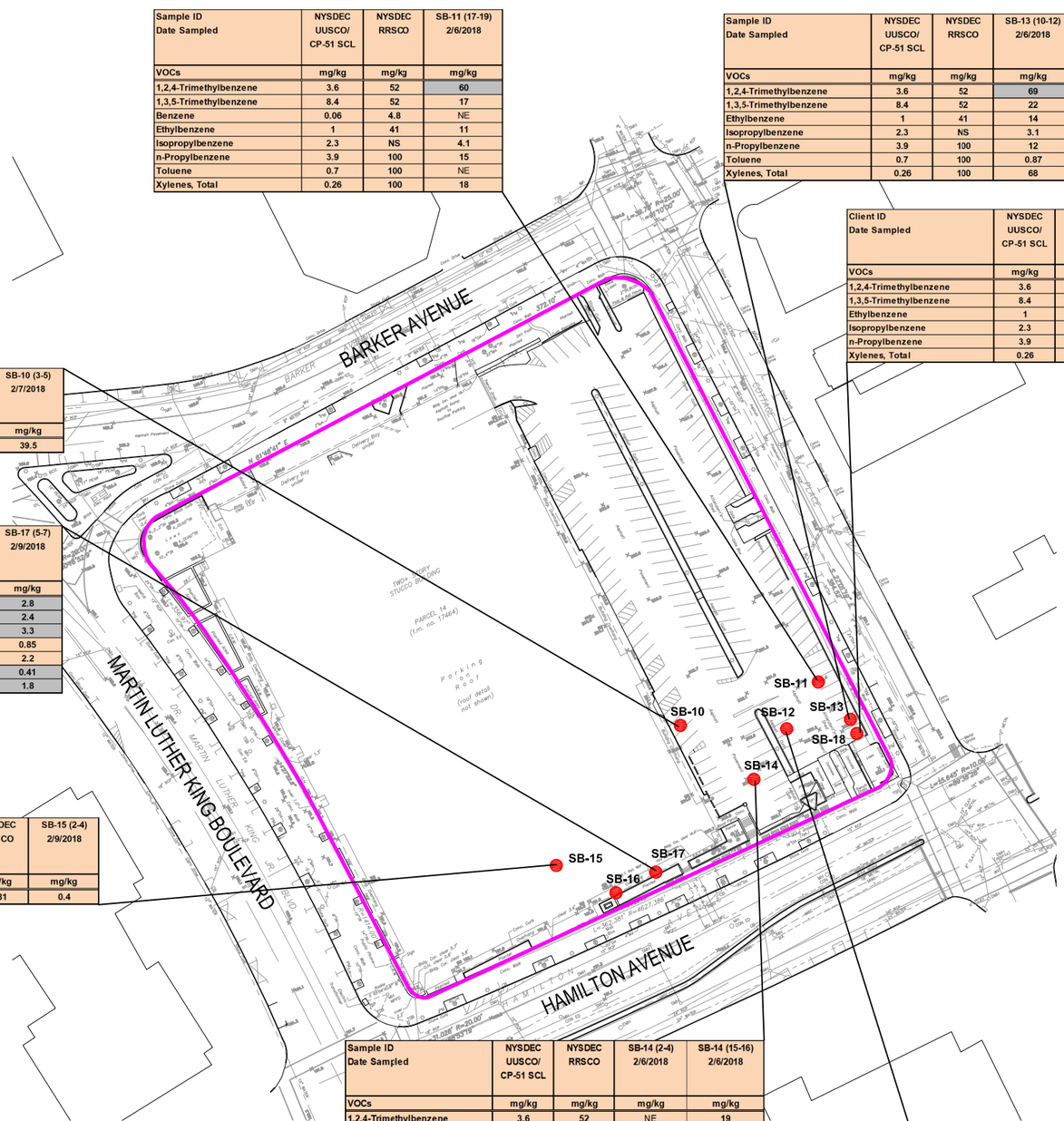
Sample ID Date Sampled	NYSDEC UUSCO/ CP-51 SCL	NYSDEC RRSCO	SB-10 (3-5) 2/7/2018
Metals	mg/kg	mg/kg	mg/kg
Chromium, Total	30*	180*	39.5

Sample ID Date Sampled	NYSDEC UUSCO/ CP-51 SCL	NYSDEC RRSCO	SB-17 (5-7) 2/9/2018
SVOCs	mg/kg	mg/kg	mg/kg
Benzo(a)anthracene	1	1	2.8
Benzo(a)pyrene	1	1	2.4
Benzo(b)fluoranthene	1	1	3.3
Benzo(k)fluoranthene	0.8	3.9	0.85
Chrysene	1	3.9	2.2
Dibenzo(a,h)anthracene	0.33	0.33	0.41
Indeno(1,2,3-cd)pyrene	0.5	0.5	1.8

Sample ID Date Sampled	NYSDEC UUSCO/ CP-51 SCL	NYSDEC RRSCO	SB-15 (2-4) 2/9/2018
Metals	mg/kg	mg/kg	mg/kg
Mercury, Total	0.18	0.81	0.4

Sample ID Date Sampled	NYSDEC UUSCO/ CP-51 SCL	NYSDEC RRSCO	SB-14 (2-4) 2/6/2018	SB-14 (15-16) 2/6/2018
VOCs	mg/kg	mg/kg	mg/kg	mg/kg
1,2,4-Trimethylbenzene	3.6	52	NE	19
1,3,5-Trimethylbenzene	8.4	52	NE	11
Benzene	0.06	4.8	NE	0.12 J
Ethylbenzene	1	41	NE	4.9
Isopropylbenzene	2.3	NS	NE	2.5
n-Propylbenzene	3.9	100	NE	4.1
Xylenes, Total	0.26	100	NE	17
Metals				
Lead, Total	63	400	140	NA

Sample ID Date Sampled	NYSDEC UUSCO/ CP-51 SCL	NYSDEC RRSCO	SB-12 (2-4) 2/6/2018
Metals	mg/kg	mg/kg	mg/kg
Chromium, Total	30*	180*	113



LEGEND

PROPERTY BOUNDARY

SOIL BORING LOCATION

SOIL

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

Exceedances of Part 375 Unrestricted Use SCOs (UUSCOS) are highlighted in bold font.
Exceedances of Part 375 Restricted Residential (RRSCOS) are highlighted in gray.

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

NE: No Exceedance
U:The analyte was not detected at the indicated concentration.
c: Elevated detection limit due to dilution required for interfering element
a: More than 40% Relative Percent Difference (RPD) for detected concentrations between the two GC columns.

Sample ID Date Sampled	NYSDEC UUSCO/ CP-51 SCL	NYSDEC RRSCO	SB-12 (2-4) 2/6/2018
Metals	mg/kg	mg/kg	mg/kg
Chromium, Total	30*	180*	113

Sample ID
Sample Date
Concentration
Analyte/Compound

0 50 100 200
SCALE IN FEET

Map Source: Insite Engineering, Surveying & Landscaping Architecture, P.C. May 4, 2017.

AKRF
440 Park Avenue South, New York, NY 10016

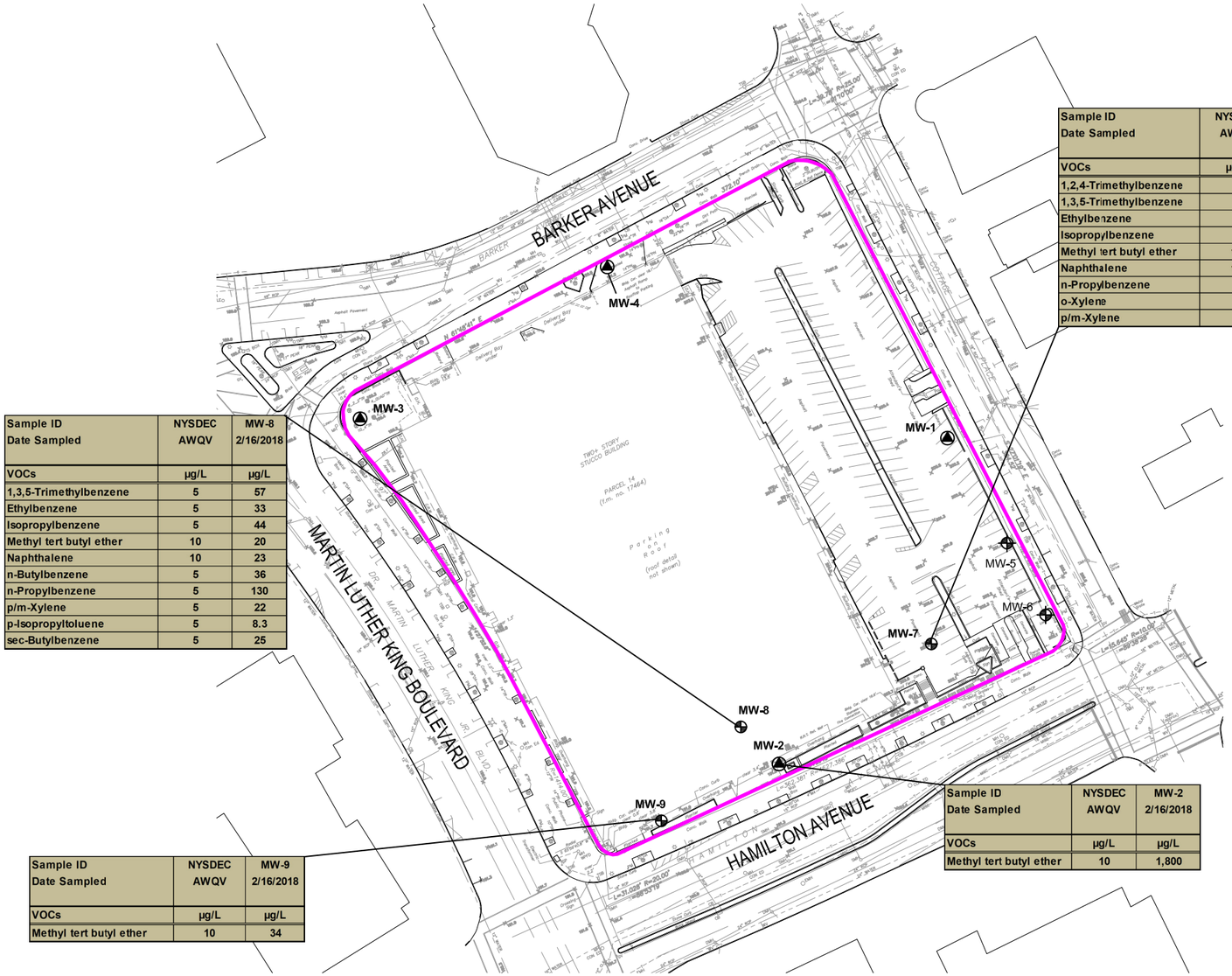
200 Hamilton Avenue
White Plains, New York

SOIL SAMPLE CONCENTRATIONS ABOVE NYSDEC SCOs

DATE
3/19/2018

PROJECT NO.
170029

FIGURE
5



Sample ID Date Sampled	NYSDEC AWQV	MW-8 2/16/2018
VOCs	µg/L	µg/L
1,3,5-Trimethylbenzene	5	57
Ethylbenzene	5	33
Isopropylbenzene	5	44
Methyl tert butyl ether	10	20
Naphthalene	10	23
n-Butylbenzene	5	36
n-Propylbenzene	5	130
p/m-Xylene	5	22
p-Isopropyltoluene	5	8.3
sec-Butylbenzene	5	25

Sample ID Date Sampled	NYSDEC AWQV	MW-7 2/16/2018
VOCs	µg/L	µg/L
1,2,4-Trimethylbenzene	5	110
1,3,5-Trimethylbenzene	5	56
Ethylbenzene	5	92
Isopropylbenzene	5	14
Methyl tert butyl ether	10	15
Naphthalene	10	14
n-Propylbenzene	5	14
o-Xylene	5	28
p/m-Xylene	5	290

Sample ID Date Sampled	NYSDEC AWQV	MW-2 2/16/2018
VOCs	µg/L	µg/L
Methyl tert butyl ether	10	1,800

Sample ID Date Sampled	NYSDEC AWQV	MW-9 2/16/2018
VOCs	µg/L	µg/L
Methyl tert butyl ether	10	34

LEGEND

- PROPERTY BOUNDARY
- EXISTING MONITORING WELL LOCATION (FROM 2015 GEOTECHNICAL INVESTIGATION)
- MONITORING WELL (2018 SPILL INVESTIGATION)
- EXISTING MONITORING WELL (UNKNOWN)

GROUNDWATER

NYSDEC Class GA Ambient Standard:
New York State Department of Environmental Conservation Technical and Operational Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. (AWQS)

Exceedances of NYSDEC Class GA Ambient Standards are highlighted in bold font.

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

Sample ID Date Sampled	NYSDEC AWQV	MW-2 2/16/2018
VOCs	µg/L	µg/L
Methyl tert butyl ether	10	1,800

Sample ID
Sample Date
Concentration
Analyte/Compound

Map Source: Insite Engineering, Surveying & Landscaping Architecture, P.C. May 4, 2017.

0 50 100 200
SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

200 Hamilton Avenue
White Plains, New York

GROUNDWATER SAMPLE CONCENTRATIONS ABOVE NYSDEC AWQS

DATE
4/13/2018

PROJECT NO.
170029

FIGURE
6

 Q:\Projects\170029 - 200 HAMILTON AVENUE\Technical\Hazmat\Spill Investigation\CAD\170029 Fig 6 GW Concs.dwg last save: mvelleux 4/13/2018 4:09 PM

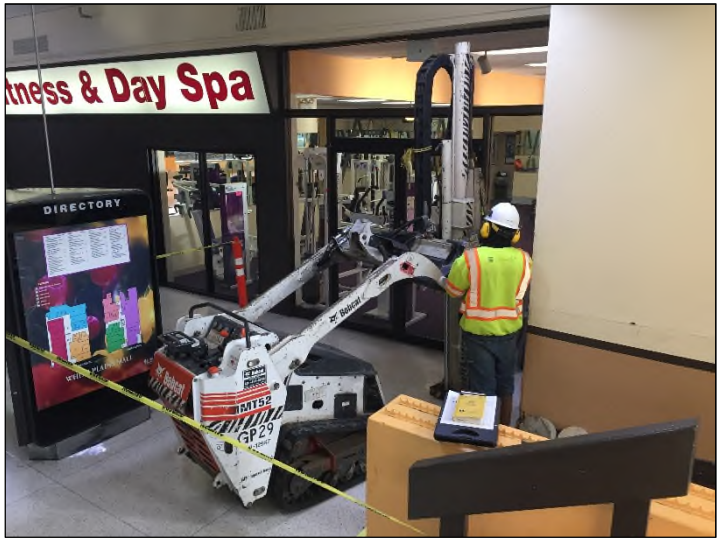
APPENDIX A
PHOTOGRAPHIC DOCUMENTATION

Photograph 1: Installation of soil boring SB-10 with track-mounted Geoprobe 6620DT.

Photograph 2: Soil cores from soil boring SB-10 staged for field screening and sample collection.

Photograph 3: Installation of 3.75-inch O.D. hollow casing at SB-14 for the installation of MW-7.

Photograph 4: Development of MW-7.



Photograph 5: Installation of soil boring SB-15 with bobcat-mounted Geoprobe 540MT.

Photograph 6: Soil cores from soil boring SB-15 staged for field screening and sample collection.

Photograph 7: Development of MW-15.

Photograph 8: Low-flow groundwater sampling equipment set up at MW-5.

APPENDIX B

GEOPHYSICAL INVESTIGATION REPORT

GEOPHYSICAL ENGINEERING SURVEY REPORT

White Plains Mall

200 Hamilton Avenue
White Plains, New York 10601

NOVA PROJECT NUMBER
18-0644

DATED
February 12, 2018

PREPARED FOR:

AKRF, INC.
Environmental, Planning, and Engineering Consultants
34 South Broadway, Suite 401
White Plains, NY 10601

PREPARED BY:

NOVA
GEOPHYSICAL
ENGINEERING
Subsurface Mapping Solutions
56-01 Marathon Parkway # 765
Douglaston, New York 11362
347-556-7787 (PHONE)
718-261-1527(FAX)
www.nova-gsi.com

NOVA GEOPHYSICAL SERVICES

SUBSURFACE MAPPING SOLUTIONS
56-01 Marathon Parkway, # 765, Douglaston, New York 11362
Ph. 347-556-7787 Fax. 718-261-1527
www.nova-gsi.com

February 12, 2018

Timothy McClintock
Environmental Scientist
AKRF, INC.
34 South Broadway, Suite 401
White Plains, NY 10601
P) 914.922.2374
C) 914.439.1629
F) 914.949.7559

Re: Geophysical Engineering Survey (GES) Report
White Plains Mall
200 Hamilton Avenue
White Plains, New York 10601

Dear Mr. McClintock:

Nova Geophysical Services (NOVA) is pleased to provide findings of the geophysical engineering survey (GES) at the above referenced project site: 200 Hamilton Avenue, White Plains, New York 10601 (the "Site"). Please see attached Site Location and Survey Plan maps for more details.

INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

NOVA performed a Geophysical engineering surveys (GES) consisting of a Ground Penetrating Radar (GPR) survey at the site. The purpose of this survey is to locate and identify utilities and other substructures as well as clear boring locations on February 6, 2018.

The equipment selected for this investigation was a Sensors and Software Noggin 250 MHz ground penetrating radar (GPR) shielded antenna and a Radio Detection RD7100 utility locator.

A GPR system consists of a radar control unit, control cable and a transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 250 MHz. The trigger pulse is sent to the transmitter electronics in the transducer via the control cable. The transmitter electronics amplify the trigger pulses into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

GEOPHYSICAL METHODS

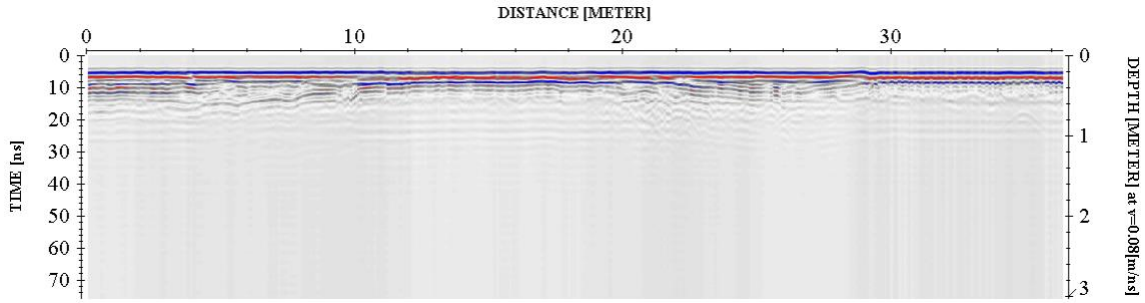
The project site was screened using the GPR to search the specified area and inspected for reflections, which could be indicative of substructures and utilities within the subsurface.

GPR data profiles were collected for the areas of the Site specified by the client. The surveyed areas consisted of asphalt, concrete, soil.

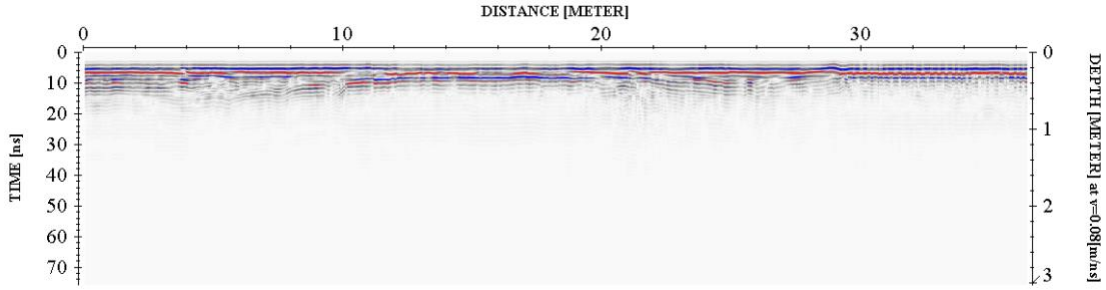
DATA PROCESSING

In order to improve the quality of the results and to better identify subsurface anomalies NOVA processed the collected data. The processes flow is briefly described in this section.

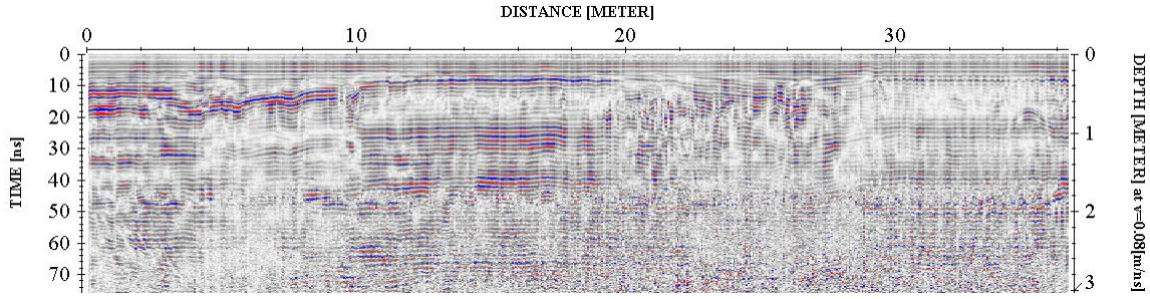
Step 1. Import raw RAMAC data to standard processing format



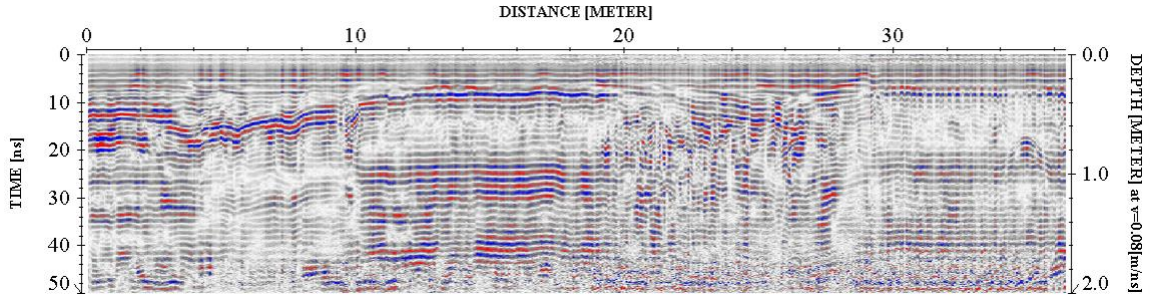
Step 2. Remove instrument noise *(dewow)*



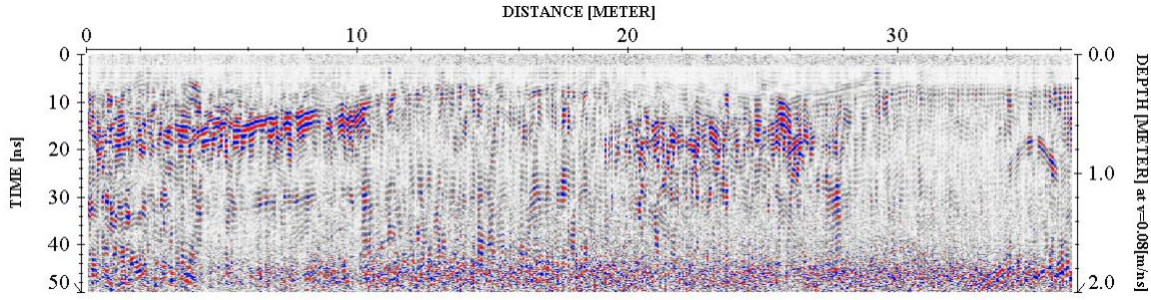
Step 3. Correct for attenuation losses *(energy decay function)*



Step 4. Remove static from bottom of profile *(time cut)*



Step 5. Mute horizontal ringing/noise *(subtracting average)*



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and describes the subsurface anomalies more accurately.

PHYSICAL SETTINGS

NOVA observed following physical conditions at the time of the survey:

Weather: Cloudy

Temperature: 30 Degrees (F)

Surface: Concrete, asphalt, soil

Geophysical Noise Level (GNL): Geophysical Noise Level (GNL) was high at the site. The noise was the result of being in an urban environment.

RESULTS

The results of the geophysical engineering survey (GES) identified following at the project Site:

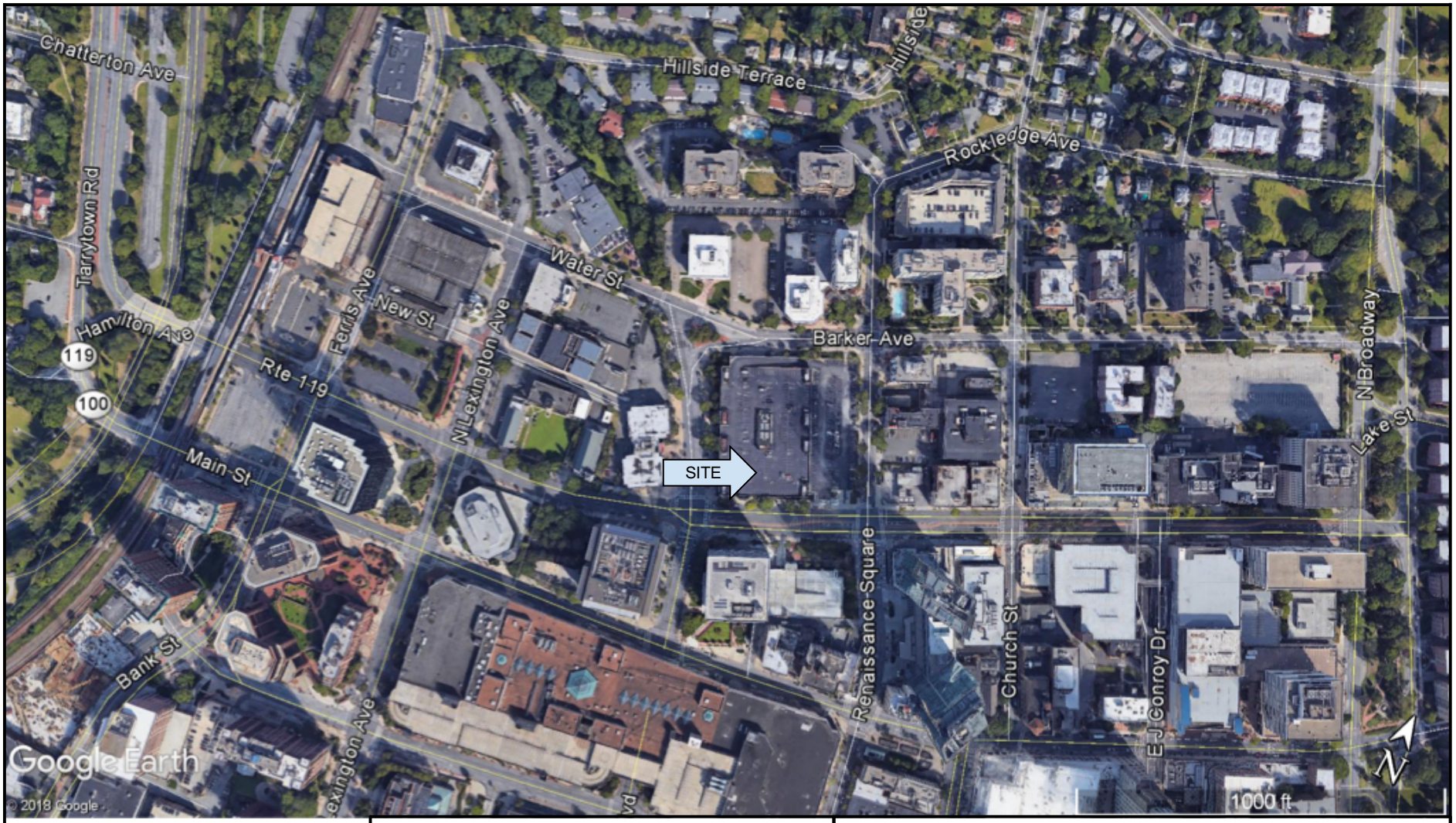
- NOVA identified multiple gas, electric, water, sewer and telecom lines within the survey area as shown in the site survey plan.
- NOVA did not identify any anomalies resembling an underground storage tank on the site.
- All detected subsurface anomalies were marked in the onsite mark out.
- All cleared boring locations were shown in the onsite mark out.
- The Survey Plan portrays the subsurface areas investigated during the GES.

If you have any questions, please do not hesitate to contact the undersigned. Sincerely,

NOVA Geophysical Services

Levent Eskicakit, P.G., E.P.
Project Engineer

Attachments:
Site Location Map
Survey Plan
Geophysical Images



NOVA
GEOPHYSICAL
ENGINEERING
Subsurface Mapping Solutions

56-01 Marathon Parkway # 765
Douglaston, New York 11362
347-556-7787 (PHONE)
718-261-1527(FAX)
www.nova-gsi.com

SITE LOCATION MAP

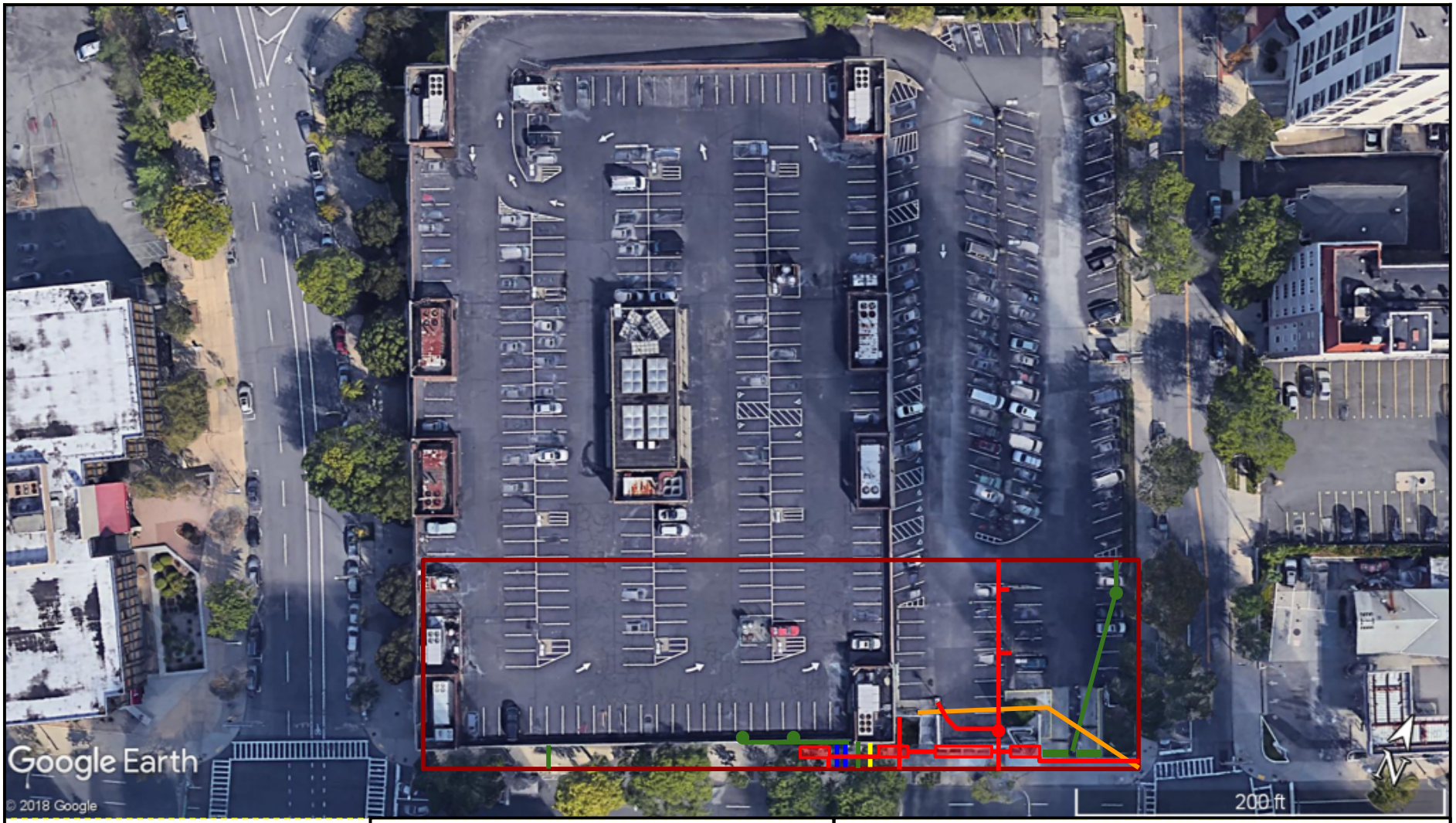
SITE: **White Plains Mall**
200 Hamilton Avenue,
White Plains, New York 10601

CLIENT: AKRF

DATE: February 6, 2018

AUTH: Chris Steinley

LEGEND



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www.nova-gsi.com

SURVEY PLAN

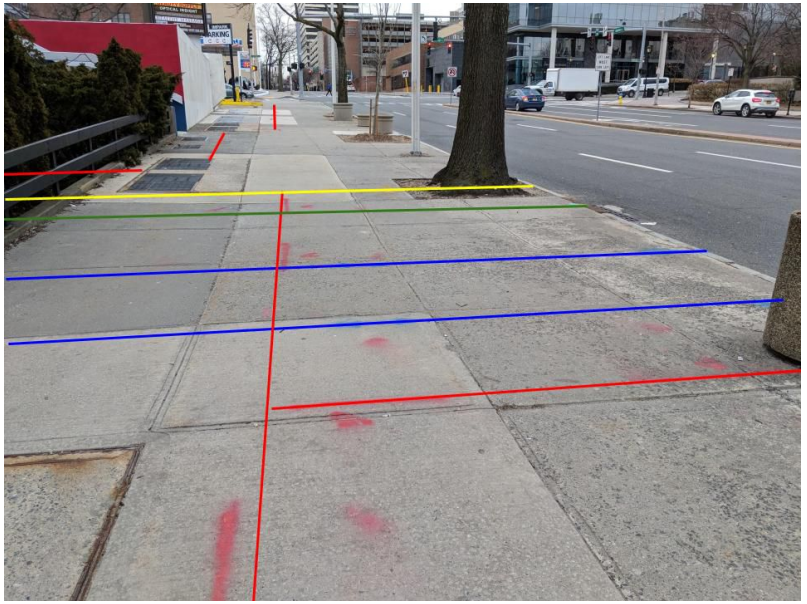
SITE:	**White Plains Mall** 200 Hamilton Avenue, White Plains, New York 10601
CLIENT:	AKRF
DATE:	February 6, 2018
AUTH:	Chris Steinley

LEGEND

- Survey Area
- Sewer
- Electric
- Water
- Gas
- Telecom
- Electric Manhole
- Floor Drain
- Electric Vault
- Trench Drain

GEOPHYSICAL IMAGES

White Plains Mall
200 Hamilton Avenue
White Plains, New York 10601
February 6, 2018



GEOPHYSICAL IMAGES

White Plains Mall
200 Hamilton Avenue
White Plains, New York 10601
February 6, 2018

GEOPHYSICAL IMAGES

White Plains Mall
200 Hamilton Avenue
White Plains, New York 10601
February 6, 2018

GEOPHYSICAL IMAGES

White Plains Mall
200 Hamilton Avenue
White Plains, New York 10601
February 6, 2018

GEOPHYSICAL IMAGES

White Plains Mall
200 Hamilton Avenue
White Plains, New York 10601
February 6, 2018

APPENDIX C
FIELD LOGS

SOIL BORING LOG

200 Hamilton Avenue
AKRF Project Number: 170029

Soil Boring ID: **SB-10**
Sheet 1 of 2

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

Drilling Method:	Geoprobe DPP
Sampling Method:	5' Macrocores
Driller:	Cascade Drilling
Weather:	30 °F, Cloudy
Logged By:	T. McClintock, AKRF

Drilling
Start Time: 8:20 **Finish Time:** 9:25
Date: 2/7/2018

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	49	Top 5": ASPHALT and fine GRAVEL (FILL).	ND	Dry	ND	ND	SB-10 (3-5) at 9:25
2							
3		Bottom 44": Brown SAND, some fine Gravel, little Silt, trace Asphalt (FILL).	ND	Dry	ND	ND	
4							
5							
6	20	Top 5": SLOUGH.	ND	Dry	ND	ND	
7		Middle 12": Brown SAND, some fine Gravel, little Silt (FILL).	ND	Dry	ND	ND	
8							
9		Bottom 3": Fine GRAVEL, trace Silt (FILL).	ND	Dry	ND	ND	
10							
11	29	Top 4": SLOUGH.	ND	Dry	ND	ND	
12		Middle 7": Fine GRAVEL, trace Silt.	ND	Dry	ND	ND	
13							
14		Bottom 18": Brown SAND, some Silt, little fine Gravel.	ND	Dry	ND	ND	
15							
16	49	Top 12": SLOUGH.	ND	Dry	ND	ND	
17		Middle 9": Brown SAND and SILT, trace fine Gravel.	ND	Dry	ND	ND	
18							
19		Bottom 28": Brown SAND, little Silt, trace fine Gravel.	ND	Dry	ND	ND	
20							

Notes: Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.
Groundwater encountered at approximately 23 feet below grade during soil boring installation.
End of soil boring at 30 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

200 Hamilton Avenue
AKRF Project Number: 170029

Soil Boring ID: **SB-10**
Sheet 2 of 2

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

Drilling Method:	Geoprobe DPP
Sampling Method:	5' Macrocores
Driller:	Cascade Drilling
Weather:	30 °F, Cloudy
Logged By:	T. McClintock, AKRF

Drilling
Start Time: 8:20 **Finish Time:** 9:25
Date: 2/7/2018

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
21	55	Top 24": SLOUGH.	ND	Dry	ND	ND	SB-10 (20-22) at 9:20
22							
23		Bottom 31": Brown SAND, little Silt, trace fine Gravel.	Septic-Like at 23'	Wet at 23'	0.1	ND	
24					0.1		
25					0.1		
					0.1		
26	56	Top 26": SLOUGH.	ND	Dry	ND	ND	
27		Middle 26": Brown SAND, little Silt, trace fine Gravel.	Septic - Like	Wet	0.1	ND	
28					0.3		
					0.4		
29		Bottom 4": Black SAND and SILT, some fine Gravel.	Organic - Like at 29'	Wet	0.2	ND	
					0.1		
30					0		
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

Notes: Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.
Groundwater encountered at approximately 23 feet below grade during soil boring installation.
End of soil boring at 30 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

200 Hamilton Avenue
AKRF Project Number: 170029

Soil Boring ID: **SB-11**
Sheet 1 of 2

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

Drilling Method:	Geoprobe DPP
Sampling Method:	5' Macrocores
Driller:	Cascade Drilling
Weather:	30 °F, Cloudy
Logged By:	T. McClintock, AKRF

Drilling
Start Time: 9:40 **Finish Time:** 11:05
Date: 2/6/2018

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	42	Top 5": ASPHALT and fine GRAVEL (FILL).	ND	Dry	ND	ND	
2							
3		Bottom 37": Brown SAND, little Silt, fine Gravel, trace wood, roots (FILL).	ND	Dry	ND	ND	
4							
5							
6	53	Top 8": SLOUGH.	ND	Dry	ND	ND	
7		Middle 40": Brown SAND, little Silt, fine Gravel.	ND	Dry	ND	ND	SB-11 (5-7) at 11:05
8							
9		Bottom 5": Gray SAND, little Silt, trace fine Gravel.	ND	Dry	ND	ND	
10							
11	55	Top 13": SLOUGH.	ND	Dry	ND	ND	
12		Bottom 42": Gray SAND, some fine Gravel, little Silt.	Petro - Like at 12'	Dry	0.5	ND	
13					1.6		
14					6.1 2.5		
15					1.8 2.9		
16	48	Top 12": SLOUGH.	Petro - Like	Dry	0.7 1.7	ND	
17					1.3		
18		Bottom 36": Gray SAND, little fine Gravel, Silt.	Petro - Like	Dry	1.2 53.2	ND	SB-11 (17-19) at 11:00
19					6 3.6		
20					1.1		

Notes: Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.
Groundwater was not encountered during soil boring installation.
End of soil boring at 22 feet below grade due to DPP refusal on apparent cobbles.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

200 Hamilton Avenue

AKRF Project Number: 170029

Soil Boring ID: **SB-11**

Sheet 2 of 2

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

Drilling Method:	Geoprobe DPP
Sampling Method:	5' Macrocores
Driller:	Cascade Drilling
Weather:	30 °F, Cloudy
Logged By:	T. McClintock, AKRF

Drilling

Start Time: 9:40 **Finish Time:** 11:05

Date: 2/6/2018

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
21	36	Top 15": SLOUGH.	Petro - Like	Dry	5.4	ND	
					4.1		
22		Bottom 21": White/Red/Blank SAND and fine Gravel, trace Silt.	Petro - Like	Dry	2	ND	
					2.2		
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

Notes: Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.
Groundwater was not encountered during soil boring installation.
End of soil boring at 22 feet below grade on apparent cobbles.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

200 Hamilton Avenue
AKRF Project Number: 170029

Soil Boring ID: **SB-12**
Sheet 1 of 2

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

Drilling Method:	Geoprobe DPP
Sampling Method:	5' Macrocores
Driller:	Cascade Drilling
Weather:	30 °F, Cloudy
Logged By:	T. McClintock, AKRF

Drilling
Start Time: 15:05 **Finish Time:** 15:50
Date: 2/6/2018

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	44	Top 3": ASPHALT and fine GRAVEL (FILL).	ND	Dry	ND	ND	SB-12 (2-4) at 15:40
2							
3		Bottom 41": Brown SAND, little Silt, fine Gravel (FILL).	ND	Dry	ND	ND	
4							
5							
6	48	Top 8": SLOUGH.	ND	Dry	ND	ND	
7							
8		Bottom 40": Brown SAND, little Silt, fine Gravel.	ND	Dry	ND	ND	
9							
10							
11	42	Top 12": SLOUGH.	ND	Dry	ND	ND	
12							
13		Bottom 30": Brown SAND, little Silt, fine Gravel.	ND	Dry	ND	ND	
14							
15							
16	37	Top 7": SLOUGH.	ND	Dry	ND	ND	SB-12 (15-16) at 15:50
17							
18		Bottom 30": Brown SAND, little Silt, fine Gravel.	ND	Wet at 16'	ND	ND	
19							
20							

Notes: Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.
Groundwater was encountered at approximately 16 feet below grade during soil boring installation.
End of soil boring at 25 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

200 Hamilton Avenue	**Soil Boring ID:** SB-12
AKRF Project Number: 170029	**Sheet 2 of 2**

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

Drilling Method:	Geoprobe DPP
Sampling Method:	5' Macrocores
Driller:	Cascade Drilling
Weather:	30 °F, Cloudy
Logged By:	T. McClintock, AKRF

Drilling

Start Time: 15:05 **Finish Time:** 15:50

Date: 2/6/2018

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
21	32	Top 3": SLOUGH.	ND	Wet	ND	ND	
22							
23		Bottom 29": Gray SAND, little Silt, fine Gravel.	ND	Wet	ND	ND	
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

Notes: Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.
Groundwater was encountered at approximately 16 feet below grade during soil boring installation.
End of soil boring at 25 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

200 Hamilton Avenue

AKRF Project Number: 170029

Soil Boring ID: **SB-13**

Sheet 1 of 1

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

Drilling Method:	Geoprobe DPP
Sampling Method:	5' Macrocores
Driller:	Cascade Drilling
Weather:	30 °F, Cloudy
Logged By:	T. McClintock, AKRF

Drilling

Start Time: 11:05 **Finish Time:** 12:05

Date: 2/6/2018

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	50	Top 5": ASPHALT and fine GRAVEL (FILL).	ND	Dry	ND	ND	SB-13 (3-5) at 12:05
2							
3		Bottom 45": Brown SAND, little Silt, fine Gravel, trace wood, roots (FILL).	ND	Dry	ND	ND	
4							
5							
6	58	Top 7": SLOUGH.	ND	Dry	ND	ND	
7		Middle 46": Brown SAND, little Silt, fine Gravel (FILL).	Petro - Like at 8'	Dry	3.1 5.2 9.2	ND	
8							
9		Bottom 5": Gray SAND, little Silt, trace fine Gravel (FILL).	Petro - Like	Dry	38.3	ND	
10							
11	32	Top 9": SLOUGH.	Petro - Like	Dry	282.8 881.4	ND	SB-13 (10-12) at 12:00
12		Bottom 23": Gray SAND, little Silt, trace fine Gravel, Concrete (FILL).	Petro - Like	Dry	306.9 262.4	ND	
13							
14							
15							
16							
17							
18							
19							
20							

Notes: Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.
Groundwater was not encountered during soil boring installation.
End of soil boring at 12 feet below grade due to DPP refusal on apparent cobbles.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	200 Hamilton Avenue AKRF Project Number: 170029	Groundwater Monitoring Well ID: Sheet 1 of 2	MW-7	Soil Boring ID:	SB-14

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

Drilling Method:	Geoprobe DPP
Sampling Method:	5' Macrocores
Driller:	Cascade Drilling
Weather:	30 °F, Cloudy
Logged by:	T. McClintock, AKRF

Drilling

Start Time: 13:20 **Finish Time:** 15:10

Date: 2/6/2018

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1		Locking Flush Mount	51	Top 5": ASPHALT and fine Gravel (FILL).	Septic - Like	Dry	0.2 0.6 2.2 4.5 3.6	ND	SB-14 (2-4) at 15:00
2									
3		Concrete Grout: 0 - 18'							
4				Bottom 46": Brown SAND, some fine Gravel, little Silt, trace Asphalt (FILL).	Septic - Like	Dry	2.2 1.3 1.1	ND	
5									
6			43	Top 3": SLOUGH.	Septic - Like	Dry	0.3 1.2	ND	
7				Middle 8": Brown SAND, some fine Gravel, little Silt.	Septic and Petro - Like	Dry	6.6 1 6.9 68.1	ND	
8									
9		2" Diameter PVC Well Riser: 0.5' - 20'		Bottom 32": Green/Gray SAND and SILT, trace fine Gravel.	Septic and Petro - Like	Dry	61.7 59.3	ND	
10									
11			54	Top 12": SLOUGH.	Septic and Petro - Like	Dry	63.7 27.5 36.3		
12				Next 12": Gray SAND and SILT.		Dry			
13				Next 18": Gray SAND, trace Silt.		Dry	63.2 75.8		
14				Bottom 12": Gray SAND, little Silt, trace fine Gravel.		Dry	629 815 967		
15									
16			55	Top 3": SLOUGH.	Septic and Petro - Like	Dry	1370 1264		
17				Middle 10": Gray SAND, little Silt, trace fine Gravel.	Petro - Like	Wet at 16'	507 465		SB-14 (15-16) at 15:10
18						Dry	1006		
19		Bentonite Seal: 18' - 19'		Bottom 42": Gray SAND, little Silt, fine Gravel.	Petro - Like	17 - 19' Wet at 19'	1221 1193 421		
20							96.1		

Notes: ▼ Groundwater Depth Indicator

Groundwater measured at 23.27 feet below grade in MW-7 on 2/8/17.

Groundwater monitoring well installed to 30 feet below grade.

Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.

Groundwater encountered at approximately 23.27 feet below grade during soil boring installation.

End of soil boring at 30 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	200 Hamilton Avenue AKRF Project Number: 170029	Groundwater Monitoring Well ID: Sheet 2 of 2	MW-7	Soil Boring ID:	SB-14

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

Drilling Method:	Geoprobe DPP
Sampling Method:	5' Macrocores
Driller:	Cascade Drilling
Weather:	30 °F, Cloudy
Logged by:	T. McClintock, AKRF

Drilling
Start Time: 13:20 **Finish Time:** 15:10
Date: 2/6/2018

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
21		Morie #2 Sand Pack: 19' - 30'		Top 6": SLOUGH.	Petro - Like	Wet		ND	
22							1215		
23			33	Middle 10": Gray SAND, little Silt, trace fine Gravel.	Petro - Like	Wet	975 457 75.7 62.3	ND	
24		2" Diameter Pre-Packed PVC Well Screen: 20' - 30'		Bottom 17": Brown SAND, little Silt, fine Gravel.	Petro - Like	Wet	11.8	ND	
25									
26				Top 6": SLOUGH.	Petro - Like	Wet	465 529	ND	
27			48	Middle 25": Brown SAND, little Silt, fine Gravel.	Petro - Like	Wet	153 113 152 40.5	ND	
28									
29				Bottom 17": Brown SAND, little Silt, fine Gravel.	Petro - Like	Wet	17.4 4.2	ND	
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									

Notes: ▼ **Groundwater Depth Indicator**

Groundwater measured at 23.27 feet below grade in MW-7 on 2/8/17.

Groundwater monitoring well installed to 30 feet below grade.

Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.

Groundwater encountered at approximately 23.27 feet below grade during soil boring installation.

End of soil boring at 30 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ppm = parts per million ND = not detected

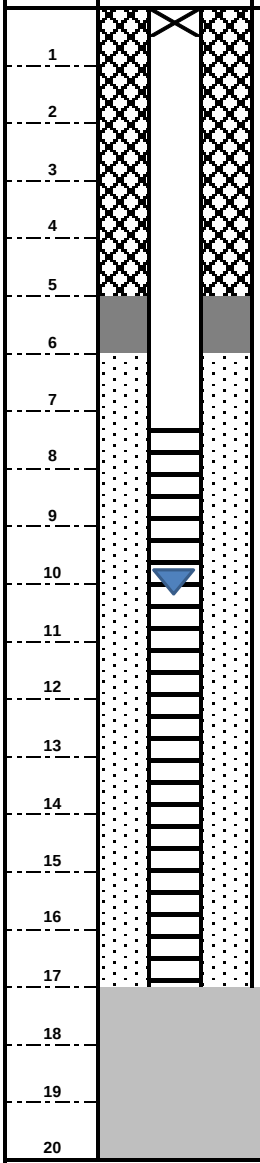
Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	200 Hamilton Avenue AKRF Project Number: 170029	Groundwater Monitoring Well ID: Sheet 1 of 1	MW-8	Soil Boring ID:	SB-15

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

Drilling Method:	Geoprobe DPP
Sampling Method:	4' Macrocores
Driller:	Cascade Drilling
Weather:	25 °F, Cloudy
Logged by:	T. McClintock, AKRF

Drilling
Start Time: 8:20 **Finish Time:** 9:00
Date: 2/9/2018



Well Construction

Locking Flush Mount

Concrete Grout: 0 - 5'

2" Diameter PVC Well Riser: 0.5' - 7'

Bentonite Seal: 5' - 6'

Morie #2 Sand Pack: 6' - 17'

2" Diameter Pre-Packed PVC Well Screen: 7' - 17'

Surface Condition: Terrazzo Tile and Concrete

Depth (feet)	Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1–4	40.5	Top 5.5": TILE and CONCRETE (FILL).	ND	Dry	ND	ND	SB-15 (2-4) at 9:00
		Bottom 35": Brown SAND, little Silt, fine Gravel (FILL).	ND	Dry	ND	ND	
5–8	40	Top 7": SLOUGH.	ND	Dry	ND	ND	
		Middle 17": Brown SAND, little Silt, trace fine Gravel.	ND	Dry	ND	ND	
		Bottom 35": Brown SAND, trace Silt, fine Gravel.	ND	Dry	ND	ND	
9–12	37	Top 4": SLOUGH.	ND	Dry	ND	ND	
		Middle 23": Brown SAND, trace Silt.	Petro - Like at 10.5'	Moist at 10.5	0.5 2.5 3.3		SB-15 (10-11) at 8:55
		Bottom 35": Gray SAND, trace Silt.	Petro - Like	Wet at 11.5	10.2 895 1101		
13–16	43	Top 6": SLOUGH.	Petro - Like	Wet	806 778 324 42.7		
		Bottom 37": Gray SAND, some SILT.	Petro - Like	Wet	20.5 12.8		
17–20							

Notes: ▼ **Groundwater Depth Indicator**

Groundwater measured at 10.26 feet below grade in MW-8 on 2/9/17.

Groundwater monitoring well installed to 17 feet below grade.

Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.

Groundwater encountered at approximately 10.26 feet below grade during soil boring installation.

End of soil boring at 16 feet below grade. Casing advanced to 17 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

200 Hamilton Avenue
AKRF Project Number: 170029

Soil Boring ID: **SB-16**
Sheet 1 of 1

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

Drilling Method:	Geoprobe DPP
Sampling Method:	4' Macrocores
Driller:	Cascade Drilling
Weather:	25 °F, Clear
Logged By:	T. McClintock, AKRF

Drilling
Start Time: 10:10 **Finish Time:** 11:10
Date: 2/9/2018

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	31	Top 4": CONCRETE and fine GRAVEL.	ND	Dry	ND	ND	SB-16 (2-4) at 11:10
2		Middle 9": Brown SAND, some Concrete, fine Gravel, little Silt, trace Brick (FILL).	ND	Dry	ND	ND	
3		Bottom 18": Brown SAND, some Silt, trave fine Gravel (FILL).	ND	Dry	ND	ND	
4							
5	38	Top 10": SLOUGH.	ND	Dry	ND	ND	
6							
7		Bottom 28": Brown SAND, some Silt, trace fine Gravel.	ND	Dry	ND	ND	
8							
9	41	Top 12": SLOUGH.	ND	Dry	ND	ND	
10		Next 8": Brown SAND, little Silt.	ND	Dry	ND	ND	
11		Next 7": Brown SILT, little Sand.	ND	Moist at 11'	ND	ND	
12		Bottom 14": Brown SAND, little Silt.	ND	Moist	ND	ND	
13	46	Top 7": SLOUGH.	Petro - Like	Wet at 13'	5.5 2.8 4.7		SB-16 (12-13) at 11:00
14		Middle 30": Gray SILT, little Sand.	Petro - Like	Wet	5.8 5.4		
15		Bottom 9": Brown SILT, little Sand.	Petro - Like	Wet	3.7 1.7		
16					1.3		
17	39	Top 8": SLOUGH.	Petro - Like	Wet	0.5 0.3	ND	
18		Middle 18": Brown SILT, little Sand.	Petro - Like	Wet	0.7 0.1	ND	
19		Bottom 13": Gray SAND, some Silt.	Septic - Like	Wet	0.4 0.3	ND	
20					2.1		

Notes: Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.
Groundwater was encountered at approximately 13 feet below grade during soil boring installation.
End of soil boring at 20 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

200 Hamilton Avenue

AKRF Project Number: 170029

Soil Boring ID: **SB-17**

Sheet 1 of 1

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

Drilling Method:	Geoprobe DPP
Sampling Method:	4' Macrocores
Driller:	Cascade Drilling
Weather:	25 °F, Clear
Logged By:	T. McClintock, AKRF

Drilling

Start Time: 11:35 **Finish Time:** 12:35

Date: 2/9/2018

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	29	Top 4": CONCRETE and fine GRAVEL.	ND	Dry	ND	ND	
2							
3		Bottom 25": Brown SAND, little Silt, fine Gravel, trace Brick (FILL).	ND	Dry	ND	ND	
4							
5	24	Top 7": SLOUGH.	ND	Dry	ND	ND	SB-17 (5-7) at 12:35
6							
7		Bottom 17": Brown SAND, little Silt, fine Gravel, trace Brick, Rubber, Asphalt (FILL).	ND	Dry	ND	ND	
8							
9	33	Top 6": SLOUGH.	ND	Dry	ND 298	ND	
10		Middle 19": Gray SILT, some Sand.	Petro - Like at 8.5'	Wet at 9'	24.3 15.7	ND	SB-17 (8-9) at 12:25
11		Bottom 8": Gray SAND, trace Silt.			11.4	ND	
12					12.7 10.7		
13	34	Top 9": SLOUGH.	Petro - Like	Wet	11.1 12.3	ND	
14		Middle 10": Gray SAND, trace Silt.	Petro - Like	Wet	3.7 4.2	ND	
15		Bottom 15": Gray SILT, trace Sand.	Petro - Like	Wet	3.8 2.9	ND	
16							
17	45	Top 6": SLOUGH.	Petro - Like	Wet	1.8 1.9 0.6 0.5	ND	
18							
19		Bottom 39": Gray SILT, little Sand.	Petro - Like	Wet	0.8 1.1 0.7	ND	
20					0.1		

Notes: Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260), CP-51 SVOCs (EPA 8270), and Resource Conservation and Recovery Act (RCRA) 8 Metals plus Zinc.
Groundwater was encountered at approximately 9 feet below grade during soil boring installation.
End of soil boring at 20 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

200 Hamilton Avenue
AKRF Project Number: 170029

Soil Boring ID: **SB-18**
Sheet 1 of 1

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

Drilling Method:	Geoprobe DPP
Sampling Method:	5' Macrocores
Driller:	Cascade Drilling
Weather:	30 °F, Cloudy
Logged By:	T. McClintock, AKRF

Drilling
Start Time: 12:10 **Finish Time:** 13:05
Date: 2/6/2018

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	45	Top 5": ASPHALT and fine GRAVEL (FILL).	ND	Dry	ND	ND	
2							
3		Bottom 40": Brown SAND, little Silt, fine Gravel, trace Concrete (FILL).	ND	Dry	ND	ND	
4							
5							
6	55	Top 5": SLOUGH.	ND	Dry	ND	ND	
7					0.5		
8					0.5		
9		Bottom 50": Brown SAND, little Silt, fine Gravel.	ND	Dry	0.7	ND	
10					1.3		
					1.7		
					2		
11	55	Top 10": SLOUGH.	ND	Dry	1.3	ND	
					2.9		
12					103		
					752		
13		Middle 24": Brown SAND, little Silt, fine Gravel.	Petro - Like at 11'	Dry	574	ND	SB-18 (12-14) at 13:05
					262		
14					589		
		Bottom 21": Gray SAND, little Silt, fine Gravel.	Petro - Like	Dry	246	ND	
15					648		
					619		
16	53	Top 9": SLOUGH.	Petro - Like	Dry	115	ND	
					22.5		
17					10.1		
		Middle 15": Gray SAND, little Silt, fine Gravel.	Petro - Like	Dry	19.2	ND	
18					8.3		
					6.7		
19		Bottom 29": Red/Brown/Black SAND, little Silt, fine Gravel.	Petro - Like	Dry	5.8	ND	
					7.2		
20							

Notes: Soil samples analyzed for Commissioners Policy (CP-51) VOCs (EPA 8260).

Groundwater was not encountered during soil boring installation.
End of soil boring at 19 feet below grade due to DPP refusal on apparent cobbles.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	200 Hamilton Avenue AKRF Project Number: 170029	Groundwater Monitoring Well ID: Sheet 1 of 1	MW-9	Soil Boring ID:	SB/MW-9

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

Drilling Method:	Geoprobe DPP
Sampling Method:	5' Macrocores
Driller:	Cascade Drilling
Weather:	30 °F, Cloudy
Logged by:	T. McClintock, AKRF

Drilling

Start Time: 11:35 **Finish Time:** 12:15

Date: 2/7/2018

Depth (feet)	Well Construction	Surface Condition: Topsoil and Grass	Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1		Locking Flush Mount	50	Top 8": Topsoil, trace grass, roots (FILL).	ND	Dry	ND	ND	
2		Concrete Grout: 0 - 18'							
3		2" Diameter PVC Well Riser: 0.5' - 5'							
4		Bentonite Seal: 3' - 4'		Bottom 42": Brown SAND, some Silt, fine Gravel, trace Brick, wood (FILL).	ND	Dry	ND	ND	
5									
6			57	Top 8": SLOUGH.	ND	Dry	ND	ND	
7									
8		Morie #2 Sand Pack: 6' - 17'							
9				Bottom 49": Brown SAND and SILT, trace fine Gravel.	ND	Wet at 9'	ND	ND	
10									
11			30	Top 7": SLOUGH.	ND	Wet	ND	ND	
12				Middle 5": Brown SILT, little Sand.	ND	Wet	ND	ND	
13		2" Diameter Pre-Packed PVC Well Screen: 7' - 17'							
14				Bottom 18": Gray SILT, little Sand.	ND	Wet	ND	ND	
15									
16									
17									
18									
19									
20									

Notes: ▼ **Groundwater Depth Indicator**

Groundwater measured at 12.27 feet below grade in MW-9 on 2/8/17.

Groundwater monitoring well installed to 20 feet below grade.

Soil samples from SB/MW-9 were not submitted for laboratory analysis.

Groundwater encountered at approximately 12.27 feet below grade during soil boring installation.

End of soil boring at 15 feet below grade. Casing advanced to 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

Well Sampling Log

Job No: 170029	**Client:** Street-Works Development	**Well No:**
Project Location: 200 Hamilton Avenue, White Plains, NY	**Sampled By:** Chris Puoplo	**MW-1**
Date: 2/16/2018	**Sampling Time:** 10:25	
LEL at surface: N/A		
PID at surface: ND		

Total Depth:	24.27 ft. below top of casing	**Water Column:** 5.89 feet	*= 0.163 * WC for 2" wells
Depth to Water:	18.38 ft. below top of casing	**Well Volume*:** 0.96 gallons	*= 0.653 * WC for 4" wells
Depth to Product:	ND ft. below top of casing	**Volume Purged:** 4 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen:	10.6 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen:	25.6 ft. below top of casing	**Purging Device (pump type):**	
Approx. Pump Intake:	21.3 ft. below top of casing	QED Bladder Pump	

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
8:57	18.38	100	13.88	10.0	1.00	7.49	164	902	
9:02	18.38	100	14.20	10.0	0.55	7.50	152	712	
9:07	18.38	100	14.32	9.92	0.38	7.51	144	493	
9:12	18.38	100	14.39	9.61	0.30	7.53	139	425	
9:17	18.38	100	14.45	9.23	0.25	7.55	134	304	
9:22	18.38	100	14.48	8.97	0.20	7.56	129	235	
9:27	18.38	100	14.47	8.76	0.18	7.57	124	165	
9:32	18.38	100	14.48	8.43	0.12	7.58	115	117	No odor or sheen
9:37	18.38	100	14.48	8.41	0.11	7.58	114	114	
9:42	18.38	100	14.51	8.35	0.10	7.59	112	117	
9:47	18.38	100	14.52	8.27	0.08	7.59	109	94.4	
9:52	18.38	100	14.53	8.22	0.08	7.59	108	90.8	
9:57	18.38	100	14.53	8.17	0.06	7.59	106	68.4	
10:02	18.38	100	14.54	8.14	0.06	7.59	105	63.8	
10:07	18.38	100	14.55	8.10	0.05	7.59	103	50.4	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

Well Sampling Log

Job No: 170029		**Client:** Street-Works Development	**Well No:** **MW-1**
Project Location: 200 Hamilton Avenue, White Plains, NY		**Sampled By:** Chris Puoplo	
Date: 2/16/2018		**Sampling Time:** 10:25	
LEL at surface: N/A			
PID at surface: ND			
Total Depth:	24.27 ft. below top of casing	**Water Column:** 5.89 feet	*= 0.163 * WC for 2" wells
Depth to Water:	18.38 ft. below top of casing	**Well Volume*:** 0.96 gallons	*= 0.653 * WC for 4" wells
Depth to Product:	ND ft. below top of casing	**Volume Purged:** 4 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen:	10.6 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen:	25.6 ft. below top of casing	**Purging Device (pump type):** QED Bladder Pump	
Approx. Pump Intake:	21.3 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
10:12	18.38	100	14.56	8.07	0.04	7.59	101	38.9	No odor or sheen
10:17	18.38	100	14.56	8.07	0.03	7.60	100	39.8	
10:22	18.38	100	14.57	8.04	0.03	7.59	98	31.0	
10:33	18.38	100	14.35	8.02	0.10	7.60	98	32.3	

Stabilization Criteria:	+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

Well Sampling Log

Job No: 170029	**Client:** Street-Works Development	**Well No:** **MW-2**
Project Location: 200 Hamilton Avenue, White Plains, NY	**Sampled By:** Tim McClintock	
Date: 2/16/2018	**Sampling Time:** 16:25	
LEL at surface: N/A		
PID at surface: 0.4 ppm		
Total Depth: 22.24 ft. below top of casing	**Water Column:** 9.82 feet	*= 0.163 * WC for 2" wells
Depth to Water: 12.42 ft. below top of casing	**Well Volume*:** 1.60 gallons	*= 0.653 * WC for 4" wells
Depth to Product: ND ft. below top of casing	**Volume Purged:** 4 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen: 10 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen: 27 ft. below top of casing	**Purging Device (pump type):** QED Bladder Pump	
Approx. Pump Intake: 17.5 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
14:20	12.42	100	15.26	4.67	4.52	6.51	41	221	Petro- & septic- like odor, no sheen.
14:25	12.42	100	15.53	3.87	3.93	6.62	-2	209	
14:30	12.42	100	15.56	5.40	3.69	6.48	-10	196	
14:35	12.42	100	15.57	5.45	3.19	6.48	-19	185	
14:40	12.42	100	15.49	5.46	2.87	6.48	-22	176	
14:45	12.42	100	15.44	5.55	2.60	6.45	-24	174	
14:50	12.42	100	15.42	5.64	2.21	6.46	-27	166	
14:55	12.42	100	15.38	5.68	1.97	6.46	-29	161	
15:00	12.42	100	15.35	5.76	1.70	6.46	-32	155	
15:05	12.42	100	15.31	5.74	1.56	6.45	-34	151	
15:10	12.42	100	15.25	5.75	2.35	6.45	-34	148	
15:15	12.42	100	15.16	5.75	2.08	6.46	-36	144	
15:20	12.42	100	15.23	5.78	1.91	6.45	-36	142	
15:25	12.42	100	15.22	5.82	1.69	6.45	-38	139	
15:30	12.42	100	15.17	5.82	1.53	6.46	-39	136	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

Well Sampling Log

Job No: 170029		**Client:** Street-Works Development	**Well No:** **MW-2**
Project Location: 200 Hamilton Avenue, White Plains, NY		**Sampled By:** Tim McClintock	
Date: 2/16/2018		**Sampling Time:** 16:25	
LEL at surface: N/A			
PID at surface: 0.4 ppm			
Total Depth:	22.24 ft. below top of casing	**Water Column:** 9.82 feet	*= 0.163 * WC for 2" wells
Depth to Water:	12.42 ft. below top of casing	**Well Volume*:** 1.60 gallons	*= 0.653 * WC for 4" wells
Depth to Product:	ND ft. below top of casing	**Volume Purged:** 4 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen:	10 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen:	27 ft. below top of casing	**Purging Device (pump type):** QED Bladder Pump	
Approx. Pump Intake:	17.5 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
15:35	12.42	100	14.59	5.95	1.26	6.41	-36	131	Petro- & septic- like odor, no sheen.
15:40	12.42	100	14.54	5.94	1.23	6.37	-35	130	
15:45	12.42	100	14.48	5.92	1.15	6.39	-36	129	
15:50	12.42	100	14.35	5.92	1.03	6.39	-37	127	
15:55	12.42	100	14.34	5.94	0.97	6.41	-39	127	
16:00	12.42	100	14.36	5.94	0.89	6.43	-41	125	
16:05	12.42	100	14.31	5.96	0.78	6.45	-43	115	
16:10	12.42	100	14.27	6.00	0.73	6.46	-43	121	
16:15	12.42	100	14.24	6.00	0.60	6.46	-45	119	
16:20	12.42	100	14.23	5.97	0.57	6.47	-45	117	
16:30	12.42	100	14.19	5.96	0.64	6.39	-26	115	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

Well Sampling Log

Job No: 170029	**Client:** Street-Works Development	**Well No:** **MW-5**
Project Location: 200 Hamilton Avenue, White Plains, NY	**Sampled By:** Tim McClintock	
Date: 2/16/2018	**Sampling Time:** 11:45	
LEL at surface: N/A		
PID at surface: ND		
Total Depth: 28.22 ft. below top of casing	**Water Column:** 6.81 feet	*= 0.163 * WC for 2" wells
Depth to Water: 21.41 ft. below top of casing	**Well Volume*:** 1.11 gallons	*= 0.653 * WC for 4" wells
Depth to Product: ND ft. below top of casing	**Volume Purged:** 4 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen: unknown ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen: unknown ft. below top of casing	**Purging Device (pump type):** QED Bladder Pump	
Approx. Pump Intake: 25 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
9:40	21.41	100	14.70	12.0	1.68	6.08	268	860	
9:45	21.41	100	14.89	11.5	2.58	6.16	258	375	
9:50	21.41	100	14.59	11.6	2.21	6.15	253	291	
9:55	21.41	100	14.36	11.9	1.65	6.09	252	203	
10:00	21.41	100	14.33	12.0	1.41	6.05	247	150	
10:05	21.41	100	14.31	12.1	1.23	6.04	244	126	
10:10	21.41	100	14.31	12.1	1.09	6.08	236	118	
10:15	21.41	100	14.31	12.1	0.97	6.11	232	106	No odor or sheen
10:20	21.41	100	14.26	12.1	0.86	6.14	227	123	
10:25	21.41	100	14.05	12.1	0.81	6.13	225	109	
10:30	21.41	100	13.58	12.1	0.69	6.05	227	121	
10:35	21.41	100	13.41	12.1	0.75	6.02	226	119	
10:40	21.41	100	13.40	12.1	0.69	6.00	225	131	
10:45	21.41	100	13.40	12.1	0.65	6.00	224	114	
10:50	21.41	100	13.40	12.1	0.59	5.97	224	107	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

Well Sampling Log

Job No: 170029		**Client:** Street-Works Development	**Well No:** **MW-5**
Project Location: 200 Hamilton Avenue, White Plains, NY		**Sampled By:** Tim McClintock	
Date: 2/16/2018		**Sampling Time:** 11:45	
LEL at surface: N/A			
PID at surface: ND			
Total Depth:	28.22 ft. below top of casing	**Water Column:** 6.81 feet	*= 0.163 * WC for 2" wells
Depth to Water:	21.41 ft. below top of casing	**Well Volume*:** 1.11 gallons	*= 0.653 * WC for 4" wells
Depth to Product:	ND ft. below top of casing	**Volume Purged:** 4 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen:	unknown ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen:	unknown ft. below top of casing	**Purging Device (pump type):** QED Bladder Pump	
Approx. Pump Intake:	25 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
10:55	21.41	100	13.27	12.2	0.53	5.98	221	101	
11:00	21.41	100	13.28	12.2	0.48	5.98	218	97.7	
11:05	21.41	100	13.23	12.2	0.45	5.98	217	117	
11:10	21.41	100	13.91	12.2	0.41	6.02	211	122	
11:15	21.41	100	13.59	12.2	0.34	6.02	211	126	
11:20	21.41	100	13.48	12.2	0.30	6.00	210	133	No odor or sheen
11:25	21.41	100	13.68	12.2	0.29	6.02	207	120	
11:30	21.41	100	13.27	12.2	0.27	6.02	201	131	
11:35	21.41	100	13.29	12.2	0.25	6.06	199	121	
11:40	21.41	100	13.33	12.2	0.24	6.06	199	124	
11:50	21.41	100	13.83	12.2	0.19	5.99	209	121	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

Well Sampling Log

Job No: 170029	**Client:** Street-Works Development	**Well No:** **MW-6**
Project Location: 200 Hamilton Avenue, White Plains, NY	**Sampled By:** Tim McClintock	
Date: 2/16/2018	**Sampling Time:** 13:20	
LEL at surface: N/A		
PID at surface: 0.7 ppm		
Total Depth: 28.94 ft. below top of casing	**Water Column:** 5.82 feet	*= 0.163 * WC for 2" wells
Depth to Water: 23.12 ft. below top of casing	**Well Volume*:** 0.95 gallons	*= 0.653 * WC for 4" wells
Depth to Product: ND ft. below top of casing	**Volume Purged:** 2 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen: unknown ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen: unknown ft. below top of casing	**Purging Device (pump type):** QED Bladder Pump	
Approx. Pump Intake: 25.8 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
12:40	23.12	100	14.71	10.0	0.28	6.36	13	181	Petro-like odor, no sheen
12:45	23.12	100	14.89	10.1	0.14	6.32	-6	137	
12:50	23.12	100	14.94	10.1	0.08	6.31	-14	106	
12:55	23.12	100	14.97	10.1	0.00	6.29	-21	72.2	
13:00	23.12	100	14.99	10.1	0.00	6.29	-25	59.5	
13:05	23.12	100	15.01	10.1	0.00	6.29	-29	47.4	
13:10	23.12	100	15.01	10.1	0.00	6.29	-32	39.7	
13:15	23.12	100	14.99	10.1	0.00	6.28	-33	36.6	
13:20	23.12	100	14.99	10.1	0.00	6.28	-34	35.1	
13:30	23.12	100	14.91	10.1	0.00	6.28	-35	33.2	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

Well Sampling Log

Job No: 170029	**Client:** Street-Works Development	**Well No:**
Project Location: 200 Hamilton Avenue, White Plains, NY	**Sampled By:** Chris Puoplo	**MW-7**
Date: 2/16/2018	**Sampling Time:** 13:55	
LEL at surface: N/A		
PID at surface: 250.6 ppm		
Total Depth: 30.35 ft. below top of casing	**Water Column:** 6.45 feet	*= 0.163 * WC for 2" wells
Depth to Water: 23.9 ft. below top of casing	**Well Volume*:** 1.05 gallons	*= 0.653 * WC for 4" wells
Depth to Product: ND ft. below top of casing	**Volume Purged:** 2.5 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen: 20.35 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen: 30.35 ft. below top of casing	**Purging Device (pump type):** QED Bladder Pump	
Approx. Pump Intake: 27 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
11:54	23.90	100	14.69	4.10	0.86	7.43	-174	216	
11:59	23.90	100	14.92	4.05	0.58	7.40	-302	198	
12:04	23.90	100	15.13	3.88	0.54	7.40	-363	244	
12:09	23.90	100	15.20	3.70	0.57	7.39	-334	489	
12:14	23.90	100	15.10	3.68	0.57	7.39	-326	467	
12:19	23.90	100	15.02	3.72	0.60	7.39	-324	392	
12:24	23.90	100	14.98	3.82	0.54	7.38	-318	339	
12:29	23.90	100	15.05	3.87	0.48	7.38	-332	271	Petro-like odor, no sheen
12:34	23.90	100	15.03	3.87	0.53	7.38	-334	251	
12:39	23.90	100	14.69	3.95	0.50	7.35	-327	180	
12:44	23.90	100	14.66	4.10	0.51	7.35	-332	143	
12:49	23.90	100	14.66	4.12	0.53	7.34	-330	128	
12:54	23.90	100	14.77	4.20	0.55	7.34	-325	191	
12:59	23.90	100	14.80	4.15	0.39	7.34	-325	168	
13:04	23.90	100	15.01	4.04	0.34	7.39	-312	122	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

Well Sampling Log

Job No: 170029		**Client:** Street-Works Development	**Well No:** **MW-7**
Project Location: 200 Hamilton Avenue, White Plains, NY		**Sampled By:** Chris Puoplo	
Date: 2/16/2018		**Sampling Time:** 13:55	
LEL at surface: N/A			
PID at surface: 250.6 ppm			
Total Depth:	30.35 ft. below top of casing	**Water Column:** 6.45 feet	*= 0.163 * WC for 2" wells
Depth to Water:	23.9 ft. below top of casing	**Well Volume*:** 1.05 gallons	*= 0.653 * WC for 4" wells
Depth to Product:	ND ft. below top of casing	**Volume Purged:** 2.5 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen:	20.35 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen:	30.35 ft. below top of casing	**Purging Device (pump type):** QED Bladder Pump	
Approx. Pump Intake:	27 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
13:09	23.90	100	15.06	3.93	0.36	7.72	-119	105	
13:14	23.90	100	15.10	3.07	0.40	7.42	81	84.5	
13:19	23.90	100	14.83	5.27	0.36	7.33	-358	260	
13:24	23.90	100	15.36	5.30	0.11	7.35	-449	217	
13:29	23.90	100	15.40	5.02	0.11	7.35	-436	400	
13:34	23.90	100	15.45	4.96	0.16	7.35	-417	571	Petro-like odor, no sheen
13:39	23.90	100	15.39	4.94	0.20	7.35	-416	710	
13:44	23.90	100	15.21	5.05	0.20	7.34	-405	626	
13:49	23.90	100	15.14	5.13	0.20	7.34	-403	606	
13:54	23.90	100	15.09	5.12	0.22	7.34	-403	572	
14:02	23.90	100	15.00	5.14	0.43	7.34	-297	668	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

Well Sampling Log

Job No: 170029	**Client:** Street-Works Development	**Well No:** **MW-8**
Project Location: 200 Hamilton Avenue, White Plains, NY	**Sampled By:** Chris Puoplo	
Date: 2/16/2018	**Sampling Time:** 18:07	
LEL at surface: N/A		
PID at surface: 11 ppm		
Total Depth: 16.98 ft. below top of casing	**Water Column:** 7.05 feet	*= 0.163 * WC for 2" wells
Depth to Water: 9.93 ft. below top of casing	**Well Volume*:** 1.15 gallons	*= 0.653 * WC for 4" wells
Depth to Product: ND ft. below top of casing	**Volume Purged:** 1.25 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen: 6.98 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen: 16.98 ft. below top of casing	**Purging Device (pump type):** QED Bladder Pump	
Approx. Pump Intake: 13.3 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
17:35	9.93	100	14.78	5.28	0.10	6.59	-61	277	Petro-like odor, no sheen
17:40	9.93	100	15.81	5.20	0.06	6.58	-78	201	
17:45	9.93	100	16.47	5.17	0.00	6.66	-94	107	
17:50	9.93	100	16.70	5.17	0.00	6.67	-100	63.5	
17:55	9.93	100	16.84	5.17	0.00	6.67	-103	46.2	
18:00	9.93	100	17.04	5.13	0.00	6.67	-107	27.6	
18:05	9.93	100	17.15	5.12	0.00	6.63	-107	19.0	
18:14	9.93	100	17.13	5.09	0.00	6.56	-102	20.0	

Stabilization Criteria:	+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

Well Sampling Log

Job No: 170029	**Client:** Street-Works Development	**Well No:** **MW-9**
Project Location: 200 Hamilton Avenue, White Plains, NY	**Sampled By:** Chris Puoplo	
Date: 2/16/2018	**Sampling Time:** 16:37	
LEL at surface: N/A		
PID at surface: 0.4 ppm		
Total Depth: 20.25 ft. below top of casing	**Water Column:** 8.43 feet	*= 0.163 * WC for 2" wells
Depth to Water: 11.82 ft. below top of casing	**Well Volume*:** 1.36 gallons	*= 0.653 * WC for 4" wells
Depth to Product: ND ft. below top of casing	**Volume Purged:** 2.5 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen: 5.25 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen: 20.25 ft. below top of casing	**Purging Device (pump type):** QED Bladder Pump	
Approx. Pump Intake: 16 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
15:05	11.82	100	14.33	3.55	2.48	7.34	78	487	No odor or sheen
15:10	11.82	100	13.63	3.61	3.43	7.33	69	437	
15:15	11.82	100	13.55	3.59	3.46	7.33	64	389	
15:20	11.82	100	13.29	3.58	3.21	7.33	50	300	
15:25	11.82	100	13.26	3.59	3.07	7.33	48	267	
15:30	11.82	100	13.17	3.59	2.95	7.33	45	208	
15:35	11.82	100	13.09	3.59	2.78	7.33	43	167	
15:40	11.82	100	12.99	3.61	2.70	7.33	36	134	
15:45	11.82	100	12.97	3.61	2.58	7.33	33	108	
15:50	11.82	100	12.96	3.61	2.50	7.33	34	107	
15:55	11.82	100	12.95	3.62	2.52	7.33	31	99	
16:00	11.82	100	12.99	3.63	2.37	7.33	26	83.9	
16:05	11.82	100	12.96	3.64	2.28	7.33	26	82.9	
16:10	11.82	100	12.92	3.65	2.22	7.33	22	73	
16:15	11.82	100	12.89	3.67	2.10	7.33	13	58.2	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

Well Sampling Log

Job No: 170029		**Client:** Street-Works Development	**Well No:** **MW-9**
Project Location: 200 Hamilton Avenue, White Plains, NY		**Sampled By:** Chris Puoplo	
Date: 2/16/2018		**Sampling Time:** 16:37	
LEL at surface: N/A			
PID at surface: 0.4 ppm			
Total Depth:	20.25 ft. below top of casing	**Water Column:** 8.43 feet	*= 0.163 * WC for 2" wells
Depth to Water:	11.82 ft. below top of casing	**Well Volume*:** 1.36 gallons	*= 0.653 * WC for 4" wells
Depth to Product:	ND ft. below top of casing	**Volume Purged:** 2.5 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen:	5.25 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen:	20.25 ft. below top of casing	**Purging Device (pump type):** QED Bladder Pump	
Approx. Pump Intake:	16 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
16:20	11.82	100	12.88	3.67	2.03	7.33	13	54.4	No odor or sheen
16:25	11.82	100	12.86	3.68	1.95	7.33	12	47.6	
16:30	11.82	100	12.81	3.70	1.89	7.33	7	40.8	
16:35	11.82	100	12.78	3.71	1.87	7.33	6	42.0	
16:47	11.82	100	12.36	3.74	1.72	7.33	5	49.2	

Stabilization Criteria:	+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: Commissioners Policy CP-51 Volatile Organic Compounds (VOCs) by EPA 8260

APPENDIX D

LABORATORY ANALYTICAL REPORTS

ANALYTICAL REPORT

Lab Number:	L1804131
Client:	AKRF, Inc. 34 South Broadway White Plains, NY 10601
ATTN:	Becky Kinal
Phone:	(914) 922-2362
Project Name:	200 HAMILTON AVENUE
Project Number:	170029
Report Date:	02/13/18

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1804131
Report Date: 02/13/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1804131-01	SB-11 (17-19)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/06/18 11:00	02/06/18
L1804131-02	SB-11 (5-7)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/06/18 11:05	02/06/18
L1804131-03	SB-13 (10-12)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/06/18 12:00	02/06/18
L1804131-04	SB-13 (3-5)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/06/18 12:05	02/06/18
L1804131-05	SB-18 (12-14)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/06/18 13:05	02/06/18
L1804131-06	SB-14 (2-4)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/06/18 15:00	02/06/18
L1804131-07	SB-14 (15-16)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/06/18 15:10	02/06/18
L1804131-08	SB-12 (2-4)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/06/18 15:40	02/06/18
L1804131-09	SB-12 (15-16)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/06/18 15:50	02/06/18
L1804131-10	SB-10 (20-22)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/07/18 09:20	02/07/18
L1804131-11	SB-10 (3-5)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/07/18 09:25	02/07/18
L1804131-12	SB-15 (10-11)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/09/18 08:55	02/09/18
L1804131-13	SB-15 (2-4)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/09/18 09:00	02/09/18
L1804131-14	SB-16 (12-13)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/09/18 11:00	02/09/18
L1804131-15	SB-16 (2-4)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/09/18 11:10	02/09/18
L1804131-16	SB-17 (8-9)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/09/18 12:25	02/09/18
L1804131-17	SB-17 (5-7)	SOIL	200 HAMILTON AVE., WHITE PLAINS, NY	02/09/18 12:35	02/09/18

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1804131
Report Date: 02/13/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	200 HAMILTON AVENUE	**Lab Number:**	L1804131
Project Number:	170029	**Report Date:**	02/13/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1804131-07: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Total Metals

The WG1088167-3 MS recovery, performed on L1804131-13, is outside the acceptance criteria for mercury (0%). A post digestion spike was performed and yielded an unacceptable recovery of 124%. This has been attributed to sample matrix.

The WG1088167-4 Laboratory Duplicate RPD for mercury (46%), performed on L1804131-13, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

Solids, Total

L1804131-12 through -17: A Laboratory Duplicate was prepared with the sample batch, however, the native sample was not available for reporting; therefore, the Laboratory Duplicate results could not be reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Amita Naik

Title: Technical Director/Representative Date: 02/13/18

ORGANICS

VOLATILES

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-01 D
Client ID: SB-11 (17-19)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/12/18 10:43
Analyst: MV
Percent Solids: 88%

Date Collected: 02/06/18 11:00
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	550	100	10
Toluene	ND		ug/kg	820	110	10
Ethylbenzene	11000		ug/kg	550	93.	10
Methyl tert butyl ether	ND		ug/kg	1100	84.	10
p/m-Xylene	17000		ug/kg	1100	190	10
o-Xylene	1400		ug/kg	1100	180	10
Xylenes, Total	18000		ug/kg	1100	180	10
n-Butylbenzene	4000		ug/kg	550	120	10
sec-Butylbenzene	2300		ug/kg	550	120	10
tert-Butylbenzene	ND		ug/kg	2700	140	10
Isopropylbenzene	4100		ug/kg	550	110	10
p-Isopropyltoluene	1000		ug/kg	550	110	10
Naphthalene	3400		ug/kg	2700	76.	10
n-Propylbenzene	15000		ug/kg	550	120	10
1,3,5-Trimethylbenzene	17000		ug/kg	2700	88.	10
1,2,4-Trimethylbenzene	60000		ug/kg	2700	100	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	97		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-02
Client ID: SB-11 (5-7)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/10/18 11:35
Analyst: AD
Percent Solids: 89%

Date Collected: 02/06/18 11:05
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	1.1	0.20	1
Toluene	ND		ug/kg	1.6	0.21	1
Ethylbenzene	ND		ug/kg	1.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.16	1
p/m-Xylene	ND		ug/kg	2.1	0.37	1
o-Xylene	ND		ug/kg	2.1	0.36	1
Xylenes, Total	ND		ug/kg	2.1	0.36	1
n-Butylbenzene	ND		ug/kg	1.1	0.24	1
sec-Butylbenzene	ND		ug/kg	1.1	0.23	1
tert-Butylbenzene	ND		ug/kg	5.3	0.26	1
Isopropylbenzene	ND		ug/kg	1.1	0.21	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.22	1
Naphthalene	ND		ug/kg	5.3	0.15	1
n-Propylbenzene	ND		ug/kg	1.1	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.3	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.3	0.20	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	107		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-03 D
Client ID: SB-13 (10-12)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/12/18 11:09
Analyst: MV
Percent Solids: 92%

Date Collected: 02/06/18 12:00
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	560	110	10
Toluene	870		ug/kg	830	110	10
Ethylbenzene	14000		ug/kg	560	94.	10
Methyl tert butyl ether	ND		ug/kg	1100	85.	10
p/m-Xylene	54000		ug/kg	1100	200	10
o-Xylene	14000		ug/kg	1100	190	10
Xylenes, Total	68000		ug/kg	1100	190	10
n-Butylbenzene	4100		ug/kg	560	130	10
sec-Butylbenzene	2100		ug/kg	560	120	10
tert-Butylbenzene	ND		ug/kg	2800	140	10
Isopropylbenzene	3100		ug/kg	560	110	10
p-Isopropyltoluene	950		ug/kg	560	110	10
Naphthalene	5800		ug/kg	2800	77.	10
n-Propylbenzene	12000		ug/kg	560	120	10
1,3,5-Trimethylbenzene	22000		ug/kg	2800	90.	10
1,2,4-Trimethylbenzene	69000		ug/kg	2800	100	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-04
Client ID: SB-13 (3-5)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/10/18 12:03
Analyst: AD
Percent Solids: 87%

Date Collected: 02/06/18 12:05
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	0.99	0.19	1
Toluene	ND		ug/kg	1.5	0.19	1
Ethylbenzene	ND		ug/kg	0.99	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.15	1
p/m-Xylene	ND		ug/kg	2.0	0.35	1
o-Xylene	ND		ug/kg	2.0	0.33	1
Xylenes, Total	ND		ug/kg	2.0	0.33	1
n-Butylbenzene	ND		ug/kg	0.99	0.22	1
sec-Butylbenzene	ND		ug/kg	0.99	0.21	1
tert-Butylbenzene	ND		ug/kg	4.9	0.24	1
Isopropylbenzene	ND		ug/kg	0.99	0.19	1
p-Isopropyltoluene	ND		ug/kg	0.99	0.20	1
Naphthalene	ND		ug/kg	4.9	0.14	1
n-Propylbenzene	ND		ug/kg	0.99	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.9	0.16	1
1,2,4-Trimethylbenzene	0.32	J	ug/kg	4.9	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	105		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-05 D
Client ID: SB-18 (12-14)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/12/18 11:36
Analyst: MV
Percent Solids: 94%

Date Collected: 02/06/18 13:05
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	940	180	20
Toluene	280	J	ug/kg	1400	180	20
Ethylbenzene	11000		ug/kg	940	160	20
Methyl tert butyl ether	ND		ug/kg	1900	140	20
p/m-Xylene	76000		ug/kg	1900	330	20
o-Xylene	2300		ug/kg	1900	320	20
Xylenes, Total	78000		ug/kg	1900	320	20
n-Butylbenzene	5200		ug/kg	940	210	20
sec-Butylbenzene	2900		ug/kg	940	200	20
tert-Butylbenzene	ND		ug/kg	4700	230	20
Isopropylbenzene	2400		ug/kg	940	180	20
p-Isopropyltoluene	1400		ug/kg	940	190	20
Naphthalene	6600		ug/kg	4700	130	20
n-Propylbenzene	7200		ug/kg	940	200	20
1,3,5-Trimethylbenzene	34000		ug/kg	4700	150	20
1,2,4-Trimethylbenzene	100000		ug/kg	4700	180	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	98		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-06
Client ID: SB-14 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/10/18 12:30
Analyst: AD
Percent Solids: 90%

Date Collected: 02/06/18 15:00
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	0.92	0.18	1
Toluene	ND		ug/kg	1.4	0.18	1
Ethylbenzene	0.18	J	ug/kg	0.92	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.14	1
p/m-Xylene	0.66	J	ug/kg	1.8	0.32	1
o-Xylene	ND		ug/kg	1.8	0.31	1
Xylenes, Total	0.66	J	ug/kg	1.8	0.31	1
n-Butylbenzene	ND		ug/kg	0.92	0.21	1
sec-Butylbenzene	0.22	J	ug/kg	0.92	0.20	1
tert-Butylbenzene	0.58	J	ug/kg	4.6	0.23	1
Isopropylbenzene	ND		ug/kg	0.92	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.92	0.19	1
Naphthalene	0.85	J	ug/kg	4.6	0.13	1
n-Propylbenzene	ND		ug/kg	0.92	0.20	1
1,3,5-Trimethylbenzene	0.30	J	ug/kg	4.6	0.15	1
1,2,4-Trimethylbenzene	0.80	J	ug/kg	4.6	0.17	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	106		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-07 D
Client ID: SB-14 (15-16)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/12/18 12:02
Analyst: MV
Percent Solids: 89%

Date Collected: 02/06/18 15:10
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	120	J	ug/kg	610	120	10
Toluene	ND		ug/kg	920	120	10
Ethylbenzene	4900		ug/kg	610	100	10
Methyl tert butyl ether	ND		ug/kg	1200	94.	10
p/m-Xylene	16000		ug/kg	1200	220	10
o-Xylene	540	J	ug/kg	1200	210	10
Xylenes, Total	17000	J	ug/kg	1200	210	10
n-Butylbenzene	1400		ug/kg	610	140	10
sec-Butylbenzene	990		ug/kg	610	130	10
tert-Butylbenzene	190	J	ug/kg	3100	150	10
Isopropylbenzene	2500		ug/kg	610	120	10
p-Isopropyltoluene	1300		ug/kg	610	120	10
Naphthalene	2800	J	ug/kg	3100	84.	10
n-Propylbenzene	4100		ug/kg	610	130	10
1,3,5-Trimethylbenzene	11000		ug/kg	3100	99.	10
1,2,4-Trimethylbenzene	19000		ug/kg	3100	110	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	122		70-130
Dibromofluoromethane	102		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-08
Client ID: SB-12 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/10/18 12:58
Analyst: AD
Percent Solids: 90%

Date Collected: 02/06/18 15:40
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	1.0	0.20	1
Toluene	ND		ug/kg	1.5	0.20	1
Ethylbenzene	0.19	J	ug/kg	1.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.16	1
p/m-Xylene	0.49	J	ug/kg	2.0	0.36	1
o-Xylene	ND		ug/kg	2.0	0.35	1
Xylenes, Total	0.49	J	ug/kg	2.0	0.35	1
n-Butylbenzene	ND		ug/kg	1.0	0.23	1
sec-Butylbenzene	ND		ug/kg	1.0	0.22	1
tert-Butylbenzene	ND		ug/kg	5.1	0.25	1
Isopropylbenzene	ND		ug/kg	1.0	0.20	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.21	1
Naphthalene	0.32	J	ug/kg	5.1	0.14	1
n-Propylbenzene	ND		ug/kg	1.0	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.1	0.16	1
1,2,4-Trimethylbenzene	0.31	J	ug/kg	5.1	0.19	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	104		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-09
Client ID: SB-12 (15-16)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/10/18 13:25
Analyst: AD
Percent Solids: 88%

Date Collected: 02/06/18 15:50
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	0.93	0.18	1
Toluene	ND		ug/kg	1.4	0.18	1
Ethylbenzene	ND		ug/kg	0.93	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.14	1
p/m-Xylene	ND		ug/kg	1.9	0.33	1
o-Xylene	ND		ug/kg	1.9	0.31	1
Xylenes, Total	ND		ug/kg	1.9	0.31	1
n-Butylbenzene	ND		ug/kg	0.93	0.21	1
sec-Butylbenzene	ND		ug/kg	0.93	0.20	1
tert-Butylbenzene	ND		ug/kg	4.6	0.23	1
Isopropylbenzene	ND		ug/kg	0.93	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.93	0.19	1
Naphthalene	ND		ug/kg	4.6	0.13	1
n-Propylbenzene	ND		ug/kg	0.93	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.6	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.6	0.17	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	103		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-10
Client ID: SB-10 (20-22)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/10/18 13:53
Analyst: AD
Percent Solids: 92%

Date Collected: 02/07/18 09:20
Date Received: 02/07/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	0.97	0.19	1
Toluene	ND		ug/kg	1.5	0.19	1
Ethylbenzene	ND		ug/kg	0.97	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.15	1
p/m-Xylene	ND		ug/kg	1.9	0.34	1
o-Xylene	ND		ug/kg	1.9	0.33	1
Xylenes, Total	ND		ug/kg	1.9	0.33	1
n-Butylbenzene	ND		ug/kg	0.97	0.22	1
sec-Butylbenzene	ND		ug/kg	0.97	0.21	1
tert-Butylbenzene	ND		ug/kg	4.9	0.24	1
Isopropylbenzene	ND		ug/kg	0.97	0.19	1
p-Isopropyltoluene	ND		ug/kg	0.97	0.20	1
Naphthalene	ND		ug/kg	4.9	0.13	1
n-Propylbenzene	ND		ug/kg	0.97	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.9	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.9	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	106		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-11
Client ID: SB-10 (3-5)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/10/18 14:21
Analyst: AD
Percent Solids: 93%

Date Collected: 02/07/18 09:25
Date Received: 02/07/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	0.93	0.18	1
Toluene	ND		ug/kg	1.4	0.18	1
Ethylbenzene	ND		ug/kg	0.93	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.14	1
p/m-Xylene	ND		ug/kg	1.9	0.33	1
o-Xylene	ND		ug/kg	1.9	0.31	1
Xylenes, Total	ND		ug/kg	1.9	0.31	1
n-Butylbenzene	ND		ug/kg	0.93	0.21	1
sec-Butylbenzene	ND		ug/kg	0.93	0.20	1
tert-Butylbenzene	ND		ug/kg	4.6	0.23	1
Isopropylbenzene	ND		ug/kg	0.93	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.93	0.19	1
Naphthalene	ND		ug/kg	4.6	0.13	1
n-Propylbenzene	ND		ug/kg	0.93	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.6	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.6	0.17	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	104		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-12
Client ID: SB-15 (10-11)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/12/18 09:51
Analyst: MV
Percent Solids: 83%

Date Collected: 02/09/18 08:55
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	1.2	0.23	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	0.36	J	ug/kg	1.2	0.20	1
Methyl tert butyl ether	2.4		ug/kg	2.4	0.18	1
p/m-Xylene	ND		ug/kg	2.4	0.41	1
o-Xylene	ND		ug/kg	2.4	0.40	1
Xylenes, Total	ND		ug/kg	2.4	0.40	1
n-Butylbenzene	6.4		ug/kg	1.2	0.27	1
sec-Butylbenzene	3.7		ug/kg	1.2	0.26	1
tert-Butylbenzene	0.31	J	ug/kg	5.9	0.29	1
Isopropylbenzene	1.4		ug/kg	1.2	0.23	1
p-Isopropyltoluene	0.91	J	ug/kg	1.2	0.24	1
Naphthalene	1.9	J	ug/kg	5.9	0.16	1
n-Propylbenzene	4.8		ug/kg	1.2	0.25	1
1,3,5-Trimethylbenzene	1.1	J	ug/kg	5.9	0.19	1
1,2,4-Trimethylbenzene	0.54	J	ug/kg	5.9	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	100		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-13
Client ID: SB-15 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/10/18 14:48
Analyst: AD
Percent Solids: 90%

Date Collected: 02/09/18 09:00
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	1.2	0.23	1
Toluene	0.27	J	ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.18	1
p/m-Xylene	ND		ug/kg	2.4	0.41	1
o-Xylene	ND		ug/kg	2.4	0.40	1
Xylenes, Total	ND		ug/kg	2.4	0.40	1
n-Butylbenzene	ND		ug/kg	1.2	0.27	1
sec-Butylbenzene	ND		ug/kg	1.2	0.26	1
tert-Butylbenzene	ND		ug/kg	5.9	0.29	1
Isopropylbenzene	ND		ug/kg	1.2	0.23	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.24	1
Naphthalene	ND		ug/kg	5.9	0.16	1
n-Propylbenzene	ND		ug/kg	1.2	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.9	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.9	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	105		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-14
Client ID: SB-16 (12-13)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/10/18 15:16
Analyst: AD
Percent Solids: 82%

Date Collected: 02/09/18 11:00
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	1.1	0.21	1
Toluene	0.30	J	ug/kg	1.6	0.21	1
Ethylbenzene	ND		ug/kg	1.1	0.18	1
Methyl tert butyl ether	37		ug/kg	2.2	0.16	1
p/m-Xylene	ND		ug/kg	2.2	0.38	1
o-Xylene	ND		ug/kg	2.2	0.36	1
Xylenes, Total	ND		ug/kg	2.2	0.36	1
n-Butylbenzene	ND		ug/kg	1.1	0.24	1
sec-Butylbenzene	0.25	J	ug/kg	1.1	0.23	1
tert-Butylbenzene	ND		ug/kg	5.4	0.26	1
Isopropylbenzene	ND		ug/kg	1.1	0.21	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.22	1
Naphthalene	ND		ug/kg	5.4	0.15	1
n-Propylbenzene	ND		ug/kg	1.1	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.4	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.4	0.20	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	104		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-15
Client ID: SB-16 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/10/18 15:43
Analyst: AD
Percent Solids: 86%

Date Collected: 02/09/18 11:10
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	1.2	0.23	1
Toluene	0.26	J	ug/kg	1.8	0.24	1
Ethylbenzene	ND		ug/kg	1.2	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.18	1
p/m-Xylene	ND		ug/kg	2.4	0.42	1
o-Xylene	ND		ug/kg	2.4	0.41	1
Xylenes, Total	ND		ug/kg	2.4	0.41	1
n-Butylbenzene	ND		ug/kg	1.2	0.28	1
sec-Butylbenzene	ND		ug/kg	1.2	0.26	1
tert-Butylbenzene	ND		ug/kg	6.0	0.30	1
Isopropylbenzene	ND		ug/kg	1.2	0.23	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.24	1
Naphthalene	0.25	J	ug/kg	6.0	0.17	1
n-Propylbenzene	ND		ug/kg	1.2	0.26	1
1,3,5-Trimethylbenzene	0.69	J	ug/kg	6.0	0.19	1
1,2,4-Trimethylbenzene	0.50	J	ug/kg	6.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	106		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-16
Client ID: SB-17 (8-9)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/12/18 10:17
Analyst: MV
Percent Solids: 80%

Date Collected: 02/09/18 12:25
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	1.2	0.23	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.18	1
p/m-Xylene	ND		ug/kg	2.4	0.41	1
o-Xylene	ND		ug/kg	2.4	0.40	1
Xylenes, Total	ND		ug/kg	2.4	0.40	1
n-Butylbenzene	ND		ug/kg	1.2	0.27	1
sec-Butylbenzene	ND		ug/kg	1.2	0.26	1
tert-Butylbenzene	0.34	J	ug/kg	5.9	0.29	1
Isopropylbenzene	1.1	J	ug/kg	1.2	0.23	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.24	1
Naphthalene	2.8	J	ug/kg	5.9	0.16	1
n-Propylbenzene	0.70	J	ug/kg	1.2	0.25	1
1,3,5-Trimethylbenzene	0.24	J	ug/kg	5.9	0.19	1
1,2,4-Trimethylbenzene	0.56	J	ug/kg	5.9	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	**160**	Q	70-130
Dibromofluoromethane	99		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-17
Client ID: SB-17 (5-7)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/10/18 16:11
Analyst: AD
Percent Solids: 93%

Date Collected: 02/09/18 12:35
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	1.0	0.20	1
Toluene	0.47	J	ug/kg	1.6	0.20	1
Ethylbenzene	ND		ug/kg	1.0	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.16	1
p/m-Xylene	ND		ug/kg	2.1	0.37	1
o-Xylene	ND		ug/kg	2.1	0.35	1
Xylenes, Total	ND		ug/kg	2.1	0.35	1
n-Butylbenzene	ND		ug/kg	1.0	0.24	1
sec-Butylbenzene	ND		ug/kg	1.0	0.23	1
tert-Butylbenzene	ND		ug/kg	5.2	0.26	1
Isopropylbenzene	ND		ug/kg	1.0	0.20	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.21	1
Naphthalene	ND		ug/kg	5.2	0.14	1
n-Propylbenzene	ND		ug/kg	1.0	0.22	1
1,3,5-Trimethylbenzene	0.20	J	ug/kg	5.2	0.17	1
1,2,4-Trimethylbenzene	0.33	J	ug/kg	5.2	0.20	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	104		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/10/18 11:08
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02,04,06,08-11,13-15,17 Batch: WG1088368-5					
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
Xylenes, Total	ND		ug/kg	2.0	0.34
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	103		70-130

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/12/18 08:59
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 12,16 Batch: WG1088505-5					
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Methyl tert butyl ether	0.21	J	ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
Xylenes, Total	ND		ug/kg	2.0	0.34
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/12/18 08:59
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01,03,05,07 Batch: WG1088551-5					
Benzene	ND		ug/kg	50	9.6
Toluene	ND		ug/kg	75	9.8
Ethylbenzene	ND		ug/kg	50	8.5
Methyl tert butyl ether	10	J	ug/kg	100	7.6
p/m-Xylene	ND		ug/kg	100	18.
o-Xylene	ND		ug/kg	100	17.
Xylenes, Total	ND		ug/kg	100	17.
n-Butylbenzene	ND		ug/kg	50	11.
sec-Butylbenzene	ND		ug/kg	50	11.
tert-Butylbenzene	ND		ug/kg	250	12.
Isopropylbenzene	ND		ug/kg	50	9.7
p-Isopropyltoluene	ND		ug/kg	50	10.
Naphthalene	ND		ug/kg	250	6.9
n-Propylbenzene	ND		ug/kg	50	11.
1,3,5-Trimethylbenzene	ND		ug/kg	250	8.0
1,2,4-Trimethylbenzene	ND		ug/kg	250	9.3

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 200 HAMILTON AVENUE

Project Number: 170029

Lab Number: L1804131

Report Date: 02/13/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02,04,06,08-11,13-15,17 Batch: WG1088368-3 WG1088368-4								
Benzene	84		84		70-130	0		30
Toluene	96		96		70-130	0		30
Ethylbenzene	103		104		70-130	1		30
Methyl tert butyl ether	76		76		66-130	0		30
p/m-Xylene	102		104		70-130	2		30
o-Xylene	102		102		70-130	0		30
n-Butylbenzene	113		115		70-130	2		30
sec-Butylbenzene	112		115		70-130	3		30
tert-Butylbenzene	112		114		70-130	2		30
Isopropylbenzene	108		110		70-130	2		30
p-Isopropyltoluene	116		117		70-130	1		30
Naphthalene	87		96		70-130	10		30
n-Propylbenzene	108		109		70-130	1		30
1,3,5-Trimethylbenzene	110		111		70-130	1		30
1,2,4-Trimethylbenzene	108		110		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		100		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	93		95		70-130
Dibromofluoromethane	102		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 200 HAMILTON AVENUE

Project Number: 170029

Lab Number: L1804131

Report Date: 02/13/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 12,16 Batch: WG1088505-3 WG1088505-4								
Benzene	93		92		70-130	1		30
Toluene	92		91		70-130	1		30
Ethylbenzene	97		96		70-130	1		30
Methyl tert butyl ether	96		95		66-130	1		30
p/m-Xylene	98		97		70-130	1		30
o-Xylene	102		101		70-130	1		30
n-Butylbenzene	96		94		70-130	2		30
sec-Butylbenzene	96		93		70-130	3		30
tert-Butylbenzene	96		93		70-130	3		30
Isopropylbenzene	98		94		70-130	4		30
p-Isopropyltoluene	96		94		70-130	2		30
Naphthalene	95		98		70-130	3		30
n-Propylbenzene	97		94		70-130	3		30
1,3,5-Trimethylbenzene	96		95		70-130	1		30
1,2,4-Trimethylbenzene	97		94		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		110		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	104		101		70-130
Dibromofluoromethane	103		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 200 HAMILTON AVENUE

Project Number: 170029

Lab Number: L1804131

Report Date: 02/13/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab	Associated sample(s): 01,03,05,07		Batch: WG1088551-3 WG1088551-4					
Benzene	93		92		70-130	1		30
Toluene	92		91		70-130	1		30
Ethylbenzene	97		96		70-130	1		30
Methyl tert butyl ether	96		95		66-130	1		30
p/m-Xylene	98		97		70-130	1		30
o-Xylene	102		101		70-130	1		30
n-Butylbenzene	96		94		70-130	2		30
sec-Butylbenzene	96		93		70-130	3		30
tert-Butylbenzene	96		93		70-130	3		30
Isopropylbenzene	98		94		70-130	4		30
p-Isopropyltoluene	96		94		70-130	2		30
Naphthalene	95		98		70-130	3		30
n-Propylbenzene	97		94		70-130	3		30
1,3,5-Trimethylbenzene	96		95		70-130	1		30
1,2,4-Trimethylbenzene	97		94		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		110		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	104		101		70-130
Dibromofluoromethane	103		102		70-130

SEMIVOLATILES

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-02
Client ID: SB-11 (5-7)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 02/10/18 03:23
Analyst: RC
Percent Solids: 89%

Date Collected: 02/06/18 11:05
Date Received: 02/06/18
Field Prep: Not Specified

Extraction Method: EPA 3546
Extraction Date: 02/08/18 22:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Fluoranthene	ND		ug/kg	110	22.	1
Naphthalene	ND		ug/kg	190	23.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	85		30-120
4-Terphenyl-d14	104		18-120

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-04
Client ID: SB-13 (3-5)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 02/10/18 03:47
Analyst: RC
Percent Solids: 87%

Date Collected: 02/06/18 12:05
Date Received: 02/06/18
Field Prep: Not Specified

Extraction Method: EPA 3546
Extraction Date: 02/08/18 22:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
Fluoranthene	ND		ug/kg	110	22.	1
Naphthalene	ND		ug/kg	190	23.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	82		30-120
4-Terphenyl-d14	104		18-120

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-06
Client ID: SB-14 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 02/10/18 06:59
Analyst: RC
Percent Solids: 90%

Date Collected: 02/06/18 15:00
Date Received: 02/06/18
Field Prep: Not Specified

Extraction Method: EPA 3546
Extraction Date: 02/08/18 22:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	35	J	ug/kg	140	19.	1
Fluoranthene	550		ug/kg	110	21.	1
Naphthalene	30	J	ug/kg	180	22.	1
Benzo(a)anthracene	240		ug/kg	110	20.	1
Benzo(a)pyrene	240		ug/kg	140	44.	1
Benzo(b)fluoranthene	330		ug/kg	110	31.	1
Benzo(k)fluoranthene	95	J	ug/kg	110	29.	1
Chrysene	210		ug/kg	110	19.	1
Acenaphthylene	47	J	ug/kg	140	28.	1
Anthracene	88	J	ug/kg	110	36.	1
Benzo(ghi)perylene	190		ug/kg	140	21.	1
Fluorene	18	J	ug/kg	180	18.	1
Phenanthrene	120		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	51	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	200		ug/kg	140	25.	1
Pyrene	440		ug/kg	110	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	111		23-120
2-Fluorobiphenyl	93		30-120
4-Terphenyl-d14	109		18-120

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-08
Client ID: SB-12 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 02/10/18 04:59
Analyst: RC
Percent Solids: 90%

Date Collected: 02/06/18 15:40
Date Received: 02/06/18
Field Prep: Not Specified

Extraction Method: EPA 3546
Extraction Date: 02/08/18 22:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Fluoranthene	24	J	ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	25.	1
Pyrene	24	J	ug/kg	110	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	88		30-120
4-Terphenyl-d14	113		18-120

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-11
Client ID: SB-10 (3-5)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 02/10/18 04:35
Analyst: RC
Percent Solids: 93%

Date Collected: 02/07/18 09:25
Date Received: 02/07/18
Field Prep: Not Specified

Extraction Method: EPA 3546
Extraction Date: 02/08/18 22:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
Fluoranthene	ND		ug/kg	110	20.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	ND		ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	96		23-120
2-Fluorobiphenyl	93		30-120
4-Terphenyl-d14	**123**	Q	18-120

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-13
Client ID: SB-15 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 02/11/18 17:36
Analyst: TT
Percent Solids: 90%

Date Collected: 02/09/18 09:00
Date Received: 02/09/18
Field Prep: Not Specified

Extraction Method: EPA 3546
Extraction Date: 02/10/18 07:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Fluoranthene	38	J	ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	36	J	ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	50	J	ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	30	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	28	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	30	J	ug/kg	150	26.	1
Pyrene	39	J	ug/kg	110	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	88		30-120
4-Terphenyl-d14	94		18-120

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-15
Client ID: SB-16 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 02/13/18 05:37
Analyst: RC
Percent Solids: 86%

Date Collected: 02/09/18 11:10
Date Received: 02/09/18
Field Prep: Not Specified

Extraction Method: EPA 3546
Extraction Date: 02/10/18 07:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
Fluoranthene	440		ug/kg	110	22.	1
Naphthalene	ND		ug/kg	190	23.	1
Benzo(a)anthracene	240		ug/kg	110	22.	1
Benzo(a)pyrene	230		ug/kg	150	47.	1
Benzo(b)fluoranthene	320		ug/kg	110	32.	1
Benzo(k)fluoranthene	120		ug/kg	110	31.	1
Chrysene	210		ug/kg	110	20.	1
Acenaphthylene	89	J	ug/kg	150	30.	1
Anthracene	68	J	ug/kg	110	37.	1
Benzo(ghi)perylene	160		ug/kg	150	22.	1
Fluorene	30	J	ug/kg	190	19.	1
Phenanthrene	240		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	48	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	190		ug/kg	150	27.	1
Pyrene	370		ug/kg	110	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	83		30-120
4-Terphenyl-d14	81		18-120

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-17
Client ID: SB-17 (5-7)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 02/13/18 06:01
Analyst: RC
Percent Solids: 93%

Date Collected: 02/09/18 12:35
Date Received: 02/09/18
Field Prep: Not Specified

Extraction Method: EPA 3546
Extraction Date: 02/10/18 07:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	88	J	ug/kg	140	18.	1
Fluoranthene	5300		ug/kg	110	20.	1
Naphthalene	50	J	ug/kg	180	22.	1
Benzo(a)anthracene	2800		ug/kg	110	20.	1
Benzo(a)pyrene	2400		ug/kg	140	43.	1
Benzo(b)fluoranthene	3300		ug/kg	110	30.	1
Benzo(k)fluoranthene	850		ug/kg	110	28.	1
Chrysene	2200		ug/kg	110	18.	1
Acenaphthylene	430		ug/kg	140	27.	1
Anthracene	960		ug/kg	110	35.	1
Benzo(ghi)perylene	1500		ug/kg	140	21.	1
Fluorene	190		ug/kg	180	17.	1
Phenanthrene	2700		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	410		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	1800		ug/kg	140	25.	1
Pyrene	4200		ug/kg	110	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	74		30-120
4-Terphenyl-d14	70		18-120

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/12/18 08:50
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 02/08/18 22:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04,06,08,11 Batch: WG1087801-1					
Acenaphthene	ND		ug/kg	130	17.
Fluoranthene	ND		ug/kg	97	18.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	39.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	22.
Pyrene	ND		ug/kg	97	16.

Tentatively Identified Compounds		
No Tentatively Identified Compounds	ND	ug/kg

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/12/18 08:50
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 02/08/18 22:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04,06,08,11 Batch: WG1087801-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	94		10-136
4-Terphenyl-d14	111		18-120

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/12/18 11:49
Analyst: TT

Extraction Method: EPA 3546
Extraction Date: 02/10/18 07:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 13,15,17 Batch: WG1088188-1					
Acenaphthene	ND		ug/kg	130	17.
Fluoranthene	ND		ug/kg	98	19.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.

Tentatively Identified Compounds		
No Tentatively Identified Compounds	ND	ug/kg

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/12/18 11:49
Analyst: TT

Extraction Method: EPA 3546
Extraction Date: 02/10/18 07:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 13,15,17 Batch: WG1088188-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	83		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	77		10-136
4-Terphenyl-d14	96		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 200 HAMILTON AVENUE

Project Number: 170029

Lab Number: L1804131

Report Date: 02/13/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04,06,08,11 Batch: WG1087801-2 WG1087801-3								
Acenaphthene	80		97		31-137	19		50
Fluoranthene	87		104		40-140	18		50
Naphthalene	76		88		40-140	15		50
Benzo(a)anthracene	83		101		40-140	20		50
Benzo(a)pyrene	88		106		40-140	19		50
Benzo(b)fluoranthene	86		102		40-140	17		50
Benzo(k)fluoranthene	84		104		40-140	21		50
Chrysene	82		97		40-140	17		50
Acenaphthylene	84		102		40-140	19		50
Anthracene	83		102		40-140	21		50
Benzo(ghi)perylene	84		102		40-140	19		50
Fluorene	84		100		40-140	17		50
Phenanthrene	80		98		40-140	20		50
Dibenzo(a,h)anthracene	87		105		40-140	19		50
Indeno(1,2,3-cd)pyrene	102		109		40-140	7		50
Pyrene	84		101		35-142	18		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 200 HAMILTON AVENUE

Project Number: 170029

Lab Number: L1804131

Report Date: 02/13/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04,06,08,11 Batch: WG1087801-2 WG1087801-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	84		96		25-120
Phenol-d6	85		99		10-120
Nitrobenzene-d5	79		105		23-120
2-Fluorobiphenyl	84		99		30-120
2,4,6-Tribromophenol	96		114		10-136
4-Terphenyl-d14	96		113		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13,15,17 Batch: WG1088188-2 WG1088188-3								
Acenaphthene	83		75		31-137	10		50
Fluoranthene	88		82		40-140	7		50
Naphthalene	76		69		40-140	10		50
Benzo(a)anthracene	87		80		40-140	8		50
Benzo(a)pyrene	92		83		40-140	10		50
Benzo(b)fluoranthene	92		85		40-140	8		50
Benzo(k)fluoranthene	86		74		40-140	15		50
Chrysene	82		77		40-140	6		50
Acenaphthylene	86		80		40-140	7		50
Anthracene	87		81		40-140	7		50
Benzo(ghi)perylene	87		81		40-140	7		50
Fluorene	86		78		40-140	10		50
Phenanthrene	82		77		40-140	6		50
Dibenzo(a,h)anthracene	88		82		40-140	7		50
Indeno(1,2,3-cd)pyrene	91		86		40-140	6		50
Pyrene	85		80		35-142	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 200 HAMILTON AVENUE

Project Number: 170029

Lab Number: L1804131

Report Date: 02/13/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13,15,17 Batch: WG1088188-2 WG1088188-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	79		71		25-120
Phenol-d6	83		74		10-120
Nitrobenzene-d5	83		80		23-120
2-Fluorobiphenyl	81		75		30-120
2,4,6-Tribromophenol	90		83		10-136
4-Terphenyl-d14	91		83		18-120

METALS

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-02
Client ID: SB-11 (5-7)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Percent Solids: 89%

Date Collected: 02/06/18 11:05
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	1.30		mg/kg	0.438	0.091	1	02/07/18 21:10	02/12/18 17:30	EPA 3050B	1,6010C	AB
Barium, Total	80.5		mg/kg	0.438	0.076	1	02/07/18 21:10	02/12/18 17:30	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.438	0.043	1	02/07/18 21:10	02/12/18 17:30	EPA 3050B	1,6010C	AB
Chromium, Total	18.5		mg/kg	0.438	0.042	1	02/07/18 21:10	02/12/18 17:30	EPA 3050B	1,6010C	AB
Lead, Total	4.32		mg/kg	2.19	0.117	1	02/07/18 21:10	02/12/18 17:30	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.07	0.02	1	02/08/18 08:00	02/08/18 19:36	EPA 7471B	1,7471B	EA
Selenium, Total	ND		mg/kg	0.876	0.113	1	02/07/18 21:10	02/12/18 17:30	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.438	0.124	1	02/07/18 21:10	02/12/18 17:30	EPA 3050B	1,6010C	AB
Zinc, Total	32.3		mg/kg	2.19	0.128	1	02/07/18 21:10	02/12/18 17:30	EPA 3050B	1,6010C	AB

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-04
Client ID: SB-13 (3-5)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Percent Solids: 87%

Date Collected: 02/06/18 12:05
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	1.73		mg/kg	0.452	0.094	1	02/07/18 21:10	02/12/18 17:35	EPA 3050B	1,6010C	AB
Barium, Total	95.6		mg/kg	0.452	0.079	1	02/07/18 21:10	02/12/18 17:35	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.452	0.044	1	02/07/18 21:10	02/12/18 17:35	EPA 3050B	1,6010C	AB
Chromium, Total	21.0		mg/kg	0.452	0.043	1	02/07/18 21:10	02/12/18 17:35	EPA 3050B	1,6010C	AB
Lead, Total	14.1		mg/kg	2.26	0.121	1	02/07/18 21:10	02/12/18 17:35	EPA 3050B	1,6010C	AB
Mercury, Total	0.04	J	mg/kg	0.07	0.02	1	02/08/18 08:00	02/08/18 19:38	EPA 7471B	1,7471B	EA
Selenium, Total	ND		mg/kg	0.904	0.117	1	02/07/18 21:10	02/12/18 17:35	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.452	0.128	1	02/07/18 21:10	02/12/18 17:35	EPA 3050B	1,6010C	AB
Zinc, Total	42.0		mg/kg	2.26	0.132	1	02/07/18 21:10	02/12/18 17:35	EPA 3050B	1,6010C	AB

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-06
Client ID: SB-14 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Percent Solids: 90%

Date Collected: 02/06/18 15:00
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	2.04		mg/kg	0.431	0.090	1	02/07/18 21:10	02/12/18 17:40	EPA 3050B	1,6010C	AB
Barium, Total	92.7		mg/kg	0.431	0.075	1	02/07/18 21:10	02/12/18 17:40	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.431	0.042	1	02/07/18 21:10	02/12/18 17:40	EPA 3050B	1,6010C	AB
Chromium, Total	19.9		mg/kg	0.431	0.041	1	02/07/18 21:10	02/12/18 17:40	EPA 3050B	1,6010C	AB
Lead, Total	140		mg/kg	2.15	0.115	1	02/07/18 21:10	02/12/18 17:40	EPA 3050B	1,6010C	AB
Mercury, Total	0.09		mg/kg	0.07	0.02	1	02/08/18 08:00	02/08/18 19:40	EPA 7471B	1,7471B	EA
Selenium, Total	ND		mg/kg	0.862	0.111	1	02/07/18 21:10	02/12/18 17:40	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.431	0.122	1	02/07/18 21:10	02/12/18 17:40	EPA 3050B	1,6010C	AB
Zinc, Total	66.5		mg/kg	2.15	0.126	1	02/07/18 21:10	02/12/18 17:40	EPA 3050B	1,6010C	AB

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-08
Client ID: SB-12 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Percent Solids: 90%

Date Collected: 02/06/18 15:40
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	1.77		mg/kg	0.420	0.087	1	02/07/18 21:10	02/12/18 17:45	EPA 3050B	1,6010C	AB
Barium, Total	292		mg/kg	0.420	0.073	1	02/07/18 21:10	02/12/18 17:45	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.420	0.041	1	02/07/18 21:10	02/12/18 17:45	EPA 3050B	1,6010C	AB
Chromium, Total	113		mg/kg	0.420	0.040	1	02/07/18 21:10	02/12/18 17:45	EPA 3050B	1,6010C	AB
Lead, Total	6.66		mg/kg	2.10	0.112	1	02/07/18 21:10	02/12/18 17:45	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.07	0.02	1	02/08/18 08:00	02/08/18 19:42	EPA 7471B	1,7471B	EA
Selenium, Total	ND		mg/kg	0.839	0.108	1	02/07/18 21:10	02/12/18 17:45	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.420	0.119	1	02/07/18 21:10	02/12/18 17:45	EPA 3050B	1,6010C	AB
Zinc, Total	59.2		mg/kg	2.10	0.123	1	02/07/18 21:10	02/12/18 17:45	EPA 3050B	1,6010C	AB

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-11
Client ID: SB-10 (3-5)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Percent Solids: 93%

Date Collected: 02/07/18 09:25
Date Received: 02/07/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	2.05		mg/kg	0.414	0.086	1	02/08/18 07:00	02/08/18 12:41	EPA 3050B	1,6010C	LC
Barium, Total	158		mg/kg	0.414	0.072	1	02/08/18 07:00	02/08/18 12:41	EPA 3050B	1,6010C	LC
Cadmium, Total	ND		mg/kg	0.414	0.041	1	02/08/18 07:00	02/08/18 12:41	EPA 3050B	1,6010C	LC
Chromium, Total	39.5		mg/kg	0.414	0.040	1	02/08/18 07:00	02/08/18 12:41	EPA 3050B	1,6010C	LC
Lead, Total	10.2		mg/kg	2.07	0.111	1	02/08/18 07:00	02/08/18 12:41	EPA 3050B	1,6010C	LC
Mercury, Total	ND		mg/kg	0.07	0.01	1	02/08/18 08:00	02/08/18 19:44	EPA 7471B	1,7471B	EA
Selenium, Total	0.116	J	mg/kg	0.828	0.107	1	02/08/18 07:00	02/08/18 12:41	EPA 3050B	1,6010C	LC
Silver, Total	ND		mg/kg	0.414	0.117	1	02/08/18 07:00	02/08/18 12:41	EPA 3050B	1,6010C	LC
Zinc, Total	56.1		mg/kg	2.07	0.121	1	02/08/18 07:00	02/08/18 12:41	EPA 3050B	1,6010C	LC

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-13
Client ID: SB-15 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Percent Solids: 90%

Date Collected: 02/09/18 09:00
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	1.46		mg/kg	0.426	0.089	1	02/10/18 07:00	02/12/18 11:50	EPA 3050B	1,6010C	PS
Barium, Total	55.3		mg/kg	0.426	0.074	1	02/10/18 07:00	02/12/18 11:50	EPA 3050B	1,6010C	PS
Cadmium, Total	0.439		mg/kg	0.426	0.042	1	02/10/18 07:00	02/12/18 11:50	EPA 3050B	1,6010C	PS
Chromium, Total	14.7		mg/kg	0.426	0.041	1	02/10/18 07:00	02/12/18 11:50	EPA 3050B	1,6010C	PS
Lead, Total	40.9		mg/kg	2.13	0.114	1	02/10/18 07:00	02/12/18 11:50	EPA 3050B	1,6010C	PS
Mercury, Total	0.40		mg/kg	0.07	0.02	1	02/10/18 11:00	02/12/18 11:34	EPA 7471B	1,7471B	MG
Selenium, Total	ND		mg/kg	0.853	0.110	1	02/10/18 07:00	02/12/18 11:50	EPA 3050B	1,6010C	PS
Silver, Total	ND		mg/kg	0.426	0.121	1	02/10/18 07:00	02/12/18 11:50	EPA 3050B	1,6010C	PS
Zinc, Total	41.4		mg/kg	2.13	0.125	1	02/10/18 07:00	02/12/18 11:50	EPA 3050B	1,6010C	PS

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-15
Client ID: SB-16 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Percent Solids: 86%

Date Collected: 02/09/18 11:10
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	1.69		mg/kg	0.453	0.094	1	02/10/18 07:00	02/12/18 14:19	EPA 3050B	1,6010C	PS
Barium, Total	59.8		mg/kg	0.453	0.079	1	02/10/18 07:00	02/12/18 14:19	EPA 3050B	1,6010C	PS
Cadmium, Total	0.526		mg/kg	0.453	0.044	1	02/10/18 07:00	02/12/18 14:19	EPA 3050B	1,6010C	PS
Chromium, Total	12.8		mg/kg	0.453	0.044	1	02/10/18 07:00	02/12/18 14:19	EPA 3050B	1,6010C	PS
Lead, Total	8.19		mg/kg	2.27	0.121	1	02/10/18 07:00	02/12/18 14:19	EPA 3050B	1,6010C	PS
Mercury, Total	0.03	J	mg/kg	0.07	0.02	1	02/10/18 11:00	02/12/18 11:41	EPA 7471B	1,7471B	MG
Selenium, Total	ND		mg/kg	0.907	0.117	1	02/10/18 07:00	02/12/18 14:19	EPA 3050B	1,6010C	PS
Silver, Total	ND		mg/kg	0.453	0.128	1	02/10/18 07:00	02/12/18 14:19	EPA 3050B	1,6010C	PS
Zinc, Total	26.9		mg/kg	2.27	0.133	1	02/10/18 07:00	02/12/18 14:19	EPA 3050B	1,6010C	PS

Project Name: 200 HAMILTON AVENUE
Lab Number: L1804131
Project Number: 170029
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-17
Client ID: SB-17 (5-7)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil
Percent Solids: 93%

Date Collected: 02/09/18 12:35
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	1.92		mg/kg	0.402	0.084	1	02/10/18 07:00	02/12/18 14:24	EPA 3050B	1,6010C	PS
Barium, Total	56.6		mg/kg	0.402	0.070	1	02/10/18 07:00	02/12/18 14:24	EPA 3050B	1,6010C	PS
Cadmium, Total	0.574		mg/kg	0.402	0.039	1	02/10/18 07:00	02/12/18 14:24	EPA 3050B	1,6010C	PS
Chromium, Total	12.0		mg/kg	0.402	0.039	1	02/10/18 07:00	02/12/18 14:24	EPA 3050B	1,6010C	PS
Lead, Total	16.5		mg/kg	2.01	0.108	1	02/10/18 07:00	02/12/18 14:24	EPA 3050B	1,6010C	PS
Mercury, Total	0.05	J	mg/kg	0.07	0.01	1	02/10/18 11:00	02/12/18 11:43	EPA 7471B	1,7471B	MG
Selenium, Total	0.108	J	mg/kg	0.803	0.104	1	02/10/18 07:00	02/12/18 14:24	EPA 3050B	1,6010C	PS
Silver, Total	ND		mg/kg	0.402	0.114	1	02/10/18 07:00	02/12/18 14:24	EPA 3050B	1,6010C	PS
Zinc, Total	38.8		mg/kg	2.01	0.118	1	02/10/18 07:00	02/12/18 14:24	EPA 3050B	1,6010C	PS

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02,04,06,08 Batch: WG1087407-1										
Arsenic, Total	ND		mg/kg	0.400	0.083	1	02/07/18 21:10	02/12/18 15:16	1,6010C	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	02/07/18 21:10	02/12/18 15:16	1,6010C	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	02/07/18 21:10	02/12/18 15:16	1,6010C	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	02/07/18 21:10	02/12/18 15:16	1,6010C	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	02/07/18 21:10	02/12/18 15:16	1,6010C	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	02/07/18 21:10	02/12/18 15:16	1,6010C	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	02/07/18 21:10	02/12/18 15:16	1,6010C	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	02/07/18 21:10	02/12/18 15:16	1,6010C	LC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02,04,06,08,11 Batch: WG1087472-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	02/08/18 08:00	02/08/18 19:07	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 11 Batch: WG1087494-1										
Arsenic, Total	ND		mg/kg	0.400	0.083	1	02/08/18 07:00	02/08/18 12:03	1,6010C	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	02/08/18 07:00	02/08/18 12:03	1,6010C	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	02/08/18 07:00	02/08/18 12:03	1,6010C	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	02/08/18 07:00	02/08/18 12:03	1,6010C	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	02/08/18 07:00	02/08/18 12:03	1,6010C	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	02/08/18 07:00	02/08/18 12:03	1,6010C	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	02/08/18 07:00	02/08/18 12:03	1,6010C	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	02/08/18 07:00	02/08/18 12:03	1,6010C	LC

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1804131

Project Number: 170029 **Report Date:** 02/13/18

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 13,15,17 Batch: WG1088164-1										
Arsenic, Total	ND		mg/kg	0.400	0.083	1	02/10/18 07:00	02/12/18 11:08	1,6010C	PS
Barium, Total	ND		mg/kg	0.400	0.070	1	02/10/18 07:00	02/12/18 11:08	1,6010C	PS
Cadmium, Total	0.040	J	mg/kg	0.400	0.039	1	02/10/18 07:00	02/12/18 11:08	1,6010C	PS
Chromium, Total	ND		mg/kg	0.400	0.038	1	02/10/18 07:00	02/12/18 11:08	1,6010C	PS
Lead, Total	ND		mg/kg	2.00	0.107	1	02/10/18 07:00	02/12/18 11:08	1,6010C	PS
Selenium, Total	ND		mg/kg	0.800	0.103	1	02/10/18 07:00	02/12/18 11:08	1,6010C	PS
Silver, Total	ND		mg/kg	0.400	0.113	1	02/10/18 07:00	02/12/18 11:08	1,6010C	PS
Zinc, Total	ND		mg/kg	2.00	0.117	1	02/10/18 07:00	02/12/18 11:08	1,6010C	PS

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 13,15,17 Batch: WG1088167-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	02/10/18 11:00	02/12/18 11:30	1,7471B	MG

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 200 HAMILTON AVENUE

Project Number: 170029

Lab Number: L1804131

Report Date: 02/13/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02,04,06,08 Batch: WG1087407-2 SRM Lot Number: D098-540								
Arsenic, Total	98		-		83-117	-		
Barium, Total	86		-		82-118	-		
Cadmium, Total	94		-		82-117	-		
Chromium, Total	92		-		83-119	-		
Lead, Total	92		-		82-117	-		
Selenium, Total	100		-		78-121	-		
Silver, Total	99		-		80-120	-		
Zinc, Total	96		-		81-119	-		
Total Metals - Mansfield Lab Associated sample(s): 02,04,06,08,11 Batch: WG1087472-2 SRM Lot Number: D098-540								
Mercury, Total	102		-		50-149	-		
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1087494-2 SRM Lot Number: D098-540								
Arsenic, Total	113		-		83-117	-		
Barium, Total	101		-		82-118	-		
Cadmium, Total	107		-		82-117	-		
Chromium, Total	102		-		83-119	-		
Lead, Total	102		-		82-117	-		
Selenium, Total	113		-		78-121	-		
Silver, Total	111		-		80-120	-		
Zinc, Total	102		-		81-119	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 200 HAMILTON AVENUE

Project Number: 170029

Lab Number: L1804131

Report Date: 02/13/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13,15,17 Batch: WG1088164-2 SRM Lot Number: D098-540					
Arsenic, Total	98	-	83-117	-	
Barium, Total	92	-	82-118	-	
Cadmium, Total	93	-	82-117	-	
Chromium, Total	92	-	83-119	-	
Lead, Total	93	-	82-117	-	
Selenium, Total	95	-	78-121	-	
Silver, Total	98	-	80-120	-	
Zinc, Total	94	-	81-119	-	
Total Metals - Mansfield Lab Associated sample(s): 13,15,17 Batch: WG1088167-2 SRM Lot Number: D098-540					
Mercury, Total	94	-	50-149	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1804131
Report Date: 02/13/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02,04,06,08 QC Batch ID: WG1087407-3 QC Sample: L1804089-03 Client ID: MS Sample												
Arsenic, Total	2.64	12.8	13.1	82		-	-		75-125	-		20
Barium, Total	721.	214	660	**0**	Q	-	-		75-125	-		20
Cadmium, Total	ND	5.45	4.67	86		-	-		75-125	-		20
Chromium, Total	11.9	21.4	32.0	94		-	-		75-125	-		20
Lead, Total	12.4	54.5	57.3	82		-	-		75-125	-		20
Selenium, Total	ND	12.8	10.2	80		-	-		75-125	-		20
Silver, Total	0.628J	32	30.3	94		-	-		75-125	-		20
Zinc, Total	101.	53.4	140	**73**	Q	-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 02,04,06,08,11 QC Batch ID: WG1087472-3 QC Sample: L1804036-01 Client ID: MS Sample												
Mercury, Total	ND	0.161	0.20	**124**	Q	-	-		80-120	-		20
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1087494-3 QC Sample: L1803664-15 Client ID: MS Sample												
Arsenic, Total	1.83	10.1	10.6	87		-	-		75-125	-		20
Barium, Total	60.6	168	186	**74**	Q	-	-		75-125	-		20
Cadmium, Total	ND	4.29	3.02	**70**	Q	-	-		75-125	-		20
Chromium, Total	7.36	16.8	18.7	**67**	Q	-	-		75-125	-		20
Lead, Total	8.03	42.9	35.5	**64**	Q	-	-		75-125	-		20
Selenium, Total	0.874	10.1	11.1	101		-	-		75-125	-		20
Silver, Total	0.157J	25.2	26.2	104		-	-		75-125	-		20
Zinc, Total	25.8	42.1	51.5	**61**	Q	-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13,15,17 QC Batch ID: WG1088164-3 QC Sample: L1804693-01 Client ID: MS Sample										
Arsenic, Total	20.1	12.7	34.1	110		-	-	75-125	-	20
Barium, Total	93.6	212	300	97		-	-	75-125	-	20
Cadmium, Total	3.46	5.42	8.43	92		-	-	75-125	-	20
Chromium, Total	141.	21.2	161	94		-	-	75-125	-	20
Lead, Total	198.	54.2	232	**63**	Q	-	-	75-125	-	20
Selenium, Total	ND	12.7	11.7	92		-	-	75-125	-	20
Silver, Total	0.191J	31.8	32.9	103		-	-	75-125	-	20
Zinc, Total	43.7	53.1	92.2	91		-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 13,15,17 QC Batch ID: WG1088167-3 QC Sample: L1804131-13 Client ID: SB-15 (2-4)										
Mercury, Total	0.40	0.139	0.36	**0**	Q	-	-	80-120	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1804131
Report Date: 02/13/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02,04,06,08 QC Batch ID: WG1087407-4 QC Sample: L1804089-03 Client ID: DUP Sample						
Arsenic, Total	2.64	2.18	mg/kg	19		20
Barium, Total	721.	448	mg/kg	**47**	Q	20
Cadmium, Total	ND	ND	mg/kg	NC		20
Chromium, Total	11.9	17.8	mg/kg	**40**	Q	20
Lead, Total	12.4	52.6	mg/kg	**124**	Q	20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	0.628J	0.440J	mg/kg	NC		20
Zinc, Total	101.	140	mg/kg	**32**	Q	20
Total Metals - Mansfield Lab Associated sample(s): 02,04,06,08,11 QC Batch ID: WG1087472-4 QC Sample: L1804036-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1087494-4 QC Sample: L1803664-15 Client ID: DUP Sample						
Chromium, Total	7.36	6.06	mg/kg	19		20
Total Metals - Mansfield Lab Associated sample(s): 13,15,17 QC Batch ID: WG1088164-4 QC Sample: L1804693-01 Client ID: DUP Sample						
Lead, Total	198.	196	mg/kg	1		20
Total Metals - Mansfield Lab Associated sample(s): 13,15,17 QC Batch ID: WG1088167-4 QC Sample: L1804131-13 Client ID: SB-15 (2-4)						
Mercury, Total	0.40	0.25	mg/kg	**46**	Q	20

INORGANICS
&
MISCELLANEOUS

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-01
Client ID: SB-11 (17-19)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/06/18 11:00
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.2		%	0.100	NA	1	-	02/07/18 12:03	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-02
Client ID: SB-11 (5-7)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/06/18 11:05
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.6		%	0.100	NA	1	-	02/07/18 12:03	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-03
Client ID: SB-13 (10-12)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/06/18 12:00
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.0		%	0.100	NA	1	-	02/07/18 12:03	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-04
Client ID: SB-13 (3-5)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/06/18 12:05
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.3		%	0.100	NA	1	-	02/07/18 12:03	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-05
Client ID: SB-18 (12-14)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/06/18 13:05
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.4		%	0.100	NA	1	-	02/07/18 12:03	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-06
Client ID: SB-14 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/06/18 15:00
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.3		%	0.100	NA	1	-	02/07/18 12:03	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-07
Client ID: SB-14 (15-16)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/06/18 15:10
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.0		%	0.100	NA	1	-	02/07/18 12:03	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-08
Client ID: SB-12 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/06/18 15:40
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.0		%	0.100	NA	1	-	02/07/18 12:03	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-09
Client ID: SB-12 (15-16)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/06/18 15:50
Date Received: 02/06/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.0		%	0.100	NA	1	-	02/07/18 12:03	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-10
Client ID: SB-10 (20-22)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/07/18 09:20
Date Received: 02/07/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.6		%	0.100	NA	1	-	02/08/18 00:57	121,2540G	FN

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-11
Client ID: SB-10 (3-5)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/07/18 09:25
Date Received: 02/07/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.6		%	0.100	NA	1	-	02/08/18 00:57	121,2540G	FN

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-12
Client ID: SB-15 (10-11)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/09/18 08:55
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.1		%	0.100	NA	1	-	02/10/18 11:06	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-13
Client ID: SB-15 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/09/18 09:00
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.0		%	0.100	NA	1	-	02/10/18 11:06	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-14
Client ID: SB-16 (12-13)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/09/18 11:00
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.5		%	0.100	NA	1	-	02/10/18 11:06	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-15
Client ID: SB-16 (2-4)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/09/18 11:10
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.3		%	0.100	NA	1	-	02/10/18 11:06	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-16
Client ID: SB-17 (8-9)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/09/18 12:25
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.1		%	0.100	NA	1	-	02/10/18 11:06	121,2540G	RI

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1804131
Report Date: 02/13/18

SAMPLE RESULTS

Lab ID: L1804131-17
Client ID: SB-17 (5-7)
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/09/18 12:35
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.4		%	0.100	NA	1	-	02/10/18 11:06	121,2540G	RI

Lab Duplicate Analysis
Batch Quality Control

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1804131
Report Date: 02/13/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1087274-1 QC Sample: L1804097-01 Client ID: DUP Sample						
Solids, Total	86.8	86.0	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 10-11 QC Batch ID: WG1087465-1 QC Sample: L1804250-01 Client ID: DUP Sample						
Solids, Total	89.5	90.6	%	1		20

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1804131
Report Date: 02/13/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
A1	Absent
A2	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1804131-01A	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-01B	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-01C	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-01D	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L1804131-01X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-01Y	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-01Z	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-02A	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-02B	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-02C	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-02D	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L1804131-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),CD-TI(180)
L1804131-02F	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		NYCP51-PAH(14)
L1804131-02X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-02Y	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-02Z	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-03A	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-03B	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-03C	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-03D	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1804131
Report Date: 02/13/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1804131-03X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-03Y	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-03Z	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-04A	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-04B	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-04C	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-04D	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L1804131-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),CD-TI(180)
L1804131-04F	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		NYCP51-PAH(14)
L1804131-04X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-04Y	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-04Z	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-05A	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-05B	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-05C	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-05D	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L1804131-05X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-05Y	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-05Z	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-06A	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-06B	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-06C	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-06D	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L1804131-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),CD-TI(180)
L1804131-06F	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		NYCP51-PAH(14)
L1804131-06X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-06Y	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1804131
Report Date: 02/13/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1804131-06Z	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-07A	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-07B	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-07C	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-07D	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L1804131-07X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-07Y	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-07Z	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-08A	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-08B	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-08C	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-08D	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L1804131-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),CD-TI(180)
L1804131-08F	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		NYCP51-PAH(14)
L1804131-08X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-08Y	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-08Z	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-09A	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-09B	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-09C	5 gram Encore Sampler	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-09D	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L1804131-09X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-09Y	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-09Z	Vial Water preserved split	A	NA		3.5	Y	Absent	07-FEB-18 09:16	NYCP51-8260HLW(14)
L1804131-10A	5 gram Encore Sampler	A1	NA		2.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-10B	5 gram Encore Sampler	A1	NA		2.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-10C	5 gram Encore Sampler	A1	NA		2.5	Y	Absent		NYCP51-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1804131
Report Date: 02/13/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1804131-10D	Plastic 2oz unpreserved for TS	A1	NA		2.5	Y	Absent		TS(7)
L1804131-10X	Vial MeOH preserved split	A1	NA		2.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-10Y	Vial Water preserved split	A1	NA		2.5	Y	Absent	08-FEB-18 02:07	NYCP51-8260HLW(14)
L1804131-10Z	Vial Water preserved split	A1	NA		2.5	Y	Absent	08-FEB-18 02:07	NYCP51-8260HLW(14)
L1804131-11A	5 gram Encore Sampler	A1	NA		2.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-11B	5 gram Encore Sampler	A1	NA		2.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-11C	5 gram Encore Sampler	A1	NA		2.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-11D	Plastic 2oz unpreserved for TS	A1	NA		2.5	Y	Absent		TS(7)
L1804131-11E	Metals Only-Glass 60mL/2oz unpreserved	A1	NA		2.5	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),CD-TI(180)
L1804131-11F	Glass 120ml/4oz unpreserved	A1	NA		2.5	Y	Absent		NYCP51-PAH(14)
L1804131-11X	Vial MeOH preserved split	A1	NA		2.5	Y	Absent		NYCP51-8260HLW(14)
L1804131-11Y	Vial Water preserved split	A1	NA		2.5	Y	Absent	08-FEB-18 02:07	NYCP51-8260HLW(14)
L1804131-11Z	Vial Water preserved split	A1	NA		2.5	Y	Absent	08-FEB-18 02:07	NYCP51-8260HLW(14)
L1804131-12A	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-12B	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-12C	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-12D	Plastic 2oz unpreserved for TS	A2	NA		3.1	Y	Absent		TS(7)
L1804131-12X	Vial MeOH preserved split	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-12Y	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)
L1804131-12Z	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)
L1804131-13A	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-13B	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-13C	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-13D	Plastic 2oz unpreserved for TS	A2	NA		3.1	Y	Absent		TS(7)
L1804131-13E	Metals Only-Glass 60mL/2oz unpreserved	A2	NA		3.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),CD-TI(180)
L1804131-13F	Glass 120ml/4oz unpreserved	A2	NA		3.1	Y	Absent		NYCP51-PAH(14)
L1804131-13X	Vial MeOH preserved split	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1804131
Report Date: 02/13/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1804131-13Y	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)
L1804131-13Z	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)
L1804131-14A	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-14B	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-14C	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-14D	Plastic 2oz unpreserved for TS	A2	NA		3.1	Y	Absent		TS(7)
L1804131-14X	Vial MeOH preserved split	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-14Y	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)
L1804131-14Z	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)
L1804131-15A	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-15B	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-15C	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-15D	Plastic 2oz unpreserved for TS	A2	NA		3.1	Y	Absent		TS(7)
L1804131-15E	Metals Only-Glass 60mL/2oz unpreserved	A2	NA		3.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),CD-TI(180)
L1804131-15F	Glass 120ml/4oz unpreserved	A2	NA		3.1	Y	Absent		NYCP51-PAH(14)
L1804131-15X	Vial MeOH preserved split	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-15Y	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)
L1804131-15Z	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)
L1804131-16A	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-16B	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-16C	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-16D	Plastic 2oz unpreserved for TS	A2	NA		3.1	Y	Absent		TS(7)
L1804131-16X	Vial MeOH preserved split	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-16Y	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)
L1804131-16Z	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)
L1804131-17A	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-17B	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1804131
Report Date: 02/13/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1804131-17C	5 gram Encore Sampler	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-17D	Plastic 2oz unpreserved for TS	A2	NA		3.1	Y	Absent		TS(7)
L1804131-17E	Metals Only-Glass 60mL/2oz unpreserved	A2	NA		3.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),CD-TI(180)
L1804131-17F	Glass 120ml/4oz unpreserved	A2	NA		3.1	Y	Absent		NYCP51-PAH(14)
L1804131-17X	Vial MeOH preserved split	A2	NA		3.1	Y	Absent		NYCP51-8260HLW(14)
L1804131-17Y	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)
L1804131-17Z	Vial Water preserved split	A2	NA		3.1	Y	Absent	10-FEB-18 11:36	NYCP51-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name:	200 HAMILTON AVENUE	**Lab Number:**	L1804131
Project Number:	170029	**Report Date:**	02/13/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

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Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

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

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	200 HAMILTON AVENUE	**Lab Number:**	L1804131
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REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 2/6/18

ALPHA Job #: L1804131

Client Information
Client: AKRF, INC
Address: 34 South Broadway
White Plains NY
Phone: 914-922-2362
Fax:
Email: RKinal@AKRF.com

Project Information
Project Name: 200 Hamilton Avenue
Project Location: 200 Hamilton Ave White Plains NY
Project #: 170029
(Use Project name as Project #) ☐
Project Manager: Rebecca Kinal
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☒ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☒ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

(*) Please keep SDG open (*)

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	CP-51 VOCs (8260)	CP-51 SVOCs (8270)	RCRA 8 Metals + Zinc	Total Bottle	Sample Specific Comments
04131 - 01	SB-11 (17-19)	2/6/18	1100	S	TM	X				
02	SB-11 (5-7)	2/6/18	1105	S	TM	X	X	X		
03	SB-13 (10-12)	2/6/18	1200	S	TM	X				
04	SB-13 (3-5)	2/6/18	1205	S	TM	X	X	X		
05	SB-18 (12-14)	2/6/18	1305	S	TM	X				
06	SB-14 (2-4)	2/6/18	1500	S	TM	X	X	X		
07	SB-14 (15-16)	2/6/18	1510	S	TM	X				
08	SB-12 (2-4)	2/6/18	1540	S	TM	X	X	X		
09	SB-12 (15-16)	2/6/18	1550	S	TM	X				

Container Type: E G G
Preservative: A A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	2/6/18 1605		2/6/18 16:05
	2/6/18 17:56		
			2/6/18 2215

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 2/7/18

ALPHA Job #: L1804131

Client Information
Client: AKRF, Inc
Address: 34 South Broadway
White Plains NY
Phone: 914-922-2362
Fax:
Email: RKinal@AKRF.com

Project Information
Project Name: 200 Hamilton Avenue
Project Location: 200 Hamilton Ave White Plains NY
Project # 170039
(Use Project name as Project #) ☐
Project Manager: Rebecca Kinal
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☒ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☒ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

(*) Please keep SDG open (*)

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	CP-51 VOCs (8260)	CP-51 SVOCs (8270)	RCRA 8 Metals + Zinc	Sample Specific Comments	Total Bottle
04131 10	SB-10 (20-22)	2/7/18	920	S	TM	X				
11	SB-10 (3-5)	2/7/18	925	S	TM	X	X	X		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	E	G	G
Preservative	A	A	A

Relinquished By:	Date/Time	Received By:	Date/Time
	2/7/18 1610	Daniel Fischer AAL	2/7/17 16:10
Daniel Fischer AAL	2/7/17 17:43		2/7/18 2230

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 2/9/18

ALPHA Job #: L1804131

Client Information

Client: AKRF, Inc.
Address: 34 South Broadway
White Plains NY
Phone: 914-922-2362
Fax:
Email: RKinal@AKRF.com

Project Information

Project Name: 200 Hamilton Avenue
Project Location: 200 Hamilton Ave White Plains NY
Project # 170029
(Use Project name as Project #) ☐
Project Manager: Rebecca Kinal
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☒ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☒ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☒ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

⊛ Close SDG ⊛

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	CP-51 VOCs (8260)	CP-51 SVOCs (8270)	RCRA 8 Metals + Zinc						Total # Bottles	Sample Specific Comments
64131-12	SB-15 (10-11)	2/9/18	855	S	TM	X									
-13	SB-15 (2-4)	2/9/18	900	S	TM	X	X	X							
-14	SB-16 (12-13)	2/9/18	1100	S	TM	X									
-15	SB-16 (2-4)	2/9/18	1110	S	TM	X	X	X							
-16	SB-17 (8-9)	2/9/18	1225	S	TM	X									
-17	SB-17 (5-7)	2/9/18	1235	S	TM	X	X	X							

Container Type: E G G
Preservative: A A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	2/9/18 1512		2/9/18 1512
	2/9/18 1600		
			2/9/18 22:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1805675
Client:	AKRF, Inc. 34 South Broadway White Plains, NY 10601
ATTN:	Becky Kinal
Phone:	(914) 922-2362
Project Name:	200 HAMILTON AVENUE
Project Number:	170029
Report Date:	02/22/18

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1805675
Report Date: 02/22/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1805675-01	MW-1	WATER	200 HAMILTON AVE., WHITE PLAINS, NY	02/16/18 10:25	02/16/18
L1805675-02	MW-5	WATER	200 HAMILTON AVE., WHITE PLAINS, NY	02/16/18 11:45	02/16/18
L1805675-03	MW-6	WATER	200 HAMILTON AVE., WHITE PLAINS, NY	02/16/18 13:20	02/16/18
L1805675-04	MW-7	WATER	200 HAMILTON AVE., WHITE PLAINS, NY	02/16/18 13:55	02/16/18
L1805675-05	MW-2	WATER	200 HAMILTON AVE., WHITE PLAINS, NY	02/16/18 16:25	02/16/18
L1805675-06	MW-9	WATER	200 HAMILTON AVE., WHITE PLAINS, NY	02/16/18 16:47	02/16/18
L1805675-07	TB-1	WATER	200 HAMILTON AVE., WHITE PLAINS, NY	02/16/18 00:00	02/16/18
L1805675-08	MW-8	WATER	200 HAMILTON AVE., WHITE PLAINS, NY	02/16/18 18:07	02/17/18

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1805675
Report Date: 02/22/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1805675
Project Number: 170029 **Report Date:** 02/22/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1805675-02: The sample has elevated detection limits due to the dilution required by the sample matrix (foam).

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kara Soroko

Title: Technical Director/Representative Date: 02/22/18

ORGANICS

VOLATILES

Project Name: 200 HAMILTON AVENUE
Lab Number: L1805675
Project Number: 170029
Report Date: 02/22/18

SAMPLE RESULTS

Lab ID: L1805675-01
Client ID: MW-1
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/21/18 11:30
Analyst: AD

Date Collected: 02/16/18 10:25
Date Received: 02/16/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	106		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1805675

Project Number: 170029 **Report Date:** 02/22/18

SAMPLE RESULTS

Lab ID: L1805675-02 D
Client ID: MW-5
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/20/18 21:13
Analyst: PD

Date Collected: 02/16/18 11:45
Date Received: 02/16/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	1.2	0.40	2.5
Toluene	ND		ug/l	6.2	1.8	2.5
Ethylbenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	ND		ug/l	6.2	1.8	2.5
o-Xylene	ND		ug/l	6.2	1.8	2.5
Xylenes, Total	ND		ug/l	6.2	1.8	2.5
n-Butylbenzene	ND		ug/l	6.2	1.8	2.5
sec-Butylbenzene	ND		ug/l	6.2	1.8	2.5
tert-Butylbenzene	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	ND		ug/l	6.2	1.8	2.5
p-Isopropyltoluene	ND		ug/l	6.2	1.8	2.5
Naphthalene	ND		ug/l	6.2	1.8	2.5
n-Propylbenzene	ND		ug/l	6.2	1.8	2.5
1,3,5-Trimethylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trimethylbenzene	ND		ug/l	6.2	1.8	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	103		70-130

Project Name: 200 HAMILTON AVENUE
Lab Number: L1805675
Project Number: 170029
Report Date: 02/22/18

SAMPLE RESULTS

Lab ID: L1805675-03
Client ID: MW-6
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/21/18 11:59
Analyst: AD

Date Collected: 02/16/18 13:20
Date Received: 02/16/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	0.67		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	1.2	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	104		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1805675

Project Number: 170029 **Report Date:** 02/22/18

SAMPLE RESULTS

Lab ID: L1805675-04 D
Client ID: MW-7
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/21/18 12:27
Analyst: AD

Date Collected: 02/16/18 13:55
Date Received: 02/16/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	0.94	J	ug/l	1.0	0.32	2
Toluene	2.3	J	ug/l	5.0	1.4	2
Ethylbenzene	92		ug/l	5.0	1.4	2
Methyl tert butyl ether	15		ug/l	5.0	1.4	2
p/m-Xylene	290		ug/l	5.0	1.4	2
o-Xylene	28		ug/l	5.0	1.4	2
Xylenes, Total	320		ug/l	5.0	1.4	2
n-Butylbenzene	1.9	J	ug/l	5.0	1.4	2
sec-Butylbenzene	2.7	J	ug/l	5.0	1.4	2
tert-Butylbenzene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	14		ug/l	5.0	1.4	2
p-Isopropyltoluene	4.5	J	ug/l	5.0	1.4	2
Naphthalene	14		ug/l	5.0	1.4	2
n-Propylbenzene	14		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	56		ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	110		ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	101		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1805675

Project Number: 170029 **Report Date:** 02/22/18

SAMPLE RESULTS

Lab ID: L1805675-05 D
Client ID: MW-2
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/21/18 12:56
Analyst: AD

Date Collected: 02/16/18 16:25
Date Received: 02/16/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	1800		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
Xylenes, Total	ND		ug/l	25	7.0	10
n-Butylbenzene	ND		ug/l	25	7.0	10
sec-Butylbenzene	ND		ug/l	25	7.0	10
tert-Butylbenzene	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
p-Isopropyltoluene	ND		ug/l	25	7.0	10
Naphthalene	ND		ug/l	25	7.0	10
n-Propylbenzene	ND		ug/l	25	7.0	10
1,3,5-Trimethylbenzene	ND		ug/l	25	7.0	10
1,2,4-Trimethylbenzene	ND		ug/l	25	7.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	104		70-130

Project Name: 200 HAMILTON AVENUE **Lab Number:** L1805675

Project Number: 170029 **Report Date:** 02/22/18

SAMPLE RESULTS

Lab ID: L1805675-06
Client ID: MW-9
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/21/18 13:54
Analyst: AD

Date Collected: 02/16/18 16:47
Date Received: 02/16/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	34		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	104		70-130

Project Name: 200 HAMILTON AVENUE
Lab Number: L1805675
Project Number: 170029
Report Date: 02/22/18

SAMPLE RESULTS

Lab ID: L1805675-07
Client ID: TB-1
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/20/18 20:38
Analyst: PD

Date Collected: 02/16/18 00:00
Date Received: 02/16/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	103		70-130

Project Name: 200 HAMILTON AVENUE
Lab Number: L1805675
Project Number: 170029
Report Date: 02/22/18

SAMPLE RESULTS

Lab ID: L1805675-08 D
Client ID: MW-8
Sample Location: 200 HAMILTON AVE., WHITE PLAINS, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/21/18 13:25
Analyst: AD

Date Collected: 02/16/18 18:07
Date Received: 02/17/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	1.0	0.32	2
Toluene	ND		ug/l	5.0	1.4	2
Ethylbenzene	33		ug/l	5.0	1.4	2
Methyl tert butyl ether	20		ug/l	5.0	1.4	2
p/m-Xylene	22		ug/l	5.0	1.4	2
o-Xylene	ND		ug/l	5.0	1.4	2
Xylenes, Total	22		ug/l	5.0	1.4	2
n-Butylbenzene	36		ug/l	5.0	1.4	2
sec-Butylbenzene	25		ug/l	5.0	1.4	2
tert-Butylbenzene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	44		ug/l	5.0	1.4	2
p-Isopropyltoluene	8.3		ug/l	5.0	1.4	2
Naphthalene	23		ug/l	5.0	1.4	2
n-Propylbenzene	130		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	57		ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	4.8	J	ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	97		70-130

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1805675
Report Date: 02/22/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/20/18 17:41
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,07 Batch: WG1091048-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	102		70-130

Project Name: 200 HAMILTON AVENUE
Project Number: 170029
Lab Number: L1805675
Report Date: 02/22/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/21/18 10:32
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-06,08 Batch: WG1091209-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 200 HAMILTON AVENUE

Project Number: 170029

Lab Number: L1805675

Report Date: 02/22/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,07 Batch: WG1091048-3 WG1091048-4								
Benzene	100		96		70-130	4		20
Toluene	100		96		70-130	4		20
Ethylbenzene	100		100		70-130	0		20
Methyl tert butyl ether	100		97		63-130	3		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	105		100		70-130	5		20
n-Butylbenzene	110		99		53-136	11		20
sec-Butylbenzene	110		99		70-130	11		20
tert-Butylbenzene	100		96		70-130	4		20
Isopropylbenzene	100		96		70-130	4		20
p-Isopropyltoluene	110		99		70-130	11		20
Naphthalene	**140**	Q	130		70-130	7		20
n-Propylbenzene	100		98		69-130	2		20
1,3,5-Trimethylbenzene	100		96		64-130	4		20
1,2,4-Trimethylbenzene	100		96		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103		102		70-130
Toluene-d8	98		99		70-130
4-Bromofluorobenzene	97		99		70-130
Dibromofluoromethane	101		101		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 200 HAMILTON AVENUE

Project Number: 170029

Lab Number: L1805675

Report Date: 02/22/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-06,08 Batch: WG1091209-3 WG1091209-4								
Benzene	92		93		70-130	1		20
Toluene	87		86		70-130	1		20
Ethylbenzene	92		92		70-130	0		20
Methyl tert butyl ether	94		93		63-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	100		100		70-130	0		20
n-Butylbenzene	89		88		53-136	1		20
sec-Butylbenzene	86		86		70-130	0		20
tert-Butylbenzene	87		86		70-130	1		20
Isopropylbenzene	82		82		70-130	0		20
p-Isopropyltoluene	91		91		70-130	0		20
Naphthalene	100		94		70-130	6		20
n-Propylbenzene	82		82		69-130	0		20
1,3,5-Trimethylbenzene	87		87		64-130	0		20
1,2,4-Trimethylbenzene	88		88		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	114		113		70-130
Toluene-d8	89		89		70-130
4-Bromofluorobenzene	84		85		70-130
Dibromofluoromethane	105		106		70-130

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1805675
Report Date: 02/22/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
A1	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1805675-01A	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-01B	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-01C	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-02A	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-02B	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-02C	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-03A	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-03B	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-03C	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-04A	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-04B	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-04C	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-05A	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-05B	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-05C	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-06A	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-06B	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-06C	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-07A	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-07B	Vial HCl preserved	A	NA		2.7	Y	Absent		NYCP51-8260-G(14)
L1805675-08A	Vial HCl preserved	A1	NA		3.2	Y	Absent		NYCP51-8260-G(14)
L1805675-08B	Vial HCl preserved	A1	NA		3.2	Y	Absent		NYCP51-8260-G(14)

*Values in parentheses indicate holding time in days

Project Name: 200 HAMILTON AVENUE
Project Number: 170029

Lab Number: L1805675
Report Date: 02/22/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1805675-08C	Vial HCl preserved	A1	NA		3.2	Y	Absent		NYCP51-8260-G(14)

*Values in parentheses indicate holding time in days

Project Name:	200 HAMILTON AVENUE	**Lab Number:**	L1805675
Project Number:	170029	**Report Date:**	02/22/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	200 HAMILTON AVENUE	**Lab Number:**	L1805675
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Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

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

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	200 HAMILTON AVENUE	**Lab Number:**	L1805675
Project Number:	170029	**Report Date:**	02/22/18

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 2/16/18

ALPHA Job #: L1805675

Client Information

Client: AKRF, Inc.
Address: 34 South Broadway
White Plains NY
Phone: 914-922-2362
Fax:
Email: RKINAL@AKRF.com

Project Information

Project Name: 200 Hamilton Avenue
Project Location: 200 Hamilton Ave, White Plains, NY
Project # 170029
(Use Project name as Project #) ☐
Project Manager: Rebecca Kinal
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☒ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☒ NY TOGS ☐ NY Part 375
☒ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☒ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

(*) Keep SDG open (*)

Please specify Metals or TAL.

ANALYSIS

CP-51 VOCs (8260)

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	CP-51 VOCs (8260)	Sample Specific Comments
05675-01	MW-1	2/16/18	1025	GW	CP	X	
02	MW-5	2/16/18	1145	GW	TM	X	
03	MW-6	2/16/18	1320	GW	TM	X	
04	MW-7	2/16/18	1355	GW	CP	X	
05	MW-2	2/16/18	1625	GW	TM	X	
06	MW-9	2/16/18	1647	GW	CP	X	
07	TB-1	2/16/18	LAB	Water	LAB	X	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	V								
Preservative	B								

Relinquished By:	Date/Time	Received By:	Date/Time
	2/16/18 1717		2/16/18 17:17
AAL	2/16/18 19:00		
	2/16/18 23:		2/16/18 23:

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 2/19/18

ALPHA Job #: L1805675

Client Information
Client: AKRF, INC.
Address: 34 South Broadway White Plains NY
Phone: 914-922-2362
Fax:
Email: RKINAL@AKRF.com

Project Information
Project Name: 200 Hamilton Avenue
Project Location: 200 Hamilton Ave White Plains NY
Project #: 170029
(Use Project name as Project #) ☐
Project Manager: Rebecca Kinal
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☒ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
☒ Same as Client Info
PO #

Regulatory Requirement
☒ NY TOGS ☐ NY Part 375
☒ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

(*) Please Close SDG (*)

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total # Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	CP-51 VOCs (8260)	Sample Specific Comments
05675-08	MW-8	2/16/18	1807	GW	CP	X	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	V									
Preservative	B									

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	2/17/18 1349	[illegible] AAL	2/17/18 2:49
Bradley Lewis	2/17/18 1350	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	2/19/18 2210

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)