

REMEDIAL ENGINEERING, P.C.
ENVIRONMENTAL ENGINEERS

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February 8, 2017

VIA EMAIL

Ms. Mandy Yau
Environmental Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 2
47-40 21st Street
Long Island City, New York 11101-5407

Re: Corrective Measure – Soil Sampling
Coral Island Shopping Center, Staten Island
Brownfield Cleanup Program Site #C243033

Dear Ms. Yau:

This letter presents a summary of soil sampling conducted on September 20, 2016 at the Coral Island Shopping Center located at 1655 Richmond Avenue, Staten Island, New York (the “Site”) in accordance with a July 22, 2016 Corrective Measures Work Plan. The work was done at the request of the New York State Department of Environmental Conservation (“NYSDEC”) to document the quality of backfill material imported to the Site in March 2015.

Background

As previously reported, following an emergency sewer pipe replacement action in March 2015, the excavation was backfilled with two loads of clean quarry process (“QP”) 3/4 – inch bluestone and two loads of recycled stone purchased from American Materials Landscaping. The material imported to the Site had not been tested prior to placement. It is our understanding that the sewer pipe is located at approximately four feet below land surface and we estimate the four loads of material imported to the Site to be a total of approximately 80 cubic yards.

Scope of Work

To assess the quality of the backfill, Remedial Engineering, P.C. and our associated consulting firm Roux Associates, Inc. (hereafter collectively referred to as “Remedial Engineering”) advanced three soil borings equally spaced across the sewer replacement area to a depth of approximately three feet (Figure 1). All soils were screened in one foot intervals for volatile organic compounds (“VOCs”) with a photoionization detector (“PID”). The two intervals with the highest PID measurements (maximum of one per boring) were selected as discrete samples for analysis of VOCs [CM1(0-1) and CB3 (2-3)]. The interval with the highest PID measurement from each of the three borings were composited into a single composite soil sample (CM-C) for analysis of semivolatile organic compounds (“SVOCs”), metals,

pesticides, herbicides, and polychlorinated biphenyls (“PCBs”) as outlined in Section 3.3 “Backfill Sampling” of the November 2008 Quality Assurance Project Plan (“QAPP”). A total of three samples, two discrete for VOCs and one composite for the larger list of analytes, were collected. In accordance with the QAPP, quality assurance/quality control (“QA/QC”) samples were not collected as part of this assessment.

All work was done following the Site-specific Health and Safety Plan (“HASP”) and air monitoring was conducted during soil sampling in accordance with the Community Air Monitoring Plan (“CAMP”), which is attached as Appendix A to the April 2009 Soil Management Plan. In accordance with the CAMP, the immediate work area was monitored for VOCs on a continuous basis. An upwind location was monitored at the start of the workday to establish a background concentration. The initial action level was considered to be a 15-minute average of five parts per million (“ppm”) above the background concentration.

Results

Analytical results for soil samples are presented in Attachment 1 and summarized below and in Table 1. Analytical results were compared to 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (“UUSCOs”).

There were no VOCs in the two discrete samples detected above UUSCOs (Table 1).

Two metals and two pesticides were detected in the composite sample at concentrations above their UUSCOs (Table 1). These included nickel at 37 milligrams per kilogram “mg/kg” compared to its UUSCO of 30 mg/kg (presented hereafter as “detection/UUSCO”); zinc (180 mg/kg / 109 mg/kg); 4,4-DDE (0.0061 mg/kg / 0.0033 mg/kg); and 4,4-DDT (0.0036 mg/kg / 0.0033 mg/kg). There were no detections of herbicides, PCBs, or SVOCs at concentrations exceeding their UUSCOs.

Community Air Monitoring

Prior to beginning work and upwind location was monitored for VOCs with a PID. The background concentration was measured at 0.0 ppm. The PID was kept in the work zone with a meter alarm set at 5.0 ppm. There were no readings other than 0.0 ppm on the PID when checked, and the alarm was never triggered.

Discussion

The owner of the Site has acknowledged to the NYSDEC of their current understanding that the Site Management Plan (“SMP”) was not followed in conducting this unexpected excavation work and indicated that they took internal steps to ensure there will be compliance with the SMP in the future. With respect to the soil in place, analytical results of the imported fill material do not strictly meet a UUSCOs standard. However, the UUSCOs were only slightly exceeded by four analytes that were all below the next most stringent criteria, the Protection of Public Health Residential Standard.

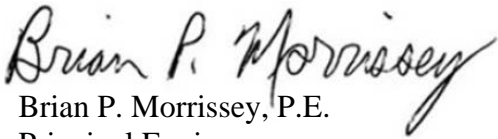
Ms. Mandy Yau
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Based on the analytical data, Remedial Engineering recommends that no further investigation or remediation is necessary and that the imported fill material should remain in place under the asphalt cap and managed in the future by the SMP.

If you have any questions or require additional information, please contact me by email at bmorrissey@rouxinc.com or by telephone at 631-232-2600.

Sincerely,

REMEDIAL ENGINEERING, P.C.



Brian P. Morrissey, P.E.
Principal Engineer

I, Brian P. Morrissey, certify that I am currently a NYS registered professional engineer and that this Corrective Measures Summary was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Attachments

cc: Jane O'Connell, NYSDEC
Christopher Doroski, NYSDOH
Jonathan Gains, WWP Associates, LLC
Wendy Marsh, Hancock Estabrook
Michael Roux, Roux Associates, Inc.

Table 1. Summary of Analytes in Soil, Coral Island Shopping Center, Staten Island, NY

	NYSDEC UUSCOs ⁽¹⁾	Sample ID: Sample Date: Sample Depth (ft):	SB-CM1 9/20/16 0-1	SB-CM3 9/20/16 2-3	SB-CM-C 9/20/16 composite
ANALYTE (mg/kg)					
Volatile Organic Compounds					
Acetone	0.05		0.05	0.0016 J	--
Acrylonitrile	-		0.014 U	0.01 U	--
Benzene	0.06		0.0014 U	0.001 U	--
Bromobenzene	-		0.0072 U	0.005 U	--
Bromochloromethane	-		0.0072 U	0.005 U	--
Bromodichloromethane	-		0.0014 U	0.001 U	--
Bromoform	-		0.0057 U	0.004 U	--
Bromomethane	-		0.0029 U	0.002 U	--
2-Butanone	0.12		0.014 U	0.01 U	--
n-Butylbenzene	12		0.0014 U	0.001 U	--
sec-Butylbenzene	11		0.0014 U	0.001 U	--
tert-Butylbenzene	5.9		0.0072 U	0.005 U	--
Carbon disulfide	-		0.014 U	0.01 U	--
Carbon tetrachloride	0.76		0.0014 U	0.001 U	--
Chlorobenzene	1.1		0.0014 U	0.001 U	--
Chloroethane	-		0.0029 U	0.002 U	--
Chloroform	0.37		0.0021 U	0.0015 U	--
Chloromethane	-		0.0072 U	0.005 U	--
1,2-Dibromo-3-chloropropane	-		0.0072 U	0.005 U	--
o-Chlorotoluene	-		0.0072 U	0.005 U	--
p-Chlorotoluene	-		0.0072 U	0.005 U	--
Dibromochloromethane	-		0.0014 U	0.001 U	--
1,2-Dibromoethane	-		0.0057 U	0.004 U	--
Dibromomethane	-		0.014 U	0.01 U	--
trans-1,4-Dichloro-2-butene	-		0.0072 U	0.005 U	--
1,2-Dichlorobenzene	1.1		0.0072 U	0.005 U	--
1,3-Dichlorobenzene	2.4		0.0072 U	0.005 U	--
1,4-Dichlorobenzene	1.8		0.0072 U	0.005 U	--
Dichlorodifluoromethane	-		0.014 U	0.01 U	--
1,1-Dichloroethane	0.27		0.0021 U	0.0015 U	--
1,2-Dichloroethane	0.02		0.0014 U	0.001 U	--
1,1-Dichloroethene	0.33		0.0014 U	0.001 U	--
cis-1,2-Dichloroethene	0.25		0.0014 U	0.001 U	--
trans-1,2-Dichloroethene	0.19		0.0021 U	0.0015 U	--
1,2-Dichloroethene, Total	-		0.0014 U	0.001 U	--
1,2-Dichloropropane	-		0.005 U	0.0035 U	--
1,3-Dichloropropane	-		0.0072 U	0.005 U	--
2,2-Dichloropropane	-		0.0072 U	0.005 U	--
1,1-Dichloropropene	-		0.0072 U	0.005 U	--
cis-1,3-Dichloropropene	-		0.0014 U	0.001 U	--
trans-1,3-Dichloropropene	-		0.0014 U	0.001 U	--
1,3-Dichloropropene, Total	-		0.0014 U	0.001 U	--
p-Diethylbenzene	-		0.0057 U	0.00048 J	--
1,4-Dioxane	0.1		0.14 U	0.1 U	--

Table 1. Summary of Analytes in Soil, Coral Island Shopping Center, Staten Island, NY

ANALYTE (mg/kg)	NYSDEC	Sample ID:	SB-CM1	SB-CM3	SB-CM-C
	UUSCOs ⁽¹⁾	Sample Date:	9/20/16	9/20/16	9/20/16
		Sample Depth (ft):	0-1	2-3	composite
Ethyl ether	-		0.0072 U	0.005 U	--
Ethylbenzene	1		0.0014 U	0.001 U	--
p-Ethyltoluene	-		0.00043 J	0.00013 J	--
Hexachlorobutadiene	-		0.0072 U	0.005 U	--
2-Hexanone	-		0.014 U	0.01 U	--
Isopropylbenzene	-		0.0014 U	0.001 U	--
p-Isopropyltoluene	-		0.0003 J	0.001 U	--
Methyl tert butyl ether	0.93		0.0029 U	0.002 U	--
4-Methyl-2-pentanone	-		0.014 U	0.01 U	--
Methylene chloride	0.05		0.014 U	0.01 U	--
Naphthalene	12		0.0013 J	0.00076 J	--
n-Propylbenzene	3.9		0.0014 U	0.001 U	--
Styrene	-		0.0029 U	0.002 U	--
1,1,1,2-Tetrachloroethane	-		0.0014 U	0.001 U	--
1,1,2,2-Tetrachloroethane	-		0.0014 U	0.001 U	--
Tetrachloroethene	1.3		0.0014 U	0.001 U	--
1,2,4,5-Tetramethylbenzene	-		0.00043 J	0.00028 J	--
Toluene	0.7		0.0021 U	0.0015 U	--
1,2,3-Trichlorobenzene	-		0.0072 U	0.005 U	--
1,2,4-Trichlorobenzene	-		0.0072 U	0.005 U	--
1,1,1-Trichloroethane	0.68		0.0014 U	0.001 U	--
1,1,2-Trichloroethane	-		0.0021 U	0.0015 U	--
Trichloroethene	0.47		0.00027 J	0.001 U	--
Trichlorofluoromethane	-		0.0072 U	0.005 U	--
1,2,3-Trichloropropane	-		0.014 U	0.01 U	--
1,2,4-Trimethylbenzene	3.6		0.00094 J	0.00038 J	--
1,3,5-Trimethylbenzene	8.4		0.00076 J	0.00018 J	--
Vinyl acetate	-		0.014 U	0.01 U	--
Vinyl chloride	0.02		0.0029 U	0.002 U	--
o-Xylene	-		0.0029 U	0.002 U	--
p/m-Xylene	-		0.0029 U	0.002 U	--
Xylenes, Total	0.26		0.0029 U	0.002 U	--
Semivolatile Organic Compounds					
Acenaphthene	20		--	--	0.14 J
Acenaphthylene	100		--	--	0.036 J
Acetophenone	-		--	--	0.18 U
Anthracene	100		--	--	0.35
Benzo(a)anthracene	1		--	--	0.62
Benzo(a)pyrene	1		--	--	0.51
Benzo(b)fluoranthene	1		--	--	0.73
Benzo(ghi)perylene	100		--	--	0.33
Benzo(k)fluoranthene	0.8		--	--	0.2
Benzoic Acid	-		--	--	0.6 U
Benzyl Alcohol	-		--	--	0.18 U

Table 1. Summary of Analytes in Soil, Coral Island Shopping Center, Staten Island, NY

ANALYTE (mg/kg)	NYSDEC	Sample ID:	SB-CM1	SB-CM3	SB-CM-C
	UUSCOs ⁽¹⁾	Sample Date:	9/20/16	9/20/16	9/20/16
		Sample Depth (ft):	0-1	2-3	composite
Biphenyl	-		--	--	0.42 U
Bis(2-chloroethoxy)methane	-		--	--	0.2 U
Bis(2-chloroethyl)ether	-		--	--	0.16 U
Bis(2-chloroisopropyl)ether	-		--	--	0.22 U
Bis(2-ethylhexyl)phthalate	-		--	--	0.18 U
4-Bromophenyl phenyl ether	-		--	--	0.18 U
Butyl benzyl phthalate	-		--	--	0.18 U
Carbazole	-		--	--	0.15 J
4-Chloroaniline	-		--	--	0.18 U
2-Chloronaphthalene	-		--	--	0.18 U
2-Chlorophenol	-		--	--	0.18 U
4-Chlorophenyl phenyl ether	-		--	--	0.18 U
Chrysene	1		--	--	0.63
Dibenzo(a,h)anthracene	0.33		--	--	0.091 J
Dibenzofuran	7		--	--	0.14 J
1,2-Dichlorobenzene	1.1		--	--	0.18 U
1,3-Dichlorobenzene	2.4		--	--	0.18 U
1,4-Dichlorobenzene	1.8		--	--	0.18 U
3,3'-Dichlorobenzidine	-		--	--	0.18 U
2,4-Dichlorophenol	-		--	--	0.16 U
Diethyl phthalate	-		--	--	0.18 U
Dimethyl phthalate	-		--	--	0.18 U
2,4-Dimethylphenol	-		--	--	0.18 U
Di-n-butylphthalate	-		--	--	0.18 U
4,6-Dinitro-o-cresol	-		--	--	0.48 U
2,4-Dinitrophenol	-		--	--	0.88 U
2,4-Dinitrotoluene	-		--	--	0.18 U
2,6-Dinitrotoluene	-		--	--	0.18 U
Di-n-octylphthalate	-		--	--	0.18 U
Fluoranthene	100		--	--	1.6
Fluorene	30		--	--	0.11 J
Hexachlorobenzene	0.33		--	--	0.11 U
Hexachlorobutadiene	-		--	--	0.18 U
Hexachlorocyclopentadiene	-		--	--	0.53 U
Hexachloroethane	-		--	--	0.15 U
Indeno(1,2,3-cd)pyrene	0.5		--	--	0.34
Isophorone	-		--	--	0.16 U
2-Methylnaphthalene	-		--	--	0.1 J
2-Methylphenol	0.33		--	--	0.18 U
3-Methylphenol/4-Methylphenol	0.33		--	--	0.26 U
Naphthalene	12		--	--	0.13 J
NDPA/DPA	-		--	--	0.15 U
2-Nitroaniline	-		--	--	0.18 U
3-Nitroaniline	-		--	--	0.18 U
4-Nitroaniline	-		--	--	0.18 U

Table 1. Summary of Analytes in Soil, Coral Island Shopping Center, Staten Island, NY

ANALYTE (mg/kg)	NYSDEC	Sample ID:	SB-CM1	SB-CM3	SB-CM-C
	UUSCOs ⁽¹⁾	Sample Date:	9/20/16	9/20/16	9/20/16
		Sample Depth (ft):	0-1	2-3	composite
Nitrobenzene	-		--	--	0.16 U
2-Nitrophenol	-		--	--	0.4 U
4-Nitrophenol	-		--	--	0.26 U
n-Nitrosodi-n-propylamine	-		--	--	0.18 U
p-Chloro-m-cresol	-		--	--	0.18 U
Pentachlorophenol	0.8		--	--	0.15 U
Phenanthrene	100		--	--	1.5
Phenol	0.33		--	--	0.18 U
Pyrene	100		--	--	1.3
1,2,4,5-Tetrachlorobenzene	-		--	--	0.18 U
1,2,4-Trichlorobenzene	-		--	--	0.18 U
2,4,5-Trichlorophenol	-		--	--	0.18 U
2,4,6-Trichlorophenol	-		--	--	0.11 U
Metals					
Arsenic	13		--	--	3
Barium	350		--	--	48
Beryllium	7.2		--	--	0.18 J
Cadmium	2.5		--	--	0.14 J
Chromium, Hexavalent	1		--	--	0.9 U
Chromium, Trivalent	30		--	--	17
Copper	50		--	--	50
Cyanide	27		--	--	0.44 J
Lead	63		--	--	57
Manganese	1,600		--	--	160
Mercury	0.18		--	--	0.07 J
Nickel	30		--	--	37
Selenium	3.9		--	--	0.19 J
Silver	2		--	--	0.21 J
Vanadium	-		--	--	16
Zinc	109		--	--	180
Pesticides/Herbicides					
2,4,5-T	-		--	--	0.184 U
2,4,5-TP (Silvex)	3.8		--	--	0.184 U
2,4-D	-		--	--	0.184 U
4,4'-DDD	0.0033		--	--	0.00202
4,4'-DDE	0.0033		--	--	0.00614
4,4'-DDT	0.0033		--	--	0.00366
Aldrin	0.005		--	--	0.00174 U
Alpha-BHC	0.02		--	--	0.000724 U
Beta-BHC	0.036		--	--	0.00174 U
Chlordane	-		--	--	0.0434
cis-Chlordane	0.094		--	--	0.00628
trans-Chlordane	-		--	--	0.00838

Table 1. Summary of Analytes in Soil, Coral Island Shopping Center, Staten Island, NY

ANALYTE (mg/kg)	NYSDEC	Sample ID:	SB-CM1	SB-CM3	SB-CM-C
	UUSCOs ⁽¹⁾	Sample Date:	9/20/16	9/20/16	9/20/16
		Sample Depth (ft):	0-1	2-3	composite
Delta-BHC	0.04		--	--	0.00174 U
Dieldrin	0.005		--	--	0.00191 P
Endosulfan I	2.4		--	--	0.00174 U
Endosulfan II	2.4		--	--	0.00174 U
Endosulfan sulfate	2.4		--	--	0.000724 U
Endrin	0.014		--	--	0.000724 U
Endrin aldehyde	-		--	--	0.00217 U
Endrin ketone	-		--	--	0.00174 U
Heptachlor	0.042		--	--	0.000868 U
Heptachlor epoxide	-		--	--	0.00181 J
Lindane	0.1		--	--	0.000724 U
Methoxychlor	-		--	--	0.00326 U
Toxaphene	-		--	--	0.0326 U
Polychlorinated Biphenyls					
Aroclor 1016	0.1		--	--	0.0365 U
Aroclor 1221	0.1		--	--	0.0365 U
Aroclor 1232	0.1		--	--	0.0365 U
Aroclor 1242	0.1		--	--	0.0365 U
Aroclor 1248	0.1		--	--	0.0365 U
Aroclor 1254	0.1		--	--	0.0365 U
Aroclor 1260	0.1		--	--	0.0285 J
Aroclor 1262	0.1		--	--	0.0365 U
Aroclor 1268	0.1		--	--	0.0365 U
PCBs, Total	-		--	--	0.0285 J

NOTES:

- No Part 375 UUSCO
- Not Analyzed
- 1 - 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
- bold/shade - Concentration exceeds UUSCO
- ft - Feet
- J - Estimated Concentration
- mg/kg - Milligrams per kilogram
- P - Column differences outside of limits
- U - Not detected above reported detection limit

Analytical Results for Soil Samples



ANALYTICAL REPORT

Lab Number:	L1629804
Client:	Roux Associates, Inc. 209 Shafter Street Islandia, NY 11749-5074
ATTN:	Michael Roux
Phone:	(631) 232-2600
Project Name:	CORAL ISLAND
Project Number:	1258.0001Y002
Report Date:	09/28/16

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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



Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1629804-01	SB-CM-C	SOIL	STATEN ISLAND	09/20/16 13:25	09/21/16
L1629804-02	SB-CM3 (2-3)	SOIL	STATEN ISLAND	09/20/16 12:20	09/21/16
L1629804-03	SB-CM1 (0-1)	SOIL	STATEN ISLAND	09/20/16 12:15	09/21/16

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Case Narrative

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

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

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

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

HOLD POLICY

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

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

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Case Narrative (continued)

Report Submission

This is a partial report. A final report will be issued as soon as the results of all requested analyses become available.

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

Semivolatile Organics

L1629804-01: The sample has elevated detection limits due to the dilution required by the sample matrix. The surrogate recoveries for L1629804-01 were below the acceptance criteria for 2-fluorophenol (4%) and 2,4,6-tribromophenol (0%); however, re-extraction achieved similar results 2-fluorophenol (3%) and 2,4,6-tribromophenol (1%). The results of both extractions are reported.

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

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 09/28/16

ORGANICS

VOLATILES

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-02
 Client ID: SB-CM3 (2-3)
 Sample Location: STATEN ISLAND
 Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 09/27/16 02:31
 Analyst: JC
 Percent Solids: 86%

Date Collected: 09/20/16 12:20
 Date Received: 09/21/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	10	1.1	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09	1
Chloroform	ND		ug/kg	1.5	0.37	1
Carbon tetrachloride	ND		ug/kg	1.0	0.21	1
1,2-Dichloropropane	ND		ug/kg	3.5	0.23	1
Dibromochloromethane	ND		ug/kg	1.0	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30	1
Tetrachloroethene	ND		ug/kg	1.0	0.14	1
Chlorobenzene	ND		ug/kg	1.0	0.35	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.39	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.11	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11	1
Bromodichloromethane	ND		ug/kg	1.0	0.17	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12	1
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12	1
1,1-Dichloropropene	ND		ug/kg	5.0	0.14	1
Bromoform	ND		ug/kg	4.0	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10	1
Benzene	ND		ug/kg	1.0	0.12	1
Toluene	ND		ug/kg	1.5	0.20	1
Ethylbenzene	ND		ug/kg	1.0	0.13	1
Chloromethane	ND		ug/kg	5.0	0.29	1
Bromomethane	ND		ug/kg	2.0	0.34	1
Vinyl chloride	ND		ug/kg	2.0	0.12	1
Chloroethane	ND		ug/kg	2.0	0.32	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21	1
Trichloroethene	ND		ug/kg	1.0	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15	1

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-02
Client ID: SB-CM3 (2-3)
Sample Location: STATEN ISLAND

Date Collected: 09/20/16 12:20
Date Received: 09/21/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.09	1
p/m-Xylene	ND		ug/kg	2.0	0.35	1
o-Xylene	ND		ug/kg	2.0	0.34	1
Xylenes, Total	ND		ug/kg	2.0	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	10	0.16	1
Styrene	ND		ug/kg	2.0	0.40	1
Dichlorodifluoromethane	ND		ug/kg	10	0.19	1
Acetone	1.6	J	ug/kg	10	1.0	1
Carbon disulfide	ND		ug/kg	10	1.1	1
2-Butanone	ND		ug/kg	10	0.27	1
Vinyl acetate	ND		ug/kg	10	0.13	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	10	0.16	1
2-Hexanone	ND		ug/kg	10	0.67	1
Bromochloromethane	ND		ug/kg	5.0	0.28	1
2,2-Dichloropropane	ND		ug/kg	5.0	0.23	1
1,2-Dibromoethane	ND		ug/kg	4.0	0.17	1
1,3-Dichloropropane	ND		ug/kg	5.0	0.14	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32	1
Bromobenzene	ND		ug/kg	5.0	0.21	1
n-Butylbenzene	ND		ug/kg	1.0	0.12	1
sec-Butylbenzene	ND		ug/kg	1.0	0.12	1
tert-Butylbenzene	ND		ug/kg	5.0	0.14	1
o-Chlorotoluene	ND		ug/kg	5.0	0.16	1
p-Chlorotoluene	ND		ug/kg	5.0	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.23	1
Isopropylbenzene	ND		ug/kg	1.0	0.10	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.12	1
Naphthalene	0.76	J	ug/kg	5.0	0.14	1
Acrylonitrile	ND		ug/kg	10	0.52	1
n-Propylbenzene	ND		ug/kg	1.0	0.11	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18	1
1,3,5-Trimethylbenzene	0.18	J	ug/kg	5.0	0.14	1

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-02
Client ID: SB-CM3 (2-3)
Sample Location: STATEN ISLAND

Date Collected: 09/20/16 12:20
Date Received: 09/21/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	0.38	J	ug/kg	5.0	0.14	1
1,4-Dioxane	ND		ug/kg	100	14.	1
p-Diethylbenzene	0.48	J	ug/kg	4.0	0.16	1
p-Ethyltoluene	0.13	J	ug/kg	4.0	0.12	1
1,2,4,5-Tetramethylbenzene	0.28	J	ug/kg	4.0	0.13	1
Ethyl ether	ND		ug/kg	5.0	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.39	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	107		70-130

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-03
 Client ID: SB-CM1 (0-1)
 Sample Location: STATEN ISLAND
 Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 09/27/16 02:57
 Analyst: JC
 Percent Solids: 87%

Date Collected: 09/20/16 12:15
 Date Received: 09/21/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	14	1.6	1
1,1-Dichloroethane	ND		ug/kg	2.1	0.12	1
Chloroform	ND		ug/kg	2.1	0.53	1
Carbon tetrachloride	ND		ug/kg	1.4	0.30	1
1,2-Dichloropropane	ND		ug/kg	5.0	0.33	1
Dibromochloromethane	ND		ug/kg	1.4	0.22	1
1,1,2-Trichloroethane	ND		ug/kg	2.1	0.43	1
Tetrachloroethene	ND		ug/kg	1.4	0.20	1
Chlorobenzene	ND		ug/kg	1.4	0.50	1
Trichlorofluoromethane	ND		ug/kg	7.2	0.55	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.16	1
1,1,1-Trichloroethane	ND		ug/kg	1.4	0.16	1
Bromodichloromethane	ND		ug/kg	1.4	0.25	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.17	1
cis-1,3-Dichloropropene	ND		ug/kg	1.4	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	1.4	0.17	1
1,1-Dichloropropene	ND		ug/kg	7.2	0.20	1
Bromoform	ND		ug/kg	5.7	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.4	0.14	1
Benzene	ND		ug/kg	1.4	0.17	1
Toluene	ND		ug/kg	2.1	0.28	1
Ethylbenzene	ND		ug/kg	1.4	0.18	1
Chloromethane	ND		ug/kg	7.2	0.42	1
Bromomethane	ND		ug/kg	2.9	0.48	1
Vinyl chloride	ND		ug/kg	2.9	0.17	1
Chloroethane	ND		ug/kg	2.9	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.37	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.30	1
Trichloroethene	0.27	J	ug/kg	1.4	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	7.2	0.22	1

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-03
Client ID: SB-CM1 (0-1)
Sample Location: STATEN ISLAND

Date Collected: 09/20/16 12:15
Date Received: 09/21/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	7.2	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	7.2	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.9	0.12	1
p/m-Xylene	ND		ug/kg	2.9	0.50	1
o-Xylene	ND		ug/kg	2.9	0.48	1
Xylenes, Total	ND		ug/kg	2.9	0.48	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.20	1
Dibromomethane	ND		ug/kg	14	0.23	1
Styrene	ND		ug/kg	2.9	0.57	1
Dichlorodifluoromethane	ND		ug/kg	14	0.27	1
Acetone	50		ug/kg	14	1.5	1
Carbon disulfide	ND		ug/kg	14	1.6	1
2-Butanone	ND		ug/kg	14	0.39	1
Vinyl acetate	ND		ug/kg	14	0.19	1
4-Methyl-2-pentanone	ND		ug/kg	14	0.35	1
1,2,3-Trichloropropane	ND		ug/kg	14	0.23	1
2-Hexanone	ND		ug/kg	14	0.95	1
Bromochloromethane	ND		ug/kg	7.2	0.39	1
2,2-Dichloropropane	ND		ug/kg	7.2	0.32	1
1,2-Dibromoethane	ND		ug/kg	5.7	0.25	1
1,3-Dichloropropane	ND		ug/kg	7.2	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.4	0.45	1
Bromobenzene	ND		ug/kg	7.2	0.30	1
n-Butylbenzene	ND		ug/kg	1.4	0.16	1
sec-Butylbenzene	ND		ug/kg	1.4	0.17	1
tert-Butylbenzene	ND		ug/kg	7.2	0.19	1
o-Chlorotoluene	ND		ug/kg	7.2	0.23	1
p-Chlorotoluene	ND		ug/kg	7.2	0.19	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	7.2	0.57	1
Hexachlorobutadiene	ND		ug/kg	7.2	0.33	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	0.30	J	ug/kg	1.4	0.18	1
Naphthalene	1.3	J	ug/kg	7.2	0.20	1
Acrylonitrile	ND		ug/kg	14	0.74	1
n-Propylbenzene	ND		ug/kg	1.4	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	7.2	0.21	1
1,2,4-Trichlorobenzene	ND		ug/kg	7.2	0.26	1
1,3,5-Trimethylbenzene	0.76	J	ug/kg	7.2	0.20	1

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-03
Client ID: SB-CM1 (0-1)
Sample Location: STATEN ISLAND

Date Collected: 09/20/16 12:15
Date Received: 09/21/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	0.94	J	ug/kg	7.2	0.20	1
1,4-Dioxane	ND		ug/kg	140	21.	1
p-Diethylbenzene	ND		ug/kg	5.7	0.23	1
p-Ethyltoluene	0.43	J	ug/kg	5.7	0.18	1
1,2,4,5-Tetramethylbenzene	0.43	J	ug/kg	5.7	0.19	1
Ethyl ether	ND		ug/kg	7.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.2	0.56	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	85		70-130

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/26/16 20:53
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-03 Batch: WG936227-5					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
1,1-Dichloropropene	ND		ug/kg	5.0	0.14
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	0.80	J	ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	ND		ug/kg	5.0	0.29
Bromomethane	0.80	J	ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/26/16 20:53
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-03 Batch: WG936227-5					
1,2-Dichlorobenzene	0.23	J	ug/kg	5.0	0.15
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
Xylenes, Total	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	1.0	J	ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
Vinyl acetate	ND		ug/kg	10	0.13
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.16
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
2,2-Dichloropropane	ND		ug/kg	5.0	0.23
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
1,3-Dichloropropane	ND		ug/kg	5.0	0.14
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14
o-Chlorotoluene	ND		ug/kg	5.0	0.16

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/26/16 20:53
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-03 Batch: WG936227-5					
p-Chlorotoluene	ND		ug/kg	5.0	0.13
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Hexachlorobutadiene	ND		ug/kg	5.0	0.23
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	0.15	J	ug/kg	5.0	0.14
Acrylonitrile	ND		ug/kg	10	0.51
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	0.15	J	ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	0.61	J	ug/kg	5.0	0.14
1,4-Dioxane	ND		ug/kg	100	14.
p-Diethylbenzene	ND		ug/kg	4.0	0.16
p-Ethyltoluene	0.27	J	ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.39

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG936227-3 WG936227-4								
Methylene chloride	95		88		70-130	8		30
1,1-Dichloroethane	100		93		70-130	7		30
Chloroform	104		96		70-130	8		30
Carbon tetrachloride	109		101		70-130	8		30
1,2-Dichloropropane	95		88		70-130	8		30
Dibromochloromethane	102		95		70-130	7		30
2-Chloroethylvinyl ether	75		67	Q	70-130	11		30
1,1,2-Trichloroethane	102		96		70-130	6		30
Tetrachloroethene	107		99		70-130	8		30
Chlorobenzene	107		99		70-130	8		30
Trichlorofluoromethane	122		113		70-139	8		30
1,2-Dichloroethane	103		98		70-130	5		30
1,1,1-Trichloroethane	107		101		70-130	6		30
Bromodichloromethane	101		94		70-130	7		30
trans-1,3-Dichloropropene	103		96		70-130	7		30
cis-1,3-Dichloropropene	98		92		70-130	6		30
1,1-Dichloropropene	104		97		70-130	7		30
Bromoform	98		93		70-130	5		30
1,1,2,2-Tetrachloroethane	96		93		70-130	3		30
Benzene	100		93		70-130	7		30
Toluene	106		100		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG936227-3 WG936227-4								
Ethylbenzene	110		100		70-130	10		30
Chloromethane	84		79		52-130	6		30
Bromomethane	122		110		57-147	10		30
Vinyl chloride	102		95		67-130	7		30
Chloroethane	129		116		50-151	11		30
1,1-Dichloroethene	117		107		65-135	9		30
trans-1,2-Dichloroethene	101		94		70-130	7		30
Trichloroethene	106		97		70-130	9		30
1,2-Dichlorobenzene	107		100		70-130	7		30
1,3-Dichlorobenzene	110		102		70-130	8		30
1,4-Dichlorobenzene	112		102		70-130	9		30
Methyl tert butyl ether	97		92		66-130	5		30
p/m-Xylene	110		102		70-130	8		30
o-Xylene	110		102		70-130	8		30
cis-1,2-Dichloroethene	100		93		70-130	7		30
Dibromomethane	100		94		70-130	6		30
Styrene	111		105		70-130	6		30
Dichlorodifluoromethane	83		79		30-146	5		30
Acetone	82		87		54-140	6		30
Carbon disulfide	102		102		59-130	0		30
2-Butanone	73		75		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG936227-3 WG936227-4								
Vinyl acetate	80		77		70-130	4		30
4-Methyl-2-pentanone	93		87		70-130	7		30
1,2,3-Trichloropropane	102		98		68-130	4		30
2-Hexanone	87		85		70-130	2		30
Bromochloromethane	104		96		70-130	8		30
2,2-Dichloropropane	107		100		70-130	7		30
1,2-Dibromoethane	99		95		70-130	4		30
1,3-Dichloropropane	102		95		69-130	7		30
1,1,1,2-Tetrachloroethane	106		98		70-130	8		30
Bromobenzene	106		98		70-130	8		30
n-Butylbenzene	121		109		70-130	10		30
sec-Butylbenzene	112		104		70-130	7		30
tert-Butylbenzene	110		103		70-130	7		30
o-Chlorotoluene	110		103		70-130	7		30
p-Chlorotoluene	111		102		70-130	8		30
1,2-Dibromo-3-chloropropane	92		87		68-130	6		30
Hexachlorobutadiene	105		93		67-130	12		30
Isopropylbenzene	111		103		70-130	7		30
p-Isopropyltoluene	114		105		70-130	8		30
Naphthalene	100		91		70-130	9		30
Acrylonitrile	86		80		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG936227-3 WG936227-4								
Isopropyl Ether	90		83		66-130	8		30
tert-Butyl Alcohol	84		82		70-130	2		30
n-Propylbenzene	112		105		70-130	6		30
1,2,3-Trichlorobenzene	107		93		70-130	14		30
1,2,4-Trichlorobenzene	106		96		70-130	10		30
1,3,5-Trimethylbenzene	111		103		70-130	7		30
1,2,4-Trimethylbenzene	112		104		70-130	7		30
Methyl Acetate	82		79		51-146	4		30
Ethyl Acetate	76		74		70-130	3		30
Acrolein	90		87		70-130	3		30
Cyclohexane	93		87		59-142	7		30
1,4-Dioxane	83		84		65-136	1		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	107		98		50-139	9		30
p-Diethylbenzene	112		101		70-130	10		30
p-Ethyltoluene	107		101		70-130	6		30
1,2,4,5-Tetramethylbenzene	108		97		70-130	11		30
Tetrahydrofuran	86		84		66-130	2		30
Ethyl ether	118		108		67-130	9		30
trans-1,4-Dichloro-2-butene	87		81		70-130	7		30
Methyl cyclohexane	100		95		70-130	5		30
Ethyl-Tert-Butyl-Ether	94		88		70-130	7		30

Lab Control Sample Analysis Batch Quality Control

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG936227-3 WG936227-4								
Tertiary-Amyl Methyl Ether	95		90		70-130	5		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		108		70-130
Toluene-d8	104		105		70-130
4-Bromofluorobenzene	100		102		70-130
Dibromofluoromethane	103		105		70-130

SEMIVOLATILES

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-01 RE
 Client ID: SB-CM-C
 Sample Location: STATEN ISLAND
 Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 09/28/16 05:06
 Analyst: RC
 Percent Solids: 89%

Date Collected: 09/20/16 13:25
 Date Received: 09/21/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 09/27/16 16:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	140	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	1600		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	130	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-01 RE
 Client ID: SB-CM-C
 Sample Location: STATEN ISLAND

Date Collected: 09/20/16 13:25
 Date Received: 09/21/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	620		ug/kg	110	21.	1
Benzo(a)pyrene	510		ug/kg	150	45.	1
Benzo(b)fluoranthene	730		ug/kg	110	31.	1
Benzo(k)fluoranthene	200		ug/kg	110	29.	1
Chrysene	630		ug/kg	110	19.	1
Acenaphthylene	36	J	ug/kg	150	28.	1
Anthracene	350		ug/kg	110	36.	1
Benzo(ghi)perylene	330		ug/kg	150	22.	1
Fluorene	110	J	ug/kg	180	18.	1
Phenanthrene	1500		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	91	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	340		ug/kg	150	26.	1
Pyrene	1300		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	140	J	ug/kg	180	17.	1
2-Methylnaphthalene	100	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	150	J	ug/kg	180	18.	1

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-01 RE
 Client ID: SB-CM-C
 Sample Location: STATEN ISLAND

Date Collected: 09/20/16 13:25
 Date Received: 09/21/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	3	Q	25-120
Phenol-d6	19		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	46		30-120
2,4,6-Tribromophenol	1	Q	10-136
4-Terphenyl-d14	39		18-120

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-01 D
 Client ID: SB-CM-C
 Sample Location: STATEN ISLAND
 Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 09/27/16 08:38
 Analyst: AS
 Percent Solids: 89%

Date Collected: 09/20/16 13:25
 Date Received: 09/21/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 09/24/16 11:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	740	95.	5
1,2,4-Trichlorobenzene	ND		ug/kg	920	100	5
Hexachlorobenzene	ND		ug/kg	550	100	5
Bis(2-chloroethyl)ether	ND		ug/kg	830	120	5
2-Chloronaphthalene	ND		ug/kg	920	91.	5
1,2-Dichlorobenzene	ND		ug/kg	920	160	5
1,3-Dichlorobenzene	ND		ug/kg	920	160	5
1,4-Dichlorobenzene	ND		ug/kg	920	160	5
3,3'-Dichlorobenzidine	ND		ug/kg	920	240	5
2,4-Dinitrotoluene	ND		ug/kg	920	180	5
2,6-Dinitrotoluene	ND		ug/kg	920	160	5
Fluoranthene	850		ug/kg	550	100	5
4-Chlorophenyl phenyl ether	ND		ug/kg	920	98.	5
4-Bromophenyl phenyl ether	ND		ug/kg	920	140	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1100	160	5
Bis(2-chloroethoxy)methane	ND		ug/kg	990	92.	5
Hexachlorobutadiene	ND		ug/kg	920	130	5
Hexachlorocyclopentadiene	ND		ug/kg	2600	830	5
Hexachloroethane	ND		ug/kg	740	150	5
Isophorone	ND		ug/kg	830	120	5
Naphthalene	ND		ug/kg	920	110	5
Nitrobenzene	ND		ug/kg	830	140	5
NDPA/DPA	ND		ug/kg	740	100	5
n-Nitrosodi-n-propylamine	ND		ug/kg	920	140	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	920	320	5
Butyl benzyl phthalate	ND		ug/kg	920	230	5
Di-n-butylphthalate	ND		ug/kg	920	170	5
Di-n-octylphthalate	ND		ug/kg	920	310	5
Diethyl phthalate	ND		ug/kg	920	85.	5
Dimethyl phthalate	ND		ug/kg	920	190	5

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-01 D
Client ID: SB-CM-C
Sample Location: STATEN ISLAND

Date Collected: 09/20/16 13:25
Date Received: 09/21/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	370	J	ug/kg	550	100	5
Benzo(a)pyrene	330	J	ug/kg	740	220	5
Benzo(b)fluoranthene	440	J	ug/kg	550	160	5
Benzo(k)fluoranthene	ND		ug/kg	550	150	5
Chrysene	370	J	ug/kg	550	96.	5
Acenaphthylene	ND		ug/kg	740	140	5
Anthracene	180	J	ug/kg	550	180	5
Benzo(ghi)perylene	200	J	ug/kg	740	110	5
Fluorene	ND		ug/kg	920	90.	5
Phenanthrene	660		ug/kg	550	110	5
Dibenzo(a,h)anthracene	ND		ug/kg	550	110	5
Indeno(1,2,3-cd)pyrene	230	J	ug/kg	740	130	5
Pyrene	700		ug/kg	550	92.	5
Biphenyl	ND		ug/kg	2100	210	5
4-Chloroaniline	ND		ug/kg	920	170	5
2-Nitroaniline	ND		ug/kg	920	180	5
3-Nitroaniline	ND		ug/kg	920	170	5
4-Nitroaniline	ND		ug/kg	920	380	5
Dibenzofuran	ND		ug/kg	920	87.	5
2-Methylnaphthalene	ND		ug/kg	1100	110	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	920	96.	5
Acetophenone	ND		ug/kg	920	110	5
2,4,6-Trichlorophenol	ND		ug/kg	550	170	5
p-Chloro-m-cresol	ND		ug/kg	920	140	5
2-Chlorophenol	ND		ug/kg	920	110	5
2,4-Dichlorophenol	ND		ug/kg	830	150	5
2,4-Dimethylphenol	ND		ug/kg	920	300	5
2-Nitrophenol	ND		ug/kg	2000	350	5
4-Nitrophenol	ND		ug/kg	1300	380	5
2,4-Dinitrophenol	ND		ug/kg	4400	430	5
4,6-Dinitro-o-cresol	ND		ug/kg	2400	440	5
Pentachlorophenol	ND		ug/kg	740	200	5
Phenol	ND		ug/kg	920	140	5
2-Methylphenol	ND		ug/kg	920	140	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1300	140	5
2,4,5-Trichlorophenol	ND		ug/kg	920	180	5
Benzoic Acid	ND		ug/kg	3000	930	5
Benzyl Alcohol	ND		ug/kg	920	280	5
Carbazole	ND		ug/kg	920	90.	5

Project Name: CORAL ISLAND**Lab Number:** L1629804**Project Number:** 1258.0001Y002**Report Date:** 09/28/16**SAMPLE RESULTS**

Lab ID: L1629804-01 D

Date Collected: 09/20/16 13:25

Client ID: SB-CM-C

Date Received: 09/21/16

Sample Location: STATEN ISLAND

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	4	Q	25-120
Phenol-d6	23		10-120
Nitrobenzene-d5	48		23-120
2-Fluorobiphenyl	45		30-120
2,4,6-Tribromophenol	0	Q	10-136
4-Terphenyl-d14	40		18-120

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/26/16 00:10
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 09/24/16 11:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG935435-1					
Acenaphthene	ND		ug/kg	130	17.
Benzidine	ND		ug/kg	540	180
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Azobenzene	ND		ug/kg	160	16.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/26/16 00:10
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 09/24/16 11:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG935435-1					
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
Aniline	ND		ug/kg	200	77.
4-Chloroaniline	ND		ug/kg	160	30.
1-Methylnaphthalene	ND		ug/kg	160	19.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
n-Nitrosodimethylamine	ND		ug/kg	330	31.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/26/16 00:10
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 09/24/16 11:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG935435-1					
P-Chloro-M-Cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
Pyridine	ND		ug/kg	650	62.
Parathion, ethyl	ND		ug/kg	330	330
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

Project Name: CORAL ISLAND

Lab Number: L1629804

Project Number: 1258.0001Y002

Report Date: 09/28/16

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 09/26/16 00:10
 Analyst: RC

Extraction Method: EPA 3546
 Extraction Date: 09/24/16 11:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG935435-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	59		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	66		18-120

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/27/16 23:50
Analyst: KV

Extraction Method: EPA 3546
Extraction Date: 09/27/16 16:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG936299-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.
Hexachlorobenzene	ND		ug/kg	100	19.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	170	16.
1,2-Dichlorobenzene	ND		ug/kg	170	30.
1,3-Dichlorobenzene	ND		ug/kg	170	29.
1,4-Dichlorobenzene	ND		ug/kg	170	29.
3,3'-Dichlorobenzidine	ND		ug/kg	170	44.
2,4-Dinitrotoluene	ND		ug/kg	170	33.
2,6-Dinitrotoluene	ND		ug/kg	170	28.
Fluoranthene	ND		ug/kg	100	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.
4-Bromophenyl phenyl ether	ND		ug/kg	170	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	170	24.
Hexachlorocyclopentadiene	ND		ug/kg	480	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	170	20.
Nitrobenzene	ND		ug/kg	150	25.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	58.
Butyl benzyl phthalate	ND		ug/kg	170	42.
Di-n-butylphthalate	ND		ug/kg	170	32.
Di-n-octylphthalate	ND		ug/kg	170	56.
Diethyl phthalate	ND		ug/kg	170	15.

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/27/16 23:50
Analyst: KV

Extraction Method: EPA 3546
Extraction Date: 09/27/16 16:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG936299-1					
Dimethyl phthalate	ND		ug/kg	170	35.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.
Benzo(k)fluoranthene	ND		ug/kg	100	27.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	170	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	170	30.
2-Nitroaniline	ND		ug/kg	170	32.
3-Nitroaniline	ND		ug/kg	170	31.
4-Nitroaniline	ND		ug/kg	170	69.
Dibenzofuran	ND		ug/kg	170	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	17.
Acetophenone	ND		ug/kg	170	20.
2,4,6-Trichlorophenol	ND		ug/kg	100	32.
p-Chloro-m-cresol	ND		ug/kg	170	25.
2-Chlorophenol	ND		ug/kg	170	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	170	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 09/27/16 23:50
Analyst: KV

Extraction Method: EPA 3546
Extraction Date: 09/27/16 16:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG936299-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	78.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	170	25.
2-Methylphenol	ND		ug/kg	170	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	170	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	170	51.
Carbazole	ND		ug/kg	170	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		25-120
Phenol-d6	61		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	59		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	68		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG935435-2 WG935435-3								
Acenaphthene	59		60		31-137	2		50
Benidine	27		31		10-66	14		50
1,2,4-Trichlorobenzene	61		64		38-107	5		50
Hexachlorobenzene	63		63		40-140	0		50
Bis(2-chloroethyl)ether	59		63		40-140	7		50
2-Chloronaphthalene	63		64		40-140	2		50
1,2-Dichlorobenzene	59		61		40-140	3		50
1,3-Dichlorobenzene	58		60		40-140	3		50
1,4-Dichlorobenzene	58		61		28-104	5		50
3,3'-Dichlorobenzidine	47		50		40-140	6		50
2,4-Dinitrotoluene	67		69		28-89	3		50
2,6-Dinitrotoluene	76		77		40-140	1		50
Azobenzene	62		63		40-140	2		50
Fluoranthene	62		65		40-140	5		50
4-Chlorophenyl phenyl ether	59		60		40-140	2		50
4-Bromophenyl phenyl ether	62		65		40-140	5		50
Bis(2-chloroisopropyl)ether	67		70		40-140	4		50
Bis(2-chloroethoxy)methane	64		65		40-117	2		50
Hexachlorobutadiene	58		60		40-140	3		50
Hexachlorocyclopentadiene	50		54		40-140	8		50
Hexachloroethane	59		61		40-140	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG935435-2 WG935435-3								
Isophorone	69		69		40-140	0		50
Naphthalene	59		60		40-140	2		50
Nitrobenzene	64		66		40-140	3		50
NDPA/DPA	63		64		36-157	2		50
n-Nitrosodi-n-propylamine	66		69		32-121	4		50
Bis(2-ethylhexyl)phthalate	65		68		40-140	5		50
Butyl benzyl phthalate	65		69		40-140	6		50
Di-n-butylphthalate	69		72		40-140	4		50
Di-n-octylphthalate	67		71		40-140	6		50
Diethyl phthalate	64		65		40-140	2		50
Dimethyl phthalate	68		69		40-140	1		50
Benzo(a)anthracene	60		62		40-140	3		50
Benzo(a)pyrene	63		66		40-140	5		50
Benzo(b)fluoranthene	59		62		40-140	5		50
Benzo(k)fluoranthene	61		65		40-140	6		50
Chrysene	58		61		40-140	5		50
Acenaphthylene	68		68		40-140	0		50
Anthracene	60		62		40-140	3		50
Benzo(ghi)perylene	58		60		40-140	3		50
Fluorene	62		62		40-140	0		50
Phenanthrene	58		60		40-140	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG935435-2 WG935435-3								
Dibenzo(a,h)anthracene	58		60		40-140	3		50
Indeno(1,2,3-cd)pyrene	59		62		40-140	5		50
Pyrene	60		63		35-142	5		50
Biphenyl	67		68		54-104	1		50
Aniline	44		46		40-140	4		50
4-Chloroaniline	52		53		40-140	2		50
1-Methylnaphthalene	61		62		26-130	2		50
2-Nitroaniline	79		78		47-134	1		50
3-Nitroaniline	57		58		26-129	2		50
4-Nitroaniline	65		68		41-125	5		50
Dibenzofuran	59		60		40-140	2		50
2-Methylnaphthalene	62		62		40-140	0		50
1,2,4,5-Tetrachlorobenzene	65		66		40-117	2		50
Acetophenone	71		74		14-144	4		50
n-Nitrosodimethylamine	56		58		22-100	4		50
2,4,6-Trichlorophenol	74		74		30-130	0		50
p-Chloro-m-cresol	72		72		26-103	0		50
2-Chlorophenol	66		68		25-102	3		50
2,4-Dichlorophenol	73		74		30-130	1		50
2,4-Dimethylphenol	71		71		30-130	0		50
2-Nitrophenol	75		77		30-130	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG935435-2 WG935435-3								
4-Nitrophenol	67		70		11-114	4		50
2,4-Dinitrophenol	44		45		4-130	2		50
4,6-Dinitro-o-cresol	64		65		10-130	2		50
Pentachlorophenol	60		63		17-109	5		50
Phenol	60		61		26-90	2		50
2-Methylphenol	67		69		30-130.	3		50
3-Methylphenol/4-Methylphenol	67		66		30-130	2		50
2,4,5-Trichlorophenol	73		74		30-130	1		50
Benzoic Acid	18		28		10-110	43		50
Benzyl Alcohol	67		69		40-140	3		50
Carbazole	62		65		54-128	5		50
Pyridine	48		47		10-93	2		50
Parathion, ethyl	111		118		40-140	6		50
Atrazine	79		82		40-140	4		50
Benzaldehyde	51		55		40-140	8		50
Caprolactam	88		88		15-130	0		50
2,3,4,6-Tetrachlorophenol	68		69		40-140	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG935435-2 WG935435-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	61		64		25-120
Phenol-d6	66		68		10-120
Nitrobenzene-d5	64		66		23-120
2-Fluorobiphenyl	64		65		30-120
2,4,6-Tribromophenol	69		71		10-136
4-Terphenyl-d14	57		59		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG936299-2 WG936299-3								
Acenaphthene	57		66		31-137	15		50
Benidine	27		36		10-66	29		50
1,2,4-Trichlorobenzene	64		70		38-107	9		50
Hexachlorobenzene	61		69		40-140	12		50
Bis(2-chloroethyl)ether	58		64		40-140	10		50
2-Chloronaphthalene	62		69		40-140	11		50
1,2-Dichlorobenzene	60		66		40-140	10		50
1,3-Dichlorobenzene	59		63		40-140	7		50
1,4-Dichlorobenzene	58		63		28-104	8		50
3,3'-Dichlorobenzidine	47		58		40-140	21		50
2,4-Dinitrotoluene	62		73		28-89	16		50
2,6-Dinitrotoluene	66		79		40-140	18		50
Azobenzene	62		71		40-140	14		50
Fluoranthene	59		69		40-140	16		50
4-Chlorophenyl phenyl ether	59		68		40-140	14		50
4-Bromophenyl phenyl ether	60		74		40-140	21		50
Bis(2-chloroisopropyl)ether	56		62		40-140	10		50
Bis(2-chloroethoxy)methane	62		71		40-117	14		50
Hexachlorobutadiene	61		67		40-140	9		50
Hexachlorocyclopentadiene	63		71		40-140	12		50
Hexachloroethane	62		64		40-140	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG936299-2 WG936299-3								
Isophorone	63		72		40-140	13		50
Naphthalene	59		64		40-140	8		50
Nitrobenzene	64		72		40-140	12		50
NDPA/DPA	60		71		36-157	17		50
n-Nitrosodi-n-propylamine	62		71		32-121	14		50
Bis(2-ethylhexyl)phthalate	64		75		40-140	16		50
Butyl benzyl phthalate	62		73		40-140	16		50
Di-n-butylphthalate	61		71		40-140	15		50
Di-n-octylphthalate	66		78		40-140	17		50
Diethyl phthalate	62		73		40-140	16		50
Dimethyl phthalate	62		74		40-140	18		50
Benzo(a)anthracene	56		66		40-140	16		50
Benzo(a)pyrene	60		71		40-140	17		50
Benzo(b)fluoranthene	60		72		40-140	18		50
Benzo(k)fluoranthene	59		66		40-140	11		50
Chrysene	57		65		40-140	13		50
Acenaphthylene	61		70		40-140	14		50
Anthracene	58		67		40-140	14		50
Benzo(ghi)perylene	56		66		40-140	16		50
Fluorene	58		69		40-140	17		50
Phenanthrene	56		65		40-140	15		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG936299-2 WG936299-3								
Dibenzo(a,h)anthracene	58		68		40-140	16		50
Indeno(1,2,3-cd)pyrene	59		69		40-140	16		50
Pyrene	57		67		35-142	16		50
Biphenyl	64		72		54-104	12		50
Aniline	34	Q	43		40-140	23		50
4-Chloroaniline	42		53		40-140	23		50
1-Methylnaphthalene	62		71		26-130	14		50
2-Nitroaniline	66		74		47-134	11		50
3-Nitroaniline	45		56		26-129	22		50
4-Nitroaniline	56		69		41-125	21		50
Dibenzofuran	58		67		40-140	14		50
2-Methylnaphthalene	60		68		40-140	13		50
1,2,4,5-Tetrachlorobenzene	64		71		40-117	10		50
Acetophenone	74		83		14-144	11		50
n-Nitrosodimethylamine	54		57		22-100	5		50
2,4,6-Trichlorophenol	64		75		30-130	16		50
p-Chloro-m-cresol	65		75		26-103	14		50
2-Chlorophenol	65		72		25-102	10		50
2,4-Dichlorophenol	70		81		30-130	15		50
2,4-Dimethylphenol	73		83		30-130	13		50
2-Nitrophenol	67		76		30-130	13		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG936299-2 WG936299-3								
4-Nitrophenol	65		78		11-114	18		50
2,4-Dinitrophenol	60		71		4-130	17		50
4,6-Dinitro-o-cresol	61		73		10-130	18		50
Pentachlorophenol	62		75		17-109	19		50
Phenol	59		68		26-90	14		50
2-Methylphenol	65		73		30-130.	12		50
3-Methylphenol/4-Methylphenol	66		74		30-130	11		50
2,4,5-Trichlorophenol	67		78		30-130	15		50
Benzoic Acid	44		55		10-110	22		50
Benzyl Alcohol	69		77		40-140	11		50
Carbazole	56		68		54-128	19		50
Pyridine	49		47		10-93	4		50
Parathion, ethyl	79		93		40-140	16		50
Atrazine	76		89		40-140	16		50
Benzaldehyde	15	Q	17	Q	40-140	13		50
Caprolactam	67		76		15-130	13		50
2,3,4,6-Tetrachlorophenol	62		74		40-140	18		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG936299-2 WG936299-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
2-Fluorophenol	65		69		25-120
Phenol-d6	68		75		10-120
Nitrobenzene-d5	66		71		23-120
2-Fluorobiphenyl	65		72		30-120
2,4,6-Tribromophenol	64		77		10-136
4-Terphenyl-d14	59		69		18-120

Matrix Spike Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Lab Number: L1629804

Project Number: 1258.0001Y002

Report Date: 09/28/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatiles Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG935435-4 WG935435-5 QC Sample: L1629736-03 Client ID: MS Sample												
Acenaphthene	ND	1770	1000	57		1000	57		31-137	0		50
Benzidine	ND	1770	640J	36		540J	31		10-66	17		50
1,2,4-Trichlorobenzene	ND	1770	1000	57		1100	63		38-107	10		50
Hexachlorobenzene	ND	1770	1000	57		1100	63		40-140	10		50
Bis(2-chloroethyl)ether	ND	1770	1000	57		1000	57		40-140	0		50
2-Chloronaphthalene	ND	1770	1100	62		1100	63		40-140	0		50
1,2-Dichlorobenzene	ND	1770	1000	57		1000	57		40-140	0		50
1,3-Dichlorobenzene	ND	1770	1000	57		1000	57		40-140	0		50
1,4-Dichlorobenzene	ND	1770	1000	57		1000	57		28-104	0		50
3,3'-Dichlorobenzidine	ND	1770	840	48		820	47		40-140	2		50
2,4-Dinitrotoluene	ND	1770	1100	62		1200	69		28-89	9		50
2,6-Dinitrotoluene	ND	1770	1300	74		1300	74		40-140	0		50
Azobenzene	ND	1770	1000	57		1100	63		40-140	10		50
Fluoranthene	ND	1770	1000	57		1100	63		40-140	10		50
4-Chlorophenyl phenyl ether	ND	1770	1000	57		1000	57		40-140	0		50
4-Bromophenyl phenyl ether	ND	1770	1000	57		1100	63		40-140	10		50
Bis(2-chloroisopropyl)ether	ND	1770	1200	68		1200	69		40-140	0		50
Bis(2-chloroethoxy)methane	ND	1770	1100	62		1100	63		40-117	0		50
Hexachlorobutadiene	ND	1770	1000	57		1000	57		40-140	0		50
Hexachlorocyclopentadiene	ND	1770	840	48		900	51		40-140	7		50
Hexachloroethane	ND	1770	1000	57		1000	57		40-140	0		50

Matrix Spike Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG935435-4 WG935435-5 QC Sample: L1629736-03 Client ID: MS Sample												
Isophorone	ND	1770	1200	68		1200	69		40-140	0		50
Naphthalene	ND	1770	1000	57		1100	63		40-140	10		50
Nitrobenzene	ND	1770	1100	62		1200	69		40-140	9		50
NDPA/DPA	ND	1770	1000	57		1100	63		36-157	10		50
n-Nitrosodi-n-propylamine	ND	1770	1100	62		1200	69		32-121	9		50
Bis(2-ethylhexyl)phthalate	ND	1770	1100	62		1100	63		40-140	0		50
Butyl benzyl phthalate	ND	1770	1100	62		1100	63		40-140	0		50
Di-n-butylphthalate	ND	1770	1200	68		1200	69		40-140	0		50
Di-n-octylphthalate	ND	1770	1200	68		1200	69		40-140	0		50
Diethyl phthalate	ND	1770	1100	62		1100	63		40-140	0		50
Dimethyl phthalate	ND	1770	1100	62		1200	69		40-140	9		50
Benzo(a)anthracene	ND	1770	1000	57		1000	57		40-140	0		50
Benzo(a)pyrene	ND	1770	1100	62		1100	63		40-140	0		50
Benzo(b)fluoranthene	ND	1770	1000	57		1000	57		40-140	0		50
Benzo(k)fluoranthene	ND	1770	1100	62		1100	63		40-140	0		50
Chrysene	ND	1770	1000	57		1000	57		40-140	0		50
Acenaphthylene	ND	1770	1100	62		1200	69		40-140	9		50
Anthracene	ND	1770	1000	57		1000	57		40-140	0		50
Benzo(ghi)perylene	ND	1770	1000	57		1000	57		40-140	0		50
Fluorene	ND	1770	1000	57		1100	63		40-140	10		50
Phenanthrene	ND	1770	1000	57		1000	57		40-140	0		50

Matrix Spike Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG935435-4 WG935435-5 QC Sample: L1629736-03 Client ID: MS Sample												
Dibenzo(a,h)anthracene	ND	1770	1000	57		1000	57		40-140	0		50
Indeno(1,2,3-cd)pyrene	ND	1770	990	56		1000	57		40-140	1		50
Pyrene	ND	1770	1000	57		1100	63		35-142	10		50
Biphenyl	ND	1770	1100	62		1200	69		54-104	9		50
Aniline	ND	1770	780	44		750	43		40-140	4		50
4-Chloroaniline	ND	1770	940	53		950	54		40-140	1		50
1-Methylnaphthalene	ND	1770	1000	57		1100	63		26-130	10		50
2-Nitroaniline	ND	1770	1300	74		1300	74		47-134	0		50
3-Nitroaniline	ND	1770	1000	57		1000	57		26-129	0		50
4-Nitroaniline	ND	1770	1100	62		1200	69		41-125	9		50
Dibenzofuran	ND	1770	1000	57		1000	57		40-140	0		50
2-Methylnaphthalene	ND	1770	1000	57		1100	63		40-140	10		50
1,2,4,5-Tetrachlorobenzene	ND	1770	1100	62		1200	69		40-117	9		50
Acetophenone	ND	1770	1200	68		1300	74		14-144	8		50
n-Nitrosodimethylamine	ND	1770	940	53		940	54		22-100	0		50
2,4,6-Trichlorophenol	ND	1770	1200	68		1300	74		30-130	8		50
p-Chloro-m-cresol	ND	1770	1200	68		1200	69		26-103	0		50
2-Chlorophenol	ND	1770	1100	62		1200	69		25-102	9		50
2,4-Dichlorophenol	ND	1770	1200	68		1300	74		30-130	8		50
2,4-Dimethylphenol	ND	1770	1200	68		1300	74		30-130	8		50
2-Nitrophenol	ND	1770	1300	74		1300	74		30-130	0		50

Matrix Spike Analysis Batch Quality Control

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG935435-4 WG935435-5 QC Sample: L1629736-03 Client ID: MS Sample												
4-Nitrophenol	ND	1770	1100	62		1200	69		11-114	9		50
2,4-Dinitrophenol	ND	1770	220J	12		260J	15		4-130	17		50
4,6-Dinitro-o-cresol	ND	1770	870	49		940	54		10-130	8		50
Pentachlorophenol	ND	1770	920	52		1000	57		17-109	8		50
Phenol	ND	1770	1000	57		1000	57		26-90	0		50
2-Methylphenol	ND	1770	1100	62		1200	69		30-130.	9		50
3-Methylphenol/4-Methylphenol	ND	1770	1100	62		1200	69		30-130	9		50
2,4,5-Trichlorophenol	ND	1770	1200	68		1300	74		30-130	8		50
Benzoic Acid	ND	1770	ND	0	Q	ND	0	Q	10-110	NC		50
Benzyl Alcohol	ND	1770	1100	62		1200	69		40-140	9		50
Carbazole	ND	1770	1000	57		1100	63		54-128	10		50
Pyridine	ND	1770	820J	46		840J	48		10-93	2		50
Parathion, ethyl	ND	1770	1800	100		1900	110		40-140	5		50
Atrazine	ND	1770	1300	74		1400	80		40-140	7		50
Benzaldehyde	ND	1770	910	51		910	52		40-140	0		50
Caprolactam	ND	1770	1300	74		1400	80		15-130	7		50
2,3,4,6-Tetrachlorophenol	ND	1770	1100	62		1200	69		40-140	9		50

<i>Surrogate</i>	<i>MS % Recovery</i>	<i>Qualifier</i>	<i>MSD % Recovery</i>	<i>Qualifier</i>	<i>Acceptance Criteria</i>
2,4,6-Tribromophenol	65		68		10-136



Matrix Spike Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Lab Number: L1629804

Project Number: 1258.0001Y002

Report Date: 09/28/16

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG935435-4 WG935435-5 QC Sample: L1629736-03 Client ID: MS Sample

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>	
2-Fluorobiphenyl	59		63		30-120
2-Fluorophenol	59		62		25-120
4-Terphenyl-d14	51		51		18-120
Nitrobenzene-d5	61		65		23-120
Phenol-d6	63		67		10-120

PCBS

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-01
 Client ID: SB-CM-C
 Sample Location: STATEN ISLAND
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 09/26/16 03:46
 Analyst: JA
 Percent Solids: 89%

Date Collected: 09/20/16 13:25
 Date Received: 09/21/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 09/24/16 14:22
 Cleanup Method: EPA 3665A
 Cleanup Date: 09/25/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 09/25/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.5	2.88	1	A
Aroclor 1221	ND		ug/kg	36.5	3.36	1	A
Aroclor 1232	ND		ug/kg	36.5	4.27	1	A
Aroclor 1242	ND		ug/kg	36.5	4.46	1	A
Aroclor 1248	ND		ug/kg	36.5	3.08	1	A
Aroclor 1254	ND		ug/kg	36.5	3.00	1	A
Aroclor 1260	28.5	J	ug/kg	36.5	2.78	1	A
Aroclor 1262	ND		ug/kg	36.5	1.81	1	A
Aroclor 1268	ND		ug/kg	36.5	5.29	1	A
PCBs, Total	28.5	J	ug/kg	36.5	1.81	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 09/26/16 01:02
Analyst: JA

Extraction Method: EPA 3546
Extraction Date: 09/24/16 14:22
Cleanup Method: EPA 3665A
Cleanup Date: 09/25/16
Cleanup Method: EPA 3660B
Cleanup Date: 09/25/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG935471-1						
Aroclor 1016	ND		ug/kg	32.5	2.57	A
Aroclor 1221	ND		ug/kg	32.5	3.00	A
Aroclor 1232	ND		ug/kg	32.5	3.81	A
Aroclor 1242	ND		ug/kg	32.5	3.98	A
Aroclor 1248	ND		ug/kg	32.5	2.74	A
Aroclor 1254	ND		ug/kg	32.5	2.67	A
Aroclor 1260	ND		ug/kg	32.5	2.48	A
Aroclor 1262	ND		ug/kg	32.5	1.61	A
Aroclor 1268	ND		ug/kg	32.5	4.72	A
PCBs, Total	ND		ug/kg	32.5	1.61	A

Surrogate	%Recovery	Qualifier	Acceptance	Column
			Criteria	
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	74		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG935471-2 WG935471-3									
Aroclor 1016	118		117		40-140	1		50	A
Aroclor 1260	117		118		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		79		30-150	A
Decachlorobiphenyl	97		95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		77		30-150	B
Decachlorobiphenyl	85		82		30-150	B

PESTICIDES

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-01
 Client ID: SB-CM-C
 Sample Location: STATEN ISLAND
 Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 09/26/16 17:57
 Analyst: AM
 Percent Solids: 89%

Date Collected: 09/20/16 13:25
 Date Received: 09/21/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 09/24/16 08:58
 Cleanup Method: EPA 3620B
 Cleanup Date: 09/25/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.340	1	A
Lindane	ND		ug/kg	0.724	0.324	1	A
Alpha-BHC	ND		ug/kg	0.724	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.658	1	A
Heptachlor	ND		ug/kg	0.868	0.389	1	A
Aldrin	ND		ug/kg	1.74	0.612	1	A
Heptachlor epoxide	1.81	J	ug/kg	3.26	0.977	1	B
Endrin	ND		ug/kg	0.724	0.297	1	A
Endrin aldehyde	ND		ug/kg	2.17	0.760	1	A
Endrin ketone	ND		ug/kg	1.74	0.447	1	A
Dieldrin	1.91	P	ug/kg	1.08	0.543	1	A
4,4'-DDE	6.14		ug/kg	1.74	0.402	1	A
4,4'-DDD	2.02		ug/kg	1.74	0.620	1	A
4,4'-DDT	3.66		ug/kg	3.26	1.40	1	B
Endosulfan I	ND		ug/kg	1.74	0.410	1	A
Endosulfan II	ND		ug/kg	1.74	0.580	1	A
Endosulfan sulfate	ND		ug/kg	0.724	0.344	1	A
Methoxychlor	ND		ug/kg	3.26	1.01	1	A
Toxaphene	ND		ug/kg	32.6	9.12	1	A
cis-Chlordane	6.28		ug/kg	2.17	0.605	1	A
trans-Chlordane	8.38		ug/kg	2.17	0.573	1	A
Chlordane	43.4		ug/kg	14.1	5.75	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	51		30-150	B
Decachlorobiphenyl	49		30-150	B
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	45		30-150	A

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-01
 Client ID: SB-CM-C
 Sample Location: STATEN ISLAND
 Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 09/24/16 13:43
 Analyst: DM
 Percent Solids: 89%
 Methylation Date: 09/24/16 01:29

Date Collected: 09/20/16 13:25
 Date Received: 09/21/16
 Field Prep: Not Specified
 Extraction Method: EPA 8151A
 Extraction Date: 09/23/16 15:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	A
2,4,5-T	ND		ug/kg	184	5.70	1	A
2,4,5-TP (Silvex)	ND		ug/kg	184	4.89	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	111		30-150	A
DCAA	100		30-150	B

Project Name: CORAL ISLAND

Lab Number: L1629804

Project Number: 1258.0001Y002

Report Date: 09/28/16

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 09/24/16 15:19
 Analyst: DM

Extraction Method: EPA 8151A
 Extraction Date: 09/23/16 15:38

Methylation Date: 09/24/16 01:29

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01 Batch: WG935231-1						
2,4-D	ND		ug/kg	164	10.3	A
2,4,5-T	ND		ug/kg	164	5.08	A
2,4,5-TP (Silvex)	ND		ug/kg	164	4.36	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	139		30-150	A
DCAA	103		30-150	B

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 09/25/16 18:09
Analyst: AM

Extraction Method: EPA 3546
Extraction Date: 09/24/16 08:58
Cleanup Method: EPA 3620B
Cleanup Date: 09/25/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG935408-1						
Delta-BHC	ND		ug/kg	1.51	0.296	A
Lindane	ND		ug/kg	0.629	0.281	A
Alpha-BHC	ND		ug/kg	0.629	0.179	A
Beta-BHC	ND		ug/kg	1.51	0.573	A
Heptachlor	ND		ug/kg	0.755	0.338	A
Aldrin	ND		ug/kg	1.51	0.532	A
Heptachlor epoxide	ND		ug/kg	2.83	0.850	A
Endrin	ND		ug/kg	0.629	0.258	A
Endrin aldehyde	ND		ug/kg	1.89	0.661	A
Endrin ketone	ND		ug/kg	1.51	0.389	A
Dieldrin	ND		ug/kg	0.944	0.472	A
4,4'-DDE	ND		ug/kg	1.51	0.349	A
4,4'-DDD	ND		ug/kg	1.51	0.539	A
4,4'-DDT	ND		ug/kg	2.83	1.21	A
Endosulfan I	ND		ug/kg	1.51	0.357	A
Endosulfan II	ND		ug/kg	1.51	0.505	A
Endosulfan sulfate	ND		ug/kg	0.629	0.300	A
Methoxychlor	ND		ug/kg	2.83	0.881	A
Toxaphene	ND		ug/kg	28.3	7.93	A
cis-Chlordane	ND		ug/kg	1.89	0.526	A
trans-Chlordane	ND		ug/kg	1.89	0.498	A
Chlordane	ND		ug/kg	12.3	5.00	A

Project Name: CORAL ISLAND

Lab Number: L1629804

Project Number: 1258.0001Y002

Report Date: 09/28/16

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 09/25/16 18:09
 Analyst: AM

Extraction Method: EPA 3546
 Extraction Date: 09/24/16 08:58
 Cleanup Method: EPA 3620B
 Cleanup Date: 09/25/16

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG935408-1					

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	55		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	63		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01 Batch: WG935231-2 WG935231-3									
2,4-D	114		116		30-150	2		30	A
2,4,5-T	108		112		30-150	4		30	A
2,4,5-TP (Silvex)	96		100		30-150	4		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	135		136		30-150	A
DCAA	94		93		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG935408-2 WG935408-3									
Delta-BHC	84		81		30-150	4		30	A
Lindane	78		76		30-150	3		30	A
Alpha-BHC	80		78		30-150	3		30	A
Beta-BHC	87		83		30-150	5		30	A
Heptachlor	73		72		30-150	1		30	A
Aldrin	83		79		30-150	5		30	A
Heptachlor epoxide	82		78		30-150	5		30	A
Endrin	88		82		30-150	7		30	A
Endrin aldehyde	46		43		30-150	7		30	A
Endrin ketone	55		53		30-150	4		30	A
Dieldrin	90		84		30-150	7		30	A
4,4'-DDE	78		73		30-150	7		30	A
4,4'-DDD	90		85		30-150	6		30	A
4,4'-DDT	80		73		30-150	9		30	A
Endosulfan I	84		79		30-150	6		30	A
Endosulfan II	93		83		30-150	11		30	A
Endosulfan sulfate	48		42		30-150	13		30	A
Methoxychlor	77		74		30-150	4		30	A
cis-Chlordane	81		76		30-150	6		30	A
trans-Chlordane	87		83		30-150	5		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG935408-2 WG935408-3

<u>Surrogate</u>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	71		73		30-150	B
Decachlorobiphenyl	61		59		30-150	B
2,4,5,6-Tetrachloro-m-xylene	70		72		30-150	A
Decachlorobiphenyl	72		71		30-150	A

METALS

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-01
 Client ID: SB-CM-C
 Sample Location: STATEN ISLAND
 Matrix: Soil
 Percent Solids: 89%

Date Collected: 09/20/16 13:25
 Date Received: 09/21/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	3.0		mg/kg	0.44	0.14	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Barium, Total	48		mg/kg	0.44	0.12	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Beryllium, Total	0.18	J	mg/kg	0.22	0.05	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Cadmium, Total	0.14	J	mg/kg	0.44	0.03	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Chromium, Total	17		mg/kg	0.44	0.08	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Copper, Total	50		mg/kg	0.44	0.08	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Lead, Total	57		mg/kg	2.2	0.10	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Manganese, Total	160		mg/kg	0.44	0.11	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Mercury, Total	0.070	J	mg/kg	0.071	0.015	1	09/22/16 09:20	09/22/16 12:17	EPA 7471B	1,7471B	BV
Nickel, Total	37		mg/kg	1.1	0.18	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Selenium, Total	0.19	J	mg/kg	0.88	0.12	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Silver, Total	0.21	J	mg/kg	0.44	0.09	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Vanadium, Total	16		mg/kg	0.44	0.04	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
Zinc, Total	180		mg/kg	2.2	0.31	1	09/22/16 07:00	09/22/16 14:09	EPA 3050B	1,6010C	PS
General Chemistry - Mansfield Lab											
Chromium, Trivalent	17		mg/kg	0.90	0.90	1		09/26/16 19:50	NA	107,-	



Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG934566-1									
Mercury, Total	ND	mg/kg	0.08	0.02	1	09/22/16 09:20	09/22/16 12:07	1,7471B	BV

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG934573-1									
Arsenic, Total	ND	mg/kg	0.40	0.13	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Barium, Total	ND	mg/kg	0.40	0.11	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Beryllium, Total	ND	mg/kg	0.20	0.04	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Cadmium, Total	ND	mg/kg	0.40	0.03	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Chromium, Total	ND	mg/kg	0.40	0.07	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Copper, Total	ND	mg/kg	0.40	0.07	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Lead, Total	ND	mg/kg	2.0	0.09	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Manganese, Total	ND	mg/kg	0.40	0.10	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Nickel, Total	ND	mg/kg	1.0	0.16	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Selenium, Total	ND	mg/kg	0.80	0.11	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Silver, Total	ND	mg/kg	0.40	0.08	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Vanadium, Total	ND	mg/kg	0.40	0.04	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS
Zinc, Total	ND	mg/kg	2.0	0.28	1	09/22/16 07:00	09/22/16 13:46	1,6010C	PS

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG934566-2 SRM Lot Number: D091-540								
Mercury, Total	98		-		72-128	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG934573-2 SRM Lot Number: D091-540								
Arsenic, Total	96		-		80-121	-		
Barium, Total	91		-		84-117	-		
Beryllium, Total	94		-		83-117	-		
Cadmium, Total	98		-		83-117	-		
Chromium, Total	91		-		80-119	-		
Copper, Total	98		-		82-117	-		
Lead, Total	96		-		82-118	-		
Manganese, Total	91		-		82-118	-		
Nickel, Total	93		-		83-117	-		
Selenium, Total	96		-		79-121	-		
Silver, Total	93		-		75-124	-		
Vanadium, Total	96		-		78-122	-		
Zinc, Total	93		-		82-118	-		

Matrix Spike Analysis Batch Quality Control

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG934566-4 QC Sample: L1629689-01 Client ID: MS Sample												
Mercury, Total	0.02J	0.136	0.17	125	Q	-	-		80-120	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG934573-4 QC Sample: L1629933-01 Client ID: MS Sample												
Arsenic, Total	2.8	10.4	11	79		-	-		75-125	-		20
Barium, Total	150	172	220	40	Q	-	-		75-125	-		20
Beryllium, Total	ND	4.31	3.8	88		-	-		75-125	-		20
Cadmium, Total	0.11J	4.4	4.0	91		-	-		75-125	-		20
Chromium, Total	17.	17.2	33	93		-	-		75-125	-		20
Copper, Total	54.	21.6	56	9	Q	-	-		75-125	-		20
Lead, Total	160	44	140	0	Q	-	-		75-125	-		20
Manganese, Total	250	43.1	280	70	Q	-	-		75-125	-		20
Nickel, Total	12.	43.1	48	83		-	-		75-125	-		20
Selenium, Total	0.25J	10.4	8.7	84		-	-		75-125	-		20
Silver, Total	ND	25.9	23	89		-	-		75-125	-		20
Vanadium, Total	19.	43.1	62	100		-	-		75-125	-		20
Zinc, Total	97.	43.1	130	76		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG934566-3 QC Sample: L1629689-01 Client ID: DUP Sample						
Mercury, Total	0.02J	0.03J	mg/kg	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG934573-3 QC Sample: L1629933-01 Client ID: DUP Sample						
Arsenic, Total	2.8	3.3	mg/kg	16		20
Barium, Total	150	94	mg/kg	46	Q	20
Beryllium, Total	ND	0.10J	mg/kg	NC		20
Cadmium, Total	0.11J	0.10J	mg/kg	NC		20
Chromium, Total	17.	17	mg/kg	0		20
Copper, Total	54.	49	mg/kg	10		20
Lead, Total	160	190	mg/kg	17		20
Manganese, Total	250	200	mg/kg	22	Q	20
Nickel, Total	12.	12	mg/kg	0		20
Selenium, Total	0.25J	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Vanadium, Total	19.	20	mg/kg	5		20
Zinc, Total	97.	89	mg/kg	9		20

INORGANICS & MISCELLANEOUS

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-01
Client ID: SB-CM-C
Sample Location: STATEN ISLAND
Matrix: Soil

Date Collected: 09/20/16 13:25
Date Received: 09/21/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.8		%	0.100	NA	1	-	09/22/16 15:07	121,2540G	RI
Cyanide, Total	0.44	J	mg/kg	1.0	0.17	1	09/22/16 10:50	09/22/16 15:59	1,9010C/9012B	JO
Chromium, Hexavalent	ND		mg/kg	0.90	0.18	1	09/25/16 16:00	09/26/16 19:50	1,7196A	WR



Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-02

Client ID: SB-CM3 (2-3)

Sample Location: STATEN ISLAND

Matrix: Soil

Date Collected: 09/20/16 12:20

Date Received: 09/21/16

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.0		%	0.100	NA	1	-	09/22/16 15:07	121,2540G	RI



Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

SAMPLE RESULTS

Lab ID: L1629804-03

Client ID: SB-CM1 (0-1)

Sample Location: STATEN ISLAND

Matrix: Soil

Date Collected: 09/20/16 12:15

Date Received: 09/21/16

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.4		%	0.100	NA	1	-	09/22/16 15:07	121,2540G	RI



Project Name: CORAL ISLAND

Lab Number: L1629804

Project Number: 1258.0001Y002

Report Date: 09/28/16

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG934722-1									
Cyanide, Total	ND	mg/kg	0.95	0.16	1	09/22/16 10:50	09/22/16 15:56	1,9010C/9012B	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG935577-1									
Chromium, Hexavalent	ND	mg/kg	0.80	0.16	1	09/25/16 16:00	09/26/16 19:38	1,7196A	WR

Lab Control Sample Analysis

Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG934722-2 WG934722-3								
Cyanide, Total	89		82		80-120	8		35
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG935577-2								
Chromium, Hexavalent	96		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG934722-4 WG934722-5 QC Sample: L1629933-03 Client ID: MS Sample												
Cyanide, Total	0.30J	11	11	99		8.6	80		65-135	24		35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG935577-4 QC Sample: L1629804-01 Client ID: SB-CM-C												
Chromium, Hexavalent	ND	944	980	100		-	-		75-125	-		20

Lab Duplicate Analysis Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y002

Lab Number: L1629804

Report Date: 09/28/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG934747-2 QC Sample: L1629829-02 Client ID: DUP Sample						
Solids, Total	78.9	78.1	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG935577-6 QC Sample: L1629804-01 Client ID: SB-CM-C						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 22-SEP-16 02:24

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629804-01A	Glass 500ml/16oz unpreserved	A	N/A	2.6	Y	Absent	NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TS(7),NYTCL-8081(14),NYTCL-8082(14)
L1629804-01B	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),V-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1629804-01C	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	HEXCR-7196(30)
L1629804-02A	5 gram Encore Sampler	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(2)
L1629804-02B	5 gram Encore Sampler	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(2)
L1629804-02C	5 gram Encore Sampler	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(2)
L1629804-02D	Plastic 2oz unpreserved for TS	A	N/A	2.6	Y	Absent	TS(7)
L1629804-02X	Vial MeOH preserved split	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(14)
L1629804-02Y	Vial Water preserved split	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(14)
L1629804-02Z	Vial Water preserved split	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(14)
L1629804-03A	5 gram Encore Sampler	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(2)
L1629804-03B	5 gram Encore Sampler	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(2)
L1629804-03C	5 gram Encore Sampler	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(2)
L1629804-03D	Plastic 2oz unpreserved for TS	A	N/A	2.6	Y	Absent	TS(7)
L1629804-03X	Vial MeOH preserved split	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(14)
L1629804-03Y	Vial Water preserved split	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(14)
L1629804-03Z	Vial Water preserved split	A	N/A	2.6	Y	Absent	NYTCL-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: DU Report with 'J' Qualifiers



Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

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Data Qualifiers

- reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
 - D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
 - E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
 - G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
 - H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
 - I** - The lower value for the two columns has been reported due to obvious interference.
 - M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
 - NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
 - P** - The RPD between the results for the two columns exceeds the method-specified criteria.
 - Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
 - R** - Analytical results are from sample re-analysis.
 - RE** - Analytical results are from sample re-extraction.
 - S** - Analytical results are from modified screening analysis.
 - J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
 - ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: CORAL ISLAND
Project Number: 1258.0001Y002

Lab Number: L1629804
Report Date: 09/28/16

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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



Certification Information

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

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: NPW and SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

EPA 9012B: NPW: Total Cyanide

EPA 9050A: NPW: Specific Conductance

SM3500: NPW: Ferrous Iron

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

SM 2540D: TSS

EPA 3005A NPW

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: **EPA 3050B**

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

Westborough Facility:

Drinking Water

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

Mansfield Facility:

Drinking Water

EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

 ALPHA ANALYTICAL	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page	Date Rec'd in Lab		ALPHA Job #
				1	of	1	9/22/16
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information Project Name: CORAL ISLAND Project Location: STATEN ISLAND Project # 1258.0001Y002		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #	
Client Information Client: ROUX ASSOCIATES Address: 209 SHAPIER ST ISLANDIA, NY 11749 Phone: 631.630.2425 Fax: - Email: MROUX@ROUXINC.COM		(Use Project name as Project #) <input checked="" type="checkbox"/> Project Manager: MICHAEL ROUX ALPHAQuote #:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input checked="" type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:	
These samples have been previously analyzed by Alpha <input type="checkbox"/>		Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)	
Other project specific requirements/comments:		Please specify Metals or TAL.		TLC, VOC 8260 SVOC 8270 TCL PEST 8081 HERB 8151 HEXCR TCL PCBs 8082 375 Metals + Selenium + Vanadium		Total Bottles	
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date Time	Sample Matrix	Sampler's Initials	Sample Specific Comments		Total Bottles
21804	-01	SB-CM-C	SO	MR			3
	-02	SB-CM3(2-3)	SO	MR	3/1		4
	-03	SB-CM1(0-1)	SO	MR	3/1		4
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type: E/P G Preservative: - -	
Relinquished By: <i>[Signature]</i>		Date/Time: 9/21/16 840		Received By: <i>[Signature]</i>		Date/Time: 9-21-16 840	
Relinquished By: <i>[Signature]</i>		Date/Time: 9-21-16 1800		Received By: <i>[Signature]</i>		Date/Time: 9-21-16 1800	
Relinquished By: <i>[Signature]</i>		Date/Time: 9-22-16 0810		Received By: <i>[Signature]</i>		Date/Time: 9/22/16 0810	

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