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January 25, 2019

Donald Middleton
Middleton Environmental Inc.
54 George Street
Babylon, New York 11702

RE: Phase II Environmental Site Assessment
4001-4011 4th Avenue, Brooklyn, New York

Dear Mr. Middleton:

Please find the attached Phase II Environmental Site Assessment Report for the property located at 4001-4011 4th Avenue, Brooklyn New York.

Thank you for the opportunity. Please call with any questions or comments.

Very truly yours,
Castleton Environmental Geologic Services, DPC

Frank P. Castellano, PG
Principal

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Phase II Environmental Site Assessment
4001-4011 4th Avenue
Brooklyn, New York

Prepared for: Donald Middleton
Middleton Environmental Inc.
54 George Street
Babylon, New York 11702

PHASE II ENVIRONMENTAL SITE ASSESSMENT
4001-4011 4TH AVENUE
BROOKLYN, NEW YORK
JANUARY 2019
CASTLETON PROJECT NUMBER: MEIN1901

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1.0 INTRODUCTION

Castleton Environmental Geologic Services DPC (Castleton) has prepared the following Phase II Environmental Site Assessment (ESA) report to document the work performed at 4001-4011 4th Avenue, Brooklyn, New York (the site). The investigation was performed based upon review of the Phase I ESA by Merritt Environmental Consulting Corp. (MECC) dated January 7, 2019.

The objectives of this work were to determine if the sites historic and current usage as a gasoline station has impacted the subsurface. The objective was met through the performance of a geophysical survey and the collection and laboratory analysis of soil samples.

2.0 SITE BACKGROUND

The site is located at 4001-4011 4th Avenue, Brooklyn, New York (Figure 1). The site is located on a plot size approximately 10,017 square feet. The site is currently used as a gas station with a convenience store and parking. The building was constructed in 1965.

Castleton reviewed the Phase I ESA prepared by MECC dated January 7, 2019. The MECC Phase I ESA identified that site has been a gasoline since its first developed use. According to the historical Sanborn Maps, a gasoline tank is present at the corner of 4th Avenue and 10th Street during the years 1926-1951.

MECC recommended further evaluation to determine if any documentation is available or if additional investigation (Phase II) is warranted. Subsequent documentation regarding the gasoline tank shown on the 1926-1951 Sanborn Maps was not provided.

3.0 PHASE II ESA FIELD INVESTIGATION

The objective of this Phase II ESA was to assess subsurface quality in relation to historic and current on-site filling station operations at the site.

The following scope of work was completed to assess subsurface conditions:

Task	Objective
Geophysical Survey	Determine if any subsurface anomalies indicative of underground storage tanks (USTs) and to clear underground utilities
Soil Sampling	Characterize site soil quality for impacts related to filling station operations

On-site work was completed on January 15, 2019. Sample collection locations are depicted on Figure 2.

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3.1 Geophysical Survey

A geophysical survey was performed to identify evidence of subsurface anomalies and to mark on-site utilities in proposed subsurface work areas. The survey was performed using a variety of remote sensing equipment/methods including a magnetometer to identify ferrous metallic objects, ground penetrating radar (GPR) to identify changes in soil density and a pipe locating device to trace piping runs. The geophysical survey was performed by Delta Geophysics, Inc. of Catasauqua, Pennsylvania.

As described in the PBS records included in the Phase I ESA, 4 4,000-gallon USTs are currently in use at the site and were identified during the geophysical survey to clear boring locations.

Nine suspect (USTs) were identified that are currently not in use. Four suspect UST anomalies are centralized under the canopy between the active dispensers. Five suspect UST anomalies are located at the western portion of the site.

A metal anomaly not indicative of a UST was identified at northern portion of the site. A suspect UST was not identified at the northern portion of the site where the gas tank was shown on the historic Sanborn Maps.

All on site utilities were cleared before intrusive activities.

3.2 Soil Investigation

Soil borings were advanced to assess soil conditions at the site. Boring locations were selected based on potential areas identified during the geophysical survey. Soil borings were advanced with direct push technology (Geoprobe®) by Coastal Environmental Solutions, Inc. of Medford, New York.

Six soil borings were advanced. Soil samples were collected continuously from each boring location, logged and field screened with a PID for the presence of VOCs. Elevated field sensory (PID), olfactory or visible evidence of impacts to soil were observed in each of the borings ranging from 22.9 ppm in SB01 to 5,285 ppm in SB04. Soil was observed to consist of silty fine and medium sand. Groundwater was not encountered during this investigation. Soil boring logs are provided as Appendix A.

The following table describes the boring location, area of concern associated with each boring, and sample collected for laboratory analysis.

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Boring	Area of Concern	Highest Soil PID Readings (ppm)	Boring Depth (feet)	Soil Analytical Sample Interval(s)
SB01	Area of former UST (Sanborn Map) and metal anomaly	22.9	25	18-20 feet
SB02	Area of former UST (Sanborn Map) and metal anomaly	425.9	20	4-6 feet
SB03	Area of former UST (Sanborn Map) and metal anomaly	2,195	22	12-14 feet
SB04	West of the five suspect USTs	5,285	30	16-18 feet
SB05	West of the five suspect USTs	3,963	20	10-15 feet
SB06	South of the five suspect USTs and west of the currently in use USTs	4,955	24.5	18-20 feet

Soil retained for laboratory analysis was placed into laboratory supplied glassware and submitted under chain of custody to York Analytical Laboratories of Stratford, Connecticut, a New York State Department of Health (NYSDOH) ELAP certified laboratory. Soil samples were analyzed for:

- CP-51 VOCs via EPA Method 8260, and
- CP-51 SVOCs via EPA Method 8270

4.0 ANALYTICAL RESULTS AND DATA DISCUSSION

Soil analytical results were compared to NYSDEC CP-51 Soil Cleanup Levels (SCLs) for petroleum impacted soil and NYSDEC Part 375 Soil Cleanup Objectives (SCOs).

Soil analytical results reported concentrations SVOCs as non-detect or below SCLs and SCOs in the six soil sample analyzed.

VOCs above SCLs were reported in five of the six soil samples. VOCs above Commercial SCOs were reported in two of the six samples analyzed.

Analytical results and laboratory report are presented in Appendix B.

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5.0 CONCLUSIONS AND RECOMMENDATIONS

Castleton has prepared the following Phase II ESA report to document the work performed at 4001-4011 4th Avenue, Brooklyn, New York. The investigation was performed based upon review of the Phase I ESA by MECC dated January 7, 2019.

The objectives of this work were to determine if the sites historic and current usage as a gasoline station has impacted the subsurface. The objective was met through the performance of a geophysical survey and the collection and laboratory analysis of soil samples.

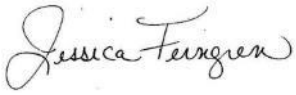
The geophysical survey identified the presence of the 4 in use USTs, nine suspect USTs that are currently not in use, and one metal anomaly that is not indicative of a UST.

Six soil boring were advanced, and six soil samples collected for laboratory analysis. Analytical results reported concentrations of VOCs above applicable standards in five of the six soil samples analyzed.

Castleton recommends the following:

- Notification of these findings be made to NYSDEC
- The suspect USTs be assessed and, if are present, properly removed as per NYSDEC protocols
- Petroleum impacts to soil be delineated and remediated under the NYSDEC Spills Program

6.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS



Frank P. Castellano, PG
Principal

Jessica Ferngren, PG
Sr. Project Manager

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FIGURES

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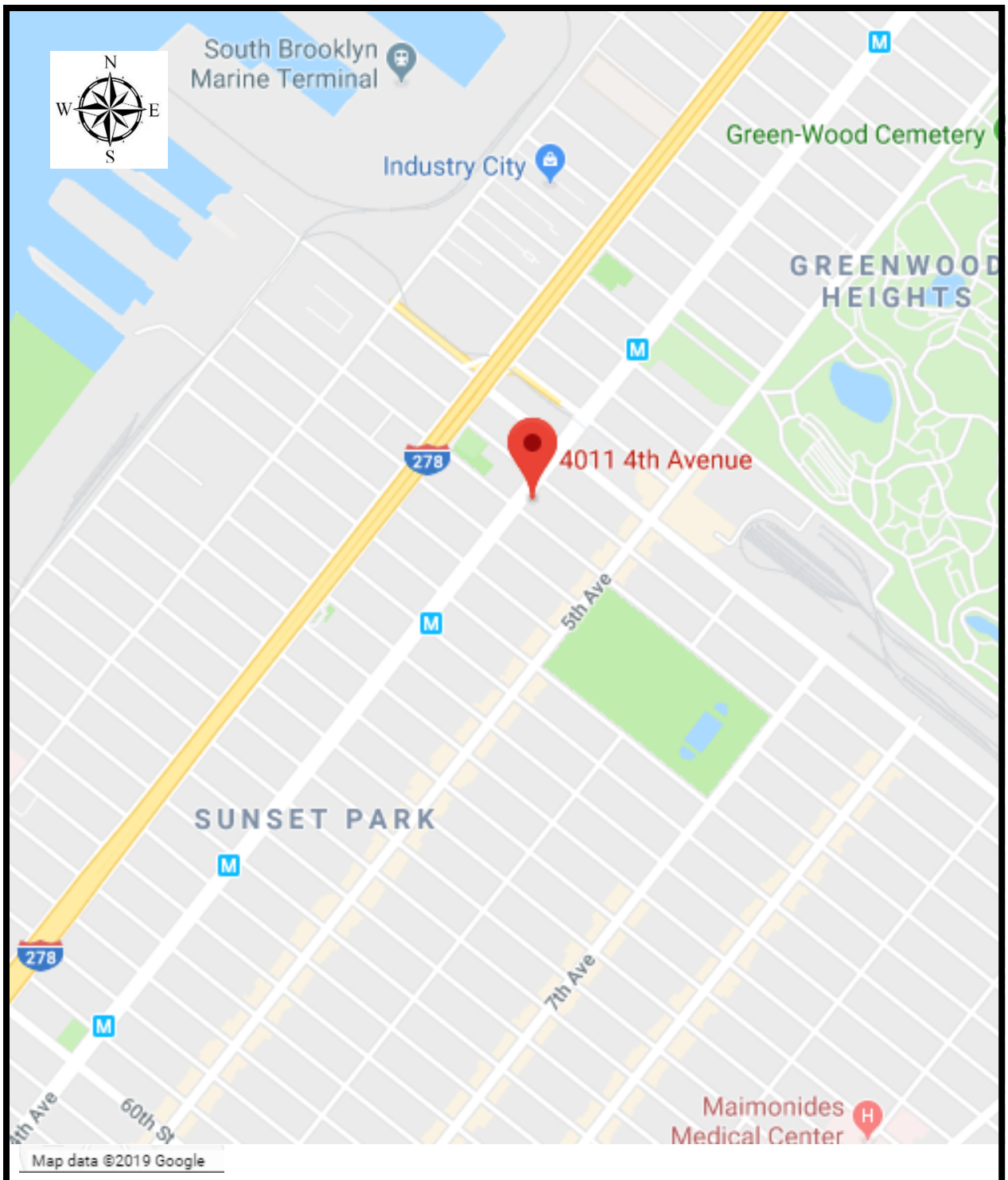

Figure 1 – Vicinity Map

4001-4011 4th Avenue

Brooklyn, New York

+

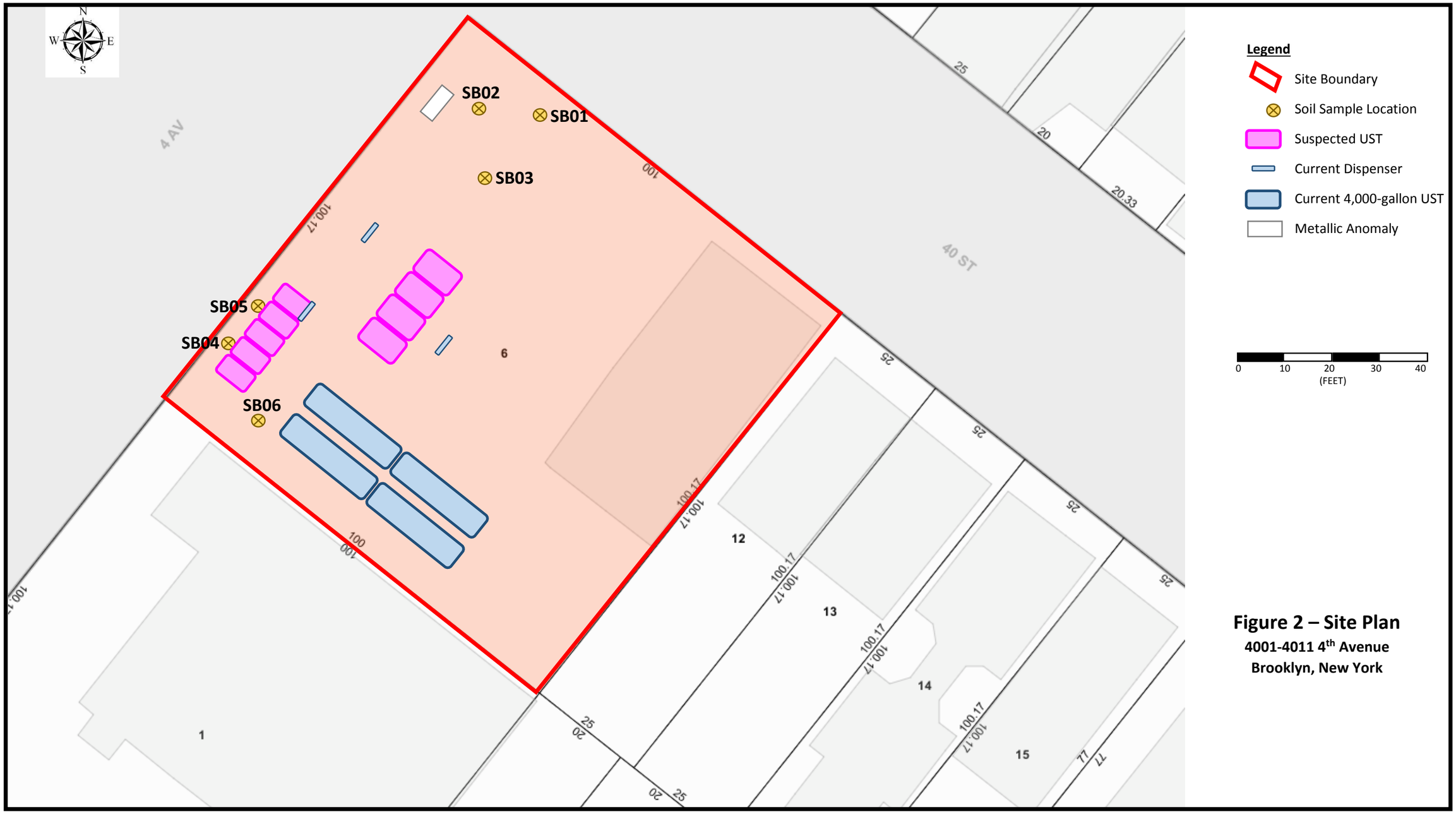

Figure 2 – Site Plan

4001-4011 4th Avenue

Brooklyn, New York

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APPENDIX A

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Locations are approximate

Boring # **SB01**	MW#	Page 1	of 1
PROJECT: 4001-4011 4th Avenue			
JOB # MEIN1901			
LOGGED BY:	CL	PRJ. MNGR.:	JF
DRILLING CONTRACTOR: Coastal Environmental Solutions			
DRILL METHOD: GeoProbe 6610DT			
DRILLER: Tom			
Borehole diameter/drill bit type: **Macrocore (2" diameter)**		total depth	**25 ft**
		elevation	**NA**
HAMMER WT: NA		DROP: NA	
START TIME: 9:25		DATE: 1/15/2019	
COMPLETION TIME: 9:50		DATE: 1/15/2019	
BACKFILL TIME: 12:30		DATE: 1/15/2019	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: NA / Screen depth: NA
0-5 ft	5	4	Asphalt Brown silty fine SAND, trace fine gravel	PID = 0.0 ppm.	
5-10 ft	5	3	Brown silty fine SAND, trace fine gravel	PID = 8.2 ppm.	
10-15 ft	5	3.5	Brown silty fine SAND, trace fine gravel	PID = 0.8 ppm.	
15-20 ft	5	1.5	Brown silty fine SAND, trace fine gravel Perched water @ 20-21 feet	PID = 22.9 ppm.	
20-25 ft	5	3	Brown clayey SAND, trace fine gravel	PID = 0.0 ppm.	

Locations are approximate

Boring # **SB02**	MW#	Page 1	of 1
PROJECT: 4001-4011 4th Avenue			
JOB # MEIN1901			
LOGGED BY:	CL	PRJ. MNGR.:	JF
DRILLING CONTRACTOR: Coastal Environmental Solutions			
DRILL METHOD: GeoProbe 6610DT			
DRILLER: Tom			
Borehole diameter/drill bit type: **Macrocore (2" diameter)**		total depth	**20 ft**
		elevation	**NA**
HAMMER WT: NA		DROP: NA	
START TIME: 9:50		DATE: 1/15/2019	
COMPLETION TIME: 10:10		DATE: 1/15/2019	
BACKFILL TIME: 12:30		DATE: 1/15/2019	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: NA / Screen depth: NA
0-5 ft	5	3	Asphalt Brown silty fine SAND, trace fine gravel, brick - Petroleum odor	PID = 23.4 ppm.	
5-10 ft	5	2.5	Brown silty fine SAND, trace fine gravel, brick	PID = 423.4 ppm.	
10-15 ft	5	2	Brown silty fine SAND, trace fine gravel, brick	PID = 0.0 ppm.	
15-20 ft	5	3	Brown silty fine SAND, trace fine gravel, brick	PID = 0.0 ppm.	

Locations are approximate

Boring # **SB03**	MW#	Page 1	of 1
PROJECT: 4001-4011 4th Avenue			
JOB # MEIN1901			
LOGGED BY:	CL	PRJ. MNGR.:	JF
DRILLING CONTRACTOR: Coastal Environmental Solutions			
DRILL METHOD: GeoProbe 6610DT			
DRILLER: Tom			
Borehole diameter/drill bit type: **Macrocore (2" diameter)**		total depth	**22 ft**
		elevation	**NA**
HAMMER WT: NA		DROP: NA	
START TIME: 10:10		DATE: 1/15/2019	
COMPLETION TIME: 11:00		DATE: 1/15/2019	
BACKFILL TIME: 12:30		DATE: 1/15/2019	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: NA / Screen depth: NA
0-5 ft	5	0.5	Asphalt Black silty fine SAND, trace fine gravel, brick - Petroleum odor	PID = 23.4 ppm.	
5-10 ft	5	3.5	Black silty fine SAND, trace fine gravel, brick - Petroleum odor Brown silty fine SAND, trace fine gravel, brick - Petroleum odor	PID = 423.4 ppm.	
10-15 ft	5	4	Brown silty fine SAND, trace fine gravel, brick - Petroleum odor	PID = 0.0 ppm.	
15-20 ft	5	2.5	Brown silty fine SAND, trace fine gravel, brick - Petroleum odor	PID = 0.0 ppm.	
20-22 ft	2	0.5	Brown silty fine SAND, trace fine gravel, brick - Petroleum odor Refusal @ 22'	PID = 0.0 ppm.	

Locations are approximate

Boring # **SB04**	MW#	Page 1	of 1
PROJECT: 4001-4011 4th Avenue			
JOB # MEIN1901			
LOGGED BY:	CL	PRJ. MNGR.:	JF
DRILLING CONTRACTOR: Coastal Environmental Solutions			
DRILL METHOD: GeoProbe 6610DT			
DRILLER: Tom			
Borehole diameter/drill bit type: **Macrocore (2" diameter)**		total depth	**30 ft**
		elevation	**NA**
HAMMER WT: NA		DROP: NA	
START TIME: 11:00		DATE: 1/15/2019	
COMPLETION TIME: 11:40		DATE: 1/15/2019	
BACKFILL TIME: 12:30		DATE: 1/15/2019	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes
0-5 ft	5	0.5	Asphalt Dark brown silty fine SAND, brick - Petroleum odor	PID = 126.7 ppm.
5-10 ft	5	2	Brown silty fine SAND, brick - Petroleum odor	PID = 148.9 ppm.
10-15 ft	5	2	Brown silty fine SAND, brick - Petroleum odor	PID = 3,414 ppm.
15-20 ft	5	2.5	Brown silty fine SAND, brick - Petroleum odor	PID = 5,285 ppm.
20-25 ft	5	3	Brown silty fine SAND, brick - Petroleum odor	PID = 4,675 ppm.
25-30 ft	5	2.5	Brown silty fine SAND, brick - Petroleum odor	PID = 368.4 ppm.

Casing depth: NA
Screen depth: NA

Locations are approximate

Boring # **SB05**	MW#	Page 1	of 1
PROJECT: 4001-4011 4th Avenue			
JOB # MEIN1901			
LOGGED BY:	CL	PRJ. MNGR.:	JF
DRILLING CONTRACTOR: Coastal Environmental Solutions			
DRILL METHOD: GeoProbe 6610DT			
DRILLER: Tom			
Borehole diameter/drill bit type: **Macrocore (2" diameter)**		total depth	**20 ft**
		elevation	**NA**
HAMMER WT: NA		DROP: NA	
START TIME: 11:40		DATE: 1/15/2019	
COMPLETION TIME: 12:00		DATE: 1/15/2019	
BACKFILL TIME: 12:30		DATE: 1/15/2019	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: NA / Screen depth: NA
0-5 ft	5	1	Concrete Brown silty fine SAND, trace fine gravel, brick - Petroleum odor	PID = 2,634 ppm.	
5-10 ft	5	2	Brown silty fine SAND, trace fine gravel, brick - Petroleum odor	PID = 2,391 ppm.	
10-15 ft	5	0.5	Brown silty fine SAND, trace fine gravel, brick - Petroleum odor	PID = 3,963 ppm.	
15-20 ft	5	0.5	Brown silty fine SAND, trace fine gravel, brick - Petroleum odor	PID = 1,516 ppm.	

Locations are approximate

Boring # **SB06**	MW#	Page 1	of 1
PROJECT: 4001-4011 4th Avenue			
JOB # MEIN1901			
LOGGED BY:	CL	PRJ. MNGR.:	JF
DRILLING CONTRACTOR: Coastal Environmental Solutions			
DRILL METHOD: GeoProbe 6610DT			
DRILLER: Tom			
Borehole diameter/drill bit type: **Macrocore (2" diameter)**		total depth	**24.5 ft**
		elevation	**NA**
HAMMER WT: NA		DROP: NA	
START TIME: 12:00		DATE: 1/15/2019	
COMPLETION TIME: 12:20		DATE: 1/15/2019	
BACKFILL TIME: 12:30		DATE: 1/15/2019	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: NA / Screen depth: NA
0-5 ft	5	0.5	Concrete Tan silty fine SAND, trace fine gravel, brick	PID = 53.7 ppm.	
5-10 ft	5	0.5	Brown silty fine SAND, trace fine gravel	PID = 10.7 ppm.	
10-15 ft	5	1.5	Brown silty fine SAND, trace fine gravel	PID = 248.6 ppm.	
15-20 ft	5	2	Brown silty fine SAND, trace fine gravel	PID = 4,955 ppm.	
20-24.5 ft	4.5	0.5	Brown silty fine SAND, trace fine gravel	PID = 4,815 ppm.	

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APPENDIX B

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Sample ID York ID Sampling Date Client Matrix		NYSDEC CP/SCO Table 2-Gasoline	NYSDEC CP/SCO Table 3-Fuel Oil	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives - Restricted Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	SB01 19A0642-01 1/15/2019 9:50:00 AM Soil		SB02 19A0642-02 1/15/2019 10:10:00 AM Soil		SB03 19A0642-03 1/15/2019 11:00:00 AM Soil		SB04 19A0642-04 1/15/2019 11:40:00 AM Soil		SB05 19A0642-05 1/15/2019 12:00:00 PM Soil		SB06 19A0642-06 1/15/2019 12:20:00 PM Soil	
Compound	**CAS Number**						Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Volatile Organics, CP-51 (formerly STARS) List		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor							1		100		200		10000		1000		5000	
1,2,4-Trimethylbenzene	95-63-6	3.6	3.6	3.6	52	190	0.00650		**4.400**	D	**22**	D	**1,200**	D	**57**	D	**360**	D
1,3,5-Trimethylbenzene	108-67-8	8.4	8.4	8.4	52	190	0.00290	J	0.170		**9.100**	D	**830**	D	**19**	D	**57**	D
Benzene	71-43-2	0.06	0.06	0.06	4.8	44	0.00680		0.00370	J	**1.200**	D	**20**	D	**2.400**	D	**3.600**	D
Ethyl Benzene	100-41-4	1	1	1	41	390	0.00310	J	0.100		**10**	D	**1,100**	D	**21**	D	**77**	D
Isopropylbenzene	98-82-8	2.3	2.3	~	~	~	0.00220	U	0.0780		**3**	D	**48**	D	**3.700**	D	**9.600**	D
Methyl tert-butyl ether (MTBE)	1634-04-4	0.93	~	0.93	100	500	0.0560		0.00350	J	0.0460		0.270	U	0.220	U	0.180	U
Naphthalene	91-20-3	12	12	12	100	500	0.00310	J	0.190		0.140		**88**	BD	6.300	BD	**23**	BD
n-Butylbenzene	104-51-8	12	12	12	100	500	0.00220	U	0.0930		0.200		**31**	D	2.700	D	6.800	D
n-Propylbenzene	103-65-1	3.9	3.9	3.9	100	500	0.00220	U	0.130		**4.800**	D	**170**	D	**11**	D	**34**	D
o-Xylene	95-47-6	~	~	~	~	~	0.00220	U	0.00250	U	3.700	D	650	D	32	D	120	D
p- & m- Xylenes	179601-23-1	~	~	~	~	~	0.00540	J	0.0130		22	D	1,600	D	82	D	350	DE
p-Isopropyltoluene	99-87-6	10	10	~	~	~	0.00220	U	0.170		2.900	D	**15**	D	1.400	D	2.300	D
sec-Butylbenzene	135-98-8	11	11	11	100	500	0.00220	U	0.110		2.100	D	**21**	D	1.600	D	3.900	D
tert-Butylbenzene	98-06-6	5.9	5.9	5.9	100	500	0.00220	U	0.0340		0.120		0.270	U	0.220	U	0.180	U
Toluene	108-88-3	0.7	0.7	0.7	100	500	0.00220	U	0.00360	J	**8.300**	D	**1,500**	D	**64**	D	**370**	D
Xylenes, Total	1330-20-7	0.26	0.26	0.26	100	500	0.00650	U	0.0130	J	**26**	D	**2,300**	D	**110**	D	**480**	DE
Semi-Volatiles, CP-51 (formerly STARS) List		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor							2		2		2		2		2		2	
Acenaphthene	83-32-9	~	20	20	100	500	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Acenaphthylene	208-96-8	~	100	100	100	500	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Anthracene	120-12-7	~	100	100	100	500	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Benzo(a)anthracene	56-55-3	~	1	1	1	5.6	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Benzo(a)pyrene	50-32-8	~	1	1	1	1	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Benzo(b)fluoranthene	205-99-2	~	1	1	1	5.6	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Benzo(g,h,i)perylene	191-24-2	~	100	100	100	500	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Benzo(k)fluoranthene	207-08-9	~	0.8	0.8	3.9	56	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Chrysene	218-01-9	~	1	1	3.9	56	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Dibenzo(a,h)anthracene	53-70-3	~	0.33	0.33	0.33	0.56	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Fluoranthene	206-44-0	~	100	100	100	500	0.0450	U	0.0870	JD	0.0560	JD	0.0540	U	0.0450	U	0.0460	U
Fluorene	86-73-7	~	30	30	100	500	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Indeno(1,2,3-cd)pyrene	193-39-5	~	0.5	0.5	0.5	5.6	0.0450	U	0.0450	U	0.0440	U	0.0540	U	0.0450	U	0.0460	U
Naphthalene	91-20-3	12	12	12	100	500	0.0450	U	0.180	D	1.600	D	1.500	D	2.900	DE	0.120	D
Phenanthrene	85-01-8	~	100	100	100	500	0.0450	U	0.100	D	0.0740	JD	0.0540	U	0.0450	U	0.0460	U
Pyrene	129-00-0	~	100	100	100	500	0.0450	U	0.0880	JD	0.0470	JD	0.0540	U	0.0450	U	0.0460	U
Total Solids							%		%		%		%		%		%	
Dilution Factor							1		1		1		1		1		1	
% Solids	solids	~	~	~	~	~	91		93.100		93.200		77.100		91.200		90.300	

NOTES:
Any Regulatory Exceedences are color coded by Regulation

Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
B=analyte found in the analysis batch blank
E=result is estimated and cannot be accurately reported due to levels encountered or interferences
P=this flag is used for pesticide and PCB (Aroclor) target compounds when there is a % difference for detected concentrations that exceed method dictated limits between the two GC columns used for analysis
NT=this indicates the analyte was not a target for this sample
~=this indicates that no regulatory limit has been established for this analyte

Technical Report

prepared for:

Castleton Environmental
54 George Street
Babylon NY, 11702
Attention: Jessica Ferngren

Report Date: 01/23/2019
Client Project ID: MEIN1901
York Project (SDG) No.: 19A0642

Report Date: 01/23/2019
Client Project ID: MEIN1901
York Project (SDG) No.: 19A0642

Castleton Environmental
54 George Street
Babylon NY, 11702
Attention: Jessica Ferngren

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on January 16, 2019 with a temperature of 1.5 C. The project was identified as your project: **MEIN1901**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
19A0642-01	SB01	Soil	01/15/2019	01/16/2019
19A0642-02	SB02	Soil	01/15/2019	01/16/2019
19A0642-03	SB03	Soil	01/15/2019	01/16/2019
19A0642-04	SB04	Soil	01/15/2019	01/16/2019
19A0642-05	SB05	Soil	01/15/2019	01/16/2019
19A0642-06	SB06	Soil	01/15/2019	01/16/2019

General Notes for York Project (SDG) No.: 19A0642

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: 

Date: 01/23/2019

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: **SB01** **York Sample ID:** **19A0642-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 9:50 am	01/16/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	**1,2,4-Trimethylbenzene**	**6.5**		ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
108-67-8	**1,3,5-Trimethylbenzene**	**2.9**	J	ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
71-43-2	**Benzene**	**6.8**		ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
100-41-4	**Ethyl Benzene**	**3.1**	J	ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
1634-04-4	**Methyl tert-butyl ether (MTBE)**	**56**		ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
91-20-3	**Naphthalene**	**3.1**	J	ug/kg dry	2.2	8.6	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: NELAC-NY10854,NELAC-NY12058,PADEP,NJI			
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
95-47-6	o-Xylene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
179601-23-1	**p- & m- Xylenes**	**5.4**	J	ug/kg dry	4.3	8.6	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
108-88-3	Toluene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
1330-20-7	Xylenes, Total	ND		ug/kg dry	6.5	13	1	EPA 8260C	01/18/2019 08:45	01/18/2019 19:28	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ			

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*102 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*102 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*109 %*	*76-130*

Sample Information

Client Sample ID: **SB01** **York Sample ID:** **19A0642-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 9:50 am	01/16/2019

Semi-Volatiles, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
208-96-8	Acenaphthylene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	Phenanthrene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/kg dry	45	91	2	EPA 8270D	01/22/2019 07:32	01/22/2019 15:29	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*54.7 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*71.8 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*66.4 %*	*24-116*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: SB01 **York Sample ID:** 19A0642-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 9:50 am	01/16/2019

Total Solids **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	91.0		%	0.100	1	SM 2540G Certifications: CTDOH	01/22/2019 11:58	01/22/2019 16:28	MAC

Sample Information

Client Sample ID: SB02 **York Sample ID:** 19A0642-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 10:10 am	01/16/2019

Volatile Organics, CP-51 (formerly STARS) List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	1,2,4-Trimethylbenzene	4400		ug/kg dry	250	500	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/21/2019 11:58	LLJ
108-67-8	1,3,5-Trimethylbenzene	170	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ
71-43-2	Benzene	3.7	J	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ
100-41-4	Ethyl Benzene	100		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ
98-82-8	Isopropylbenzene	78	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	3.5	J	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ
91-20-3	Naphthalene	190	IS-HI	ug/kg dry	2.5	10	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,PADEP,NJI	01/18/2019 08:45	01/18/2019 19:56	LLJ
104-51-8	n-Butylbenzene	93	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ
103-65-1	n-Propylbenzene	130	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ
95-47-6	o-Xylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ
179601-23-1	p- & m- Xylenes	13		ug/kg dry	5.0	10	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ
99-87-6	p-Isopropyltoluene	170	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ
135-98-8	sec-Butylbenzene	110	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ
98-06-6	tert-Butylbenzene	34	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/18/2019 08:45	01/18/2019 19:56	LLJ

Sample Information

Client Sample ID: **SB02** **York Sample ID:** **19A0642-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 10:10 am	01/16/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	**Toluene**	**3.6**	J	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	01/18/2019 08:45	01/18/2019 19:56 CTDOH,NELAC-NY10854,NELAC-NY12058,PA	LLJ
1330-20-7	**Xylenes, Total**	**13**	J	ug/kg dry	7.5	15	1	EPA 8260C Certifications:	01/18/2019 08:45	01/18/2019 19:56 CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	LLJ

	Surrogate Recoveries	Result		Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*122 %*		*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*90.5 %*		*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*246 %*	IS-HI, S-03	*76-130*

Semi-Volatiles, CP-51 (formerly STARS) List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
208-96-8	Acenaphthylene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
120-12-7	Anthracene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
218-01-9	Chrysene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
206-44-0	**Fluoranthene**	**87**	J	ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
86-73-7	Fluorene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 NELAC-NY10854,NJDEP,PADEP	OW
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW
91-20-3	**Naphthalene**	**180**		ug/kg dry	45	89	2	EPA 8270D Certifications:	01/22/2019 07:32	01/22/2019 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	OW

Sample Information

Client Sample ID: SB02 **York Sample ID:** 19A0642-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 10:10 am	01/16/2019

Semi-Volatiles, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-01-8	**Phenanthrene**	**100**		ug/kg dry	45	89	2	EPA 8270D	01/22/2019 07:32	01/22/2019 21:49	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
129-00-0	**Pyrene**	**88**	J	ug/kg dry	45	89	2	EPA 8270D	01/22/2019 07:32	01/22/2019 21:49	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*61.4 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*73.5 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*75.9 %*	*24-116*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**93.1**		%	0.100	1	SM 2540G	01/22/2019 11:58	01/22/2019 16:28	MAC
							Certifications: CTDOH			

Sample Information

Client Sample ID: SB03 **York Sample ID:** 19A0642-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 11:00 am	01/16/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	**1,2,4-Trimethylbenzene**	**22000**		ug/kg dry	530	1100	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
108-67-8	**1,3,5-Trimethylbenzene**	**9100**		ug/kg dry	530	1100	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
71-43-2	**Benzene**	**1200**		ug/kg dry	530	1100	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
100-41-4	**Ethyl Benzene**	**10000**		ug/kg dry	530	1100	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
98-82-8	**Isopropylbenzene**	**3000**		ug/kg dry	530	1100	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
1634-04-4	**Methyl tert-butyl ether (MTBE)**	**46**	IS-HI	ug/kg dry	2.6	5.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 20:23	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
91-20-3	**Naphthalene**	**140**		ug/kg dry	2.6	11	1	EPA 8260C	01/18/2019 08:45	01/18/2019 20:23	LLJ
								Certifications: NELAC-NY10854,NELAC-NY12058,PADEP,NJI			

Sample Information

Client Sample ID: SB03 **York Sample ID:** 19A0642-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 11:00 am	01/16/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
104-51-8	**n-Butylbenzene**	**200**		ug/kg dry	2.6	5.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 20:23	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
103-65-1	**n-Propylbenzene**	**4800**		ug/kg dry	530	1100	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
95-47-6	**o-Xylene**	**3700**		ug/kg dry	530	1100	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
179601-23-1	**p- & m- Xylenes**	**22000**		ug/kg dry	1100	2100	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
99-87-6	**p-Isopropyltoluene**	**2900**		ug/kg dry	530	1100	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
135-98-8	**sec-Butylbenzene**	**2100**		ug/kg dry	530	1100	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-06-6	**tert-Butylbenzene**	**120**		ug/kg dry	2.6	5.3	1	EPA 8260C	01/18/2019 08:45	01/18/2019 20:23	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
108-88-3	**Toluene**	**8300**		ug/kg dry	530	1100	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1330-20-7	**Xylenes, Total**	**26000**		ug/kg dry	1600	3200	200	EPA 8260C	01/18/2019 08:45	01/21/2019 16:56	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJ		

	Surrogate Recoveries	Result		Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*388 %*	IS-HI, S-03	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*104 %*		*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*1100 %*	S-03	*76-130*

Semi-Volatiles, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
208-96-8	Acenaphthylene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: SB03 **York Sample ID:** 19A0642-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 11:00 am	01/16/2019

Semi-Volatiles, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	**Fluoranthene**	**56**	J	ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	**Naphthalene**	**1600**		ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	**Phenanthrene**	**74**	J	ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	**Pyrene**	**47**	J	ug/kg dry	44	88	2	EPA 8270D	01/22/2019 07:32	01/22/2019 22:36	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*78.2 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*73.7 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*83.8 %*	*24-116*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**93.2**		%	0.100	1	SM 2540G	01/22/2019 11:58	01/22/2019 16:28	MAC
							Certifications:	CTDOH		

Sample Information

Client Sample ID: SB04 **York Sample ID:** 19A0642-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 11:40 am	01/16/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: **SB04** **York Sample ID:** **19A0642-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 11:40 am	01/16/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	**1,2,4-Trimethylbenzene**	**1200000**		ug/kg dry	27000	54000	10000	EPA 8260C	01/21/2019 09:52	01/22/2019 12:27	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
108-67-8	**1,3,5-Trimethylbenzene**	**830000**		ug/kg dry	14000	27000	5000	EPA 8260C	01/21/2019 09:52	01/21/2019 17:22	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
71-43-2	**Benzene**	**20000**	IS-HI	ug/kg dry	270	540	100	EPA 8260C	01/21/2019 09:52	01/21/2019 12:52	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
100-41-4	**Ethyl Benzene**	**1100000**		ug/kg dry	14000	27000	5000	EPA 8260C	01/21/2019 09:52	01/21/2019 17:22	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
98-82-8	**Isopropylbenzene**	**48000**		ug/kg dry	2700	5400	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 15:35	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	270	540	100	EPA 8260C	01/21/2019 09:52	01/21/2019 12:52	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
91-20-3	**Naphthalene**	**88000**	B	ug/kg dry	2700	11000	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 15:35	LLJ
								Certifications: NELAC-NY10854,NELAC-NY12058,PADEP,NJI			
104-51-8	**n-Butylbenzene**	**31000**		ug/kg dry	2700	5400	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 15:35	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
103-65-1	**n-Propylbenzene**	**170000**		ug/kg dry	2700	5400	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 15:35	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
95-47-6	**o-Xylene**	**650000**		ug/kg dry	27000	54000	10000	EPA 8260C	01/21/2019 09:52	01/22/2019 12:27	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
179601-23-1	**p- & m- Xylenes**	**1600000**		ug/kg dry	54000	110000	10000	EPA 8260C	01/21/2019 09:52	01/22/2019 12:27	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
99-87-6	**p-Isopropyltoluene**	**15000**		ug/kg dry	270	540	100	EPA 8260C	01/21/2019 09:52	01/21/2019 12:52	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
135-98-8	**sec-Butylbenzene**	**21000**		ug/kg dry	2700	5400	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 15:35	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
98-06-6	tert-Butylbenzene	ND		ug/kg dry	270	540	100	EPA 8260C	01/21/2019 09:52	01/21/2019 12:52	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
108-88-3	**Toluene**	**1500000**		ug/kg dry	27000	54000	10000	EPA 8260C	01/21/2019 09:52	01/22/2019 12:27	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
1330-20-7	**Xylenes, Total**	**2300000**		ug/kg dry	81000	160000	10000	EPA 8260C	01/21/2019 09:52	01/22/2019 12:27	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ			

	Surrogate Recoveries	Result		Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*96.5 %*	IS-HI	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*110 %*		*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*174 %*	S-03	*76-130*

Semi-Volatiles, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: **SB04** **York Sample ID:** **19A0642-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 11:40 am	01/16/2019

Semi-Volatiles, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
208-96-8	Acenaphthylene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	**Naphthalene**	**1500**		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	Phenanthrene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/kg dry	54	110	2	EPA 8270D	01/22/2019 07:32	01/22/2019 23:24	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*53.5 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*77.7 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*82.0 %*	*24-116*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: SB04 **York Sample ID:** 19A0642-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 11:40 am	01/16/2019

Total Solids **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	77.1		%	0.100	1	SM 2540G Certifications: CTDOH	01/22/2019 11:58	01/22/2019 16:28	MAC

Sample Information

Client Sample ID: SB05 **York Sample ID:** 19A0642-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 12:00 pm	01/16/2019

Volatile Organics, CP-51 (formerly STARS) List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	1,2,4-Trimethylbenzene	57000		ug/kg dry	2200	4400	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 16:02	LLJ
108-67-8	1,3,5-Trimethylbenzene	19000		ug/kg dry	2200	4400	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 16:02	LLJ
71-43-2	Benzene	2400		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 13:46	LLJ
100-41-4	Ethyl Benzene	21000		ug/kg dry	2200	4400	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 16:02	LLJ
98-82-8	Isopropylbenzene	3700		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 13:46	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 13:46	LLJ
91-20-3	Naphthalene	6300	B	ug/kg dry	220	870	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,PADEP,NJI	01/21/2019 09:52	01/21/2019 13:46	LLJ
104-51-8	n-Butylbenzene	2700		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 13:46	LLJ
103-65-1	n-Propylbenzene	11000		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 13:46	LLJ
95-47-6	o-Xylene	32000		ug/kg dry	2200	4400	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 16:02	LLJ
179601-23-1	p- & m- Xylenes	82000		ug/kg dry	4400	8700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 16:02	LLJ
99-87-6	p-Isopropyltoluene	1400		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 13:46	LLJ
135-98-8	sec-Butylbenzene	1600		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 13:46	LLJ
98-06-6	tert-Butylbenzene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	01/21/2019 09:52	01/21/2019 13:46	LLJ

Sample Information

Client Sample ID: **SB05** **York Sample ID:** **19A0642-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 12:00 pm	01/16/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	**Toluene**	**64000**		ug/kg dry	2200	4400	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 16:02	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
1330-20-7	**Xylenes, Total**	**110000**		ug/kg dry	6500	13000	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 16:02	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ			

	Surrogate Recoveries	Result		Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*88.1 %*		*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*100 %*		*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*139 %*	S-03	*76-130*

Semi-Volatiles, CP-51 (formerly STARS) List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
208-96-8	Acenaphthylene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
120-12-7	Anthracene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
218-01-9	Chrysene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
206-44-0	Fluoranthene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
86-73-7	Fluorene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: NELAC-NY10854,NJDEP,PADEP			
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
91-20-3	**Naphthalene**	**2900**		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: **SB05** **York Sample ID:** **19A0642-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 12:00 pm	01/16/2019

Semi-Volatiles, CP-51 (formerly STARS) List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-01-8	Phenanthrene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
129-00-0	Pyrene	ND		ug/kg dry	45	90	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:11	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*69.5 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*80.1 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*85.1 %*	*24-116*

Total Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**91.2**		%	0.100	1	SM 2540G	01/22/2019 11:58	01/22/2019 16:28	MAC
							Certifications: CTDOH			

Sample Information

Client Sample ID: **SB06** **York Sample ID:** **19A0642-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 12:20 pm	01/16/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	**1,2,4-Trimethylbenzene**	**360000**		ug/kg dry	8900	18000	5000	EPA 8260C	01/21/2019 09:52	01/21/2019 17:50	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
108-67-8	**1,3,5-Trimethylbenzene**	**57000**		ug/kg dry	1800	3500	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 16:29	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
71-43-2	**Benzene**	**3600**	IS-HI	ug/kg dry	180	350	100	EPA 8260C	01/21/2019 09:52	01/21/2019 14:41	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
100-41-4	**Ethyl Benzene**	**77000**		ug/kg dry	1800	3500	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 16:29	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
98-82-8	**Isopropylbenzene**	**9600**		ug/kg dry	180	350	100	EPA 8260C	01/21/2019 09:52	01/21/2019 14:41	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	180	350	100	EPA 8260C	01/21/2019 09:52	01/21/2019 14:41	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
91-20-3	**Naphthalene**	**23000**	B	ug/kg dry	1800	7100	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 16:29	LLJ
								Certifications: NELAC-NY10854,NELAC-NY12058,PADEP,NJI			

Sample Information

Client Sample ID: SB06 **York Sample ID:** 19A0642-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 12:20 pm	01/16/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
104-51-8	**n-Butylbenzene**	**6800**		ug/kg dry	180	350	100	EPA 8260C	01/21/2019 09:52	01/21/2019 14:41	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
103-65-1	**n-Propylbenzene**	**34000**		ug/kg dry	1800	3500	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 16:29	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
95-47-6	**o-Xylene**	**120000**		ug/kg dry	1800	3500	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 16:29	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
179601-23-1	**p- & m- Xylenes**	**350000**	VOA-E	ug/kg dry	3500	7100	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 16:29	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
99-87-6	**p-Isopropyltoluene**	**2300**		ug/kg dry	180	350	100	EPA 8260C	01/21/2019 09:52	01/21/2019 14:41	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
135-98-8	**sec-Butylbenzene**	**3900**		ug/kg dry	180	350	100	EPA 8260C	01/21/2019 09:52	01/21/2019 14:41	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
98-06-6	tert-Butylbenzene	ND		ug/kg dry	180	350	100	EPA 8260C	01/21/2019 09:52	01/21/2019 14:41	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
108-88-3	**Toluene**	**370000**		ug/kg dry	8900	18000	5000	EPA 8260C	01/21/2019 09:52	01/21/2019 17:50	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
1330-20-7	**Xylenes, Total**	**480000**	VOA-E	ug/kg dry	5300	11000	1000	EPA 8260C	01/21/2019 09:52	01/21/2019 16:29	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ			

	Surrogate Recoveries	Result		Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*108 %*	IS-HI	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*103 %*		*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*139 %*	S-03	*76-130*

Semi-Volatiles, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
208-96-8	Acenaphthylene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
120-12-7	Anthracene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: **SB06** **York Sample ID:** **19A0642-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19A0642	MEIN1901	Soil	January 15, 2019 12:20 pm	01/16/2019

Semi-Volatiles, CP-51 (formerly STARS) List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	**Naphthalene**	**120**		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	Phenanthrene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/kg dry	46	91	2	EPA 8270D	01/22/2019 07:32	01/23/2019 00:59	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*55.6 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*79.8 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*77.2 %*	*24-116*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**90.3**		%	0.100	1	SM 2540G	01/22/2019 11:58	01/22/2019 16:28	MAC
							Certifications:	CTDOH		

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19A0642-01	SB01	40mL Vial with Stir Bar-Cool 4° C
19A0642-02	SB02	40mL Vial with Stir Bar-Cool 4° C
19A0642-03	SB03	40mL Vial with Stir Bar-Cool 4° C
19A0642-04	SB04	40mL Vial with Stir Bar-Cool 4° C
19A0642-05	SB05	40mL Vial with Stir Bar-Cool 4° C
19A0642-06	SB06	40mL Vial with Stir Bar-Cool 4° C

Sample and Data Qualifiers Relating to This Work Order

VOA-E	The concentration reported for this analyte is an estimated value above the linear range of the instrument for EPA SW846-5035/8260 (>200ppb). Re-analysis using 5035/8260 medium level prep. resulted in a detection below the reporting limit (<500ppb).
S-03	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. This effect was confirmed by reanalysis.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
IS-HI	The internal std associated with this target compound did not meet acceptance criteria (area >200% CCV) at the stated dilution due to matrix effects. Sample was rerun to confirm matrix effects.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

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Field Chain-of-Custody Record

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No.: 19A0642

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: CastleTon Environmental	Company:	Company:	MEIN1901	RUSH - Next Day
Address: 54 George St Babylon, NY	Address: SAME	Address: SAME	YOUR Project Name: MEIN1901	RUSH - Two Day
Phone: 631 [illegible] 1818	Phone:	Phone:		RUSH - Three Day
Contact: Jessica Terngren	Contact:	Contact:		RUSH - Four Day
E-mail: jessica@castletonenv.com	E-mail:	E-mail:	YOUR PO#:	Standard (5-7 Day) X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Samples Collected by: (print your name above and sign below)
Charles Lambert
Chl Lbt

Matrix Codes	Samples From	Report / EDD Type (circle selections)			YORK Reg. Comp.
S - soil / solid	New York X	~~Summary Report~~	CT RCP	~~Standard Excel EDD~~	Compared to the following Regulation(s): (please fill in)
GW - groundwater	New Jersey	QA Report	CT RCP DQA/DUE	EQuIS (Standard)	
DW - drinking water	Connecticut	NY ASP A Package	NJDEP Reduced Deliverables	NYSDEC EQuIS	
WW - wastewater	Pennsylvania	NY ASP B Package		NJDEP SRP HazSite	
O - Oil ⋮ Other	Other		NJDKQP	Other:	

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
SB01	S	1/15/19 9:50	CP-51 VOCs via 8260, CP51 SVOCs via 8270	terracore kit, 8oz jar
SB02		10:10		
SB03		11:00		
SB04		11:40		
SB05		12:00		
SB06		12:20		

Comments:

Preservation: (check all that apply)
HCl ___ MeOH ___ HNO_3 ___ H_2SO_4 ___ NaOH ___ ZnAc ___
Ascorbic Acid ___ Other: ___

Special Instruction: Field Filtered ___ Lab to Filter ___

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
[signature]	1/16/19 8:40am	[signature]	1/16/19 8:40AM		
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Temp. Received at Lab
				TC Mahl 1/16/19 1647	1.5 Degrees C