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Subsurface Investigation Report

Rockaway Park Former MGP Site

Rockaway Park
Queens County, New York
Order on Consent Index No. D1-0002-98-11
Site No. 2-41-029

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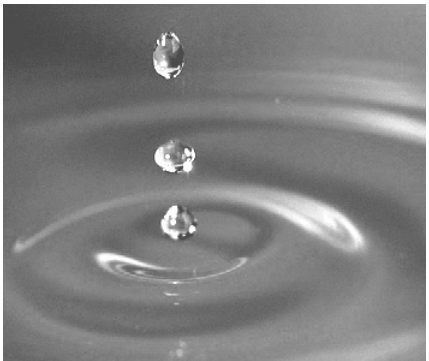

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1. Introduction

This report summarizes the results of subsurface investigations conducted on Beach 108th Street adjacent to the Rockaway Park Former Manufactured Gas Plant (MGP) site located in Rockaway Park, Queens County, New York (the Site) (**Figure 1**). Soil samples were collected in June 2018 to determine if any remedial action will be required in support of a planned utility work. These investigations were conducted in accordance with the requirements of Section 6 of *DER-10* (Division of Environmental Remediation) *Technical Guidance for Site Investigation and Remediation*; the Order on Consent, Index No. D1-0002-98-11 signed by National Grid Corporation (National Grid) and the New York State Department of Environmental Conservation (NYSDEC), and the *Draft Site Management Plan* (SMP), *Rockaway Park Former Manufactured Gas Plant, Rockaway Park, New York* prepared by GEI Consultants, Inc. P.C. (GEI), dated March 2017. Previous investigations were conducted in February 2000, November 2001, and July 2002 to characterize soil impacts on Beach 108th Street and reported in the January 2004 Remedial Investigation Report.

1.1 Background

The Rockaway MGP began operations in the late 1870s. The plant was operated by Rockaway Electric Light Co., Town of Hempstead Gas & Electric Company, and later the Queensboro Gas and Electric Company from the late 1870s to 1926. In 1926, Queensboro Gas and Electric Company became a subsidiary of the Long Island Lighting Company (LILCO). LILCO operated the plant from 1926 to approximately 1958, when most of the facilities were demolished. In 1998, KeySpan Corporation acquired the former MGP property through a merger of LILCO and Brooklyn Union Gas Company.

Active remediation at the former MGP site was completed in accordance with the NYSDEC-approved 100% Remedial Design Report dated December 2008, the NYSDEC-approved Field Change Requests, and the NYSDEC-approved DNAPL Gauging and Recovery Rate Analysis Work Plan dated September 2012. A Draft Final Engineering Report was submitted to the NYSDEC in November 2016 documenting the completed remedy. A Draft SMP, which includes requirements for soil handling and disposal during future intrusive work at the former MGP site, was submitted in March 2017 and is pending NYSDEC approval.

1.2 Project Description

Soil samples were collected from Beach 108th Street and the intersection of Beach 108th Street and Beach Channel Drive from June 11-14, 2018 to identify any MGP-related impacts that may require additional remediation and for waste disposal purposes in support of a utility construction project as described in the NYSDEC-approved Subsurface Investigation Work Plan, Rockaway Park Former MGP Site dated May 2018. Previous soil samples collected in

February 2000, November 2001, and July 2002 as part of the overall remedial investigation of the site did not find evidence of MGP-related impacts in Beach 108th Street. There were soil impacts identified in these borings consistent with impacts found in urban fill. The data from these samples were reported in the 2004 NYSDEC-approved Remedial Investigation Report.

Post remediation groundwater monitoring has been completed on an annual basis since 2016. Impacted groundwater has been observed at Monitoring Well Cluster RPMW-17 located in Beach 108th Street (see Figure 2). The most recent annual groundwater sampling results from December 2017 were submitted to the NYSDEC in the May 2018 Groundwater Monitoring Report. VOCs and SVOCs were detected above the New York State Ambient Water Quality Standards (NYS AWQS) for GA Groundwater in the December 2017 samples collected from RPMW-17S and RPMW-17I. Monitoring well RPMW-17S is screened at the water table between 5 and 15 feet below ground surface (ft bgs) and monitoring well RPMW-17S is screened at 35-45 ft bgs.

2. Subsurface Investigation

2.1 June 2018 Soil Sampling

GEI conducted soil sampling from June 11th to 14th, 2018 to identify any MGP-related soil impacts. A total of twelve soil borings were drilled to 12 ft bgs as shown on **Figure 2**. One grab soil sample (collected at the 11-12 ft bgs interval) and one composite soil sample were collected from each of the twelve soil borings. All soil samples were screened with a PID for the presence of volatile organic compounds (VOCs), visually inspected for staining, discoloration, and non-aqueous phase liquid (NAPL), checked for odors, and logged using the Unified Soil Classification system. Boring logs are included in **Appendix A**.

Prior to commencement of soil drilling activities and between boring locations, all "down-hole" drilling equipment (e.g. probe rods, sampling equipment) were decontaminated.

Grab soil samples were analyzed for the following:

- Volatile Organic Compounds (VOCs) (8260C)
- Semi-Volatile Organic Compounds (SVOCs) (8270C/D)
- Metals (23) 6010/7000 (Mercury 7471)
- Polychlorinated biphenyls (PCBs) (8082A)
- Pesticides/Herbicides

Composite soil samples were analyzed for the following:

- Polyaromatic Hydrocarbons (PAHs/EPA 8270)
- PCBs (United States Environmental Protection Agency [EPA] 3550/8082)
- TPH-DRO/GRO (EPA 8015B)
- Resource Conservation and Recovery Act (RCRA) Characteristics (SW-846)
- Toxic Characteristic Leaching Procedure (TCLP) RCRA metals (SW-846).

2.1.1 Quality Assurance/Quality Control Samples

Quality assurance/quality control QA/QC samples were collected at a frequency of 1 set per 20 samples. Each set of QA/QC samples consisted of a blind duplicate, a trip blank, an equipment rinsate blank (field duplicate), and a Matrix Spike (MS) and Matrix Spike Duplicate (MSD).

2.1.2 Community Air Monitoring Plan

VOCs and PM-10 were monitored upwind and downwind on a continuous basis during intrusive field work using a PID for VOCs and a particulate meter for particulate dust. The

work zone air monitoring was implemented in accordance with the Health and Safety Plan (HASP). There were no elevated concentrations of monitored parameters detected during the June 2018 subsurface investigation. A summary table of VOCs and dust levels are provided in **Appendix B.**

2.1.3 Survey

The sample locations were surveyed by a Kennon Survey Services, a New York State Licensed Land Surveyor. The elevation of each sample location was determined to ±0.01 foot and was tied into the Site benchmark. All locations and elevations were referenced to the New York State Plane Eastern Zone North American Datum 1983 and NAVD 1988. A copy of the survey is included in **Appendix C**.

2.1.4 Data Validation and Management

Soil samples were analyzed by TestAmerica Laboratories (TestAmerica) (Edison, New Jersey) a NYSDOH environmental lab approval program accredited laboratory. TestAmerica provided analytical results in a New York State Category B data deliverable format. The data was validated in accordance with New York State Analytical Service Protocols (ASP) and a data usability summary report (DUSR) was prepared documenting the adequacy of the analytical data obtained from the laboratory and identified any pertinent data excursions or limitations on the use of the data. The DUSR is included as **Appendix D**.

2.1.5 Investigation-Derived Waste Management

In accordance with the NYSDEC-approved work plan, all soils removed during the investigation were placed back in bore hole at each location following the completion of the boring. No visually-impacted materials were observed during the investigation.

2.2 Summary of Historical Soil Investigation

GEI conducted soil sampling on Beach 108th Street in February 2000, November 2001, and July 2002 as part of the overall site investigation activities. The data from these samples were reported in the 2004 NYSDEC-approved Remedial Investigation Report. The soil samples were analyzed for BTEX, PAHs, phenols, RCRA metals, and cyanide. The boring logs are included in **Appendix A.**

One soil boring, GP-27, was advanced to approximately 75 ft bgs in July 2002. Grab samples were collected at the 12-16 ft bgs and the 36-40 ft bgs intervals.

Four soil borings, SB-98, SB-98A, SB-99, and SB-100, were advanced in November 2001 to approximately 40 feet, 20 feet, 40 feet, and 38 feet bgs, respectively. Grab samples were collected at the following intervals:

- 4-6 ft bgs and 38-40 ft bgs at SB-98
- 6-8 ft bgs and 18-20 ft bgs at SB-98A
- 6-8 ft bgs and 38-40 ft bgs at SB-99
- 4-6 ft bgs and 36-38 ft bgs at SB-100

Two soil borings, SB-61 and SB-63, were advanced in February 2000 to depths of approximately 57 feet and 47 feet bgs, respectively. Grab samples were collected at the following intervals:

- 10-12 ft bgs and 55-57 ft bgs at SB-61
- 15-17 ft bgs and 45-47 ft bgs at SB-63

3. Subsurface Investigation Findings

3.1 Community Air Monitoring Summary

Air quality was monitored upwind and downwind of the work zone for each boring for dust and VOCs. The data demonstrate that action levels were not exceeded at the upwind and downwind stations. A summary table of VOCs and dust levels are provided in **Appendix B**.

3.2 June 2018 Soil Sampling Results

A summary of the analytical exceedances of the Unrestricted Use and Commercial Use SCOs for the soil samples are provided in **Table 1**. A total of 24 soil samples were collected from 12 boring locations (see Figure 2). The data included the following:

- One grab sample and one composite sample, both from soil boring location RPSB-305 that had detections above the Commercial Use SCOs for PAHs.
- Nineteen of the twenty-four samples collected from the borings met the Unrestricted Use SCOs. Samples RPSB-305 grab, RPSB-305 composite, RPSB-306 grab, RPSB-309 grab, and RPSB-310 composite, had exceedances of the Unrestricted Use SCOs for PAHs.
- No visual evidence of MGP-related impacts was observed in the soils.

3.3 Historical Soil Investigation Results

A summary of the analytical exceedances of the Unrestricted Use and Commercial Use SCOs for the soil samples collected in July 2002, November 2001, and February 2000 are provided in **Table 2**. A total of 14 soil samples were collected from 7 boring locations (See Figure 2).

- One soil sample, SB-61 (10-12 feet bgs), had a detection of total xylenes which exceeded the Commercial Use SCOs. All other samples met the Commercial Use SCOs.
- Twelve of the fourteen samples collected from the borings met the Unrestricted Use SCOs. Two soil samples, GP-27 (12-16 feet bgs) and SB-61 (10-12 feet bgs), had detections of one or more BTEX compounds which exceeded the Unrestricted Use SCOs.
- One soil sample, SB-61 (10-12 feet bgs), had detections of PAHs which exceeded the Unrestricted Use SCOs.
- No visual evidence of MGP-related impacts was observed in the soils.

4. Conclusion and Recommendation

Based on the findings from the June 2018 and previous subsurface investigations conducted on Beach 108th Street the following conclusions can be made:

- No MGP-related source areas or soils with visual MGP-related impacts were observed.
- Individual PAHs were detected above the Commercial Use SCOs in one of 19 total soil boring locations (RPSB-305) and above the Unrestricted Use SCOs in five of the 19 boring locations (SB-61, RPSB-305, RPSB-306, RPSB-309, and RPSB-310).
- Individual BTEX compounds were detected above the Commercial Use SCOs in two out of 19 total boring locations (SB-61 and RPSB-305) and above the Unrestricted Use SCOs in two of the 19 boring locations (GP-27 and SB-61).
- MGP related impacts do not appear to be present at depths and concentrations that pose a threat to construction workers performing the planned utility work.

Based on the observations from the historic borings and the recent borings completed in June 2018, it appears that no MGP-related source material is present in the study area. The only detections above the Commercial Use SCOs were limited to soils in the vicinity of RPSB-305 and SB-61. Groundwater in the vicinity of MW-17S is impacted. If dewatering is required for future construction, carbon treatment of the groundwater discharge would be required to remove the impacts in addition to the NYCDEP requirement to remove suspended solids prior to discharge.

Tables

Table 1. Summary of June 2018 Analytical Exceedances in Soil Samples
National Grid
Rockaway Park, New York

Analyte	Units	CAS No.	Unrestricted SCO	Commerical SCO	Sample Name	RP-SB-301(0-12)	Dup-061318A	RP-SB-301 (11-12)	RP-SB-302 (0-12)	RP-SB-302 (11-12)	Dup-061318 (11-12)	RP-SB-303 (0-12)	RP-SB-303 (11-12)	RP-SB-304 (0-12)	RP-SB-304 (11-12)	RP-SB-305 (0-12)	RP-SB-305 (11-12)	RP-SB-306 (0-12)	RP-SB-306 (11-12)	RP-SB-307 (0-12)	RP-SB-307 (11-12)
					Start Depth	0	0	11	0	11	11	0	11	0	11	0	11	0	11	0	11
					End Depth	12	0	12	12	12	12	12	12	12	12	12	12	12	12	12	12
					Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
					Sample Date	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/14/2018	6/14/2018	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/14/2018	6/14/2018
					Parent Sample		RP-SB-301(0-12) COMPOSITE				RP-SB-302 (11-12) GRAB										
BTEX	mg/kg																				
Benzene		71-43-2	0.06	44			0.0012 U		0.0013 U	0.0012 U		**0.0016**		0.0013 U		0.0013 U		0.14 U		**0.016**
Toluene		108-88-3	0.7	500			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		**0.0011 J**		**0.21**		**0.00095 J**
Ethylbenzene		100-41-4	1	390			0.0012 U		0.0013 U	0.0012 U		**0.0003 J**		0.0013 U		**0.0013**		**13**		**0.16**
o-Xylene		95-47-6	0.26	500			**0.00013 J**		0.0013 U	0.0012 U		**0.00013 J**		0.0013 U		**0.0063**		**2.2**		**0.032**
m/p-Xylene		179601-23-1	0.26	500			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		**0.0062**		**0.58**		**0.0053**
Total BTEX (ND=0)		TBTEX_ND0	NE	NE			**0.00013**		ND	ND		**0.00203**		ND		**0.0149**		**15.99**		**0.2142**
Other VOCs	mg/kg																				
Acetone		67-64-1	0.05	500			0.006 U		0.0066 U	0.0061 U		**0.024**		0.0065 U		**0.018**		0.71 U		0.0085 U
Bromochloromethane		74-97-5	NE	NE			0.0012 UJ		0.0013 UJ	0.0012 UJ		0.0012 UJ		0.0013 U		0.0013 U		0.14 U		0.0014 U
Bromodichloromethane		75-27-4	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
Bromoform		75-25-2	NE	NE			0.0012 UJ		0.0013 UJ	0.0012 UJ		0.0012 UJ		0.0013 UJ		0.0013 UJ		0.14 UJ		0.0014 UJ
Bromomethane		74-83-9	NE	NE			0.0012 UJ		0.0013 UJ	0.0012 UJ		0.0012 UJ		0.0013 U		0.0013 U		0.14 UJ		0.0014 U
Carbon disulfide		75-15-0	NE	NE			0.0012 U		0.0013 U	0.0012 U		**0.0038**		0.0013 U		**0.0034**		0.14 U		**0.0058**
Carbon tetrachloride		56-23-5	0.76	22			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
Chlorobenzene		108-90-7	1.1	500			0.0012 U		0.0013 U	0.0012 U		**0.00023 J**		0.0013 U		0.0013 U		0.14 U		0.0014 U
Chloroethane		75-00-3	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 UJ
Chloroform (Trichloromethane)		67-66-3	0.37	350			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
Chloromethane		74-87-3	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
Cyclohexane		110-82-7	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		**0.0016**
1,2-Dibromo-3-chloropropane		96-12-8	NE	NE			0.0012 UJ		0.0013 UJ	0.0012 UJ		0.0012 UJ		0.0013 U		0.0013 U		0.14 UJ		0.0014 U
Dibromochloromethane		124-48-1	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 UJ		0.0013 UJ		0.14 U		0.0014 UJ
1,2-Dibromoethane (EDB)		106-93-4	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
1,2-Dichlorobenzene (o-DCB)		95-50-1	1.1	500			0.0012 U		0.0013 U	0.0012 U		**0.00037 J**		0.0013 U		0.0013 U		0.14 U		0.0014 U
1,3-Dichlorobenzene (m-DCB)		541-73-1	2.4	280			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
1,4-Dichlorobenzene (p-DCB)		106-46-7	1.8	130			0.0012 U		0.0013 U	0.0012 U		**0.00033 J**		0.0013 U		0.0013 U		0.14 U		0.0014 U
Dichlorodifluoromethane (Freon 12)		75-71-8	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 UJ		0.0014 U
1,1-Dichloroethane		75-34-3	0.27	240			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
1,2-Dichloroethane		107-06-2	0.02	30			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
1,1-Dichloroethene		75-35-4	0.33	500			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
cis-1,2-Dichloroethene		156-59-2	0.25	500			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
trans-1,2-Dichloroethene		156-60-5	0.19	500			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
1,2-Dichloropropane		78-87-5	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
cis-1,3-Dichloropropene		10061-01-5	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
trans-1,3-Dichloropropene		10061-02-6	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
1,4-Dioxane		123-91-1	0.1	130			0.024 U		0.026 U	0.024 U		0.024 U		0.026 U		0.026 U		7.1 U		0.029 U
2-Hexanone		591-78-6	NE	NE			0.006 U		0.0066 U	0.0061 U		0.0061 U		0.0065 U		0.0065 U		0.71 U		0.0072 U
Isopropylbenzene		98-82-8	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		**0.0078**		**0.26**		**0.4**
Methyl acetate		79-20-9	NE	NE			0.006 U		0.0066 U	0.0061 U		0.0061 U		0.0065 U		0.0065 U		0.71 U		0.0072 U
Methyl ethyl ketone (2-Butanone)		78-93-3	0.12	500			0.006 UJ		0.0066 UJ	0.0061 UJ		**0.0043 J**		0.0065 U		**0.0038 J**		0.71 U		0.0072 U
Methyl tert-butyl ether (MTBE)		1634-04-4	0.93	500			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 UJ		0.0014 U
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	NE			0.006 U		0.0066 U	0.0061 U		0.0061 U		0.0065 U		0.0065 U		0.71 U		0.0072 U
Methylcyclohexane		108-87-2	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		**0.12 J**		0.0014 U
Methylene chloride		75-09-2	0.05	500			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
Styrene		100-42-5	NE	NE			0.0012 U		0.0013 U	0.0012 U		**0.00033 J**		0.0013 U		**0.0061**		**0.61**		0.0014 U
1,1,2,2-Tetrachloroethane		79-34-5	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
Tetrachloroethene (PCE)		127-18-4	1.3	150			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		**0.00041 J**		0.14 U		0.0014 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
1,2,3-Trichlorobenzene		87-61-6	NE	NE			0.0012 UJ		0.0013 UJ	0.0012 UJ		0.0012 UJ		0.0013 U		0.0013 U		0.14 U		0.0014 U
1,2,4-Trichlorobenzene		120-82-1	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
1,1,1-Trichloroethane (TCA)		71-55-6	0.68	500			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
1,1,2-Trichloroethane		79-00-5	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
Trichloroethene (TCE)		79-01-6	0.47	200			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
Trichlorofluoromethane (Freon 11)		75-69-4	NE	NE			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
Vinyl chloride		75-01-4	0.02	13			0.0012 U		0.0013 U	0.0012 U		0.0012 U		0.0013 U		0.0013 U		0.14 U		0.0014 U
NYSDEC PAH17	mg/kg																				
Acenaphthene		83-32-9	20	500	0.4 U	0.39 U	0.43 U	0.39 U	0.43 UJ	0.43 U	0.38 U	0.43 U	0.38 U	0.42 U	**0.18 J**	**0.11 J**	**0.19 J**	0.42 U	**1**	**0.71**
Acenaphthylene		208-96-8	100	500	**0.055 J**	**0.14 J**	0.43 U	**0.063 J**	0.43 UJ	0.43 U	**0.091 J**	**0.015 J**	**0.061 J**	**0.031 J**	**0.33 J**	**0.28 J**	**0.22 J**	0.42 U	**0.26 J**	0.43 U
Anthracene		120-12-7	100	500	0.4 U	**0.038 J**	0.43 U	**0.022 J**	0.43 U	0.43 U	**0.031 J**	0.43 U	**0.049 J**	0.42 U	**0.18 J**	0.42 U	**0.3 J**	**0.3 J**	**0.056 J**	**0.038 J**
Benzo(a)anthracene		56-55-3	1	5.6	**0.072**	**0.14**	0.043 U	**0.1**	0.043 UJ	0.043 U	**0.21**	**0.1**	**0.21**	**0.029 J**	**1.7**	**2**	**0.36**	**0.37**	**0.033 J**	**0.022 J**
Benzo(b)fluoranthene		205-99-2	1	5.6	**0.12 J**	**0.29 J**	0.043 U	**0.12**	0.043 U	0.043 U	**0.43**	**0.099**	**0.28**	**0.028 J**	**1.6**	**1.8**	**0.29**	**0.28**	**0.088**	**0.02 J**
Benzo(k)fluoranthene		207-08-9	0.8	56	**0.055**	**0.092**	0.043 U	**0.059**	0.043 U	0.043 U	**0.19**	**0.047**	**0.11**	**0.012 J**	**0.82**	**0.76**	**0.11**	**0.12**	**0.033 J**	0.043 U
Benzo(g,h,i)perylene		191-24-2	100	500	**0.13 J**	**0.29 J**	0.43 U	**0.086 J**	0.43 U	0.43 U	**0.41**	**0.051 J**	**0.14 J**	**0.022 J**	**0.74**	**0.75**	**0.16 J**	**0.13 J**	**0.047 J**	0.43 U
Benzo(a)pyrene		50-32-8	1	1	**0.099 J**	**0.21 J**	0.043 U	**0.089**	0.043 U	0.043 U	**0.23**	**0.078**	**0.2**	**0.022 J**	**1.2**	**1.4**	**0.2**	**0.2**	**0.023 J**	**0.015 J**
Chrysene		218-01-9	1	56	**0.081 J**	**0.18 J**	0.43 U	**0.1 J**	0.43 U	0.43 U	**0.29 J**	**0.11 J**	**0.21 J**	**0.022 J**	**1.6**	**1.8**	**0.38**	**0.39 J**	**0.075 J**	0.43 U
Dibenz(a,h)anthracene		53-70-3	0.33	0.56	**0.03 J**	**0.056**	0.043 U	**0.028 J**	0.043 U	0.043 U	**0.084**	0.043 U	**0.034 J**	0.042 U	**0.27**	**0.27**	**0.056**	**0.048**	0.039 U	0.043 U
Fluoranthene		206-44-0	100	500	**0.055 J**	**0.098 J**	0.43 U	**0.085 J**	0.43 U	0.43 U	**0.21 J**	**0.15 J**	**0.36 J**	0.42 U	**3.7**	**3.9**	**0.73**	**0.86**	**0.042 J**	**0.038 J**
Fluorene		86-73-7	30	500	0.4 U	**0.014 J**	0.43 U	0.39 U	0.43 U	0.43 U	**0.011 J**	0.43 U	**0.016 J**	0.42 U	0.37 U	**0.029 J**	**0.098 J**	0.42 U	**0.088 J**	**0.069 J**
Indeno(1,2,3-cd)pyrene		193-39-5	0.5	5.6	**0.096 J**	**0.23 J**	0.043 U	**0.09**	0.043 U	0.043 U	**0.35**	**0.048**	**0.16**	**0.022 J**	**0.8**	**0.85**	**0.17**	**0.13**	**0.058**	0.043 U
2-Methylnaphthalene		91-57-6	NE	NE	**0.01 J**	**0.023 J**	0.43 U	**0.012 J**	0.43 UJ	0.43 U	**0.017 J**	**0.012 J**	**0.025 J**	0.42 U	**0.032 J**	**0.018 J**	**0.16 J**	0.42 U	**0.03 J**	**0.6**
Naphthalene		91-20-3	12	500	**0.018 J**	**0.035 J**	0.43 U	**0.016 J**	0.43 UJ	0.43 U	**0.021 J**	**0.026 J**	**0.03 J**	0.42 U	**0.08 J**	**0.043 J**	**0.36 J**	0.42 U	**0.59**	**0.26 J**
Phenanthrene		85-01-8	100	500	**0.03 J**	**0.058 J**	0.43 U	**0.057 J**	0.43 U	0.43 U	**0.058 J**	**0.038 J**	**0.18 J**	**0.016 J**	**0.13 J**	0.42 U	**0.88**	**0.25 J**	**0.28 J**	**0.3 J**
Pyrene		129-00-0	100	500	**0.15 J**	**0.26 J**	0.43 U	**0.17 J**	0.43 U	0.43 U	**0.49**	**0.19 J**	**0.36 J**	**0.032 J**	**4.7**	**5.6**	**1.2**	**1.4**	**0.1 J**	**0.1 J**
Total PAH (17) (ND=0)		TPAH17_ND0	NE	NE	**1.001**	**2.154**	ND	**1.097**	ND	ND	**3.123**	**0.964**	**2.425**	**0.236**	**18.06**	**19.61**	**5.864**	**4.478**	**2.803**	**2.172**

Table 1. Summary of June 2018 Analytical Exceedances in Soil Samples
National Grid
Rockaway Park, New York

Analyte	Units	CAS No.	Unrestricted SCO	Commerical SCO	Sample Name	RP-SB-301(0-12)	Dup-061318A	RP-SB-301 (11-12)	RP-SB-302 (0-12)	RP-SB-302 (11-12)	Dup-061318 (11-12)	RP-SB-303 (0-12)	RP-SB-303 (11-12)	RP-SB-304 (0-12)	RP-SB-304 (11-12)	RP-SB-305 (0-12)	RP-SB-305 (11-12)	RP-SB-306 (0-12)	RP-SB-306 (11-12)	RP-SB-307 (0-12)	RP-SB-307 (11-12)
					Start Depth	0	0	11	0	11	11	0	11	0	11	0	11	0	11	0	11
					End Depth	12	0	12	12	12	12	12	12	12	12	12	12	12	12	12	12
					Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
					Sample Date	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/14/2018	6/14/2018	6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/14/2018	6/14/2018
					Parent Sample		RP-SB-301(0-12) COMPOSITE				RP-SB-302 (11-12) GRAB										
NYSDEC PAH17 Other SVOCs	mg/kg																				
Acetophenone		98-86-2	NE	NE			0.43 U		0.43 UJ	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Atrazine		1912-24-9	NE	NE			0.17 U		0.17 U	0.17 U		0.17 U		0.17 U		0.17 U		0.17 U		0.17 U	
Benzaldehyde		100-52-7	NE	NE			0.43 U		0.43 UJ	0.43 U		0.43 U		0.42 U		**0.057 J**		0.42 U		0.43 U	
Biphenyl (1,1-Biphenyl)		92-52-4	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Bis(2-chloroethoxy)methane		111-91-1	NE	NE			0.43 U		0.43 UJ	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Bis(2-chloroethyl)ether		111-44-4	NE	NE			0.043 U		0.043 UJ	0.043 U		0.043 U		0.042 U		0.042 U		0.042 U		0.043 U	
2,2-oxybis(1-Chloropropane)		108-60-1	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Bis(2-ethylhexyl)phthalate		117-81-7	NE	NE			0.43 U		0.43 U	**0.043 J**		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
4-Bromophenyl phenyl ether		101-55-3	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Butyl benzyl phthalate		85-68-7	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Caprolactam		105-60-2	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Carbazole		86-74-8	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
4-Chloro-3-methylphenol		59-50-7	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
4-Chloroaniline		106-47-8	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
2-Chloronaphthalene		91-58-7	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
2-Chlorophenol		95-57-8	NE	NE			0.43 U		0.43 UJ	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
4-Chlorophenyl phenyl ether		7005-72-3	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Dibenzofuran		132-64-9	7	350			0.43 U		0.43 UJ	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		**0.034 J**	
3,3-Dichlorobenzidine		91-94-1	NE	NE			0.17 U		0.17 U	0.17 U		0.17 U		0.17 U		0.17 U		0.17 U		0.17 U	
2,4-Dichlorophenol		120-83-2	NE	NE			0.17 U		0.17 U	0.17 U		0.17 U		0.17 U		0.17 U		0.17 U		0.17 U	
Diethyl phthalate		84-66-2	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Dimethyl phthalate		131-11-3	NE	NE			0.43 U		0.43 UJ	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
2,4-Dimethylphenol		105-67-9	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Di-n-butyl phthalate		84-74-2	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
4,6-Dinitro-2-methylphenol		534-52-1	NE	NE			0.35 U		0.34 UJ	0.35 U		0.34 U		0.34 U		0.34 U		0.33 U		0.35 U	
2,4-Dinitrophenol		51-28-5	NE	NE			0.35 U		0.34 UJ	0.35 U		0.34 U		0.34 U		0.34 U		0.33 U		0.35 U	
2,4-Dinitrotoluene		121-14-2	NE	NE			0.088 U		0.086 U	0.088 U		0.086 U		0.085 U		0.085 U		0.084 U		0.088 U	
2,6-Dinitrotoluene		606-20-2	NE	NE			0.088 U		0.086 UJ	0.088 U		0.086 U		0.085 U		0.085 U		0.084 U		0.088 U	
Di-n-octyl phthalate		117-84-0	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Hexachlorobenzene		118-74-1	0.33	6			0.043 U		0.043 U	0.043 U		0.043 U		0.042 U		0.042 U		0.042 U		0.043 U	
1,3-Hexachlorobutadiene (C-46)		87-68-3	NE	NE			0.088 U		0.086 UJ	0.088 U		0.086 U		0.085 U		0.085 U		0.084 U		0.088 U	
Hexachlorocyclopentadiene		77-47-4	NE	NE			0.43 UJ		0.43 UJ	0.43 UJ		0.43 UJ		0.42 U		0.42 UJ		0.42 UJ		0.43 U	
Hexachloroethane		67-72-1	NE	NE			0.043 U		0.043 UJ	0.043 U		0.043 U		0.042 U		0.042 U		0.042 U		0.043 U	
Isophorone		78-59-1	NE	NE			0.17 U		0.17 UJ	0.17 U		0.17 U		0.17 U		0.17 U		0.17 U		0.17 U	
2-Methylnaphthalene		91-57-6	NE	NE	**0.01 J**	**0.023 J**	0.43 U	**0.012 J**	0.43 UJ	0.43 U	**0.017 J**	**0.012 J**	**0.025 J**	0.42 U	**0.032 J**	**0.018 J**	**0.16 J**	0.42 U	**0.03 J**	**0.6**	
2-Methylphenol (o-Cresol)		95-48-7	0.33	500			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
4-Methylphenol (p-Cresol)		106-44-5	0.33	500			0.43 U		0.43 UJ	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
2-Nitroaniline		88-74-4	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
3-Nitroaniline		99-09-2	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
4-Nitroaniline		100-01-6	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
Nitrobenzene		98-95-3	NE	NE			0.043 U		0.043 UJ	0.043 U		0.043 U		0.042 U		0.042 U		0.042 U		0.043 U	
2-Nitrophenol		88-75-5	NE	NE			0.43 U		0.43 UJ	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
4-Nitrophenol		100-02-7	NE	NE			0.88 U		0.86 U	0.88 U		0.86 U		0.85 U		0.85 U		0.84 U		0.88 U	
N-Nitrosodiphenylamine (NDFA)		86-30-6	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	NE			0.043 U		0.043 UJ	0.043 U		0.043 U		0.042 U		0.042 U		0.042 U		0.043 U	
Pentachlorophenol		87-86-5	0.8	6.7			0.35 U		0.34 U	0.35 U		0.34 U		0.34 U		0.34 U		0.33 U		0.35 U	
Phenol		108-95-2	0.33	500			0.43 U		0.43 UJ	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
1,2,4,5-Tetrachlorobenzene		95-94-3	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
2,3,4,6-Tetrachlorophenol		58-90-2	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
2,4,5-Trichlorophenol		95-95-4	NE	NE			0.43 U		0.43 U	0.43 U		0.43 U		0.42 U		0.42 U		0.42 U		0.43 U	
2,4,6-Trichlorophenol		88-06-2	NE	NE			0.17 U		0.17 U	0.17 U		0.17 U		0.17 U		0.17 U		0.17 U		0.17 U	
PCB Aroclors	mg/kg																				
Aroclor 1016		12674-11-2	NE	NE	0.081 U	0.079 U	0.088 U	0.08 U	0.087 U	0.088 U	0.077 U	0.087 U	0.077 U	0.085 U	0.075 U	0.085 U	0.075 U	0.084 U	0.079 U	0.088 UJ	
Aroclor 1221		11104-28-2	NE	NE	0.081 U	0.079 U	0.088 U	0.08 U	0.087 U	0.088 U	0.077 U	0.087 U	0.077 U	0.085 U	0.075 U	0.085 U	0.075 U	0.084 U	0.079 U	0.088 UJ	
Aroclor 1232		11141-16-5	NE	NE	0.081 U	0.079 U	0.088 U	0.08 U	0.087 U	0.088 U	0.077 U	0.087 U	0.077 U	0.085 U	0.075 U	0.085 U	0.075 U	0.084 U	0.079 U	0.088 UJ	
Aroclor 1242		53469-21-9	NE	NE	0.081 U	0.079 U	0.088 U	0.08 U	0.087 U	0.088 U	0.077 U	0.087 U	0.077 U	0.085 U	0.075 U	0.085 U	0.075 U	0.084 U	0.079 U	0.088 UJ	
Aroclor 1248		12672-29-6	NE	NE	0.081 U	0.079 U	0.088 U	0.08 U	0.087 U	0.088 U	0.077 U	0.087 U	0.077 U	0.085 U	0.075 U	0.085 U	0.075 U	0.084 U	0.079 U	0.088 UJ	
Aroclor 1254		11097-69-1	NE	NE	0.081 U	0.079 U	0.088 U	0.08 U	0.087 U	0.088 U	0.077 U	0.087 U	0.077 U	0.085 U	0.075 U	0.085 U	0.075 U	0.084 U	0.079 U	0.088 UJ	
Aroclor 1260		11096-82-5	NE	NE	0.081 U	0.079 U	0.088 U	0.08 U	0.087 U	0.088 U	0.077 U	0.087 U	0.077 U	0.085 U	0.075 U	0.085 U	0.075 U	0.084 U	0.079 U	0.088 UJ	
Aroclor 1262		37324-23-5	NE	NE	0.081 U	0.079 U	0.088 U	0.08 U	0.087 U	0.088 U	0.077 U	0.087 U	0.077 U	0.085 U	0.075 U	0.085 U	0.075 U	0.084 U	0.079 U	0.088 UJ	
Aroclor 1268		11100-14-4	NE	NE	0.081 U	0.079 U	0.088 U	0.08 U	0.087 U	0.088 U	0.077 U	0.087 U	0.077 U	0.085 U	0.075 U	0.085 U	0.075 U	0.084 U	0.079 U	0.088 UJ	
Total PCBs (Lab calculated)		1336-36-3	0.1	1	0.081 U	0.079 U	0.088 U	0.08 U	0.087 U	0.088 U	0.077 U	0.087 U	0.077 U	0.085 U	0.075 U	0.085 U	0.075 U	0.084 U	0.079 U	0.088 UJ	
Pesticides	mg/kg																				
Aldrin		309-00-2	0.005	0.68			0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U	
alpha-BHC (Hexachlorocyclohexane)		319-84-6	0.02	3.4			0.0026 U		0.0026 U	0.0026 U		0.0026 U		0.0025 U		0.0026 UJ		0.0025 UJ		0.0026 U	
beta-BHC (beta-Hexachlorocyclohexane)		319-85-7	0.036	3			0.0026 U		0.0026 U	0.0026 U		0.0026 U		0.0025 U		0.0026 UJ		0.0025 UJ		0.0026 U	
gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane)		58-89-9	0.1	9.2			0.0026 U		0.0026 U	0.0026 U		0.0026 U		0.0025 U		0.0026 UJ		0.0025 UJ		0.0026 U	
delta-BHC (delta-Hexachlorocyclohexane)		319-86-8	0.04	500			0.0026 U		0.0026 U	0.0026 U		0.0026 U		0.0025 U		0.0026 UJ		0.0025 UJ		0.0026 U	
Chlordane (Alpha & Gamma)		57-74-9	NE	NE			0.088 U		0.087 U	0.088 U		0.086 U		0.085 U		0.086 UJ		0.084 UJ		0.088 U	
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	NE	NE			0.044 U		0.043 U	0.044 U		0.043 U		0.042 U		0.043 U		0.042 U		0.044 U	

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National Grid
Rockaway Park, New York

Analyte	Units	CAS No.	Unrestricted SCO	Commerical SCO	Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample	RP-SB-301(0-12) Composite 0 12 ft 6/13/2018	Dup-061318A Composite 0 0 ft 6/13/2018 RP-SB-301(0-12) COMPOSITE	RP-SB-301 (11-12) Grab 11 12 ft 6/13/2018	RP-SB-302 (0-12) Composite 0 12 ft 6/13/2018	RP-SB-302 (11-12) Grab 11 12 ft 6/13/2018	Dup-061318 (11-12) Grab 11 12 ft 6/13/2018 RP-SB-302 (11-12) GRAB	RP-SB-303 (0-12) Composite 0 12 ft 6/13/2018	RP-SB-303 (11-12) Grab 11 12 ft 6/13/2018	RP-SB-304 (0-12) Composite 0 12 ft 6/14/2018	RP-SB-304 (11-12) Grab 11 12 ft 6/14/2018	RP-SB-305 (0-12) Composite 0 12 ft 6/13/2018	RP-SB-305 (11-12) Grab 11 12 ft 6/13/2018	RP-SB-306 (0-12) Composite 0 12 ft 6/13/2018	RP-SB-306 (11-12) Grab 11 12 ft 6/13/2018	RP-SB-307 (0-12) Composite 0 12 ft 6/14/2018	RP-SB-307 (11-12) Grab 11 12 ft 6/14/2018
4,4'-DDT (p,p'-DDT)		50-29-3	0.0033	47				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U
4,4'-DDE (p,p'-DDE)		72-55-9	0.0033	62				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U
4,4-DDD (p,p-DDD)		72-54-8	0.0033	92				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U
Dieldrin		60-57-1	0.005	1.4				0.0026 U		0.0026 U	0.0026 U		0.0026 U		0.0025 U		0.0026 UJ		0.0025 UJ		0.0026 U
alpha-Endosulfan (I)		959-98-8	2.4	200				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U
beta-Endosulfan (II)		33213-65-9	2.4	200				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U
Endosulfan sulfate		1031-07-8	2.4	200				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U
Endrin		72-20-8	0.014	89				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U
Endrin aldehyde		7421-93-4	NE	NE				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U
Endrin ketone		53494-70-5	NE	NE				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U
Heptachlor		76-44-8	0.042	15				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U
Heptachlor epoxide		1024-57-3	NE	NE				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		**0.052 J**		**0.014 J**		0.0088 U
Methoxychlor		72-43-5	NE	NE				0.0088 U		0.0087 U	0.0088 U		0.0086 U		0.0085 U		0.0086 UJ		0.0084 UJ		0.0088 U
2,4,5-TP (Silvex)		93-72-1	3.8	500				0.044 UJ		0.043 UJ	0.044 UJ		0.043 UJ		0.042 U		0.043 UJ		0.042 UJ		0.044 U
Toxaphene		8001-35-2	NE	NE				0.088 U		0.087 U	0.088 U		0.086 U		0.085 U		0.086 UJ		0.084 UJ		0.088 U
Herbicides	mg/kg																				
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	NE	NE				0.044 U		0.043 U	0.044 U		0.043 U		0.042 U		0.043 U		0.042 U		0.044 U
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)		93-76-5	NE	NE				0.044 UJ		0.043 UJ	0.044 UJ		0.043 UJ		0.042 U		0.043 UJ		0.042 UJ		0.044 U
2,4,5-TP (Silvex)		93-72-1	3.8	500				0.044 UJ		0.043 UJ	0.044 UJ		0.043 UJ		0.042 U		0.043 UJ		0.042 UJ		0.044 U
Total Metals	mg/kg																				
Aluminum		7429-90-5	NE	NE				**715 J**		**879 J**	**767 J**		**575 J**		**1070 J**		**278 J**		**206 J**		**899 J**
Antimony		7440-36-0	NE	NE				4.2 U		4 U	3.9 U		4.3 U		3.8 U		3.7 U		3.8 U		4.3 U
Arsenic		7440-38-2	13	16				3.1 U		3 U	**1.1 J**		**0.88 J**		**1.1 J**		2.8 U		2.8 U		**0.8 J**
Barium		7440-39-3	350	400				42 U		**3.6 J**	39 U		42.8 U		**6.6 J**		37.1 U		37.6 U		**4.1 J**
Beryllium		7440-41-7	7.2	590				**0.053 J**		**0.077 J**	**0.062 J**		0.43 U		**0.092 J**		0.37 U		0.38 U		**0.086 J**
Cadmium		7440-43-9	2.5	9.3				0.84 U		0.8 U	0.78 U		**0.24 J**		0.77 U		0.74 U		0.75 U		0.87 U
Calcium		7440-70-2	NE	NE				**264 J**		**485 J**	**371 J**		**216 J**		**3640**		**294 J**		940 U		**3770**
Chromium		7440-47-3	NE	NE				**2.4**		**3**	**2.8**		**2.1**		**5.5**		**1.7 J**		**1.1 J**		**3.3**
Cobalt		7440-48-4	NE	NE				10.5 U		10 U	9.7 U		**1.4 J**		9.6 U		9.3 U		9.4 U		10.9 U
Copper		7440-50-8	50	270				**1.7 J**		**4.5 J**	**4 J**		**38.7**		**3.4 J**		**5.6**		**3 J**		**2.7 J**
Iron		7439-89-6	NE	NE				**1930**		**2710**	**2430**		**1610**		**2490**		**875**		**673**		**5400**
Lead		7439-92-1	63	1000				**1.8 J**		**2.3**	**1.6 J**		**6.4**		**8.1**		**2.8**		**0.8 J**		**2.3**
Magnesium		7439-95-4	NE	NE				**512 J**		**608 J**	**539 J**		**158 J**		**649 J**		**340 J**		**93.7 J**		**501 J**
Manganese		7439-96-5	1600	10000				**16**		**27.7**	**21.8**		**6.9**		**30**		**4.9**		**4.5**		**28.4**
Mercury		7439-97-6	0.18	2.8				0.02 U		0.02 U	0.022 U		**0.017 J**		0.022 U		0.02 U		0.02 U		0.02 U
Nickel		7440-02-0	30	310				**2.1 J**		**2.6 J**	**2.3 J**		**4.8 J**		**3.2 J**		7.4 U		7.5 U		**3.8 J**
Potassium		7440-09-7	NE	NE				**254 J**		**282 J**	**255 J**		**88.6 J**		**221 J**		**125 J**		**54.6 J**		**269 J**
Selenium		7782-49-2	3.9	1500				4.2 U		4 U	3.9 U		4.3 U		3.8 U		3.7 U		3.8 U		4.3 U
Silver		7440-22-4	2	1500				2.1 U		2 U	1.9 U		2.1 U		1.9 U		1.9 U		1.9 U		2.2 U
Sodium		7440-23-5	NE	NE				**1370**		**1610**	**1620**		**181 J**		**615 J**		**1770**		**376 J**		**720 J**
Thallium		7440-28-0	NE	NE				4.2 U		4 U	3.9 U		4.3 U		3.8 U		3.7 U		3.8 U		4.3 U
Vanadium		7440-62-2	NE	NE				**3.1 J**		**3.8 J**	**3.4 J**		**1.8 J**		**3.9 J**		**1.6 J**		9.4 U		**3.7 J**
Zinc		7440-66-6	109	10000				**7.5**		**8.8**	**7.7**		**42.2**		**22.7**		**2.2 J**		**5.8**		**42.4**
TCLP Metals	ug/L																				
Arsenic		7440-38-2	NE	NE	75 U	75 U		75 U		68.3 J			**55.2 J**		**259 J**		**56.9 J**		**77.2 J**		**52.3 J**	
Barium		7440-39-3	NE	NE	**48.6 J**	**52.4 J**															
Cadmium		7440-43-9	NE	NE	20 U	20 U		20 U					**1.7 J**		**1.3 J**		20 U		20 U		20 U	
Chromium		7440-47-3	NE	NE	50 U	50 U		50 U					50 U		**180**		50 U		50 U		50 U	
Lead		7439-92-1	NE	NE	**29 J**	**92**		50 U					**15.6 J**		50 U		**28.3 J**		**18.4 J**		50 U	
Mercury		7439-97-6	NE	NE	0.2 U	0.2 U		0.2 U					0.2 U		0.2 U		0.2 U		0.2 U		0.2 U	
Selenium		7782-49-2	NE	NE	100 U	100 U		100 U					100 U		100 U		100 U		100 U		100 U	
Silver		7440-22-4	NE	NE	50 U	50 U		50 U					50 U		50 U		50 U		50 U		50 U	
Cyanides	mg/kg																				
Cyanide Reactivity		REAC-CN	NE	NE	25 U	25 U		25 U					25 U		25 U		25 U		25 U		25 U	
Other																					
Corrosivity	s.u.	CORROS	NE	NE	**9.4 J**	**9.1 J**		**10.8 J**					**5.7 J**		**11.6 J**		**5.7 J**		**7.2 J**		**9.5 J**	
Ignitibility	mm/sec	IGNIT	NE	NE	2.2 U	2.2 U		2.2 U					2.2 U		2.2 U		2.2 U		2.2 U		2.2 U	
pH	s.u.	pH	NE	NE	**9.4 J**	**9.1 J**		**10.8 J**					**5.7 J**		**11.6 J**		**5.7 J**		**7.2 J**		**9.5 J**	
Sulfide Reactivity	mg/kg	REAC-HS	NE	NE	20 U	20 U		20 U					20 U		20 U		20 U		20 U		**30.2**	
Diesel Range Organics	mg/kg	DRO	NE	NE	**17 J**	**69 J**		**82**					**30 J**		**17**		**220**		**40 J**		**33**	
Gasoline Range Organics	mg/kg	GRO	NE	NE	2.4 U	2.8 U		2.5 U					1.6 U		1.2 U		**18**		**95**		**15**	

Table 1. Summary of June 2018 Analytical Exceedances in Soil Samples
National Grid
Rockaway Park, New York

Analyte	Units	CAS No.	Unrestricted SCO	Commerical SCO	RP-SB-308 (0-12) Composite 0 12 ft 6/14/2018	RP-SB-308 (11-12) Grab 11 12 ft 6/14/2018	RP-SB-309 (0-12) Composite 0 12 ft 6/14/2018	RP-SB-309 (11-12) Grab 11 12 ft 6/14/2018	RP-SB-310 (0-12) Composite 0 12 ft 6/14/2018	RP-SB-310 (11-12) Grab 11 12 ft 6/14/2018	RP-SB-311 (0-12) Composite 0 12 ft 6/14/2018	RP-SB-311 (11-12) Grab 11 12 ft 6/14/2018	RP-SB-312 (0-12) Composite 0 12 ft 6/13/2018	RP-SB-312 (11-12) Grab 11 12 ft 6/13/2018
BTEX	mg/kg													
Benzene		71-43-2	0.06	44		**0.0017**		**0.011**		**0.044**		**0.0087 J**		0.0011 U
Toluene		108-88-3	0.7	500		0.0011 U		**0.0078**		**0.0022**		0.0011 U		0.0011 U
Ethylbenzene		100-41-4	1	390		**0.001 J**		**0.0057**		**0.027**		0.0011 U		0.0011 U
o-Xylene		95-47-6	0.26	500		**0.00013 J**		**0.00094 J**		**0.0083**		**0.0018 J**		**0.00033 J**
m/p-Xylene		179601-23-1	0.26	500		**0.00022 J**		**0.0017**		**0.0035**		0.0011 U		0.0011 U
Total BTEX (ND=0)		TBTEX_ND0	NE	NE		**0.00305**		**0.02714**		**0.085**		**0.0105**		**0.00033**
Other VOCs	mg/kg													
Acetone		67-64-1	0.05	500		0.0097 U		0.01 U		**0.029**		0.0055 U		**0.01**
Bromochloromethane		74-97-5	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Bromodichloromethane		75-27-4	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 UJ		0.0011 U
Bromoform		75-25-2	NE	NE		0.0011 UJ		0.001 UJ		0.0018 UJ		0.0011 UJ		0.0011 UJ
Bromomethane		74-83-9	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Carbon disulfide		75-15-0	NE	NE		**0.0027**		**0.0041**		**0.015**		**0.0013**		**0.0029**
Carbon tetrachloride		56-23-5	0.76	22		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Chlorobenzene		108-90-7	1.1	500		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Chloroethane		75-00-3	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Chloroform (Trichloromethane)		67-66-3	0.37	350		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Chloromethane		74-87-3	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Cyclohexane		110-82-7	NE	NE		0.0011 U		0.001 U		**0.00088 J**		0.0011 U		**0.00034 J**
1,2-Dibromo-3-chloropropane		96-12-8	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Dibromochloromethane		124-48-1	NE	NE		0.0011 UJ		0.001 UJ		0.0018 UJ		0.0011 UJ		0.0011 UJ
1,2-Dibromoethane (EDB)		106-93-4	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,2-Dichlorobenzene (o-DCB)		95-50-1	1.1	500		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,3-Dichlorobenzene (m-DCB)		541-73-1	2.4	280		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,4-Dichlorobenzene (p-DCB)		106-46-7	1.8	130		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Dichlorodifluoromethane (Freon 12)		75-71-8	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,1-Dichloroethane		75-34-3	0.27	240		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,2-Dichloroethane		107-06-2	0.02	30		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,1-Dichloroethene		75-35-4	0.33	500		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
cis-1,2-Dichloroethene		156-59-2	0.25	500		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
trans-1,2-Dichloroethene		156-60-5	0.19	500		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,2-Dichloropropane		78-87-5	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
cis-1,3-Dichloropropene		10061-01-5	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
trans-1,3-Dichloropropene		10061-02-6	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,4-Dioxane		123-91-1	0.1	130		0.021 U		0.021 U		0.035 U		0.022 U		0.022 U
2-Hexanone		591-78-6	NE	NE		0.0053 U		0.0051 U		0.0088 U		0.0055 U		0.0055 U
Isopropylbenzene		98-82-8	NE	NE		**0.0019**		**0.014**		**0.087**		**0.0023**		**0.0071**
Methyl acetate		79-20-9	NE	NE		0.0053 U		0.0051 U		0.0088 U		0.0055 U		0.0055 U
Methyl ethyl ketone (2-Butanone)		78-93-3	0.12	500		**0.0018 J**		**0.0024 J**		**0.0036 J**		0.0055 U		**0.0021 J**
Methyl tert-butyl ether (MTBE)		1634-04-4	0.93	500		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	NE		0.0053 U		0.0051 U		0.0088 U		0.0055 U		0.0055 U
Methylcyclohexane		108-87-2	NE	NE		0.0011 U		**0.0012**		**0.0009 J**		0.0011 U		**0.0014**
Methylene chloride		75-09-2	0.05	500		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Styrene		100-42-5	NE	NE		0.0011 U		**0.00024 J**		**0.0036**		0.0011 U		0.0011 U
1,1,2,2-Tetrachloroethane		79-34-5	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Tetrachloroethene (PCE)		127-18-4	1.3	150		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,2,3-Trichlorobenzene		87-61-6	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,2,4-Trichlorobenzene		120-82-1	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,1,1-Trichloroethane (TCA)		71-55-6	0.68	500		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
1,1,2-Trichloroethane		79-00-5	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Trichloroethene (TCE)		79-01-6	0.47	200		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Trichlorofluoromethane (Freon 11)		75-69-4	NE	NE		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
Vinyl chloride		75-01-4	0.02	13		0.0011 U		0.001 U		0.0018 U		0.0011 U		0.0011 U
NYSDEC PAH17	mg/kg													
Acenaphthene		83-32-9	20	500	0.36 U	0.4 U	0.39 U	0.42 U	**1**	**0.18 J**	0.37 U	0.41 UJ	0.38 U	0.38 U
Acenaphthylene		208-96-8	100	500	**0.016 J**	**0.021 J**	**0.098 J**	**0.06 J**	**0.88**	**1**	**0.017 J**	0.41 UJ	0.38 U	0.38 U
Anthracene		120-12-7	100	500	0.36 U	**0.011 J**	**0.024 J**	**0.015 J**	**0.58**	**0.24 J**	**0.078 J**	0.41 UJ	0.38 U	0.38 U
Benzo(a)anthracene		56-55-3	1	5.6	0.036 U	0.04 U	**0.096**	**0.06**	**0.91**	**0.47**	**0.16**	0.041 UJ	**0.11**	**0.21**
Benzo(b)fluoranthene		205-99-2	1	5.6	0.036 U	**0.037 J**	**0.12**	**0.075**	**1.3**	**0.63**	**0.18**	0.041 UJ	**0.1**	**0.2**
Benzo(k)fluoranthene		207-08-9	0.8	56	0.036 U	**0.016 J**	0.039 U	0.042 U	**0.39**	**0.19**	**0.065**	0.041 UJ	**0.047**	**0.11**
Benzo(g,h,i)perylene		191-24-2	100	500	**0.02 J**	0.4 U	**0.085 J**	**0.044 J**	**0.62**	**0.35 J**	**0.1 J**	0.41 UJ	**0.054 J**	**0.098 J**
Benzo(a)pyrene		50-32-8	1	1	**0.022 J**	**0.039 J**	**0.1**	**0.07**	**0.78**	**0.4**	**0.14**	0.041 UJ	**0.063**	**0.15**
Chrysene		218-01-9	1	56	0.36 U	**0.032 J**	**0.1 J**	**0.042 J**	**1.2**	**0.5**	**0.15 J**	0.41 UJ	**0.097 J**	**0.15 J**
Dibenz(a,h)anthracene		53-70-3	0.33	0.56	0.036 U	0.04 U	0.039 U	0.042 U	**0.12**	**0.083**	**0.024 J**	0.041 UJ	0.038 U	**0.035 J**
Fluoranthene		206-44-0	100	500	0.36 U	0.4 U	**0.098 J**	**0.084 J**	**2.3**	**0.81**	**0.38**	0.41 UJ	**0.12 J**	**0.27 J**
Fluorene		86-73-7	30	500	0.36 U	0.4 U	0.39 U	0.42 U	**0.91**	**0.21 J**	**0.028 J**	0.41 UJ	0.38 U	0.38 U
Indeno(1,2,3-cd)pyrene		193-39-5	0.5	5.6	**0.019 J**	**0.02 J**	**0.088**	**0.049**	**0.63**	**0.39**	**0.11**	0.041 UJ	**0.057**	**0.1**
2-Methylnaphthalene		91-57-6	NE	NE	0.36 U	**0.031 J**	**0.059 J**	0.42 U	**0.5**	**0.14 J**	0.37 U	0.41 UJ	0.38 U	0.38 U
Naphthalene		91-20-3	12	500	0.36 U	**0.065 J**	**0.15 J**	**0.064 J**	**1**	**0.7**	0.37 U	0.41 UJ	0.38 U	0.38 U
Phenanthrene		85-01-8	100	500	**0.019 J**	**0.034 J**	**0.056 J**	**0.018 J**	**3.3**	**0.5**	**0.32 J**	0.41 UJ	0.38 U	0.38 U
Pyrene		129-00-0	100	500	**0.04 J**	**0.072 J**	**0.19 J**	**0.18 J**	**2.6**	**1.3**	**0.32 J**	0.41 UJ	**0.54**	**1.3**
Total PAH (17) (ND=0)		TPAH17_ND0	NE	NE	**0.136**	**0.378**	**1.264**	**0.761**	**19.02**	**8.093**	**2.072**	ND	**1.188**	**2.623**

Table 1. Summary of June 2018 Analytical Exceedances in Soil Samples
National Grid
Rockaway Park, New York

Analyte	Units	CAS No.	Unrestricted SCO	Commerical SCO	Sample Name	RP-SB-308 (0-12)	RP-SB-308 (11-12)	RP-SB-309 (0-12)	RP-SB-309 (11-12)	RP-SB-310 (0-12)	RP-SB-310 (11-12)	RP-SB-311 (0-12)	RP-SB-311 (11-12)	RP-SB-312 (0-12)	RP-SB-312 (11-12)
					Start Depth	Composite 0	Grab 11	Composite 0	Grab 11	Composite 0	Grab 11	Composite 0	Grab 11	Composite 0	Grab 11
					End Depth	12	12	12	12	12	12	12	12	12	12
					Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
					Sample Date	6/14/2018	6/14/2018	6/14/2018	6/14/2018	6/14/2018	6/14/2018	6/14/2018	6/14/2018	6/13/2018	6/13/2018
					Parent Sample										
NYSDEC PAH17 Other SVOCs	mg/kg														
Acetophenone		98-86-2	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
Atrazine		1912-24-9	NE	NE		0.16 U	0.16 U		0.17 U		0.17 U		0.17 UJ		0.15 U
Benzaldehyde		100-52-7	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
Biphenyl (1,1-Biphenyl)		92-52-4	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
Bis(2-chloroethoxy)methane		111-91-1	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
Bis(2-chloroethyl)ether		111-44-4	NE	NE		0.04 U	0.04 U		0.042 U		0.042 U		0.041 UJ		0.038 U
2,2-oxybis(1-Chloropropane)		108-60-1	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 U		0.38 U
Bis(2-ethylhexyl)phthalate		117-81-7	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		**0.047 J**
4-Bromophenyl phenyl ether		101-55-3	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
Butyl benzyl phthalate		85-68-7	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
Caprolactam		105-60-2	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
Carbazole		86-74-8	NE	NE		0.081 U	0.4 U		0.42 U		**0.036 J**		0.41 UJ		0.38 U
4-Chloro-3-methylphenol		59-50-7	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
4-Chloroaniline		106-47-8	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 U		0.38 U
2-Chloronaphthalene		91-58-7	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
2-Chlorophenol		95-57-8	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
4-Chlorophenyl phenyl ether		7005-72-3	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
Dibenzofuran		132-64-9	7	350		0.081 U	0.4 U		0.42 U		**0.11 J**		0.41 UJ		0.38 U
3,3-Dichlorobenzidine		91-94-1	NE	NE		0.16 U	0.16 U		0.17 U		0.17 U		0.17 U		0.15 U
2,4-Dichlorophenol		120-83-2	NE	NE		0.16 U	0.16 U		0.17 U		0.17 U		0.17 UJ		0.15 U
Diethyl phthalate		84-66-2	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
Dimethyl phthalate		131-11-3	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
2,4-Dimethylphenol		105-67-9	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
Di-n-butyl phthalate		84-74-2	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
4,6-Dinitro-2-methylphenol		534-52-1	NE	NE		0.32 U	0.32 U		0.34 U		0.34 U		0.33 UJ		0.3 U
2,4-Dinitrophenol		51-28-5	NE	NE		0.32 U	0.32 U		0.34 U		0.34 U		0.33 R		0.3 U
2,4-Dinitrotoluene		121-14-2	NE	NE		0.081 U	0.081 U		0.085 U		0.086 U		0.084 UJ		0.077 U
2,6-Dinitrotoluene		606-20-2	NE	NE		0.081 U	0.081 U		0.085 U		0.086 U		0.084 UJ		0.077 U
Di-n-octyl phthalate		117-84-0	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
Hexachlorobenzene		118-74-1	0.33	6		0.04 U	0.04 U		0.042 U		0.042 U		0.041 UJ		0.038 U
1,3-Hexachlorobutadiene (C-46)		87-68-3	NE	NE		0.081 U	0.081 U		0.085 U		0.086 U		0.084 UJ		0.077 U
Hexachlorocyclopentadiene		77-47-4	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 UJ
Hexachloroethane		67-72-1	NE	NE		0.04 U	0.04 U		0.042 U		0.042 U		0.041 UJ		0.038 U
Isophorone		78-59-1	NE	NE		0.16 U	0.16 U		0.17 U		0.17 U		0.17 UJ		0.15 U
2-Methylnaphthalene		91-57-6	NE	NE	0.36 U	**0.031 J**	**0.059 J**	0.42 U	**0.5**		**0.14 J**	0.37 U	0.41 UJ	0.38 U	0.38 U
2-Methylphenol (o-Cresol)		95-48-7	0.33	500		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
4-Methylphenol (p-Cresol)		106-44-5	0.33	500		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
2-Nitroaniline		88-74-4	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
3-Nitroaniline		99-09-2	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 U		0.38 U
4-Nitroaniline		100-01-6	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 U		0.38 U
Nitrobenzene		98-95-3	NE	NE		0.04 U	0.04 U		0.042 U		0.042 U		0.041 UJ		0.038 U
2-Nitrophenol		88-75-5	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
4-Nitrophenol		100-02-7	NE	NE		0.81 U	0.81 U		0.85 U		0.86 U		0.84 U		0.77 U
N-Nitrosodiphenylamine (NDFA)		86-30-6	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	NE		0.04 U	0.04 U		0.042 U		0.042 U		0.041 UJ		0.038 U
Pentachlorophenol		87-86-5	0.8	6.7		0.32 U	0.32 U		0.34 U		0.34 U		0.33 UJ		0.3 U
Phenol		108-95-2	0.33	500		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
1,2,4,5-Tetrachlorobenzene		95-94-3	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
2,3,4,6-Tetrachlorophenol		58-90-2	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
2,4,5-Trichlorophenol		95-95-4	NE	NE		0.081 U	0.4 U		0.42 U		0.42 U		0.41 UJ		0.38 U
2,4,6-Trichlorophenol		88-06-2	NE	NE		0.16 U	0.16 U		0.17 U		0.17 U		0.17 UJ		0.15 U
PCB Aroclors	mg/kg														
Aroclor 1016		12674-11-2	NE	NE	0.073 U	0.081 U	0.079 U	0.085 U	0.075 U		0.43 U	0.076 U	0.084 U	0.076 U	0.077 U
Aroclor 1221		11104-28-2	NE	NE	0.073 U	0.081 U	0.079 U	0.085 U	0.075 U		0.43 U	0.076 U	0.084 U	0.076 U	0.077 U
Aroclor 1232		11141-16-5	NE	NE	0.073 U	0.081 U	0.079 U	0.085 U	0.075 U		0.43 U	0.076 U	0.084 U	0.076 U	0.077 U
Aroclor 1242		53469-21-9	NE	NE	0.073 U	0.081 U	0.079 U	0.085 U	0.075 U		0.43 U	0.076 U	0.084 U	0.076 U	0.077 U
Aroclor 1248		12672-29-6	NE	NE	0.073 U	0.081 U	0.079 U	0.085 U	0.075 U		0.43 U	0.076 U	0.084 U	0.076 U	0.077 U
Aroclor 1254		11097-69-1	NE	NE	0.073 U	0.081 U	0.079 U	0.085 U	0.075 U		0.43 U	0.076 U	0.084 U	0.076 U	0.077 U
Aroclor 1260		11096-82-5	NE	NE	0.073 U	0.081 U	0.079 U	0.085 U	0.075 U		0.43 U	0.076 U	0.084 U	0.076 U	0.077 U
Aroclor 1262		37324-23-5	NE	NE	0.073 U	0.081 U	0.079 U	0.085 U	0.075 U		0.43 U	0.076 U	0.084 U	0.076 U	0.077 U
Aroclor 1268		11100-14-4	NE	NE	0.073 U	0.081 U	0.079 U	0.085 U	0.075 U		0.43 U	0.076 U	0.084 U	0.076 U	0.077 U
Total PCBs (Lab calculated)		1336-36-3	0.1	1	0.073 U	0.081 U	0.079 U	0.085 U	0.075 U		0.43 U	0.076 U	0.084 U	0.076 U	0.077 U
Pesticides	mg/kg														
Aldrin		309-00-2	0.005	0.68		0.0081 U	0.0081 U		0.0085 U		0.0086 U		0.0084 U		0.0077 U
alpha-BHC (Hexachlorocyclohexane)		319-84-6	0.02	3.4		0.0024 U	0.0024 U		0.0025 U		0.0026 U		0.0025 UJ		0.0023 U
beta-BHC (beta-Hexachlorocyclohexane)		319-85-7	0.036	3		0.0024 U	0.0024 U		0.0025 U		0.0026 U		0.0025 UJ		0.0023 U
gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane)		58-89-9	0.1	9.2		0.0024 U	0.0024 U		0.0025 U		0.0026 U		0.0025 UJ		0.0023 U
delta-BHC (delta-Hexachlorocyclohexane)		319-86-8	0.04	500		0.0024 U	0.0024 U		0.0025 U		0.0026 U		0.0025 UJ		0.0023 U
Chlordane (Alpha & Gamma)		57-74-9	NE	NE		0.081 U	0.081 U		0.085 U		0.086 U		0.084 U		0.077 U
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	NE	NE		0.04 U	0.04 U		0.042 U		0.043 U		0.042 U		0.038 U

Table 1. Summary of June 2018 Analytical Exceedances in Soil Samples
National Grid
Rockaway Park, New York

Analyte	Units	CAS No.	Unrestricted SCO	Commerical SCO	RP-SB-308 (0-12) Composite 0 12 ft 6/14/2018	RP-SB-308 (11-12) Grab 11 12 ft 6/14/2018	RP-SB-309 (0-12) Composite 0 12 ft 6/14/2018	RP-SB-309 (11-12) Grab 11 12 ft 6/14/2018	RP-SB-310 (0-12) Composite 0 12 ft 6/14/2018	RP-SB-310 (11-12) Grab 11 12 ft 6/14/2018	RP-SB-311 (0-12) Composite 0 12 ft 6/14/2018	RP-SB-311 (11-12) Grab 11 12 ft 6/14/2018	RP-SB-312 (0-12) Composite 0 12 ft 6/13/2018	RP-SB-312 (11-12) Grab 11 12 ft 6/13/2018
4,4'-DDT (p,p'-DDT)		50-29-3	0.0033	47		0.0081 U		0.0085 U		0.0086 U		0.0084 UJ		0.0077 U
4,4'-DDE (p,p'-DDE)		72-55-9	0.0033	62		0.0081 U		0.0085 U		0.0086 U		0.0084 U		0.0077 U
4,4-DDD (p,p-DDD)		72-54-8	0.0033	92		0.0081 U		0.0085 U		0.0086 U		0.0084 UJ		0.0077 U
Dieldrin		60-57-1	0.005	1.4		0.0024 U		0.0025 U		0.0026 U		0.0025 R		0.0023 U
alpha-Endosulfan (I)		959-98-8	2.4	200		0.0081 U		0.0085 U		0.0086 U		0.0084 UJ		0.0077 U
beta-Endosulfan (II)		33213-65-9	2.4	200		0.0081 U		0.0085 U		0.0086 U		0.0084 R		0.0077 U
Endosulfan sulfate		1031-07-8	2.4	200		0.0081 U		0.0085 U		0.0086 U		0.0084 R		0.0077 U
Endrin		72-20-8	0.014	89		0.0081 U		0.0085 U		0.0086 U		0.0084 UJ		0.0077 U
Endrin aldehyde		7421-93-4	NE	NE		0.0081 U		0.0085 U		0.0086 U		0.0084 R		0.0077 U
Endrin ketone		53494-70-5	NE	NE		0.0081 U		0.0085 U		0.0086 U		0.0084 R		0.0077 U
Heptachlor		76-44-8	0.042	15		0.0081 U		0.0085 U		0.0086 U		0.0084 U		0.0077 U
Heptachlor epoxide		1024-57-3	NE	NE		0.0081 U		0.0085 U		0.0086 U		0.0084 UJ		0.0077 U
Methoxychlor		72-43-5	NE	NE		0.0081 U		0.0085 U		0.0086 U		0.0084 UJ		0.0077 U
2,4,5-TP (Silvex)		93-72-1	3.8	500		0.04 U		0.042 U		0.043 U		0.042 U		0.038 UJ
Toxaphene		8001-35-2	NE	NE		0.081 U		0.085 U		0.086 U		0.084 U		0.077 U
Herbicides	mg/kg													
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	NE	NE		0.04 U		0.042 U		0.043 U		0.042 U		0.038 U
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)		93-76-5	NE	NE		0.04 U		0.042 U		0.043 U		0.042 U		0.038 UJ
2,4,5-TP (Silvex)		93-72-1	3.8	500		0.04 U		0.042 U		0.043 U		0.042 U		0.038 UJ
Total Metals	mg/kg													
Aluminum		7429-90-5	NE	NE		**682 J**		**392 J**		**1380 J**		**370 J**		**214 J**
Antimony		7440-36-0	NE	NE		3.9 U		4.1 U		4.1 U		3.8 U		3.4 U
Arsenic		7440-38-2	13	16		**1 J**		3.1 U		**2.2 J**		2.9 U		2.5 U
Barium		7440-39-3	350	400		**3.4 J**		**8.6 J**		**15.6 J**		38.5 U		34 U
Beryllium		7440-41-7	7.2	590		**0.055 J**		0.41 U		**0.13 J**		0.38 U		0.34 U
Cadmium		7440-43-9	2.5	9.3		0.77 U		0.82 U		0.82 U		0.77 U		0.68 U
Calcium		7440-70-2	NE	NE		**3280**		**140 J**		**27100**		**165 J**		**97.3 J**
Chromium		7440-47-3	NE	NE		**3**		**2.9**		**6**		**2.7**		**3.2**
Cobalt		7440-48-4	NE	NE		9.6 U		10.2 U		**1.2 J**		9.6 U		8.5 U
Copper		7440-50-8	50	270		**4 J**		**7**		**14.9**		**1.2 J**		**1.2 J**
Iron		7439-89-6	NE	NE		**1940**		**1530**		**5640**		**941**		**675**
Lead		7439-92-1	63	1000		**6.2**		**93.5**		**41.1**		**5.3**		**3.3**
Magnesium		7439-95-4	NE	NE		**444 J**		**259 J**		**13900**		**183 J**		**107 J**
Manganese		7439-96-5	1600	10000		**19**		**12.9**		**49.9**		**11.4**		**7.6**
Mercury		7439-97-6	0.18	2.8		0.021 U		**0.05**		**0.068**		0.019 U		0.019 U
Nickel		7440-02-0	30	310		**2.9 J**		**1.5 J**		**4.4 J**		7.7 U		6.8 U
Potassium		7440-09-7	NE	NE		**247 J**		**135 J**		**273 J**		**106 J**		**58.6 J**
Selenium		7782-49-2	3.9	1500		3.9 U		4.1 U		4.1 U		3.8 U		3.4 U
Silver		7440-22-4	2	1500		1.9 U		2 U		2.1 U		1.9 U		1.7 U
Sodium		7440-23-5	NE	NE		**829 J**		**943 J**		**400 J**		**445 J**		**311 J**
Thallium		7440-28-0	NE	NE		3.9 U		4.1 U		4.1 U		3.8 U		3.4 U
Vanadium		7440-62-2	NE	NE		**3.1 J**		**2.3 J**		**7 J**		**2 J**		**1.4 J**
Zinc		7440-66-6	109	10000		**17.7**		**90.3**		**29**		**5.2 J**		**3 J**
TCLP Metals	ug/L													
Arsenic		7440-38-2	NE	NE	75 U		75 U		75 U		75 U		75 U	
Barium		7440-39-3	NE	NE	**69.4 J**		**68.1 J**		**250 J**		**208 J**		**52.1 J**	
Cadmium		7440-43-9	NE	NE	**1.1 J**		**1.9 J**		**5.9 J**		**1.3 J**		20 U	
Chromium		7440-47-3	NE	NE	50 U		**7.9 J**		50 U		50 U		50 U	
Lead		7439-92-1	NE	NE	**26.6 J**		**457**		**126**		**96**		**35.6 J**	
Mercury		7439-97-6	NE	NE	0.2 U		0.2 U		0.2 U		0.2 U		0.2 U	
Selenium		7782-49-2	NE	NE	100 U		100 U		100 U		100 U		100 U	
Silver		7440-22-4	NE	NE	50 U		50 U		50 U		50 U		50 U	
Cyanides	mg/kg													
Cyanide Reactivity		REAC-CN	NE	NE	25 U		25 U		25 U		25 U		25 U	
Other														
Corrosivity	s.u.	CORROS	NE	NE	**10.3 J**		**10.7 J**		**10.3 J**		**9.1 J**		**7.4 J**	
Ignitibility	mm/sec	IGNIT	NE	NE	2.2 U		2.2 U		2.2 U		2.2 U		2.2 U	
pH	s.u.	pH	NE	NE	**10.3 J**		**10.7 J**		**10.3 J**		**9.1 J**		**7.4 J**	
Sulfide Reactivity	mg/kg	REAC-HS	NE	NE	20 U		20 U		20 U		20 U		20 U	
Diesel Range Organics	mg/kg	DRO	NE	NE	**20**		**12 J**		**170**		**12**		**10**	
Gasoline Range Organics	mg/kg	GRO	NE	NE	2.2 U		2.6 U		**5.2**		2.6 U		**11**	

Table 1. Summary of June 2018 Analytical Exceedances in Soil Samples
National Grid
Rockaway Park, New York

Notes:
Analytes in blue are not detected in any sample
mg/kg = milligrams/kilogram or parts per million (ppm)
mm/sec = millimeters per second
s.u. = standard units
ug/L = micrograms per liter or parts per billion (ppb)

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
PAH = Polycyclic Aromatic Hydrocarbon
PCB = Polychlorinated Biphenyl
SVOC = Semi-Volatile Organic Compound
TCLP = Toxicity Characteristic Leaching Procedure
VOC = Volatile Organic Compound

Total BTEX and Total PAHs are calculated using detects only.
Total PAH16 is calculated using the EPA16 list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, Phenanthrene, and Pyrene
Total PAH17 is calculated using the EPA16 list of analytes plus 2-Methylnaphthalene

6 NYCRR = New York State Register and Official Compilation of Codes, Rules and Regulations of the State of New York
Comparison of detected results are performed against one or more of the following NYCRR, Chapter IV, Part 375-6 Soil Cleanup Objectives (SCO)s: Unrestricted Use, Residential, Restricted-Residential, Commercial, Industrial, Protection of Ecological Resources, or Protection of Groundwater

CAS No. = Chemical Abstracts Service Number
MGP = Manufactured Gas Plant
ND = Not Detected
NE = Not Established
NYSDEC = New York State Department of Environmental Conservation

Bolding indicates a detected result concentration
Shading and bolding indicates that the detected concentration is above the NYSDOH guidance it was compared to
Gray shading and bolding indicates that the detected result value exceeds the Unrestricted SCO
Yellow shading and bolding indicates that the detected result value exceeds the Commercial SCO

Validation Qualifiers:
J = The result is an estimated value.
R = The result is rejected.
U = The result was not detected above the reporting limit.
UJ = The results was not detected at or above the reporting limit shown and the reporting limit is estimated.

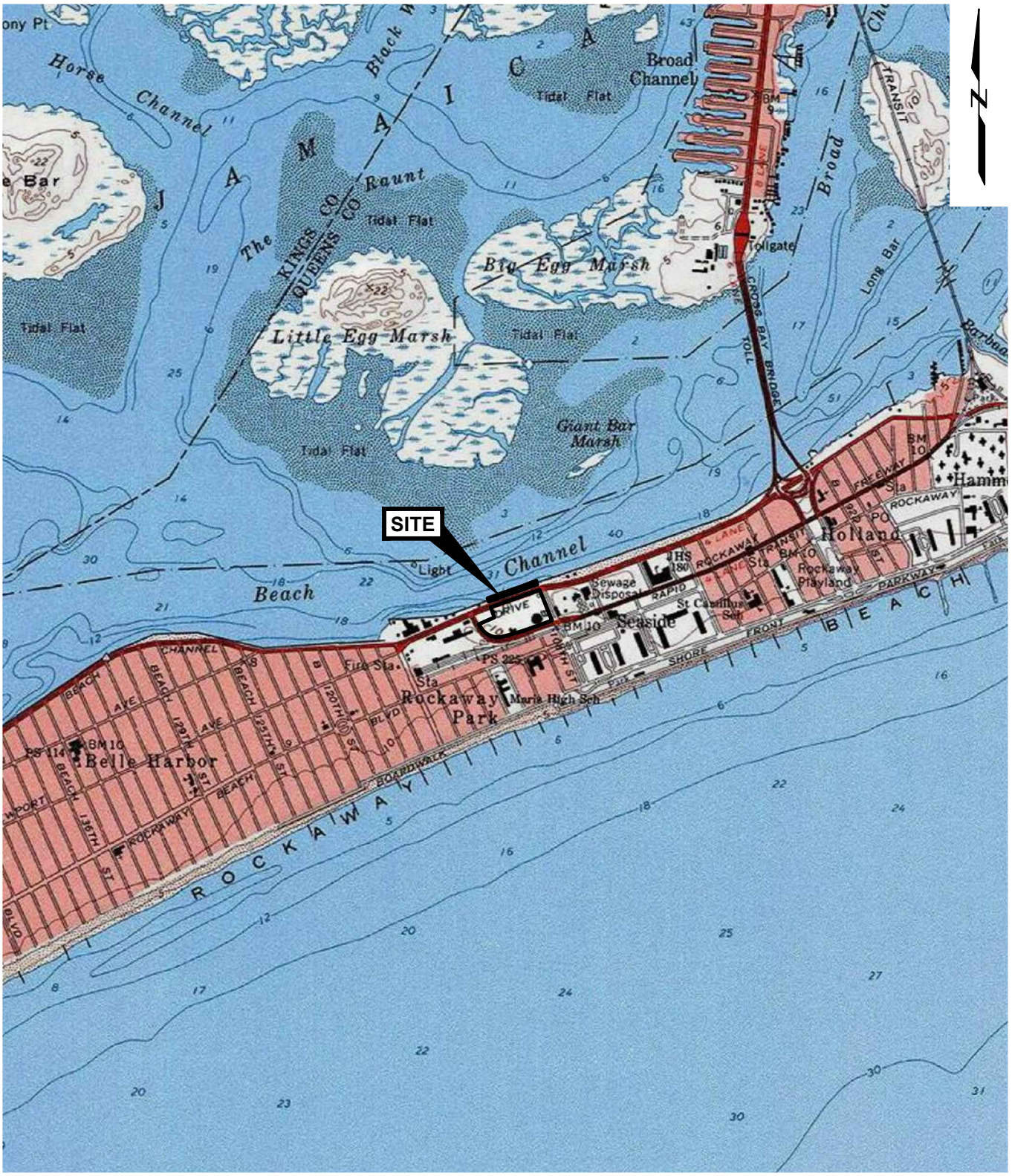
Table 2. Summary of 2000-2002 Analytical Exceedances in Soil Samples
Beach 108th Street
Rockaway Park Former MGP Site
Rockaway Park, New York

					Location Name	RPGP-27	RPGP-27	RPSB-61	RPSB-61	RPSB-63	RPSB-63	RPSB-98	RPSB-98	RPSB-98A	RPSB-98A	RPSB-99	RPSB-99
					Sample Name	RPGP-27 (12-16)	RPGP-27 (36-40)	RPSB-61 (10-12)	RPSB-61 (55-57)	RPSB-63 (15-17)	RPSB-63 (45-47)	RPSB-98 (4-6)	RPSB-98 (38-40)	RPSB-98A (6-8)	RPSB-98A (18-20)	RPSB-99 (6-8)	RPSB-99 (38-40)
					Start Depth	12	36	10	55	15	45	4	38	6	18	6	38
					End Depth	16	40	12	57	17	47	6	40	8	20	8	40
					Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
					Sample Date	07/23/2002	07/25/2002	02/10/2000	02/10/2000	02/23/2000	02/23/2000	11/07/2001	11/08/2001	11/09/2001	11/09/2001	11/14/2001	11/14/2001
Analyte	**Units**	**CAS No.**	**Unrestricted SCO**	**Commercial SCO**													
BTEX	mg/kg																
Benzene		71-43-2	0.06	44	**0.067**	0.001 U	**20**	0.001 U	0.001 U	0.001 U	**0.001**	0.001 U	0.001 U	0.001 U	**0.036**	0.001 U
Ethyl benzene		100-41-4	1	390	**0.035**	0.001 U	**190**	0.001 U	0.001 U	0.001 U	**0.004**	0.001 U	0.001 U	**0.002**	**0.041**	**0.002**
Toluene		108-88-3	0.7	500	0.001 U	0.001 U	**180**	**0.002**	0.001 U	0.001 U	0.001 U	**0.002**	**0.001**	**0.002**	**0.059**	**0.004**
Xylene (total)		1330-20-7	0.26	500	**0.05**	0.001 U	**2400**	**0.006**	0.001 U	0.001 U	**0.016**	0.001 U	0.001 U	**0.001**	**0.066**	**0.006**
Total BTEX					**0.152**	0	**2790**	**0.008**	0	0	**0.021**	**0.002**	**0.001**	**0.005**	**0.202**	**0.012**
Volatile Organic Compounds	ug/kg																
1,2,3-Trichlorobenzene		87-61-6	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone		78-93-3	120	500000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone		591-78-6	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone		67-64-1	50	500000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene, 1,2,4-trimethyl		95-63-6	3600	190000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-		108-67-8	8400	190000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene, 1-methylethyl- (Isopropylbenzene)		98-82-8	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide		75-15-0	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene		108-90-7	1,100	500,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene chloride		75-09-2	50	500000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene		104-51-8	12000	500000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene		103-65-1	3900	500000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene		135-98-8	11000	500000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		100-42-5	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene		127-18-4	1,300	150000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene		79-01-6	470	200000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane		75-69-4	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds	mg/kg																
Carcinogenic PAHs																	
Benzo(a)anthracene		56-55-3	1	5.6	0.4 U	NA	**1.2 J**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.1 J**	0.37 U	**0.28 J**	0.42 U
Benzo(a)pyrene		50-32-8	1	1	0.4 U	NA	**0.51 J**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.19 J**	0.37 U	**0.38**	0.42 U
Benzo(b)fluoranthene		205-99-2	1	5.6	0.4 U	NA	**0.77 J**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.2 J**	0.37 U	**0.66**	0.42 U
Benzo(k)fluoranthene		207-08-9	0.8	56	0.4 U	NA	**0.36 J**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.091 J**	0.37 U	**0.31 J**	0.42 U
Chrysene		218-01-9	1	56	0.4 U	NA	**1.3 J**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.11 J**	0.37 U	**0.4**	0.42 U
Dibenzo(a,h)anthracene		53-70-3	0.33	0.56	0.4 U	NA	1.6 U	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	0.41 U	0.37 U	0.35 U	0.42 U
Indeno(1,2,3-cd)pyrene		193-39-5	0.5	5.6	0.4 U	NA	**0.31 J**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.16 J**	0.37 U	**0.32 J**	0.42 U
Total Carcinogenic PAHs					0	NA	**4.45**	0	0	0	0	0	**0.851**	0	**2.35**	0
Non-Carcinogenic PAHs																	
2-Methylnaphthalene	mg/kg	91-57-6	NE	NE	0.4 U	NA	**14**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	0.41 U	0.37 U	**0.24 J**	0.42 U
Acenaphthene		83-32-9	20	500	0.4 U	NA	**0.94 J**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	0.41 U	0.37 U	**0.098 J**	0.42 U
Acenaphthylene		208-96-8	100	500	0.4 U	NA	**1 J**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.4 J**	0.37 U	**0.58**	0.42 U
Anthracene		120-12-7	100	500	0.4 U	NA	**1.3 J**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.11 J**	0.37 U	**0.16 J**	0.42 U
Benzo(g,h,i)perylene		191-24-2	100	500	0.4 U	NA	**0.31 J**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.18 J**	0.37 U	**0.3 J**	0.42 U
Fluoranthene		206-44-0	100	500	0.4 U	NA	**3.1**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.13 J**	0.37 U	**0.37**	0.42 U
Fluorene		86-73-7	30	500	0.4 U	NA	**3.6**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.071 J**	0.37 U	**0.12 J**	0.42 U
Naphthalene		91-20-3	12	500	0.4 U	NA	**46 D**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.16 J**	0.37 U	**0.48**	0.42 U
Phenanthrene		85-01-8	100	500	0.4 U	NA	**10**	**0.066 J**	0.39 U	0.38 U	0.38 U	0.4 U	**0.12 J**	0.37 U	**0.26 J**	0.42 U
Pyrene		129-00-0	100	500	0.4 U	NA	**4**	0.4 U	0.39 U	0.38 U	0.38 U	0.4 U	**0.17 J**	0.37 U	**0.46**	0.42 U
Total Non-Carcinogenic PAHs					0	NA	**84.25**	**0.066**	0	0	0	0	**1.341**	0	**3.068**	0
Total PAHs					0	NA	**88.7**	**0.066**	0	0	0	0	**2.192**	0	**5.418**	0
Other Semivolatile Organic Compounds	ug/lg																
1,2-Dichlorobenzene		95-50-1	1100	500000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-Methyl naphthalene		90-12-0	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol		120-83-2	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene		121-14-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol		95-48-7	330	500000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol		106-44-5	330	500000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene, hydroxy- (Phenol)		108-95-2	330	500000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate		117-81-7	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butylbenzylphthalate		85-68-7	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole		86-74-8	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran		132-64-9	7000	350000	400 U	NA	**770 J**	400 U	390 U	380 U	380 U	400 U	**54 J**	370 U	350 U	420 U
Di-n-butylphthalate		84-74-2	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octylphthalate		117-84-0	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine (1)		86-30-6	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Cymene (isopropyltoluene)		99-87-6	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals	mg/kg																
Aluminum		7429-90-5	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony		7440-36-0	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic		7440-38-2	13	16	NA	NA	0.43 U	**0.5 B**	0.39 U	0.47 U	NA	NA	NA	NA	NA	NA
Barium		7440-39-3	350	400	NA	NA	**1.9 B**	**1 B**	**1.7 B**	**2 B**	NA	NA	NA	NA	NA	NA
Beryllium		7440-41-7	7.2	590	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium		7440-43-9	2.5	9.3	NA	NA	0.043 U	**0.043 B**	**0.072 B**	**0.1 B**	NA	NA	NA	NA	NA	NA
Calcium		7440-70-2	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium		7440-47-3	NE	NE	NA	NA	**2.6**	**1.4 B**	**1.1 B**	**2.3 B**	NA	NA	NA	NA	NA	NA
Cobalt		7440-48-4	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper		7440-50-8	50	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron		7439-89-6	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		7439-92-1	63	1000	NA	NA	**6.1**	**0.41 B**	**0.89 B**	**0.96**	NA	NA	NA	NA	NA	NA
Magnesium		7439-95-4	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese		7439-96-5	1600	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury		7439-97-6	0.18	2.8	NA	NA	0.019 U	0.02 U	0.02 U	0.019 U	NA	NA	NA	NA	NA	NA
Nickel		7440-02-0	30	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium		7440-09-7	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium		7782-49-2	3.9	1500	NA	NA	**0.95 B**	**0.68 B**	0.39 U	0.47 U	NA	NA	NA	NA	NA	NA
Silver		7440-22-4	2	1500	NA	NA	0.22 U	**0.25 B**	0.2 U	0.23 U	NA	NA	NA	NA	NA	NA
Sodium		7440-23-5	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium		7440-28-0	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium		7440-62-2	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		7440-66-6	109	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Cyanide	mg/kg																
Cyanide, total		57-12-5	27	27	NA	NA	**0.29 B**	0.069 U	**0.12 B**	0.096 U	7 U	7 U	**1.6**	7 U	**0.38 B**	**3.3**

Table 2. Summary of 2000-2002 Analytical Exceedances in Soil Samples
Beach 108th Street
Rockaway Park Former MGP Site
Rockaway Park, New York

				Location Name	**RPSB-100**	**RPSB-100**
				Sample Name	**RPSB-100 (4-6)**	**RPSB-100 (36-38)**
				Start Depth	**4**	**36**
				End Depth	**6**	**38**
				Depth Unit	**ft**	**ft**
				Sample Date	**11/08/2001**	**11/08/2001**
Analyte	**Units**	**CAS No.**	**Unrestricted SCO**	**Commercial SCO**		
BTEX	mg/kg					
Benzene		71-43-2	0.06	44	0.001 U	0.001 U
Ethyl benzene		100-41-4	1	390	0.001 U	0.001 U
Toluene		108-88-3	0.7	500	**0.003**	**0.002**
Xylene (total)		1330-20-7	0.26	500	0.001 U	0.001 U
Total BTEX					**0.003**	**0.002**
Volatile Organic Compounds	ug/kg					
1,2,3-Trichlorobenzene		87-61-6	NE	NE	NA	NA
2-Butanone		78-93-3	120	500000	NA	NA
2-Hexanone		591-78-6	NE	NE	NA	NA
Acetone		67-64-1	50	500000	NA	NA
Benzene, 1,2,4-trimethyl		95-63-6	3600	190000	NA	NA
Benzene, 1,3,5-trimethyl-		108-67-8	8400	190000	NA	NA
Benzene, 1-methylethyl- (Isopropylbenzene)		98-82-8	NE	NE	NA	NA
Carbon disulfide		75-15-0	NE	NE	NA	NA
Chlorobenzene		108-90-7	1,100	500,000	NA	NA
Methylene chloride		75-09-2	50	500000	NA	NA
n-Butylbenzene		104-51-8	12000	500000	NA	NA
n-Propylbenzene		103-65-1	3900	500000	NA	NA
sec-Butylbenzene		135-98-8	11000	500000	NA	NA
Styrene		100-42-5	NE	NE	NA	NA
Tetrachloroethene		127-18-4	1,300	150000	NA	NA
Trichloroethene		79-01-6	470	200000	NA	NA
Trichlorofluoromethane		75-69-4	NE	NE	NA	NA
Semivolatile Organic Compounds	mg/kg					
Carcinogenic PAHs						
Benzo(a)anthracene		56-55-3	1	5.6	0.41 U	0.4 U
Benzo(a)pyrene		50-32-8	1	1	0.41 U	0.4 U
Benzo(b)fluoranthene		205-99-2	1	5.6	0.41 U	0.4 U
Benzo(k)fluoranthene		207-08-9	0.8	56	0.41 U	0.4 U
Chrysene		218-01-9	1	56	0.41 U	0.4 U
Dibenzo(a,h)anthracene		53-70-3	0.33	0.56	0.41 U	0.4 U
Indeno(1,2,3-cd)pyrene		193-39-5	0.5	5.6	0.41 U	0.4 U
Total Carcinogenic PAHs					0	0
Non-Carcinogenic PAHs						
2-Methylnaphthalene	mg/kg	91-57-6	NE	NE	0.41 U	0.4 U
Acenaphthene		83-32-9	20	500	0.41 U	0.4 U
Acenaphthylene		208-96-8	100	500	**0.23 J**	0.4 U
Anthracene		120-12-7	100	500	**0.11 J**	0.4 U
Benzo(g,h,i)perylene		191-24-2	100	500	**0.081 J**	0.4 U
Fluoranthene		206-44-0	100	500	0.41 U	0.4 U
Fluorene		86-73-7	30	500	0.41 U	0.4 U
Naphthalene		91-20-3	12	500	0.41 U	0.4 U
Phenanthrene		85-01-8	100	500	0.41 U	0.4 U
Pyrene		129-00-0	100	500	0.41 U	0.4 U
Total Non-Carcinogenic PAHs					**0.421**	0
Total PAHs					**0.421**	0
Other Semivolatile Organic Compounds	ug/lg					
1,2-Dichlorobenzene		95-50-1	1100	500000	NA	NA
1-Methyl naphthalene		90-12-0	NE	NE	NA	NA
2,4-Dimethylphenol		120-83-2	NE	NE	NA	NA
2,4-Dinitrotoluene		121-14-2	NA	NA	NA	NA
2-Methylphenol		95-48-7	330	500000	NA	NA
4-Methylphenol		106-44-5	330	500000	NA	NA
Benzene, hydroxy- (Phenol)		108-95-2	330	500000	NA	NA
Bis(2-ethylhexyl)phthalate		117-81-7	NE	NE	NA	NA
Butylbenzylphthalate		85-68-7	NE	NE	NA	NA
Carbazole		86-74-8	NE	NE	NA	NA
Dibenzofuran		132-64-9	7000	350000	410 U	400 U
Di-n-butylphthalate		84-74-2	NE	NE	NA	NA
Di-n-octylphthalate		117-84-0	NE	NE	NA	NA
N-Nitrosodiphenylamine (1)		86-30-6	NE	NE	NA	NA
p-Cymene (isopropyltoluene)		99-87-6	NE	NE	NA	NA
Metals	mg/kg					
Aluminum		7429-90-5	NE	NE	NA	NA
Antimony		7440-36-0	NE	NE	NA	NA
Arsenic		7440-38-2	13	16	NA	NA
Barium		7440-39-3	350	400	NA	NA
Beryllium		7440-41-7	7.2	590	NA	NA
Cadmium		7440-43-9	2.5	9.3	NA	NA
Calcium		7440-70-2	NE	NE	NA	NA
Chromium		7440-47-3	NE	NE	NA	NA
Cobalt		7440-48-4	NE	NE	NA	NA
Copper		7440-50-8	50	270	NA	NA
Iron		7439-89-6	NE	NE	NA	NA
Lead		7439-92-1	63	1000	NA	NA
Magnesium		7439-95-4	NE	NE	NA	NA
Manganese		7439-96-5	1600	10000	NA	NA
Mercury		7439-97-6	0.18	2.8	NA	NA
Nickel		7440-02-0	30	310	NA	NA
Potassium		7440-09-7	NE	NE	NA	NA
Selenium		7782-49-2	3.9	1500	NA	NA
Silver		7440-22-4	2	1500	NA	NA
Sodium		7440-23-5	NE	NE	NA	NA
Thallium		7440-28-0	NE	NE	NA	NA
Vanadium		7440-62-2	NE	NE	NA	NA
Zinc		7440-66-6	109	10000	NA	NA
Total Cyanide	mg/kg					
Cyanide, total		57-12-5	27	27	7 U	7 U

Figures



SOURCE:

U.S.G.S 7.5 Minute Topographic Maps, accessed via ArcGIS for AutoCAD

0 2000 4000

SCALE: 1" = 2000'

Subsurface Investigation Report
Rockaway Park Former MGP Site
Rockaway Park, New York

nationalgrid

GEI Consultants

SITE LOCATION FIGURE

Project 093150 | August 2018 | Fig. 1

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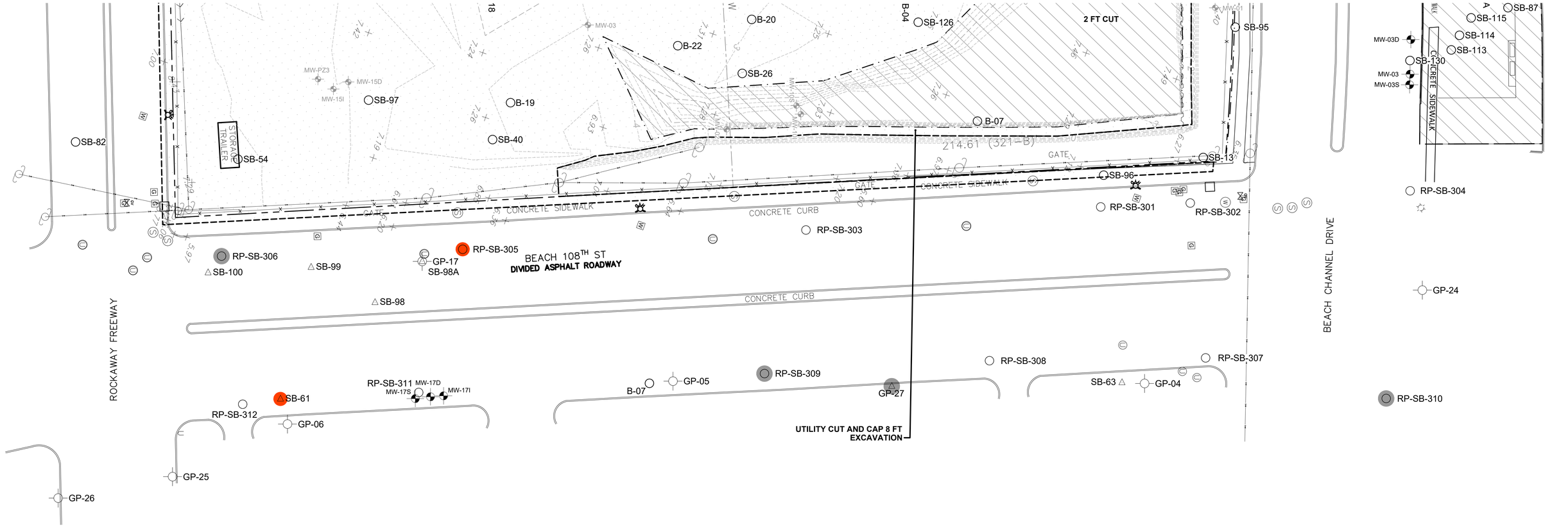
LEGEND:

- BOTTOM OF EXCAVATION CONTOUR
- AREA OF 2' CUT
- AREA OF 8' EXCAVATION
- MW-08D — EXISTING GROUNDWATER MONITORING WELL
- MW-02 — ABANDONED OR DESTROYED MONITORING WELL
- PROPERTY BOUNDARY
- FENCE
- DNAPL MIGRATION BARRIER
- RP-SB-301 — LOCATION OF JUNE 2018 SUBSURFACE INVESTIGATION BORING
- UNRESTRICTED SCO BORING - LOCATION INCLUDES ONE OR MORE INDIVIDUAL COMPOUND EXCEEDANCE OF UNRESTRICTED USE SCO
- COMMERCIAL SCO BORING - LOCATION INCLUDES ONE OR MORE INDIVIDUAL COMPOUND EXCEEDANCE OF COMMERCIAL USE SCO
- 2000-2002 HISTORICAL SUBSURFACE INVESTIGATION BORING



SOURCE:
BOUNDARY SURVEY, SECTION 062 - BLOCK 16166 - LOTS 110 & 155, ROCKAWAY PARK, QUEENS COUNTY, NEW YORK, PREPARED BY KENNON SURVEYING SERVICES INC., SCALE: 1" = 40', DATE: NOVEMBER 2016.

0 20 40
SCALE: 1" = 20'

Subsurface Investigation Report
Rockaway Park Former MGP Site
Rockaway Park, New York

nationalgrid

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BEACH 108TH STREET
SOIL SAMPLE
LOCATION PLAN

Project 093150 | August 2018 | Fig. 2

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Appendix A

Soil Boring Logs

Site Id: RPGP-27

GEI Consultants, Inc.

Client: Keyspan Energy, Inc.			
Project Number: 982482	Project Name: Rockaway Park	Date Started: 07/22/02	Date Completed: 07/23/02
Remarks:		Ground Elevation: 8.08'	Datum: Mean Sea Level
		Contractor: Zebra Environmental	Total Depth: 75.00'
		Drilling Method: Geoprobe	
		Logged By: Rachelle Noble	Certified By: Matt O'Neil

Split Spoon Sample Depth (ft.)	Blows Per 6 Inches	Recovery %	PID	Depth (ft.)	Soil Description: color, density, SOIL, admixture, moisture, other notes, ORIGIN.	Lithology / Physical Observations	Elevation (ft)
0–4		58	0.4 ppm		0'–4' Dry, tan, FINE SAND, non-representative. No odors or visual impacts.		
4–8		65	0.5 ppm		4'–8' Non-representative. Dry, tan, last 2" dark gray. FINE SAND to MED SAND. Stained material with diesel-like odor in last 2".		
8–12		100	49 ppm		8'–8'3" Wet, tan, FINE SAND, No visual impacts. Slight hydrogen sulfide odor. 8'3"–9' Wet, dark gray mottled with tan, FINE SAND, stained with slight diesel/Hydrogen sulfide odor. 9'–11'10" Wet, light gray with dark gray staining, FINE SAND. No visual product, moderate diesel/hydrogen sulfide odor.		0
				10			
					11'10"–12' Wet, dark gray, FINE SAND, stained with moderate diesel/hydrogen sulfide odor.		
12–16		88	93 ppm		12'–14' Wet, olive gray, MED SAND grading to FINE SAND. No visual impacts. Hydrogen sulfide like odor.		
					14'–15'5" Wet, olive gray, FINE SAND grading to MED SAND with shell fragments. Hydrocarbon odor, no visual impacts.		

Legend: Physical Observations

None | Blebs, Globs, Lenses, Grain Coating, Sheens | Stain | Tar Saturated | Solid Tar

Site Id: RPGP-27

GEI Consultants, Inc.

Client: Keyspan Energy, Inc.			
Project Number: 982482	Project Name: Rockaway Park	Date Started: 07/22/02	Date Completed: 07/23/02
Remarks:		Ground Elevation: 8.08'	Datum: Mean Sea Level
		Contractor: Zebra Environmental	Total Depth: 75.00'
		Drilling Method: Geoprobe	
		Logged By: Rachelle Noble	Certified By: Matt O'Neil

Split Spoon Sample Depth (ft.)	Blows Per 6 Inches	Recovery %	PID	Depth (ft.)	Soil Description: color, density, SOIL, admixture, moisture, other notes, ORIGIN.	Lithology / Physical Observations	Elevation (ft)
16–20		88	72 ppm		16'–20' Wet, olive gray, FINE and MED SAND with zone of COARSE SAND and shell fragments at 17'4" and 17'9". No visual impacts. Slight diesel like odor throughout		
							–10
20–24		100	14 ppm	20–	20'–24' Wet, olive gray, FINE SAND grading to MED SAND. No visual impact except brownish gray at 21'6". Gravel and shell fragments at 21'6" and 22'4"–22'10" slight hydrogen sulfide odor		
24–28		88	3.0 ppm		24'–28' Wet, olive gray, FINE SAND, layer of COARSE SAND and SMALL GRAVEL at 25' to 26'. No visual impacts. Slight hydrogen sulfide odor.		
28–32		88	4.0 ppm		28'–32' Wet, olive gray, FINE SAND, dense. No visual impacts. Mod hydrogen sulfide odor.		–20

Legend: Physical Observations

None | Blebs, Globs, Lenses, Grain Coating, Sheens | Stain | Tar Saturated | Solid Tar

Site Id: RPGP-27

GEI Consultants, Inc.

Client: Keyspan Energy, Inc.			
Project Number: 982482	Project Name: Rockaway Park	Date Started: 07/22/02	Date Completed: 07/23/02
Remarks:		Ground Elevation: 8.08'	Datum: Mean Sea Level
		Contractor: Zebra Environmental	Total Depth: 75.00'
		Drilling Method: Geoprobe	
		Logged By: Rachelle Noble	Certified By: Matt O'Neil

Split Spoon Sample Depth (ft.)	Blows Per 6 Inches	Recovery %	PID	Depth (ft.)	Soil Description: color, density, SOIL, admixture, moisture, other notes, ORIGIN.	Lithology / Physical Observations	Elevation (ft)
32–36		88	15 ppm		32'–36' Wet, olive gray, FINE SAND to MED SAND with shell fragments and SMALL GRAVEL at 33' – 33'7" No visual impacts, slight hydrogen sulfide odor.		
36–40		88	2.0 ppm		36'–40' Wet, olive gray, FINE SAND, non–cohesive, well sorted. No visual impacts or odors.		–30
40–44		54	7.9 ppm	40	40'–44' As Above		
44–48		54	2.6 ppm		44'–48' As Above		

Legend: Physical Observations — None; Blebs, Globs, Lenses, Grain Coating, Sheens; Stain; Tar Saturated; Solid Tar

Site Id: RPGP-27

GEI Consultants, Inc.

Client: Keyspan Energy, Inc.			
Project Number: 982482	Project Name: Rockaway Park	Date Started: 07/22/02	Date Completed: 07/23/02
Remarks:		Ground Elevation: 8.08'	Datum: Mean Sea Level
		Contractor: Zebra Environmental	Total Depth: 75.00'
		Drilling Method: Geoprobe	
		Logged By: Rachelle Noble	Certified By: Matt O'Neil

Split Spoon Sample Depth (ft.)	Blows Per 6 Inches	Recovery %	PID	Depth (ft.)	Soil Description: color, density, SOIL, admixture, moisture, other notes, ORIGIN.	Lithology / Physical Observations	Elevation (ft)
					48'–52' As Above with lens of MED SAND and SMALL GRAVEL at 49'.		
48–52		65	0.5 ppm				-40
				50			
52–56		88	1.1 ppm		52'–53'8" As Above 53'8"–54'10" Wet, olive gray, MED SAND with shell fragments, well sorted, dense. No odors or visual impacts. 54'10"–55'7" Wet, olive gray, FINE SAND, well sorted, dense. No odors or visual impacts.		
56–60		88	1.0 ppm		56'–60' Wet, Olive gray, MED SAND with SMALL GRAVEL and shell fragments, dense. No odors or visual impacts.		-50

Legend: Physical Observations

None | Blebs, Globs, Lenses, Grain Coating, Sheens | Stain | Tar Saturated | Solid Tar

Site Id: RPGP-27

GEI Consultants, Inc.

Client: Keyspan Energy, Inc.			
Project Number: 982482	Project Name: Rockaway Park	Date Started: 07/22/02	Date Completed: 07/23/02
Remarks:		Ground Elevation: 8.08'	Datum: Mean Sea Level
		Contractor: Zebra Environmental	Total Depth: 75.00'
		Drilling Method: Geoprobe	
		Logged By: Rachelle Noble	Certified By: Matt O'Neil

Split Spoon Sample Depth (ft.)	Blows Per 6 Inches	Recovery %	PID	Depth (ft.)	Soil Description: color, density, SOIL, admixture, moisture, other notes, ORIGIN.	Lithology	Physical Observations	Elevation (ft)
60–64		90	0.5 ppm		60'–64' Wet, olive gray, FINE SAND with shell fragments, dense. No odors or visual impacts.			
64–68		100	0.4 ppm		64'–65'10" Wet, dark brownish olive gray, VERY FINE SAND, cohesive. No odors or visual impacts.			
					65'10"–66'1" As Above with slight organic like odor.			
					66'1"–68' Wet, dark brown, VERY FINE SNAD, cohesive, as above with no odors or visual impacts.			
68–72		100	0.6 ppm		68'–72' Wet, dark brown, FINE SAND as above, well sorted. No odors or visual impacts.			–60
				70				
					72'–75' Wet, dark brown, VERY FINE SAND, well sorted, cohesive, no odors or visual impacts.			
72–76		75	0.3 ppm					
					END OF BORING AT 75'.			

Legend: Physical Observations

None | Blebs, Globs, Lenses, Grain Coating, Sheens | Stain | Tar Saturated | Solid Tar

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Site Id: RPSB-61

Location: Rockaway Park

Purpose: Soil Boring

Date(s): 02/10/00 - 02/10/00

Total Depth: 57.00'

Elevation: 7.68'

Datum: Mean Sea Level

Logged By: John Schafer

Drilling Method: Hollow Stem Auger

Contractor: LAWES

Borehole Dia.: 2.00in

Remarks: Samples selected for analysis at 10-12' and 55-57'. No HCN for 15-17' and 20-22' due to previous high concentrations.

Depth (ft)	Recovery	Sample Interval	Discrete PID	Discrete HCN	Graphic Log	Material Description
5		5-7'	20.5 ppm 25.7 ppm 31.3 ppm	3.0 ppm		Tan-gray, fine-med SAND, loose, w/sewage-like odor, wet at 6'
10		10-12'	200 ppm 2000+ ppm 2000+ ppm	7.0 ppm 12 ppm 15 ppm		Gray, fine-med SAND, med dense, w/heavy solvent-like odor, wet
15		15-17'	60.0 ppm 150 ppm 70.0 ppm			Dark gray-black, fine-coarse SAND, w/some gravel & shells, solvent-like odor
20		20-22'	35.0 ppm 19.0 ppm 27.0 ppm			Same as above
25		25-27'	11.7 ppm 28.5 ppm 24.9 ppm	3.0 ppm		Gray, fine-coarse SAND & GRAVEL, solvent-like odor

Location: Rockaway Park	Site Id: RPSB-61
Purpose: Soil Boring	Total Depth: 57.00'
Consulting Firm: Dvirka & Bartilucci	Borehole Dia.: 2.00in

Depth (ft)	Recovery	Sample Interval	Discrete PID	Discrete HCN	Graphic Log	Material Description
		30-32'	30.0 ppm 50.0 ppm			Gray, fine SAND, med dense, w/slight solvent-like odor, wet
35		35-37'	48.2 ppm 50.1 ppm			Gray, fine SAND, dense, no odor, wet
40		40-42'	7.3 ppm 11.9 ppm			Same as above
45		45-47'	15.5 ppm 13.2 ppm			Gray, fine SAND, med dense, w/shells, wet
50		50-52'	17.5 ppm			Gray, fine-med SAND, med dense, wet
55		55-57'	8.7 ppm 9.1 ppm			Same as above
60						Same as above Base of boring - 57 ft.
65						

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Site Id: RPSB-63

Location: Rockaway Park

Purpose: Soil Boring

Date(s): 02/23/00 - 02/23/00

Total Depth: 47.00'

Elevation: 8.16'

Datum: Mean Sea Level

Logged By: Patrick West

Drilling Method: Hydraulic hammer

Contractor: Zebra Environmental

Borehole Dia.: 2.00in

Remarks: Samples selected for analysis at 15-17' and 45-47'.

Depth (ft)	Recovery	Sample Interval	PID	Graphic Log	Material Description
5		5-7'	0.0 ppm		Tan-brown, fine-med SAND, loose, moist
10		10-12'	0.0 ppm		Gray, med-fine SAND, med dense, moist
15		15-17'	1.3 ppm 2.5 ppm		Same as above, w/NAPL/naphthalene-like odor
20		20-22'	21.5 ppm 20.3 ppm		Same as above
25		25-27'	240 ppm 216 ppm		Same as above

Location: Rockaway Park	Site Id: RPSB-63
Purpose: Soil Boring	Total Depth: 47.00'
Consulting Firm: Dvirka & Bartilucci	Borehole Dia.: 2.00in

Depth (ft)	Recovery	Sample Interval	PID	Graphic Log	Material Description
		30–32'	31.5 ppm 14.7 ppm		Gray, med–fine SAND, w/mild NAPL/naphthalene–like odor, hydrogen sulfide–like odor, some staining, medium dense, wet
35		35–37'	18.5 ppm 18.9 ppm		Same as above, no staining
40		40–42'	0.0 ppm		Gray, med–fine SAND, w/mild hydrogen sulfide–like odor, med dense, moist
45		45–47'	0.0 ppm		Gray, med–fine SAND, w/mild hydrogen sulfide–like odor, med dense, moist
					Base of boring– 47 ft.
50					
55					
60					
65					

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Site Id: RPSB-98

Location: Rockaway Park

Purpose: Soil Boring

Date(s): 11/07/01 - 11/08/01

Total Depth: 40.00'

Elevation: 8.20'

Datum: Mean Sea Level

Logged By: William J. Ryan

Drilling Method: Hand Augered 0-4', Geoprobe 4-40'

Contractor: Zebra Environmental

Borehole Dia.: 2.00in

Remarks: Samples selected for analysis at 4-6' and 38-40'.

Depth (ft)	Recovery	Sample Interval	PID	Graphic Log	Material Description
		0-4'	0.0 ppm		Tan-orange, medium sandy FILL w/gravel, road stone, loose, dry (composite sample)
		4-8'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 2.0 ppm 6.0 ppm		Light brown (gray 6.2-6.7'), medium SAND, loose, black banding at 6.2', mild hydrocarbon-like odor, dry-moist at 5.7', wet at 6.2'
5		8-12'	20.5 ppm 25.2 ppm 5.1 ppm 0.8 ppm 2.6 ppm 9.0 ppm 7.3 ppm		Gray, fine-medium SAND, loose, dark black staining in bottom 4", possible sewage-like odor near top, very mild naphthalene-like odor, wet
10		12-16'	612 ppm 161 ppm 220 ppm 116 ppm		Charcoal gray, fine-medium SAND (coarse in top 3-5"), loose, solvent/sewage-like odor, wet
15		16-20'	562 ppm 82.8 ppm 75.8 ppm 79.2 ppm 129 ppm 111 ppm		Charcoal gray, medium-coarse SAND w/fine gravel and sea shells, loose, strong solvent/sewage-like odor, wet
20		20-24'	260 ppm 83.1 ppm 63.7 ppm 155 ppm 29.3 ppm 21.3 ppm 4.0 ppm		Charcoal gray, m-c SAND w/trace fine gravel, loose, odor as above, wet Charcoal gray, fine-medium SAND, loose, mild solvent/sewage-like odor, wet
25		24-28'	0.9 ppm 3.6 ppm 0.9 ppm 1.4 ppm 3.5 ppm 13.2 ppm 3.4 ppm		Same as above, fine-medium-coarse (26.5-27.5'), mild sewage-like odor
		28-32'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm		Charcoal gray, fine-medium-coarse SAND, loose, mild sewage-like odor, wet

Location: Rockaway Park	Site Id: RPSB-98
Purpose: Soil Boring	Total Depth: 40.00'
Consulting Firm: Dvirka & Bartilucci	Borehole Dia.: 2.00in

Depth (ft)	Recovery	Sample Interval	PID	Graphic Log	Material Description
			0.0 ppm 0.0 ppm		Charcoal gray, fine-medium SAND, loose, mild sewage-like odor, wet
			0.0 ppm		Same as above, mild organic (H2S-like)/sewage-like odor
		32-36'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm		
35					
			0.0 ppm		Gray, fine-medium SAND, loose, wet
		36-40'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm		
40					Base of boring - 40 ft.
45					
50					
55					
60					
65					

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Site Id: RPSB-98A

Location: Rockaway Park

Purpose: Soil Boring

Date(s): 11/09/01 - 11/09/01

Total Depth: 20.00'

Elevation: 8.19'

Datum: Mean Sea Level

Logged By: William J. Ryan

Drilling Method: Hand Augered 0-5', Geoprobe 5-20'

Contractor: Zebra Environmental

Borehole Dia.: 2.00in

Remarks: Samples selected for analysis at 6-8' and 18-20'.

Depth (ft)	Recovery	Sample Interval	PID	Graphic Log	Material Description
		0-5'	0.0 ppm		Orange-tan, medium sandy FILL w/fine gravel, road stone, loose, dry (composite sample)
5		5-8'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm		Orange-tan, fine-medium sandy FILL, loose, coal fragments, dry Gray, fine-medium SAND, loose, wet
		8-12'	0.8 ppm 1.8 ppm 11.5 ppm 20.5 ppm 86 ppm		Charcoal gray-black, fine-medium-coarse SAND, loose, strong hydrocarbon/solvent/sewage-like odor, wet
10			94.2 ppm 44.6 ppm 58.4 ppm		
		12-16'	1.6 ppm 1.2 ppm 9.6 ppm 464 ppm 723 ppm 757 ppm		Black, fine-medium SAND, loose, hydrocarbon/solvent/sewage-like odor, wet
15		16-20'	1.3 ppm 0.8 ppm 1.4 ppm 2.3 ppm 0.9 ppm 0.8 ppm		Black, fine-medium-coarse SAND w/trace of fine gravel, loose, mild organic (H2S-like) odor, wet
20					Base of boring - 20 ft.
25					

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Site Id: RPSB-99

Location: Rockaway Park

Purpose: Soil Boring

Date(s): 11/14/01 - 11/14/01

Total Depth: 40.00'

Elevation: 8.06'

Datum: Mean Sea Level

Logged By: William J. Ryan

Drilling Method: Hand Augered 0-5', Geoprobe 5-40'

Contractor: Zebra Environmental

Borehole Dia.: 2.00in

Remarks: Samples selected for analysis at 6-8' and 38-40'.

Depth (ft)	Recovery	Sample Interval	PID	Graphic Log	Material Description
		0-5'			FILL, asphalt and road stone Dark brown-gray-orange, medium SAND, loose, dry
5		5-8'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 1.0 ppm		Dark brown-tan, fine-medium SAND, loose, black from 6.75-7.75', dry-wet at 6.75'
		8-12'	30.4 ppm 650 ppm 1221 ppm 340 ppm 2000+ ppm 1163 ppm		Black, fine-medium SAND, loose, solvent/sewage-like odor, wet
10		12-16'	2000+ ppm 1322 ppm 360 ppm 620 ppm 778 ppm		Same as above
15		16-20'	36.5 ppm 23.7 ppm 12.4 ppm 3.7 ppm 35 ppm 3.8 ppm		Same as above, med-coarse from 17.7-18.7', odor not as strong
20		20-24'	6.0 ppm 4.3 ppm 5.7 ppm 0.4 ppm 1.0 ppm 0.6 ppm 1.8 ppm		Gray, fine-medium SAND, loose, wet
25		24-28'	29 ppm 11.1 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm		Gray, fine-medium-coarse SAND w/trace sea shells, loose, wet
		28-32'	26.7 ppm 0.0 ppm 0.0 ppm 0.0 ppm		Gray, fine-medium SAND, loose, no distinct odor, wet

Location: Rockaway Park	Site Id: RPSB-99
Purpose: Soil Boring	Total Depth: 40.00'
Consulting Firm: Dvirka & Bartilucci	Borehole Dia.: 2.00in

Depth (ft)	Recovery	Sample Interval	PID	Graphic Log	Material Description
			0.0 ppm		Gray, fine-medium SAND, loose, no distinct odor, wet
			23.2 ppm		Same as above, mild solvent/sewage-like odor near top only
		32-36'	15.4 ppm		
			3.9 ppm		
			0.0 ppm		
			0.8 ppm		
35			0.0 ppm		
			0.4 ppm		Gray, fine-medium SAND, loose, slight solvent/sewage-like odor, wet
		36-40'	0.0 ppm		
			9.7 ppm		
			0.0 ppm		
			0.0 ppm		
			0.0 ppm		
40			0.0 ppm		Base of boring - 40 ft.
45					
50					
55					
60					
65					

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Site Id: RPSB-100

Location: Rockaway Park

Purpose: Soil Boring

Date(s): 11/09/01 - 11/09/01

Total Depth: 40.00'

Remarks: Samples selected for analysis at 4-6' and 36-38'.

Elevation: 7.86'

Datum: Mean Sea Level

Logged By: William J. Ryan

Drilling Method: Hand Augered 0-5', Geoprobe 5-40'

Contractor: Zebra Environmental

Borehole Dia.: 2.00in

Depth (ft)	Recovery	Sample Interval	PID	Graphic Log	Material Description
		0-5'	0.0 ppm		Brown-orange, medium sandy FILL w/trace fine gravel and brick fill, loose, trace coal, dry (composite sample)
5		5-8'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm		Gray, fine-medium sandy FILL, loose, wet
		8-12'	0.0 ppm 0.0 ppm 0.2 ppm 14.7 ppm 16.8 ppm 21.5 ppm 29.6 ppm 88.3 ppm		Same as above Dark gray-charcoal gray, f-m sandy FILL, loose, black banding at 9.5', transitions to bk at 10.5', hydrocarbon/sewage-like odor, wet
10		12-16'	22.9 ppm 52.9 ppm 48.9 ppm 131 ppm 44.9 ppm 21.9 ppm 43 ppm		Black, fine-medium sandy FILL, loose, strong hydrocarbon/solvent/sewage-like odor, wet Same as above, gray, trace coal fragments, odor not as strong
15		16-20'	1.3 ppm 0.9 ppm 0.2 ppm 0.6 ppm 0.9 ppm 1.2 ppm 0.8 ppm		Black, fine-medium-coarse SAND w/trace fine gravel, loose, sewage-like odor, wet
20		20-24'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm		Same as above Black-charcoal gray, fine-medium-coarse SAND, loose, wet
		24-28'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm		Same as above, charcoal gray
25		28-32'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm		Gray, fine-medium SAND, loose, wet

Location: Rockaway Park	Site Id: RPSB-100
Purpose: Soil Boring	Total Depth: 40.00'
Consulting Firm: Dvirka & Bartilucci	Borehole Dia.: 2.00in

Depth (ft)	Recovery	Sample Interval	PID	Graphic Log	Material Description
			0.0 ppm 0.0 ppm		Gray, fine-medium SAND, loose, wet
		32-36'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm		Same as above
35		36-40'	0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm		Same as above
40					Base of boring - 40 ft.
45					
50					
55					
60					
65					

DRAFT

GEI Consultants, Inc. P.C.
455 Winding Brook Drive
Suite 201
Glastonbury, CT 06033
(860) 368-5300

CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-301

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/11/2018 - 6/13/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 6.00
GENERAL NOTE:

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	SAMPLE INFO: PEN/REC FT./FT.	SAMPLE INFO: PID (PPM)	STRATA	VISUAL IMPACTS	ODOR	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	0.9				RP-SB-301 (0-12) COMPOSITE, DUP-061318 A	(0'- 0.3') ASPHALT; 100% asphalt. (0.3'- 1.7') CONCRETE; 100% concrete, possibly wire mesh.
							NLO		(1.7'- 6') POORLY GRADED SAND (SP); ~95% sand, fine to medium, ~5% gravel, fine to medium, subrounded; max. gravel size .75", slight naphthalene-like odor, moist, brown.
	5								
▽		S2	4/2.8	0.0					(6'- 10') POORLY GRADED SAND (SP); ~95% sand, fine to medium, ~5% gravel, fine, subangular; max. gravel size .5", wet, brown.
	10	S3	2/2	0.0				RP-SB-301 (11-12) GRAB	(10'- 12') POORLY GRADED SAND (SP); ~100% sand, fine to medium; wet, light brown.
									End of Boring at 12 feet. Backfilled with Cuttings.

NOTES:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (PPM)
JHS = JAR HEADSPACE PID READING (PPM)

NA = NOT APPLICABLE
NM = NOT MEASURED
Q_P = POCKET PENETROMETER
S_V = TORVANE PEAK

ppm = PARTS PER MILLION
IN. = INCHES
FT. = FEET

NLO = NAPHTHALENE LIKE ODOR
PLO = PETROLEUM LIKE ODOR
TLO = TAR LIKE ODOR
CLO = CHEMICAL LIKE ODOR
ALO = ASPHALT LIKE ODOR

CrLO= CREOSOTE LIKE ODOR
OLO = ORGANIC LIKE ODOR
SLO = SULFUR LIKE ODOR
MLO = MUSTY LIKE ODOR

ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

DRAFT

GEI Consultants, Inc. P.C.
455 Winding Brook Drive
Suite 201
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(860) 368-5300

CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-302

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/11/2018 - 6/13/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 6.00
GENERAL NOTE:

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	PEN/REC FT./FT.	PID (PPM)	STRATA	VISUAL IMPACTS	ODOR	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	0.2				RP-SB-302 (0-12) COMPOSITE	(0'- 0.4') ASPHALT; 100% asphalt. (0.4'- 1.1') CONCRETE; 100% concrete. (1.1'- 6') POORLY GRADED SAND (SP); ~100% sand, fine; trace silt, slight naphthalene-like odor, moist, brown.
	5						NLO		
▽		S2	4/2.3	0.0					(6'- 8.3') POORLY GRADED SAND (SP); ~90% sand, fine to medium, ~10% gravel, fine to medium, subangular; max. gravel size .75", wet, brown.
				0.0					(8.3'- 10') POORLY GRADED SAND (SP); ~100% sand, fine to medium; wet, reddish brown.
	10	S3	2/2	0.0				RP-SB-302 (11-12) GRAB, DUP-061318 GRAB	(10'- 12') POORLY GRADED SAND (SP); ~100% sand, fine; wet, gray.
									End of Boring at 12 feet. Backfilled with Cuttings.

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S_V = TORVANE PEAK

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IN. = INCHES
FT. = FEET

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CLO = CHEMICAL LIKE ODOR
ALO = ASPHALT LIKE ODOR

CrLO= CREOSOTE LIKE ODOR
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MLO = MUSTY LIKE ODOR

ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

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CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-303

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/11/2018 - 6/13/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 7.00
GENERAL NOTE:

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	SAMPLE INFO: PEN/REC FT./FT.	SAMPLE INFO: PID (PPM)	STRATA	VISUAL IMPACTS	ODOR	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	0.1				RP-SB-303 (0-12) COMPOSITE	(0'- 0.4') ASPHALT; 100% asphalt. (0.4'- 1.3') CONCRETE; 100% concrete.
							NLO		(1.3'- 6') POORLY GRADED SAND (SP); ~95% sand, fine to medium, ~5% gravel, fine to medium, subrounded; max. gravel size .75", slight naphthalene-like odor, moist, brown.
	5								
▽		S2	4/3.3	0.0					(6'- 9.2') POORLY GRADED SAND (SP); ~100% sand, fine to medium; wet, tan.
				0.0					(9.2'- 10') POORLY GRADED SAND (SP); ~100% sand, fine to medium; wet, gray.
	10	S3	2/2	1.4			SLO	RP-SB-303 (11-12) GRAB	(10'- 10.2') POORLY GRADED SAND (SP); ~100% sand, fine to medium; slight sulfur-like odor, wet, black.
				0.0					(10.2'- 12') POORLY GRADED SAND (SP); ~100% sand, fine to medium; wet, gray.
									End of Boring at 12 feet. Backfilled with Cuttings.

NOTES:

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JHS = JAR HEADSPACE PID READING (PPM)

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NM = NOT MEASURED
Q_P = POCKET PENETROMETER
S_V = TORVANE PEAK

ppm = PARTS PER MILLION
IN. = INCHES
FT. = FEET

NLO = NAPHTHALENE LIKE ODOR
PLO = PETROLEUM LIKE ODOR
TLO = TAR LIKE ODOR
CLO = CHEMICAL LIKE ODOR
ALO = ASPHALT LIKE ODOR

CrLO= CREOSOTE LIKE ODOR
OLO = ORGANIC LIKE ODOR
SLO = SULFUR LIKE ODOR
MLO = MUSTY LIKE ODOR

ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

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CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-304

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/12/2018 - 6/14/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 6.00
GENERAL NOTE:

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	SAMPLE INFO: PEN/REC FT./FT.	SAMPLE INFO: PID (PPM)	STRATA	VISUAL IMPACTS	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	0.3			RP-SB-304 (0-12) COMPOSITE	(0'- 0.5') ASPHALT; 100% asphalt.
								(0.5'- 1.4') CONCRETE; 100% concrete.
								(1.4'- 5') POORLY GRADED SAND (SP); ~95% sand, fine, ~5% gravel, fine, subrounded; max. gravel size 0.25", moist, brown.
	5							
▽		S2	4/2.1	0.0				(6'- 8.3') WELL GRADED SAND WITH SILT AND GRAVEL (SW-SM); ~70% sand, fine to coarse, ~20% gravel, fine to coarse, ~10% fines; max. gravel size .75", moist, brown.
				0.0				(8.3'- 10') POORLY GRADED SAND (SP); ~100% sand, fine; wet, brown, Shell fragments.
	10	S3	2/1.1	0.0			RP-SB-304 (11-12) GRAB	(10'- 12') POORLY GRADED SAND (SP); ~100% sand, fine to medium; wet, brown, Shell fragments.
								End of Boring at 12 feet. Backfilled with Cuttings.

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TLO = TAR LIKE ODOR
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ALO = ASPHALT LIKE ODOR

CrLO= CREOSOTE LIKE ODOR
OLO = ORGANIC LIKE ODOR
SLO = SULFUR LIKE ODOR
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ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

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CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-305

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/11/2018 - 6/13/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 6.00
GENERAL NOTE:

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	PEN/REC FT./FT.	PID (PPM)	STRATA	VISUAL IMPACTS	ODOR	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	24.6				RP-SB-305 (0-12) COMPOSITE	(0'- 0.5') ASPHALT; 100% asphalt.
									(0.5'- 1.2') CONCRETE; 100% concrete.
									(1.2'- 6') POORLY GRADED SAND (SP); ~95% sand, fine, ~5% gravel, fine, subangular; max. gravel size .75", moderate naphthalene-like odor, moist, brown.
							NLO		
	5								
▽		S2	4/2.6	0.0					(6'- 7.7') POORLY GRADED SAND WITH SILT (SP-SM); ~90% sand, fine to medium, ~10% fines; wet, brown.
				204.1			PLO		(7.7'- 8.5') POORLY GRADED SAND (SP); ~100% sand, fine; moderate petroleum-like odor, moist, brown, some staining.
				228.6			PLO		(8.5'- 10') POORLY GRADED SAND (SP); ~100% sand, fine; moderate petroleum-like odor, moist, black, slight sheen.
	10	S3	2/2	256.4				RP-SB-305 (11-12) GRAB	(10'- 12') POORLY GRADED SAND (SP); ~100% sand, fine; moderate petroleum-like odor, moist, black, sheen.
							PLO		
									End of Boring at 12 feet. Backfilled with Cuttings.

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S_V = TORVANE PEAK

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IN. = INCHES
FT. = FEET

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ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

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CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-306

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/11/2018 - 6/13/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 6.00
GENERAL NOTE:

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	SAMPLE INFO: PEN/REC FT./FT.	SAMPLE INFO: PID (PPM)	STRATA	VISUAL IMPACTS	ODOR	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	81.6				RP-SB-306 (0-12) COMPOSITE	(0'- 0.4') ASPHALT; 100% asphalt. (0.4'- 1.2') CONCRETE; 100% concrete.
							NLO		(1.2'- 6') POORLY GRADED SAND (SP); ~95% sand, fine, ~5% gravel, fine, subangular; max. gravel size .5", moderate naphthalene-like odor, moist, brown.
	5	S2	4/3	118.7			PLO		(6'- 6.8') WELL GRADED SAND WITH SILT AND GRAVEL (SW-SM); ~65% sand, fine to coarse, ~25% gravel, fine to coarse, subangular, ~10% fines; max. gravel size 1.75", moist, brown. (6.8'- 10') POORLY GRADED SAND (SP); ~100% sand, fine; moderate petroleum-like odor, wet, gray.
	10	S3	2/2	382.2			PLO	RP-SB-306 (11-12) GRAB	(10'- 12') POORLY GRADED SAND (SP); ~100% sand, fine; moderate petroleum-like odor, wet, gray.
									End of Boring at 12 feet. Backfilled with Cuttings.

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S_V = TORVANE PEAK

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FT. = FEET

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ALO = ASPHALT LIKE ODOR

CrLO= CREOSOTE LIKE ODOR
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MLO = MUSTY LIKE ODOR

ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

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CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-307

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/12/2018 - 6/14/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 6.00
GENERAL NOTE:

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	SAMPLE INFO: PEN/REC FT./FT.	SAMPLE INFO: PID (PPM)	STRATA	VISUAL IMPACTS	ODOR	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	0.3				RP-SB-307 (0-12) COMPOSITE	(0'- 1') ASPHALT; 100% asphalt.
							NLO		(1'- 1.2') WELL GRADED GRAVEL; 100% concrete, processed gravel sub-base material.. (1.2'- 6') POORLY GRADED SAND (SP); ~100% sand, fine; slight naphthalene-like odor, moist, brown.
	5								
▽		S2	4/2.5	1.7					(6'- 6.6') POORLY GRADED SAND (SP); ~100% sand, fine; wet, brown, shell fragments.
				1.8			NLO		(6.6'- 7.6') POORLY GRADED SAND (SP); ~100% sand, fine; slight naphthalene-like odor, wet, blackish gray.
				1.1			NLO		(7.6'- 8.6') POORLY GRADED SAND (SP); ~100% sand, fine; slight naphthalene-like odor, wet, brown.
				78.2			PLO		(8.6'- 10') POORLY GRADED SAND (SP); ~100% sand, fine; moderate petroleum-like odor, wet, black, shell fragments.
	10	S3	2/2	470				RP-SB-307 (11-12) GRAB	(10'- 12') POORLY GRADED SAND (SP); ~100% sand, fine; strong petroleum-like odor, wet, dark gray.
							PLO		
									End of Boring at 12 feet. Backfilled with Cuttings.

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ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

DRAFT

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CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-308

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/12/2018 - 6/14/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 7.00
GENERAL NOTE:

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	PEN/REC FT./FT.	PID (PPM)	STRATA	VISUAL IMPACTS	ODOR	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	7.3				RP-SB-308 (0-12) COMPOSITE	(0'- 0.5') ASPHALT; 100% asphalt.
									(0.5'- 1.1') CONCRETE; 100% concrete.
									(1.1'- 6') POORLY GRADED SAND (SP); ~95% sand, fine, ~5% gravel, fine, subrounded; max. gravel size .5", moderate naphthalene-like odor, moist, brown.
	5						NLO		
▽		S2	4/1.9	0.1					(6'- 9.4') POORLY GRADED SAND (SP); ~95% sand, fine to coarse, ~5% gravel, fine, subrounded; max. gravel size .5", wet, brown.
				0.9					(9.4'- 10') POORLY GRADED SAND (SP); ~100% sand, fine; wet, gray.
	10	S3	2/2	1.3				RP-SB-308 (11-12) GRAB	(10'- 11.3') POORLY GRADED SAND (SP); ~100% sand, fine; wet, gray.
				4.8			SLO		(11.3'- 11.4') POORLY GRADED SAND (SP); ~100% sand, fine; slight sulfur-like odor, wet, black.
							SLO		(11.4'- 12') POORLY GRADED SAND (SP); ~100% sand, fine; slight sulfur-like odor, wet, gray, shell fragments.
									End of Boring at 12 feet.
									Backfilled with Cuttings.

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ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

DRAFT

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CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-309

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/12/2018 - 6/14/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 6.00
GENERAL NOTE:

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	SAMPLE INFO: PEN/REC FT./FT.	SAMPLE INFO: PID (PPM)	STRATA	VISUAL IMPACTS	ODOR	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	0.0				RP-SB-309 (0-12) COMPOSITE, MS/MSD	(0'- 0.5') ASPHALT; 100% asphalt. (0.5'- 1.5') CONCRETE; 100% concrete. (1.5'- 6') POORLY GRADED SAND (SP); ~100% sand, fine; moist, light brown.
▽	5	S2	4/2.3	0.0					(6'- 7.2') POORLY GRADED SAND (SP); ~100% sand, fine; wet, brown. (7.2'- 10') POORLY GRADED SAND (SP); ~100% sand, fine to medium; wet, gray.
	10	S3	2/2	0 1.1			SLO SLO	RP-SB-309 (11-12) GRAB	(10'- 11.7') POORLY GRADED SAND (SP); ~100% sand, fine to medium; slight sulfur-like odor, wet, gray. (11.7'- 12') POORLY GRADED SAND (SP); ~100% sand, fine to medium; moderate sulfur-like odor, wet, black. End of Boring at 12 feet. Backfilled with Cuttings.

NOTES:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (PPM)
JHS = JAR HEADSPACE PID READING (PPM)

NA = NOT APPLICABLE
NM = NOT MEASURED
Q_P = POCKET PENETROMETER
S_V = TORVANE PEAK

ppm = PARTS PER MILLION
IN. = INCHES
FT. = FEET

NLO = NAPHTHALENE LIKE ODOR
PLO = PETROLEUM LIKE ODOR
TLO = TAR LIKE ODOR
CLO = CHEMICAL LIKE ODOR
ALO = ASPHALT LIKE ODOR

CrLO= CREOSOTE LIKE ODOR
OLO = ORGANIC LIKE ODOR
SLO = SULFUR LIKE ODOR
MLO = MUSTY LIKE ODOR

ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

DRAFT

GEI Consultants, Inc. P.C.
455 Winding Brook Drive
Suite 201
Glastonbury, CT 06033
(860) 368-5300

CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-310

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/12/2018 - 6/14/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 6.00
GENERAL NOTE: 1st attempt refused @ 11' bgs. ADT offset and resumed soil boring.

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	PEN/REC FT./FT.	PID (PPM)	STRATA	VISUAL IMPACTS	ODOR	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	0.0				RP-SB-310 (0-12) COMPOSITE	(0'- 0.6') ASPHALT; 100% asphalt. (0.6'- 0.9') CONCRETE; 100% concrete. (0.9'- 6') POORLY GRADED SAND (SP); ~95% sand, fine, ~5% gravel, fine, subrounded; max. gravel size 0.25", moist, brown.
▽	5	S2	4/1.6	5.6			NLO		(6'- 10') POORLY GRADED SAND (SP); ~95% sand, fine, ~5% gravel, fine, subrounded; max. gravel size 0.35", slight naphthalene-like odor, wet, black.
	10	S3	2/2	7.9				RP-SB-310 (11-12) GRAB	(10'- 12') POORLY GRADED SAND (SP); ~95% sand, fine, ~5% gravel, fine, subrounded; max. gravel size 0.35", wet, black, creosote treated pile fragments.
									End of Boring at 12 feet. Backfilled with Cuttings.

NOTES:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (PPM)
JHS = JAR HEADSPACE PID READING (PPM)

NA = NOT APPLICABLE
NM = NOT MEASURED
Q_P = POCKET PENETROMETER
S_V = TORVANE PEAK

ppm = PARTS PER MILLION
IN. = INCHES
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NLO = NAPHTHALENE LIKE ODOR
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CrLO= CREOSOTE LIKE ODOR
OLO = ORGANIC LIKE ODOR
SLO = SULFUR LIKE ODOR
MLO = MUSTY LIKE ODOR

ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

DRAFT

GEI Consultants, Inc. P.C.
455 Winding Brook Drive
Suite 201
Glastonbury, CT 06033
(860) 368-5300

CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-311

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/11/2018 - 6/14/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 6.00
GENERAL NOTE:

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	PEN/REC FT./FT.	PID (PPM)	STRATA	VISUAL IMPACTS	ODOR	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	2.3				RP-SB-311 (0-12) COMPOSITE	(0'- 0.5') ASPHALT; 100% asphalt.
									(0.5'- 1.2') CONCRETE; 100% concrete.
									(1.2'- 6') POORLY GRADED SAND (SP); ~100% sand, fine; slight naphthalene-like odor, moist, brown.
							NLO		
	5								
▽		S2	4/2.6	0.0					(6'- 10') POORLY GRADED SAND (SP); ~100% sand, fine; slight sulfur-like odor, wet, gray.
							SLO		
	10	S3	2/2	5.2				RP-SB-311 (11-12) GRAB, MS/MSD	(10'- 12') POORLY GRADED SAND (SP); ~100% sand, fine; wet, gray.
									End of Boring at 12 feet. Backfilled with Cuttings.

NOTES:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (PPM)
JHS = JAR HEADSPACE PID READING (PPM)

NA = NOT APPLICABLE
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Q_P = POCKET PENETROMETER
S_V = TORVANE PEAK

ppm = PARTS PER MILLION
IN. = INCHES
FT. = FEET

NLO = NAPHTHALENE LIKE ODOR
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ALO = ASPHALT LIKE ODOR

CrLO= CREOSOTE LIKE ODOR
OLO = ORGANIC LIKE ODOR
SLO = SULFUR LIKE ODOR
MLO = MUSTY LIKE ODOR

ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

DRAFT

GEI Consultants, Inc. P.C.
455 Winding Brook Drive
Suite 201
Glastonbury, CT 06033
(860) 368-5300

CLIENT: National Grid
PROJECT: Rockaway Park Former MGP Site
CITY/STATE: Rockaway Park, New York
GEI PROJECT NUMBER: 093150-4-1413

BORING LOG
PAGE 1 of 1
RP-SB-312

LOCATION:
NORTHING (FT): **EASTING (FT):**
TOTAL DEPTH (FT): 12.0
DRILLED BY: ADT / Rob Allegrezza
DATUM VERT. / HORZ.: NAVD 88 / NAD83
LOGGED BY: Russ Morang
DATE START / END: 6/11/2018 - 6/13/2018
DRILLING DETAILS: Geoprobe / Geoprobe 320
WATER LEVEL DEPTHS (FT): ▽ 6.00
GENERAL NOTE:

ELEV. FT.	DEPTH FT.	SAMPLE INFO: TYPE and NO.	SAMPLE INFO: PEN/REC FT./FT.	SAMPLE INFO: PID (PPM)	STRATA	VISUAL IMPACTS	ODOR	ANALYZED SAMPLE ID	SOIL / BEDROCK DESCRIPTION
	0	S1	6/NM	1.1				RP-SB-312 (0-12) COMPOSITE	(0'- 0.5') ASPHALT; 100% asphalt.
									(0.5'- 1.2') CONCRETE; 100% concrete.
									(1.2'- 6') POORLY GRADED SAND (SP); ~100% sand, fine; slight naphthalene-like odor, moist, brown.
	5						NLO		
▽		S2	4/3.9	0.0					(6'- 7') POORLY GRADED SAND (SP); ~100% sand, fine; wet, brown.
									(7'- 9') POORLY GRADED SAND (SP); ~100% sand, fine; wet, gray.
				56.2					(9'- 10') POORLY GRADED SAND (SP); ~100% sand, fine; wet, gray.
	10	S3	2/2	172.1			PLO	RP-SB-312 (11-12) COMPOSITE	(10'- 12') POORLY GRADED SAND (SP); ~100% sand, fine; moderate petroleum-like odor, wet, gray.
									End of Boring at 12 feet. Backfilled with Cuttings.

NOTES:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (PPM)
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Q_P = POCKET PENETROMETER
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NLO = NAPHTHALENE LIKE ODOR
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CrLO= CREOSOTE LIKE ODOR
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ENVIRONMENTAL BORING LOG BELLE HARBOR.GPJ GEI TEMPLATE 11-7-13.GDT 6/21/18

Appendix B

Community Air Monitoring Summary

Appendix B. Daily Maximum 15-Minute Average Concentrations of TVOC and PM-10
Rockaway Park Former MGP Site - Community Air Monitoring Plan
National Grid
Rockaway Park, NY

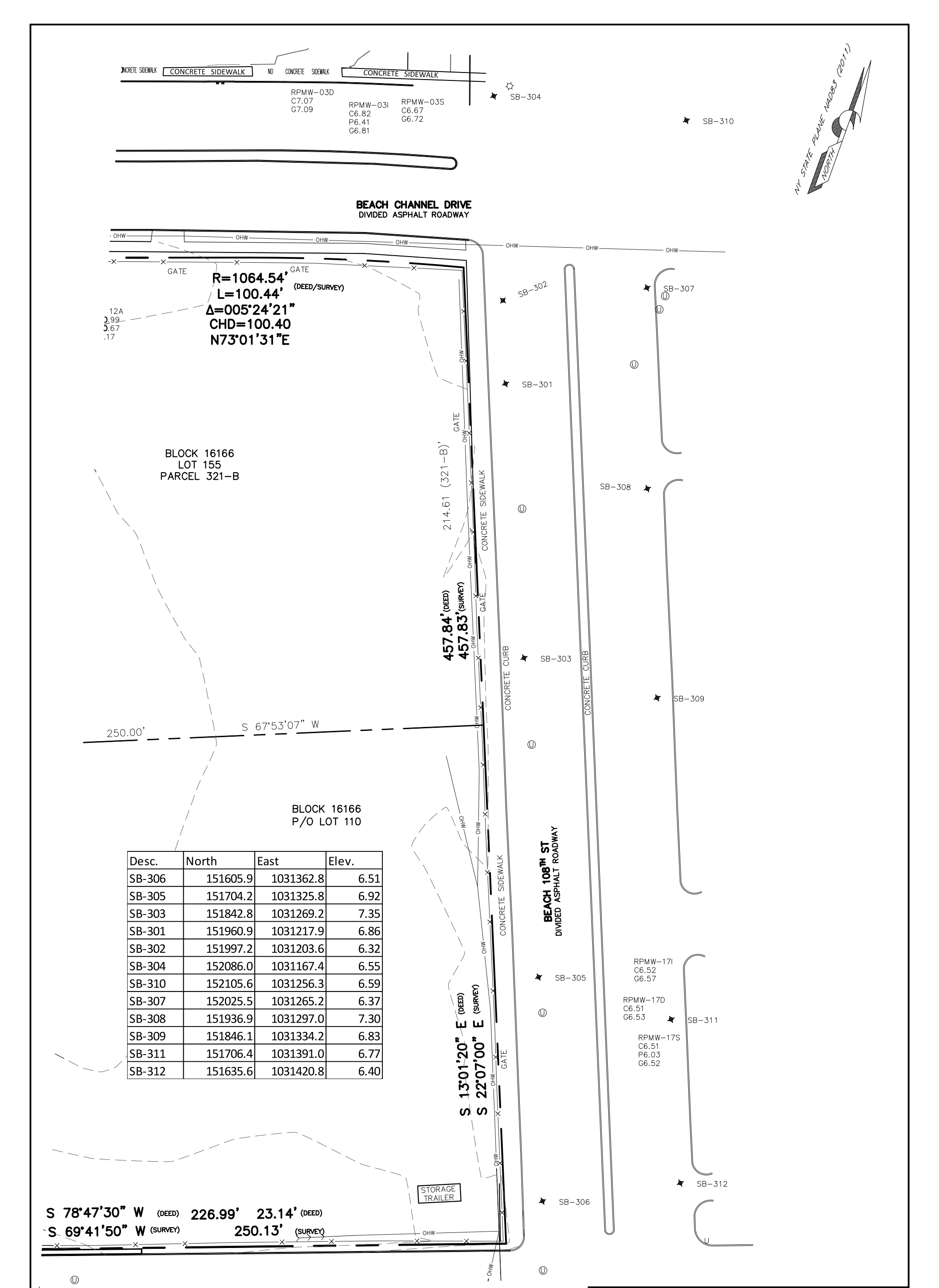
	TVOC (ppmv)		PM-10 (ug/m^3)	
Alert Limit	3.7 ppm		-	
Response Limit	-		100 ug/m^3	
Action Limit	5.0 ppm		150 ug/m^3	
Date	**Upwind**	**Downwind**	**Upwind**	**Downwind**
Mon 6/11/2018	0.10	0.14	33.1	30.4
Tue 6/12/2018	0.10	0.10	7.6	14.5
Wed 6/13/2018	0.30	0.11	12.3	21.9
Thu 6/14/2018	0.10	0.10	11.1	22.2

Notes:

ug/m^3 = micrograms per cubic meter
ppm = parts per million by volume
TVOC = total volatile organic compounds
PM-10 = particulate matter (i.e. dust) less than 10 microns in diameter

Appendix C

Boring Survey



Desc.	North	East	Elev.
SB-306	151605.9	1031362.8	6.51
SB-305	151704.2	1031325.8	6.92
SB-303	151842.8	1031269.2	7.35
SB-301	151960.9	1031217.9	6.86
SB-302	151997.2	1031203.6	6.32
SB-304	152086.0	1031167.4	6.55
SB-310	152105.6	1031256.3	6.59
SB-307	152025.5	1031265.2	6.37
SB-308	151936.9	1031297.0	7.30
SB-309	151846.1	1031334.2	6.83
SB-311	151706.4	1031391.0	6.77
SB-312	151635.6	1031420.8	6.40

LEGEND

SB–# SOIL BORING

NOTES

NEW YORK STATE PLANE COORDINATES (NAD83 – HORIZONTAL, CORS96 AND NAVD88 – VERTICAL, GEOID03) ESTABLISHED FROM RTK GPS OBSERVATIONS.

SOIL BORING LOCATION
SECTION 062 – BLOCK 16166
LOTS 110 & 155
ROCKAWAY PARK, NEW YORK CITY
QUEENS COUNTY, NEW YORK

KSS KENNON SURVEYING SERVICES INC.
5 POWDER HORN DRIVE, SUITE 4
P.O. BOX 4477
WARREN, NEW JERSEY 07059
CERTIFICATE OF AUTHORIZATION NO. 27944900
PHONE 732–564–1818 EMAIL: KSS@KENNONSURVEYING.COM

date	scale	proj. no.	sheet
06–23–18	1" = 40'	2597	1 OF 1

Appendix D

Data Usability Summary Report

Site: Rockaway Park Former MGP Site
Laboratory: Test America, Edison, NJ
Report No.: 460-158228
Reviewer: Lorie MacKinnon/GEI Consultants
Date: July 24, 2018

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
RP-SB-302(11-12)Grab	460-158228-01	VOC, SVOC, PCB, Pest, Herb, Metals
Dup-061318(11-12)Grab	460-158228-02	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-301(11-12)Grab	460-158228-03	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-303(11-12)Grab	460-158228-04	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-305(11-12)Grab	460-158228-05	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-306(11-12)Grab	460-158228-06	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-312(11-12)Grab	460-158228-07	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-302(0-12)Composite	460-158229-01	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
RP-SB-301(0-12)Composite	460-158229-02	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
Dup-061318A Composite	460-158229-03	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
RP-SB-303(0-12)Composite	460-158229-04	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
RP-SB-305(0-12)Composite	460-158229-05	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
RP-SB-306(0-12)Composite	460-158229-06	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
RP-SB-312(0-12)Composite	460-158229-07	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
FB-061318	460-158244-01	VOC, SVOC, PCB, Pest, Herb, Metals, TCLP Metals, pH, Reactivity
TB-061318	460-158244-02	VOC

Associated QC Samples:

Field/Trip Blanks:	FB-061318, TB-061318
Field Duplicate Pairs:	RP-SB-302(11-12)Grab/Dup-061318(11-12)Grab
	RP-SB-301(0-12)Composite/Dup-061318A Composite

The above-listed soil samples, field blank sample, and trip blank sample were collected on June 13, 2018 and were analyzed for volatile organic compounds (VOCs) by SW-846 method 8260C, semivolatile organic compounds (SVOCs) and polynuclear aromatic hydrocarbon (PAH) SVOCs

by SW-846 method 8270D, polychlorinated biphenyls (PCBs) by SW-846 method 8082A, pesticides (pest) by SW-846 8081B, herbicides (herb) by SW-846 method 8151A, gasoline range organics (GRO) and diesel range organics (DRO) by SW-846 method 8015D, toxicity characteristic leaching procedure (TCLP) metals by SW-846 methods 1311/6010C/7470A, total metals by SW-846 methods 6010C/6020A/7471B, and reactivity analyses which included ignitability by SW-846 method 1030, reactive cyanide by SW-846 method 7.3.3/9014, reactive sulfide by SW-846 7.3.4/9034, and pH by SW-846 method 9045C.

The data validation was performed based on the following USEPA Region 2 Documents: SOP HW-35 (Revision 2) *Semivolatile Data Validation* (March 2013), and SOP HW-33 (Revision 3) *Low/Medium Volatile Data Validation* (March 2013), Standard Operating Procedure (SOP) HW-37 (Revision 3) *Polychlorinated Biphenyl (PCB) Aroclor Data Validation* (May 2013), SOP HW-36 (Revision 4) *Pesticide Data Validation* (May 2013), and SOPs HW-2a, 2b, and 2c (Revision 15), *SOPs for the Evaluation of Metals, Cyanide and Mercury for the Contract Laboratory Program* (December 2012), modified for the SW-846 methodologies utilized.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results
- Field Duplicate Results
- Laboratory Control Sample (LCS)/LCS Duplicate (LCSD) Results
- Internal Standards
- Serial Dilution Results
- Moisture Content
- Quantitation Limits
- Sample Quantitation and Compound Identification

In general, the data appear usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers.

-

The validation findings were based on the following information.

Data Completeness

The data package was found to be complete as received by the laboratory.

Holding Times and Sample Preservation

All criteria were met except where noted below.

pH SW-846 method 9045D

The pH analysis for aqueous samples FB-061318 and TB-061318 took place one day outside of the hold time of one day. The pH results in samples FB-061318 and TB-061318 were qualified as estimated (J). Although not specified for soils, it is recommended that the analysis for pH take place as soon as possible. The pH analysis for all soils took place five days after sampling. Professional judgment was taken to qualify the pH results in samples RP-SB-302(0-12)Composite, RP-SB-301(0-12)Composite, DUP-061318A Composite, RP-SB-303(0-12)Composite, RP-SB-305(0-12)Composite, RP-SB-306(0-12)Composite, and RP-SB-312(0-12)Composite as estimated (J) as the analysis was not performed within two days.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

PCBs, Pesticides, Herbicides, GRO, DRO, and Reactivity

All criteria were met.

VOCs and SVOCs

Compounds that did not meet criteria in the VOC and SVOC calibrations are summarized in the following table.

Instrument/ Calibration Standard	Compound	Calibration Exceedance	Validation Qualifier
VOCs			
CVOAMS12 CCAL 06/19 08:28	Dichlorodifluoromethane	26.1 %D	Estimate (J/UJ) the positive and nondetect results for the affected compounds in sample RP-SB-306(11-12)Grab.
	Bromomethane	211.9% D	
	Bromoform	21.1 %D	
	1,2-Dibromo-3-chloropropane	33.1 %D	
Associated Sample: RP-SB-306(11-12)Grab			
CVOAMS4 CCAL 06/17 04:57	Bromoform	21.6 %D	
	Bromomethane	27.7 %D	Estimate (J/UJ) the positive and nondetect results for the affected compounds in the associated
	2-Butanone	27.7 %D	

	Chlorobromomethane	24.3 %D	samples.
	1,2-Dibromo-3-chloropropane	23.0 %D	
	1,2,3-Trichlorobenzene	23.5 %D	
Associated Samples: RP-SB-302(11-12)Grab, DUP-061318(11-12)Grab, RP-SB-301(11-12)Grab, RP-SB-303(11-12)Grab			
CVOAMS6 CCAL 06/18 07:04	Dichlorodifluoromethane	32.6 %D	Estimate (J/UJ) the positive and nondetect results for the affected compounds in the associated samples.
	Chloromethane	25.2 %D	
	1,2-Dichloroethane	25.5 %D	
	1,4-Dioxane	48.1 %D	
	cis-1,3-Dichloropropene	20.8 %D	
	trans-1,3-Dichloropropene	20.4 %D	
	1,2-Dibromo-3-chloropropane	22.0 %D	
Associated Samples: FB-061318, TB-061318			
CVOAMS9 CCAL 06/19 17:21	Chlorodibromomethane	27.7 %D	Estimate (J/UJ) the positive and nondetect results for the affected compounds in the associated samples.
	Bromoform	43.4 %D	
Associated Samples: RP-SB-305(11-12)Grab, RP-SB-312(11-12)Grab			
SVOC			
CBNAMS11 CCAL 06/14 23:41	Hexachlorocyclopentadiene	23.1 %D	Estimate (UJ) the nondetect results for hexachlorocyclopentadiene in the associated samples.
Associated Samples: RP-SB-302(11-12)Grab, DUP-061318(11-12)Grab, RP-SB-301(11-12)Grab, RP-SB-303(11-12)Grab, RP-SB-305(11-12)Grab, RP-SB-306(11-12)Grab, RP-SB-312(11-12)Grab			
CBNAMS17 CCAL 06/15 23:04	Butyl benzyl phthalate	25.1 %D	Estimate (UJ) the nondetect result for butyl benzyl phthalate in sample FB-061318.
Associated sample: FB-061318			

Initial calibration (ICAL) relative standard deviation (%RSD) > 20 for; estimate (J) positive and blank-qualified (UJ) results only.
Continuing calibration (CCAL) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
RF = Response factor (RF) < 0.05; Estimate (J) positive results and reject (R) nondetect results.

The direction of the bias cannot be determined for the calibration nonconformances. The results can be used for project objectives as estimated (J/UJ) values which may have a minor impact on the data usability.

Metals

The following table lists the recoveries which were outside the control limits of 70-130 in the contract required quantitation limit (CRQL) standards and the resulting validation actions. The affected level range was determined by two times the true value of the CRQL standard analyzed.

Analyte	Recovery (%)	Affected Level	Validation Actions
Mercury	67.5%	0.40 ug/L	Estimate (UJ) the nondetect result for mercury in sample FB-061318: Low bias.
Associated samples: FB-061318			

The recovery criteria were met in the ICSAB sample analysis. Analytes, which should not be present, were detected above the absolute value of the method detection limit in the ICSA sample analyses. Only samples with interferent levels similar (within 15%) to those of the ICSA sample were considered to be affected. Validation actions were not required as all sample interferent levels were less than those of the ICSA sample.

Blanks

Analytes were detected in select laboratory method blank samples and field blank sample FB-061318. Contamination was not detected in the trip blanks sample. The following table summarizes the contamination and validation actions taken. Action levels were adjusted due to sample specific preparation weights and moisture content.

Analyte	Blank ID/ Associated Samples	Maximum Concentration	10x Action Level	Validation Actions
Methylene chloride	LB3 460-527675: RP-SB-302(11-12)Grab, DUP-061318(11-12)Grab, RP-SB-301(11-12)Grab, RP-SB-303(11-12)Grab, RP-SB-305(11-12)Grab, RP-SB-306(11-12)Grab, RP-SB-312(11-12)Grab	0.000216 mg/kg	0.00216 mg/kg	Qualify the results for methylene chloride in samples DUP-061318(11-12)Grab, RP-SB-301(11-12)Grab, RP-SB-303(11-12)Grab, RP-SB-305(11-12)Grab, and RP-SB-312(11-12)Grab as nondetect (U) at the RL.
m/p-Xylene		0.000185 mg/kg	0.00185 mg/kg	Qualify the results for m/p-xylene in samples RP-SB-301(11-12)Grab and RP-SB-303(11-12)Grab as nondetect (U) at the RL.
1,2,4-Trichlorobenzene	MB460-528505: RP-SB-302(11-12)Grab, DUP-061318(11-12)Grab, RP-SB-301(11-12)Grab, RP-SB-303(11-12)Grab	0.000109 mg/kg	0.00109 mg/kg	Validation actions were not required.
Methylene chloride	MB460-529127: RP-SB-305(11-12)Grab, RP-SB-312(11-12)Grab	0.000432 mg/kg	0.00432 mg/kg	Further validation actions were not required.
Trichlorofluoromethane		0.000479 mg/kg	0.00479 mg/kg	Validation actions were not required.
Acetophenone	FB-061318: All samples	1.8 ug/L (0.0154 mg/kg)	0.154 mg/kg	Qualify the results for acetophenone in samples RP-SB-305(11-12)Grab and RP-SB-306(11-12)Grab as nondetect (U) at the RL.

Analyte	Blank ID/ Associated Samples	Maximum Concentration	10x Action Level	Validation Actions
TCLP Chromium	Instrument blank and LB528232: All TCLP samples	2.23 ug/L	22.3 ug/L	Qualify the results for chromium in TCLP samples RP-SB-302(0-12)Composite, RP-SB-305(0-12)Composite, and RP-SB-312(0-12)Composite as nondetect (U) at the RL.
TCLP Arsenic		13.89 ug/L	138.9 ug/L	Qualify the result for arsenic in TCLP sample RP-SB-312(0-12)Composite as nondetect (U) at the RL.

Blank Actions:
If the sample result is < RL (<2xRL for common contaminants); report the result as nondetect (U) at the reporting limit (RL) or reported value.
If the sample result is ≥ RL and <blank contamination detected; report the result as nondetect (U) at the reported value.
If the sample result is ≥ RL and < 10x Action Level; professional judgment was taken to report the sample result as estimated (J); biased high.
If the sample result is > 10x Action Level; validation action is not required.

Surrogate Recoveries

VOCs, SVOCs, Herbicides, GRO, and DRO

All criteria were met for samples analyzed at dilutions less than ten.

Pesticides

The following table lists the surrogate recoveries outside of the control limits and the resulting validation actions.

Sample	Surrogate	Recovery (%)	Control Limits (%)	Validation Actions
RP-SB-305(11-12)Grab	Tetrachloro-m-xylene (column 1)	63	74-150	Estimate (J/UJ) the positive and nondetect results for pesticide sample RP-SB-305(11-12)Grab; Low bias.
RP-SB-306(11-12)Grab	Tetrachloro-m-xylene (column 1 and 2)	73, 67		Estimate (J/UJ) the positive and nondetect results for pesticide sample RP-SB-306(11-12)Grab; Low bias.

PCBs

The following table lists the surrogate recoveries outside of the control limits and the resulting validation actions.

Sample	Surrogate	Recovery (%)	Control Limits (%)	Validation Actions
DUP-061318(11-12)Grab	Decachlorobiphenyl (column 2)	163	53-150	Validation actions were not required as all associated PCB results were nondetect and

Sample	Surrogate	Recovery (%)	Control Limits (%)	Validation Actions
RP-SB-303(11-12)Grab	Decachlorobiphenyl (column 2)	166		therefore not affected by the potential high bias.

MS/MSD Results

MS analyses were performed on samples RP-SB-306(11-12)Grab for VOCs, sample RP-SB-302(11-12)Grab for SVOCs, sample RP-SB-303(0-12)Composite for DRO, and sample RP-SB-312(0-12)Composite for TCLP mercury. MS analyses were performed on project soil samples RP-SB-311(11-12)Grab and RP-SB-309(0-12)Composite for metals, which were reported in case number 460-158410. Results from these metals MS samples were applied to samples in this report. The following table lists the recoveries outside of control limits and the resulting actions.

RP-SB-311(11-12)Grab			
Analyte	**MS (%)**	**Control Limits (%)**	**Validation Action/Bias**
Aluminum	159	75-125	Estimate (J) the positive results for aluminum in all associated samples; High bias.
Associated Samples: RP-SB-302(11-12)Grab, DUP-061318(11-12)Grab, RP-SB-301(11-12)Grab, RP-SB-303(11-12)Grab, RP-SB-305(11-12)Grab, RP-SB-306(11-12)Grab, RP-SB-312(11-12)Grab			

Analyte	MS/MSD (%)	RPD (%)	Control Limits (%)	Validation Action/Bias
VOC RP-SB-306(11-12)Grab				
Bromoform	74, 71	-	77-124	Estimate (UJ) the nondetect result for bromoform in sample RP-SB-306(11-12)Grab; Low bias.
Bromomethane	194, 188	-	59-132	Validation action was not required as the result for bromomethane in this sample was nondetect and therefore not affected by the potential high bias.
DRO RP-SB-303(0-12)Composite				
#2 Diesel Fuel	54, 54	-	60-105	Estimate (J) the positive result for C10-C44 in sample RP-SB-303(0-12)Composite; Low bias.
SVOC RP-SB-302(11-12)Grab				
2,4-Dinitrophenol	14, 15	-	56-122	Estimate (J/UJ) the positive and nondetect results for the affected compounds in sample RP-SB-302(11-12)Grab; Low bias.
2,6-Dinitrotoluene	MS 69	-	70-114	
2-Chlorophenol	MS 56	-	62-97	
2-Methylnaphthalene	MS 61	-	65-104	

2-Nitrophenol	57, 61	-	65-104	
4,6-Dinitro-2-methylphenol	39, 44	-	67-120	
4-Methylphenol	55, 59	-	61-105	
Acenaphthene	MS 59	-	62-108	
Acenaphthylene	MS 63	-	67-107	
Acetophenone	52, 58	-	60-109	
Benzaldehyde	MS 47	-	52-113	
Benzo(a)anthracene	MS 66	-	68-110	
Bis(2-chloroethoxy)methane	MS 63	-	65-106	
Bis(2-chloroethyl)ether	56, 62	-	64-105	
Dibenzofuran	MS 65	-	67-107	
Dimethyl phthalate	MS 66		68-112	
Hexachlorobutadiene	55, 59	-	60-108	
Hexachlorocyclopentadiene	21. 23	-	50-129	
Hexachloroethane	51, 54	-	63-99	
Isophorone	59, 63	-	68-111	
Naphthalene	58, 63	-	65-102	
Nitrobenzene	56, 61	-	66-108	
N-Nitrosodi-n-propylamine	MS 59	-	63-117	
Phenol	MS 57	-	58-103	

Laboratory Duplicate Results

Laboratory duplicate analyses were performed on sample RP-SB-312(0-12)Composite and project soil samples RP-SB-311(11-12)Grab and RP-SB-309(0-12)Composite for metals, which were reported in case number 460-158410. Results from these metals duplicate analyses were applied to samples in this report. All criteria were met.

Field Duplicate Results

Samples RP-SB-302(11-12)Grab and Dup-061318(11-12)Grab were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair, which were within the acceptance criteria.

Analyte	RP-SB-302(11-12)Grab (mg/kg)	Dup-061318(11-12)Grab (mg/kg)	RPD (%)
Bis(2-ethylhexyl)phthalate	0.43 U	0.043 J	NC, Within 2xRL

Analyte	RP-SB-302(11-12)Grab (mg/kg)	Dup-061318(11-12)Grab (mg/kg)	RPD (%)
Aluminum	879	767	13.6
Arsenic	3.0 U	1.1 J	NC, Within 2xRL
Barium	3.6 J	39.0 U	NC, Within 2xRL
Beryllium	0.077 J	0.062 J	21.6
Calcium	485 J	371 J	26.6
Chromium	3.0	2.8	6.9
Copper	4.5 J	4.0 J	11.8
Iron	2710	2430	10.9
Lead	2.3	1.6 J	35.9
Magnesium	608 J	539 J	12.0
Manganese	27.7	21.8	23.8
Nickel	2.6 J	2.3 J	12.2
Potassium	282 J	255 J	10.1
Sodium	1610	1620	0.6
Vanadium	3.8 J	3.4 J	11.1
Zinc	8.8	7.7	13.3
NC– Not calculable Criteria: When both results are ≥5x the RL, RPDs must be <50%. When results are < 5x RL, the absolute difference between the original and field duplicate results must be < 2xRL			

Samples RP-SB-301(0-12)Composite and Dup-061318A Composite were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair, which were within the acceptance criteria except for benzo(a)pyrene, benzo(b)fluoranthene, indeno(123-cd)pyrene, and DRO C10-C44. The positive results for benzo(a)pyrene, benzo(b)fluoranthene, indeno(123-cd)pyrene, and DRO C10-C44 in samples RP-SB-301(0-12)Composite and Dup-061318A were qualified as estimated (J). The direction of the bias cannot be determined from this nonconformance.

Analyte	RP-SB-301(0-12)Composite (mg/kg)	Dup-061318A Composite (mg/kg)	RPD (%)
2-Methylnaphthalene	0.010 J	0.023 J	78.7, Within 2xRL
Acenaphthylene	0.055 J	0.14 J	87.2, Within 2xRL
Anthracene	0.40 U	0.038 J	NC, Within 2xRL
Benzo(a)anthracene	0.072	0.14	64.2, Within 2xRL
Benzo(a)pyrene	0.099	0.21	**71.8, Not within 2xRL**
Benzo(b)fluoranthene	0.12	0.29	**82.9, Not Within 2xRL**
Benzo(ghi)perylene	0.13 J	0.29 J	76.2, Within 2xRL
Benzo(k)fluoranthene	0.055	0.092	50.3, Within 2xRL
Chrysene	0.081 J	0.18 J	75.9, Within 2xRL
Dibenz(ah)anthracene	0.030 J	0.056	60.5, Within 2xRL
Fluoranthene	0.055 J	0.098 J	56.2, Within 2xRL
Fluorene	0.40 U	0.014 J	NC, Within 2xRL
Indeno(123-cd)pyrene	0.096	0.23	**82.2**
Naphthalene	0.018 J	0.035 J	64.2, Within 2xRL
Phenanthrene	0.030 J	0.058 J	63.6, Within 2xRL

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Analyte	RP-SB-301(0-12)Composite (mg/kg)	Dup-061318A Composite (mg/kg)	RPD (%)
Pyrene	0.15 J	0.26 J	53.7, Within 2xRL
DRO C10-C44	17	69	**120.9**
TCLP Barium	48.6 J ug/L	52.4 J ug/L	7.5
TCLP Lead	29.0 J ug/L	92.0 ug/L	104, Within 2xRL
Corrosivity	9.4 SU	9.1 SU	3.2
pH	9.4 SU	9.1 SU	3.2
NC– Not calculable Criteria: When both results are ≥5x the RL, RPDs must be <50%. When results are < 5x RL, the absolute difference between the original and field duplicate results must be < 2xRL			

LCS/LCSD Results

SVOCs, Pesticides, PCBs, GRO, DRO, Metals, and Reactivity

All criteria were met.

VOCs and Herbicides

The following table lists the compounds recovered outside of control limits in the LCS and LCSD and the resulting actions.

Compound	Recovery (%)	RPD (%)	Control Limits (%)	LCS ID/ Associated Samples	Validation Action/Bias
cis-1,3-Dichloropropene	LCSD 75	-	77-120	460-528630: FB-061318, TB-061318	Estimate (UJ) the nondetect results for the affected compounds in samples FB-061318 and TB-061318; Low bias.
1,1,2-Trichloroethane	LCSD 77	-	78-120		
1,2-Dichloroethane	LCSD 69	-	76-121		
Bromomethane	LCS 276	NA	59-132	460-528933: RP-SB-306(11-12)Grab	Validation action was not required as the result for bromomethane was nondetect and therefore not affected by the potential high bias.
Methyl tert-butyl ether	LCS 79	NA	80-125		Estimate (UJ) the nondetect result for methyl tert-butyl ether in sample RP-SB-306(11-12)Grab; Low bias.
2,4,5-T	67	NA	71-141	460-528605: RP-SB-302(11-12)Grab, DUP-061318(11-12)Grab, RP-SB-301(11-12)Grab, RP-SB-303(11-12)Grab, RP-SB-305(11-12)Grab, RP-SB-306(11-12)Grab, RP-SB-312(11-12)Grab	Estimate (UJ) the nondetect results for 2,4,5-T and silvex in the associated samples; Low bias.
Silvex (2,4,5-TP)	72	NA	80-150		
NA – Not applicable as LCSD was not analyzed.					

Internal Standards

All criteria were met.

Serial Dilution Results

Serial dilution analyses were performed on project soil samples RP-SB-311(11-12)Grab and RP-SB-309(0-12)Composite for metals, which were reported in case number 460-158410. Results from these metals analyses were applied to samples in this report. All criteria were met.

Moisture Content

All criteria were met.

Quantitation Limits

Results were reported which were below the reporting limit (RL)/quantitation limit (QL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

All soil total metals samples were analyzed at four-fold dilutions. All TCLP metals samples were analyzed at five-fold dilutions. The following table lists the additional sample dilutions which were performed and the results to be reported. QLs were elevated accordingly.

Sample	VOC Analysis Reported	DRO Analysis Reported	GRO Analysis Reported
RP-SB-306(11-12)Grab	A medium level (50-fold dilution) analysis was performed on this sample.	NA	NA
RP-SB-302(0-12)Composite	NR	50-fold dilutions were performed for these samples.	NR
RP-SB-301(0-12)Composite	NR		NR
DUP-061318A Composite	NR		NR
RP-SB-303(0-12)Composite	NR		NR
RP-SB-305(0-12)Composite	NR		A 5-fold dilution was performed.
RP-SB-306(0-12)Composite	NR	A 100-fold dilution was performed.	A 5-fold dilution was performed.
RP-SB-312(0-12)Composite	NR	A 50-fold dilution was performed.	NR

Sample	VOC Analysis Reported	DRO Analysis Reported	GRO Analysis Reported
NR- Dilution was not required. NA- Not applicable; analysis was not requested for this sample.			

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

All GC dual column precision criteria were met.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

Client: GEI Consultants, Inc.
Project/Site: Rockaway Park Former MGP Site

Client Sample ID: RP-SB-302(11-12)Grab
Date Collected: 06/13/18 08:45
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-1
Matrix: Solid
Percent Solids: 77.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0013	U	0.0013	0.00031	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,1,2,2-Tetrachloroethane	0.0013	U	0.0013	0.00028	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0013	U	0.0013	0.00040	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,1,2-Trichloroethane	0.0013	U	0.0013	0.00024	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,1-Dichloroethane	0.0013	U	0.0013	0.00027	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,1-Dichloroethene	0.0013	U	0.0013	0.00030	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,2,3-Trichlorobenzene	0.0013	U J	0.0013	0.00024	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,2,4-Trichlorobenzene	0.0013	U	0.0013	0.00012	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,2-Dibromo-3-Chloropropane	0.0013	U J	0.0013	0.00061	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,2-Dichlorobenzene	0.0013	U	0.0013	0.00019	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,2-Dichloroethane	0.0013	U	0.0013	0.00039	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,2-Dichloropropane	0.0013	U	0.0013	0.00056	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,3-Dichlorobenzene	0.0013	U	0.0013	0.00021	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,4-Dichlorobenzene	0.0013	U	0.0013	0.00013	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
1,4-Dioxane	0.026	U	0.026	0.012	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
2-Butanone (MEK)	0.0066	U J	0.0066	0.0015	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
2-Hexanone	0.0066	U	0.0066	0.0010	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
4-Methyl-2-pentanone (MIBK)	0.0066	U	0.0066	0.00088	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Acetone	0.0066	U	0.0066	0.0050	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Benzene	0.0013	U	0.0013	0.00034	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Bromoform	0.0013	U J	0.0013	0.00056	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Bromomethane	0.0013	U J	0.0013	0.00063	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Carbon disulfide	0.0013	U	0.0013	0.00035	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Carbon tetrachloride	0.0013	U	0.0013	0.00024	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Chlorobenzene	0.0013	U	0.0013	0.00023	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Chlorobromomethane	0.0013	U J	0.0013	0.00037	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Chlorodibromomethane	0.0013	U	0.0013	0.00026	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Chloroethane	0.0013	U	0.0013	0.00069	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Chloroform	0.0013	U	0.0013	0.00042	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Chloromethane	0.0013	U	0.0013	0.00057	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
cis-1,2-Dichloroethene	0.0013	U	0.0013	0.00020	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
cis-1,3-Dichloropropene	0.0013	U	0.0013	0.00036	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Cyclohexane	0.0013	U	0.0013	0.00029	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Dichlorobromomethane	0.0013	U	0.0013	0.00034	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Dichlorodifluoromethane	0.0013	U	0.0013	0.00045	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Ethylbenzene	0.0013	U	0.0013	0.00026	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Ethylene Dibromide	0.0013	U	0.0013	0.00024	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Isopropylbenzene	0.0013	U	0.0013	0.00017	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Methyl acetate	0.0066	U	0.0066	0.0057	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Methyl tert-butyl ether	0.0013	U	0.0013	0.00017	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Methylcyclohexane	0.0013	U	0.0013	0.00021	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Methylene Chloride	0.0013	U	0.0013	0.00022	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
m-Xylene & p-Xylene	0.0013	U	0.0013	0.00023	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
o-Xylene	0.0013	U	0.0013	0.00013	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Styrene	0.0013	U	0.0013	0.00016	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Tetrachloroethene	0.0013	U	0.0013	0.00019	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Toluene	0.0013	U	0.0013	0.00083	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
trans-1,2-Dichloroethene	0.0013	U	0.0013	0.00033	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
trans-1,3-Dichloropropene	0.0013	U	0.0013	0.00035	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1

Client Sample ID: RP-SB-302(11-12)Grab
Date Collected: 06/13/18 08:45
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-1
Matrix: Solid
Percent Solids: 77.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.0013	U	0.0013	0.00019	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Trichlorofluoromethane	0.0013	U	0.0013	0.00054	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1
Vinyl chloride	0.0013	U	0.0013	0.00072	mg/Kg	☼	06/14/18 04:23	06/17/18 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*78 - 135*	*06/14/18 04:23*	*06/17/18 13:33*	*1*
4-Bromofluorobenzene	*91*		*67 - 126*	*06/14/18 04:23*	*06/17/18 13:33*	*1*
Dibromofluoromethane (Surr)	*94*		*61 - 149*	*06/14/18 04:23*	*06/17/18 13:33*	*1*
Toluene-d8 (Surr)	*105*		*73 - 121*	*06/14/18 04:23*	*06/17/18 13:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.43	U	0.43	0.0057	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
1,2,4,5-Tetrachlorobenzene	0.43	U	0.43	0.0056	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2,2'-oxybis[1-chloropropane]	0.43	U	0.43	0.0077	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2,3,4,6-Tetrachlorophenol	0.43	U	0.43	0.029	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2,4,5-Trichlorophenol	0.43	U	0.43	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2,4,6-Trichlorophenol	0.17	U	0.17	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2,4-Dichlorophenol	0.17	U	0.17	0.0090	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2,4-Dimethylphenol	0.43	U	0.43	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2,4-Dinitrophenol	0.34	U J-	0.34	0.21	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2,4-Dinitrotoluene	0.086	U	0.086	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2,6-Dinitrotoluene	0.086	U J-	0.086	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2-Chloronaphthalene	0.43	U	0.43	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2-Chlorophenol	0.43	U J-	0.43	0.0060	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2-Methylnaphthalene	0.43	U J-	0.43	0.0053	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2-Methylphenol	0.43	U	0.43	0.0069	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2-Nitroaniline	0.43	U	0.43	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
2-Nitrophenol	0.43	U J-	0.43	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
3,3'-Dichlorobenzidine	0.17	U	0.17	0.064	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
3-Nitroaniline	0.43	U	0.43	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
4,6-Dinitro-2-methylphenol	0.34	U J-	0.34	0.069	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
4-Bromophenyl phenyl ether	0.43	U	0.43	0.0055	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
4-Chloro-3-methylphenol	0.43	U	0.43	0.0071	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
4-Chloroaniline	0.43	U	0.43	0.030	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
4-Chlorophenyl phenyl ether	0.43	U	0.43	0.0067	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
4-Methylphenol	0.43	U J-	0.43	0.0073	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
4-Nitroaniline	0.43	U	0.43	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
4-Nitrophenol	0.86	U	0.86	0.070	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Acenaphthene	0.43	U J-	0.43	0.031	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Acenaphthylene	0.43	U J-	0.43	0.0044	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Acetophenone	0.43	U J-	0.43	0.0069	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Anthracene	0.43	U	0.43	0.0048	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Atrazine	0.17	U	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Benzaldehyde	0.43	U J-	0.43	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Benzo[a]anthracene	0.043	U J-	0.043	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Benzo[a]pyrene	0.043	U	0.043	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Benzo[b]fluoranthene	0.043	U	0.043	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Benzo[g,h,i]perylene	0.43	U	0.43	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Benzo[k]fluoranthene	0.043	U	0.043	0.0084	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1

Client Sample ID: RP-SB-302(11-12)Grab
Date Collected: 06/13/18 08:45
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-1
Matrix: Solid
Percent Solids: 77.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	0.43	U J	0.43	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Bis(2-chloroethyl)ether	0.043	U J	0.043	0.0052	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Bis(2-ethylhexyl) phthalate	0.43	U	0.43	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Butyl benzyl phthalate	0.43	U	0.43	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Caprolactam	0.43	U	0.43	0.026	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Carbazole	0.43	U	0.43	0.0050	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Chrysene	0.43	U	0.43	0.0072	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Dibenz(a,h)anthracene	0.043	U	0.043	0.018	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Dibenzofuran	0.43	U J	0.43	0.0060	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Diethyl phthalate	0.43	U	0.43	0.0062	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Dimethyl phthalate	0.43	U J	0.43	0.0052	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Di-n-butyl phthalate	0.43	U	0.43	0.075	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Di-n-octyl phthalate	0.43	U	0.43	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Fluoranthene	0.43	U	0.43	0.0055	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Fluorene	0.43	U	0.43	0.0058	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Hexachlorobenzene	0.043	U	0.043	0.0063	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Hexachlorobutadiene	0.086	U J	0.086	0.0091	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Hexachlorocyclopentadiene	0.43	U J	0.43	0.037	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Hexachloroethane	0.043	U J	0.043	0.0066	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Indeno[1,2,3-cd]pyrene	0.043	U	0.043	0.017	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Isophorone	0.17	U J	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Naphthalene	0.43	U J	0.43	0.0074	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Nitrobenzene	0.043	U J	0.043	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
N-Nitrosodi-n-propylamine	0.043	U J	0.043	0.0068	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
N-Nitrosodiphenylamine	0.43	U	0.43	0.0082	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Pentachlorophenol	0.34	U	0.34	0.088	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Phenanthrene	0.43	U	0.43	0.0075	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Phenol	0.43	U J	0.43	0.0063	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1
Pyrene	0.43	U	0.43	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 02:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*64*		*10 - 103*	*06/14/18 10:16*	*06/15/18 02:32*	*1*
2-Fluorobiphenyl	*62*		*38 - 95*	*06/14/18 10:16*	*06/15/18 02:32*	*1*
2-Fluorophenol (Surr)	*63*		*25 - 92*	*06/14/18 10:16*	*06/15/18 02:32*	*1*
Nitrobenzene-d5 (Surr)	*58*		*37 - 94*	*06/14/18 10:16*	*06/15/18 02:32*	*1*
Phenol-d5 (Surr)	*65*		*32 - 91*	*06/14/18 10:16*	*06/15/18 02:32*	*1*
Terphenyl-d14 (Surr)	*72*		*24 - 109*	*06/14/18 10:16*	*06/15/18 02:32*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0087	U	0.0087	0.0015	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
4,4'-DDE	0.0087	U	0.0087	0.0010	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
4,4'-DDT	0.0087	U	0.0087	0.0016	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Aldrin	0.0087	U	0.0087	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
alpha-BHC	0.0026	U	0.0026	0.00088	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
beta-BHC	0.0026	U	0.0026	0.00097	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Chlordane (technical)	0.087	U	0.087	0.021	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
delta-BHC	0.0026	U	0.0026	0.00053	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Dieldrin	0.0026	U	0.0026	0.0011	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Endosulfan I	0.0087	U	0.0087	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1

Client Sample ID: RP-SB-302(11-12)Grab
Date Collected: 06/13/18 08:45
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-1
Matrix: Solid
Percent Solids: 77.2

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II	0.0087	U	0.0087	0.0022	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Endosulfan sulfate	0.0087	U	0.0087	0.0011	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Endrin	0.0087	U	0.0087	0.0012	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Endrin aldehyde	0.0087	U	0.0087	0.0020	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Endrin ketone	0.0087	U	0.0087	0.0017	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
gamma-BHC (Lindane)	0.0026	U	0.0026	0.00080	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Heptachlor	0.0087	U	0.0087	0.0010	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Heptachlor epoxide	0.0087	U	0.0087	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Methoxychlor	0.0087	U	0.0087	0.0020	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1
Toxaphene	0.087	U	0.087	0.031	mg/Kg	☼	06/18/18 12:24	06/19/18 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*69 - 150*	*06/18/18 12:24*	*06/19/18 13:02*	*1*
DCB Decachlorobiphenyl	*77*		*69 - 150*	*06/18/18 12:24*	*06/19/18 13:02*	*1*
Tetrachloro-m-xylene	*80*		*74 - 150*	*06/18/18 12:24*	*06/19/18 13:02*	*1*
Tetrachloro-m-xylene	*89*		*74 - 150*	*06/18/18 12:24*	*06/19/18 13:02*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:17	1
Aroclor 1221	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:17	1
Aroclor 1232	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:17	1
Aroclor 1242	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:17	1
Aroclor 1248	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:17	1
Aroclor 1254	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:17	1
Aroclor 1260	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:17	1
Aroclor-1262	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:17	1
Aroclor 1268	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:17	1
Polychlorinated biphenyls, Total	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*53 - 150*	*06/18/18 12:15*	*06/19/18 14:17*	*1*
DCB Decachlorobiphenyl	*74*		*53 - 150*	*06/18/18 12:15*	*06/19/18 14:17*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.043	U J	0.043	0.0092	mg/Kg	☼	06/18/18 00:56	06/18/18 14:54	1
2,4-D	0.043	U	0.043	0.016	mg/Kg	☼	06/18/18 00:56	06/18/18 14:54	1
Silvex (2,4,5-TP)	0.043	U J	0.043	0.0045	mg/Kg	☼	06/18/18 00:56	06/18/18 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*143*		*80 - 150*	*06/18/18 00:56*	*06/18/18 14:54*	*1*
2,4-Dichlorophenylacetic acid	*139*		*80 - 150*	*06/18/18 00:56*	*06/18/18 14:54*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**879**	J	39.8	8.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Antimony	4.0	U	4.0	0.48	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Arsenic	3.0	U	3.0	0.74	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Barium	**3.6**	J	39.8	3.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Beryllium	**0.077**	J	0.40	0.046	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4

Client Sample ID: RP-SB-302(11-12)Grab

Date Collected: 06/13/18 08:45
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-1
Matrix: Solid
Percent Solids: 77.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.80	U	0.80	0.12	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Calcium	**485**	J	996	102	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Chromium	**3.0**		2.0	0.55	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Cobalt	10	U	10	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Copper	**4.5**	J	5.0	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Iron	**2710**		29.9	5.4	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Lead	**2.3**		2.0	0.60	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Magnesium	**608**	J	996	76.8	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Manganese	**27.7**		3.0	0.31	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Nickel	**2.6**	J	8.0	0.76	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Potassium	**282**	J	996	53.0	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Selenium	4.0	U	4.0	1.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Silver	2.0	U	2.0	0.30	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Sodium	**1610**		996	76.7	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Thallium	4.0	U	4.0	1.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Vanadium	**3.8**	J	10	1.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4
Zinc	**8.8**		6.0	0.52	mg/Kg	☼	06/14/18 20:45	06/15/18 18:21	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	U	0.020	0.012	mg/Kg	☼	06/19/18 03:57	06/19/18 09:01	1

Client Sample ID: Dup-061318(11-12)Grab

Date Collected: 06/13/18 12:00
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-2
Matrix: Solid
Percent Solids: 76.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0012	U	0.0012	0.00028	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,1,2,2-Tetrachloroethane	0.0012	U	0.0012	0.00026	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0012	U	0.0012	0.00037	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,1,2-Trichloroethane	0.0012	U	0.0012	0.00022	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,1-Dichloroethane	0.0012	U	0.0012	0.00025	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,1-Dichloroethene	0.0012	U	0.0012	0.00027	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,2,3-Trichlorobenzene	0.0012	U J	0.0012	0.00022	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,2,4-Trichlorobenzene	0.0012	U	0.0012	0.00011	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,2-Dibromo-3-Chloropropane	0.0012	U J	0.0012	0.00056	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,2-Dichlorobenzene	0.0012	U	0.0012	0.00018	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,2-Dichloroethane	0.0012	U	0.0012	0.00036	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,2-Dichloropropane	0.0012	U	0.0012	0.00052	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,3-Dichlorobenzene	0.0012	U	0.0012	0.00019	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,4-Dichlorobenzene	0.0012	U	0.0012	0.00012	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
1,4-Dioxane	0.024	U	0.024	0.011	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
2-Butanone (MEK)	0.0061	U J	0.0061	0.0014	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
2-Hexanone	0.0061	U	0.0061	0.00095	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
4-Methyl-2-pentanone (MIBK)	0.0061	U	0.0061	0.00081	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Acetone	0.0061	U	0.0061	0.0046	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Benzene	0.0012	U	0.0012	0.00031	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Bromoform	0.0012	U J	0.0012	0.00052	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Bromomethane	0.0012	U J	0.0012	0.00058	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1

Client Sample ID: Dup-061318(11-12)Grab
Date Collected: 06/13/18 12:00
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-2
Matrix: Solid
Percent Solids: 76.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.0012	U	0.0012	0.00032	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Carbon tetrachloride	0.0012	U	0.0012	0.00022	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Chlorobenzene	0.0012	U	0.0012	0.00022	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Chlorobromomethane	0.0012	U J.	0.0012	0.00034	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Chlorodibromomethane	0.0012	U	0.0012	0.00024	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Chloroethane	0.0012	U	0.0012	0.00064	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Chloroform	0.0012	U	0.0012	0.00039	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Chloromethane	0.0012	U	0.0012	0.00053	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
cis-1,2-Dichloroethene	0.0012	U	0.0012	0.00019	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
cis-1,3-Dichloropropene	0.0012	U	0.0012	0.00033	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Cyclohexane	0.0012	U	0.0012	0.00027	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Dichlorobromomethane	0.0012	U	0.0012	0.00031	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Dichlorodifluoromethane	0.0012	U	0.0012	0.00041	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Ethylbenzene	0.0012	U	0.0012	0.00024	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Ethylene Dibromide	0.0012	U	0.0012	0.00022	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Isopropylbenzene	0.0012	U	0.0012	0.00015	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Methyl acetate	0.0061	U	0.0061	0.0052	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Methyl tert-butyl ether	0.0012	U	0.0012	0.00015	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Methylcyclohexane	0.0012	U	0.0012	0.00020	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Methylene Chloride	~~0.00026 J B~~ 0.0012U		0.0012	0.00020	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
m-Xylene & p-Xylene	0.0012	U	0.0012	0.00021	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
o-Xylene	0.0012	U	0.0012	0.00012	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Styrene	0.0012	U	0.0012	0.00015	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Tetrachloroethene	0.0012	U	0.0012	0.00017	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Toluene	0.0012	U	0.0012	0.00076	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
trans-1,2-Dichloroethene	0.0012	U	0.0012	0.00030	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
trans-1,3-Dichloropropene	0.0012	U	0.0012	0.00032	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Trichloroethene	0.0012	U	0.0012	0.00018	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Trichlorofluoromethane	0.0012	U	0.0012	0.00050	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1
Vinyl chloride	0.0012	U	0.0012	0.00067	mg/Kg	☼	06/14/18 04:24	06/17/18 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*78 - 135*	*06/14/18 04:24*	*06/17/18 13:58*	*1*
4-Bromofluorobenzene	*90*		*67 - 126*	*06/14/18 04:24*	*06/17/18 13:58*	*1*
Dibromofluoromethane (Surr)	*95*		*61 - 149*	*06/14/18 04:24*	*06/17/18 13:58*	*1*
Toluene-d8 (Surr)	*106*		*73 - 121*	*06/14/18 04:24*	*06/17/18 13:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.43	U	0.43	0.0058	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
1,2,4,5-Tetrachlorobenzene	0.43	U	0.43	0.0057	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2,2'-oxybis[1-chloropropane]	0.43	U	0.43	0.0078	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2,3,4,6-Tetrachlorophenol	0.43	U	0.43	0.029	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2,4,5-Trichlorophenol	0.43	U	0.43	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2,4,6-Trichlorophenol	0.17	U	0.17	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2,4-Dichlorophenol	0.17	U	0.17	0.0092	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2,4-Dimethylphenol	0.43	U	0.43	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2,4-Dinitrophenol	0.35	U	0.35	0.21	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2,4-Dinitrotoluene	0.088	U	0.088	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2,6-Dinitrotoluene	0.088	U	0.088	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1

Client Sample ID: Dup-061318(11-12)Grab
Date Collected: 06/13/18 12:00
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-2
Matrix: Solid
Percent Solids: 76.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	0.43	U	0.43	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2-Chlorophenol	0.43	U	0.43	0.0061	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2-Methylnaphthalene	0.43	U	0.43	0.0054	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2-Methylphenol	0.43	U	0.43	0.0070	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2-Nitroaniline	0.43	U	0.43	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
2-Nitrophenol	0.43	U	0.43	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
3,3'-Dichlorobenzidine	0.17	U	0.17	0.065	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
3-Nitroaniline	0.43	U	0.43	0.024	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
4,6-Dinitro-2-methylphenol	0.35	U	0.35	0.070	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
4-Bromophenyl phenyl ether	0.43	U	0.43	0.0056	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
4-Chloro-3-methylphenol	0.43	U	0.43	0.0072	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
4-Chloroaniline	0.43	U	0.43	0.030	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
4-Chlorophenyl phenyl ether	0.43	U	0.43	0.0068	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
4-Methylphenol	0.43	U	0.43	0.0074	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
4-Nitroaniline	0.43	U	0.43	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
4-Nitrophenol	0.88	U	0.88	0.071	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Acenaphthene	0.43	U	0.43	0.032	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Acenaphthylene	0.43	U	0.43	0.0045	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Acetophenone	0.43	U	0.43	0.0070	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Anthracene	0.43	U	0.43	0.0048	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Atrazine	0.17	U	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Benzaldehyde	0.43	U	0.43	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Benzo[a]anthracene	0.043	U	0.043	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Benzo[a]pyrene	0.043	U	0.043	0.012	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Benzo[b]fluoranthene	0.043	U	0.043	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Benzo[g,h,i]perylene	0.43	U	0.43	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Benzo[k]fluoranthene	0.043	U	0.043	0.0085	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Bis(2-chloroethoxy)methane	0.43	U	0.43	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Bis(2-chloroethyl)ether	0.043	U	0.043	0.0052	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Bis(2-ethylhexyl) phthalate	**0.043**	J	0.43	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Butyl benzyl phthalate	0.43	U	0.43	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Caprolactam	0.43	U	0.43	0.026	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Carbazole	0.43	U	0.43	0.0051	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Chrysene	0.43	U	0.43	0.0073	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Dibenz(a,h)anthracene	0.043	U	0.043	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Dibenzofuran	0.43	U	0.43	0.0061	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Diethyl phthalate	0.43	U	0.43	0.0063	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Dimethyl phthalate	0.43	U	0.43	0.0052	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Di-n-butyl phthalate	0.43	U	0.43	0.076	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Di-n-octyl phthalate	0.43	U	0.43	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Fluoranthene	0.43	U	0.43	0.0056	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Fluorene	0.43	U	0.43	0.0059	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Hexachlorobenzene	0.043	U	0.043	0.0064	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Hexachlorobutadiene	0.088	U	0.088	0.0092	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Hexachlorocyclopentadiene	0.43	U J	0.43	0.038	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Hexachloroethane	0.043	U	0.043	0.0067	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Indeno[1,2,3-cd]pyrene	0.043	U	0.043	0.017	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Isophorone	0.17	U	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Naphthalene	0.43	U	0.43	0.0075	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1

Client Sample ID: Dup-061318(11-12)Grab
Date Collected: 06/13/18 12:00
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-2
Matrix: Solid
Percent Solids: 76.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	0.043	U	0.043	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
N-Nitrosodi-n-propylamine	0.043	U	0.043	0.0069	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
N-Nitrosodiphenylamine	0.43	U	0.43	0.0083	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Pentachlorophenol	0.35	U	0.35	0.089	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Phenanthrene	0.43	U	0.43	0.0076	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Phenol	0.43	U	0.43	0.0064	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1
Pyrene	0.43	U	0.43	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*60*		*10 - 103*	*06/14/18 10:16*	*06/15/18 06:09*	*1*
2-Fluorobiphenyl	*69*		*38 - 95*	*06/14/18 10:16*	*06/15/18 06:09*	*1*
2-Fluorophenol (Surr)	*65*		*25 - 92*	*06/14/18 10:16*	*06/15/18 06:09*	*1*
Nitrobenzene-d5 (Surr)	*64*		*37 - 94*	*06/14/18 10:16*	*06/15/18 06:09*	*1*
Phenol-d5 (Surr)	*67*		*32 - 91*	*06/14/18 10:16*	*06/15/18 06:09*	*1*
Terphenyl-d14 (Surr)	*82*		*24 - 109*	*06/14/18 10:16*	*06/15/18 06:09*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0088	U	0.0088	0.0015	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
4,4'-DDE	0.0088	U	0.0088	0.0010	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
4,4'-DDT	0.0088	U	0.0088	0.0016	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Aldrin	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
alpha-BHC	0.0026	U	0.0026	0.00089	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
beta-BHC	0.0026	U	0.0026	0.00098	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Chlordane (technical)	0.088	U	0.088	0.021	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
delta-BHC	0.0026	U	0.0026	0.00054	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Dieldrin	0.0026	U	0.0026	0.0011	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Endosulfan I	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Endosulfan II	0.0088	U	0.0088	0.0023	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Endosulfan sulfate	0.0088	U	0.0088	0.0011	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Endrin	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Endrin aldehyde	0.0088	U	0.0088	0.0021	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Endrin ketone	0.0088	U	0.0088	0.0017	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
gamma-BHC (Lindane)	0.0026	U	0.0026	0.00081	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Heptachlor	0.0088	U	0.0088	0.0010	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Heptachlor epoxide	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Methoxychlor	0.0088	U	0.0088	0.0020	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1
Toxaphene	0.088	U	0.088	0.032	mg/Kg	☼	06/18/18 12:24	06/19/18 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*69 - 150*	*06/18/18 12:24*	*06/19/18 13:15*	*1*
DCB Decachlorobiphenyl	*79*		*69 - 150*	*06/18/18 12:24*	*06/19/18 13:15*	*1*
Tetrachloro-m-xylene	*82*		*74 - 150*	*06/18/18 12:24*	*06/19/18 13:15*	*1*
Tetrachloro-m-xylene	*92*		*74 - 150*	*06/18/18 12:24*	*06/19/18 13:15*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 11:40	1
Aroclor 1221	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 11:40	1
Aroclor 1232	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 11:40	1

Client Sample ID: Dup-061318(11-12)Grab
Date Collected: 06/13/18 12:00
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-2
Matrix: Solid
Percent Solids: 76.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1242	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 11:40	1
Aroclor 1248	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 11:40	1
Aroclor 1254	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 11:40	1
Aroclor 1260	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 11:40	1
Aroclor-1262	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 11:40	1
Aroclor 1268	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 11:40	1
Polychlorinated biphenyls, Total	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*163*	*	*53 - 150*	*06/18/18 12:15*	*06/19/18 11:40*	*1*
DCB Decachlorobiphenyl	*146*		*53 - 150*	*06/18/18 12:15*	*06/19/18 11:40*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.044	U J ·	0.044	0.0093	mg/Kg	☼	06/18/18 00:56	06/18/18 15:09	1
2,4-D	0.044	U	0.044	0.016	mg/Kg	☼	06/18/18 00:56	06/18/18 15:09	1
Silvex (2,4,5-TP)	0.044	U J ·	0.044	0.0046	mg/Kg	☼	06/18/18 00:56	06/18/18 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*135*		*80 - 150*	*06/18/18 00:56*	*06/18/18 15:09*	*1*
2,4-Dichlorophenylacetic acid	*129*		*80 - 150*	*06/18/18 00:56*	*06/18/18 15:09*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**767**	J ·	39.0	8.0	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Antimony	3.9	U	3.9	0.47	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Arsenic	**1.1**	J ·	2.9	0.72	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Barium	39.0	U	39.0	3.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Beryllium	**0.062**	J ·	0.39	0.045	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Cadmium	0.78	U	0.78	0.12	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Calcium	**371**	J ·	974	99.3	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Chromium	**2.8**		1.9	0.54	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Cobalt	9.7	U	9.7	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Copper	**4.0**	J ·	4.9	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Iron	**2430**		29.2	5.3	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Lead	**1.6**	J ·	1.9	0.59	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Magnesium	**539**	J ·	974	75.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Manganese	**21.8**		2.9	0.30	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Nickel	**2.3**	J ·	7.8	0.74	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Potassium	**255**	J ·	974	51.8	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Selenium	3.9	U	3.9	1.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Silver	1.9	U	1.9	0.30	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Sodium	**1620**		974	75.0	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Thallium	3.9	U	3.9	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Vanadium	**3.4**	J ·	9.7	1.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4
Zinc	**7.7**		5.8	0.50	mg/Kg	☼	06/14/18 20:45	06/15/18 18:25	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	U	0.022	0.013	mg/Kg	☼	06/19/18 03:57	06/19/18 09:03	1

Client Sample ID: RP-SB-301(11-12)Grab
Date Collected: 06/13/18 09:30
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-3
Matrix: Solid
Percent Solids: 76.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0012	U	0.0012	0.00028	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,1,2,2-Tetrachloroethane	0.0012	U	0.0012	0.00026	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0012	U	0.0012	0.00036	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,1,2-Trichloroethane	0.0012	U	0.0012	0.00021	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,1-Dichloroethane	0.0012	U	0.0012	0.00025	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,1-Dichloroethene	0.0012	U	0.0012	0.00027	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,2,3-Trichlorobenzene	0.0012	U J.	0.0012	0.00022	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,2,4-Trichlorobenzene	0.0012	U	0.0012	0.00011	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,2-Dibromo-3-Chloropropane	0.0012	U J.	0.0012	0.00055	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,2-Dichlorobenzene	0.0012	U	0.0012	0.00017	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,2-Dichloroethane	0.0012	U	0.0012	0.00035	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,2-Dichloropropane	0.0012	U	0.0012	0.00051	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,3-Dichlorobenzene	0.0012	U	0.0012	0.00019	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,4-Dichlorobenzene	0.0012	U	0.0012	0.00012	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
1,4-Dioxane	0.024	U	0.024	0.011	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
2-Butanone (MEK)	0.0060	U J.	0.0060	0.0013	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
2-Hexanone	0.0060	U	0.0060	0.00093	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
4-Methyl-2-pentanone (MIBK)	0.0060	U	0.0060	0.00079	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Acetone	0.0060	U	0.0060	0.0045	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Benzene	0.0012	U	0.0012	0.00031	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Bromoform	0.0012	U J.	0.0012	0.00051	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Bromomethane	0.0012	U J.	0.0012	0.00057	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Carbon disulfide	0.0012	U	0.0012	0.00032	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Carbon tetrachloride	0.0012	U	0.0012	0.00022	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Chlorobenzene	0.0012	U	0.0012	0.00021	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Chlorobromomethane	0.0012	U J.	0.0012	0.00034	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Chlorodibromomethane	0.0012	U	0.0012	0.00023	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Chloroethane	0.0012	U	0.0012	0.00062	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Chloroform	0.0012	U	0.0012	0.00038	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Chloromethane	0.0012	U	0.0012	0.00052	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
cis-1,2-Dichloroethene	0.0012	U	0.0012	0.00018	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
cis-1,3-Dichloropropene	0.0012	U	0.0012	0.00033	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Cyclohexane	0.0012	U	0.0012	0.00026	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Dichlorobromomethane	0.0012	U	0.0012	0.00031	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Dichlorodifluoromethane	0.0012	U	0.0012	0.00040	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Ethylbenzene	0.0012	U	0.0012	0.00024	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Ethylene Dibromide	0.0012	U	0.0012	0.00022	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Isopropylbenzene	0.0012	U	0.0012	0.00015	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Methyl acetate	0.0060	U	0.0060	0.0051	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Methyl tert-butyl ether	0.0012	U	0.0012	0.00015	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Methylcyclohexane	0.0012	U	0.0012	0.00019	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Methylene Chloride	~~0.00020 J B~~ 0.0012 U		0.0012	0.00019	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
m-Xylene & p-Xylene	~~0.00024 J B~~ 0.0012 U		0.0012	0.00021	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
o-Xylene	**0.00013** J		0.0012	0.00011	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Styrene	0.0012	U	0.0012	0.00015	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Tetrachloroethene	0.0012	U	0.0012	0.00017	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Toluene	0.0012	U	0.0012	0.00075	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
trans-1,2-Dichloroethene	0.0012	U	0.0012	0.00029	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
trans-1,3-Dichloropropene	0.0012	U	0.0012	0.00032	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1

Client Sample ID: RP-SB-301(11-12)Grab
Date Collected: 06/13/18 09:30
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-3
Matrix: Solid
Percent Solids: 76.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.0012	U	0.0012	0.00017	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Trichlorofluoromethane	0.0012	U	0.0012	0.00049	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1
Vinyl chloride	0.0012	U	0.0012	0.00065	mg/Kg	☼	06/14/18 04:24	06/17/18 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*78 - 135*	*06/14/18 04:24*	*06/17/18 14:23*	*1*
4-Bromofluorobenzene	*91*		*67 - 126*	*06/14/18 04:24*	*06/17/18 14:23*	*1*
Dibromofluoromethane (Surr)	*97*		*61 - 149*	*06/14/18 04:24*	*06/17/18 14:23*	*1*
Toluene-d8 (Surr)	*107*		*73 - 121*	*06/14/18 04:24*	*06/17/18 14:23*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.43	U	0.43	0.0058	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
1,2,4,5-Tetrachlorobenzene	0.43	U	0.43	0.0057	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2,2'-oxybis[1-chloropropane]	0.43	U	0.43	0.0078	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2,3,4,6-Tetrachlorophenol	0.43	U	0.43	0.029	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2,4,5-Trichlorophenol	0.43	U	0.43	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2,4,6-Trichlorophenol	0.17	U	0.17	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2,4-Dichlorophenol	0.17	U	0.17	0.0092	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2,4-Dimethylphenol	0.43	U	0.43	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2,4-Dinitrophenol	0.35	U	0.35	0.21	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2,4-Dinitrotoluene	0.088	U	0.088	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2,6-Dinitrotoluene	0.088	U	0.088	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2-Chloronaphthalene	0.43	U	0.43	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2-Chlorophenol	0.43	U	0.43	0.0061	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2-Methylnaphthalene	0.43	U	0.43	0.0054	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2-Methylphenol	0.43	U	0.43	0.0070	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2-Nitroaniline	0.43	U	0.43	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
2-Nitrophenol	0.43	U	0.43	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
3,3'-Dichlorobenzidine	0.17	U	0.17	0.065	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
3-Nitroaniline	0.43	U	0.43	0.024	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
4,6-Dinitro-2-methylphenol	0.35	U	0.35	0.070	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
4-Bromophenyl phenyl ether	0.43	U	0.43	0.0056	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
4-Chloro-3-methylphenol	0.43	U	0.43	0.0072	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
4-Chloroaniline	0.43	U	0.43	0.030	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
4-Chlorophenyl phenyl ether	0.43	U	0.43	0.0068	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
4-Methylphenol	0.43	U	0.43	0.0074	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
4-Nitroaniline	0.43	U	0.43	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
4-Nitrophenol	0.88	U	0.88	0.071	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Acenaphthene	0.43	U	0.43	0.032	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Acenaphthylene	0.43	U	0.43	0.0045	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Acetophenone	0.43	U	0.43	0.0070	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Anthracene	0.43	U	0.43	0.0048	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Atrazine	0.17	U	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Benzaldehyde	0.43	U	0.43	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Benzo[a]anthracene	0.043	U	0.043	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Benzo[a]pyrene	0.043	U	0.043	0.012	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Benzo[b]fluoranthene	0.043	U	0.043	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Benzo[g,h,i]perylene	0.43	U	0.43	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Benzo[k]fluoranthene	0.043	U	0.043	0.0085	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1

Client Sample ID: RP-SB-301(11-12)Grab
Date Collected: 06/13/18 09:30
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-3
Matrix: Solid
Percent Solids: 76.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	0.43	U	0.43	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Bis(2-chloroethyl)ether	0.043	U	0.043	0.0052	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Bis(2-ethylhexyl) phthalate	0.43	U	0.43	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Butyl benzyl phthalate	0.43	U	0.43	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Caprolactam	0.43	U	0.43	0.026	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Carbazole	0.43	U	0.43	0.0051	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Chrysene	0.43	U	0.43	0.0073	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Dibenz(a,h)anthracene	0.043	U	0.043	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Dibenzofuran	0.43	U	0.43	0.0061	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Diethyl phthalate	0.43	U	0.43	0.0063	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Dimethyl phthalate	0.43	U	0.43	0.0052	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Di-n-butyl phthalate	0.43	U	0.43	0.076	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Di-n-octyl phthalate	0.43	U	0.43	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Fluoranthene	0.43	U	0.43	0.0056	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Fluorene	0.43	U	0.43	0.0059	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Hexachlorobenzene	0.043	U	0.043	0.0063	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Hexachlorobutadiene	0.088	U	0.088	0.0092	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Hexachlorocyclopentadiene	0.43	U J	0.43	0.038	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Hexachloroethane	0.043	U	0.043	0.0067	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Indeno[1,2,3-cd]pyrene	0.043	U	0.043	0.017	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Isophorone	0.17	U	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Naphthalene	0.43	U	0.43	0.0075	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Nitrobenzene	0.043	U	0.043	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
N-Nitrosodi-n-propylamine	0.043	U	0.043	0.0069	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
N-Nitrosodiphenylamine	0.43	U	0.43	0.0083	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Pentachlorophenol	0.35	U	0.35	0.089	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Phenanthrene	0.43	U	0.43	0.0076	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Phenol	0.43	U	0.43	0.0064	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1
Pyrene	0.43	U	0.43	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*61*		*10 - 103*	*06/14/18 10:16*	*06/15/18 06:33*	*1*
2-Fluorobiphenyl	*64*		*38 - 95*	*06/14/18 10:16*	*06/15/18 06:33*	*1*
2-Fluorophenol (Surr)	*60*		*25 - 92*	*06/14/18 10:16*	*06/15/18 06:33*	*1*
Nitrobenzene-d5 (Surr)	*58*		*37 - 94*	*06/14/18 10:16*	*06/15/18 06:33*	*1*
Phenol-d5 (Surr)	*63*		*32 - 91*	*06/14/18 10:16*	*06/15/18 06:33*	*1*
Terphenyl-d14 (Surr)	*78*		*24 - 109*	*06/14/18 10:16*	*06/15/18 06:33*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0088	U	0.0088	0.0015	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
4,4'-DDE	0.0088	U	0.0088	0.0010	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
4,4'-DDT	0.0088	U	0.0088	0.0016	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Aldrin	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
alpha-BHC	0.0026	U	0.0026	0.00089	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
beta-BHC	0.0026	U	0.0026	0.00098	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Chlordane (technical)	0.088	U	0.088	0.021	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
delta-BHC	0.0026	U	0.0026	0.00054	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Dieldrin	0.0026	U	0.0026	0.0011	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Endosulfan I	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1

Client Sample ID: RP-SB-301(11-12)Grab
Date Collected: 06/13/18 09:30
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-3
Matrix: Solid
Percent Solids: 76.2

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II	0.0088	U	0.0088	0.0023	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Endosulfan sulfate	0.0088	U	0.0088	0.0011	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Endrin	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Endrin aldehyde	0.0088	U	0.0088	0.0021	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Endrin ketone	0.0088	U	0.0088	0.0017	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
gamma-BHC (Lindane)	0.0026	U	0.0026	0.00081	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Heptachlor	0.0088	U	0.0088	0.0010	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Heptachlor epoxide	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Methoxychlor	0.0088	U	0.0088	0.0020	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1
Toxaphene	0.088	U	0.088	0.032	mg/Kg	☼	06/18/18 12:24	06/19/18 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*69 - 150*	*06/18/18 12:24*	*06/19/18 17:17*	*1*
DCB Decachlorobiphenyl	*81*		*69 - 150*	*06/18/18 12:24*	*06/19/18 17:17*	*1*
Tetrachloro-m-xylene	*85*		*74 - 150*	*06/18/18 12:24*	*06/19/18 17:17*	*1*
Tetrachloro-m-xylene	*85*		*74 - 150*	*06/18/18 12:24*	*06/19/18 17:17*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:34	1
Aroclor 1221	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:34	1
Aroclor 1232	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:34	1
Aroclor 1242	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:34	1
Aroclor 1248	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:34	1
Aroclor 1254	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:34	1
Aroclor 1260	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:34	1
Aroclor-1262	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:34	1
Aroclor 1268	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:34	1
Polychlorinated biphenyls, Total	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*76*		*53 - 150*	*06/18/18 12:15*	*06/19/18 14:34*	*1*
DCB Decachlorobiphenyl	*86*		*53 - 150*	*06/18/18 12:15*	*06/19/18 14:34*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.044	U J ·	0.044	0.0093	mg/Kg	☼	06/18/18 00:56	06/18/18 15:23	1
2,4-D	0.044	U	0.044	0.016	mg/Kg	☼	06/18/18 00:56	06/18/18 15:23	1
Silvex (2,4,5-TP)	0.044	U J ·	0.044	0.0045	mg/Kg	☼	06/18/18 00:56	06/18/18 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*139*		*80 - 150*	*06/18/18 00:56*	*06/18/18 15:23*	*1*
2,4-Dichlorophenylacetic acid	*133*		*80 - 150*	*06/18/18 00:56*	*06/18/18 15:23*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**715**	J ·	42.0	8.6	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Antimony	4.2	U	4.2	0.50	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Arsenic	3.1	U	3.1	0.78	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Barium	42.0	U	42.0	3.4	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Beryllium	**0.053**	J ·	0.42	0.048	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4

Client Sample ID: RP-SB-301(11-12)Grab

Date Collected: 06/13/18 09:30
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-3
Matrix: Solid
Percent Solids: 76.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.84	U	0.84	0.12	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Calcium	**264**	J	1050	107	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Chromium	**2.4**		2.1	0.58	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Cobalt	10.5	U	10.5	1.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Copper	**1.7**	J	5.2	1.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Iron	**1930**		31.5	5.7	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Lead	**1.8**	J	2.1	0.63	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Magnesium	**512**	J	1050	80.9	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Manganese	**16.0**		3.1	0.33	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Nickel	**2.1**	J	8.4	0.80	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Potassium	**254**	J	1050	55.8	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Selenium	4.2	U	4.2	1.3	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Silver	2.1	U	2.1	0.32	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Sodium	**1370**		1050	80.8	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Thallium	4.2	U	4.2	1.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Vanadium	**3.1**	J	10.5	1.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4
Zinc	**7.5**		6.3	0.54	mg/Kg	☼	06/14/18 20:45	06/15/18 18:28	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	U	0.020	0.012	mg/Kg	☼	06/19/18 03:57	06/19/18 09:05	1

Client Sample ID: RP-SB-303(11-12)Grab

Date Collected: 06/13/18 10:50
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-4
Matrix: Solid
Percent Solids: 77.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0012	U	0.0012	0.00028	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,1,2,2-Tetrachloroethane	0.0012	U	0.0012	0.00026	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0012	U	0.0012	0.00036	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,1,2-Trichloroethane	0.0012	U	0.0012	0.00022	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,1-Dichloroethane	0.0012	U	0.0012	0.00025	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,1-Dichloroethene	0.0012	U	0.0012	0.00027	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,2,3-Trichlorobenzene	0.0012	U J	0.0012	0.00022	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,2,4-Trichlorobenzene	0.0012	U	0.0012	0.00011	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,2-Dibromo-3-Chloropropane	0.0012	U J	0.0012	0.00056	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,2-Dichlorobenzene	**0.00037**	J	0.0012	0.00017	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,2-Dichloroethane	0.0012	U	0.0012	0.00036	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,2-Dichloropropane	0.0012	U	0.0012	0.00051	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,3-Dichlorobenzene	0.0012	U	0.0012	0.00019	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,4-Dichlorobenzene	**0.00033**	J	0.0012	0.00012	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
1,4-Dioxane	0.024	U	0.024	0.011	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
2-Butanone (MEK)	**0.0043**	J	0.0061	0.0013	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
2-Hexanone	0.0061	U	0.0061	0.00094	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
4-Methyl-2-pentanone (MIBK)	0.0061	U	0.0061	0.00080	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Acetone	**0.024**		0.0061	0.0046	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Benzene	**0.0016**		0.0012	0.00031	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Bromoform	0.0012	U J	0.0012	0.00051	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Bromomethane	0.0012	U J	0.0012	0.00057	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1

Client Sample ID: RP-SB-303(11-12)Grab
Date Collected: 06/13/18 10:50
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-4
Matrix: Solid
Percent Solids: 77.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	**0.0038**		0.0012	0.00032	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Carbon tetrachloride	0.0012	U	0.0012	0.00022	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Chlorobenzene	**0.00023**	J	0.0012	0.00021	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Chlorobromomethane	0.0012	U J	0.0012	0.00034	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Chlorodibromomethane	0.0012	U	0.0012	0.00023	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Chloroethane	0.0012	U	0.0012	0.00063	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Chloroform	0.0012	U	0.0012	0.00039	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Chloromethane	0.0012	U	0.0012	0.00053	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
cis-1,2-Dichloroethene	0.0012	U	0.0012	0.00018	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
cis-1,3-Dichloropropene	0.0012	U	0.0012	0.00033	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Cyclohexane	0.0012	U	0.0012	0.00027	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Dichlorobromomethane	0.0012	U	0.0012	0.00031	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Dichlorodifluoromethane	0.0012	U	0.0012	0.00041	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Ethylbenzene	**0.00030**	J	0.0012	0.00024	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Ethylene Dibromide	0.0012	U	0.0012	0.00022	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Isopropylbenzene	0.0012	U	0.0012	0.00015	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Methyl acetate	0.0061	U	0.0061	0.0052	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Methyl tert-butyl ether	0.0012	U	0.0012	0.00015	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Methylcyclohexane	0.0012	U	0.0012	0.00019	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Methylene Chloride	~~0.00028~~	~~J B~~ 0.0012 U	0.0012	0.00020	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
m-Xylene & p-Xylene	~~0.00028~~	~~J B~~ 0.0012 U	0.0012	0.00021	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
o-Xylene	**0.00013**	J	0.0012	0.00012	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Styrene	**0.00033**	J	0.0012	0.00015	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Tetrachloroethene	0.0012	U	0.0012	0.00017	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Toluene	0.0012	U	0.0012	0.00076	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
trans-1,2-Dichloroethene	0.0012	U	0.0012	0.00030	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
trans-1,3-Dichloropropene	0.0012	U	0.0012	0.00032	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Trichloroethene	0.0012	U	0.0012	0.00017	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Trichlorofluoromethane	0.0012	U	0.0012	0.00049	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1
Vinyl chloride	0.0012	U	0.0012	0.00066	mg/Kg	☼	06/14/18 04:25	06/17/18 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*78 - 135*	*06/14/18 04:25*	*06/17/18 14:48*	*1*
4-Bromofluorobenzene	*93*		*67 - 126*	*06/14/18 04:25*	*06/17/18 14:48*	*1*
Dibromofluoromethane (Surr)	*96*		*61 - 149*	*06/14/18 04:25*	*06/17/18 14:48*	*1*
Toluene-d8 (Surr)	*107*		*73 - 121*	*06/14/18 04:25*	*06/17/18 14:48*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.43	U	0.43	0.0057	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
1,2,4,5-Tetrachlorobenzene	0.43	U	0.43	0.0056	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2,2'-oxybis[1-chloropropane]	0.43	U	0.43	0.0077	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2,3,4,6-Tetrachlorophenol	0.43	U	0.43	0.029	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2,4,5-Trichlorophenol	0.43	U	0.43	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2,4,6-Trichlorophenol	0.17	U	0.17	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2,4-Dichlorophenol	0.17	U	0.17	0.0090	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2,4-Dimethylphenol	0.43	U	0.43	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2,4-Dinitrophenol	0.34	U	0.34	0.21	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2,4-Dinitrotoluene	0.086	U	0.086	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2,6-Dinitrotoluene	0.086	U	0.086	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1

Client Sample ID: RP-SB-303(11-12)Grab
Date Collected: 06/13/18 10:50
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-4
Matrix: Solid
Percent Solids: 77.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	0.43	U	0.43	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2-Chlorophenol	0.43	U	0.43	0.0060	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2-Methylnaphthalene	**0.012**	J	0.43	0.0053	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2-Methylphenol	0.43	U	0.43	0.0069	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2-Nitroaniline	0.43	U	0.43	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
2-Nitrophenol	0.43	U	0.43	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
3,3'-Dichlorobenzidine	0.17	U	0.17	0.064	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
3-Nitroaniline	0.43	U	0.43	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
4,6-Dinitro-2-methylphenol	0.34	U	0.34	0.069	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
4-Bromophenyl phenyl ether	0.43	U	0.43	0.0055	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
4-Chloro-3-methylphenol	0.43	U	0.43	0.0071	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
4-Chloroaniline	0.43	U	0.43	0.030	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
4-Chlorophenyl phenyl ether	0.43	U	0.43	0.0067	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
4-Methylphenol	0.43	U	0.43	0.0073	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
4-Nitroaniline	0.43	U	0.43	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
4-Nitrophenol	0.86	U	0.86	0.070	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Acenaphthene	0.43	U	0.43	0.031	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Acenaphthylene	**0.015**	J	0.43	0.0044	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Acetophenone	0.43	U	0.43	0.0069	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Anthracene	0.43	U	0.43	0.0048	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Atrazine	0.17	U	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Benzaldehyde	0.43	U	0.43	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Benzo[a]anthracene	**0.10**		0.043	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Benzo[a]pyrene	**0.078**		0.043	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Benzo[b]fluoranthene	**0.099**		0.043	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Benzo[g,h,i]perylene	**0.051**	J	0.43	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Benzo[k]fluoranthene	**0.047**		0.043	0.0084	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Bis(2-chloroethoxy)methane	0.43	U	0.43	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Bis(2-chloroethyl)ether	0.043	U	0.043	0.0052	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Bis(2-ethylhexyl) phthalate	0.43	U	0.43	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Butyl benzyl phthalate	0.43	U	0.43	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Caprolactam	0.43	U	0.43	0.026	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Carbazole	0.43	U	0.43	0.0050	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Chrysene	**0.11**	J	0.43	0.0072	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Dibenz(a,h)anthracene	0.043	U	0.043	0.018	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Dibenzofuran	0.43	U	0.43	0.0060	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Diethyl phthalate	0.43	U	0.43	0.0062	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Dimethyl phthalate	0.43	U	0.43	0.0052	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Di-n-butyl phthalate	0.43	U	0.43	0.075	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Di-n-octyl phthalate	0.43	U	0.43	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Fluoranthene	**0.15**	J	0.43	0.0055	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Fluorene	0.43	U	0.43	0.0058	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Hexachlorobenzene	0.043	U	0.043	0.0063	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Hexachlorobutadiene	0.086	U	0.086	0.0091	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Hexachlorocyclopentadiene	0.43	UJ	0.43	0.037	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Hexachloroethane	0.043	U	0.043	0.0066	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Indeno[1,2,3-cd]pyrene	**0.048**		0.043	0.017	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Isophorone	0.17	U	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Naphthalene	**0.026**	J	0.43	0.0074	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1

Client Sample ID: RP-SB-303(11-12)Grab
Date Collected: 06/13/18 10:50
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-4
Matrix: Solid
Percent Solids: 77.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	0.043	U	0.043	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
N-Nitrosodi-n-propylamine	0.043	U	0.043	0.0068	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
N-Nitrosodiphenylamine	0.43	U	0.43	0.0082	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Pentachlorophenol	0.34	U	0.34	0.088	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Phenanthrene	**0.038**	J	0.43	0.0075	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Phenol	0.43	U	0.43	0.0063	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1
Pyrene	**0.19**	J	0.43	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 06:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*70*		*10 - 103*	*06/14/18 10:16*	*06/15/18 06:57*	*1*
2-Fluorobiphenyl	*65*		*38 - 95*	*06/14/18 10:16*	*06/15/18 06:57*	*1*
2-Fluorophenol (Surr)	*60*		*25 - 92*	*06/14/18 10:16*	*06/15/18 06:57*	*1*
Nitrobenzene-d5 (Surr)	*60*		*37 - 94*	*06/14/18 10:16*	*06/15/18 06:57*	*1*
Phenol-d5 (Surr)	*62*		*32 - 91*	*06/14/18 10:16*	*06/15/18 06:57*	*1*
Terphenyl-d14 (Surr)	*84*		*24 - 109*	*06/14/18 10:16*	*06/15/18 06:57*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0086	U	0.0086	0.0015	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
4,4'-DDE	0.0086	U	0.0086	0.0010	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
4,4'-DDT	0.0086	U	0.0086	0.0016	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Aldrin	0.0086	U	0.0086	0.0013	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
alpha-BHC	0.0026	U	0.0026	0.00088	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
beta-BHC	0.0026	U	0.0026	0.00097	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Chlordane (technical)	0.086	U	0.086	0.021	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
delta-BHC	0.0026	U	0.0026	0.00053	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Dieldrin	0.0026	U	0.0026	0.0011	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Endosulfan I	0.0086	U	0.0086	0.0013	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Endosulfan II	0.0086	U	0.0086	0.0022	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Endosulfan sulfate	0.0086	U	0.0086	0.0011	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Endrin	0.0086	U	0.0086	0.0012	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Endrin aldehyde	0.0086	U	0.0086	0.0020	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Endrin ketone	0.0086	U	0.0086	0.0017	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
gamma-BHC (Lindane)	0.0026	U	0.0026	0.00080	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Heptachlor	0.0086	U	0.0086	0.0010	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Heptachlor epoxide	0.0086	U	0.0086	0.0013	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Methoxychlor	0.0086	U	0.0086	0.0020	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1
Toxaphene	0.086	U	0.086	0.031	mg/Kg	☼	06/18/18 12:24	06/20/18 09:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*69 - 150*	*06/18/18 12:24*	*06/20/18 09:27*	*1*
DCB Decachlorobiphenyl	*72*		*69 - 150*	*06/18/18 12:24*	*06/20/18 09:27*	*1*
Tetrachloro-m-xylene	*82*		*74 - 150*	*06/18/18 12:24*	*06/20/18 09:27*	*1*
Tetrachloro-m-xylene	*81*		*74 - 150*	*06/18/18 12:24*	*06/20/18 09:27*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.087	U	0.087	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 12:15	1
Aroclor 1221	0.087	U	0.087	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 12:15	1
Aroclor 1232	0.087	U	0.087	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 12:15	1

Client Sample ID: RP-SB-303(11-12)Grab
Date Collected: 06/13/18 10:50
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-4
Matrix: Solid
Percent Solids: 77.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1242	0.087	U	0.087	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 12:15	1
Aroclor 1248	0.087	U	0.087	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 12:15	1
Aroclor 1254	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 12:15	1
Aroclor 1260	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 12:15	1
Aroclor-1262	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 12:15	1
Aroclor 1268	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 12:15	1
Polychlorinated biphenyls, Total	0.087	U	0.087	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*166*	*	*53 - 150*	*06/18/18 12:15*	*06/19/18 12:15*	*1*
DCB Decachlorobiphenyl	*144*		*53 - 150*	*06/18/18 12:15*	*06/19/18 12:15*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.043	UJ	0.043	0.0091	mg/Kg	☼	06/18/18 00:56	06/18/18 15:38	1
2,4-D	0.043	U	0.043	0.016	mg/Kg	☼	06/18/18 00:56	06/18/18 15:38	1
Silvex (2,4,5-TP)	0.043	UJ	0.043	0.0045	mg/Kg	☼	06/18/18 00:56	06/18/18 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*137*		*80 - 150*	*06/18/18 00:56*	*06/18/18 15:38*	*1*
2,4-Dichlorophenylacetic acid	*114*		*80 - 150*	*06/18/18 00:56*	*06/18/18 15:38*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**575**	J	42.8	8.8	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Antimony	4.3	U	4.3	0.51	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Arsenic	**0.88**	J	3.2	0.79	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Barium	42.8	U	42.8	3.5	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Beryllium	0.43	U	0.43	0.049	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Cadmium	**0.24**	J	0.86	0.13	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Calcium	**216**	J	1070	109	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Chromium	**2.1**		2.1	0.59	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Cobalt	**1.4**	J	10.7	1.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Copper	**38.7**		5.3	1.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Iron	**1610**		32.1	5.8	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Lead	**6.4**		2.1	0.65	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Magnesium	**158**	J	1070	82.4	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Manganese	**6.9**		3.2	0.33	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Nickel	**4.8**	J	8.6	0.81	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Potassium	**88.6**	J	1070	56.9	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Selenium	4.3	U	4.3	1.3	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Silver	2.1	U	2.1	0.33	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Sodium	**181**	J	1070	82.3	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Thallium	4.3	U	4.3	1.3	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Vanadium	**1.8**	J	10.7	1.3	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4
Zinc	**42.2**		6.4	0.55	mg/Kg	☼	06/14/18 20:45	06/15/18 18:32	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	J	0.021	0.013	mg/Kg	☼	06/19/18 03:57	06/19/18 09:07	1

Client Sample ID: RP-SB-305(11-12)Grab
Date Collected: 06/13/18 11:35
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-5
Matrix: Solid
Percent Solids: 78.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0013	U	0.0013	0.00030	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,1,2,2-Tetrachloroethane	0.0013	U	0.0013	0.00028	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0013	U	0.0013	0.00039	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,1,2-Trichloroethane	0.0013	U	0.0013	0.00023	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,1-Dichloroethane	0.0013	U	0.0013	0.00027	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,1-Dichloroethene	0.0013	U	0.0013	0.00029	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,2,3-Trichlorobenzene	0.0013	U	0.0013	0.00024	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,2,4-Trichlorobenzene	0.0013	U	0.0013	0.00012	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,2-Dibromo-3-Chloropropane	0.0013	U	0.0013	0.00060	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,2-Dichlorobenzene	0.0013	U	0.0013	0.00019	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,2-Dichloroethane	0.0013	U	0.0013	0.00039	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,2-Dichloropropane	0.0013	U	0.0013	0.00055	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,3-Dichlorobenzene	0.0013	U	0.0013	0.00021	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,4-Dichlorobenzene	0.0013	U	0.0013	0.00013	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
1,4-Dioxane	0.026	U	0.026	0.012	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
2-Butanone (MEK)	**0.0038**	J	0.0065	0.0014	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
2-Hexanone	0.0065	U	0.0065	0.0010	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
4-Methyl-2-pentanone (MIBK)	0.0065	U	0.0065	0.00086	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Acetone	**0.018**		0.0065	0.0049	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Benzene	0.0013	U	0.0013	0.00034	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Bromoform	0.0013	U J	0.0013	0.00055	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Bromomethane	0.0013	U	0.0013	0.00062	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Carbon disulfide	**0.0034**		0.0013	0.00035	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Carbon tetrachloride	0.0013	U	0.0013	0.00024	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Chlorobenzene	0.0013	U	0.0013	0.00023	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Chlorobromomethane	0.0013	U	0.0013	0.00037	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Chlorodibromomethane	0.0013	U J	0.0013	0.00025	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Chloroethane	0.0013	U	0.0013	0.00068	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Chloroform	0.0013	U	0.0013	0.00042	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Chloromethane	0.0013	U	0.0013	0.00057	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
cis-1,2-Dichloroethene	0.0013	U	0.0013	0.00020	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
cis-1,3-Dichloropropene	0.0013	U	0.0013	0.00036	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Cyclohexane	0.0013	U	0.0013	0.00029	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Dichlorobromomethane	0.0013	U	0.0013	0.00033	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Dichlorodifluoromethane	0.0013	U	0.0013	0.00044	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Ethylbenzene	**0.0013**		0.0013	0.00026	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Ethylene Dibromide	0.0013	U	0.0013	0.00023	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Isopropylbenzene	**0.0078**		0.0013	0.00016	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Methyl acetate	0.0065	U	0.0065	0.0056	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Methyl tert-butyl ether	0.0013	U	0.0013	0.00016	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Methylcyclohexane	0.0013	U	0.0013	0.00021	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Methylene Chloride	~~0.00048~~ ~~J B~~ 0.0013 U		0.0013	0.00021	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
m-Xylene & p-Xylene	**0.0062**		0.0013	0.00023	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
o-Xylene	**0.0063**		0.0013	0.00012	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Styrene	**0.0061**		0.0013	0.00016	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Tetrachloroethene	**0.00041**	J	0.0013	0.00019	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Toluene	**0.0011**	J	0.0013	0.00081	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
trans-1,2-Dichloroethene	0.0013	U	0.0013	0.00032	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
trans-1,3-Dichloropropene	0.0013	U	0.0013	0.00035	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1

Client Sample ID: RP-SB-305(11-12)Grab
Date Collected: 06/13/18 11:35
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-5
Matrix: Solid
Percent Solids: 78.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.0013	U	0.0013	0.00019	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Trichlorofluoromethane	0.0013	U	0.0013	0.00053	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1
Vinyl chloride	0.0013	U	0.0013	0.00071	mg/Kg	☼	06/14/18 04:26	06/20/18 02:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*78 - 135*	*06/14/18 04:26*	*06/20/18 02:53*	*1*
4-Bromofluorobenzene	*91*		*67 - 126*	*06/14/18 04:26*	*06/20/18 02:53*	*1*
Dibromofluoromethane (Surr)	*97*		*61 - 149*	*06/14/18 04:26*	*06/20/18 02:53*	*1*
Toluene-d8 (Surr)	*99*		*73 - 121*	*06/14/18 04:26*	*06/20/18 02:53*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.42	U	0.42	0.0056	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
1,2,4,5-Tetrachlorobenzene	0.42	U	0.42	0.0055	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2,2'-oxybis[1-chloropropane]	0.42	U	0.42	0.0076	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2,3,4,6-Tetrachlorophenol	0.42	U	0.42	0.029	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2,4,5-Trichlorophenol	0.42	U	0.42	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2,4,6-Trichlorophenol	0.17	U	0.17	0.021	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2,4-Dichlorophenol	0.17	U	0.17	0.0089	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2,4-Dimethylphenol	0.42	U	0.42	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2,4-Dinitrophenol	0.34	U	0.34	0.21	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2,4-Dinitrotoluene	0.085	U	0.085	0.021	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2,6-Dinitrotoluene	0.085	U	0.085	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2-Chloronaphthalene	0.42	U	0.42	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2-Chlorophenol	0.42	U	0.42	0.0059	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2-Methylnaphthalene	**0.018**	**J**	0.42	0.0053	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2-Methylphenol	0.42	U	0.42	0.0068	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2-Nitroaniline	0.42	U	0.42	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
2-Nitrophenol	0.42	U	0.42	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
3,3'-Dichlorobenzidine	0.17	U	0.17	0.064	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
3-Nitroaniline	0.42	U	0.42	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
4,6-Dinitro-2-methylphenol	0.34	U	0.34	0.069	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
4-Bromophenyl phenyl ether	0.42	U	0.42	0.0055	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
4-Chloro-3-methylphenol	0.42	U	0.42	0.0070	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
4-Chloroaniline	0.42	U	0.42	0.030	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
4-Chlorophenyl phenyl ether	0.42	U	0.42	0.0067	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
4-Methylphenol	0.42	U	0.42	0.0072	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
4-Nitroaniline	0.42	U	0.42	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
4-Nitrophenol	0.85	U	0.85	0.069	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Acenaphthene	**0.11**	**J**	0.42	0.031	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Acenaphthylene	**0.28**	**J**	0.42	0.0044	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Acetophenone	~~0.17~~	~~J~~ 0.42U	0.42	0.0068	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Anthracene	0.42	U	0.42	0.0047	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Atrazine	0.17	U	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Benzaldehyde	**0.057**	**J**	0.42	0.018	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Benzo[a]anthracene	**2.0**		0.042	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Benzo[a]pyrene	**1.4**		0.042	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Benzo[b]fluoranthene	**1.8**		0.042	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Benzo[g,h,i]perylene	**0.75**		0.42	0.012	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Benzo[k]fluoranthene	**0.76**		0.042	0.0083	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1

Client Sample ID: RP-SB-305(11-12)Grab
Date Collected: 06/13/18 11:35
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-5
Matrix: Solid
Percent Solids: 78.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	0.42	U	0.42	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Bis(2-chloroethyl)ether	0.042	U	0.042	0.0051	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Bis(2-ethylhexyl) phthalate	0.42	U	0.42	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Butyl benzyl phthalate	0.42	U	0.42	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Caprolactam	0.42	U	0.42	0.025	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Carbazole	0.42	U	0.42	0.0049	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Chrysene	**1.8**		0.42	0.0071	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Dibenz(a,h)anthracene	**0.27**		0.042	0.018	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Dibenzofuran	0.42	U	0.42	0.0059	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Diethyl phthalate	0.42	U	0.42	0.0061	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Dimethyl phthalate	0.42	U	0.42	0.0051	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Di-n-butyl phthalate	0.42	U	0.42	0.074	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Di-n-octyl phthalate	0.42	U	0.42	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Fluoranthene	**3.9**		0.42	0.0055	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Fluorene	**0.029**	J	0.42	0.0057	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Hexachlorobenzene	0.042	U	0.042	0.0062	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Hexachlorobutadiene	0.085	U	0.085	0.0090	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Hexachlorocyclopentadiene	0.42	U J	0.42	0.037	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Hexachloroethane	0.042	U	0.042	0.0065	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Indeno[1,2,3-cd]pyrene	**0.85**		0.042	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Isophorone	0.17	U	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Naphthalene	**0.043**	J	0.42	0.0073	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Nitrobenzene	0.042	U	0.042	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
N-Nitrosodi-n-propylamine	0.042	U	0.042	0.0067	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
N-Nitrosodiphenylamine	0.42	U	0.42	0.0081	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Pentachlorophenol	0.34	U	0.34	0.086	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Phenanthrene	0.42	U	0.42	0.0074	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Phenol	0.42	U	0.42	0.0063	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1
Pyrene	**5.6**		0.42	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 07:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*66*		*10 - 103*	*06/14/18 10:16*	*06/15/18 07:21*	*1*
2-Fluorobiphenyl	*74*		*38 - 95*	*06/14/18 10:16*	*06/15/18 07:21*	*1*
2-Fluorophenol (Surr)	*64*		*25 - 92*	*06/14/18 10:16*	*06/15/18 07:21*	*1*
Nitrobenzene-d5 (Surr)	*64*		*37 - 94*	*06/14/18 10:16*	*06/15/18 07:21*	*1*
Phenol-d5 (Surr)	*64*		*32 - 91*	*06/14/18 10:16*	*06/15/18 07:21*	*1*
Terphenyl-d14 (Surr)	*76*		*24 - 109*	*06/14/18 10:16*	*06/15/18 07:21*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0086	U J	0.0086	0.0015	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
4,4'-DDE	0.0086	U	0.0086	0.0010	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
4,4'-DDT	0.0086	U	0.0086	0.0016	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Aldrin	0.0086	U	0.0086	0.0013	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
alpha-BHC	0.0026	U	0.0026	0.00087	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
beta-BHC	0.0026	U	0.0026	0.00096	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Chlordane (technical)	0.086	U	0.086	0.021	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
delta-BHC	0.0026	U	0.0026	0.00052	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Dieldrin	0.0026	U	0.0026	0.0011	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Endosulfan I	0.0086	U J	0.0086	0.0013	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1

Client Sample ID: RP-SB-305(11-12)Grab
Date Collected: 06/13/18 11:35
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-5
Matrix: Solid
Percent Solids: 78.2

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II	0.0086	U J	0.0086	0.0022	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Endosulfan sulfate	0.0086	U	0.0086	0.0011	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Endrin	0.0086	U	0.0086	0.0012	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Endrin aldehyde	0.0086	U	0.0086	0.0020	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Endrin ketone	0.0086	U	0.0086	0.0017	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
gamma-BHC (Lindane)	0.0026	U	0.0026	0.00079	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Heptachlor	0.0086	U J	0.0086	0.0010	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Heptachlor epoxide	**0.052**	J	0.0086	0.0013	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Methoxychlor	0.0086	U J	0.0086	0.0020	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1
Toxaphene	0.086	U J	0.086	0.031	mg/Kg	☼	06/18/18 12:24	06/20/18 09:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*69 - 150*	*06/18/18 12:24*	*06/20/18 09:40*	*1*
DCB Decachlorobiphenyl	*73*		*69 - 150*	*06/18/18 12:24*	*06/20/18 09:40*	*1*
Tetrachloro-m-xylene	*86*		*74 - 150*	*06/18/18 12:24*	*06/20/18 09:40*	*1*
Tetrachloro-m-xylene	*63*	*	*74 - 150*	*06/18/18 12:24*	*06/20/18 09:40*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 14:51	1
Aroclor 1221	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 14:51	1
Aroclor 1232	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 14:51	1
Aroclor 1242	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 14:51	1
Aroclor 1248	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 14:51	1
Aroclor 1254	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:51	1
Aroclor 1260	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:51	1
Aroclor-1262	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:51	1
Aroclor 1268	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:51	1
Polychlorinated biphenyls, Total	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*97*		*53 - 150*	*06/18/18 12:15*	*06/19/18 14:51*	*1*
DCB Decachlorobiphenyl	*109*		*53 - 150*	*06/18/18 12:15*	*06/19/18 14:51*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.043	U J	0.043	0.0090	mg/Kg	☼	06/18/18 00:56	06/18/18 15:53	1
2,4-D	0.043	U	0.043	0.015	mg/Kg	☼	06/18/18 00:56	06/18/18 15:53	1
Silvex (2,4,5-TP)	0.043	U J	0.043	0.0044	mg/Kg	☼	06/18/18 00:56	06/18/18 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*128*		*80 - 150*	*06/18/18 00:56*	*06/18/18 15:53*	*1*
2,4-Dichlorophenylacetic acid	*137*		*80 - 150*	*06/18/18 00:56*	*06/18/18 15:53*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**278**	J	37.1	7.6	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Antimony	3.7	U	3.7	0.44	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Arsenic	2.8	U	2.8	0.69	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Barium	37.1	U	37.1	3.0	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Beryllium	0.37	U	0.37	0.043	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4

Client Sample ID: RP-SB-305(11-12)Grab

Date Collected: 06/13/18 11:35
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-5
Matrix: Solid
Percent Solids: 78.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.74	U	0.74	0.11	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Calcium	**294**	J	926	94.5	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Chromium	**1.7**	J	1.9	0.51	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Cobalt	9.3	U	9.3	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Copper	**5.6**		4.6	1.0	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Iron	**875**		27.8	5.0	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Lead	**2.8**		1.9	0.56	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Magnesium	**340**	J	926	71.4	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Manganese	**4.9**		2.8	0.29	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Nickel	7.4	U	7.4	0.70	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Potassium	**125**	J	926	49.3	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Selenium	3.7	U	3.7	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Silver	1.9	U	1.9	0.28	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Sodium	**1770**		926	71.3	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Thallium	3.7	U	3.7	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Vanadium	**1.6**	J	9.3	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4
Zinc	**2.2**	J	5.6	0.48	mg/Kg	☼	06/14/18 20:45	06/15/18 18:36	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	U	0.020	0.012	mg/Kg	☼	06/19/18 03:57	06/19/18 09:08	1

Client Sample ID: RP-SB-306(11-12)Grab

Date Collected: 06/13/18 12:25
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-6
Matrix: Solid
Percent Solids: 79.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.14	U	0.14	0.040	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,1,2,2-Tetrachloroethane	0.14	U	0.14	0.027	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.14	U	0.14	0.049	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,1,2-Trichloroethane	0.14	U	0.14	0.011	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,1-Dichloroethane	0.14	U	0.14	0.034	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,1-Dichloroethene	0.14	U	0.14	0.049	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,2,3-Trichlorobenzene	0.14	U	0.14	0.050	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,2,4-Trichlorobenzene	0.14	U	0.14	0.039	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,2-Dibromo-3-Chloropropane	0.14	U J	0.14	0.033	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,2-Dichlorobenzene	0.14	U	0.14	0.031	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,2-Dichloroethane	0.14	U	0.14	0.036	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,2-Dichloropropane	0.14	U	0.14	0.026	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,3-Dichlorobenzene	0.14	U	0.14	0.047	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,4-Dichlorobenzene	0.14	U	0.14	0.047	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
1,4-Dioxane	7.1	U	7.1	1.2	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
2-Butanone (MEK)	0.71	U	0.71	0.31	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
2-Hexanone	0.71	U	0.71	0.10	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
4-Methyl-2-pentanone (MIBK)	0.71	U	0.71	0.090	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Acetone	0.71	U	0.71	0.15	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Benzene	0.14	U	0.14	0.027	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Bromoform	0.14	UJ	0.14	0.026	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Bromomethane	0.14	UJ	0.14	0.026	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50

Client Sample ID: RP-SB-306(11-12)Grab
Date Collected: 06/13/18 12:25
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-6
Matrix: Solid
Percent Solids: 79.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.14	U	0.14	0.031	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Carbon tetrachloride	0.14	U	0.14	0.047	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Chlorobenzene	0.14	U	0.14	0.034	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Chlorobromomethane	0.14	U	0.14	0.043	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Chlorodibromomethane	0.14	U	0.14	0.031	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Chloroethane	0.14	U	0.14	0.053	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Chloroform	0.14	U	0.14	0.031	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Chloromethane	0.14	U	0.14	0.031	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
cis-1,2-Dichloroethene	0.14	U	0.14	0.037	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
cis-1,3-Dichloropropene	0.14	U	0.14	0.023	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Cyclohexane	0.14	U	0.14	0.037	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Dichlorobromomethane	0.14	U	0.14	0.021	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Dichlorodifluoromethane	0.14	U J.	0.14	0.020	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Ethylbenzene	**13**		0.14	0.043	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Ethylene Dibromide	0.14	U	0.14	0.027	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Isopropylbenzene	**0.26**		0.14	0.046	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Methyl acetate	0.71	U	0.71	0.083	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Methyl tert-butyl ether	0.14	U J.	0.14	0.019	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Methylcyclohexane	**0.12**	J.	0.14	0.031	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Methylene Chloride	0.14	U	0.14	0.030	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
m-Xylene & p-Xylene	**0.58**		0.14	0.040	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
o-Xylene	**2.2**		0.14	0.046	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Styrene	**0.61**		0.14	0.024	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Tetrachloroethene	0.14	U	0.14	0.051	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Toluene	**0.21**		0.14	0.036	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
trans-1,2-Dichloroethene	0.14	U	0.14	0.026	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
trans-1,3-Dichloropropene	0.14	U	0.14	0.027	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Trichloroethene	0.14	U	0.14	0.031	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Trichlorofluoromethane	0.14	U	0.14	0.021	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50
Vinyl chloride	0.14	U	0.14	0.029	mg/Kg	☼	06/14/18 04:20	06/19/18 12:22	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*69 - 143*	*06/14/18 04:20*	*06/19/18 12:22*	*50*
4-Bromofluorobenzene	*95*		*61 - 137*	*06/14/18 04:20*	*06/19/18 12:22*	*50*
Dibromofluoromethane (Surr)	*105*		*61 - 135*	*06/14/18 04:20*	*06/19/18 12:22*	*50*
Toluene-d8 (Surr)	*107*		*67 - 127*	*06/14/18 04:20*	*06/19/18 12:22*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.42	U	0.42	0.0055	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
1,2,4,5-Tetrachlorobenzene	0.42	U	0.42	0.0054	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2,2'-oxybis[1-chloropropane]	0.42	U	0.42	0.0075	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2,3,4,6-Tetrachlorophenol	0.42	U	0.42	0.028	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2,4,5-Trichlorophenol	0.42	U	0.42	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2,4,6-Trichlorophenol	0.17	U	0.17	0.021	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2,4-Dichlorophenol	0.17	U	0.17	0.0088	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2,4-Dimethylphenol	0.42	U	0.42	0.018	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2,4-Dinitrophenol	0.33	U	0.33	0.20	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2,4-Dinitrotoluene	0.084	U	0.084	0.021	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2,6-Dinitrotoluene	0.084	U	0.084	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1

Client Sample ID: RP-SB-306(11-12)Grab
Date Collected: 06/13/18 12:25
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-6
Matrix: Solid
Percent Solids: 79.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	0.42	U	0.42	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2-Chlorophenol	0.42	U	0.42	0.0058	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2-Methylnaphthalene	0.42	U	0.42	0.0052	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2-Methylphenol	0.42	U	0.42	0.0067	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2-Nitroaniline	0.42	U	0.42	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
2-Nitrophenol	0.42	U	0.42	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
3,3'-Dichlorobenzidine	0.17	U	0.17	0.063	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
3-Nitroaniline	0.42	U	0.42	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
4,6-Dinitro-2-methylphenol	0.33	U	0.33	0.068	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
4-Bromophenyl phenyl ether	0.42	U	0.42	0.0054	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
4-Chloro-3-methylphenol	0.42	U	0.42	0.0069	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
4-Chloroaniline	0.42	U	0.42	0.029	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
4-Chlorophenyl phenyl ether	0.42	U	0.42	0.0066	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
4-Methylphenol	0.42	U	0.42	0.0071	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
4-Nitroaniline	0.42	U	0.42	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
4-Nitrophenol	0.84	U	0.84	0.068	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Acenaphthene	0.42	U	0.42	0.030	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Acenaphthylene	0.42	U	0.42	0.0043	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Acetophenone	~~0.035~~	~~J~~ 0.42U	0.42	0.0067	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Anthracene	**0.30**	J	0.42	0.0047	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Atrazine	0.17	U	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Benzaldehyde	0.42	U	0.42	0.018	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Benzo[a]anthracene	**0.37**		0.042	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Benzo[a]pyrene	**0.20**		0.042	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Benzo[b]fluoranthene	**0.28**		0.042	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Benzo[g,h,i]perylene	**0.13**	J	0.42	0.012	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Benzo[k]fluoranthene	**0.12**		0.042	0.0082	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Bis(2-chloroethoxy)methane	0.42	U	0.42	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Bis(2-chloroethyl)ether	0.042	U	0.042	0.0050	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Bis(2-ethylhexyl) phthalate	0.42	U	0.42	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Butyl benzyl phthalate	0.42	U	0.42	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Caprolactam	0.42	U	0.42	0.025	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Carbazole	0.42	U	0.42	0.0049	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Chrysene	**0.39**	J	0.42	0.0070	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Dibenz(a,h)anthracene	**0.048**		0.042	0.018	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Dibenzofuran	0.42	U	0.42	0.0058	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Diethyl phthalate	0.42	U	0.42	0.0060	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Dimethyl phthalate	0.42	U	0.42	0.0050	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Di-n-butyl phthalate	0.42	U	0.42	0.073	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Di-n-octyl phthalate	0.42	U	0.42	0.022	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Fluoranthene	**0.86**		0.42	0.0054	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Fluorene	0.42	U	0.42	0.0056	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Hexachlorobenzene	0.042	U	0.042	0.0061	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Hexachlorobutadiene	0.084	U	0.084	0.0089	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Hexachlorocyclopentadiene	0.42	U J	0.42	0.037	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Hexachloroethane	0.042	U	0.042	0.0064	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Indeno[1,2,3-cd]pyrene	**0.13**		0.042	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Isophorone	0.17	U	0.17	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Naphthalene	0.42	U	0.42	0.0072	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1

Client Sample ID: RP-SB-306(11-12)Grab
Date Collected: 06/13/18 12:25
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-6
Matrix: Solid
Percent Solids: 79.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	0.042	U	0.042	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
N-Nitrosodi-n-propylamine	0.042	U	0.042	0.0066	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
N-Nitrosodiphenylamine	0.42	U	0.42	0.0080	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Pentachlorophenol	0.33	U	0.33	0.085	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Phenanthrene	**0.25**	J	0.42	0.0073	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Phenol	0.42	U	0.42	0.0062	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1
Pyrene	**1.4**		0.42	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 07:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	43		10 - 103	06/14/18 10:16	06/15/18 07:45	1
2-Fluorobiphenyl	57		38 - 95	06/14/18 10:16	06/15/18 07:45	1
2-Fluorophenol (Surr)	48		25 - 92	06/14/18 10:16	06/15/18 07:45	1
Nitrobenzene-d5 (Surr)	51		37 - 94	06/14/18 10:16	06/15/18 07:45	1
Phenol-d5 (Surr)	50		32 - 91	06/14/18 10:16	06/15/18 07:45	1
Terphenyl-d14 (Surr)	64		24 - 109	06/14/18 10:16	06/15/18 07:45	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0084	U J	0.0084	0.0014	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
4,4'-DDE	0.0084	U	0.0084	0.00099	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
4,4'-DDT	0.0084	U	0.0084	0.0015	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Aldrin	0.0084	U	0.0084	0.0013	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
alpha-BHC	0.0025	U	0.0025	0.00086	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
beta-BHC	0.0025	U	0.0025	0.00094	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Chlordane (technical)	0.084	U	0.084	0.020	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
delta-BHC	0.0025	U	0.0025	0.00052	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Dieldrin	0.0025	U	0.0025	0.0011	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Endosulfan I	0.0084	U	0.0084	0.0013	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Endosulfan II	0.0084	U	0.0084	0.0022	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Endosulfan sulfate	0.0084	U	0.0084	0.0011	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Endrin	0.0084	U	0.0084	0.0012	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Endrin aldehyde	0.0084	U	0.0084	0.0020	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Endrin ketone	0.0084	U	0.0084	0.0016	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
gamma-BHC (Lindane)	0.0025	U	0.0025	0.00078	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Heptachlor	0.0084	U J	0.0084	0.00099	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Heptachlor epoxide	**0.014**	J	0.0084	0.0013	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Methoxychlor	0.0084	U J	0.0084	0.0019	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1
Toxaphene	0.084	U J	0.084	0.030	mg/Kg	☼	06/18/18 12:24	06/20/18 09:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	83		69 - 150	06/18/18 12:24	06/20/18 09:53	1
DCB Decachlorobiphenyl	79		69 - 150	06/18/18 12:24	06/20/18 09:53	1
Tetrachloro-m-xylene	67	*	74 - 150	06/18/18 12:24	06/20/18 09:53	1
Tetrachloro-m-xylene	73	*	74 - 150	06/18/18 12:24	06/20/18 09:53	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.084	U	0.084	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 12:49	1
Aroclor 1221	0.084	U	0.084	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 12:49	1
Aroclor 1232	0.084	U	0.084	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 12:49	1

Client Sample ID: RP-SB-306(11-12)Grab
Date Collected: 06/13/18 12:25
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-6
Matrix: Solid
Percent Solids: 79.4

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1242	0.084	U	0.084	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 12:49	1
Aroclor 1248	0.084	U	0.084	0.011	mg/Kg	☼	06/18/18 12:15	06/19/18 12:49	1
Aroclor 1254	0.084	U	0.084	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 12:49	1
Aroclor 1260	0.084	U	0.084	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 12:49	1
Aroclor-1262	0.084	U	0.084	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 12:49	1
Aroclor 1268	0.084	U	0.084	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 12:49	1
Polychlorinated biphenyls, Total	0.084	U	0.084	0.012	mg/Kg	☼	06/18/18 12:15	06/19/18 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*117*		*53 - 150*	*06/18/18 12:15*	*06/19/18 12:49*	*1*
DCB Decachlorobiphenyl	*117*		*53 - 150*	*06/18/18 12:15*	*06/19/18 12:49*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.042	U J	0.042	0.0089	mg/Kg	☼	06/18/18 00:56	06/18/18 16:07	1
2,4-D	0.042	U	0.042	0.015	mg/Kg	☼	06/18/18 00:56	06/18/18 16:07	1
Silvex (2,4,5-TP)	0.042	U J	0.042	0.0044	mg/Kg	☼	06/18/18 00:56	06/18/18 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*137*		*80 - 150*	*06/18/18 00:56*	*06/18/18 16:07*	*1*
2,4-Dichlorophenylacetic acid	*118*		*80 - 150*	*06/18/18 00:56*	*06/18/18 16:07*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**206**	J	37.6	7.7	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Antimony	3.8	U	3.8	0.45	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Arsenic	2.8	U	2.8	0.70	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Barium	37.6	U	37.6	3.0	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Beryllium	0.38	U	0.38	0.043	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Cadmium	0.75	U	0.75	0.11	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Calcium	940	U	940	95.9	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Chromium	**1.1**	J	1.9	0.52	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Cobalt	9.4	U	9.4	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Copper	**3.0**	J	4.7	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Iron	**673**		28.2	5.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Lead	**0.80**	J	1.9	0.57	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Magnesium	**93.7**	J	940	72.5	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Manganese	**4.5**		2.8	0.29	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Nickel	7.5	U	7.5	0.71	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Potassium	**54.6**	J	940	50.0	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Selenium	3.8	U	3.8	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Silver	1.9	U	1.9	0.29	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Sodium	**376**	J	940	72.4	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Thallium	3.8	U	3.8	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Vanadium	9.4	U	9.4	1.1	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4
Zinc	**5.8**		5.6	0.49	mg/Kg	☼	06/14/18 20:45	06/15/18 18:40	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	U	0.020	0.012	mg/Kg	☼	06/19/18 03:57	06/19/18 09:14	1

Client Sample ID: RP-SB-312(11-12)Grab
Date Collected: 06/13/18 13:30
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-7
Matrix: Solid
Percent Solids: 87.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0011	U	0.0011	0.00025	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,1,2,2-Tetrachloroethane	0.0011	U	0.0011	0.00023	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0011	U	0.0011	0.00033	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,1,2-Trichloroethane	0.0011	U	0.0011	0.00019	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,1-Dichloroethane	0.0011	U	0.0011	0.00022	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,1-Dichloroethene	0.0011	U	0.0011	0.00025	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,2,3-Trichlorobenzene	0.0011	U	0.0011	0.00020	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,2,4-Trichlorobenzene	0.0011	U	0.0011	0.00010	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,2-Dibromo-3-Chloropropane	0.0011	U	0.0011	0.00050	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,2-Dichlorobenzene	0.0011	U	0.0011	0.00016	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,2-Dichloroethane	0.0011	U	0.0011	0.00032	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,2-Dichloropropane	0.0011	U	0.0011	0.00046	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,3-Dichlorobenzene	0.0011	U	0.0011	0.00017	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,4-Dichlorobenzene	0.0011	U	0.0011	0.00011	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
1,4-Dioxane	0.022	U	0.022	0.010	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
2-Butanone (MEK)	**0.0021**	J	0.0055	0.0012	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
2-Hexanone	0.0055	U	0.0055	0.00085	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
4-Methyl-2-pentanone (MIBK)	0.0055	U	0.0055	0.00073	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Acetone	**0.010**		0.0055	0.0041	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Benzene	0.0011	U	0.0011	0.00028	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Bromoform	0.0011	U J	0.0011	0.00046	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Bromomethane	0.0011	U	0.0011	0.00052	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Carbon disulfide	**0.0029**		0.0011	0.00029	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Carbon tetrachloride	0.0011	U	0.0011	0.00020	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Chlorobenzene	0.0011	U	0.0011	0.00019	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Chlorobromomethane	0.0011	U	0.0011	0.00031	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Chlorodibromomethane	0.0011	U J	0.0011	0.00021	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Chloroethane	0.0011	U	0.0011	0.00057	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Chloroform	0.0011	U	0.0011	0.00035	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Chloromethane	0.0011	U	0.0011	0.00048	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
cis-1,2-Dichloroethene	0.0011	U	0.0011	0.00017	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
cis-1,3-Dichloropropene	0.0011	U	0.0011	0.00030	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Cyclohexane	**0.00034**	J	0.0011	0.00024	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Dichlorobromomethane	0.0011	U	0.0011	0.00028	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Dichlorodifluoromethane	0.0011	U	0.0011	0.00037	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Ethylbenzene	0.0011	U	0.0011	0.00022	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Ethylene Dibromide	0.0011	U	0.0011	0.00020	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Isopropylbenzene	**0.0071**		0.0011	0.00014	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Methyl acetate	0.0055	U	0.0055	0.0047	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Methyl tert-butyl ether	0.0011	U	0.0011	0.00014	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Methylcyclohexane	**0.0014**		0.0011	0.00017	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Methylene Chloride	~~0.00071 J B~~ 0.0011 U		0.0011	0.00018	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
m-Xylene & p-Xylene	0.0011	U	0.0011	0.00019	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
o-Xylene	**0.00033**	J	0.0011	0.00010	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Styrene	0.0011	U	0.0011	0.00013	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Tetrachloroethene	0.0011	U	0.0011	0.00016	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Toluene	0.0011	U	0.0011	0.00068	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
trans-1,2-Dichloroethene	0.0011	U	0.0011	0.00027	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
trans-1,3-Dichloropropene	0.0011	U	0.0011	0.00029	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1

Client Sample ID: RP-SB-312(11-12)Grab
Date Collected: 06/13/18 13:30
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-7
Matrix: Solid
Percent Solids: 87.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.0011	U	0.0011	0.00016	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Trichlorofluoromethane	0.0011	U	0.0011	0.00044	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1
Vinyl chloride	0.0011	U	0.0011	0.00060	mg/Kg	☼	06/14/18 04:27	06/20/18 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 135*	*06/14/18 04:27*	*06/20/18 03:18*	*1*
4-Bromofluorobenzene	*94*		*67 - 126*	*06/14/18 04:27*	*06/20/18 03:18*	*1*
Dibromofluoromethane (Surr)	*94*		*61 - 149*	*06/14/18 04:27*	*06/20/18 03:18*	*1*
Toluene-d8 (Surr)	*96*		*73 - 121*	*06/14/18 04:27*	*06/20/18 03:18*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.38	U	0.38	0.0050	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
1,2,4,5-Tetrachlorobenzene	0.38	U	0.38	0.0050	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2,2'-oxybis[1-chloropropane]	0.38	U	0.38	0.0068	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2,3,4,6-Tetrachlorophenol	0.38	U	0.38	0.026	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2,4,5-Trichlorophenol	0.38	U	0.38	0.012	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2,4,6-Trichlorophenol	0.15	U	0.15	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2,4-Dichlorophenol	0.15	U	0.15	0.0080	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2,4-Dimethylphenol	0.38	U	0.38	0.017	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2,4-Dinitrophenol	0.30	U	0.30	0.19	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2,4-Dinitrotoluene	0.077	U	0.077	0.019	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2,6-Dinitrotoluene	0.077	U	0.077	0.012	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2-Chloronaphthalene	0.38	U	0.38	0.017	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2-Chlorophenol	0.38	U	0.38	0.0053	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2-Methylnaphthalene	0.38	U	0.38	0.0047	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2-Methylphenol	0.38	U	0.38	0.0061	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2-Nitroaniline	0.38	U	0.38	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
2-Nitrophenol	0.38	U	0.38	0.012	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
3,3'-Dichlorobenzidine	0.15	U	0.15	0.057	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
3-Nitroaniline	0.38	U	0.38	0.021	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
4,6-Dinitro-2-methylphenol	0.30	U	0.30	0.061	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
4-Bromophenyl phenyl ether	0.38	U	0.38	0.0049	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
4-Chloro-3-methylphenol	0.38	U	0.38	0.0063	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
4-Chloroaniline	0.38	U	0.38	0.026	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
4-Chlorophenyl phenyl ether	0.38	U	0.38	0.0060	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
4-Methylphenol	0.38	U	0.38	0.0064	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
4-Nitroaniline	0.38	U	0.38	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
4-Nitrophenol	0.77	U	0.77	0.062	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Acenaphthene	0.38	U	0.38	0.028	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Acenaphthylene	0.38	U	0.38	0.0039	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Acetophenone	0.38	U	0.38	0.0061	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Anthracene	0.38	U	0.38	0.0042	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Atrazine	0.15	U	0.15	0.0095	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Benzaldehyde	0.38	U	0.38	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Benzo[a]anthracene	**0.21**		0.038	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Benzo[a]pyrene	**0.15**		0.038	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Benzo[b]fluoranthene	**0.20**		0.038	0.0098	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Benzo[g,h,i]perylene	**0.098**	J	0.38	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Benzo[k]fluoranthene	**0.11**		0.038	0.0074	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1

Client Sample ID: RP-SB-312(11-12)Grab
Date Collected: 06/13/18 13:30
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-7
Matrix: Solid
Percent Solids: 87.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	0.38	U	0.38	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Bis(2-chloroethyl)ether	0.038	U	0.038	0.0046	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Bis(2-ethylhexyl) phthalate	**0.047**	J	0.38	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Butyl benzyl phthalate	0.38	U	0.38	0.018	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Caprolactam	0.38	U	0.38	0.023	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Carbazole	0.38	U	0.38	0.0044	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Chrysene	**0.15**	J	0.38	0.0064	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Dibenz(a,h)anthracene	**0.035**	J	0.038	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Dibenzofuran	0.38	U	0.38	0.0053	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Diethyl phthalate	0.38	U	0.38	0.0055	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Dimethyl phthalate	0.38	U	0.38	0.0046	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Di-n-butyl phthalate	0.38	U	0.38	0.067	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Di-n-octyl phthalate	0.38	U	0.38	0.020	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Fluoranthene	**0.27**	J	0.38	0.0049	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Fluorene	0.38	U	0.38	0.0051	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Hexachlorobenzene	0.038	U	0.038	0.0055	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Hexachlorobutadiene	0.077	U	0.077	0.0080	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Hexachlorocyclopentadiene	0.38	U J	0.38	0.033	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Hexachloroethane	0.038	U	0.038	0.0058	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Indeno[1,2,3-cd]pyrene	**0.10**		0.038	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Isophorone	0.15	U	0.15	0.0099	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Naphthalene	0.38	U	0.38	0.0065	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Nitrobenzene	0.038	U	0.038	0.0091	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
N-Nitrosodi-n-propylamine	0.038	U	0.038	0.0060	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
N-Nitrosodiphenylamine	0.38	U	0.38	0.0072	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Pentachlorophenol	0.30	U	0.30	0.078	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Phenanthrene	0.38	U	0.38	0.0066	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Phenol	0.38	U	0.38	0.0056	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1
Pyrene	**1.3**		0.38	0.0094	mg/Kg	☼	06/14/18 10:16	06/15/18 08:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*61*		*10 - 103*	*06/14/18 10:16*	*06/15/18 08:08*	*1*
2-Fluorobiphenyl	*68*		*38 - 95*	*06/14/18 10:16*	*06/15/18 08:08*	*1*
2-Fluorophenol (Surr)	*54*		*25 - 92*	*06/14/18 10:16*	*06/15/18 08:08*	*1*
Nitrobenzene-d5 (Surr)	*52*		*37 - 94*	*06/14/18 10:16*	*06/15/18 08:08*	*1*
Phenol-d5 (Surr)	*58*		*32 - 91*	*06/14/18 10:16*	*06/15/18 08:08*	*1*
Terphenyl-d14 (Surr)	*72*		*24 - 109*	*06/14/18 10:16*	*06/15/18 08:08*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0077	U	0.0077	0.0013	mg/Kg	☼	06/18/18 12:24	06/19/18 18:05	1
4,4'-DDE	0.0077	U	0.0077	0.00090	mg/Kg	☼	06/18/18 12:24	06/19/18 18:05	1
4,4'-DDT	0.0077	U	0.0077	0.0014	mg/Kg	☼	06/18/18 12:24	06/19/18 18:05	1
Aldrin	0.0077	U	0.0077	0.0012	mg/Kg	☼	06/18/18 12:24	06/19/18 18:05	1
alpha-BHC	0.0023	U	0.0023	0.00078	mg/Kg	☼	06/18/18 12:24	06/19/18 18:05	1
beta-BHC	0.0023	U	0.0023	0.00086	mg/Kg	☼	06/18/18 12:24	06/19/18 18:05	1
Chlordane (technical)	0.077	U	0.077	0.019	mg/Kg	☼	06/18/18 12:24	06/19/18 18:05	1
delta-BHC	0.0023	U	0.0023	0.00047	mg/Kg	☼	06/18/18 12:24	06/19/18 18:05	1
Dieldrin	0.0023	U	0.0023	0.0010	mg/Kg	☼	06/18/18 12:24	06/19/18 18:05	1
Endosulfan I	0.0077	U	0.0077	0.0012	mg/Kg	☼	06/18/18 12:24	06/19/18 18:05	1

Client Sample ID: RP-SB-312(11-12)Grab

Date Collected: 06/13/18 13:30
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158228-7
Matrix: Solid
Percent Solids: 87.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.68	U	0.68	0.10	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Calcium	97.3	J	849	86.6	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Chromium	3.2		1.7	0.47	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Cobalt	8.5	U	8.5	0.97	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Copper	1.2	J	4.2	0.96	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Iron	675		25.5	4.6	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Lead	3.3		1.7	0.51	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Magnesium	107	J	849	65.5	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Manganese	7.6		2.5	0.26	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Nickel	6.8	U	6.8	0.64	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Potassium	58.6	J	849	45.2	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Selenium	3.4	U	3.4	1.0	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Silver	1.7	U	1.7	0.26	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Sodium	311	J	849	65.4	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Thallium	3.4	U	3.4	1.0	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Vanadium	1.4	J	8.5	1.0	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4
Zinc	3.0	J	5.1	0.44	mg/Kg	☼	06/14/18 20:45	06/15/18 18:44	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	U	0.019	0.011	mg/Kg	☼	06/19/18 03:57	06/19/18 09:16	1

Client Sample ID: RP-SB-302(0-12)Composite

Date Collected: 06/13/18 09:00
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-1
Matrix: Solid
Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.012	J	0.39	0.0049	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Acenaphthene	0.39	U	0.39	0.029	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Acenaphthylene	0.063	J	0.39	0.0041	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Anthracene	0.022	J	0.39	0.0044	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Benzo[a]anthracene	0.10		0.039	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Benzo[a]pyrene	0.089		0.039	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Benzo[b]fluoranthene	0.12		0.039	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Benzo[g,h,i]perylene	0.086	J	0.39	0.012	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Benzo[k]fluoranthene	0.059		0.039	0.0077	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Chrysene	0.10	J	0.39	0.0067	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Dibenz(a,h)anthracene	0.028	J	0.039	0.017	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Fluoranthene	0.085	J	0.39	0.0051	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Fluorene	0.39	U	0.39	0.0054	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Indeno[1,2,3-cd]pyrene	0.090		0.039	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Naphthalene	0.016	J	0.39	0.0068	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Phenanthrene	0.057	J	0.39	0.0069	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1
Pyrene	0.17	J	0.39	0.0098	mg/Kg	☼	06/14/18 10:16	06/15/18 08:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*38 - 95*	*06/14/18 10:16*	*06/15/18 08:32*	*1*
Nitrobenzene-d5 (Surr)	*58*		*37 - 94*	*06/14/18 10:16*	*06/15/18 08:32*	*1*
Terphenyl-d14 (Surr)	*76*		*24 - 109*	*06/14/18 10:16*	*06/15/18 08:32*	*1*

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Rockaway Park Former MGP Site

TestAmerica Job ID: 460-158228-1

Client Sample ID: RP-SB-302(0-12)Composite
Date Collected: 06/13/18 09:00
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-1
Matrix: Solid
Percent Solids: 83.6

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	2.5	U	2.5	2.5	mg/Kg	☼	06/14/18 04:03	06/19/18 14:15	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*80 - 135*	*06/14/18 04:03*	*06/19/18 14:15*	*50*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	82		10	1.0	mg/Kg	☼	06/18/18 10:47	06/19/18 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*75*		*11 - 126*	*06/18/18 10:47*	*06/19/18 11:03*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.080	U	0.080	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:12	1
Aroclor 1221	0.080	U	0.080	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:12	1
Aroclor 1232	0.080	U	0.080	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:12	1
Aroclor 1242	0.080	U	0.080	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:12	1
Aroclor 1248	0.080	U	0.080	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:12	1
Aroclor 1254	0.080	U	0.080	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:12	1
Aroclor 1260	0.080	U	0.080	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:12	1
Aroclor-1262	0.080	U	0.080	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:12	1
Aroclor 1268	0.080	U	0.080	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:12	1
Polychlorinated biphenyls, Total	0.080	U	0.080	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*53 - 150*	*06/16/18 12:35*	*06/17/18 18:12*	*1*
DCB Decachlorobiphenyl	*76*		*53 - 150*	*06/16/18 12:35*	*06/17/18 18:12*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/15/18 10:26	06/15/18 17:31	5
Barium	**68.3**	J	1000	38.4	ug/L		06/15/18 10:26	06/15/18 17:31	5
Cadmium	20.0	U	20.0	1.1	ug/L		06/15/18 10:26	06/15/18 17:31	5
Chromium	~~7.8~~ ~~J~~	SOU	50.0	6.3	ug/L		06/15/18 10:26	06/15/18 17:31	5
Lead	50.0	U	50.0	12.3	ug/L		06/15/18 10:26	06/15/18 17:31	5
Selenium	100	U	100	33.0	ug/L		06/15/18 10:26	06/15/18 17:31	5
Silver	50.0	U	50.0	5.4	ug/L		06/15/18 10:26	06/15/18 17:31	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/21/18 04:24	06/21/18 08:22	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	**10.8**	~~HF~~ J			SU			06/18/18 18:21	1
pH	**10.8**	~~HF~~ J			SU			06/18/18 18:21	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/19/18 16:07	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/18/18 16:37	06/18/18 16:44	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/18/18 11:30	06/18/18 16:41	1

Client Sample ID: RP-SB-301(0-12)Composite

Date Collected: 06/13/18 09:45
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-2
Matrix: Solid
Percent Solids: 82.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.010	J	0.40	0.0050	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Acenaphthene	0.40	U	0.40	0.029	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Acenaphthylene	0.055	J	0.40	0.0041	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Anthracene	0.40	U	0.40	0.0045	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Benzo[a]anthracene	0.072		0.040	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Benzo[a]pyrene	0.099	J	0.040	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Benzo[b]fluoranthene	0.12	J	0.040	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Benzo[g,h,i]perylene	0.13	J	0.40	0.012	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Benzo[k]fluoranthene	0.055		0.040	0.0078	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Chrysene	0.081	J	0.40	0.0067	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Dibenz(a,h)anthracene	0.030	J	0.040	0.017	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Fluoranthene	0.055	J	0.40	0.0052	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Fluorene	0.40	U	0.40	0.0054	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Indeno[1,2,3-cd]pyrene	0.096	J	0.040	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Naphthalene	0.018	J	0.40	0.0069	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Phenanthrene	0.030	J	0.40	0.0070	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1
Pyrene	0.15	J	0.40	0.0099	mg/Kg	☼	06/14/18 10:16	06/15/18 08:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*38 - 95*	*06/14/18 10:16*	*06/15/18 08:56*	*1*
Nitrobenzene-d5 (Surr)	*57*		*37 - 94*	*06/14/18 10:16*	*06/15/18 08:56*	*1*
Terphenyl-d14 (Surr)	*82*		*24 - 109*	*06/14/18 10:16*	*06/15/18 08:56*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	2.4	U	2.4	2.4	mg/Kg	☼	06/14/18 04:03	06/18/18 13:09	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*106*		*80 - 135*	*06/14/18 04:03*	*06/18/18 13:09*	*50*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	17	J	10	1.0	mg/Kg	☼	06/18/18 10:47	06/19/18 11:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*81*		*11 - 126*	*06/18/18 10:47*	*06/19/18 11:16*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.081	U	0.081	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:29	1
Aroclor 1221	0.081	U	0.081	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:29	1
Aroclor 1232	0.081	U	0.081	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:29	1
Aroclor 1242	0.081	U	0.081	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:29	1
Aroclor 1248	0.081	U	0.081	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:29	1
Aroclor 1254	0.081	U	0.081	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:29	1
Aroclor 1260	0.081	U	0.081	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:29	1
Aroclor-1262	0.081	U	0.081	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:29	1
Aroclor 1268	0.081	U	0.081	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:29	1
Polychlorinated biphenyls, Total	0.081	U	0.081	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:29	1

Client Sample ID: RP-SB-301(0-12)Composite

Date Collected: 06/13/18 09:45
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-2
Matrix: Solid
Percent Solids: 82.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	88	p	53 - 150	06/16/18 12:35	06/17/18 18:29	1
DCB Decachlorobiphenyl	133		53 - 150	06/16/18 12:35	06/17/18 18:29	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/15/18 10:26	06/15/18 17:35	5
Barium	**48.6**	**J**	1000	38.4	ug/L		06/15/18 10:26	06/15/18 17:35	5
Cadmium	20.0	U	20.0	1.1	ug/L		06/15/18 10:26	06/15/18 17:35	5
Chromium	50.0	U	50.0	6.3	ug/L		06/15/18 10:26	06/15/18 17:35	5
Lead	**29.0**	**J**	50.0	12.3	ug/L		06/15/18 10:26	06/15/18 17:35	5
Selenium	100	U	100	33.0	ug/L		06/15/18 10:26	06/15/18 17:35	5
Silver	50.0	U	50.0	5.4	ug/L		06/15/18 10:26	06/15/18 17:35	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/21/18 03:58	06/21/18 08:24	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	**9.4**	**HF J**			SU			06/18/18 18:22	1
pH	**9.4**	**HF J**			SU			06/18/18 18:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/19/18 16:07	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/18/18 16:37	06/18/18 16:44	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/18/18 11:30	06/18/18 16:41	1

Client Sample ID: Dup-061318A Composite

Date Collected: 06/13/18 12:15
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-3
Matrix: Solid
Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**0.023**	**J**	0.39	0.0049	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Acenaphthene	0.39	U	0.39	0.028	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Acenaphthylene	**0.14**	**J**	0.39	0.0040	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Anthracene	**0.038**	**J**	0.39	0.0044	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Benzo[a]anthracene	**0.14**		0.039	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Benzo[a]pyrene	**0.21**	**J**	0.039	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Benzo[b]fluoranthene	**0.29**	**J**	0.039	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Benzo[g,h,i]perylene	**0.29**	**J**	0.39	0.012	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Benzo[k]fluoranthene	**0.092**		0.039	0.0077	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Chrysene	**0.18**	**J**	0.39	0.0066	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Dibenz(a,h)anthracene	**0.056**		0.039	0.017	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Fluoranthene	**0.098**	**J**	0.39	0.0051	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Fluorene	**0.014**	**J**	0.39	0.0053	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Indeno[1,2,3-cd]pyrene	**0.23**	**J**	0.039	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Naphthalene	**0.035**	**J**	0.39	0.0068	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Phenanthrene	**0.058**	**J**	0.39	0.0069	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1
Pyrene	**0.26**	**J**	0.39	0.0097	mg/Kg	☼	06/14/18 10:16	06/15/18 09:20	1

Client Sample ID: Dup-061318A Composite
Date Collected: 06/13/18 12:15
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-3
Matrix: Solid
Percent Solids: 84.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		38 - 95	06/14/18 10:16	06/15/18 09:20	1
Nitrobenzene-d5 (Surr)	57		37 - 94	06/14/18 10:16	06/15/18 09:20	1
Terphenyl-d14 (Surr)	69		24 - 109	06/14/18 10:16	06/15/18 09:20	1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	2.8	U	2.8	2.8	mg/Kg	☼	06/14/18 04:03	06/18/18 12:42	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	113		80 - 135	06/14/18 04:03	06/18/18 12:42	50

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	69	J	10	0.99	mg/Kg	☼	06/18/18 10:47	06/19/18 11:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	93		11 - 126	06/18/18 10:47	06/19/18 11:29	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.079	U	0.079	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:46	1
Aroclor 1221	0.079	U	0.079	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:46	1
Aroclor 1232	0.079	U	0.079	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:46	1
Aroclor 1242	0.079	U	0.079	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:46	1
Aroclor 1248	0.079	U	0.079	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:46	1
Aroclor 1254	0.079	U	0.079	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:46	1
Aroclor 1260	0.079	U	0.079	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:46	1
Aroclor-1262	0.079	U	0.079	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:46	1
Aroclor 1268	0.079	U	0.079	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:46	1
Polychlorinated biphenyls, Total	0.079	U	0.079	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 18:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	78		53 - 150	06/16/18 12:35	06/17/18 18:46	1
DCB Decachlorobiphenyl	90		53 - 150	06/16/18 12:35	06/17/18 18:46	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/15/18 10:26	06/15/18 17:39	5
Barium	**52.4**	J	1000	38.4	ug/L		06/15/18 10:26	06/15/18 17:39	5
Cadmium	20.0	U	20.0	1.1	ug/L		06/15/18 10:26	06/15/18 17:39	5
Chromium	50.0	U	50.0	6.3	ug/L		06/15/18 10:26	06/15/18 17:39	5
Lead	**92.0**		50.0	12.3	ug/L		06/15/18 10:26	06/15/18 17:39	5
Selenium	100	U	100	33.0	ug/L		06/15/18 10:26	06/15/18 17:39	5
Silver	50.0	U	50.0	5.4	ug/L		06/15/18 10:26	06/15/18 17:39	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/21/18 04:31	06/21/18 08:48	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	9.1	HF J			SU			06/18/18 18:24	1

Client Sample ID: Dup-061318A Composite

Lab Sample ID: 460-158229-3
Matrix: Solid
Date Collected: 06/13/18 12:15
Date Received: 06/13/18 18:40

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	9.1	HF J.			SU			06/18/18 18:24	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/19/18 16:07	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/18/18 16:37	06/18/18 16:44	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/18/18 11:30	06/18/18 16:41	1

Client Sample ID: RP-SB-303(0-12)Composite

Lab Sample ID: 460-158229-4
Matrix: Solid
Percent Solids: 87.4
Date Collected: 06/13/18 11:00
Date Received: 06/13/18 18:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.017	J	0.38	0.0047	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Acenaphthene	0.38	U	0.38	0.028	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Acenaphthylene	0.091	J	0.38	0.0039	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Anthracene	0.031	J	0.38	0.0042	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Benzo[a]anthracene	0.21		0.038	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Benzo[a]pyrene	0.23		0.038	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Benzo[b]fluoranthene	0.43		0.038	0.0098	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Benzo[g,h,i]perylene	0.41		0.38	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Benzo[k]fluoranthene	0.19		0.038	0.0074	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Chrysene	0.29	J	0.38	0.0064	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Dibenz(a,h)anthracene	0.084		0.038	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Fluoranthene	0.21	J	0.38	0.0049	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Fluorene	0.011	J	0.38	0.0051	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Indeno[1,2,3-cd]pyrene	0.35		0.038	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Naphthalene	0.021	J	0.38	0.0065	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Phenanthrene	0.058	J	0.38	0.0066	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1
Pyrene	0.49		0.38	0.0094	mg/Kg	☼	06/14/18 10:16	06/15/18 09:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*38 - 95*	*06/14/18 10:16*	*06/15/18 09:44*	*1*
Nitrobenzene-d5 (Surr)	*50*		*37 - 94*	*06/14/18 10:16*	*06/15/18 09:44*	*1*
Terphenyl-d14 (Surr)	*78*		*24 - 109*	*06/14/18 10:16*	*06/15/18 09:44*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	1.6	U	1.6	1.6	mg/Kg	☼	06/14/18 04:03	06/18/18 11:47	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*109*		*80 - 135*	*06/14/18 04:03*	*06/18/18 11:47*	*50*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	30	J.	9.9	0.96	mg/Kg	☼	06/18/18 10:47	06/19/18 10:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*84*		*11 - 126*	*06/18/18 10:47*	*06/19/18 10:50*	*1*

Client Sample ID: RP-SB-303(0-12)Composite

Date Collected: 06/13/18 11:00
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-4
Matrix: Solid
Percent Solids: 87.4

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.077	U	0.077	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:02	1
Aroclor 1221	0.077	U	0.077	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:02	1
Aroclor 1232	0.077	U	0.077	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:02	1
Aroclor 1242	0.077	U	0.077	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:02	1
Aroclor 1248	0.077	U	0.077	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:02	1
Aroclor 1254	0.077	U	0.077	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 19:02	1
Aroclor 1260	0.077	U	0.077	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 19:02	1
Aroclor-1262	0.077	U	0.077	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 19:02	1
Aroclor 1268	0.077	U	0.077	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 19:02	1
Polychlorinated biphenyls, Total	0.077	U	0.077	0.011	mg/Kg	☼	06/16/18 12:35	06/17/18 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*53 - 150*	*06/16/18 12:35*	*06/17/18 19:02*	*1*
DCB Decachlorobiphenyl	*85*		*53 - 150*	*06/16/18 12:35*	*06/17/18 19:02*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/17/18 01:05	06/17/18 20:20	5
Barium	**55.2**	J	1000	38.4	ug/L		06/17/18 01:05	06/17/18 20:20	5
Cadmium	**1.7**	J	20.0	1.1	ug/L		06/17/18 01:05	06/17/18 20:20	5
Chromium	50.0	U	50.0	6.3	ug/L		06/17/18 01:05	06/17/18 20:20	5
Lead	**15.6**	J	50.0	12.3	ug/L		06/17/18 01:05	06/17/18 20:20	5
Selenium	100	U	100	33.0	ug/L		06/17/18 01:05	06/17/18 20:20	5
Silver	50.0	U	50.0	5.4	ug/L		06/17/18 01:05	06/17/18 20:20	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/21/18 04:31	06/21/18 08:49	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	**5.7**	HF J			SU			06/18/18 15:24	1
pH	**5.7**	HF J			SU			06/18/18 15:24	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/19/18 16:07	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/18/18 16:37	06/18/18 16:44	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/18/18 11:30	06/18/18 16:41	1

Client Sample ID: RP-SB-305(0-12)Composite

Date Collected: 06/13/18 11:45
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-5
Matrix: Solid
Percent Solids: 89.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**0.032**	J	0.37	0.0046	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Acenaphthene	**0.18**	J	0.37	0.027	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Acenaphthylene	**0.33**	J	0.37	0.0038	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Anthracene	**0.18**	J	0.37	0.0041	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Benzo[a]anthracene	**1.7**		0.037	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Benzo[a]pyrene	**1.2**		0.037	0.0099	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1

Client Sample ID: RP-SB-305(0-12)Composite
Date Collected: 06/13/18 11:45
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-5
Matrix: Solid
Percent Solids: 89.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	1.6		0.037	0.0096	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Benzo[g,h,i]perylene	0.74		0.37	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Benzo[k]fluoranthene	0.82		0.037	0.0073	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Chrysene	1.6		0.37	0.0063	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Dibenz(a,h)anthracene	0.27		0.037	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Fluoranthene	3.7		0.37	0.0048	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Fluorene	0.37	U	0.37	0.0050	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Indeno[1,2,3-cd]pyrene	0.80		0.037	0.014	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Naphthalene	0.080	J	0.37	0.0064	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Phenanthrene	0.13	J	0.37	0.0065	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1
Pyrene	4.7		0.37	0.0092	mg/Kg	☼	06/14/18 10:16	06/15/18 10:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*38 - 95*	*06/14/18 10:16*	*06/15/18 10:08*	*1*
Nitrobenzene-d5 (Surr)	*58*		*37 - 94*	*06/14/18 10:16*	*06/15/18 10:08*	*1*
Terphenyl-d14 (Surr)	*67*		*24 - 109*	*06/14/18 10:16*	*06/15/18 10:08*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	18		2.1	2.1	mg/Kg	☼	06/14/18 04:04	06/16/18 16:16	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*119*		*80 - 135*	*06/14/18 04:04*	*06/16/18 16:16*	*50*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	220		49	4.7	mg/Kg	☼	06/18/18 10:47	06/19/18 11:42	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*11 - 126*	*06/18/18 10:47*	*06/19/18 11:42*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:19	1
Aroclor 1221	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:19	1
Aroclor 1232	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:19	1
Aroclor 1242	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:19	1
Aroclor 1248	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:19	1
Aroclor 1254	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:19	1
Aroclor 1260	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:19	1
Aroclor-1262	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:19	1
Aroclor 1268	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:19	1
Polychlorinated biphenyls, Total	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*53 - 150*	*06/16/18 12:35*	*06/17/18 19:19*	*1*
DCB Decachlorobiphenyl	*103*		*53 - 150*	*06/16/18 12:35*	*06/17/18 19:19*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/17/18 01:05	06/17/18 20:24	5

Client Sample ID: RP-SB-305(0-12)Composite

Date Collected: 06/13/18 11:45
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-5
Matrix: Solid

Method: 6010C - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	56.9	J	1000	38.4	ug/L		06/17/18 01:05	06/17/18 20:24	5
Cadmium	20.0	U	20.0	1.1	ug/L		06/17/18 01:05	06/17/18 20:24	5
Chromium	~~6.7~~	~~J~~ 50U	50.0	6.3	ug/L		06/17/18 01:05	06/17/18 20:24	5
Lead	28.3	J	50.0	12.3	ug/L		06/17/18 01:05	06/17/18 20:24	5
Selenium	100	U	100	33.0	ug/L		06/17/18 01:05	06/17/18 20:24	5
Silver	50.0	U	50.0	5.4	ug/L		06/17/18 01:05	06/17/18 20:24	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/21/18 04:31	06/21/18 08:51	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	5.7	HF J			SU			06/18/18 15:29	1
pH	5.7	HF J			SU			06/18/18 15:29	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/19/18 16:07	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/18/18 16:37	06/18/18 16:44	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/18/18 11:30	06/18/18 16:41	1

Client Sample ID: RP-SB-306(0-12)Composite

Date Collected: 06/13/18 12:35
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-6
Matrix: Solid
Percent Solids: 88.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.16	J	0.37	0.0047	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Acenaphthene	0.19	J	0.37	0.027	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Acenaphthylene	0.22	J	0.37	0.0039	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Anthracene	0.30	J	0.37	0.0042	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Benzo[a]anthracene	0.36		0.037	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Benzo[a]pyrene	0.20		0.037	0.0099	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Benzo[b]fluoranthene	0.29		0.037	0.0096	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Benzo[g,h,i]perylene	0.16	J	0.37	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Benzo[k]fluoranthene	0.11		0.037	0.0073	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Chrysene	0.38		0.37	0.0063	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Dibenz(a,h)anthracene	0.056		0.037	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Fluoranthene	0.73		0.37	0.0048	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Fluorene	0.098	J	0.37	0.0051	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Indeno[1,2,3-cd]pyrene	0.17		0.037	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Naphthalene	0.36	J	0.37	0.0064	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Phenanthrene	0.88		0.37	0.0066	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1
Pyrene	1.2		0.37	0.0093	mg/Kg	☼	06/14/18 10:16	06/15/18 10:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*38 - 95*	*06/14/18 10:16*	*06/15/18 10:31*	*1*
Nitrobenzene-d5 (Surr)	*56*		*37 - 94*	*06/14/18 10:16*	*06/15/18 10:31*	*1*
Terphenyl-d14 (Surr)	*71*		*24 - 109*	*06/14/18 10:16*	*06/15/18 10:31*	*1*

Client Sample ID: RP-SB-306(0-12)Composite
Date Collected: 06/13/18 12:35
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-6
Matrix: Solid
Percent Solids: 88.6

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	95		4.7	4.7	mg/Kg	☼	06/14/18 04:04	06/18/18 14:03	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*118*		*80 - 135*	*06/14/18 04:04*	*06/18/18 14:03*	*100*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	40	J	49	4.7	mg/Kg	☼	06/18/18 10:47	06/19/18 11:55	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*72*		*11 - 126*	*06/18/18 10:47*	*06/19/18 11:55*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:36	1
Aroclor 1221	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:36	1
Aroclor 1232	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:36	1
Aroclor 1242	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:36	1
Aroclor 1248	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:36	1
Aroclor 1254	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:36	1
Aroclor 1260	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:36	1
Aroclor-1262	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:36	1
Aroclor 1268	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:36	1
Polychlorinated biphenyls, Total	0.075	U	0.075	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*95*		*53 - 150*	*06/16/18 12:35*	*06/17/18 19:36*	*1*
DCB Decachlorobiphenyl	*119*		*53 - 150*	*06/16/18 12:35*	*06/17/18 19:36*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/17/18 01:05	06/17/18 20:28	5
Barium	77.2	J	1000	38.4	ug/L		06/17/18 01:05	06/17/18 20:28	5
Cadmium	20.0	U	20.0	1.1	ug/L		06/17/18 01:05	06/17/18 20:28	5
Chromium	50.0	U	50.0	6.3	ug/L		06/17/18 01:05	06/17/18 20:28	5
Lead	18.4	J	50.0	12.3	ug/L		06/17/18 01:05	06/17/18 20:28	5
Selenium	100	U	100	33.0	ug/L		06/17/18 01:05	06/17/18 20:28	5
Silver	50.0	U	50.0	5.4	ug/L		06/17/18 01:05	06/17/18 20:28	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/21/18 04:31	06/21/18 08:53	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	7.2	HF J			SU			06/18/18 15:34	1
pH	7.2	HF J			SU			06/18/18 15:34	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/19/18 16:07	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/18/18 16:37	06/18/18 16:44	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/18/18 11:30	06/18/18 16:41	1

Client Sample ID: RP-SB-312(0-12)Composite
Date Collected: 06/13/18 13:45
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158229-7
Matrix: Solid
Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.38	U	0.38	0.0047	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Acenaphthene	0.38	U	0.38	0.028	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Acenaphthylene	0.38	U	0.38	0.0039	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Anthracene	0.38	U	0.38	0.0042	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Benzo[a]anthracene	**0.11**		0.038	0.013	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Benzo[a]pyrene	**0.063**		0.038	0.010	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Benzo[b]fluoranthene	**0.10**		0.038	0.0098	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Benzo[g,h,i]perylene	**0.054**	J	0.38	0.011	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Benzo[k]fluoranthene	**0.047**		0.038	0.0074	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Chrysene	**0.097**	J	0.38	0.0064	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Dibenz(a,h)anthracene	0.038	U	0.038	0.016	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Fluoranthene	**0.12**	J	0.38	0.0049	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Fluorene	0.38	U	0.38	0.0051	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Indeno[1,2,3-cd]pyrene	**0.057**		0.038	0.015	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Naphthalene	0.38	U	0.38	0.0065	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Phenanthrene	0.38	U	0.38	0.0066	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1
Pyrene	**0.54**		0.38	0.0094	mg/Kg	☼	06/14/18 10:16	06/15/18 10:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*38 - 95*	*06/14/18 10:16*	*06/15/18 10:55*	*1*
Nitrobenzene-d5 (Surr)	*59*		*37 - 94*	*06/14/18 10:16*	*06/15/18 10:55*	*1*
Terphenyl-d14 (Surr)	*75*		*24 - 109*	*06/14/18 10:16*	*06/15/18 10:55*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	11		2.5	2.5	mg/Kg	☼	06/14/18 04:04	06/18/18 13:36	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*113*		*80 - 135*	*06/14/18 04:04*	*06/18/18 13:36*	*50*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	10		9.9	0.96	mg/Kg	☼	06/18/18 10:47	06/19/18 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*75*		*11 - 126*	*06/18/18 10:47*	*06/19/18 12:33*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.076	U	0.076	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:53	1
Aroclor 1221	0.076	U	0.076	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:53	1
Aroclor 1232	0.076	U	0.076	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:53	1
Aroclor 1242	0.076	U	0.076	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:53	1
Aroclor 1248	0.076	U	0.076	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:53	1
Aroclor 1254	0.076	U	0.076	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:53	1
Aroclor 1260	0.076	U	0.076	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:53	1
Aroclor-1262	0.076	U	0.076	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:53	1
Aroclor 1268	0.076	U	0.076	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:53	1
Polychlorinated biphenyls, Total	0.076	U	0.076	0.010	mg/Kg	☼	06/16/18 12:35	06/17/18 19:53	1

Client Sample ID: RP-SB-312(0-12)Composite

Lab Sample ID: 460-158229-7
Matrix: Solid
Percent Solids: 87.5

Date Collected: 06/13/18 13:45
Date Received: 06/13/18 18:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	85		53 - 150	06/16/18 12:35	06/17/18 19:53	1
DCB Decachlorobiphenyl	97		53 - 150	06/16/18 12:35	06/17/18 19:53	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	~~17.3~~	~~J B~~ 75U ·	75.0	13.3	ug/L		06/17/18 01:05	06/17/18 20:32	5
Barium	52.1	J ·	1000	38.4	ug/L		06/17/18 01:05	06/17/18 20:32	5
Cadmium	20.0	U	20.0	1.1	ug/L		06/17/18 01:05	06/17/18 20:32	5
Chromium	~~9.8~~	~~J~~ 50U ·	50.0	6.3	ug/L		06/17/18 01:05	06/17/18 20:32	5
Lead	35.6	J ·	50.0	12.3	ug/L		06/17/18 01:05	06/17/18 20:32	5
Selenium	100	U	100	33.0	ug/L		06/17/18 01:05	06/17/18 20:32	5
Silver	50.0	U	50.0	5.4	ug/L		06/17/18 01:05	06/17/18 20:32	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/21/18 04:31	06/21/18 08:41	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	7.4	~~HF~~ J ·			SU			06/18/18 15:40	1
pH	7.4	~~HF~~ J ·			SU			06/18/18 15:40	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/19/18 16:07	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/18/18 16:38	06/18/18 16:44	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/18/18 11:30	06/18/18 16:41	1

Client Sample ID: FB-061318

Lab Sample ID: 460-158244-1
Matrix: Water

Date Collected: 06/13/18 07:30
Date Received: 06/13/18 18:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/18/18 10:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/18/18 10:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/18/18 10:39	1
1,1,2-Trichloroethane	1.0	U J ·	1.0	0.43	ug/L			06/18/18 10:39	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/18/18 10:39	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/18/18 10:39	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			06/18/18 10:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/18/18 10:39	1
1,2-Dibromo-3-Chloropropane	1.0	U J ·	1.0	0.38	ug/L			06/18/18 10:39	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/18/18 10:39	1
1,2-Dichloroethane	1.0	U J ·	1.0	0.43	ug/L			06/18/18 10:39	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/18/18 10:39	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/18/18 10:39	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/18/18 10:39	1
1,4-Dioxane	50	U J ·	50	28	ug/L			06/18/18 10:39	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/18/18 10:39	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			06/18/18 10:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			06/18/18 10:39	1
Acetone	5.0	U	5.0	5.0	ug/L			06/18/18 10:39	1

Client Sample ID: FB-061318
Date Collected: 06/13/18 07:30
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158244-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.43	ug/L			06/18/18 10:39	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/18/18 10:39	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/18/18 10:39	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/18/18 10:39	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/18/18 10:39	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/18/18 10:39	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			06/18/18 10:39	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			06/18/18 10:39	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/18/18 10:39	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/18/18 10:39	1
Chloromethane	1.0	U J	1.0	0.14	ug/L			06/18/18 10:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/18/18 10:39	1
cis-1,3-Dichloropropene	1.0	U J	1.0	0.46	ug/L			06/18/18 10:39	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/18/18 10:39	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			06/18/18 10:39	1
Dichlorodifluoromethane	1.0	U J	1.0	0.12	ug/L			06/18/18 10:39	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/18/18 10:39	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			06/18/18 10:39	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/18/18 10:39	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/18/18 10:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/18/18 10:39	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/18/18 10:39	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/18/18 10:39	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			06/18/18 10:39	1
o-Xylene	1.0	U	1.0	0.36	ug/L			06/18/18 10:39	1
Styrene	1.0	U	1.0	0.42	ug/L			06/18/18 10:39	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/18/18 10:39	1
Toluene	1.0	U	1.0	0.38	ug/L			06/18/18 10:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/18/18 10:39	1
trans-1,3-Dichloropropene	1.0	U J	1.0	0.49	ug/L			06/18/18 10:39	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/18/18 10:39	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/18/18 10:39	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/18/18 10:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*74 - 132*		*06/18/18 10:39*	*1*
4-Bromofluorobenzene	*104*		*77 - 124*		*06/18/18 10:39*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*06/18/18 10:39*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*06/18/18 10:39*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	10	U	10	1.2	ug/L		06/15/18 11:45	06/16/18 03:20	1
1,2,4,5-Tetrachlorobenzene	10	U	10	1.2	ug/L		06/15/18 11:45	06/16/18 03:20	1
2,2'-oxybis[1-chloropropane]	10	U	10	0.63	ug/L		06/15/18 11:45	06/16/18 03:20	1
2,3,4,6-Tetrachlorophenol	10	U	10	0.75	ug/L		06/15/18 11:45	06/16/18 03:20	1
2,4,5-Trichlorophenol	10	U	10	0.28	ug/L		06/15/18 11:45	06/16/18 03:20	1
2,4,6-Trichlorophenol	10	U	10	0.30	ug/L		06/15/18 11:45	06/16/18 03:20	1
2,4-Dichlorophenol	10	U	10	0.42	ug/L		06/15/18 11:45	06/16/18 03:20	1
2,4-Dimethylphenol	10	U	10	0.24	ug/L		06/15/18 11:45	06/16/18 03:20	1

Client Sample ID: FB-061318
Date Collected: 06/13/18 07:30
Date Received: 06/13/18 18:40

Lab Sample ID: 460-158244-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	1.3	ug/L		06/15/18 11:45	06/16/18 03:20	1
Isophorone	10	U	10	0.80	ug/L		06/15/18 11:45	06/16/18 03:20	1
Naphthalene	10	U	10	1.1	ug/L		06/15/18 11:45	06/16/18 03:20	1
Nitrobenzene	1.0	U	1.0	0.57	ug/L		06/15/18 11:45	06/16/18 03:20	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.43	ug/L		06/15/18 11:45	06/16/18 03:20	1
N-Nitrosodiphenylamine	10	U	10	0.89	ug/L		06/15/18 11:45	06/16/18 03:20	1
Pentachlorophenol	20	U	20	1.4	ug/L		06/15/18 11:45	06/16/18 03:20	1
Phenanthrene	10	U	10	0.58	ug/L		06/15/18 11:45	06/16/18 03:20	1
Phenol	10	U	10	0.29	ug/L		06/15/18 11:45	06/16/18 03:20	1
Pyrene	10	U	10	1.6	ug/L		06/15/18 11:45	06/16/18 03:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*84*		*26 - 139*	*06/15/18 11:45*	*06/16/18 03:20*	*1*
2-Fluorobiphenyl	*101*		*45 - 107*	*06/15/18 11:45*	*06/16/18 03:20*	*1*
2-Fluorophenol (Surr)	*43*		*25 - 58*	*06/15/18 11:45*	*06/16/18 03:20*	*1*
Nitrobenzene-d5 (Surr)	*101*		*51 - 108*	*06/15/18 11:45*	*06/16/18 03:20*	*1*
Phenol-d5 (Surr)	*29*		*14 - 39*	*06/15/18 11:45*	*06/16/18 03:20*	*1*
Terphenyl-d14 (Surr)	*129*		*40 - 148*	*06/15/18 11:45*	*06/16/18 03:20*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	25	U	25	25	ug/L			06/16/18 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*124*		*79 - 140*		*06/16/18 01:56*	*1*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	130	U	130	39	ug/L		06/15/18 07:32	06/16/18 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*98*		*42 - 120*	*06/15/18 07:32*	*06/16/18 14:50*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		06/15/18 07:10	06/16/18 06:18	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		06/15/18 07:10	06/16/18 06:18	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		06/15/18 07:10	06/16/18 06:18	1
Aldrin	0.020	U	0.020	0.0030	ug/L		06/15/18 07:10	06/16/18 06:18	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		06/15/18 07:10	06/16/18 06:18	1
beta-BHC	0.020	U	0.020	0.0040	ug/L		06/15/18 07:10	06/16/18 06:18	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		06/15/18 07:10	06/16/18 06:18	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		06/15/18 07:10	06/16/18 06:18	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		06/15/18 07:10	06/16/18 06:18	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		06/15/18 07:10	06/16/18 06:18	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		06/15/18 07:10	06/16/18 06:18	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		06/15/18 07:10	06/16/18 06:18	1
Endrin	0.020	U	0.020	0.0040	ug/L		06/15/18 07:10	06/16/18 06:18	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		06/15/18 07:10	06/16/18 06:18	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		06/15/18 07:10	06/16/18 06:18	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		06/15/18 07:10	06/16/18 06:18	1

Site: Rockaway Park Former MGP Site
Laboratory: Test America, Edison, NJ
Report No.: 460-158410
Reviewer: Lorie MacKinnon/GEI Consultants
Date: July 24, 2018

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
TB-061418	460-158410-01	VOC
RP-SB-311(11-12)Grab	460-158410-02	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-309(11-12)Grab	460-158410-03	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-308(11-12)Grab	460-158410-04	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-307(11-12)Grab	460-158410-05	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-310(11-12)Grab	460-158410-06	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-304(11-12)Grab	460-158410-07	VOC, SVOC, PCB, Pest, Herb, Metals
RP-SB-311(0-12)Composite	460-158411-01	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
RP-SB-309(0-12)Composite	460-158411-02	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
RP-SB-308(0-12)Composite	460-158411-03	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
RP-SB-307(0-12)Composite	460-158411-04	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
RP-SB-310(0-12)Composite	460-158411-05	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals
RP-SB-304(0-12)Composite	460-158411-06	PAH, DRO, GRO, PCBs, pH, Reactivity, TCLP Metals

Associated QC Samples:
Field/Trip Blanks: FB-061318 (reported in 460-158228), TB-061418

The above-listed soil samples and trip blank sample were collected on June 14, 2018 and were analyzed for volatile organic compounds (VOCs) by SW-846 method 8260C, semivolatile organic compounds (SVOCs) and polynuclear aromatic hydrocarbon (PAH) SVOCs by SW-846 method 8270D, polychlorinated biphenyls (PCBs) by SW-846 method 8082A, pesticides by SW-846 8081B, herbicides by SW-846 method 8151A, gasoline range organics (GRO) and diesel range organics (DRO) by SW-846 method 8015D, toxicity characteristic leaching procedure (TCLP) metals by SW-846 methods 1311/6010C/7470A, total metals by SW-846 methods 6010C/6020A/7471B, and reactivity analyses which included ignitability by SW-846 method 1030, reactive cyanide by SW-846 method 7.3.3/9014, reactive sulfide by SW-846 7.3.4/9034, and pH by SW-846 method 9045C.

The data validation was performed based on the following USEPA Region 2 Documents: SOP HW-35 (Revision 2) *Semivolatile Data Validation* (March 2013), and SOP HW-33 (Revision 3) *Low/Medium Volatile Data Validation* (March 2013), Standard Operating Procedure (SOP) HW-37 (Revision 3) *Polychlorinated Biphenyl (PCB) Aroclor Data Validation* (May 2013), SOP HW-36 (Revision 4) *Pesticide Data Validation* (May 2013), and SOPs HW-2a, 2b, and 2c (Revision 15), *SOPs for the Evaluation of Metals, Cyanide and Mercury for the Contract Laboratory Program* (December 2012), modified for the SW-846 methodologies utilized.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results

NA
- Field Duplicate Results

- Laboratory Control Sample (LCS)/LCS Duplicate (LCSD) Results
- Internal Standards
- Serial Dilution Results
- Moisture Content
- Quantitation Limits
- Sample Quantitation and Compound Identification

NA – Not applicable as a field duplicate pair was not associated with this sample set.

In general, the data appear usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers. However, the following issues were noted which may have a significant impact on the data usability:

- The nondetect results for 2,4-dinitrophenol, dieldrin, endosulfan II, endosulfan sulfate, endrin aldehyde, and endrin ketone in sample RP-SB-311(11-12)Grab were rejected (R) due to MS and/or MSD recoveries below 10. These results should not be used for decision-making purposes.
-

The validation findings were based on the following information.

Data Completeness

The data package was found to be complete as received by the laboratory.

Holding Times and Sample Preservation

All criteria were met except where noted below.

pH SW-846 method 9045D

Although not specified for soils in method 9045D, it is recommended that the analysis for pH take place as soon as possible. The pH analysis for all soils took place seven days after sampling. Professional judgment was taken to qualify the pH results in samples RP-SB-311(0-12)Composite, RP-SB-309(0-12)Composite, RP-SB-308(0-12)Composite, RP-SB-307(0-12)Composite, RP-SB-310(0-12)Composite, and RP-SB-304(0-12)Composite as estimated (J) as the analysis was not performed within two days after collection.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

SVOCs, PCBs, Pesticides, Herbicides, GRO, DRO, and Reactivity

All criteria were met.

VOCs

Compounds that did not meet criteria in the VOC calibrations are summarized in the following table.

Instrument/ Calibration Standard	Compound	Calibration Exceedance	Validation Qualifier
VOCs			
CVOAMS13 CCAL 06/19 09:33	Dichlorodifluoromethane	29.6 %D	Estimate (UJ) the nondetect result for dichlorodifluoromethane in sample TB-061418.
Associated Sample: TB-061418			
CVOAMS9 CCAL 06/18 05:20	Dichlorobromomethane	22.0 %D	
	Chlorodibromomethane	34.2 %D	Estimate (J/UJ) the positive and nondetect results for the affected compounds in sample RP-SB-311(11-12)Grab.
	Bromoform	47.1 %D	
Associated Samples: RP-SB-311(11-12)Grab			
CVOAMS9 CCAL 06/18 17:20	Chlorodibromomethane	26.5 %D	Estimate (J/UJ) the positive and nondetect results for the affected compounds in the associated samples.
	Bromoform	39.8 %D	

Associated Samples: RP-SB-309(11-12)Grab, RP-SB-308(11-12)Grab, RP-SB-310(11-12)Grab, RP-SB-304(11-12)Grab			
CVOAMS9 CCAL 06/21 18:43	Chloroethane	21.4 %D	Estimate (J/UJ) the positive and nondetect results for the affected compounds in sample RP-SB-307(11-12)Grab.
	Chlorodibromomethane	26.2 %D	
	Bromoform	39.4 %D	
Associated Sample: RP-SB-307(11-12)Grab			

Initial calibration (ICAL) relative standard deviation (%RSD) > 20 for; estimate (J) positive and blank-qualified (UJ) results only.
Continuing calibration (CCAL) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
RF = Response factor (RF) < 0.05; Estimate (J) positive results and reject (R) nondetect results.

The direction of the bias cannot be determined for the calibration nonconformances. The results can be used for project objectives as estimated (J/UJ) values which may have a minor impact on the data usability.

Metals

All initial and continuing calibration verification sample and CRDL standard recovery criteria were met.

The recovery criteria were met in the ICSAB sample analysis. Analytes, which should not be present, were detected above the absolute value of the method detection limit in the ICSA sample analyses. Only samples with interferent levels similar (within 15%) to those of the ICSA sample were considered to be affected. Validation actions were not required as all sample interferent levels were less than those of the ICSA sample.

Blanks

Analytes were detected in select laboratory method blank samples, associated field blank sample FB-061318, and trip blank sample TB-061418. The following table summarizes the contamination and validation actions taken. Action levels were adjusted due to sample specific preparation weights and moisture content.

Analyte	Blank ID/ Associated Samples	Maximum Concentration	10x Action Level	Validation Actions
Methylene chloride	TB-061418: All samples	0.23 ug/L (0.00023 mg/kg)	0.0023 mg/kg	Qualify the results for methylene chloride in samples RP-SB-309(11-12)Grab, RP-SB-308(11-12)Grab, and RP-SB-304(11-12)Grab as nondetect (U) at the RL.
Acetone		1.5 ug/L (0.0015 mg/kg)	0.015 mg/kg	Qualify the results for acetone in samples RP-SB-309(11-12)Grab, RP-SB-308(11-12)Grab, and RP-SB-307(11-12)Grab as nondetect (U) at the reported values.
Methylene chloride	LB3 460-528293: RP-SB-311(11-12)Grab	0.000231 mg/kg	0.00231 mg/kg	Validation actions were not required.

Analyte	Blank ID/ Associated Samples	Maximum Concentration	10x Action Level	Validation Actions
Methylene chloride	MB460-529904: RP-SB-307(11-12)Grab	0.000561 mg/kg	0.00561 mg/kg	Validation actions were not required.
Trichlorofluoromethane		0.000448 mg/kg	0.00448 mg/kg	Validation actions were not required.
Acetophenone	FB-061318: All samples	1.8 ug/L (0.0154 mg/kg)	0.154 mg/kg	Validation actions were not required.
Cadmium	06/20/18 Instrument blank: RP-SB-308(11-12)Grab, RP-SB-307(11-12)Grab, RP-SB-310(11-12)Grab, RP-SB-304(11-12)Grab	0.268 ug/L (0.054 mg/kg)	0.54 mg/kg	Qualify the result for cadmium in sample RP-SB-310(11-12)Grab as nondetect (U) at the RL.

Blank Actions:
If the sample result is < RL (<2xRL for common contaminants); report the result as nondetect (U) at the reporting limit (RL) or reported value.
If the sample result is ≥ RL and <blank contamination detected; report the result as nondetect (U) at the reported value.
If the sample result is ≥ RL and < 10x Action Level; professional judgment was taken to report the sample result as estimated (J); biased high.
If the sample result is > 10x Action Level; validation action is not required.

Surrogate Recoveries

VOCs, SVOCs, Pesticides, GRO, and DRO

All criteria were met for samples analyzed at dilutions less than ten.

Herbicides

The following table lists the surrogate recoveries outside of the control limits and the resulting validation actions.

Sample	Surrogate	Recovery (%)	Control Limits (%)	Validation Actions
RP-SB-310(11-12)Grab	2,4-Dichlorophenylacetic acid (column 1 and 2)	159, 360	80-150	Validation actions were not required as all associated herbicide results were nondetect and therefore not affected by the potential high bias.

PCBs

The following table lists the surrogate recoveries outside of the control limits and the resulting validation actions.

Sample	Surrogate	Recovery (%)	Control Limits (%)	Validation Actions
RP-SB-307(11-12)Grab	Decachlorobiphenyl (column 1)	48	53-150	Estimate (UJ) the nondetect results for PCB sample RP-SB-307(11-12)Grab; Low bias.

MS/MSD Results

MS analyses were performed on sample RP-SB-311(11-12)Grab for VOCs, SVOCs, pesticides, PCBs, herbicides, and metals and sample RP-SB-309(0-12)Composite for PAHs, GRO, DRO, PCBs, metals, and reactive sulfide. The following table lists the recoveries and relative percent differences (RPD) outside of control limits and the resulting actions.

RP-SB-311(11-12)Grab			
Analyte	**MS (%)**	**Control Limits (%)**	**Validation Action/Bias**
Aluminum	159	75-125	Estimate (J) the positive results for aluminum in all associated samples; High bias.
Associated Samples: RP-SB-311(11-12)Grab, RP-SB-309(11-12)Grab, RP-SB-308(11-12)Grab, RP-SB-307(11-12)Grab, RP-SB-310(11-12)Grab, RP-SB-304(11-12)Grab			

RP-SB-311(11-12)Grab				
Analyte	**MS/MSD (%)**	**RPD (%)**	**Control Limits (%)**	**Validation Action/Bias**
VOCs				
Chlorodibromomethane	MS 66	-	67-143	Estimate (UJ) the nondetect result for chlorodibromomethane in sample RP-SB-311(11-12)Grab; Low bias.
Benzene	MSD 151	-	75-127	Estimate (J) the positive results for benzene and o-xylene in sample RP-SB-311(11-12)Grab; High bias.
o-Xylene	MSD 125	-	79-123	
Pesticides				
Dieldrin	51, 0	200	70-134/30	Reject (R) the nondetect results for dieldrin, endosulfan II, endosulfan sulfate, endrin aldehyde, and endrin ketone in sample RP-SB-311(11-12)Composite; Low bias.
Endosulfan II	7, 6	-	72-127	
Endosulfan sulfate	0, 0	-	71-128	
Endrin aldehyde	1, 1	-	71-129	
Endrin ketone	0, 0	-	68-135	
4,4'-DDD	56, 60	-	67-130	Estimate (UJ) the nondetect results for the affected compounds in sample RP-SB-311(11-12)Grab;
4,4'-DDT	59, 63	-	70-122	

alpha-BHC	MS 62	-	65-142	Low bias.
beta-BHC	40, 40	-	70-132	
delta-BHC	17, 16	-	65-136	
Endosulfan I	66, 69	-	70-136	
Endrin	54, 57	-	74-129	
gamma-BHC	46, 48	-	68-136	
Heptachlor epoxide	60, 63	-	72-131	
Methoxychlor	17, 16	-	63-135	
SVOC RP-SB-311(11-12)Grab				
2,4-Dinitrophenol	8, 8	-	56-122	Reject (R) the nondetect result for 2,4-dinitrophenol in sample RP-SB-311(11-12) Grab.
1,1'-Biphenyl	47, 50	-	64-108	Estimate (J/UJ) the positive and nondetect results for the affected compounds in sample RP-SB-311(11-12)Grab; Low bias.
1,2,4,5-Tetrachlorobenzene	43, 44	-	57-112	
2,3,4,6-Tetrachlorophenol	25, 54	73	60-114/30	
2,4,5-Trichlorophenol	51, 54	-	60-106	
2,4,6-Trichlorophenol	42,57	-	62-110	
2,4-Dichlorophenol	52, 60	-	61-103	
2,4-Dimethylphenol	53, 62	-	63-101	
2,4-Dinitrotoluene	58, 56	-	66-122	
2,6-Dinitrotoluene	59, 58	-	70-114	
2-Chloronaphthalene	46, 50	-	63-107	
2-Chlorophenol	MS 51	-	62-97	
2-Methylnaphthalene	46, 52	-	65-104	
2-Methylphenol	MS 53	-	61-103	
2-Nitroaniline	MS 56	-	57-114	
2-Nitrophenol	48, 58	-	65-104	
4,6-Dinitro-2-methylphenol	15, 15	-	67-120	
4-Bromophenyl phenyl ether	51, 49	-	59-122	
4-Chloro-3-methylphenol	MS 57	-	62-111	
4-Chlorophenyl phenyl ether	50, 51	-	66-110	
4-Methylphenol	MS 53	-	61-105	
Acenaphthene	49, 51	-	62-108	
Acenaphthylene	49, 51	-	67-107	

Acetophenone	44, 57	-	60-109	
Anthracene	54, 50	-	69-111	
Atrazine	57, 53	-	62-137	
Benzaldehyde	MS 43	-	52-113	
Benzo(a)anthracene	55, 47	-	68-110	
Benzo(a)pyrene	56, 49	-	72-115	
Benzo(b)fluoranthene	56, 50	-	69-119	
Benzo(ghi)perylene	MSD 48	-	54-128	
Benzo(k)fluoranthene	57, 48	-	70-115	
Bis(2-chloroethoxy)methane	51, 58	-	65-106	
Bis(2-chloroethyl)ether	44, 59	-	64-105	
Bis(2-ethylhexyl)phthalate	56, 48	-	63-125	
Butyl benzyl phthalate	56, 51	-	65-125	
Caprolactam	MS 48	39	53-148/30	
Carbazole	55, 52	-	66-115	
Chrysene	55, 49	-	70-111	
Dibenz(ah)anthracene	59, 53	-	60-130	
Dibenzofuran	50, 52	-	67-107	
Diethyl phthalate	56, 55	-	66-117	
Dimethyl phthalate	56, 56	-	68-112	
Di-n-butyl phthalate	56, 51	-	67-119	
Di-n-octyl phthalate	56, 48	-	57-138	
Fluoranthene	57, 50	-	64-114	
Fluorene	52, 52	-	66-110	
Hexachlorobenzene	52, 46	-	57-128	
Hexachlorobutadiene	38, 38	-	60-108	
Hexachlorocyclopentadiene	29, 20	35	50-129/30	
Hexachloroethane	35, 38	-	63-99	
Indeno(123-cd)pyrene	15, 50	109	53-137/30	
Isophorone	50, 58	-	68-111	
Naphthalene	44, 50	-	65-102	
Nitrobenzene	46, 61	-	66-108	
N-Nitrosodi-n-propylamine	MS 50	-	63-117	

N-Nitrosodiphenylamine	54, 52	-	65-114	
Pentachlorophenol	21, 49	80	56-116/30	
Phenanthrene	53, 50	-	68-111	
Phenol	MS 52	31	58-103/30	
Pyrene	56, 49	-	64-121	

RP-SB-309(0-12)(Composite)				
Analyte	**MS/MSD (%)**	**RPD (%)**	**Control Limits (%)**	**Validation Action/Bias**
PAH				
2-Methylnaphthalene	MS 62	-	65-104	Estimate (J) the positive results for naphthalene and 2-methylnaphthalene in sample RP-SB-309(0-12)(Composite); Low bias.
Naphthalene	56, 59	-	65-102	
DRO				
C10-C44	-20, 1	-	60-105	Estimate (J) the positive result for C10-C44 in sample RP-SB-309(0-12)(Composite); Low bias.

Laboratory Duplicate Results

Laboratory duplicate analyses were performed on samples RP-SB-311(11-12)Grab and RP-SB-309(0-12)Composite for metals and reactive cyanide. All criteria were met.

LCS/LCSD Results

SVOCs, Herbicides, Pesticides, PCBs, GRO, DRO, Metals, and Reactivity

All criteria were met.

VOCs

The following table lists the compounds recovered outside of control limits in the LCS and LCSD and the resulting actions.

Compound	Recovery (%)	RPD (%)	Control Limits (%)	LCS ID/ Associated Samples	Validation Action/Bias
Chlorodibromomethane	LCS 65	-	67-143	460-528608: RP-SB-311(11-12)Grab	Estimate (UJ) the nondetect result for chlorodibromomethane in sample RP-SB-311(11-12)Grab; Low bias.

Internal Standards

All criteria were met.

Serial Dilution Results

Serial dilution analyses were performed on samples RP-SB-311(11-12)Grab and RP-SB-309(0-12)Composite for metals. All criteria were met.

Moisture Content

All criteria were met.

Quantitation Limits

Results were reported which were below the reporting limit (RL)/quantitation limit (QL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

All total metals samples were analyzed at four-fold dilutions. All TCLP metals samples were analyzed at five-fold dilutions. The following table lists the additional sample dilutions which were performed and the results to be reported. QLs were elevated accordingly.

Sample	PCB Analysis Reported	GRO Analysis Reported	DRO Analysis Reported
RP-SB-310(11-12)Grab	A 5-fold dilution was performed due to sample matrix. Nondetect RLs were elevated in this sample.	NA	NA
RP-SB-311(0-12)Composite	NR	50-fold dilutions were performed for these samples.	NR
RP-SB-309(0-12)Composite	NR		NR
RP-SB-308(0-12)Composite	NR		NR
RP-SB-307(0-12)Composite	NR		NR
RP-SB-310(0-12)Composite	NR		A 5-fold dilution was performed.
RP-SB-304(0-12)Composite	NR		NR

NR- Dilution was not required.

NA- Not applicable; analysis was not requested for this sample.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

Client Sample ID: TB-061418
Date Collected: 06/14/18 07:00
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/19/18 13:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/19/18 13:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/19/18 13:18	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/19/18 13:18	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/19/18 13:18	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/19/18 13:18	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			06/19/18 13:18	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/19/18 13:18	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/19/18 13:18	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/19/18 13:18	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/19/18 13:18	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/19/18 13:18	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/19/18 13:18	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/19/18 13:18	1
1,4-Dioxane	50	U	50	28	ug/L			06/19/18 13:18	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/19/18 13:18	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			06/19/18 13:18	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			06/19/18 13:18	1
Acetone	5.0	U	5.0	5.0	ug/L			06/19/18 13:18	1
Benzene	1.0	U	1.0	0.43	ug/L			06/19/18 13:18	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/19/18 13:18	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/19/18 13:18	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/19/18 13:18	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/19/18 13:18	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/19/18 13:18	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			06/19/18 13:18	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			06/19/18 13:18	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/19/18 13:18	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/19/18 13:18	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/19/18 13:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/19/18 13:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/19/18 13:18	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/19/18 13:18	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			06/19/18 13:18	1
Dichlorodifluoromethane	1.0	U J.	1.0	0.12	ug/L			06/19/18 13:18	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/19/18 13:18	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			06/19/18 13:18	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/19/18 13:18	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/19/18 13:18	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/19/18 13:18	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/19/18 13:18	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/19/18 13:18	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			06/19/18 13:18	1
o-Xylene	1.0	U	1.0	0.36	ug/L			06/19/18 13:18	1
Styrene	1.0	U	1.0	0.42	ug/L			06/19/18 13:18	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/19/18 13:18	1
Toluene	1.0	U	1.0	0.38	ug/L			06/19/18 13:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/19/18 13:18	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/19/18 13:18	1

6/29/18

Client Sample ID: TB-061418

Date Collected: 06/14/18 07:00
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/19/18 13:18	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/19/18 13:18	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/19/18 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*74 - 132*		*06/19/18 13:18*	*1*
4-Bromofluorobenzene	*113*		*77 - 124*		*06/19/18 13:18*	*1*
Dibromofluoromethane (Surr)	*111*		*72 - 131*		*06/19/18 13:18*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*		*06/19/18 13:18*	*1*

Client Sample ID: RP-SB-311(11-12) Grab

Date Collected: 06/14/18 08:10
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-2
Matrix: Solid
Percent Solids: 80.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0011	U	0.0011	0.00026	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,1,2,2-Tetrachloroethane	0.0011	U	0.0011	0.00023	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0011	U	0.0011	0.00033	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,1,2-Trichloroethane	0.0011	U	0.0011	0.00020	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,1-Dichloroethane	0.0011	U	0.0011	0.00023	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,1-Dichloroethene	0.0011	U	0.0011	0.00025	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,2,3-Trichlorobenzene	0.0011	U	0.0011	0.00020	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,2,4-Trichlorobenzene	0.0011	U	0.0011	0.00010	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,2-Dibromo-3-Chloropropane	0.0011	U	0.0011	0.00050	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,2-Dichlorobenzene	0.0011	U	0.0011	0.00016	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,2-Dichloroethane	0.0011	U	0.0011	0.00032	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,2-Dichloropropane	0.0011	U	0.0011	0.00046	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,3-Dichlorobenzene	0.0011	U	0.0011	0.00017	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,4-Dichlorobenzene	0.0011	U	0.0011	0.00011	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
1,4-Dioxane	0.022	U	0.022	0.010	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
2-Butanone (MEK)	0.0055	U	0.0055	0.0012	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
2-Hexanone	0.0055	U	0.0055	0.00086	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
4-Methyl-2-pentanone (MIBK)	0.0055	U	0.0055	0.00073	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Acetone	0.0055	U	0.0055	0.0042	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Benzene	**0.0087**	J	0.0011	0.00028	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Bromoform	0.0011	U J	0.0011	0.00047	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Bromomethane	0.0011	U	0.0011	0.00052	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Carbon disulfide	**0.0013**		0.0011	0.00029	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Carbon tetrachloride	0.0011	U	0.0011	0.00020	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Chlorobenzene	0.0011	U	0.0011	0.00019	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Chlorobromomethane	0.0011	U	0.0011	0.00031	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Chlorodibromomethane	0.0011	UJ	0.0011	0.00021	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Chloroethane	0.0011	U	0.0011	0.00057	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Chloroform	0.0011	U	0.0011	0.00035	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Chloromethane	0.0011	U	0.0011	0.00048	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
cis-1,2-Dichloroethene	0.0011	U	0.0011	0.00017	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
cis-1,3-Dichloropropene	0.0011	U	0.0011	0.00030	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Cyclohexane	0.0011	U	0.0011	0.00024	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Dichlorobromomethane	0.0011	UJ	0.0011	0.00028	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1

Client Sample ID: RP-SB-311(11-12) Grab
Date Collected: 06/14/18 08:10
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-2
Matrix: Solid
Percent Solids: 80.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.0011	U	0.0011	0.00037	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Ethylbenzene	0.0011	U	0.0011	0.00022	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Ethylene Dibromide	0.0011	U	0.0011	0.00020	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Isopropylbenzene	**0.0023**		0.0011	0.00014	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Methyl acetate	0.0055	U	0.0055	0.0047	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Methyl tert-butyl ether	0.0011	U	0.0011	0.00014	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Methylcyclohexane	0.0011	U	0.0011	0.00018	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Methylene Chloride	0.0011	U	0.0011	0.00018	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
m-Xylene & p-Xylene	0.0011	U	0.0011	0.00019	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
o-Xylene	**0.0018**	J	0.0011	0.00010	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Styrene	0.0011	U	0.0011	0.00013	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Tetrachloroethene	0.0011	U	0.0011	0.00016	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Toluene	0.0011	U	0.0011	0.00069	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
trans-1,2-Dichloroethene	0.0011	U	0.0011	0.00027	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
trans-1,3-Dichloropropene	0.0011	U	0.0011	0.00029	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Trichloroethene	0.0011	U	0.0011	0.00016	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Trichlorofluoromethane	0.0011	U	0.0011	0.00045	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1
Vinyl chloride	0.0011	U	0.0011	0.00060	mg/Kg	☼	06/15/18 21:35	06/18/18 09:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*78 - 135*	*06/15/18 21:35*	*06/18/18 09:05*	*1*
4-Bromofluorobenzene	*94*		*67 - 126*	*06/15/18 21:35*	*06/18/18 09:05*	*1*
Dibromofluoromethane (Surr)	*100*		*61 - 149*	*06/15/18 21:35*	*06/18/18 09:05*	*1*
Toluene-d8 (Surr)	*103*		*73 - 121*	*06/15/18 21:35*	*06/18/18 09:05*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.41	U J	0.41	0.0055	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
1,2,4,5-Tetrachlorobenzene	0.41	U J	0.41	0.0054	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2,2'-oxybis[1-chloropropane]	0.41	U	0.41	0.0075	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2,3,4,6-Tetrachlorophenol	0.41	U J	0.41	0.028	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2,4,5-Trichlorophenol	0.41	U	0.41	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2,4,6-Trichlorophenol	0.17	U	0.17	0.021	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2,4-Dichlorophenol	0.17	U	0.17	0.0087	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2,4-Dimethylphenol	0.41	U	0.41	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2,4-Dinitrophenol	~~0.33~~	~~U~~ R	0.33	0.20	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2,4-Dinitrotoluene	0.084	U	0.084	0.021	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2,6-Dinitrotoluene	0.084	U	0.084	0.013	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2-Chloronaphthalene	0.41	U	0.41	0.019	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2-Chlorophenol	0.41	U	0.41	0.0058	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2-Methylnaphthalene	0.41	U	0.41	0.0052	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2-Methylphenol	0.41	U	0.41	0.0067	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2-Nitroaniline	0.41	U	0.41	0.015	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
2-Nitrophenol	0.41	U J	0.41	0.013	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
3,3'-Dichlorobenzidine	0.17	U	0.17	0.062	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
3-Nitroaniline	0.41	U	0.41	0.022	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
4,6-Dinitro-2-methylphenol	0.33	U J	0.33	0.067	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
4-Bromophenyl phenyl ether	0.41	U J	0.41	0.0053	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
4-Chloro-3-methylphenol	0.41	U J	0.41	0.0069	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
4-Chloroaniline	0.41	U	0.41	0.029	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1

Client Sample ID: RP-SB-311(11-12) Grab
Date Collected: 06/14/18 08:10
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-2
Matrix: Solid
Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	0.41	U J	0.41	0.0065	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
4-Methylphenol	0.41	U J	0.41	0.0070	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
4-Nitroaniline	0.41	U	0.41	0.015	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
4-Nitrophenol	0.84	U	0.84	0.067	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Acenaphthene	0.41	U J	0.41	0.030	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Acenaphthylene	0.41	U	0.41	0.0043	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Acetophenone	0.41	U	0.41	0.0067	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Anthracene	0.41	U	0.41	0.0046	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Atrazine	0.17	U	0.17	0.010	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Benzaldehyde	0.41	U	0.41	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Benzo[a]anthracene	0.041	U	0.041	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Benzo[a]pyrene	0.041	U	0.041	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Benzo[b]fluoranthene	0.041	U	0.041	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Benzo[g,h,i]perylene	0.41	U	0.41	0.012	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Benzo[k]fluoranthene	0.041	U	0.041	0.0081	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Bis(2-chloroethoxy)methane	0.41	U	0.41	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Bis(2-chloroethyl)ether	0.041	U	0.041	0.0050	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Bis(2-ethylhexyl) phthalate	0.41	U	0.41	0.022	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Butyl benzyl phthalate	0.41	U	0.41	0.019	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Caprolactam	0.41	U	0.41	0.025	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Carbazole	0.41	U	0.41	0.0048	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Chrysene	0.41	U	0.41	0.0070	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Dibenz(a,h)anthracene	0.041	U	0.041	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Dibenzofuran	0.41	U	0.41	0.0058	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Diethyl phthalate	0.41	U	0.41	0.0060	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Dimethyl phthalate	0.41	U	0.41	0.0050	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Di-n-butyl phthalate	0.41	U	0.41	0.073	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Di-n-octyl phthalate	0.41	U	0.41	0.022	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Fluoranthene	0.41	U	0.41	0.0054	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Fluorene	0.41	U	0.41	0.0056	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Hexachlorobenzene	0.041	U	0.041	0.0061	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Hexachlorobutadiene	0.084	U	0.084	0.0088	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Hexachlorocyclopentadiene	0.41	U	0.41	0.036	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Hexachloroethane	0.041	U	0.041	0.0064	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Indeno[1,2,3-cd]pyrene	0.041	U	0.041	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Isophorone	0.17	U	0.17	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Naphthalene	0.41	U	0.41	0.0071	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Nitrobenzene	0.041	U	0.041	0.0099	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
N-Nitrosodi-n-propylamine	0.041	U	0.041	0.0066	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
N-Nitrosodiphenylamine	0.41	U	0.41	0.0079	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Pentachlorophenol	0.33	U	0.33	0.085	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Phenanthrene	0.41	U	0.41	0.0073	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Phenol	0.41	U	0.41	0.0061	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1
Pyrene	0.41	U J	0.41	0.010	mg/Kg	☼	06/17/18 13:40	06/18/18 09:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*60*		*10 - 103*	*06/17/18 13:40*	*06/18/18 09:12*	*1*
2-Fluorobiphenyl	*58*		*38 - 95*	*06/17/18 13:40*	*06/18/18 09:12*	*1*
2-Fluorophenol (Surr)	*66*		*25 - 92*	*06/17/18 13:40*	*06/18/18 09:12*	*1*
Nitrobenzene-d5 (Surr)	*61*		*37 - 94*	*06/17/18 13:40*	*06/18/18 09:12*	*1*

Client Sample ID: RP-SB-311(11-12) Grab
Date Collected: 06/14/18 08:10
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-2
Matrix: Solid
Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5 (Surr)	65		32 - 91	06/17/18 13:40	06/18/18 09:12	1
Terphenyl-d14 (Surr)	58		24 - 109	06/17/18 13:40	06/18/18 09:12	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0084	U J	0.0084	0.0014	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
4,4'-DDE	0.0084	U	0.0084	0.00099	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
4,4'-DDT	0.0084	U J	0.0084	0.0015	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Aldrin	0.0084	U	0.0084	0.0013	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
alpha-BHC	0.0025	U J	0.0025	0.00085	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
beta-BHC	0.0025	U J	0.0025	0.00094	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Chlordane (technical)	0.084	U	0.084	0.020	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
delta-BHC	0.0025	U J	0.0025	0.00051	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Dieldrin	0.0025	~~U~~ R	0.0025	0.0011	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Endosulfan I	0.0084	U J	0.0084	0.0013	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Endosulfan II	0.0084	~~U~~ R	0.0084	0.0021	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Endosulfan sulfate	0.0084	~~U~~ R	0.0084	0.0010	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Endrin	0.0084	U J	0.0084	0.0012	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Endrin aldehyde	0.0084	~~U~~ R	0.0084	0.0020	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Endrin ketone	0.0084	~~U~~ R	0.0084	0.0016	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
gamma-BHC (Lindane)	0.0025	U J	0.0025	0.00077	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Heptachlor	0.0084	U	0.0084	0.00099	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Heptachlor epoxide	0.0084	U J	0.0084	0.0012	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Methoxychlor	0.0084	U J	0.0084	0.0019	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1
Toxaphene	0.084	U	0.084	0.030	mg/Kg	☼	06/19/18 12:48	06/20/18 09:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	85		69 - 150	06/19/18 12:48	06/20/18 09:50	1
DCB Decachlorobiphenyl	75		69 - 150	06/19/18 12:48	06/20/18 09:50	1
Tetrachloro-m-xylene	78		74 - 150	06/19/18 12:48	06/20/18 09:50	1
Tetrachloro-m-xylene	76		74 - 150	06/19/18 12:48	06/20/18 09:50	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.084	U	0.084	0.011	mg/Kg	☼	06/19/18 12:42	06/20/18 09:04	1
Aroclor 1221	0.084	U	0.084	0.011	mg/Kg	☼	06/19/18 12:42	06/20/18 09:04	1
Aroclor 1232	0.084	U	0.084	0.011	mg/Kg	☼	06/19/18 12:42	06/20/18 09:04	1
Aroclor 1242	0.084	U	0.084	0.011	mg/Kg	☼	06/19/18 12:42	06/20/18 09:04	1
Aroclor 1248	0.084	U	0.084	0.011	mg/Kg	☼	06/19/18 12:42	06/20/18 09:04	1
Aroclor 1254	0.084	U	0.084	0.011	mg/Kg	☼	06/19/18 12:42	06/20/18 09:04	1
Aroclor 1260	0.084	U	0.084	0.011	mg/Kg	☼	06/19/18 12:42	06/20/18 09:04	1
Aroclor-1262	0.084	U	0.084	0.011	mg/Kg	☼	06/19/18 12:42	06/20/18 09:04	1
Aroclor 1268	0.084	U	0.084	0.011	mg/Kg	☼	06/19/18 12:42	06/20/18 09:04	1
Polychlorinated biphenyls, Total	0.084	U	0.084	0.011	mg/Kg	☼	06/19/18 12:42	06/20/18 09:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	83		53 - 150	06/19/18 12:42	06/20/18 09:04	1
DCB Decachlorobiphenyl	92		53 - 150	06/19/18 12:42	06/20/18 09:04	1

Client Sample ID: RP-SB-311(11-12) Grab

Lab Sample ID: 460-158410-2
Date Collected: 06/14/18 08:10
Matrix: Solid
Date Received: 06/14/18 20:30
Percent Solids: 80.0

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.042	U	0.042	0.0088	mg/Kg	☼	06/19/18 03:10	06/19/18 13:07	1
2,4-D	0.042	U	0.042	0.015	mg/Kg	☼	06/19/18 03:10	06/19/18 13:07	1
Silvex (2,4,5-TP)	0.042	U	0.042	0.0043	mg/Kg	☼	06/19/18 03:10	06/19/18 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*145*		*80 - 150*	*06/19/18 03:10*	*06/19/18 13:07*	*1*
2,4-Dichlorophenylacetic acid	*143*		*80 - 150*	*06/19/18 03:10*	*06/19/18 13:07*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**370**	J	38.5	7.9	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Antimony	3.8	U	3.8	0.46	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Arsenic	2.9	U	2.9	0.71	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Barium	38.5	U	38.5	3.1	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Beryllium	0.38	U	0.38	0.044	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Cadmium	0.77	U	0.77	0.11	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Calcium	**165**	J	962	98.1	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Chromium	**2.7**		1.9	0.53	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Cobalt	9.6	U	9.6	1.1	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Copper	**1.2**	J	4.8	1.1	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Iron	**941**		28.9	5.2	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Lead	**5.3**		1.9	0.58	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Magnesium	**183**	J	962	74.2	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Manganese	**11.4**		2.9	0.30	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Nickel	7.7	U	7.7	0.73	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Potassium	**106**	J	962	51.2	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Selenium	3.8	U	3.8	1.2	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Silver	1.9	U	1.9	0.29	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Sodium	**445**	J	962	74.1	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Thallium	3.8	U	3.8	1.1	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Vanadium	**2.0**	J	9.6	1.1	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4
Zinc	**5.2**	J	5.8	0.50	mg/Kg	☼	06/15/18 22:00	06/17/18 17:42	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	U	0.019	0.011	mg/Kg	☼	06/20/18 04:34	06/20/18 08:25	1

Client Sample ID: RP-SB-309(11-12) Grab

Lab Sample ID: 460-158410-3
Date Collected: 06/14/18 09:05
Matrix: Solid
Date Received: 06/14/18 20:30
Percent Solids: 79.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010	0.00024	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010	0.00022	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010	0.00031	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,1,2-Trichloroethane	0.0010	U	0.0010	0.00018	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,1-Dichloroethane	0.0010	U	0.0010	0.00021	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00023	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,2,3-Trichlorobenzene	0.0010	U	0.0010	0.00019	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1

Client Sample ID: RP-SB-309(11-12) Grab
Date Collected: 06/14/18 09:05
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-3
Matrix: Solid
Percent Solids: 79.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.0010	U	0.0010	0.000095	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,2-Dibromo-3-Chloropropane	0.0010	U	0.0010	0.00047	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,2-Dichlorobenzene	0.0010	U	0.0010	0.00015	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00030	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,2-Dichloropropane	0.0010	U	0.0010	0.00044	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,3-Dichlorobenzene	0.0010	U	0.0010	0.00016	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,4-Dichlorobenzene	0.0010	U	0.0010	0.00010	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
1,4-Dioxane	0.021	U	0.021	0.0095	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
2-Butanone (MEK)	**0.0024**	J	0.0051	0.0011	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
2-Hexanone	0.0051	U	0.0051	0.00080	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
4-Methyl-2-pentanone (MIBK)	0.0051	U	0.0051	0.00068	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Acetone	**0.010**	U	0.0051	0.0039	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Benzene	**0.011**		0.0010	0.00027	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Bromoform	0.0010	U J	0.0010	0.00044	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Bromomethane	0.0010	U	0.0010	0.00049	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Carbon disulfide	**0.0041**		0.0010	0.00027	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Carbon tetrachloride	0.0010	U	0.0010	0.00019	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Chlorobenzene	0.0010	U	0.0010	0.00018	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Chlorobromomethane	0.0010	U	0.0010	0.00029	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Chlorodibromomethane	0.0010	U J	0.0010	0.00020	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Chloroethane	0.0010	U	0.0010	0.00054	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Chloroform	0.0010	U	0.0010	0.00033	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Chloromethane	0.0010	U	0.0010	0.00045	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
cis-1,2-Dichloroethene	0.0010	U	0.0010	0.00016	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
cis-1,3-Dichloropropene	0.0010	U	0.0010	0.00028	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Cyclohexane	0.0010	U	0.0010	0.00023	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Dichlorobromomethane	0.0010	U	0.0010	0.00026	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Dichlorodifluoromethane	0.0010	U	0.0010	0.00035	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Ethylbenzene	**0.0057**		0.0010	0.00020	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Ethylene Dibromide	0.0010	U	0.0010	0.00019	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Isopropylbenzene	**0.014**		0.0010	0.00013	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Methyl acetate	0.0051	U	0.0051	0.0044	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Methyl tert-butyl ether	0.0010	U	0.0010	0.00013	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Methylcyclohexane	**0.0012**		0.0010	0.00016	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Methylene Chloride	~~0.00029~~ J B	0.0010 U	0.0010	0.00017	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
m-Xylene & p-Xylene	**0.0017**		0.0010	0.00018	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
o-Xylene	**0.00094**	J	0.0010	0.000098	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Styrene	**0.00024**	J	0.0010	0.00013	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Tetrachloroethene	0.0010	U	0.0010	0.00015	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Toluene	**0.0078**		0.0010	0.00064	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
trans-1,2-Dichloroethene	0.0010	U	0.0010	0.00025	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
trans-1,3-Dichloropropene	0.0010	U	0.0010	0.00027	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Trichloroethene	0.0010	U	0.0010	0.00015	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Trichlorofluoromethane	0.0010	U	0.0010	0.00042	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1
Vinyl chloride	0.0010	U	0.0010	0.00056	mg/Kg	☼	06/15/18 21:37	06/18/18 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*78 - 135*	*06/15/18 21:37*	*06/18/18 20:09*	*1*
4-Bromofluorobenzene	*93*		*67 - 126*	*06/15/18 21:37*	*06/18/18 20:09*	*1*
Dibromofluoromethane (Surr)	*100*		*61 - 149*	*06/15/18 21:37*	*06/18/18 20:09*	*1*

Client Sample ID: RP-SB-309(11-12) Grab
Date Collected: 06/14/18 09:05
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-3
Matrix: Solid
Percent Solids: 79.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		73 - 121	06/15/18 21:37	06/18/18 20:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.42	U	0.42	0.0056	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
1,2,4,5-Tetrachlorobenzene	0.42	U	0.42	0.0055	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2,2'-oxybis[1-chloropropane]	0.42	U	0.42	0.0076	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2,3,4,6-Tetrachlorophenol	0.42	U	0.42	0.028	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2,4,5-Trichlorophenol	0.42	U	0.42	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2,4,6-Trichlorophenol	0.17	U	0.17	0.021	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2,4-Dichlorophenol	0.17	U	0.17	0.0088	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2,4-Dimethylphenol	0.42	U	0.42	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2,4-Dinitrophenol	0.34	U	0.34	0.21	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2,4-Dinitrotoluene	0.085	U	0.085	0.021	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2,6-Dinitrotoluene	0.085	U	0.085	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2-Chloronaphthalene	0.42	U	0.42	0.019	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2-Chlorophenol	0.42	U	0.42	0.0059	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2-Methylnaphthalene	0.42	U	0.42	0.0052	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2-Methylphenol	0.42	U	0.42	0.0067	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2-Nitroaniline	0.42	U	0.42	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
2-Nitrophenol	0.42	U	0.42	0.013	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
3,3'-Dichlorobenzidine	0.17	U	0.17	0.063	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
3-Nitroaniline	0.42	U	0.42	0.023	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
4,6-Dinitro-2-methylphenol	0.34	U	0.34	0.068	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
4-Bromophenyl phenyl ether	0.42	U	0.42	0.0054	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
4-Chloro-3-methylphenol	0.42	U	0.42	0.0069	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
4-Chloroaniline	0.42	U	0.42	0.029	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
4-Chlorophenyl phenyl ether	0.42	U	0.42	0.0066	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
4-Methylphenol	0.42	U	0.42	0.0071	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
4-Nitroaniline	0.42	U	0.42	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
4-Nitrophenol	0.85	U	0.85	0.068	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Acenaphthene	0.42	U	0.42	0.030	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Acenaphthylene	**0.060**	**J**	0.42	0.0043	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Acetophenone	0.42	U	0.42	0.0067	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Anthracene	**0.015**	**J**	0.42	0.0047	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Atrazine	0.17	U	0.17	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Benzaldehyde	0.42	U	0.42	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Benzo[a]anthracene	**0.060**		0.042	0.015	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Benzo[a]pyrene	**0.070**		0.042	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Benzo[b]fluoranthene	**0.075**		0.042	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Benzo[g,h,i]perylene	**0.044**	**J**	0.42	0.012	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Benzo[k]fluoranthene	0.042	U	0.042	0.0082	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Bis(2-chloroethoxy)methane	0.42	U	0.42	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Bis(2-chloroethyl)ether	0.042	U	0.042	0.0051	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Bis(2-ethylhexyl) phthalate	0.42	U	0.42	0.022	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Butyl benzyl phthalate	0.42	U	0.42	0.020	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Caprolactam	0.42	U	0.42	0.025	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Carbazole	0.42	U	0.42	0.0049	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Chrysene	**0.042**	**J**	0.42	0.0071	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1

Client Sample ID: RP-SB-309(11-12) Grab
Date Collected: 06/14/18 09:05
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-3
Matrix: Solid
Percent Solids: 79.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	0.042	U	0.042	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Dibenzofuran	0.42	U	0.42	0.0059	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Diethyl phthalate	0.42	U	0.42	0.0061	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Dimethyl phthalate	0.42	U	0.42	0.0050	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Di-n-butyl phthalate	0.42	U	0.42	0.074	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Di-n-octyl phthalate	0.42	U	0.42	0.022	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Fluoranthene	**0.084**	J	0.42	0.0054	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Fluorene	0.42	U	0.42	0.0057	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Hexachlorobenzene	0.042	U	0.042	0.0061	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Hexachlorobutadiene	0.085	U	0.085	0.0089	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Hexachlorocyclopentadiene	0.42	U	0.42	0.037	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Hexachloroethane	0.042	U	0.042	0.0064	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Indeno[1,2,3-cd]pyrene	**0.049**		0.042	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Isophorone	0.17	U	0.17	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Naphthalene	**0.064**	J	0.42	0.0072	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Nitrobenzene	0.042	U	0.042	0.010	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
N-Nitrosodi-n-propylamine	0.042	U	0.042	0.0067	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
N-Nitrosodiphenylamine	0.42	U	0.42	0.0080	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Pentachlorophenol	0.34	U	0.34	0.086	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Phenanthrene	**0.018**	J	0.42	0.0073	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Phenol	0.42	U	0.42	0.0062	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1
Pyrene	**0.18**	J	0.42	0.010	mg/Kg	☼	06/17/18 13:40	06/18/18 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*54*		*10 - 103*	*06/17/18 13:40*	*06/18/18 14:24*	*1*
2-Fluorobiphenyl	*55*		*38 - 95*	*06/17/18 13:40*	*06/18/18 14:24*	*1*
2-Fluorophenol (Surr)	*60*		*25 - 92*	*06/17/18 13:40*	*06/18/18 14:24*	*1*
Nitrobenzene-d5 (Surr)	*57*		*37 - 94*	*06/17/18 13:40*	*06/18/18 14:24*	*1*
Phenol-d5 (Surr)	*59*		*32 - 91*	*06/17/18 13:40*	*06/18/18 14:24*	*1*
Terphenyl-d14 (Surr)	*59*		*24 - 109*	*06/17/18 13:40*	*06/18/18 14:24*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0085	U	0.0085	0.0014	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
4,4'-DDE	0.0085	U	0.0085	0.0010	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
4,4'-DDT	0.0085	U	0.0085	0.0016	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Aldrin	0.0085	U	0.0085	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
alpha-BHC	0.0025	U	0.0025	0.00086	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
beta-BHC	0.0025	U	0.0025	0.00095	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Chlordane (technical)	0.085	U	0.085	0.020	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
delta-BHC	0.0025	U	0.0025	0.00052	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Dieldrin	0.0025	U	0.0025	0.0011	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Endosulfan I	0.0085	U	0.0085	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Endosulfan II	0.0085	U	0.0085	0.0022	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Endosulfan sulfate	0.0085	U	0.0085	0.0011	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Endrin	0.0085	U	0.0085	0.0012	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Endrin aldehyde	0.0085	U	0.0085	0.0020	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Endrin ketone	0.0085	U	0.0085	0.0016	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
gamma-BHC (Lindane)	0.0025	U	0.0025	0.00078	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Heptachlor	0.0085	U	0.0085	0.0010	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1

Client Sample ID: RP-SB-309(11-12) Grab
Date Collected: 06/14/18 09:05
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-3
Matrix: Solid
Percent Solids: 79.1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor epoxide	0.0085	U	0.0085	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Methoxychlor	0.0085	U	0.0085	0.0019	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1
Toxaphene	0.085	U	0.085	0.031	mg/Kg	☼	06/18/18 21:16	06/19/18 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*69 - 150*	*06/18/18 21:16*	*06/19/18 22:35*	*1*
DCB Decachlorobiphenyl	*94*		*69 - 150*	*06/18/18 21:16*	*06/19/18 22:35*	*1*
Tetrachloro-m-xylene	*101*		*74 - 150*	*06/18/18 21:16*	*06/19/18 22:35*	*1*
Tetrachloro-m-xylene	*97*		*74 - 150*	*06/18/18 21:16*	*06/19/18 22:35*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:14	1
Aroclor 1221	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:14	1
Aroclor 1232	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:14	1
Aroclor 1242	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:14	1
Aroclor 1248	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:14	1
Aroclor 1254	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:14	1
Aroclor 1260	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:14	1
Aroclor-1262	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:14	1
Aroclor 1268	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:14	1
Polychlorinated biphenyls, Total	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*53 - 150*	*06/18/18 21:26*	*06/20/18 08:14*	*1*
DCB Decachlorobiphenyl	*88*		*53 - 150*	*06/18/18 21:26*	*06/20/18 08:14*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.042	U	0.042	0.0089	mg/Kg	☼	06/19/18 03:10	06/19/18 13:22	1
2,4-D	0.042	U	0.042	0.015	mg/Kg	☼	06/19/18 03:10	06/19/18 13:22	1
Silvex (2,4,5-TP)	0.042	U	0.042	0.0044	mg/Kg	☼	06/19/18 03:10	06/19/18 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*137*		*80 - 150*	*06/19/18 03:10*	*06/19/18 13:22*	*1*
2,4-Dichlorophenylacetic acid	*146*		*80 - 150*	*06/19/18 03:10*	*06/19/18 13:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**392**	J	40.8	8.4	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Antimony	4.1	U	4.1	0.49	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Arsenic	3.1	U	3.1	0.75	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Barium	**8.6**	J	40.8	3.3	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Beryllium	0.41	U	0.41	0.047	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Cadmium	0.82	U	0.82	0.12	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Calcium	**140**	J	1020	104	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Chromium	**2.9**		2.0	0.57	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Cobalt	10.2	U	10.2	1.2	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Copper	**7.0**		5.1	1.2	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Iron	**1530**		30.6	5.5	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Lead	**93.5**		2.0	0.62	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4

Client Sample ID: RP-SB-309(11-12) Grab

Lab Sample ID: 460-158410-3

Date Collected: 06/14/18 09:05
Date Received: 06/14/18 20:30

Matrix: Solid
Percent Solids: 79.1

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**259**	J	1020	78.6	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Manganese	**12.9**		3.1	0.32	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Nickel	**1.5**	J	8.2	0.77	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Potassium	**135**	J	1020	54.2	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Selenium	4.1	U	4.1	1.2	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Silver	2.0	U	2.0	0.31	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Sodium	**943**	J	1020	78.5	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Thallium	4.1	U	4.1	1.2	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Vanadium	**2.3**	J	10.2	1.2	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4
Zinc	**90.3**		6.1	0.53	mg/Kg	☼	06/15/18 22:00	06/17/18 18:37	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.050**		0.020	0.011	mg/Kg	☼	06/20/18 04:34	06/20/18 08:33	1

Client Sample ID: RP-SB-308(11-12) Grab

Lab Sample ID: 460-158410-4

Date Collected: 06/14/18 10:05
Date Received: 06/14/18 20:30

Matrix: Solid
Percent Solids: 82.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0011	U	0.0011	0.00025	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,1,2,2-Tetrachloroethane	0.0011	U	0.0011	0.00023	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0011	U	0.0011	0.00032	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,1,2-Trichloroethane	0.0011	U	0.0011	0.00019	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,1-Dichloroethane	0.0011	U	0.0011	0.00022	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,1-Dichloroethene	0.0011	U	0.0011	0.00024	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,2,3-Trichlorobenzene	0.0011	U	0.0011	0.00019	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,2,4-Trichlorobenzene	0.0011	U	0.0011	0.000098	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,2-Dibromo-3-Chloropropane	0.0011	U	0.0011	0.00049	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,2-Dichlorobenzene	0.0011	U	0.0011	0.00015	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,2-Dichloroethane	0.0011	U	0.0011	0.00031	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,2-Dichloropropane	0.0011	U	0.0011	0.00045	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,3-Dichlorobenzene	0.0011	U	0.0011	0.00017	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,4-Dichlorobenzene	0.0011	U	0.0011	0.00011	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
1,4-Dioxane	0.021	U	0.021	0.0097	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
2-Butanone (MEK)	**0.0018**	J	0.0053	0.0012	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
2-Hexanone	0.0053	U	0.0053	0.00083	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
4-Methyl-2-pentanone (MIBK)	0.0053	U	0.0053	0.00070	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Acetone	**0.0097**	U	0.0053	0.0040	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Benzene	**0.0017**		0.0011	0.00027	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Bromoform	0.0011	U J	0.0011	0.00045	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Bromomethane	0.0011	U	0.0011	0.00050	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Carbon disulfide	**0.0027**		0.0011	0.00028	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Carbon tetrachloride	0.0011	U	0.0011	0.00019	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Chlorobenzene	0.0011	U	0.0011	0.00019	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Chlorobromomethane	0.0011	U	0.0011	0.00030	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Chlorodibromomethane	0.0011	U J	0.0011	0.00021	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Chloroethane	0.0011	U	0.0011	0.00055	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Chloroform	0.0011	U	0.0011	0.00034	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1

Client Sample ID: RP-SB-308(11-12) Grab
Date Collected: 06/14/18 10:05
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-4
Matrix: Solid
Percent Solids: 82.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.0011	U	0.0011	0.00046	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
cis-1,2-Dichloroethene	0.0011	U	0.0011	0.00016	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
cis-1,3-Dichloropropene	0.0011	U	0.0011	0.00029	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Cyclohexane	0.0011	U	0.0011	0.00023	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Dichlorobromomethane	0.0011	U	0.0011	0.00027	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Dichlorodifluoromethane	0.0011	U	0.0011	0.00036	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Ethylbenzene	**0.0010**	J	0.0011	0.00021	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Ethylene Dibromide	0.0011	U	0.0011	0.00019	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Isopropylbenzene	**0.0019**		0.0011	0.00013	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Methyl acetate	0.0053	U	0.0053	0.0046	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Methyl tert-butyl ether	0.0011	U	0.0011	0.00013	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Methylcyclohexane	0.0011	U	0.0011	0.00017	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Methylene Chloride	~~0.00061~~	~~J B~~ 0.0011 U	0.0011	0.00017	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
m-Xylene & p-Xylene	**0.00022**	J	0.0011	0.00018	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
o-Xylene	**0.00013**	J	0.0011	0.00010	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Styrene	0.0011	U	0.0011	0.00013	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Tetrachloroethene	0.0011	U	0.0011	0.00015	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Toluene	0.0011	U	0.0011	0.00066	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
trans-1,2-Dichloroethene	0.0011	U	0.0011	0.00026	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
trans-1,3-Dichloropropene	0.0011	U	0.0011	0.00028	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Trichloroethene	0.0011	U	0.0011	0.00015	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Trichlorofluoromethane	0.0011	U	0.0011	0.00043	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1
Vinyl chloride	0.0011	U	0.0011	0.00058	mg/Kg	☼	06/15/18 21:38	06/18/18 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*78 - 135*	*06/15/18 21:38*	*06/18/18 20:33*	*1*
4-Bromofluorobenzene	*97*		*67 - 126*	*06/15/18 21:38*	*06/18/18 20:33*	*1*
Dibromofluoromethane (Surr)	*101*		*61 - 149*	*06/15/18 21:38*	*06/18/18 20:33*	*1*
Toluene-d8 (Surr)	*104*		*73 - 121*	*06/15/18 21:38*	*06/18/18 20:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.40	U	0.40	0.0053	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
1,2,4,5-Tetrachlorobenzene	0.40	U	0.40	0.0053	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2,2'-oxybis[1-chloropropane]	0.40	U	0.40	0.0073	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2,3,4,6-Tetrachlorophenol	0.40	U	0.40	0.027	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2,4,5-Trichlorophenol	0.40	U	0.40	0.013	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2,4,6-Trichlorophenol	0.16	U	0.16	0.020	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2,4-Dichlorophenol	0.16	U	0.16	0.0085	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2,4-Dimethylphenol	0.40	U	0.40	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2,4-Dinitrophenol	0.32	U	0.32	0.20	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2,4-Dinitrotoluene	0.081	U	0.081	0.020	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2,6-Dinitrotoluene	0.081	U	0.081	0.013	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2-Chloronaphthalene	0.40	U	0.40	0.019	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2-Chlorophenol	0.40	U	0.40	0.0056	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2-Methylnaphthalene	**0.031**	J	0.40	0.0050	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2-Methylphenol	0.40	U	0.40	0.0065	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2-Nitroaniline	0.40	U	0.40	0.015	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
2-Nitrophenol	0.40	U	0.40	0.013	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
3,3'-Dichlorobenzidine	0.16	U	0.16	0.061	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1

Client Sample ID: RP-SB-308(11-12) Grab
Date Collected: 06/14/18 10:05
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-4
Matrix: Solid
Percent Solids: 82.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	0.40	U	0.40	0.022	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
4,6-Dinitro-2-methylphenol	0.32	U	0.32	0.065	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
4-Bromophenyl phenyl ether	0.40	U	0.40	0.0052	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
4-Chloro-3-methylphenol	0.40	U	0.40	0.0067	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
4-Chloroaniline	0.40	U	0.40	0.028	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
4-Chlorophenyl phenyl ether	0.40	U	0.40	0.0063	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
4-Methylphenol	0.40	U	0.40	0.0068	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
4-Nitroaniline	0.40	U	0.40	0.015	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
4-Nitrophenol	0.81	U	0.81	0.065	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Acenaphthene	0.40	U	0.40	0.029	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Acenaphthylene	**0.021**	**J**	0.40	0.0042	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Acetophenone	0.40	U	0.40	0.0065	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Anthracene	**0.011**	**J**	0.40	0.0045	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Atrazine	0.16	U	0.16	0.010	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Benzaldehyde	0.40	U	0.40	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Benzo[a]anthracene	0.040	U	0.040	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Benzo[a]pyrene	**0.039**	**J**	0.040	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Benzo[b]fluoranthene	**0.037**	**J**	0.040	0.010	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Benzo[g,h,i]perylene	0.40	U	0.40	0.012	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Benzo[k]fluoranthene	**0.016**	**J**	0.040	0.0079	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Bis(2-chloroethoxy)methane	0.40	U	0.40	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Bis(2-chloroethyl)ether	0.040	U	0.040	0.0049	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Bis(2-ethylhexyl) phthalate	0.40	U	0.40	0.021	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Butyl benzyl phthalate	0.40	U	0.40	0.019	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Caprolactam	0.40	U	0.40	0.024	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Carbazole	0.40	U	0.40	0.0047	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Chrysene	**0.032**	**J**	0.40	0.0068	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Dibenz(a,h)anthracene	0.040	U	0.040	0.017	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Dibenzofuran	0.40	U	0.40	0.0056	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Diethyl phthalate	0.40	U	0.40	0.0058	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Dimethyl phthalate	0.40	U	0.40	0.0048	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Di-n-butyl phthalate	0.40	U	0.40	0.071	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Di-n-octyl phthalate	0.40	U	0.40	0.021	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Fluoranthene	0.40	U	0.40	0.0052	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Fluorene	0.40	U	0.40	0.0054	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Hexachlorobenzene	0.040	U	0.040	0.0059	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Hexachlorobutadiene	0.081	U	0.081	0.0085	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Hexachlorocyclopentadiene	0.40	U	0.40	0.035	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Hexachloroethane	0.040	U	0.040	0.0062	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Indeno[1,2,3-cd]pyrene	**0.020**	**J**	0.040	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Isophorone	0.16	U	0.16	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Naphthalene	**0.065**	**J**	0.40	0.0069	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Nitrobenzene	0.040	U	0.040	0.0096	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
N-Nitrosodi-n-propylamine	0.040	U	0.040	0.0064	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
N-Nitrosodiphenylamine	0.40	U	0.40	0.0077	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Pentachlorophenol	0.32	U	0.32	0.082	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Phenanthrene	**0.034**	**J**	0.40	0.0071	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Phenol	0.40	U	0.40	0.0059	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1
Pyrene	**0.072**	**J**	0.40	0.010	mg/Kg	☼	06/17/18 13:40	06/18/18 14:40	1

Client Sample ID: RP-SB-308(11-12) Grab
Date Collected: 06/14/18 10:05
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-4
Matrix: Solid
Percent Solids: 82.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	51		10 - 103	06/17/18 13:40	06/18/18 14:40	1
2-Fluorobiphenyl	58		38 - 95	06/17/18 13:40	06/18/18 14:40	1
2-Fluorophenol (Surr)	62		25 - 92	06/17/18 13:40	06/18/18 14:40	1
Nitrobenzene-d5 (Surr)	58		37 - 94	06/17/18 13:40	06/18/18 14:40	1
Phenol-d5 (Surr)	62		32 - 91	06/17/18 13:40	06/18/18 14:40	1
Terphenyl-d14 (Surr)	63		24 - 109	06/17/18 13:40	06/18/18 14:40	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0081	U	0.0081	0.0014	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
4,4'-DDE	0.0081	U	0.0081	0.00096	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
4,4'-DDT	0.0081	U	0.0081	0.0015	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Aldrin	0.0081	U	0.0081	0.0012	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
alpha-BHC	0.0024	U	0.0024	0.00083	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
beta-BHC	0.0024	U	0.0024	0.00091	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Chlordane (technical)	0.081	U	0.081	0.020	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
delta-BHC	0.0024	U	0.0024	0.00050	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Dieldrin	0.0024	U	0.0024	0.0011	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Endosulfan I	0.0081	U	0.0081	0.0012	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Endosulfan II	0.0081	U	0.0081	0.0021	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Endosulfan sulfate	0.0081	U	0.0081	0.0010	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Endrin	0.0081	U	0.0081	0.0012	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Endrin aldehyde	0.0081	U	0.0081	0.0019	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Endrin ketone	0.0081	U	0.0081	0.0016	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
gamma-BHC (Lindane)	0.0024	U	0.0024	0.00075	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Heptachlor	0.0081	U	0.0081	0.00096	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Heptachlor epoxide	0.0081	U	0.0081	0.0012	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Methoxychlor	0.0081	U	0.0081	0.0019	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1
Toxaphene	0.081	U	0.081	0.029	mg/Kg	☼	06/18/18 21:16	06/19/18 22:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	94		69 - 150	06/18/18 21:16	06/19/18 22:48	1
DCB Decachlorobiphenyl	97		69 - 150	06/18/18 21:16	06/19/18 22:48	1
Tetrachloro-m-xylene	95		74 - 150	06/18/18 21:16	06/19/18 22:48	1
Tetrachloro-m-xylene	97		74 - 150	06/18/18 21:16	06/19/18 22:48	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.081	U	0.081	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:30	1
Aroclor 1221	0.081	U	0.081	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:30	1
Aroclor 1232	0.081	U	0.081	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:30	1
Aroclor 1242	0.081	U	0.081	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:30	1
Aroclor 1248	0.081	U	0.081	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:30	1
Aroclor 1254	0.081	U	0.081	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:30	1
Aroclor 1260	0.081	U	0.081	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:30	1
Aroclor-1262	0.081	U	0.081	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:30	1
Aroclor 1268	0.081	U	0.081	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:30	1
Polychlorinated biphenyls, Total	0.081	U	0.081	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 08:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	92		53 - 150	06/18/18 21:26	06/20/18 08:30	1

Client Sample ID: RP-SB-308(11-12) Grab

Date Collected: 06/14/18 10:05
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-4
Matrix: Solid
Percent Solids: 82.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	97		53 - 150	06/18/18 21:26	06/20/18 08:30	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.040	U	0.040	0.0086	mg/Kg	☼	06/19/18 03:10	06/19/18 13:36	1
2,4-D	0.040	U	0.040	0.015	mg/Kg	☼	06/19/18 03:10	06/19/18 13:36	1
Silvex (2,4,5-TP)	0.040	U	0.040	0.0042	mg/Kg	☼	06/19/18 03:10	06/19/18 13:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	142		80 - 150	06/19/18 03:10	06/19/18 13:36	1
2,4-Dichlorophenylacetic acid	140		80 - 150	06/19/18 03:10	06/19/18 13:36	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	682	J	38.6	7.9	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Antimony	3.9	U	3.9	0.46	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Arsenic	1.0	J	2.9	0.71	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Barium	3.4	J	38.6	3.1	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Beryllium	0.055	J	0.39	0.044	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Cadmium	0.77	U	0.77	0.11	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Calcium	3280		965	98.4	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Chromium	3.0		1.9	0.54	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Cobalt	9.6	U	9.6	1.1	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Copper	4.0	J	4.8	1.1	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Iron	1940		28.9	5.2	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Lead	6.2		1.9	0.58	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Magnesium	444	J	965	74.4	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Manganese	19.0		2.9	0.30	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Nickel	2.9	J	7.7	0.73	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Potassium	247	J	965	51.3	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Selenium	3.9	U	3.9	1.2	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Silver	1.9	U	1.9	0.29	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Sodium	829	J	965	74.3	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Thallium	3.9	U	3.9	1.1	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Vanadium	3.1	J	9.6	1.1	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4
Zinc	17.7		5.8	0.50	mg/Kg	☼	06/17/18 02:45	06/20/18 12:52	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021	U	0.021	0.012	mg/Kg	☼	06/20/18 04:34	06/20/18 08:34	1

Client Sample ID: RP-SB-307(11-12) Grab

Date Collected: 06/14/18 10:55
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-5
Matrix: Solid
Percent Solids: 76.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0014	U	0.0014	0.00033	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,1,2,2-Tetrachloroethane	0.0014	U	0.0014	0.00031	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0014	U	0.0014	0.00043	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1

Client Sample ID: RP-SB-307(11-12) Grab
Date Collected: 06/14/18 10:55
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-5
Matrix: Solid
Percent Solids: 76.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	0.0014	U	0.0014	0.00025	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,1-Dichloroethane	0.0014	U	0.0014	0.00029	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,1-Dichloroethene	0.0014	U	0.0014	0.00032	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,2,3-Trichlorobenzene	0.0014	U	0.0014	0.00026	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,2,4-Trichlorobenzene	0.0014	U	0.0014	0.00013	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,2-Dibromo-3-Chloropropane	0.0014	U	0.0014	0.00066	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,2-Dichlorobenzene	0.0014	U	0.0014	0.00021	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,2-Dichloroethane	0.0014	U	0.0014	0.00042	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,2-Dichloropropane	0.0014	U	0.0014	0.00061	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,3-Dichlorobenzene	0.0014	U	0.0014	0.00023	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,4-Dichlorobenzene	0.0014	U	0.0014	0.00014	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
1,4-Dioxane	0.029	U	0.029	0.013	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
2-Butanone (MEK)	0.0072	U	0.0072	0.0016	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
2-Hexanone	0.0072	U	0.0072	0.0011	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
4-Methyl-2-pentanone (MIBK)	0.0072	U	0.0072	0.00095	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Acetone	**0.0085**	U	0.0072	0.0054	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Benzene	**0.016**		0.0014	0.00037	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Bromoform	0.0014	U J	0.0014	0.00061	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Bromomethane	0.0014	U	0.0014	0.00068	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Carbon disulfide	**0.0058**		0.0014	0.00038	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Carbon tetrachloride	0.0014	U	0.0014	0.00026	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Chlorobenzene	0.0014	U	0.0014	0.00025	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Chlorobromomethane	0.0014	U	0.0014	0.00040	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Chlorodibromomethane	0.0014	U J	0.0014	0.00028	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Chloroethane	0.0014	U J	0.0014	0.00075	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Chloroform	0.0014	U	0.0014	0.00046	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Chloromethane	0.0014	U	0.0014	0.00062	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
cis-1,2-Dichloroethene	0.0014	U	0.0014	0.00022	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
cis-1,3-Dichloropropene	0.0014	U	0.0014	0.00039	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Cyclohexane	**0.0016**		0.0014	0.00032	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Dichlorobromomethane	0.0014	U	0.0014	0.00037	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Dichlorodifluoromethane	0.0014	U	0.0014	0.00048	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Ethylbenzene	**0.16**		0.0014	0.00028	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Ethylene Dibromide	0.0014	U	0.0014	0.00026	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Isopropylbenzene	**0.40**		0.0014	0.00018	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Methyl acetate	0.0072	U	0.0072	0.0062	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Methyl tert-butyl ether	0.0014	U	0.0014	0.00018	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Methylcyclohexane	0.0014	U	0.0014	0.00023	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Methylene Chloride	0.0014	U	0.0014	0.00023	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
m-Xylene & p-Xylene	**0.0053**		0.0014	0.00025	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
o-Xylene	**0.032**		0.0014	0.00014	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Styrene	0.0014	U	0.0014	0.00018	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Tetrachloroethene	0.0014	U	0.0014	0.00020	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Toluene	**0.00095**	J	0.0014	0.00089	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
trans-1,2-Dichloroethene	0.0014	U	0.0014	0.00035	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
trans-1,3-Dichloropropene	0.0014	U	0.0014	0.00038	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Trichloroethene	0.0014	U	0.0014	0.00021	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Trichlorofluoromethane	0.0014	U	0.0014	0.00058	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1
Vinyl chloride	0.0014	U	0.0014	0.00078	mg/Kg	☼	06/15/18 21:39	06/22/18 05:11	1

Client Sample ID: RP-SB-307(11-12) Grab

Date Collected: 06/14/18 10:55
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-5
Matrix: Solid
Percent Solids: 76.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		78 - 135	06/15/18 21:39	06/22/18 05:11	1
4-Bromofluorobenzene	94		67 - 126	06/15/18 21:39	06/22/18 05:11	1
Dibromofluoromethane (Surr)	100		61 - 149	06/15/18 21:39	06/22/18 05:11	1
Toluene-d8 (Surr)	106		73 - 121	06/15/18 21:39	06/22/18 05:11	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.43	U	0.43	0.0058	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
1,2,4,5-Tetrachlorobenzene	0.43	U	0.43	0.0057	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2,2'-oxybis[1-chloropropane]	0.43	U	0.43	0.0079	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2,3,4,6-Tetrachlorophenol	0.43	U	0.43	0.029	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2,4,5-Trichlorophenol	0.43	U	0.43	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2,4,6-Trichlorophenol	0.17	U	0.17	0.022	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2,4-Dichlorophenol	0.17	U	0.17	0.0092	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2,4-Dimethylphenol	0.43	U	0.43	0.019	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2,4-Dinitrophenol	0.35	U	0.35	0.21	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2,4-Dinitrotoluene	0.088	U	0.088	0.022	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2,6-Dinitrotoluene	0.088	U	0.088	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2-Chloronaphthalene	0.43	U	0.43	0.020	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2-Chlorophenol	0.43	U	0.43	0.0061	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2-Methylnaphthalene	**0.60**		0.43	0.0054	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2-Methylphenol	0.43	U	0.43	0.0070	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2-Nitroaniline	0.43	U	0.43	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
2-Nitrophenol	0.43	U	0.43	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
3,3'-Dichlorobenzidine	0.17	U	0.17	0.066	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
3-Nitroaniline	0.43	U	0.43	0.024	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
4,6-Dinitro-2-methylphenol	0.35	U	0.35	0.070	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
4-Bromophenyl phenyl ether	0.43	U	0.43	0.0056	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
4-Chloro-3-methylphenol	0.43	U	0.43	0.0072	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
4-Chloroaniline	0.43	U	0.43	0.030	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
4-Chlorophenyl phenyl ether	0.43	U	0.43	0.0068	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
4-Methylphenol	0.43	U	0.43	0.0074	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
4-Nitroaniline	0.43	U	0.43	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
4-Nitrophenol	0.88	U	0.88	0.071	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Acenaphthene	**0.71**		0.43	0.032	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Acenaphthylene	0.43	U	0.43	0.0045	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Acetophenone	0.43	U	0.43	0.0070	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Anthracene	**0.038**	J	0.43	0.0049	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Atrazine	0.17	U	0.17	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Benzaldehyde	0.43	U	0.43	0.019	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Benzo[a]anthracene	**0.022**	J	0.043	0.015	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Benzo[a]pyrene	**0.015**	J	0.043	0.012	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Benzo[b]fluoranthene	**0.020**	J	0.043	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Benzo[g,h,i]perylene	0.43	U	0.43	0.013	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Benzo[k]fluoranthene	0.043	U	0.043	0.0085	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Bis(2-chloroethoxy)methane	0.43	U	0.43	0.015	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Bis(2-chloroethyl)ether	0.043	U	0.043	0.0052	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Bis(2-ethylhexyl) phthalate	0.43	U	0.43	0.023	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Butyl benzyl phthalate	0.43	U	0.43	0.020	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Caprolactam	0.43	U	0.43	0.026	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1

Client Sample ID: RP-SB-307(11-12) Grab
Date Collected: 06/14/18 10:55
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-5
Matrix: Solid
Percent Solids: 76.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	0.43	U	0.43	0.0051	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Chrysene	0.43	U	0.43	0.0073	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Dibenz(a,h)anthracene	0.043	U	0.043	0.019	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Dibenzofuran	**0.034**	J	0.43	0.0061	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Diethyl phthalate	0.43	U	0.43	0.0063	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Dimethyl phthalate	0.43	U	0.43	0.0052	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Di-n-butyl phthalate	0.43	U	0.43	0.077	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Di-n-octyl phthalate	0.43	U	0.43	0.023	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Fluoranthene	**0.038**	J	0.43	0.0056	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Fluorene	**0.069**	J	0.43	0.0059	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Hexachlorobenzene	0.043	U	0.043	0.0064	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Hexachlorobutadiene	0.088	U	0.088	0.0092	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Hexachlorocyclopentadiene	0.43	U	0.43	0.038	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Hexachloroethane	0.043	U	0.043	0.0067	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Indeno[1,2,3-cd]pyrene	0.043	U	0.043	0.017	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Isophorone	0.17	U	0.17	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Naphthalene	**0.26**	J	0.43	0.0075	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Nitrobenzene	0.043	U	0.043	0.010	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
N-Nitrosodi-n-propylamine	0.043	U	0.043	0.0069	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
N-Nitrosodiphenylamine	0.43	U	0.43	0.0083	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Pentachlorophenol	0.35	U	0.35	0.089	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Phenanthrene	**0.30**	J	0.43	0.0076	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Phenol	0.43	U	0.43	0.0064	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1
Pyrene	**0.10**	J	0.43	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*59*		*10 - 103*	*06/17/18 13:40*	*06/18/18 14:56*	*1*
2-Fluorobiphenyl	*54*		*38 - 95*	*06/17/18 13:40*	*06/18/18 14:56*	*1*
2-Fluorophenol (Surr)	*58*		*25 - 92*	*06/17/18 13:40*	*06/18/18 14:56*	*1*
Nitrobenzene-d5 (Surr)	*57*		*37 - 94*	*06/17/18 13:40*	*06/18/18 14:56*	*1*
Phenol-d5 (Surr)	*57*		*32 - 91*	*06/17/18 13:40*	*06/18/18 14:56*	*1*
Terphenyl-d14 (Surr)	*62*		*24 - 109*	*06/17/18 13:40*	*06/18/18 14:56*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0088	U	0.0088	0.0015	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
4,4'-DDE	0.0088	U	0.0088	0.0010	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
4,4'-DDT	0.0088	U	0.0088	0.0016	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Aldrin	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
alpha-BHC	0.0026	U	0.0026	0.00089	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
beta-BHC	0.0026	U	0.0026	0.00098	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Chlordane (technical)	0.088	U	0.088	0.021	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
delta-BHC	0.0026	U	0.0026	0.00054	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Dieldrin	0.0026	U	0.0026	0.0011	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Endosulfan I	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Endosulfan II	0.0088	U	0.0088	0.0023	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Endosulfan sulfate	0.0088	U	0.0088	0.0011	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Endrin	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Endrin aldehyde	0.0088	U	0.0088	0.0021	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Endrin ketone	0.0088	U	0.0088	0.0017	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1

Client Sample ID: RP-SB-307(11-12) Grab
Date Collected: 06/14/18 10:55
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-5
Matrix: Solid
Percent Solids: 76.1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	0.0026	U	0.0026	0.00081	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Heptachlor	0.0088	U	0.0088	0.0010	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Heptachlor epoxide	0.0088	U	0.0088	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Methoxychlor	0.0088	U	0.0088	0.0020	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1
Toxaphene	0.088	U	0.088	0.032	mg/Kg	☼	06/18/18 21:16	06/19/18 22:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*69 - 150*	*06/18/18 21:16*	*06/19/18 22:59*	*1*
DCB Decachlorobiphenyl	*93*		*69 - 150*	*06/18/18 21:16*	*06/19/18 22:59*	*1*
Tetrachloro-m-xylene	*101*		*74 - 150*	*06/18/18 21:16*	*06/19/18 22:59*	*1*
Tetrachloro-m-xylene	*90*		*74 - 150*	*06/18/18 21:16*	*06/19/18 22:59*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.088	U J	0.088	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:46	1
Aroclor 1221	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:46	1
Aroclor 1232	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:46	1
Aroclor 1242	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:46	1
Aroclor 1248	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:46	1
Aroclor 1254	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:46	1
Aroclor 1260	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:46	1
Aroclor-1262	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:46	1
Aroclor 1268	0.088	U	0.088	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:46	1
Polychlorinated biphenyls, Total	0.088	U J	0.088	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 08:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*53 - 150*	*06/18/18 21:26*	*06/20/18 08:46*	*1*
DCB Decachlorobiphenyl	*48*	*p **	*53 - 150*	*06/18/18 21:26*	*06/20/18 08:46*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.044	U	0.044	0.0093	mg/Kg	☼	06/19/18 03:10	06/19/18 13:51	1
2,4-D	0.044	U	0.044	0.016	mg/Kg	☼	06/19/18 03:10	06/19/18 13:51	1
Silvex (2,4,5-TP)	0.044	U	0.044	0.0046	mg/Kg	☼	06/19/18 03:10	06/19/18 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*137*		*80 - 150*	*06/19/18 03:10*	*06/19/18 13:51*	*1*
2,4-Dichlorophenylacetic acid	*102*		*80 - 150*	*06/19/18 03:10*	*06/19/18 13:51*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**899**	J	43.4	8.9	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Antimony	4.3	U	4.3	0.52	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Arsenic	**0.80**	J	3.3	0.80	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Barium	**4.1**	J	43.4	3.5	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Beryllium	**0.086**	J	0.43	0.050	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Cadmium	0.87	U	0.87	0.13	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Calcium	**3770**		1090	111	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Chromium	**3.3**		2.2	0.60	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Cobalt	10.9	U	10.9	1.2	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Copper	**2.7**	J	5.4	1.2	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4

Client Sample ID: RP-SB-307(11-12) Grab

Date Collected: 06/14/18 10:55
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-5
Matrix: Solid
Percent Solids: 76.1

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	5400		32.6	5.9	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Lead	2.3		2.2	0.66	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Magnesium	501	J	1090	83.7	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Manganese	28.4		3.3	0.34	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Nickel	3.8	J	8.7	0.82	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Potassium	269	J	1090	57.8	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Selenium	4.3	U	4.3	1.3	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Silver	2.2	U	2.2	0.33	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Sodium	720	J	1090	83.6	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Thallium	4.3	U	4.3	1.3	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Vanadium	3.7	J	10.9	1.3	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4
Zinc	42.4		6.5	0.56	mg/Kg	☼	06/17/18 02:45	06/20/18 12:56	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	U	0.020	0.012	mg/Kg	☼	06/20/18 04:34	06/20/18 08:36	1

Client Sample ID: RP-SB-310(11-12) Grab

Date Collected: 06/14/18 13:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-6
Matrix: Solid
Percent Solids: 77.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0018	U	0.0018	0.00041	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,1,2,2-Tetrachloroethane	0.0018	U	0.0018	0.00038	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0018	U	0.0018	0.00053	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,1,2-Trichloroethane	0.0018	U	0.0018	0.00032	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,1-Dichloroethane	0.0018	U	0.0018	0.00036	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,1-Dichloroethene	0.0018	U	0.0018	0.00040	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,2,3-Trichlorobenzene	0.0018	U	0.0018	0.00032	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,2,4-Trichlorobenzene	0.0018	U	0.0018	0.00016	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,2-Dibromo-3-Chloropropane	0.0018	U	0.0018	0.00081	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,2-Dichlorobenzene	0.0018	U	0.0018	0.00025	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,2-Dichloroethane	0.0018	U	0.0018	0.00052	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,2-Dichloropropane	0.0018	U	0.0018	0.00075	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,3-Dichlorobenzene	0.0018	U	0.0018	0.00028	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,4-Dichlorobenzene	0.0018	U	0.0018	0.00018	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
1,4-Dioxane	0.035	U	0.035	0.016	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
2-Butanone (MEK)	0.0036	J	0.0088	0.0020	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
2-Hexanone	0.0088	U	0.0088	0.0014	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
4-Methyl-2-pentanone (MIBK)	0.0088	U	0.0088	0.0012	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Acetone	0.029		0.0088	0.0067	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Benzene	0.044		0.0018	0.00046	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Bromoform	0.0018	U J	0.0018	0.00075	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Bromomethane	0.0018	U	0.0018	0.00084	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Carbon disulfide	0.015		0.0018	0.00047	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Carbon tetrachloride	0.0018	U	0.0018	0.00032	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Chlorobenzene	0.0018	U	0.0018	0.00031	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Chlorobromomethane	0.0018	U	0.0018	0.00050	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Chlorodibromomethane	0.0018	U J	0.0018	0.00034	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1

Client Sample ID: RP-SB-310(11-12) Grab
Date Collected: 06/14/18 13:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-6
Matrix: Solid
Percent Solids: 77.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	0.0018	U	0.0018	0.00092	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Chloroform	0.0018	U	0.0018	0.00056	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Chloromethane	0.0018	U	0.0018	0.00077	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
cis-1,2-Dichloroethene	0.0018	U	0.0018	0.00027	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
cis-1,3-Dichloropropene	0.0018	U	0.0018	0.00048	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Cyclohexane	**0.00088**	J	0.0018	0.00039	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Dichlorobromomethane	0.0018	U	0.0018	0.00045	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Dichlorodifluoromethane	0.0018	U	0.0018	0.00060	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Ethylbenzene	**0.027**		0.0018	0.00035	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Ethylene Dibromide	0.0018	U	0.0018	0.00032	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Isopropylbenzene	**0.087**		0.0018	0.00022	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Methyl acetate	0.0088	U	0.0088	0.0076	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Methyl tert-butyl ether	0.0018	U	0.0018	0.00022	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Methylcyclohexane	**0.00090**	J	0.0018	0.00028	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Methylene Chloride	0.0018	U	0.0018	0.00029	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
m-Xylene & p-Xylene	**0.0035**		0.0018	0.00031	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
o-Xylene	**0.0083**		0.0018	0.00017	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Styrene	**0.0036**		0.0018	0.00022	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Tetrachloroethene	0.0018	U	0.0018	0.00025	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Toluene	**0.0022**		0.0018	0.0011	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
trans-1,2-Dichloroethene	0.0018	U	0.0018	0.00044	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
trans-1,3-Dichloropropene	0.0018	U	0.0018	0.00047	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Trichloroethene	0.0018	U	0.0018	0.00025	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Trichlorofluoromethane	0.0018	U	0.0018	0.00072	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1
Vinyl chloride	0.0018	U	0.0018	0.00097	mg/Kg	☼	06/15/18 21:40	06/18/18 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*78 - 135*	*06/15/18 21:40*	*06/18/18 20:58*	*1*
4-Bromofluorobenzene	*93*		*67 - 126*	*06/15/18 21:40*	*06/18/18 20:58*	*1*
Dibromofluoromethane (Surr)	*85*		*61 - 149*	*06/15/18 21:40*	*06/18/18 20:58*	*1*
Toluene-d8 (Surr)	*101*		*73 - 121*	*06/15/18 21:40*	*06/18/18 20:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.42	U	0.42	0.0057	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
1,2,4,5-Tetrachlorobenzene	0.42	U	0.42	0.0056	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2,2'-oxybis[1-chloropropane]	0.42	U	0.42	0.0077	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2,3,4,6-Tetrachlorophenol	0.42	U	0.42	0.029	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2,4,5-Trichlorophenol	0.42	U	0.42	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2,4,6-Trichlorophenol	0.17	U	0.17	0.021	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2,4-Dichlorophenol	0.17	U	0.17	0.0090	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2,4-Dimethylphenol	0.42	U	0.42	0.019	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2,4-Dinitrophenol	0.34	U	0.34	0.21	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2,4-Dinitrotoluene	0.086	U	0.086	0.022	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2,6-Dinitrotoluene	0.086	U	0.086	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2-Chloronaphthalene	0.42	U	0.42	0.020	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2-Chlorophenol	0.42	U	0.42	0.0060	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2-Methylnaphthalene	**0.14**	J	0.42	0.0053	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2-Methylphenol	0.42	U	0.42	0.0069	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
2-Nitroaniline	0.42	U	0.42	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1

Client Sample ID: RP-SB-310(11-12) Grab
Date Collected: 06/14/18 13:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-6
Matrix: Solid
Percent Solids: 77.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	0.42	U	0.42	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
3,3'-Dichlorobenzidine	0.17	U	0.17	0.064	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
3-Nitroaniline	0.42	U	0.42	0.023	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
4,6-Dinitro-2-methylphenol	0.34	U	0.34	0.069	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
4-Bromophenyl phenyl ether	0.42	U	0.42	0.0055	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
4-Chloro-3-methylphenol	0.42	U	0.42	0.0071	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
4-Chloroaniline	0.42	U	0.42	0.030	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
4-Chlorophenyl phenyl ether	0.42	U	0.42	0.0067	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
4-Methylphenol	0.42	U	0.42	0.0073	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
4-Nitroaniline	0.42	U	0.42	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
4-Nitrophenol	0.86	U	0.86	0.069	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Acenaphthene	**0.18**	**J**	0.42	0.031	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Acenaphthylene	**1.0**		0.42	0.0044	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Acetophenone	0.42	U	0.42	0.0069	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Anthracene	**0.24**	**J**	0.42	0.0048	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Atrazine	0.17	U	0.17	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Benzaldehyde	0.42	U	0.42	0.019	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Benzo[a]anthracene	**0.47**		0.042	0.015	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Benzo[a]pyrene	**0.40**		0.042	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Benzo[b]fluoranthene	**0.63**		0.042	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Benzo[g,h,i]perylene	**0.35**	**J**	0.42	0.013	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Benzo[k]fluoranthene	**0.19**		0.042	0.0083	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Bis(2-chloroethoxy)methane	0.42	U	0.42	0.015	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Bis(2-chloroethyl)ether	0.042	U	0.042	0.0051	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Bis(2-ethylhexyl) phthalate	0.42	U	0.42	0.023	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Butyl benzyl phthalate	0.42	U	0.42	0.020	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Caprolactam	0.42	U	0.42	0.025	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Carbazole	**0.036**	**J**	0.42	0.0050	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Chrysene	**0.50**		0.42	0.0072	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Dibenz(a,h)anthracene	**0.083**		0.042	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Dibenzofuran	**0.11**	**J**	0.42	0.0060	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Diethyl phthalate	0.42	U	0.42	0.0062	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Dimethyl phthalate	0.42	U	0.42	0.0051	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Di-n-butyl phthalate	0.42	U	0.42	0.075	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Di-n-octyl phthalate	0.42	U	0.42	0.023	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Fluoranthene	**0.81**		0.42	0.0055	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Fluorene	**0.21**	**J**	0.42	0.0058	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Hexachlorobenzene	0.042	U	0.042	0.0062	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Hexachlorobutadiene	0.086	U	0.086	0.0091	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Hexachlorocyclopentadiene	0.42	U	0.42	0.037	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Hexachloroethane	0.042	U	0.042	0.0066	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Indeno[1,2,3-cd]pyrene	**0.39**		0.042	0.017	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Isophorone	0.17	U	0.17	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Naphthalene	**0.70**		0.42	0.0074	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Nitrobenzene	0.042	U	0.042	0.010	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
N-Nitrosodi-n-propylamine	0.042	U	0.042	0.0068	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
N-Nitrosodiphenylamine	0.42	U	0.42	0.0081	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Pentachlorophenol	0.34	U	0.34	0.087	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Phenanthrene	**0.50**		0.42	0.0075	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1

Client Sample ID: RP-SB-310(11-12) Grab
Date Collected: 06/14/18 13:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-6
Matrix: Solid
Percent Solids: 77.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.42	U	0.42	0.0063	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1
Pyrene	**1.3**		0.42	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*49*		*10 - 103*	*06/17/18 13:40*	*06/18/18 15:13*	*1*
2-Fluorobiphenyl	*57*		*38 - 95*	*06/17/18 13:40*	*06/18/18 15:13*	*1*
2-Fluorophenol (Surr)	*52*		*25 - 92*	*06/17/18 13:40*	*06/18/18 15:13*	*1*
Nitrobenzene-d5 (Surr)	*49*		*37 - 94*	*06/17/18 13:40*	*06/18/18 15:13*	*1*
Phenol-d5 (Surr)	*55*		*32 - 91*	*06/17/18 13:40*	*06/18/18 15:13*	*1*
Terphenyl-d14 (Surr)	*65*		*24 - 109*	*06/17/18 13:40*	*06/18/18 15:13*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0086	U	0.0086	0.0015	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
4,4'-DDE	0.0086	U	0.0086	0.0010	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
4,4'-DDT	0.0086	U	0.0086	0.0016	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Aldrin	0.0086	U	0.0086	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
alpha-BHC	0.0026	U	0.0026	0.00088	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
beta-BHC	0.0026	U	0.0026	0.00097	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Chlordane (technical)	0.086	U	0.086	0.021	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
delta-BHC	0.0026	U	0.0026	0.00053	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Dieldrin	0.0026	U	0.0026	0.0011	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Endosulfan I	0.0086	U	0.0086	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Endosulfan II	0.0086	U	0.0086	0.0022	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Endosulfan sulfate	0.0086	U	0.0086	0.0011	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Endrin	0.0086	U	0.0086	0.0012	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Endrin aldehyde	0.0086	U	0.0086	0.0020	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Endrin ketone	0.0086	U	0.0086	0.0017	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
gamma-BHC (Lindane)	0.0026	U	0.0026	0.00080	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Heptachlor	0.0086	U	0.0086	0.0010	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Heptachlor epoxide	0.0086	U	0.0086	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Methoxychlor	0.0086	U	0.0086	0.0020	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1
Toxaphene	0.086	U	0.086	0.031	mg/Kg	☼	06/18/18 21:16	06/19/18 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*69 - 150*	*06/18/18 21:16*	*06/19/18 23:11*	*1*
DCB Decachlorobiphenyl	*93*		*69 - 150*	*06/18/18 21:16*	*06/19/18 23:11*	*1*
Tetrachloro-m-xylene	*97*		*74 - 150*	*06/18/18 21:16*	*06/19/18 23:11*	*1*
Tetrachloro-m-xylene	*94*		*74 - 150*	*06/18/18 21:16*	*06/19/18 23:11*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.43	U	0.43	0.057	mg/Kg	☼	06/18/18 21:26	06/20/18 11:25	5
Aroclor 1221	0.43	U	0.43	0.057	mg/Kg	☼	06/18/18 21:26	06/20/18 11:25	5
Aroclor 1232	0.43	U	0.43	0.057	mg/Kg	☼	06/18/18 21:26	06/20/18 11:25	5
Aroclor 1242	0.43	U	0.43	0.057	mg/Kg	☼	06/18/18 21:26	06/20/18 11:25	5
Aroclor 1248	0.43	U	0.43	0.057	mg/Kg	☼	06/18/18 21:26	06/20/18 11:25	5
Aroclor 1254	0.43	U	0.43	0.059	mg/Kg	☼	06/18/18 21:26	06/20/18 11:25	5
Aroclor 1260	0.43	U	0.43	0.059	mg/Kg	☼	06/18/18 21:26	06/20/18 11:25	5
Aroclor-1262	0.43	U	0.43	0.059	mg/Kg	☼	06/18/18 21:26	06/20/18 11:25	5

Client Sample ID: RP-SB-310(11-12) Grab
Date Collected: 06/14/18 13:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-6
Matrix: Solid
Percent Solids: 77.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1268	0.43	U	0.43	0.059	mg/Kg	☼	06/18/18 21:26	06/20/18 11:25	5
Polychlorinated biphenyls, Total	0.43	U	0.43	0.059	mg/Kg	☼	06/18/18 21:26	06/20/18 11:25	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*53 - 150*	*06/18/18 21:26*	*06/20/18 11:25*	*5*
DCB Decachlorobiphenyl	*65*		*53 - 150*	*06/18/18 21:26*	*06/20/18 11:25*	*5*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.043	U	0.043	0.0091	mg/Kg	☼	06/19/18 03:10	06/19/18 14:20	1
2,4-D	0.043	U	0.043	0.016	mg/Kg	☼	06/19/18 03:10	06/19/18 14:20	1
Silvex (2,4,5-TP)	0.043	U	0.043	0.0045	mg/Kg	☼	06/19/18 03:10	06/19/18 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*159*	*p **	*80 - 150*	*06/19/18 03:10*	*06/19/18 14:20*	*1*
2,4-Dichlorophenylacetic acid	*360*	***	*80 - 150*	*06/19/18 03:10*	*06/19/18 14:20*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1380**	J ·	41.2	8.5	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Antimony	4.1	U	4.1	0.49	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Arsenic	**2.2**	J ·	3.1	0.76	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Barium	**15.6**	J ·	41.2	3.3	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Beryllium	**0.13**	J ·	0.41	0.047	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Cadmium	~~0.15~~ ~~J~~ 0.82U ·		0.82	0.12	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Calcium	**27100**		1030	105	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Chromium	**6.0**		2.1	0.57	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Cobalt	**1.2**	J ·	10.3	1.2	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Copper	**14.9**		5.2	1.2	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Iron	**5640**		30.9	5.6	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Lead	**41.1**		2.1	0.62	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Magnesium	**13900**		1030	79.5	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Manganese	**49.9**		3.1	0.32	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Nickel	**4.4**	J ·	8.2	0.78	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Potassium	**273**	J ·	1030	54.8	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Selenium	4.1	U	4.1	1.2	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Silver	2.1	U	2.1	0.31	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Sodium	**400**	J ·	1030	79.4	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Thallium	4.1	U	4.1	1.2	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Vanadium	**7.0**	J ·	10.3	1.2	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4
Zinc	**29.0**		6.2	0.53	mg/Kg	☼	06/17/18 02:45	06/20/18 13:00	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.068**		0.021	0.012	mg/Kg	☼	06/20/18 04:34	06/20/18 08:38	1

Client Sample ID: RP-SB-304(11-12) Grab
Date Collected: 06/14/18 12:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-7
Matrix: Solid
Percent Solids: 78.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0013	U	0.0013	0.00030	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,1,2,2-Tetrachloroethane	0.0013	U	0.0013	0.00028	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0013	U	0.0013	0.00039	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,1,2-Trichloroethane	0.0013	U	0.0013	0.00023	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,1-Dichloroethane	0.0013	U	0.0013	0.00027	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,1-Dichloroethene	0.0013	U	0.0013	0.00029	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,2,3-Trichlorobenzene	0.0013	U	0.0013	0.00023	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,2,4-Trichlorobenzene	0.0013	U	0.0013	0.00012	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,2-Dibromo-3-Chloropropane	0.0013	U	0.0013	0.00059	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,2-Dichlorobenzene	0.0013	U	0.0013	0.00019	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,2-Dichloroethane	0.0013	U	0.0013	0.00038	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,2-Dichloropropane	0.0013	U	0.0013	0.00055	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,3-Dichlorobenzene	0.0013	U	0.0013	0.00021	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,4-Dichlorobenzene	0.0013	U	0.0013	0.00013	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
1,4-Dioxane	0.026	U	0.026	0.012	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
2-Butanone (MEK)	0.0065	U	0.0065	0.0014	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
2-Hexanone	0.0065	U	0.0065	0.0010	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
4-Methyl-2-pentanone (MIBK)	0.0065	U	0.0065	0.00086	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Acetone	0.0065	U	0.0065	0.0049	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Benzene	0.0013	U	0.0013	0.00033	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Bromoform	0.0013	U J.	0.0013	0.00055	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Bromomethane	0.0013	U	0.0013	0.00061	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Carbon disulfide	0.0013	U	0.0013	0.00034	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Carbon tetrachloride	0.0013	U	0.0013	0.00023	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Chlorobenzene	0.0013	U	0.0013	0.00023	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Chlorobromomethane	0.0013	U	0.0013	0.00036	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Chlorodibromomethane	0.0013	U J.	0.0013	0.00025	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Chloroethane	0.0013	U	0.0013	0.00067	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Chloroform	0.0013	U	0.0013	0.00041	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Chloromethane	0.0013	U	0.0013	0.00056	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
cis-1,2-Dichloroethene	0.0013	U	0.0013	0.00020	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
cis-1,3-Dichloropropene	0.0013	U	0.0013	0.00035	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Cyclohexane	0.0013	U	0.0013	0.00029	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Dichlorobromomethane	0.0013	U	0.0013	0.00033	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Dichlorodifluoromethane	0.0013	U	0.0013	0.00044	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Ethylbenzene	0.0013	U	0.0013	0.00026	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Ethylene Dibromide	0.0013	U	0.0013	0.00023	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Isopropylbenzene	0.0013	U	0.0013	0.00016	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Methyl acetate	0.0065	U	0.0065	0.0056	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Methyl tert-butyl ether	0.0013	U	0.0013	0.00016	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Methylcyclohexane	0.0013	U	0.0013	0.00021	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Methylene Chloride	~~0.00033~~	~~J B~~ 0.0013U.	0.0013	0.00021	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
m-Xylene & p-Xylene	0.0013	U	0.0013	0.00022	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
o-Xylene	0.0013	U	0.0013	0.00012	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Styrene	0.0013	U	0.0013	0.00016	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Tetrachloroethene	0.0013	U	0.0013	0.00018	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Toluene	0.0013	U	0.0013	0.00081	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
trans-1,2-Dichloroethene	0.0013	U	0.0013	0.00032	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
trans-1,3-Dichloropropene	0.0013	U	0.0013	0.00034	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1

Client Sample ID: RP-SB-304(11-12) Grab
Date Collected: 06/14/18 12:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-7
Matrix: Solid
Percent Solids: 78.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.0013	U	0.0013	0.00019	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Trichlorofluoromethane	0.0013	U	0.0013	0.00052	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1
Vinyl chloride	0.0013	U	0.0013	0.00071	mg/Kg	☼	06/15/18 21:41	06/18/18 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*78 - 135*	*06/15/18 21:41*	*06/18/18 21:23*	*1*
4-Bromofluorobenzene	*98*		*67 - 126*	*06/15/18 21:41*	*06/18/18 21:23*	*1*
Dibromofluoromethane (Surr)	*101*		*61 - 149*	*06/15/18 21:41*	*06/18/18 21:23*	*1*
Toluene-d8 (Surr)	*100*		*73 - 121*	*06/15/18 21:41*	*06/18/18 21:23*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.42	U	0.42	0.0056	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
1,2,4,5-Tetrachlorobenzene	0.42	U	0.42	0.0055	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2,2'-oxybis[1-chloropropane]	0.42	U	0.42	0.0076	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2,3,4,6-Tetrachlorophenol	0.42	U	0.42	0.028	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2,4,5-Trichlorophenol	0.42	U	0.42	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2,4,6-Trichlorophenol	0.17	U	0.17	0.021	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2,4-Dichlorophenol	0.17	U	0.17	0.0089	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2,4-Dimethylphenol	0.42	U	0.42	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2,4-Dinitrophenol	0.34	U	0.34	0.21	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2,4-Dinitrotoluene	0.085	U	0.085	0.021	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2,6-Dinitrotoluene	0.085	U	0.085	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2-Chloronaphthalene	0.42	U	0.42	0.019	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2-Chlorophenol	0.42	U	0.42	0.0059	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2-Methylnaphthalene	0.42	U	0.42	0.0052	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2-Methylphenol	0.42	U	0.42	0.0068	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2-Nitroaniline	0.42	U	0.42	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
2-Nitrophenol	0.42	U	0.42	0.013	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
3,3'-Dichlorobenzidine	0.17	U	0.17	0.063	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
3-Nitroaniline	0.42	U	0.42	0.023	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
4,6-Dinitro-2-methylphenol	0.34	U	0.34	0.068	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
4-Bromophenyl phenyl ether	0.42	U	0.42	0.0054	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
4-Chloro-3-methylphenol	0.42	U	0.42	0.0070	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
4-Chloroaniline	0.42	U	0.42	0.029	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
4-Chlorophenyl phenyl ether	0.42	U	0.42	0.0066	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
4-Methylphenol	0.42	U	0.42	0.0071	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
4-Nitroaniline	0.42	U	0.42	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
4-Nitrophenol	0.85	U	0.85	0.068	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Acenaphthene	0.42	U	0.42	0.031	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Acenaphthylene	**0.031**	**J**	0.42	0.0043	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Acetophenone	0.42	U	0.42	0.0068	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Anthracene	0.42	U	0.42	0.0047	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Atrazine	0.17	U	0.17	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Benzaldehyde	0.42	U	0.42	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Benzo[a]anthracene	**0.029**	**J**	0.042	0.015	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Benzo[a]pyrene	**0.022**	**J**	0.042	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Benzo[b]fluoranthene	**0.028**	**J**	0.042	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Benzo[g,h,i]perylene	**0.022**	**J**	0.42	0.012	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Benzo[k]fluoranthene	**0.012**	**J**	0.042	0.0082	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1

Client Sample ID: RP-SB-304(11-12) Grab
Date Collected: 06/14/18 12:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-7
Matrix: Solid
Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	0.42	U	0.42	0.014	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Bis(2-chloroethyl)ether	0.042	U	0.042	0.0051	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Bis(2-ethylhexyl) phthalate	0.42	U	0.42	0.022	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Butyl benzyl phthalate	0.42	U	0.42	0.020	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Caprolactam	0.42	U	0.42	0.025	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Carbazole	0.42	U	0.42	0.0049	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Chrysene	**0.022**	J	0.42	0.0071	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Dibenz(a,h)anthracene	0.042	U	0.042	0.018	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Dibenzofuran	0.42	U	0.42	0.0059	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Diethyl phthalate	0.42	U	0.42	0.0061	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Dimethyl phthalate	0.42	U	0.42	0.0051	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Di-n-butyl phthalate	0.42	U	0.42	0.074	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Di-n-octyl phthalate	0.42	U	0.42	0.022	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Fluoranthene	0.42	U	0.42	0.0054	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Fluorene	0.42	U	0.42	0.0057	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Hexachlorobenzene	0.042	U	0.042	0.0061	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Hexachlorobutadiene	0.085	U	0.085	0.0089	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Hexachlorocyclopentadiene	0.42	U	0.42	0.037	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Hexachloroethane	0.042	U	0.042	0.0065	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Indeno[1,2,3-cd]pyrene	**0.022**	J	0.042	0.016	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Isophorone	0.17	U	0.17	0.011	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Naphthalene	0.42	U	0.42	0.0072	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Nitrobenzene	0.042	U	0.042	0.010	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
N-Nitrosodi-n-propylamine	0.042	U	0.042	0.0067	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
N-Nitrosodiphenylamine	0.42	U	0.42	0.0080	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Pentachlorophenol	0.34	U	0.34	0.086	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Phenanthrene	**0.016**	J	0.42	0.0074	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Phenol	0.42	U	0.42	0.0062	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1
Pyrene	**0.032**	J	0.42	0.010	mg/Kg	☼	06/17/18 13:40	06/18/18 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*46*		*10 - 103*	*06/17/18 13:40*	*06/18/18 15:29*	*1*
2-Fluorobiphenyl	*49*		*38 - 95*	*06/17/18 13:40*	*06/18/18 15:29*	*1*
2-Fluorophenol (Surr)	*53*		*25 - 92*	*06/17/18 13:40*	*06/18/18 15:29*	*1*
Nitrobenzene-d5 (Surr)	*50*		*37 - 94*	*06/17/18 13:40*	*06/18/18 15:29*	*1*
Phenol-d5 (Surr)	*53*		*32 - 91*	*06/17/18 13:40*	*06/18/18 15:29*	*1*
Terphenyl-d14 (Surr)	*62*		*24 - 109*	*06/17/18 13:40*	*06/18/18 15:29*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0085	U	0.0085	0.0014	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
4,4'-DDE	0.0085	U	0.0085	0.0010	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
4,4'-DDT	0.0085	U	0.0085	0.0016	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Aldrin	0.0085	U	0.0085	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
alpha-BHC	0.0025	U	0.0025	0.00086	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
beta-BHC	0.0025	U	0.0025	0.00095	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Chlordane (technical)	0.085	U	0.085	0.021	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
delta-BHC	0.0025	U	0.0025	0.00052	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Dieldrin	0.0025	U	0.0025	0.0011	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Endosulfan I	0.0085	U	0.0085	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1

Client Sample ID: RP-SB-304(11-12) Grab
Date Collected: 06/14/18 12:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-7
Matrix: Solid
Percent Solids: 78.8

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II	0.0085	U	0.0085	0.0022	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Endosulfan sulfate	0.0085	U	0.0085	0.0011	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Endrin	0.0085	U	0.0085	0.0012	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Endrin aldehyde	0.0085	U	0.0085	0.0020	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Endrin ketone	0.0085	U	0.0085	0.0016	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
gamma-BHC (Lindane)	0.0025	U	0.0025	0.00079	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Heptachlor	0.0085	U	0.0085	0.0010	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Heptachlor epoxide	0.0085	U	0.0085	0.0013	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Methoxychlor	0.0085	U	0.0085	0.0019	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1
Toxaphene	0.085	U	0.085	0.031	mg/Kg	☼	06/18/18 21:16	06/19/18 23:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*108*		*69 - 150*	*06/18/18 21:16*	*06/19/18 23:22*	*1*
DCB Decachlorobiphenyl	*109*		*69 - 150*	*06/18/18 21:16*	*06/19/18 23:22*	*1*
Tetrachloro-m-xylene	*108*		*74 - 150*	*06/18/18 21:16*	*06/19/18 23:22*	*1*
Tetrachloro-m-xylene	*106*		*74 - 150*	*06/18/18 21:16*	*06/19/18 23:22*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 09:18	1
Aroclor 1221	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 09:18	1
Aroclor 1232	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 09:18	1
Aroclor 1242	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 09:18	1
Aroclor 1248	0.085	U	0.085	0.011	mg/Kg	☼	06/18/18 21:26	06/20/18 09:18	1
Aroclor 1254	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 09:18	1
Aroclor 1260	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 09:18	1
Aroclor-1262	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 09:18	1
Aroclor 1268	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 09:18	1
Polychlorinated biphenyls, Total	0.085	U	0.085	0.012	mg/Kg	☼	06/18/18 21:26	06/20/18 09:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*103*		*53 - 150*	*06/18/18 21:26*	*06/20/18 09:18*	*1*
DCB Decachlorobiphenyl	*97*		*53 - 150*	*06/18/18 21:26*	*06/20/18 09:18*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.042	U	0.042	0.0090	mg/Kg	☼	06/19/18 03:10	06/19/18 14:35	1
2,4-D	0.042	U	0.042	0.015	mg/Kg	☼	06/19/18 03:10	06/19/18 14:35	1
Silvex (2,4,5-TP)	0.042	U	0.042	0.0044	mg/Kg	☼	06/19/18 03:10	06/19/18 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*130*		*80 - 150*	*06/19/18 03:10*	*06/19/18 14:35*	*1*
2,4-Dichlorophenylacetic acid	*131*		*80 - 150*	*06/19/18 03:10*	*06/19/18 14:35*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1070**	J	38.5	7.9	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Antimony	3.8	U	3.8	0.46	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Arsenic	**1.1**	J	2.9	0.71	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Barium	**6.6**	J	38.5	3.1	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Beryllium	**0.092**	J	0.38	0.044	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4

Client Sample ID: RP-SB-304(11-12) Grab

Date Collected: 06/14/18 12:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158410-7
Matrix: Solid
Percent Solids: 78.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.77	U	0.77	0.11	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Calcium	3640		962	98.1	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Chromium	5.5		1.9	0.53	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Cobalt	9.6	U	9.6	1.1	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Copper	3.4	J	4.8	1.1	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Iron	2490		28.9	5.2	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Lead	8.1		1.9	0.58	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Magnesium	649	J	962	74.1	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Manganese	30.0		2.9	0.30	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Nickel	3.2	J	7.7	0.73	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Potassium	221	J	962	51.2	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Selenium	3.8	U	3.8	1.2	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Silver	1.9	U	1.9	0.29	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Sodium	615	J	962	74.1	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Thallium	3.8	U	3.8	1.1	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Vanadium	3.9	J	9.6	1.1	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4
Zinc	22.7		5.8	0.50	mg/Kg	☼	06/17/18 02:45	06/20/18 13:23	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	U	0.022	0.013	mg/Kg	☼	06/20/18 04:34	06/20/18 08:44	1

Client Sample ID: RP-SB-311(0-12) Composite

Date Collected: 06/14/18 08:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-1
Matrix: Solid
Percent Solids: 88.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.37	U	0.37	0.0047	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Acenaphthene	0.37	U	0.37	0.027	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Acenaphthylene	0.017	J	0.37	0.0039	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Anthracene	0.078	J	0.37	0.0042	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Benzo[a]anthracene	0.16		0.037	0.013	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Benzo[a]pyrene	0.14		0.037	0.0099	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Benzo[b]fluoranthene	0.18		0.037	0.0097	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Benzo[g,h,i]perylene	0.10	J	0.37	0.011	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Benzo[k]fluoranthene	0.065		0.037	0.0073	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Chrysene	0.15	J	0.37	0.0063	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Dibenz(a,h)anthracene	0.024	J	0.037	0.016	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Fluoranthene	0.38		0.37	0.0048	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Fluorene	0.028	J	0.37	0.0051	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Indeno[1,2,3-cd]pyrene	0.11		0.037	0.015	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Naphthalene	0.37	U	0.37	0.0065	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Phenanthrene	0.32	J	0.37	0.0066	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1
Pyrene	0.32	J	0.37	0.0093	mg/Kg	☼	06/18/18 19:16	06/19/18 11:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*38 - 95*	*06/18/18 19:16*	*06/19/18 11:04*	*1*
Nitrobenzene-d5 (Surr)	*87*		*37 - 94*	*06/18/18 19:16*	*06/19/18 11:04*	*1*
Terphenyl-d14 (Surr)	*93*		*24 - 109*	*06/18/18 19:16*	*06/19/18 11:04*	*1*

Client Sample ID: RP-SB-311(0-12) Composite
Date Collected: 06/14/18 08:30
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-1
Matrix: Solid
Percent Solids: 88.6

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	2.6	U	2.6	2.6	mg/Kg	☼	06/16/18 00:28	06/19/18 08:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*107*		*80 - 135*	*06/16/18 00:28*	*06/19/18 08:28*	*50*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	12		9.8	0.95	mg/Kg	☼	06/19/18 09:47	06/19/18 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*84*		*11 - 126*	*06/19/18 09:47*	*06/19/18 18:32*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.076	U	0.076	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 16:10	1
Aroclor 1221	0.076	U	0.076	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 16:10	1
Aroclor 1232	0.076	U	0.076	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 16:10	1
Aroclor 1242	0.076	U	0.076	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 16:10	1
Aroclor 1248	0.076	U	0.076	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 16:10	1
Aroclor 1254	0.076	U	0.076	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 16:10	1
Aroclor 1260	0.076	U	0.076	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 16:10	1
Aroclor-1262	0.076	U	0.076	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 16:10	1
Aroclor 1268	0.076	U	0.076	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 16:10	1
Polychlorinated biphenyls, Total	0.076	U	0.076	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*92*		*53 - 150*	*06/18/18 21:29*	*06/19/18 16:10*	*1*
DCB Decachlorobiphenyl	*94*		*53 - 150*	*06/18/18 21:29*	*06/19/18 16:10*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/17/18 19:00	06/18/18 16:25	5
Barium	**208**	J	1000	38.4	ug/L		06/17/18 19:00	06/18/18 16:25	5
Cadmium	**1.3**	J	20.0	1.1	ug/L		06/17/18 19:00	06/18/18 16:25	5
Chromium	50.0	U	50.0	6.3	ug/L		06/17/18 19:00	06/18/18 16:25	5
Lead	**96.0**		50.0	12.3	ug/L		06/17/18 19:00	06/18/18 16:25	5
Selenium	100	U	100	33.0	ug/L		06/17/18 19:00	06/18/18 16:25	5
Silver	50.0	U	50.0	5.4	ug/L		06/17/18 19:00	06/18/18 16:25	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/22/18 13:36	06/22/18 16:28	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	**9.1**	HF J			SU			06/21/18 14:58	1
pH	**9.1**	HF J			SU			06/21/18 14:58	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/22/18 15:54	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/21/18 11:56	06/21/18 18:04	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/21/18 11:56	06/21/18 18:02	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Rockaway Park Formx MGP Site

TestAmerica Job ID: 460-158410-1

Client Sample ID: RP-SB-309(0-12) Composite
Date Collected: 06/14/18 09:15
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-2
Matrix: Solid
Percent Solids: 84.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**0.059**	**J**	0.39	0.0049	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Acenaphthene	0.39	U	0.39	0.028	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Acenaphthylene	**0.098**	**J**	0.39	0.0040	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Anthracene	**0.024**	**J**	0.39	0.0044	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Benzo[a]anthracene	**0.096**		0.039	0.014	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Benzo[a]pyrene	**0.10**		0.039	0.010	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Benzo[b]fluoranthene	**0.12**		0.039	0.010	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Benzo[g,h,i]perylene	**0.085**	**J**	0.39	0.012	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Benzo[k]fluoranthene	0.039	U	0.039	0.0077	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Chrysene	**0.10**	**J**	0.39	0.0066	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Dibenz(a,h)anthracene	0.039	U	0.039	0.017	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Fluoranthene	**0.098**	**J**	0.39	0.0051	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Fluorene	0.39	U	0.39	0.0053	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Indeno[1,2,3-cd]pyrene	**0.088**		0.039	0.015	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Naphthalene	**0.15**	**J**	0.39	0.0068	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Phenanthrene	**0.056**	**J**	0.39	0.0069	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1
Pyrene	**0.19**	**J**	0.39	0.0097	mg/Kg	☼	06/18/18 19:16	06/19/18 10:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*38 - 95*	*06/18/18 19:16*	*06/19/18 10:15*	*1*
Nitrobenzene-d5 (Surr)	*67*		*37 - 94*	*06/18/18 19:16*	*06/19/18 10:15*	*1*
Terphenyl-d14 (Surr)	*91*		*24 - 109*	*06/18/18 19:16*	*06/19/18 10:15*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	2.6	U	2.6	2.6	mg/Kg	☼	06/16/18 00:28	06/19/18 08:56	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*110*		*80 - 135*	*06/16/18 00:28*	*06/19/18 08:56*	*50*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	12	J	10	0.99	mg/Kg	☼	06/19/18 09:47	06/19/18 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*91*		*11 - 126*	*06/19/18 09:47*	*06/19/18 17:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:00	1
Aroclor 1221	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:00	1
Aroclor 1232	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:00	1
Aroclor 1242	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:00	1
Aroclor 1248	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:00	1
Aroclor 1254	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:00	1
Aroclor 1260	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:00	1
Aroclor-1262	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:00	1
Aroclor 1268	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:00	1
Polychlorinated biphenyls, Total	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:00	1

Client Sample ID: RP-SB-309(0-12) Composite

Date Collected: 06/14/18 09:15
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-2
Matrix: Solid
Percent Solids: 84.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	97		53 - 150	06/18/18 21:29	06/19/18 17:00	1
DCB Decachlorobiphenyl	102		53 - 150	06/18/18 21:29	06/19/18 17:00	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/17/18 19:00	06/18/18 15:46	5
Barium	**68.1**	J	1000	38.4	ug/L		06/17/18 19:00	06/18/18 15:46	5
Cadmium	**1.9**	J	20.0	1.1	ug/L		06/17/18 19:00	06/18/18 15:46	5
Chromium	**7.9**	J	50.0	6.3	ug/L		06/17/18 19:00	06/18/18 15:46	5
Lead	**457**		50.0	12.3	ug/L		06/17/18 19:00	06/18/18 15:46	5
Selenium	100	U	100	33.0	ug/L		06/17/18 19:00	06/18/18 15:46	5
Silver	50.0	U	50.0	5.4	ug/L		06/17/18 19:00	06/18/18 15:46	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/22/18 13:36	06/22/18 15:50	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	**10.7**	HF J			SU			06/21/18 15:01	1
pH	**10.7**	HF J			SU			06/21/18 15:01	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/22/18 15:54	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/21/18 11:56	06/21/18 18:04	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/21/18 11:56	06/21/18 18:02	1

Client Sample ID: RP-SB-308(0-12) Composite

Date Collected: 06/14/18 10:15
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-3
Matrix: Solid
Percent Solids: 91.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.36	U	0.36	0.0045	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Acenaphthene	0.36	U	0.36	0.026	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Acenaphthylene	**0.016**	J	0.36	0.0037	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Anthracene	0.36	U	0.36	0.0040	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Benzo[a]anthracene	0.036	U	0.036	0.013	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Benzo[a]pyrene	**0.022**	J	0.036	0.0096	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Benzo[b]fluoranthene	0.036	U	0.036	0.0094	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Benzo[g,h,i]perylene	**0.020**	J	0.36	0.011	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Benzo[k]fluoranthene	0.036	U	0.036	0.0071	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Chrysene	0.36	U	0.36	0.0061	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Dibenz(a,h)anthracene	0.036	U	0.036	0.016	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Fluoranthene	0.36	U	0.36	0.0047	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Fluorene	0.36	U	0.36	0.0049	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Indeno[1,2,3-cd]pyrene	**0.019**	J	0.036	0.014	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Naphthalene	0.36	U	0.36	0.0063	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Phenanthrene	**0.019**	J	0.36	0.0064	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1
Pyrene	**0.040**	J	0.36	0.0090	mg/Kg	☼	06/18/18 19:16	06/19/18 11:20	1

Client Sample ID: RP-SB-308(0-12) Composite
Date Collected: 06/14/18 10:15
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-3
Matrix: Solid
Percent Solids: 91.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	72		38 - 95	06/18/18 19:16	06/19/18 11:20	1
Nitrobenzene-d5 (Surr)	70		37 - 94	06/18/18 19:16	06/19/18 11:20	1
Terphenyl-d14 (Surr)	80		24 - 109	06/18/18 19:16	06/19/18 11:20	1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	2.2	U	2.2	2.2	mg/Kg	☼	06/16/18 00:29	06/19/18 09:23	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		80 - 135	06/16/18 00:29	06/19/18 09:23	50

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	20		9.5	0.92	mg/Kg	☼	06/19/18 09:47	06/19/18 18:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	66		11 - 126	06/19/18 09:47	06/19/18 18:45	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.073	U	0.073	0.0097	mg/Kg	☼	06/18/18 21:29	06/19/18 17:17	1
Aroclor 1221	0.073	U	0.073	0.0097	mg/Kg	☼	06/18/18 21:29	06/19/18 17:17	1
Aroclor 1232	0.073	U	0.073	0.0097	mg/Kg	☼	06/18/18 21:29	06/19/18 17:17	1
Aroclor 1242	0.073	U	0.073	0.0097	mg/Kg	☼	06/18/18 21:29	06/19/18 17:17	1
Aroclor 1248	0.073	U	0.073	0.0097	mg/Kg	☼	06/18/18 21:29	06/19/18 17:17	1
Aroclor 1254	0.073	U	0.073	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:17	1
Aroclor 1260	0.073	U	0.073	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:17	1
Aroclor-1262	0.073	U	0.073	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:17	1
Aroclor 1268	0.073	U	0.073	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:17	1
Polychlorinated biphenyls, Total	0.073	U	0.073	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	92		53 - 150	06/18/18 21:29	06/19/18 17:17	1
DCB Decachlorobiphenyl	98		53 - 150	06/18/18 21:29	06/19/18 17:17	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/17/18 19:00	06/18/18 16:29	5
Barium	**69.4**	J	1000	38.4	ug/L		06/17/18 19:00	06/18/18 16:29	5
Cadmium	**1.1**	J	20.0	1.1	ug/L		06/17/18 19:00	06/18/18 16:29	5
Chromium	50.0	U	50.0	6.3	ug/L		06/17/18 19:00	06/18/18 16:29	5
Lead	**26.6**	J	50.0	12.3	ug/L		06/17/18 19:00	06/18/18 16:29	5
Selenium	100	U	100	33.0	ug/L		06/17/18 19:00	06/18/18 16:29	5
Silver	50.0	U	50.0	5.4	ug/L		06/17/18 19:00	06/18/18 16:29	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/22/18 13:36	06/22/18 16:29	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	10.3	HF J			SU			06/21/18 15:03	1

Client Sample ID: RP-SB-308(0-12) Composite

Date Collected: 06/14/18 10:15
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-3
Matrix: Solid

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	10.3	HF J.			SU			06/21/18 15:03	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/22/18 15:54	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/21/18 11:56	06/21/18 18:04	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/21/18 11:56	06/21/18 18:02	1

Client Sample ID: RP-SB-307(0-12) Composite

Date Collected: 06/14/18 11:05
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-4
Matrix: Solid
Percent Solids: 84.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.030	J	0.39	0.0049	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Acenaphthene	1.0		0.39	0.028	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Acenaphthylene	0.26	J	0.39	0.0040	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Anthracene	0.056	J	0.39	0.0044	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Benzo[a]anthracene	0.033	J	0.039	0.014	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Benzo[a]pyrene	0.023	J	0.039	0.010	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Benzo[b]fluoranthene	0.088		0.039	0.010	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Benzo[g,h,i]perylene	0.047	J	0.39	0.011	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Benzo[k]fluoranthene	0.033	J	0.039	0.0076	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Chrysene	0.075	J	0.39	0.0066	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Dibenz(a,h)anthracene	0.039	U	0.039	0.017	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Fluoranthene	0.042	J	0.39	0.0051	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Fluorene	0.088	J	0.39	0.0053	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Indeno[1,2,3-cd]pyrene	0.058		0.039	0.015	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Naphthalene	0.59		0.39	0.0067	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Phenanthrene	0.28	J	0.39	0.0068	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1
Pyrene	0.10	J	0.39	0.0097	mg/Kg	☼	06/18/18 19:16	06/19/18 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*38 - 95*	*06/18/18 19:16*	*06/19/18 11:37*	*1*
Nitrobenzene-d5 (Surr)	*74*		*37 - 94*	*06/18/18 19:16*	*06/19/18 11:37*	*1*
Terphenyl-d14 (Surr)	*76*		*24 - 109*	*06/18/18 19:16*	*06/19/18 11:37*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	15		2.5	2.5	mg/Kg	☼	06/16/18 00:29	06/19/18 16:04	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*104*		*80 - 135*	*06/16/18 00:29*	*06/19/18 16:04*	*50*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	33		10	0.99	mg/Kg	☼	06/19/18 09:47	06/19/18 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*80*		*11 - 126*	*06/19/18 09:47*	*06/19/18 18:57*	*1*

Client Sample ID: RP-SB-307(0-12) Composite

Date Collected: 06/14/18 11:05
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-4
Matrix: Solid
Percent Solids: 84.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.079	U	0.079	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:34	1
Aroclor 1221	0.079	U	0.079	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:34	1
Aroclor 1232	0.079	U	0.079	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:34	1
Aroclor 1242	0.079	U	0.079	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:34	1
Aroclor 1248	0.079	U	0.079	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:34	1
Aroclor 1254	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:34	1
Aroclor 1260	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:34	1
Aroclor-1262	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:34	1
Aroclor 1268	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:34	1
Polychlorinated biphenyls, Total	0.079	U	0.079	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*98*		*53 - 150*	*06/18/18 21:29*	*06/19/18 17:34*	*1*
DCB Decachlorobiphenyl	*108*		*53 - 150*	*06/18/18 21:29*	*06/19/18 17:34*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/17/18 19:00	06/18/18 16:33	5
Barium	**52.3**	J	1000	38.4	ug/L		06/17/18 19:00	06/18/18 16:33	5
Cadmium	20.0	U	20.0	1.1	ug/L		06/17/18 19:00	06/18/18 16:33	5
Chromium	50.0	U	50.0	6.3	ug/L		06/17/18 19:00	06/18/18 16:33	5
Lead	50.0	U	50.0	12.3	ug/L		06/17/18 19:00	06/18/18 16:33	5
Selenium	100	U	100	33.0	ug/L		06/17/18 19:00	06/18/18 16:33	5
Silver	50.0	U	50.0	5.4	ug/L		06/17/18 19:00	06/18/18 16:33	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/22/18 13:36	06/22/18 16:31	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	**9.5**	HF J			SU			06/21/18 15:06	1
pH	**9.5**	HF J			SU			06/21/18 15:06	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/22/18 15:54	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/21/18 11:56	06/21/18 18:04	1
Sulfide, Reactive	**30.2**		20.0	20.0	mg/Kg		06/21/18 11:56	06/21/18 18:02	1

Client Sample ID: RP-SB-310(0-12) Composite

Date Collected: 06/14/18 13:40
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-5
Matrix: Solid
Percent Solids: 88.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**0.50**		0.37	0.0046	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Acenaphthene	**1.0**		0.37	0.027	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Acenaphthylene	**0.88**		0.37	0.0039	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Anthracene	**0.58**		0.37	0.0042	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Benzo[a]anthracene	**0.91**		0.037	0.013	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Benzo[a]pyrene	**0.78**		0.037	0.0099	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1

Client Sample ID: RP-SB-310(0-12) Composite
Date Collected: 06/14/18 13:40
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-5
Matrix: Solid
Percent Solids: 88.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	1.3		0.037	0.0096	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Benzo[g,h,i]perylene	0.62		0.37	0.011	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Benzo[k]fluoranthene	0.39		0.037	0.0073	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Chrysene	1.2		0.37	0.0063	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Dibenz(a,h)anthracene	0.12		0.037	0.016	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Fluoranthene	2.3		0.37	0.0048	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Fluorene	0.91		0.37	0.0051	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Indeno[1,2,3-cd]pyrene	0.63		0.037	0.015	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Naphthalene	1.0		0.37	0.0064	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Phenanthrene	3.3		0.37	0.0065	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1
Pyrene	2.6		0.37	0.0093	mg/Kg	☼	06/18/18 19:16	06/19/18 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*38 - 95*	*06/18/18 19:16*	*06/19/18 13:48*	*1*
Nitrobenzene-d5 (Surr)	*65*		*37 - 94*	*06/18/18 19:16*	*06/19/18 13:48*	*1*
Terphenyl-d14 (Surr)	*59*		*24 - 109*	*06/18/18 19:16*	*06/19/18 13:48*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	5.2		2.5	2.5	mg/Kg	☼	06/16/18 00:29	06/19/18 16:31	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*112*		*80 - 135*	*06/16/18 00:29*	*06/19/18 16:31*	*50*

Method: 8015D - Diesel Range Organics (DRO) (GC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	170		49	4.7	mg/Kg	☼	06/19/18 09:47	06/19/18 19:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*11 - 126*	*06/19/18 09:47*	*06/19/18 19:35*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.075	U	0.075	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:51	1
Aroclor 1221	0.075	U	0.075	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:51	1
Aroclor 1232	0.075	U	0.075	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:51	1
Aroclor 1242	0.075	U	0.075	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:51	1
Aroclor 1248	0.075	U	0.075	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:51	1
Aroclor 1254	0.075	U	0.075	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:51	1
Aroclor 1260	0.075	U	0.075	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:51	1
Aroclor-1262	0.075	U	0.075	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:51	1
Aroclor 1268	0.075	U	0.075	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:51	1
Polychlorinated biphenyls, Total	0.075	U	0.075	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*95*		*53 - 150*	*06/18/18 21:29*	*06/19/18 17:51*	*1*
DCB Decachlorobiphenyl	*103*		*53 - 150*	*06/18/18 21:29*	*06/19/18 17:51*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/17/18 19:00	06/18/18 16:37	5

Client Sample ID: RP-SB-310(0-12) Composite

Date Collected: 06/14/18 13:40
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-5
Matrix: Solid

Method: 6010C - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	250	J	1000	38.4	ug/L		06/17/18 19:00	06/18/18 16:37	5
Cadmium	5.9	J	20.0	1.1	ug/L		06/17/18 19:00	06/18/18 16:37	5
Chromium	50.0	U	50.0	6.3	ug/L		06/17/18 19:00	06/18/18 16:37	5
Lead	126		50.0	12.3	ug/L		06/17/18 19:00	06/18/18 16:37	5
Selenium	100	U	100	33.0	ug/L		06/17/18 19:00	06/18/18 16:37	5
Silver	50.0	U	50.0	5.4	ug/L		06/17/18 19:00	06/18/18 16:37	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/22/18 13:36	06/22/18 16:33	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	10.3	HF J			SU			06/21/18 15:09	1
pH	10.3	HF J			SU			06/21/18 15:09	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/22/18 15:54	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/21/18 11:56	06/21/18 18:04	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/21/18 11:56	06/21/18 18:02	1

Client Sample ID: RP-SB-304(0-12) Composite

Date Collected: 06/14/18 09:25
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-6
Matrix: Solid
Percent Solids: 87.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.025	J	0.38	0.0047	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Acenaphthene	0.38	U	0.38	0.028	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Acenaphthylene	0.061	J	0.38	0.0039	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Anthracene	0.049	J	0.38	0.0042	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Benzo[a]anthracene	0.21		0.038	0.013	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Benzo[a]pyrene	0.20		0.038	0.010	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Benzo[b]fluoranthene	0.28		0.038	0.0098	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Benzo[g,h,i]perylene	0.14	J	0.38	0.011	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Benzo[k]fluoranthene	0.11		0.038	0.0074	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Chrysene	0.21	J	0.38	0.0064	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Dibenz(a,h)anthracene	0.034	J	0.038	0.016	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Fluoranthene	0.36	J	0.38	0.0049	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Fluorene	0.016	J	0.38	0.0051	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Indeno[1,2,3-cd]pyrene	0.16		0.038	0.015	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Naphthalene	0.030	J	0.38	0.0065	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Phenanthrene	0.18	J	0.38	0.0066	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1
Pyrene	0.36	J	0.38	0.0094	mg/Kg	☼	06/18/18 19:16	06/19/18 11:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*38 - 95*	*06/18/18 19:16*	*06/19/18 11:53*	*1*
Nitrobenzene-d5 (Surr)	*58*		*37 - 94*	*06/18/18 19:16*	*06/19/18 11:53*	*1*
Terphenyl-d14 (Surr)	*62*		*24 - 109*	*06/18/18 19:16*	*06/19/18 11:53*	*1*

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Rockaway Park Formx MGP Site

TestAmerica Job ID: 460-158410-1

Client Sample ID: RP-SB-304(0-12) Composite
Date Collected: 06/14/18 09:25
Date Received: 06/14/18 20:30

Lab Sample ID: 460-158411-6
Matrix: Solid
Percent Solids: 87.4

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO	1.2	U	1.2	1.2	mg/Kg	☼	06/16/18 00:30	06/19/18 08:00	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*108*		*80 - 135*	*06/16/18 00:30*	*06/19/18 08:00*	*50*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C44	17		9.9	0.96	mg/Kg	☼	06/19/18 09:47	06/19/18 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*62*		*11 - 126*	*06/19/18 09:47*	*06/19/18 19:48*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.077	U	0.077	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 18:08	1
Aroclor 1221	0.077	U	0.077	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 18:08	1
Aroclor 1232	0.077	U	0.077	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 18:08	1
Aroclor 1242	0.077	U	0.077	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 18:08	1
Aroclor 1248	0.077	U	0.077	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 18:08	1
Aroclor 1254	0.077	U	0.077	0.010	mg/Kg	☼	06/18/18 21:29	06/19/18 18:08	1
Aroclor 1260	0.077	U	0.077	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 18:08	1
Aroclor-1262	0.077	U	0.077	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 18:08	1
Aroclor 1268	0.077	U	0.077	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 18:08	1
Polychlorinated biphenyls, Total	0.077	U	0.077	0.011	mg/Kg	☼	06/18/18 21:29	06/19/18 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*53 - 150*	*06/18/18 21:29*	*06/19/18 18:08*	*1*
DCB Decachlorobiphenyl	*94*		*53 - 150*	*06/18/18 21:29*	*06/19/18 18:08*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75.0	U	75.0	13.3	ug/L		06/17/18 19:00	06/18/18 16:41	5
Barium	**259**	J	1000	38.4	ug/L		06/17/18 19:00	06/18/18 16:41	5
Cadmium	**1.3**	J	20.0	1.1	ug/L		06/17/18 19:00	06/18/18 16:41	5
Chromium	**180**		50.0	6.3	ug/L		06/17/18 19:00	06/18/18 16:41	5
Lead	50.0	U	50.0	12.3	ug/L		06/17/18 19:00	06/18/18 16:41	5
Selenium	100	U	100	33.0	ug/L		06/17/18 19:00	06/18/18 16:41	5
Silver	50.0	U	50.0	5.4	ug/L		06/17/18 19:00	06/18/18 16:41	5

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		06/22/18 13:36	06/22/18 16:55	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	**11.6**	HF J			SU			06/21/18 15:12	1
pH	**11.6**	HF J			SU			06/21/18 15:12	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			06/22/18 15:59	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/Kg		06/21/18 11:56	06/21/18 18:04	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/Kg		06/21/18 11:56	06/21/18 18:02	1

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Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page ____ of ____

Name (for report and invoice) Matt O'Neil	Samplers Name (Printed) Russ Morang	Site/Project Identification Rockaway Park Farmx MGP site
Company GEI Consultants Inc	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 455 Windy Brook Drive	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP: ☐
City Glastonbury State CT	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone 860-368-5300 Fax		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 158410

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs 8260 D	SVOCs 8270 C	Metals (23)	PCB's	Pesticides	Herbicides	TCL VOCs 8260 C	SHORT HOLD	Sample Numbers
TB-061418	6-14	0700	Water	3							X		1
RP-SB-311 (11-12) Grab		0810	Solid	6	X	X	X	X	X	X	X		2
RP-SB-309 (11-12) Grab		0905		6									3
RP-SB-308 (11-12) Grab		1005		6									4
RP-SB-307 (11-12) Grab		1056		6									5
RP-SB-310 (11-12) Grab		1330		6									6
RP-SB-304 (11-12) Grab		1230		6									7
~~TB-061418 Grab~~				~~6~~									8 Cooling
MS/MSD RP-SB-311 (11-12) Grab	↓	0820	↓	6	↓	↓	↓	↓	↓	↓			2

Grab

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH Soil:
6 = Other _____, 7 = Other _____ Water:

Special Instructions MS/MSD Percent samp 6 RP-SB-311 (11-12) Grab

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company GEI Consultants	Date / Time 6-14-18 17:00	Received by 1)	Company
Relinquished by 2)	Company T, A	Date / Time 6/14/18 2030	Received by 2)	Company TA Edi 6/14/18 2030
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578) 2,0 (2,0 2,0 / 2,0 TAL - 0016 (0715)

460-158410 Chain of Custody

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Edison, New Jersey 08817
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CHAIN OF CUSTODY / ANALYSIS REQUEST

Page ___ of ___

Name (for report and invoice) Matt O'Neil	Samplers Name (Printed) Russ Morey	Site/Project Identification Rockaway Park Former MGP Site
Company GEI Consultants Inc	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 455 Winding Brook Drive	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP: ☐
City Glastonbury State CT	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone 860-368-5300 Fax		Job No: 158411

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	PAHs 8270 SIM	TRPH	DRO/GRO	TCLP RCRA 8 metals	PCBs	RCRA Characteristics	Sample Numbers
RP-SB-311 (0-12) Composite	6-14-18	0830	Solid	5							1
RP-SB-309 (0-12) Composite		0915		5							2
RP-SB-308 (0-12) Composite		1015		5							3
RP-SB-307 (0-12) Composite		1105		5							4
RP-SB-310 (0-12) Composite		1340		5							5
RP-SB-304 (0-12) Composite		1240		5							6
~~Duplicate of RP-SB-307 (0-12) Composite~~	↓		↓	~~5~~							~~7~~ 6/15/18
MS/MSD RP-SB-309 (0-12) Composite	↓	0925	↓	5	↓	↓	↓	↓	↓	↓	8

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH Soil:
6 = Other _____, 7 = Other _____ Water:

Special Instructions MS/MSD Parent sample RP-SB-309 (0-12) Composite Water Metals Filtered (Yes/No)? _____

	Company	Date / Time		Company
Relinquished by	GEI Consultants	6-14-18 1720	Received by 1)	T. A
Relinquished by 2)	T. A	6/14/18 2030	Received by 2)	TAEL 6/14/18 2030
Relinquished by 3)			Received by 3)	
Relinquished by 4)			Received by 4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

2.0 / 2.0 2.5 / 2.5 TRH ICNOCS

Composite

460-158411 Chain of Custody