December 19, 2019

NOBR 261 LLC
250 Walton Avenue
Bronx, NY 10451

Gerry O'Donoghue
GPJ O'Donoghue Contracting Corp
261 Grand Concourse
Bronx, NY 10451

Re: Limited Subsurface Soil Investigation
250 Walton Avenue (AKA 123 East 138th Street and 205 – 261 Grand Concourse)
Bronx, New York

Dear Mr. O'Donoghue:

Gallinger Environmental Management Corp. (GEM) has completed a limited subsurface soil investigation at the aforementioned address. The purpose of GEM's investigation was to document subsurface soil conditions beneath the site property. This investigation was limited to the ground floor parking garages, truck loading dock, workshop, and site areas that were accessible to the drilling equipment. The following Letter Report serves to update you with the results of this investigation.

Site Description:

The site contains a 10,242 square foot office building with a parking garage, tool storage area, carpenter shop, loading dock, and lobby on the ground floor and offices on the upper floor. The triangular shaped building occupies almost the entire property and is located between Walton Avenue, and Grand Concourse, on the North side of East 138th Street in the Bronx borough.

GEM identified a buried metal pipe, possible underground storage (UST) tank fill pipe, in the concrete floor of the parking garage. The opening of the pipe had been sealed with concrete and further physical inspection was not possible without excavating the floor. GEM used a Fisher TW-6 Tank and Cable Locator and scanned the area surrounding the pipe. The scan revealed a strong signal response (possible buried UST) extending approximately six feet off the pipe. Based on these findings, GEM recommends further investigation to determine whether or not a buried UST remains in this area.

Subsurface Investigation:

GEM was on site on November 25 and 26, 2019 to conduct this subsurface investigation. A total of 14 soil borings were installed at the site. GEM used a track-mounted hammer-

driven Geoprobe Soil Sampler to install 12 soil borings. A 4-foot Macro Core (MC) Sampler was advanced into the soils at 4-foot increments and retrieved with the hydraulic puller. Two soil borings were installed inside the tool storage area using a limited access jackhammer driven Geoprobe Soil Sampler. A 2-foot Large Bore (LB) Sampler was advanced into the soil in 2-foot increments and retrieved using a manual jack. See **Attachment 1** for the Soil Boring Location Map and **Attachment 2** for Site Photographs. The borings were installed in areas considered to be potential areas of concern and/or accessible areas to provide the most representative coverage of the site.

Shallow bedrock refusal was consistently encountered across the site at depths ranging from 3.0 feet to 5.0 feet below ground surface (b.g.s.). Fill material consisting of sand, brick, concrete, and asphalt was encountered from 1.0 foot b.g.s. to the bedrock surface. Groundwater was not encountered at the site to a depth of 5.0 feet b.g.s. (depth of bedrock).

Soil samples were field screened using a calibrated Mini Rae Lite photo-ionization detector (PID) to obtain a relative concentration of petroleum in the samples. The PID was inserted into each borehole following completion to obtain a reading of volatile organic vapor from beneath the site. No elevated field screening readings or petroleum odors were detected in any of the completed boreholes or soil samples collected. See Table 1 in **Attachment 3** for a summary of the field observations.

Soil Sample Analytical Results

Select soil samples were submitted to a NYSDOH-certified laboratory to be analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), using USEPA Test Methods 8260C and 8270D, respectively. See Table 2 in **Attachment 3** for a summary of the soil analytical results and the applicable soil cleanup levels as set forth in the NYSDEC Part 375. The soil sample results were compared to the Restricted Use Soil Cleanup Objectives (SCO) for commercial properties. See **Attachment 4** for the Laboratory Analytical Report.

VOCs:
No method compounds were detected in the soil samples collected from the site.

SVOCs:
Numerous polycyclic aromatic hydrocarbons (PAHs) were detected in all six soil samples submitted to the laboratory. The widespread presence of elevated PAH concentrations is the result of the fill material observed at the site. Concentrations of individual PAHs were detected at levels above the Restricted Use Soil Cleanup Objectives for commercial properties in soil samples collected from W2 at 4.0 feet b.g.s., W9 at 5.0 feet b.g.s., and W12 at 5.0 feet b.g.s. All other locations were below the Restricted Use Soil Cleanup Objectives for commercial properties.

The exceedances at W2 and W9 were limited to benzo(a)pyrene (BaP) at levels of 1,100 - 1,300 ug/kg compared to the standard of 1,000 ug/kg. These exceedances are due to

asphalt and fill materials observed and intermixed in the soil samples. The exceedances at W9 included benzo(a)anthracene (8,200 ug/kg compared to the standard of 5,600 ug/kg), BaP (6,900 ug/kg compared to the standard of 1,000 ug/kg), benzo(b)fluoranthene (6,400 ug/kg compared to the standard of 5,600 ug/kg), and dibenzo(a,h)anthracene (2,100 ug/kg compared to the standard of 560 ug/kg). These exceedances are due to asphalt layers present in the soil sample. The presence of these shallow PAHs is attributable to construction debris beneath the site and poses no threat to human health or the environment.

It should be noted that the concentration of total PAHs detected is below the 500 ppm soil cleanup level for subsurface soil specified by the NYSDEC in CP-51 for commercial or industrial use sites. "Subsurface soil" is defined as soil beneath a permanent structure, pavement, or similar cover system, or at least one foot of soil cover that meets the applicable SCOs.

Conclusions:

Based on the field observations and laboratory analytical results, GEM concludes the following:

1.) A possible tank fill pipe was identified in the parking garage floor and requires further investigation.
2.) No elevated field screening readings, visual or olfactory evidence of chemical or petroleum impacted soils was encountered in the sampling locations during this investigation.
3.) Soil samples collected from the site have detections of some individual PAH compounds exceeding the NYSDEC Restricted Use Soil Cleanup Objectives for commercial properties, however these readings are directly attributable to fill material (brick, asphalt and concrete) and encountered consistently beneath the site.
4.) The concentration of total PAHs detected is below the 500 ppm soil cleanup level for subsurface soil specified by the NYSDEC in CP-51 for commercial or industrial use sites.
5.) Solid bedrock was encountered at depths ranging from 3.0 feet to 5.0 feet b.g.s. in all boring locations.
6.) Groundwater was not encountered during this investigation to a depth of 5.0 feet b.g.s.
7.) The PAH concentrations, resultant from fill materials, are located beneath the concrete floors in the structure and present no risk to human health or the environment.

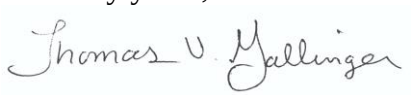
Recommendations:

Based on the field observations and laboratory analytical results, GEM recommends the following:

1.) Hand excavate and investigate the sealed pipe located in the parking garage to determine whether or not a UST exists beneath the floor.

Please contact us at (914) 907-2963 if you have any questions regarding this Letter Report or need further assistance.

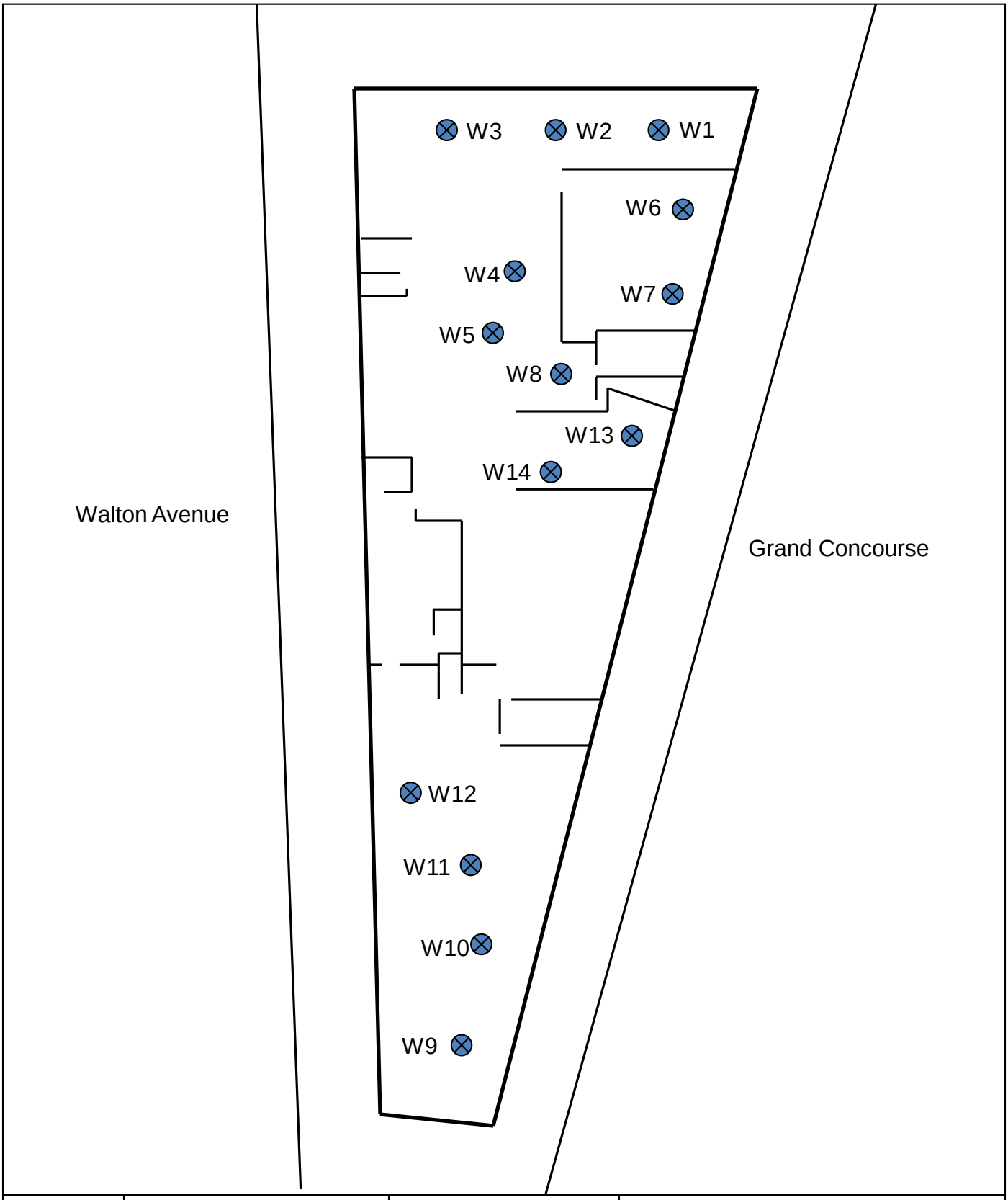
Sincerely yours,



Thomas V. Gallinger
Tank Closure / Subsurface Evaluator

Attachment 1

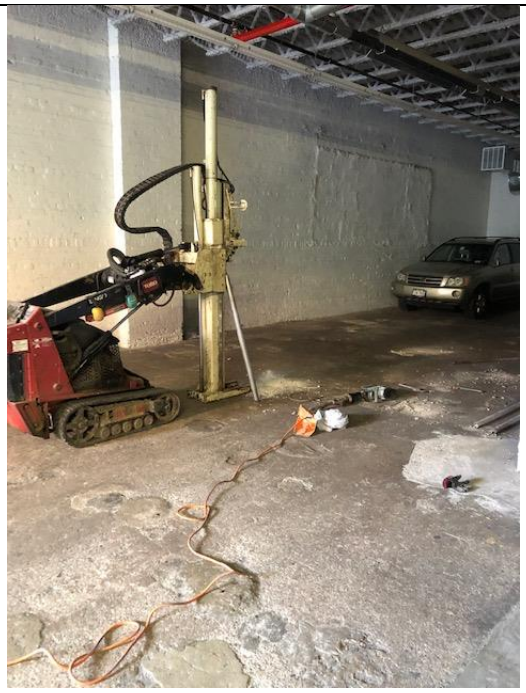
Soil Boring Location Map

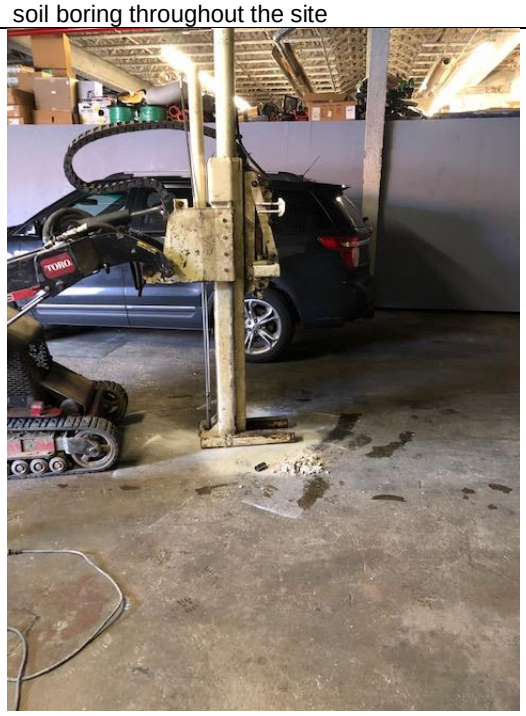
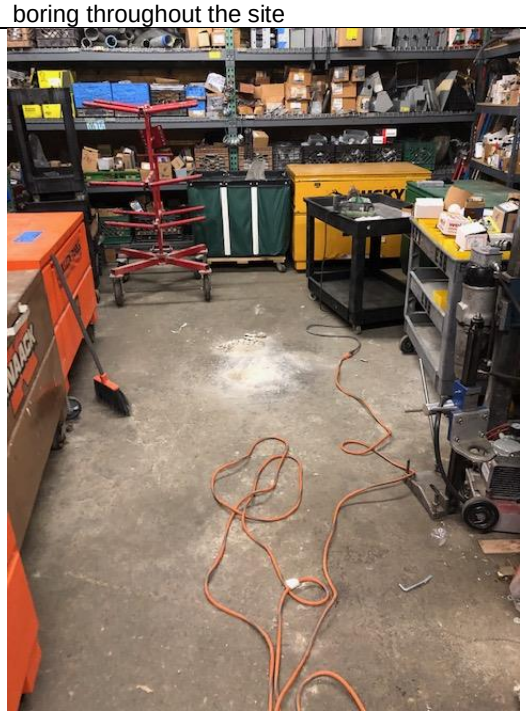


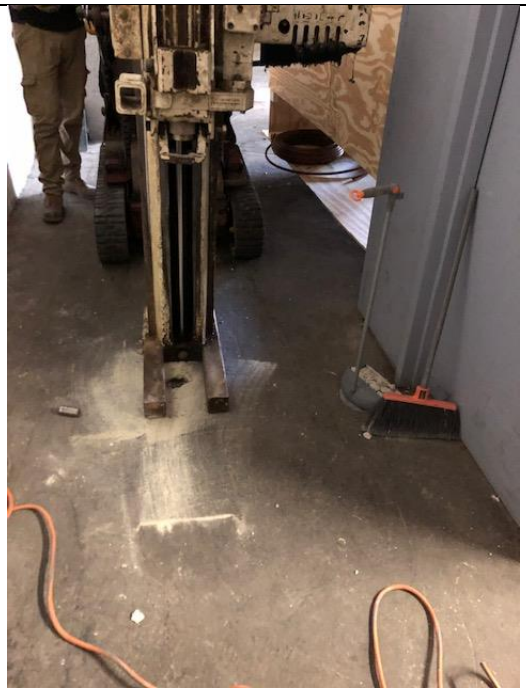
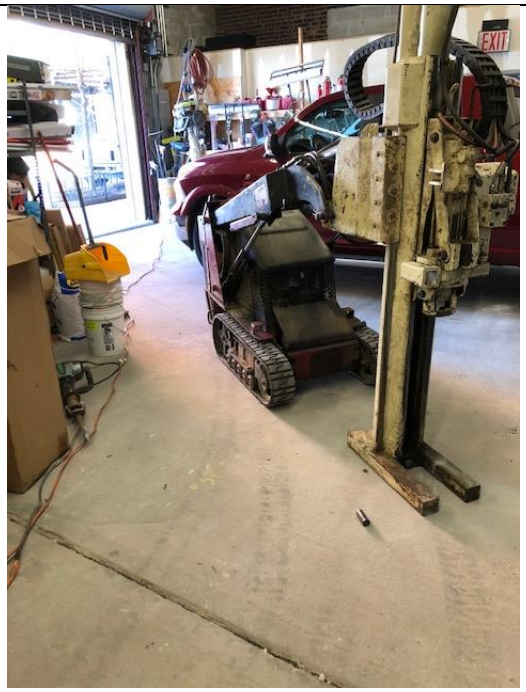
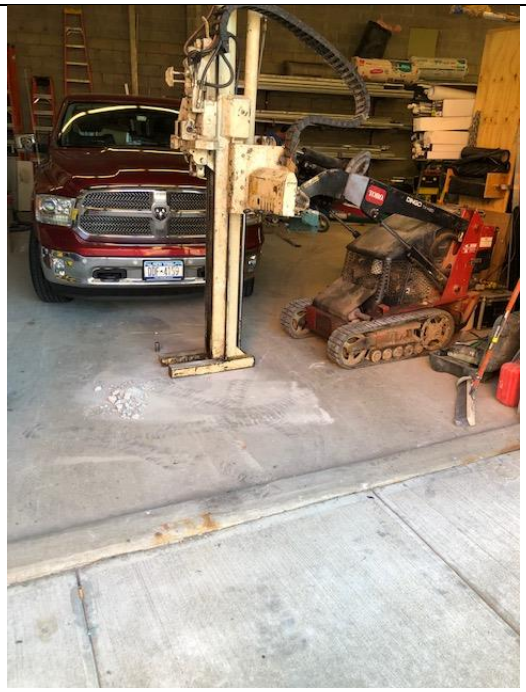
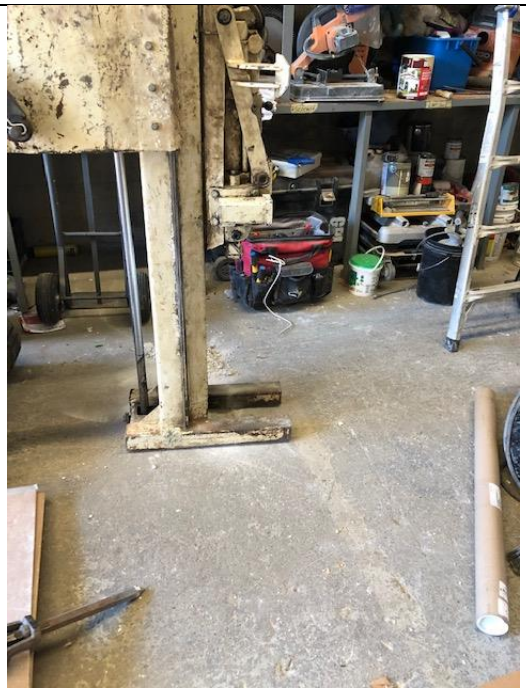
North	Approximate Scale: 1 inch = 25 feet	GEM Corp. 7 Aqueduct Road Garrison, NY 10524	Soil Boring Location Map 250 Walton Avenue Bronx, NY

Attachment 2

Site Photographs

	
Installation of soil boring W1	Installation of soil boring W2
	
Pipe in the concrete floor – recommend investigation	Installation of soil boring W3

	
Brick, asphalt, and concrete fill material encountered in soil boring throughout the site	Asphalt and concrete fill material encountered in soil boring throughout the site
	
Installation of soil boring W4	Soil boring W6 in workshop area

	
Installation of soil boring W8	Installation of soil boring W11
	
Installation of soil boring W12	Installation of soil boring W14

Attachment 3

Tables

Table 1
Summary of Field Observations
250 Walton Avenue
Bronx, New York

Sample #, Depth feet	Soil Description	PID Reading	Notes
W1 1	3” concrete, red brick, asphalt and sand fill	0.0 ppm	No odor, dry
W1 2	Red brick, asphalt and sand fill	0.2 ppm	No odor, dry
W1 3	Dark rock fragments	0.0 ppm	No odor, dry
W1 4	Dark rock fragments, grey rock refusal	0.1 ppm	No odor, dry
W2 1	3” concrete, brown sandy soil	0.0 ppm	No odor, dry
W2 2	Red brick, concrete, and asphalt	0.1 ppm	No odor, dry
W2 3	Dark brown sand and rock	0.1 ppm	No odor, dry
W2 4	Sand, brick, and asphalt fill, rock refusal	0.0 ppm	No odor, dry
W3 1	4” concrete, brown sand and gravel	0.2 ppm	No odor, dry
W3 2	Black rock fragments	0.0 ppm	No odor, dry
W3 3	Bedrock fragments, rock refusal	0.0 ppm	No odor, dry
W4 1	3-4” concrete, brown sand	0.0 ppm	No odor, dry
W4 2	Dark brown sand	0.0 ppm	No odor, dry
W4 3	Dark sand, rock fragments	0.0 ppm	No odor, dry
W4 4	Rock refusal	0.0 ppm	No odor, dry
W5 1	3-4” concrete, brown sand and fill	0 ppm	No odor, dry
W5 2	Brown sand and fill	0.1 ppm	No odor, dry

Table 1
Summary of Field Observations
250 Walton Avenue
Bronx, New York

Sample #, Depth feet	Soil Description	PID Reading	Notes
W5 3	Black/grey rock refusal	0.2 ppm	No odor, dry
W6 1	Rock refusal	--	--
W7 1	3-4” concrete, brown sand and fill	0.1 ppm	No odor, dry
W7 2	Rock refusal	0.2 ppm	No odor, dry
W8 1	4” concrete, sand, brick and asphalt	0.0 ppm	No odor, dry
W8 2	Sand, brick and asphalt	0.0 ppm	No odor, dry
W8 3	Sand, brick and asphalt	0.1 ppm	No odor, dry
W8 4	Sand, brick and asphalt	0.1 ppm	No odor, dry
W9 1	4” concrete, brown sand	0.0 ppm	No odor, dry
W9 2	Black sand, asphalt, rock fragments, fill	0.2 ppm	No odor, dry
W9 3	Black sand, asphalt, rock fragments, fill	0.0 ppm	No odor, dry
W9 4	Black sand, asphalt layer, rock fragments, fill	0.1 ppm	No odor, dry
W9 5	Black sand, asphalt layer, rock fragments, fill	0.2 ppm	No odor, dry
W10 1	4” concrete, brown sand and brick	0.1 ppm	No odor, dry
W10 2	Black rock fragments	0.0 ppm	No odor, dry
W10 3	Dark black sand and rock, rock refusal	0.0 ppm	No odor, dry

Table 1
Summary of Field Observations
250 Walton Avenue
Bronx, New York

Sample #, Depth feet	Soil Description	PID Reading	Notes
W11 1	4” concrete, brown sand, brick, and fill	0.1 ppm	No odor, dry
W11 2	Brown sand, brick and fill	0.0 ppm	No odor, dry
W11 3	Black rock refusal	0.0 ppm	No odor, dry
W12 1	4” concrete, brown sand, asphalt, and fill	0.2 ppm	No odor, dry
W12 2	Red brick, brown sand, fill	0.0 ppm	No odor, dry
W12 3	Brown sand and fill	0.1 ppm	No odor, dry
W12 4	Grey/black rock	0.0 ppm	No odor, dry
W12 5	Brown sand, asphalt, and fill Rock refusal	0.1 ppm	No odor, dry
W13 1	4” concrete, brown sand, brick, and fill	0.1 ppm	No odor, dry
W13 2	Red brick, brown sand, fill, rock refusal	0.0 ppm	No odor, dry
W14 1	4” concrete, brown sand, brick, and fill	0.2 ppm	No odor, dry
W14 2	Red brick, brown sand, fill, rock refusal	0.0 ppm	No odor, dry

Table 1
Soil Sample Analytical Results
250 Walton Avenue
Bronx, New York

Sample ID Depth (feet) Date Sampled	Units	NYSDEC Restricted Use (Commercial) Soil Cleanup Objectives	W2 4.0 11/25/19	W7 2.0 11/25/19	W8 4.0 11/25/19	W9 5.0 11/26/19	W12 5.0 11/26/19	W14 2.0 11/26/19
Volatile Organic Compounds								
1,2,4-Trimethylbenzene	ug/kg	190,000	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ug/kg	190,000	ND	ND	ND	ND	ND	ND
Benzene	ug/kg	44,000	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	390,000	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ug/kg	--	ND	ND	ND	ND	ND	ND
m&p-Xylenes	ug/kg	**	ND	ND	ND	ND	ND	ND
Methyl-tert-Butyl Ether (MTBE)	ug/kg	500,000	ND	ND	ND	ND	ND	ND
Naphthalene	ug/kg	500,000	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ug/kg	500,000	ND	ND	ND	ND	ND	ND
n-Propylbenzene	ug/kg	500,000	ND	ND	ND	ND	ND	ND
o-Xylene	ug/kg	**	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	ug/kg	--	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ug/kg	500,000	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ug/kg	500,000	ND	ND	ND	ND	ND	ND
Toluene	ug/kg	500,000	ND	ND	ND	ND	ND	ND
Total Xylenes	ug/kg	500,000	ND	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds								
Acenaphthene	ug/kg	500,000	ND	ND	ND	**1,200**	**220**	ND
Acenaphthylene	ug/kg	500,000	**81 J**	ND	ND	**150**	**100**	ND
Anthracene	ug/kg	500,000	**130**	**120**	ND	**4,000**	**600**	ND
Benzo(a)anthracene	ug/kg	5,600	**680**	**280**	**110**	**8,200**	**1,300**	**120**
Benzo(a)pyrene	ug/kg	1,000	**1,100**	**260**	**140**	**6,900**	**1,300**	**130**
Benzo(b)fluoranthene	ug/kg	5,600	**840**	**220**	**120**	**6,400**	**1,100**	**120**
Benzo(g,h,i)perylene	ug/kg	500,000	**710**	**150**	**95**	**4,100**	**810**	**90**
Benzo(k)fluoranthene	ug/kg	56,000	**770**	**200**	**100**	**5,700**	**990**	**99**
Chrysene	ug/kg	56,000	**740**	**250**	**120**	**7,400**	**1,300**	**130**
Dibenzo(a,h)anthracene	ug/kg	560	**260**	**57 J**	ND	**2,100**	**230**	ND
Fluoranthene	ug/kg	500,000	**1,300**	**620**	**210**	**18,000**	**2,900**	**220**
Fluorene	ug/kg	500,000	ND	ND	ND	**1,500**	**230**	ND
Indeno(1,2,3-cd)pyrene	ug/kg	5,600	**700**	**150**	**93**	**3,900**	**780**	**75 J**
Naphthalene	ug/kg	500,000	ND	ND	ND	**170**	**58 J**	ND
Phenanthrene	ug/kg	500,000	**730**	**520**	**130**	**14,000**	**2,300**	**120**
Pyrene	ug/kg	500,000	**1,100**	**490**	**180**	**14,000**	**2,400**	**220**

Notes:
ND - Not detected
J - Estimated value
* - See Total Xylenes
** Soil Cleanup Levels as specified in NYSDEC Part 375 - Restricted Use Soil Cleanup Objectives, Commercial Properties
-- No standard established
Values in **bold** are detected values.
Value exceeds NYSDEC Restricted Use (Commercial) Soil Cleanup Objectives

Attachment 4

Laboratory Analytical Report

Technical Report

prepared for:

Gallinger Environmental Management Corporation
7 Aqueduct Road
Garrison NY, 10524
Attention: Tom Gallinger

Report Date: 12/06/2019
Client Project ID: 250 Walton
York Project (SDG) No.: 19L0002

Report Date: 12/06/2019
Client Project ID: 250 Walton
York Project (SDG) No.: 19L0002

Gallinger Environmental Management Corporation
7 Aqueduct Road
Garrison NY, 10524
Attention: Tom Gallinger

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 December 02, 2019 with a temperature of 1.4 C. The project was identified as your project: **250 Walton**.

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
19L0002-01	W2 4'	Soil	11/25/2019	12/02/2019
19L0002-02	W7 2'	Soil	11/25/2019	12/02/2019
19L0002-03	W8 4'	Soil	11/25/2019	12/02/2019
19L0002-04	W9 5'	Soil	11/26/2019	12/02/2019
19L0002-05	W12 5'	Soil	11/26/2019	12/02/2019
19L0002-06	W14 2'	Soil	11/26/2019	12/02/2019

General Notes for York Project (SDG) No.: 19L0002

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: 12/06/2019

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: W2 4' **York Sample ID:** 19L0002-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 25, 2019 9:00 am	12/02/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

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	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
71-43-2	Benzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
91-20-3	Naphthalene	ND		ug/kg dry	2.8	11	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,PADEP,NJI		
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
95-47-6	o-Xylene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
108-88-3	Toluene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1330-20-7	Xylenes, Total	ND		ug/kg dry	2.8	5.6	1	EPA 8260C	12/03/2019 07:30	12/03/2019 16:40	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJ		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*98.1 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*96.4 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*104 %*	*76-130*

Sample Information

Client Sample ID: W2 4'

York Sample ID: 19L0002-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 25, 2019 9:00 am	12/02/2019

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

Log-in Notes: VOA-CON T

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 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
208-96-8	**Acenaphthylene**	**81**	J	ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
120-12-7	**Anthracene**	**130**		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
56-55-3	**Benzo(a)anthracene**	**680**		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
50-32-8	**Benzo(a)pyrene**	**1100**		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
205-99-2	**Benzo(b)fluoranthene**	**840**		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
191-24-2	**Benzo(g,h,i)perylene**	**710**		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
207-08-9	**Benzo(k)fluoranthene**	**770**		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
218-01-9	**Chrysene**	**740**		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
53-70-3	**Dibenzo(a,h)anthracene**	**260**	CCV-H	ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
206-44-0	**Fluoranthene**	**1300**		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
86-73-7	Fluorene	ND		ug/kg dry	46	91	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
193-39-5	**Indeno(1,2,3-cd)pyrene**	**700**		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
91-20-3	Naphthalene	ND		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
85-01-8	**Phenanthrene**	**730**		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR
129-00-0	**Pyrene**	**1100**		ug/kg dry	46	91	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:07	SR

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*71.8 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*70.6 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*75.7 %*	*24-116*

Total Solids

Log-in Notes: VOA-CON T

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	**89.0**		%	0.100	1	SM 2540G Certifications: CTDOH	12/06/2019 08:58	12/06/2019 14:32	JAG

Sample Information

Client Sample ID: W2 4' **York Sample ID:** 19L0002-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 25, 2019 9:00 am	12/02/2019

Sample Information

Client Sample ID: W7 2' **York Sample ID:** 19L0002-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 25, 2019 1:00 am	12/02/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

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	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
71-43-2	Benzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
91-20-3	Naphthalene	ND		ug/kg dry	2.8	11	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,PADEP,NJI		
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
95-47-6	o-Xylene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
108-88-3	Toluene	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1330-20-7	Xylenes, Total	ND		ug/kg dry	2.8	5.5	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:06	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJ		

Surrogate Recoveries	Result	Acceptance Range

Sample Information

Client Sample ID: W7 2' **York Sample ID:** 19L0002-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 25, 2019 1:00 am	12/02/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

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
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*98.2 %*			*77-125*						
2037-26-5	*Surrogate: SURR: Toluene-d8*	*96.0 %*			*85-120*						
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*102 %*			*76-130*						

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

Log-in Notes: VOA-CONT **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	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
120-12-7	**Anthracene**	**120**		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
56-55-3	**Benzo(a)anthracene**	**280**		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
50-32-8	**Benzo(a)pyrene**	**260**		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
205-99-2	**Benzo(b)fluoranthene**	**220**		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
191-24-2	**Benzo(g,h,i)perylene**	**150**		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
207-08-9	**Benzo(k)fluoranthene**	**200**		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
218-01-9	**Chrysene**	**250**		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
53-70-3	**Dibenzo(a,h)anthracene**	**57**	CCV-H, J	ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
206-44-0	**Fluoranthene**	**620**		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
86-73-7	Fluorene	ND		ug/kg dry	46	92	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
193-39-5	**Indeno(1,2,3-cd)pyrene**	**150**		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
91-20-3	Naphthalene	ND		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
85-01-8	**Phenanthrene**	**520**		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR
129-00-0	**Pyrene**	**490**		ug/kg dry	46	92	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 17:38	SR

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*71.6 %*	*22-108*

Sample Information

Client Sample ID: W7 2' **York Sample ID:** 19L0002-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 25, 2019 1:00 am	12/02/2019

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

Log-in Notes: VOA-CONT **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
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*74.3 %*			*21-113*						
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*74.6 %*			*24-116*						

Total Solids

Log-in Notes: VOA-CONT **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**	**90.6**		%	0.100	1	SM 2540G Certifications: CTDOH	12/06/2019 08:58	12/06/2019 14:32	JAG

Sample Information

Client Sample ID: W8 4' **York Sample ID:** 19L0002-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 25, 2019 2:00 am	12/02/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

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	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	12/03/2019 07:30	12/03/2019 17:31	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	12/03/2019 07:30	12/03/2019 17:31	SS
71-43-2	Benzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	12/03/2019 07:30	12/03/2019 17:31	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	12/03/2019 07:30	12/03/2019 17:31	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	12/03/2019 07:30	12/03/2019 17:31	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	12/03/2019 07:30	12/03/2019 17:31	SS
91-20-3	Naphthalene	ND		ug/kg dry	2.7	11	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,PADEP,NJI	12/03/2019 07:30	12/03/2019 17:31	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	12/03/2019 07:30	12/03/2019 17:31	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	12/03/2019 07:30	12/03/2019 17:31	SS

Sample Information

Client Sample ID: W8 4' **York Sample ID:** 19L0002-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 25, 2019 2:00 am	12/02/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

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
95-47-6	o-Xylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:31	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:31	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:31	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:31	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:31	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
108-88-3	Toluene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:31	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1330-20-7	Xylenes, Total	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:31	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJ		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*97.8 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*95.9 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*102 %*	*76-130*

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

Log-in Notes: VOA-CONT **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	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
208-96-8	Acenaphthylene	ND		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	**Benzo(a)anthracene**	**110**		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	**Benzo(a)pyrene**	**140**		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	**Benzo(b)fluoranthene**	**120**		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	**Benzo(g,h,i)perylene**	**95**		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	**Benzo(k)fluoranthene**	**100**		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	**Chrysene**	**120**		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: W8 4' **York Sample ID:** 19L0002-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 25, 2019 2:00 am	12/02/2019

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

Log-in Notes: VOA-CONT **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
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
206-44-0	**Fluoranthene**	**210**		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
86-73-7	Fluorene	ND		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications: NELAC-NY10854,NJDEP,PADEP			
193-39-5	**Indeno(1,2,3-cd)pyrene**	**93**		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
91-20-3	Naphthalene	ND		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
85-01-8	**Phenanthrene**	**130**		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
129-00-0	**Pyrene**	**180**		ug/kg dry	45	90	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:09	SR
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*71.0 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*74.2 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*74.4 %*	*24-116*

Total Solids

Log-in Notes: VOA-CONT **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**	**92.1**		%	0.100	1	SM 2540G	12/06/2019 08:58	12/06/2019 14:32	JAG
							Certifications: CTDOH			

Sample Information

Client Sample ID: W9 5' **York Sample ID:** 19L0002-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 26, 2019 9:00 am	12/02/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

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	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA			

Sample Information

Client Sample ID: W9 5'

York Sample ID: 19L0002-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 26, 2019 9:00 am	12/02/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: VOA-CONT

Sample Notes: VOA-CONT

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
71-43-2	Benzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
91-20-3	Naphthalene	ND		ug/kg dry	2.7	11	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,PADEP,NJI		
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
95-47-6	o-Xylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
108-88-3	Toluene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1330-20-7	Xylenes, Total	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/03/2019 07:30	12/03/2019 17:56	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJ		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*98.5 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*96.2 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*101 %*	*76-130*

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

Log-in Notes: VOA-CONT

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**	**1200**		ug/kg dry	44	88	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:41	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
208-96-8	**Acenaphthylene**	**150**		ug/kg dry	44	88	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:41	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: W9 5' **York Sample ID:** 19L0002-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 26, 2019 9:00 am	12/02/2019

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

Log-in Notes: VOA-CON T **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
120-12-7	**Anthracene**	**4000**		ug/kg dry	440	880	20	EPA 8270D	12/04/2019 14:19	12/06/2019 13:59	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	**Benzo(a)anthracene**	**8200**		ug/kg dry	440	880	20	EPA 8270D	12/04/2019 14:19	12/06/2019 13:59	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	**Benzo(a)pyrene**	**6900**		ug/kg dry	440	880	20	EPA 8270D	12/04/2019 14:19	12/06/2019 13:59	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	**Benzo(b)fluoranthene**	**6400**		ug/kg dry	440	880	20	EPA 8270D	12/04/2019 14:19	12/06/2019 13:59	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	**Benzo(g,h,i)perylene**	**4100**		ug/kg dry	440	880	20	EPA 8270D	12/04/2019 14:19	12/06/2019 13:59	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	**Benzo(k)fluoranthene**	**5700**		ug/kg dry	440	880	20	EPA 8270D	12/04/2019 14:19	12/06/2019 13:59	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	**Chrysene**	**7400**		ug/kg dry	440	880	20	EPA 8270D	12/04/2019 14:19	12/06/2019 13:59	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	**Dibenzo(a,h)anthracene**	**2100**	CCV-H	ug/kg dry	44	88	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:41	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	**Fluoranthene**	**18000**		ug/kg dry	440	880	20	EPA 8270D	12/04/2019 14:19	12/06/2019 13:59	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	**Fluorene**	**1500**		ug/kg dry	44	88	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:41	SR
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	**Indeno(1,2,3-cd)pyrene**	**3900**		ug/kg dry	440	880	20	EPA 8270D	12/04/2019 14:19	12/06/2019 13:59	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	**Naphthalene**	**170**		ug/kg dry	44	88	2	EPA 8270D	12/04/2019 14:19	12/05/2019 18:41	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	**Phenanthrene**	**14000**		ug/kg dry	440	880	20	EPA 8270D	12/04/2019 14:19	12/06/2019 13:59	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	**Pyrene**	**14000**		ug/kg dry	440	880	20	EPA 8270D	12/04/2019 14:19	12/06/2019 13:59	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*63.2 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*67.9 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*69.8 %*	*24-116*

Total Solids

Log-in Notes: VOA-CON T **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**	**93.4**		%	0.100	1	SM 2540G	12/06/2019 08:58	12/06/2019 14:32	JAG
							Certifications:	CTDOH		

Sample Information

Client Sample ID: W12 5'

York Sample ID: 19L0002-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 26, 2019 11:45 am	12/02/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: VOA-CONT

Sample Notes: VOA-CONT

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	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
71-43-2	Benzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
91-20-3	Naphthalene	ND		ug/kg dry	2.8	11	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,PADEP,NJI		
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
95-47-6	o-Xylene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
108-88-3	Toluene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1330-20-7	Xylenes, Total	ND		ug/kg dry	2.8	5.7	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:22	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJ		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*98.4 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*96.1 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*101 %*	*76-130*

Sample Information

Client Sample ID: W12 5' **York Sample ID:** 19L0002-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 26, 2019 11:45 am	12/02/2019

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

Log-in Notes: VOA-CONT **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**	**220**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
208-96-8	**Acenaphthylene**	**100**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
120-12-7	**Anthracene**	**600**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
56-55-3	**Benzo(a)anthracene**	**1300**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
50-32-8	**Benzo(a)pyrene**	**1300**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
205-99-2	**Benzo(b)fluoranthene**	**1100**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
191-24-2	**Benzo(g,h,i)perylene**	**810**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
207-08-9	**Benzo(k)fluoranthene**	**990**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
218-01-9	**Chrysene**	**1300**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
53-70-3	**Dibenzo(a,h)anthracene**	**230**	CCV-H	ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
206-44-0	**Fluoranthene**	**2900**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
86-73-7	**Fluorene**	**230**		ug/kg dry	47	94	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
193-39-5	**Indeno(1,2,3-cd)pyrene**	**780**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
91-20-3	**Naphthalene**	**58**	J	ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
85-01-8	**Phenanthrene**	**2300**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR
129-00-0	**Pyrene**	**2400**		ug/kg dry	47	94	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/04/2019 14:19	12/05/2019 19:12	SR

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*65.8 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*68.1 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*67.0 %*	*24-116*

Total Solids

Log-in Notes: VOA-CONT **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**	**88.4**		%	0.100	1	SM 2540G Certifications: CTDOH	12/06/2019 08:58	12/06/2019 14:32	JAG

Sample Information

Client Sample ID: W14 2'

York Sample ID: 19L0002-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 26, 2019 1:00 am	12/02/2019

Volatile Organics, CP-51 (formerly STARS) List

Log-in Notes: VOA-CONT

Sample Notes: VOA-CONT

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	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
71-43-2	Benzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
91-20-3	Naphthalene	ND		ug/kg dry	2.6	11	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,PADEP,NJI		
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
95-47-6	o-Xylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
108-88-3	Toluene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PA		
1330-20-7	Xylenes, Total	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	12/03/2019 07:30	12/03/2019 18:47	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJ		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*98.2 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*96.3 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*101 %*	*76-130*

Sample Information

Client Sample ID: W14 2'

York Sample ID: 19L0002-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 26, 2019 1:00 am	12/02/2019

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

Log-in Notes: VOA-CON T

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	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
208-96-8	Acenaphthylene	ND		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	**Benzo(a)anthracene**	**120**		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	**Benzo(a)pyrene**	**130**		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	**Benzo(b)fluoranthene**	**120**		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	**Benzo(g,h,i)perylene**	**90**		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	**Benzo(k)fluoranthene**	**99**		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	**Chrysene**	**130**		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	**Fluoranthene**	**220**		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	**Indeno(1,2,3-cd)pyrene**	**75**	J	ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	**Phenanthrene**	**120**		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	**Pyrene**	**220**		ug/kg dry	43	85	2	EPA 8270D	12/04/2019 14:19	12/05/2019 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*67.9 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*76.1 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*72.7 %*	*24-116*

Total Solids

Log-in Notes: VOA-CON T

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**	**95.0**		%	0.100	1	SM 2540G	12/06/2019 08:58	12/06/2019 14:32	JAG
							Certifications:	CTDOH		

Sample Information

Client Sample ID: **W14 2'** **York Sample ID:** **19L0002-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19L0002	250 Walton	Soil	November 26, 2019 1:00 am	12/02/2019

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19L0002-01	W2 4'	40mL 01_Clear Vial Cool to 4° C
19L0002-02	W7 2'	40mL 01_Clear Vial Cool to 4° C
19L0002-03	W8 4'	40mL 01_Clear Vial Cool to 4° C
19L0002-04	W9 5'	40mL 01_Clear Vial Cool to 4° C
19L0002-05	W12 5'	40mL 01_Clear Vial Cool to 4° C
19L0002-06	W14 2'	40mL 01_Clear Vial Cool to 4° C

Sample and Data Qualifiers Relating to This Work Order

VOA-CONT	Non-Compliant - the container(s) provided by the client for soil volatiles do not meet the requirements of EPA SW846-5035A. Results reported below 200 ug/kg may be biased low due to samples not being collected according to EPA SW846 5035A requirements.
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.
CCV-H	The value reported is estimated due to its behavior during continuing calibration verification (>20% difference for average RF or >20% drift for linear or quadratic fit.) This value may be biased high.

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.

YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DR.
STRATFORD, CT 06615
(203) 325-1371
FAX (203) 357-0166

Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 1920002

YOUR Information

Company: GEM
Address: 7 Aqueduct RD
Garrison NY 10524
Phone No.:
Contact Person:
E-Mail Address:

Report To:

Company: S
Address:
Phone No.:
Attention:
E-Mail Address:

Invoice To:

Company: S
Address:
Phone No.:
Attention:
E-Mail Address:

YOUR Project ID

250 Walton.

Purchase Order No.

250 walton

Samples from: CT ___ NY X NJ ___

Turn-Around Time

- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) ☐

Report Type

- Summary Report ____
- Summary w/ QA Summary ____
- CT RCP Package ____
- CTRCP DQA/DUE Pkg ____
- NY ASP A Package ____
- NY ASP B Package ____
- NJDEP Red. Deliv. ____

Electronic Data Deliverables (EDD)

- Simple Excel ____
- NYSDEC EQuIS ____
- EQuIS (std) ____
- EZ-EDD (EQuIS) ____
- NJDEP SRP HazSite EDD ____
- GIS/KEY (std) ____
- Other ____
- **York Regulatory Comparison**
- **Excel Spreadsheet** ____

Compare to the following Regs: (please fill in)

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/Authorized By (Signature)

Thomas V. Callisco
Name (printed)

Matrix Codes
S - soil
Other - specify(oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN	Ignitability
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part 360-Routine	Heterotrophs
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part 360-Baseline	TOX
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded	BTU lb.
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.
Halog. only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC
App.IX list	SPLP or TCLP	TCLP BN A	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
W2 4'	11/25 9:00	SOIL	NY STARS 8260 + 8270	8oz
W7 2'	11/25 1:00	SOIL	NY STARS 8260 + 8270	8oz
W8 4'	11/26 2:00	SOIL	NY STARS 8260 + 8270	8oz
W9 5'	11/26 9:00	SOIL	NY STARS 8260 + 8270	8oz
W12 5'	11/26 11:00	SOIL	NY STARS 8260 + 8270	8oz
W14 2'	11/26 1:00	SOIL	NY STARS 8260 + 8270	8oz

Comments

Preservation Check those Applicable
4°C ___ Frozen ___ HCl ___ MeOH ___ HNO_3 ___ H_2SO_4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other:

Special Instructions
Field Filtered ☐
Lab to Filter ☐

Samples Relinquished By	Date/Time	Samples Received By	Date/Time
Chris C 12-2-19	11/29/19 0800.	Chris C 11-29-19	12:30
Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time
		Grace	12-2-19 0810 @

Temperature on Receipt 1.4 °C