SUMMARY REPORT

OF

SUBSURFACE INVESTIGATION

Ocean Bay Houses
Former Filling Station

53-21 Beach Channel Drive,
Borough of Queens,
New York City, New York
Block 15890, Lot 58

NYSDEC Spill No. 03-06202

December 4, 2015

ESI File: NQ15100.40

Prepared By:

Ecosystems Strategies, Inc.
24 Davis Avenue, Poughkeepsie, NY 12603
phone 845.452.1658 | fax 845.485.7083 | ecosystemsstrategies.com

SUMMARY REPORT

OF

SUBSURFACE INVESTIGATION

Ocean Bay Houses
Former Filling Station

53-21 Beach Channel Drive
Borough of Queens
New York City, New York

NYSDEC Spill No. 03-06202

December 4, 2015

ESI File: NQ15100.40

Prepared By:

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, New York 12603

Prepared For:

New York City Housing Authority (NYCHA)
23-02 49th Avenue
Long Island City, New York 11101

The undersigned has reviewed this Summary Report of Subsurface Investigation and certifies to the New York City Housing Authority that the information provided in this document is accurate as of the date of issuance by this office.

Any and all questions or comments, including requests for additional information, should be submitted to the undersigned.

Paul H. Ciminello
President

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 Purpose

This Summary Report of Subsurface Investigation (Report) documents environmental fieldwork performed by Ecosystems Strategies, Inc. (ESI) and authorized subcontractors at a former gasoline station (located adjacent to Ocean Bay Houses) at 53-15 Beach Channel Drive, Borough of Queens, New York City, New York. Investigative and analytical work was performed to address contamination associated with New York State Department of Environmental Conservation (NYSDEC) spill number 03-06202. The specific purpose of this Report is to summarize the work performed by ESI and ESI's subcontractors to implement the Field Investigation Work Plan (FIWP) that was prepared for the property by Gannett Fleming for NYCHA (Appendix E), and to suggest, if appropriate, further investigative and/or remedial options regarding previously identified on-site conditions.

This Report describes all fieldwork methodologies for the work conducted by this office, includes discussions of the resulting analytical data from collected samples, and provides conclusions and recommendations drawn from the fieldwork and analytical data.

1.2 Limitations

This written analysis summarizes the site characterization activities conducted on a specified portion of the above-referenced property and is not relevant to other portions of this property or any other property. It is a representation of those portions of the property analyzed as of the respective dates of fieldwork. This Report cannot be held accountable for activities or events resulting in contamination after the dates of fieldwork.

Services summarized in this Report were performed in accordance with generally accepted practices and established NYSDEC protocols. Unless specifically noted, the findings and conclusions contained herein must be considered not as scientific certainties, but as probabilities based on professional judgment.

1.3 Site Location and Description

The property is a 0.19-acre parcel that is bounded by a vacant lot to the east, commercial buildings to the south, Beach 54th Street to the west, and Beach Channel Drive to the north. The specified portion of the property on which the environmental investigation was conducted (hereafter referred to as the "Site") consists of the northern portion of the property, which formerly contained a filling station. A Fieldwork Map indicating specific Site characteristics is provided in Appendix A.

1.4 Site Background

The Site formerly contained a gasoline filling station (the property, however, does not appear in NYSDEC PBS database records). NYSDEC spill number 03-06202 was reported for the Site on September 11, 2003 based on "the results of soil sampling conducted during a [Phase II Environmental Site Assessment]". A fieldwork map provided to ESI by NYSDEC personnel indicates that a subsurface investigation was conducted at the Site on September 4, 2003 by URS (likely the Phase II investigation referenced in the spill database file). Significantly elevated concentrations of volatile organic compounds (VOCs) were documented in groundwater at the northern-central and northwestern portions of the property, in the vicinity of the former filling station. The map depicts two potential source areas and an inferred groundwater contamination plume extending west from the Site. No other site-specific documentation of previous environmental investigations or remediation of spill number 03-06202 has been provided to ESI.

2.0 SUBSURFACE INVESTIGATION

2.1 Summary of Services

The original scope of work (as provided in the work plan specified in Section 1.1, above) included the extension of nine soil borings. Three borings were to be completed as permanent monitoring wells and four were to be completed as temporary monitoring wells. Following NYSDEC review of a previous environmental report for the Site (see Section 1.4), the scope of work was modified (at the request of the NYSDEC) to require the installation of four borings, all of which were to be completed as permanent monitoring wells.

In order to achieve the purpose of the approved work scope and, in accordance with directives provided by the NYSDEC spill officer for the Site, the following activities were conducted by ESI:

- Extended four soil borings on the Site in the vicinity of two former pump islands;
- Completed all soil borings as a permanent monitoring wells; and,
- Determined the presence or absence of gasoline contamination through sampling and laboratory analysis of subsurface soil and groundwater samples for VOCs and semi-volatile organic compounds (SVOCs).

This Report is divided into individual sections that document fieldwork methodology (Section 2.2) and laboratory results (Section 2.3), and present ESI's conclusions and recommendations (Section 3.0).

2.2 Fieldwork Methodology

2.2.1 Site Preparation Services

Prior to the initiation of fieldwork, a request for a complete utility markout of the subject property was submitted by ESI as required by New York State Department of Labor regulations. Confirmation of underground utility locations was secured and a field check of the utility markout was conducted prior to the extension of soil borings. A geophysical survey of the work area was performed by Underground Surveying, LLC on November 9, 2015, in order to determine the location of any other subsurface utilities.

2.2.2 Extension of Soil Borings

Four mechanized soil borings were extended at the northern portion of the Site in the vicinity of the remains of two former pump islands (see Section 1.4, above) on November 9, 2015. Borings were located as follows:

- Soil boring MW-01 was extended to the east of the former eastern pump island.
- Soil boring MW-02 was extended between the eastern and western former pump islands.
- Soil borings MW-03 and MW-04 were extended at the northwestern and southwestern corners of the former filling station area, respectively, near the western (downgradient) property line.

A Fieldwork Map indicating boring locations and associated selected site features is provided in Appendix A.

All mechanized borings were extended by personnel from Zebra Environmental Corporation using a track-mounted Geoprobe equipped with disposable acetate sleeves (used to prevent the cross contamination of soil samples). Sampling was conducted at each boring location at five-foot intervals to a maximum depth of 25 feet below surface grade (bsg). The sampling instrument was

decontaminated prior to the initiation of fieldwork and after the collection of each sample. Decontamination procedures were consistent with established NYSDEC protocols. A MiniRAE 3000 (Model PGM 7320) photo-ionization detector (PID) was utilized by ESI personnel to screen encountered material for the presence of any volatile organic vapors where appropriate [note: due to an equipment malfunction, PID readings were not collected from MW-03 or MW-04]. Prior to the initiation of fieldwork, this PID was properly calibrated to read parts per million calibration gas equivalents (ppm-cge) of isobutylene in accordance with protocols set forth by the equipment manufacturer.

An assessment of subsurface soil characteristics, including soil type, the presence of foreign materials, field indications of contamination (e.g., unusual coloration patterns, or odors), and instrument indications of contamination (i.e., PID readings) was made by ESI personnel during the extension of each soil boring. ESI personnel maintained independent field logs documenting physical characteristics, PID readings, and any field indications of contamination for all encountered material at each boring location. Soil boring logs are provided as Appendix B.

Samples of soil material were collected from each of the soil borings where appropriate (see Section 2.2.5 for specifics regarding sample collection methodology) and notations were made regarding the sampled material's physical characteristics. A sufficient volume of material was collected at each sample location for the required analyses and for potential additional analyses.

Subsurface soils encountered at the Site during the extension of the soil borings generally consisted of 1-3 feet of variable color and texture, poor quality fill sands with solid debris inclusions (e.g. plastic fragments, concrete, etc.) overlying peat and tan, medium to fine sands.

Groundwater was encountered at 4.5 to 5 feet bsg during the extension of the soil borings.

Gasoline odors were noted at all boring locations, with the strongest odors in shallow soils (4-6 feet bsg) at MW-02 and MW-03. Elevated PID readings were noted at MW-01 8-10 (maximum 127 ppm) and MW-02 4-6 (maximum 460 ppm). Due to an equipment malfunction, no PID readings could be collected during the installation of MW-03 and MW-04. Gray staining was observed at all boring locations, generally beginning at or just below the water table and extending to the bottom of each boring. Petroleum odors at all borings significantly decreased below 10 feet bsg.

2.2.3 Monitoring Well Installation and Development

All soil borings were completed as permanent monitoring wells. The wells were constructed of two-inch PVC casing and 0.01-inch slotted PVC well screening. The annular space between the well screen and the borehole was backfilled with clean #1 silica sand and a one-foot thick bentonite seal was poured above the sand. The annular space above the bentonite seal was then grouted with cement. The well casing was equipped with a gripper cap and was finished with a steel "drive-over" cover.

The height of each well casing was surveyed to a vertical accuracy of 0.01 foot, relative to a fixed, on-site artificial benchmark elevation of 100', for use in determining relative groundwater elevations prior to sampling activities.

Wells were developed on November 18, 2015, in order to clear fine-grained material that might have settled around the well screen and to enhance the natural hydraulic connection between the well screen and the surrounding soils. Prior to development, each monitoring well casing was opened and the well column was immediately screened with a PID to document the presence of any volatile organic vapors. Water removed from each monitoring well was visually inspected for indications of contamination. Development was conducted using dedicated plastic tubing and a

peristaltic pump, and was considered complete when purged water no longer appeared to be turbid.

Mild to moderate gasoline odors and slightly elevated PID readings (5-30 ppm) were noted during purging of wells MW-01, MW-03, and MW-04. A moderate gasoline odor was noted at MW-02 and the PID reading from the well headspace was greater than 5,000 ppm (it is not clear whether this number represents actual conditions or an erroneous reading). No significant sheen was noted on the purged water from any well.

2.2.4 Direction of Groundwater Flow

The monitoring wells were subsequently gauged by ESI using a Keck Interface Probe accurate to a hundredth of a foot. No floating petroleum was encountered during well gauging activities. Depth to groundwater ranged from 4.32 to 5.34 feet bsg. A comparison of static groundwater elevations suggests that on-site groundwater flow is to the west-southwest (note: the elevation at MW-02 appears to have been influenced by a shallow concrete layer encountered at this location during boring activities). A Fieldwork Map indicating groundwater elevations is provided in Appendix A.

2.2.5 Sample Collection

All soil samples collected by ESI were obtained in a manner consistent with NYSDEC sample collection and decontamination protocols. Soil samples submitted for VOC analysis were collected using laboratory-supplied volatile organic analysis (VOA) kits and dedicated disposable soil syringes. All field personnel wore dedicated, disposable gloves, and all samples were placed into laboratory supplied containers. Soil samples were collected directly from the acetate sleeves.

Soil samples were collected on November 9, 2015. One soil sample was collected from the top of the saturated zone (4 to 6 feet bsg) and one sample was collected from the area of most evident contamination (or the deepest sampling interval if the area of most evident contamination was the top of the saturated zone). QA/QC field duplicates (soil sample Dup-20151109 [duplicate of MW-01 8-10] and groundwater sample Dup-20151118 [duplicate of MW-01]) were also collected and submitted for analysis.

Sampling of the monitoring wells was conducted on November 18, 2015, following well development. The volume of groundwater in each well was calculated (based on well depth and depth to water measurements) and at least one purge volume of water (three times the static well volume) was removed using dedicated plastic tubing and a peristaltic pump, before groundwater samples were collected. Groundwater samples were collected into 40 ml vials (preserved with acid as appropriate for the specific analysis) and 1 liter amber jars. No groundwater samples were filtered prior to submission to the laboratory.

All soil and water samples were placed in a cooler immediately after sample collection and were maintained at cold temperatures prior to transport to the laboratory. All samples were transported via courier to York Analytical Laboratories, Inc., a New York State Department of Health-certified laboratory (ELAP Certification Number 10854) for chemical analyses. Soil samples and groundwater samples were transported on November 11, 2015 and November 19, 2015, respectively. Appropriate chain-of-custody procedures were followed.

2.3 Laboratory Analysis

2.3.1 Guidance Levels

The term "guidance level", as defined in this Report, refers to the concentration of a particular contaminant above which remedial actions are considered more likely. The overall objective of setting guidance levels is to assess the integrity of on-site soils and groundwater relative to conditions which are likely to present a threat to public health or the environment, given the existing and probable future uses of the Site. On-site soils and groundwater with contaminant levels exceeding these guidance levels are considered more likely to warrant remediation. No independent risk assessment was performed as part of this investigation.

The guidance levels identified in this Report for VOCs and SVOCs detected in soils are based on Soil Cleanup Levels for petroleum contaminated soils provided in NYSDEC CP-51.

Guidance levels for groundwater are based on NYSDEC TOGS 1.1.1.

All data presented in this Report have been analyzed in accordance with applicable guidance levels.

2.3.2 Laboratory Results

All soil and groundwater samples were submitted for analysis of VOCs using USEPA Method 8260 and SVOCs using USEPA Method 8270, CP-51 fuel oil list.

A summary of the results of the laboratory analyses conducted on soil and water samples is presented below. Data summary tables and the laboratory reports are provided in Appendices C and D, respectively, and recommendations regarding these findings are located in Section 3.0.

Soil

The following VOCs were detected in MW-03 4-6 at concentrations above guidance levels. Due to the high dilution of the sample, minimum detection limits for several non-detect compounds in the sample are above their respective guidance levels.

- 1,2,4-trimethylbenzene (330 ppm, guidance level 3.6 ppm)
- 1,3,5-trimethylbenzene (290 ppm, guidance level 8.4 ppm)
- isopropylbenzene (19 ppm, guidance level 2.3 ppm)
- n-propylbenzene (34 ppm, guidance level 3.9 ppm)
- naphthalene (160 ppm, guidance level 12 ppm)
- p-isopropyltoluene (40 ppm, guidance level 10 ppm)
- sec-butylbenzene (20 ppm, guidance level 11 ppm)

The following VOCs were detected in MW-02 4-6 at concentrations above guidance levels:

- p- & m-xylenes (0.43 ppm, guidance level 0.26 ppm)
- xylenes, total (0.68 ppm, guidance level 0.26 ppm)

Trace- to low-levels of numerous other compounds were detected in MW-02 4-6 below guidance levels. With the exception of three trace compounds in MW-02 18-20, MW-03 23-25, and MW-04 13-15, no other VOCs were detected in any sample.

No SVOCs were detected in any sample at concentrations above guidance levels. Trace levels of SVOCs were detected in several of the samples submitted for analysis.

Groundwater

Elevated VOCs were detected in MW-02, MW-03, and MW-04, with peak concentrations at MW-03. Benzene, toluene, and xylenes were detected above guidance levels in MW-02 but were not detected in any of the remaining wells. No VOCs were detected in MW-01 or in the duplicate sample from MW-01. [Note: minimum detection limits for several compounds in samples MW-03 and MW-04 are at or above their respective guidance levels].

3.0 CONCLUSIONS AND RECOMMENDATIONS

This office has completed the services summarized in Section 2.0 on specified portions of the Ocean Bay Houses Former Filling Station property located at 53-21 Beach Channel Drive, Borough of Queens, New York City, New York. Services included the extension of four (4) soil borings, installation of four (4) permanent monitoring wells, and gauging of new monitoring wells at the Site to further the investigation of previously identified subsurface petroleum contamination associated with NYSDEC spill number 03-06202.

Based on the services provided by this office and analytical data generated, the following conclusions and recommendations (shown in **bold**) are provided below:

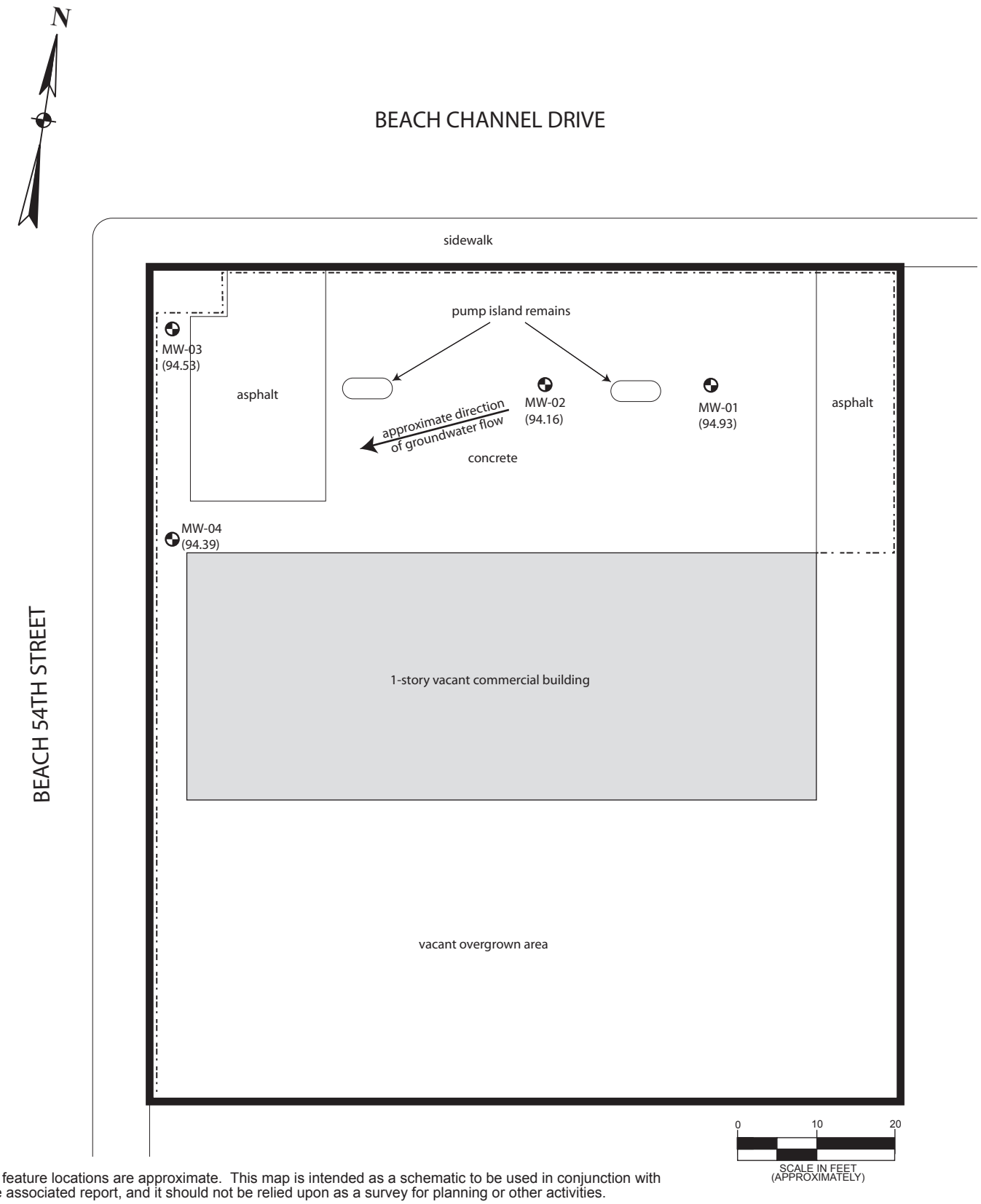
1. Petroleum contamination (elevated PID readings, odors and/or soil staining) was observed in all soil borings extended at the Site. The most significant impacts were documented in shallow soils at the groundwater interface (4 to 6 feet bsg) between the former pump islands (MW-02) and at the northwestern corner of the property (MW-03). Gray staining and odors were encountered in all soils encountered below the water table (odors significantly subsided below 10 feet bsg). Elevated VOCs were detected in shallow soil samples (4 to 6 feet bsg) collected from MW-02 and MW-03, with peak concentrations detected at MW-03.
2. Elevated concentrations of dissolved VOCs were documented at monitoring wells MW-02, MW-03, and MW-04. No concentrations of dissolved VOCs, however, were found at MW-01 (likely to be hydraulically upgradient from the former pump islands). Hydraulically down-gradient wells (MW-03 and MW-04) documented the most elevated concentrations of VOCs, indicating possible movement of concentrations to the west and off-site.
3. These findings support the conclusion that petroleum contamination, likely associated with NYSDEC spill number 03-06202, remains in the vicinity of the former filling station, with the greatest impacts present west of the former pump islands. The extent of soil and groundwater contamination is not known at this time; current data, however, suggest that contaminated soil and groundwater extends off-site to the west.

   It is recommended that additional groundwater monitoring wells be installed down-gradient of the Site (across Beach 54th Street and across Beach Channel Drive).

APPENDIX A

Map

Ecosystems Strategies, Inc.



All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Fieldwork Map

Ocean Bay Houses
Former Filling Station
53-21 Beach Channel Drive
Borough of Queens, New York

Legend:

- subject property border
- chain-link fence
- monitoring well location (groundwater elevation)

ESI File: NQ15100.40
December 2015
Scale as shown
Appendix A

APPENDIX B

Soil Boring Logs

Soil Boring Log

Ecosystems Strategies, Inc.

MW-01 (SHEET 1 OF 1)	Work Plan Implementation (Spill #03-06202) 53-21 Beach Channel Drive Borough of Queens New York City, New York	ESI FILE NQ15100.40
	DATE: 2015-11-09 DRILLER (RIG) Zebra (7720DT Geoprobe, 5' macro-core)	
	ESI STAFF: T. Goodnough WEATHER: sunny, mid-50s F	

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: CONCRETE (4") SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM)	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 5' (60%)	Tan, M-F SAND ****** Saturated at 4.5' *****	Dry-wet	0.2	ND	ND	ND	**(4-6)**
5 – 10' (100%)	Light brown, M-F SAND, turning gray at ~7.5' Gray to black, PEAT with SILT	Wet Wet	127 100	Mild Mild	Yes Yes	ND ND	**(8-10)**
10 – 15' (100%)	Gray, PEAT mixed with gray, M-C SAND Gray, M-C SAND, overlying gray, F SAND ****** End of Boring at 15' ***** ****** Boring completed as monitoring well *****	Wet Wet	0.4 0.4	Mild Mild	Yes Yes	ND ND	

Notes

Fill Materials

Not encountered

Field Evidence of Contamination

Gray staining and petroleum odors from ~7.5 – 15', odor mild from ~10 – 15'

Saturated Soils

4.5 - 15'

Additional Notes

Monitoring well installed - set at 13' bsg, screen from 3-13'
Sample from 4-6' collected from bottom of 0-5' sleeve and top of 5-10' sleeve

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

Ecosystems Strategies, Inc.

MW-02 (SHEET 1 OF 1)	Work Plan Implementation (Spill #03-06202) 53-21 Beach Channel Drive Borough of Queens New York City, New York	ESI FILE NQ15100.40
	DATE: 2015-11-09 DRILLER (RIG) Zebra (7720DT Geoprobe, 5' macro-core)	
	ESI STAFF: T. Goodnough WEATHER: sunny, mid-50s F	

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: CONCRETE (1') SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM)	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 5' (75%)	Brown to gray, M SAND (fill) overlying 1' concrete (turning green at bottom)	Dry	0.0	ND	ND	ND	
	Gray to green, M-C SAND with cobbles	Moist	460	Mod	Yes	ND	**(4-6)**
	****** Saturated at 5' *****						
5 – 10' (100%)	Gray to green, M-C SAND with cobbles	Wet	122	Mod	Yes	ND	
	Gray to black, PEAT with SILT	Wet	387	Mod	Yes	ND	
	Dark gray, M SAND	Wet	134	Mod	Yes	ND	
10 – 15' (100%)	Gray, M SAND	Wet	150	Mod	Yes	ND	
	Gray, F SAND	Wet	20	Mild	Yes	ND	
15 – 20' (100%)	Gray, M-F SAND	Wet	0.4	Mild	Yes	ND	**(18-20)**
	****** End of Boring at 20' *****						
	****** Boring completed as monitoring well *****						

Notes

Fill Materials

0-2'

Field Evidence of Contamination

Gray staining and petroleum odors from ~5 – 15', odor mild from ~15 – 20'

Saturated Soils

5' – 20'

Additional Notes

Monitoring well installed - set at 14' bsg, screen from 4-14'

Sample from 4-6' collected from bottom of 0-5' sleeve and top of 5-10' sleeve

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

Ecosystems Strategies, Inc.

MW-03 (SHEET 1 OF 2)	Work Plan Implementation (Spill #03-06202) 53-21 Beach Channel Drive Borough of Queens New York City, New York	ESI FILE NQ15100.40
	DATE: 2015-11-09 DRILLER (RIG) Zebra (7720DT Geoprobe, 5' macro-core)	
	ESI STAFF: T. Goodnough WEATHER: sunny, mid-50s F	

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: CONCRETE (6") SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM)	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 5' (50%)	Brown, M-F SAND with debris (plastic, masonry) overlying 2" concrete (fill)	Dry	0.2	ND	ND	ND	**(4-6)**
	Tan, M-F SAND, turning gray at ~5'	Wet	NA	Mild	Yes	ND	
	****** Saturated at 4.5' *****						
5 – 10' (100%)	Gray, M-F SAND (note: very strong gasoline odor at ~5-7.5')	Wet	NA	Strong	Yes	ND	
	Gray, PEAT with SILT	Wet	NA	Strong	Yes	ND	
	Dark gray, F SAND	Wet	NA	Mod	Yes	ND	
10 – 15' (100%)	Gray, M-F SAND	Wet	NA	Mild	Yes	ND	
15 – 20' (100%)	Gray, M-F SAND	Wet	NA	Mild	Yes	ND	

Notes

Fill Materials

0-3'

Field Evidence of Contamination

Gray staining and petroleum odors from ~4.5 – 25', odor mild from ~10 – 25'

Saturated Soils

4.5 – 25'

Additional Notes

Monitoring well installed - set at 13' bsg, screen from 3-13'

Sample from 4-6' collected from bottom of 0-5' sleeve and top of 5-10' sleeve

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

Ecosystems Strategies, Inc.

MW-03 (SHEET 2 OF 2)	Work Plan Implementation (Spill #03-06202) 53-21 Beach Channel Drive Borough of Queens New York City, New York	ESI FILE NQ15100.40
	DATE: 2015-11-09 DRILLER (RIG) Zebra (7720DT Geoprobe, 5' macro-core)	
	ESI STAFF: T. Goodnough WEATHER: sunny, mid-50s F	

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: DEBRIS (6") SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM)	ODORS	STAINING	NAPL	SAMPLES COLLECTED
20 – 25' (100%)	Gray, M-F SAND with small shells throughout ****** End of Boring at 25' *****	Wet	NA	Mild	ND	ND	**(23-25)**

Notes

Fill Materials

0-3'

Field Evidence of Contamination

Gray staining and petroleum odors from ~4.5 – 25', odor mild from ~10 – 25'

Saturated Soils

4.5 – 25'

Additional Notes

Monitoring well installed - set at 13' bsg, screen from 3-13'

Sample from 4-6' collected from bottom of 0-5' sleeve and top of 5-10' sleeve

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

Ecosystems Strategies, Inc.

MW-04 (SHEET 1 OF 1)	Work Plan Implementation (Spill #03-06202) 53-21 Beach Channel Drive Borough of Queens New York City, New York	ESI FILE NQ15100.40
	DATE: 2015-11-09 DRILLER (RIG) Zebra (7720DT Geoprobe, 5' macro-core)	
	ESI STAFF: T. Goodnough WEATHER: sunny, mid-50s F	

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: ASPHALT (4") AND CONCRETE (6") SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM)	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 5' (50%)	Black, silty SAND (fill)	Dry	NA	ND	ND	ND	
	Tan, M-F SAND	Wet	NA	ND	ND	ND	**(4-6)**
	****** Saturated at 4.5' *****						
5 – 10' (100%)	Tan, M-F SAND turning gray at ~5.5'	Wet	NA	Mild	Yes	ND	
	Gray to black, PEAT with SILT	Wet	NA	Mild	Yes	ND	
10 – 15' (100%)	Gray to black, PEAT with SILT	Wet	NA	Mild	Yes	ND	
	Gray, M-F SAND	Wet	NA	Mild	Yes	ND	**(13-15)**
	****** End of Boring at 15' *****						

Notes

Fill Materials

0-1'

Field Evidence of Contamination

Gray staining and mild petroleum odors from ~5.5 – 15', odor mild from ~10 - 15'

Saturated Soils

4.5-15'

Additional Notes

Monitoring well installed - set at 13' bsg, screen from 3-13'

Sample from 4-6' collected from bottom of 0-5' sleeve and top of 5-10' sleeve

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

APPENDIX C

Tables

Table 1: Petroleum Compounds in Soils

NYSDEC Spill No. 03-06202

Ecosystems Strategies, Inc.

ESI File: NQ15100.40

All data in mg/Kg (ppm)	**Sample ID**	**MW-01 4-6**		**MW-01 8-10**		**MW-02 4-6**		**MW-02 18-20**		**MW-03 4-6**	
U= Not Detected ≥ indicated value	Sample Date	(2014-10-02)		(2014-10-02)		(2014-10-02)		(2014-10-02)		(2014-10-02)	
Data above Soil Cleanup Levels in **Bold**	Dilution Factor	1		1		1		1		2000	
VOCs , 8260	**Cleanup Level**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,2,4-Trimethylbenzene	3.6	0.0028	*U*	0.0031	*U*	0.31	*E*	0.0025	*U*	**330**	*D*
1,3,5-Trimethylbenzene	8.4	0.0028	*U*	0.0031	*U*	0.1		0.0025	*U*	**290**	*D*
Benzene	0.06	0.0028	*U*	0.0031	*U*	0.037		0.0025	*U*	0.54	*U*
Ethyl Benzene	1	0.0028	*U*	0.0031	*U*	0.18		0.0025	*U*	0.54	*U*
Isopropylbenzene	2.3	0.0028	*U*	0.0031	*U*	0.018		0.0025	*U*	**19**	*D*
Methyl tert-butyl ether (MTBE)	0.93	0.0028	*U*	0.0031	*U*	0.0025	*U*	0.0025	*U*	0.54	*U*
n-Butylbenzene	12	0.0028	*U*	0.0031	*U*	0.17	*B*	0.0041	*JB*	0.54	*U*
n-Propylbenzene	3.9	0.0028	*U*	0.0031	*U*	0.014		0.0025	*U*	**34**	*D*
Naphthalene	12	0.0028	*U*	0.0031	*U*	0.053		0.0025	*U*	**160**	*D*
o-Xylene	0.26	0.0028	*U*	0.0031	*U*	0.25	*E*	0.0025	*U*	0.54	*U*
p- & m- Xylenes	0.26	0.0056	*U*	0.0062	*U*	**0.43**	*E*	0.0049	*U*	1.1	*U*
p-Isopropyltoluene	10	0.0028	*U*	0.0031	*U*	0.016		0.0025	*U*	**40**	*D*
sec-Butylbenzene	11	0.0028	*U*	0.0031	*U*	0.0056		0.0025	*U*	**20**	*D*
tert-Butylbenzene	5.9	0.0028	*U*	0.0031	*U*	0.0025	*U*	0.0025	*U*	0.54	*U*
Toluene	0.7	0.0028	*U*	0.0031	*U*	0.28	*E*	0.0025	*U*	0.54	*U*
Xylenes, Total	0.26	0.0084	*U*	0.0093	*U*	**0.68**	*E*	0.0074	*U*	1.6	*U*

	Sample ID	**MW-01 4-6**		**MW-01 8-10**		**MW-02 4-6**		**MW-02 18-20**		**MW-03 4-6**	
	Sample Date	(2014-10-02)		(2014-10-02)		(2014-10-02)		(2014-10-02)		(2014-10-02)	
	Dilution Factor	2		2		2		2		2	
SVOCs, 8260	**Cleanup Level**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Acenaphthene	20	0.051	*U*	0.085	*U*	0.069	*U*	0.053	*U*	0.077	*U*
Acenaphthylene	100	0.051	*U*	0.1	*JD*	0.069	*U*	0.053	*U*	0.077	*U*
Anthracene	100	0.051	*U*	0.085	*U*	0.069	*U*	0.053	*U*	0.077	*U*
Benzo(a)anthracene	1	0.051	*U*	0.085	*U*	0.069	*U*	0.053	*U*	0.077	*U*
Benzo(a)pyrene	1	0.051	*U*	0.085	*U*	0.069	*U*	0.053	*U*	0.077	*U*
Benzo(b)fluoranthene	1	0.051	*U*	0.085	*U*	0.069	*U*	0.053	*U*	0.077	*U*
Benzo(g,h,i)perylene	100	0.051	*U*	0.085	*U*	0.069	*U*	0.053	*U*	0.077	*U*
Benzo(k)fluoranthene	0.8	0.051	*U*	0.085	*U*	0.069	*U*	0.053	*U*	0.077	*U*
Chrysene	1	0.051	*U*	0.085	*U*	0.083	*JD*	0.053	*U*	0.077	*U*
Dibenzo(a,h)anthracene	0.33	0.051	*U*	0.085	*U*	0.069	*U*	0.053	*U*	0.077	*U*
Fluoranthene	100	0.051	*U*	0.085	*U*	0.088	*JD*	0.053	*U*	0.077	*U*
Fluorene	30	0.051	*U*	0.085	*U*	0.069	*U*	0.053	*U*	0.14	*JD*
Indeno(1,2,3-cd)pyrene	0.5	0.051	*U*	0.085	*U*	0.069	*U*	0.053	*U*	0.077	*U*
Naphthalene	12	0.051	*U*	0.085	*U*	0.1	*JD*	0.053	*U*	0.077	*U*
Phenanthrene	100	0.051	*U*	0.085	*U*	0.086	*JD*	0.053	*U*	0.2	*D*
Pyrene	100	0.051	*U*	0.085	*U*	0.1	*JD*	0.053	*U*	0.086	*JD*

Detected Concentrations

Concentrations Above Cleanup Levels

Notes: Soil Cleanup Levels based on NYSDEC CP-51 NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 1: Petroleum Compounds in Soils

NYSDEC Spill No. 03-06202

Ecosystems Strategies, Inc.

ESI File: NQ15100.40

All data in mg/Kg (ppm)	**Sample ID**	**MW-03 23-25**		**MW-04 4-6**		**MW-04 13-15**		**DUP-20151109**	
U= Not Detected ≥ indicated value	Sample Date	(2014-10-02)		(2014-10-02)		(2014-10-02)		(2014-10-02)	
Data above Soil Cleanup Levels in **Bold**	Dilution Factor	1		1		1		1	
VOCs , 8260	**Cleanup Level**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,2,4-Trimethylbenzene	3.6	0.0034	*J*	0.0025	*U*	0.0027	*U*	0.0058	*U*
1,3,5-Trimethylbenzene	8.4	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
Benzene	0.06	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
Ethyl Benzene	1	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
Isopropylbenzene	2.3	0.0031	*U*	0.0025	*U*	0.0032	*J*	0.0058	*U*
Methyl tert-butyl ether (MTBE)	0.93	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
n-Butylbenzene	12	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
n-Propylbenzene	3.9	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
Naphthalene	12	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
o-Xylene	0.26	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
p- & m- Xylenes	0.26	0.0061	*U*	0.0051	*U*	0.0053	*U*	0.012	*U*
p-Isopropyltoluene	10	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
sec-Butylbenzene	11	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
tert-Butylbenzene	5.9	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
Toluene	0.7	0.0031	*U*	0.0025	*U*	0.0027	*U*	0.0058	*U*
Xylenes, Total	0.26	0.0092	*U*	0.0076	*U*	0.008	*U*	0.017	*U*

	Sample ID	**MW-03 23-25**		**MW-04 4-6**		**MW-04 (0-5)**		**DUP-20151109**	
	Sample Date	(2014-10-02)		(2014-10-02)		(2014-10-02)		(2014-10-02)	
	Dilution Factor	2		2		2		2	
SVOCs, 8260	**Cleanup Level**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Acenaphthene	20	0.059	*U*	0.049	*U*	0.36	*D*	0.13	*U*
Acenaphthylene	100	0.059	*U*	0.049	*U*	0.11	*JD*	0.13	*U*
Anthracene	100	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Benzo(a)anthracene	1	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Benzo(a)pyrene	1	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Benzo(b)fluoranthene	1	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Benzo(g,h,i)perylene	100	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Benzo(k)fluoranthene	0.8	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Chrysene	1	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Dibenzo(a,h)anthracene	0.33	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Fluoranthene	100	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Fluorene	30	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Indeno(1,2,3-cd)pyrene	0.5	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Naphthalene	12	0.059	*U*	0.049	*U*	0.054	*U*	0.17	*JD*
Phenanthrene	100	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*
Pyrene	100	0.059	*U*	0.049	*U*	0.054	*U*	0.13	*U*

Detected Concentrations

Concentrations Above Cleanup Levels

Notes: Soil Cleanup Levels based on NYSDEC CP-51 NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 2: VOCs in Groundwater
NYSDEC Spill No. 03-06202

Ecosystems Strategies, Inc.

ESI File: NQ15100.40

All data in µg/L (parts per billion, ppb)	**Sample ID**	**MW-01**		**MW-02**		**MW-03**		**MW-04**		**Dup-20151118**		**TB-20151118**	
U= Not Detected at or above indicated value	Sample Date	(2015-11-18)		(2015-11-18)		(2015-11-18)		(2015-11-18)		(2015-11-18)		(2015-11-18)	
Data above AWQS shown in **Bold**	Dilution Factor	1		1		1		10		1		1	
VOCs, 8260	**AWQS**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,2,4-Trimethylbenzene	5	0.2	*U*	**12**		**310**	*D*	**220**	*D*	0.2	*U*	0.2	*U*
1,3,5-Trimethylbenzene	5	0.2	*U*	0.2	*U*	**210**	*D*	**54**	*D*	0.2	*U*	0.2	*U*
Benzene	1	0.2	*U*	**9.5**		2	*U*	2	*U*	0.2	*U*	0.2	*U*
Ethyl Benzene	5	0.2	*U*	**18**		2	*U*	**9.4**	*D*	0.2	*U*	0.2	*U*
Isopropylbenzene	5	0.2	*U*	1.2		**14**	*D*	**19**	*D*	0.2	*U*	0.2	*U*
Methyl tert-butyl ether (MTBE)	10	0.2	*U*	0.2	*U*	2	*U*	2	*U*	0.2	*U*	0.2	*U*
Naphthalene	10	1	*U*	4.2		10	*U*	10	*U*	1	*U*	1	*U*
n-Butylbenzene	5	0.2	*U*	0.2	*U*	**17**	*D*	**7.5**	*D*	0.2	*U*	0.2	*U*
n-Propylbenzene	5	0.2	*U*	2.2		**140**	*D*	**75**	*D*	0.2	*U*	0.2	*U*
o-Xylene	5	0.2	*U*	**19**		2	*U*	2	*U*	0.2	*U*	0.2	*U*
p- & m- Xylenes	5	0.5	*U*	**40**		5	*U*	5	*U*	0.5	*U*	0.5	*U*
p-Isopropyltoluene	5	0.2	*U*	0.2	*U*	**5.1**	*D*	2	*U*	0.2	*U*	0.2	*U*
sec-Butylbenzene	5	0.2	*U*	0.2	*U*	**20**	*D*	**7**	*D*	0.2	*U*	0.2	*U*
tert-Butylbenzene	5	0.2	*U*	0.2	*U*	2	*U*	2	*U*	0.2	*U*	0.2	*U*
Toluene	5	0.2	*U*	**38**		2	*U*	2	*U*	0.2	*U*	0.2	*U*
Xylenes, Total	5	0.6	*U*	**59**		6	*U*	6	*U*	0.6	*U*	0.6	*U*
Total VOCs		ND		203.1		716.1		391.9		ND		ND	

Detected concentrations

Concentrations above AWQS

Notes: AWQS based on NYSDEC TOGS 1.1.1 (Class GA) NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 3: SVOCs in Groundwater

NYSDEC Spill No. 03-6202

Ecosystems Strategies, Inc.

ESI File: NQ15100.40

All data in µg/L (parts per billion, ppb)	**Sample ID**	**MW-01**		**MW-02**		**MW-03**		**MW-04**		**Dup-20151118**	
U= Not Detected at or above indicated value	Sample Date	(2015-11-18)		(2015-11-18)		(2015-11-18)		(2015-11-18)		(2015-11-18)	
Data above AWQS shown in **Bold**	Dilution Factor	1		1		1		1		1	
SVOCs, 8270	**AWQS**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Acenaphthene	20	0.15		8.08		0.16		0.13		0.14	
Acenaphthylene	NA	0.05	*J*	0.05	*J*	0.05	*U*	0.05	*U*	0.05	*J*
Anthracene	50	0.05	*U*	0.2		0.05	*U*	0.05	*U*	0.05	*U*
Benzo(a)anthracene	0.002	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*
Benzo(a)pyrene	NA	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*
Benzo(b)fluoranthene	0.002	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*
Benzo(g,h,i)perylene	NA	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*
Benzo(k)fluoranthene	0.002	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*
Chrysene	0.002	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*
Dibenzo(a,h)anthracene	NA	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*
Fluoranthene	50	0.05	*U*	0.09		0.05	*U*	0.05	*U*	0.05	*U*
Fluorene	50	0.05	*U*	0.19		0.13		0.06		0.05	*U*
Indeno(1,2,3-cd)pyrene	0.002	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*
Naphthalene	10	0.05	*U*	2.75		0.26		0.9		0.05	*U*
Phenanthrene	50	0.05	*U*	0.23		0.08		0.11		0.05	*U*
Pyrene	50	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*	0.05	*U*

Detected concentrations

Concentrations above AWQS

Notes: AWQS based on NYSDEC TOGS 1.1.1 (Class GA) NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

APPENDIX D

Laboratory Reports

Technical Report

prepared for:

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie NY, 12603
Attention: Tyler Goodnough

Report Date: 11/23/2015
Client Project ID: NQ15100.40
York Project (SDG) No.: 15K0414

Report Date: 11/23/2015
Client Project ID: NQ15100.40
York Project (SDG) No.: 15K0414

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie NY, 12603
Attention: Tyler Goodnough

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 November 11, 2015 and listed below. The project was identified as your project: **NQ15100.40**.

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 Notes 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 attachment to 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
15K0414-01	MW-01 4-6	Soil	11/09/2015	11/11/2015
15K0414-02	MW-01 8-10	Soil	11/09/2015	11/11/2015
15K0414-03	MW-02 4-6	Soil	11/09/2015	11/11/2015
15K0414-04	MW-02 18-20	Soil	11/09/2015	11/11/2015
15K0414-05	MW-03 4-6	Soil	11/09/2015	11/11/2015
15K0414-06	MW-03 23-25	Soil	11/09/2015	11/11/2015
15K0414-07	MW-04 4-6	Soil	11/09/2015	11/11/2015
15K0414-08	MW-04 13-15	Soil	11/09/2015	11/11/2015
15K0414-09	DUP-20151109	Soil	11/09/2015	11/11/2015

General Notes for York Project (SDG) No.: 15K0414

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 samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By: 

Date: 11/23/2015

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: MW-01 4-6 **York Sample ID:** 15K0414-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/19/2015 15:28	11/20/2015 00:40	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/19/2015 15:28	11/20/2015 00:40	SS
71-43-2	Benzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/19/2015 15:28	11/20/2015 00:40	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/19/2015 15:28	11/20/2015 00:40	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/19/2015 15:28	11/20/2015 00:40	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/19/2015 15:28	11/20/2015 00:40	SS
91-20-3	Naphthalene	ND		ug/kg dry	2.8	11	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	11/19/2015 15:28	11/20/2015 00:40	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/19/2015 15:28	11/20/2015 00:40	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/19/2015 15:28	11/20/2015 00:40	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	11/19/2015 15:28	11/20/2015 00:40	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.6	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	11/19/2015 15:28	11/20/2015 00:40	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/19/2015 15:28	11/20/2015 00:40	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/19/2015 15:28	11/20/2015 00:40	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/19/2015 15:28	11/20/2015 00:40	SS
108-88-3	Toluene	ND		ug/kg dry	2.8	5.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/19/2015 15:28	11/20/2015 00:40	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.4	17	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/19/2015 15:28	11/20/2015 00:40	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*105 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*99.7 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*111 %*	*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	51	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 17:18	KH

Sample Information

Client Sample ID: MW-01 4-6 **York Sample ID:** 15K0414-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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
208-96-8	Acenaphthylene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
85-01-8	Phenanthrene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/kg dry	51	100	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:18	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*62.4 %*	*21-90*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*58.8 %*	*21-93*
1718-51-0	*Surrogate: Terphenyl-d14*	*54.3 %*	*18-102*

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**82.2**		%	0.100	0.100	1	SM 2540G	11/11/2015 18:34	11/12/2015 13:46	CLS
								Certifications:	CTDOH		

Sample Information

Client Sample ID: **MW-01 8-10** **York Sample ID:** **15K0414-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 01:10	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 01:10	SS
71-43-2	Benzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 01:10	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 01:10	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 01:10	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 01:10	SS
91-20-3	Naphthalene	ND		ug/kg dry	3.1	12	1	EPA 8260C Certifications:	11/19/2015 15:28 NELAC-NY10854,NJDEP	11/20/2015 01:10	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 01:10	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 01:10	SS
95-47-6	o-Xylene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854	11/20/2015 01:10	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	6.2	12	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854	11/20/2015 01:10	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 01:10	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 01:10	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 01:10	SS
108-88-3	Toluene	ND		ug/kg dry	3.1	6.2	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 01:10	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	9.3	19	1	EPA 8260C Certifications:	11/19/2015 15:28 CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 01:10	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*101 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*102 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*122 %*	*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	85	170	2	EPA 8270D Certifications:	11/17/2015 08:56 CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 17:49	KH

Sample Information

Client Sample ID: MW-01 8-10 **York Sample ID:** 15K0414-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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
208-96-8	**Acenaphthylene**	**100**	J	ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
120-12-7	Anthracene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
218-01-9	Chrysene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
206-44-0	Fluoranthene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
86-73-7	Fluorene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: NELAC-NY10854,NJDEP,PADEP			
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
91-20-3	Naphthalene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
85-01-8	Phenanthrene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
129-00-0	Pyrene	ND		ug/kg dry	85	170	2	EPA 8270D	11/17/2015 08:56	11/17/2015 17:49	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*58.4 %*	*21-90*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*51.8 %*	*21-93*
1718-51-0	*Surrogate: Terphenyl-d14*	*45.4 %*	*18-102*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**49.2**		%	0.100	0.100	1	SM 2540G	11/11/2015 18:34	11/12/2015 13:46	CLS
								Certifications: CTDOH			

Sample Information

Client Sample ID: **MW-02 4-6** **York Sample ID:** **15K0414-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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**	**310**	E	ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
108-67-8	**1,3,5-Trimethylbenzene**	**100**		ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
71-43-2	**Benzene**	**37**		ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
100-41-4	**Ethyl Benzene**	**180**		ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
98-82-8	**Isopropylbenzene**	**18**		ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
91-20-3	**Naphthalene**	**170**	B	ug/kg dry	2.5	9.9	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: NELAC-NY10854,NJDEP			
104-51-8	**n-Butylbenzene**	**14**		ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
103-65-1	**n-Propylbenzene**	**53**		ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
95-47-6	**o-Xylene**	**250**	E	ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854			
179601-23-1	**p- & m- Xylenes**	**430**	E	ug/kg dry	5.0	9.9	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854			
99-87-6	**p-Isopropyltoluene**	**16**		ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
135-98-8	**sec-Butylbenzene**	**5.6**		ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
108-88-3	**Toluene**	**280**	E	ug/kg dry	2.5	5.0	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
1330-20-7	**Xylenes, Total**	**680**	E	ug/kg dry	7.4	15	1	EPA 8260C	11/20/2015 08:27	11/20/2015 20:29	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*91.5 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*98.2 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*95.5 %*	*76-130*

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

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546 SVOA

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: MW-02 4-6 **York Sample ID:** 15K0414-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546 SVOA

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	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
120-12-7	Anthracene	ND		ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
218-01-9	**Chrysene**	**83**	J	ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
206-44-0	**Fluoranthene**	**88**	J	ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
86-73-7	Fluorene	ND		ug/kg dry	69	140	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
91-20-3	**Naphthalene**	**100**	J	ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	11/16/2015 06:22	11/16/2015 20:55	KH
85-01-8	**Phenanthrene**	**86**	J	ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH
129-00-0	**Pyrene**	**100**	J	ug/kg dry	69	140	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 20:55	KH

	Surrogate Recoveries	Result		Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*44.2 %*	S-D	*21-90*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*93.3 %*	S-D	*21-93*
1718-51-0	*Surrogate: Terphenyl-d14*	*105 %*	S-D	*18-102*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**91.4**		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	11/11/2015 18:34	11/12/2015 13:46	CLS

Sample Information

Client Sample ID: **MW-02 4-6** **York Sample ID:** **15K0414-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

Sample Information

Client Sample ID: **MW-02 18-20** **York Sample ID:** **15K0414-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 08:27	11/20/2015 21:10	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 08:27	11/20/2015 21:10	BK
71-43-2	Benzene	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 08:27	11/20/2015 21:10	BK
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 08:27	11/20/2015 21:10	BK
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 08:27	11/20/2015 21:10	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 08:27	11/20/2015 21:10	BK
91-20-3	**Naphthalene**	**4.1**	J, B	ug/kg dry	2.5	9.9	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	11/20/2015 08:27	11/20/2015 21:10	BK
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 08:27	11/20/2015 21:10	BK
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 08:27	11/20/2015 21:10	BK
95-47-6	o-Xylene	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	11/20/2015 08:27	11/20/2015 21:10	BK
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	4.9	9.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	11/20/2015 08:27	11/20/2015 21:10	BK
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 08:27	11/20/2015 21:10	BK
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 08:27	11/20/2015 21:10	BK
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 08:27	11/20/2015 21:10	BK
108-88-3	Toluene	ND		ug/kg dry	2.5	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 08:27	11/20/2015 21:10	BK
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.4	15	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 08:27	11/20/2015 21:10	BK

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*101 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*100 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*98.3 %*	*76-130*

Sample Information

Client Sample ID: **MW-02 18-20** **York Sample ID:** **15K0414-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
120-12-7	Anthracene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
218-01-9	Chrysene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
206-44-0	Fluoranthene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
86-73-7	Fluorene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
91-20-3	Naphthalene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	11/17/2015 08:56	11/17/2015 18:20	KH
85-01-8	Phenanthrene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH
129-00-0	Pyrene	ND		ug/kg dry	53	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:56	11/17/2015 18:20	KH

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*57.7 %*	*21-90*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*51.8 %*	*21-93*
1718-51-0	*Surrogate: Terphenyl-d14*	*56.1 %*	*18-102*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**79.4**		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	11/11/2015 18:34	11/12/2015 13:46	CLS

Sample Information

Client Sample ID: **MW-03 4-6** **York Sample ID:** **15K0414-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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**	**330000**		ug/kg dry	4300	8600	2000	EPA 8260C	11/20/2015 08:27	11/20/2015 21:50	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
108-67-8	**1,3,5-Trimethylbenzene**	**290000**		ug/kg dry	4300	8600	2000	EPA 8260C	11/20/2015 08:27	11/20/2015 21:50	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
71-43-2	Benzene	ND		ug/kg dry	540	1100	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
100-41-4	Ethyl Benzene	ND		ug/kg dry	540	1100	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
98-82-8	**Isopropylbenzene**	**19000**		ug/kg dry	540	1100	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	540	1100	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
91-20-3	Naphthalene	ND		ug/kg dry	540	2200	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: NELAC-NY10854,NJDEP			
104-51-8	**n-Butylbenzene**	**34000**		ug/kg dry	540	1100	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
103-65-1	**n-Propylbenzene**	**160000**		ug/kg dry	4300	8600	2000	EPA 8260C	11/20/2015 08:27	11/20/2015 21:50	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
95-47-6	o-Xylene	ND		ug/kg dry	540	1100	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854			
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	1100	2200	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854			
99-87-6	**p-Isopropyltoluene**	**40000**		ug/kg dry	540	1100	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
135-98-8	**sec-Butylbenzene**	**20000**		ug/kg dry	540	1100	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
98-06-6	tert-Butylbenzene	ND		ug/kg dry	540	1100	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
108-88-3	Toluene	ND		ug/kg dry	540	1100	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
1330-20-7	Xylenes, Total	ND		ug/kg dry	1600	3200	250	EPA 8260C	11/20/2015 08:27	11/20/2015 22:31	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result		Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*152 %*	S-04	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*81.0 %*	S-04	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*111 %*		*76-130*

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

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546 SVOA

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	77	150	2	EPA 8270D	11/16/2015 06:22	11/16/2015 21:57	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: MW-03 4-6 **York Sample ID:** 15K0414-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
208-96-8	Acenaphthylene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
120-12-7	Anthracene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
218-01-9	Chrysene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
206-44-0	Fluoranthene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
86-73-7	**Fluorene**	**140**	J	ug/kg dry	77	150	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
91-20-3	Naphthalene	ND		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	11/16/2015 06:22	11/16/2015 21:57	KH
85-01-8	**Phenanthrene**	**200**		ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH
129-00-0	**Pyrene**	**86**	J	ug/kg dry	77	150	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/16/2015 21:57	KH

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*48.0 %*	*21-90*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*68.7 %*	*21-93*
1718-51-0	*Surrogate: Terphenyl-d14*	*68.6 %*	*18-102*

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**81.7**		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	11/11/2015 18:34	11/12/2015 13:46	CLS

Sample Information

Client Sample ID: MW-03 23-25 **York Sample ID:** 15K0414-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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**	**3.4**	J	ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
71-43-2	Benzene	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
91-20-3	Naphthalene	ND		ug/kg dry	3.1	12	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	NELAC-NY10854,NJDEP		
104-51-8	n-Butylbenzene	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
103-65-1	n-Propylbenzene	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
95-47-6	o-Xylene	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854		
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	6.1	12	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854		
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
135-98-8	sec-Butylbenzene	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
98-06-6	tert-Butylbenzene	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
108-88-3	Toluene	ND		ug/kg dry	3.1	6.1	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/kg dry	9.2	18	1	EPA 8260C	11/20/2015 08:27	11/20/2015 23:12	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*99.8 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*101 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*98.5 %*	*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	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: MW-03 23-25 **York Sample ID:** 15K0414-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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
208-96-8	Acenaphthylene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
85-01-8	Phenanthrene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/kg dry	59	120	2	EPA 8270D	11/17/2015 08:53	11/17/2015 18:51	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*50.4 %*	*21-90*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*46.9 %*	*21-93*
1718-51-0	*Surrogate: Terphenyl-d14*	*50.0 %*	*18-102*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**70.4**		%	0.100	0.100	1	SM 2540G	11/11/2015 18:34	11/12/2015 13:46	CLS
								Certifications:	CTDOH		

Sample Information

Client Sample ID: MW-04 4-6 **York Sample ID:** 15K0414-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 23:53	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 23:53	BK
71-43-2	Benzene	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 23:53	BK
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 23:53	BK
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 23:53	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 23:53	BK
91-20-3	Naphthalene	ND		ug/kg dry	2.5	10	1	EPA 8260C Certifications:	11/20/2015 08:27 NELAC-NY10854,NJDEP	11/20/2015 23:53	BK
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 23:53	BK
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 23:53	BK
95-47-6	o-Xylene	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854	11/20/2015 23:53	BK
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.1	10	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854	11/20/2015 23:53	BK
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 23:53	BK
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 23:53	BK
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP	11/20/2015 23:53	BK
108-88-3	Toluene	ND		ug/kg dry	2.5	5.1	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 23:53	BK
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.6	15	1	EPA 8260C Certifications:	11/20/2015 08:27 CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 23:53	BK

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*102 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*101 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*93.9 %*	*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	49	99	2	EPA 8270D Certifications:	11/17/2015 08:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 19:21	KH

Sample Information

Client Sample ID: MW-04 4-6 **York Sample ID:** 15K0414-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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
208-96-8	Acenaphthylene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
85-01-8	Phenanthrene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/kg dry	49	99	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:21	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*65.3 %*	*21-90*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*57.8 %*	*21-93*
1718-51-0	*Surrogate: Terphenyl-d14*	*63.1 %*	*18-102*

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**84.4**		%	0.100	0.100	1	SM 2540G	11/11/2015 18:34	11/12/2015 13:46	CLS
								Certifications:	CTDOH		

Sample Information

Client Sample ID: **MW-04 13-15** **York Sample ID:** **15K0414-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 04:38	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 04:38	BK
71-43-2	Benzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 16:41	11/21/2015 04:38	BK
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 16:41	11/21/2015 04:38	BK
98-82-8	**Isopropylbenzene**	**3.2**	J	ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 04:38	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 04:38	BK
91-20-3	Naphthalene	ND		ug/kg dry	2.7	11	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 04:38	BK
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 04:38	BK
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 04:38	BK
95-47-6	o-Xylene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	11/20/2015 16:41	11/21/2015 04:38	BK
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.3	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	11/20/2015 16:41	11/21/2015 04:38	BK
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 04:38	BK
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 04:38	BK
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 04:38	BK
108-88-3	Toluene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 16:41	11/21/2015 04:38	BK
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.0	16	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 16:41	11/21/2015 04:38	BK

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*104 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*101 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*95.1 %*	*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**	**360**		ug/kg dry	54	110	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/17/2015 08:53	11/17/2015 19:52	KH

Sample Information

Client Sample ID: MW-04 13-15 **York Sample ID:** 15K0414-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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
208-96-8	**Acenaphthylene**	**110**	J	ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
85-01-8	Phenanthrene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/kg dry	54	110	2	EPA 8270D	11/17/2015 08:53	11/17/2015 19:52	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*74.5 %*	*21-90*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*71.2 %*	*21-93*
1718-51-0	*Surrogate: Terphenyl-d14*	*84.0 %*	*18-102*

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**77.8**		%	0.100	0.100	1	SM 2540G	11/11/2015 18:34	11/12/2015 13:46	CLS
								Certifications:	CTDOH		

Sample Information

Client Sample ID: DUP-20151109 **York Sample ID:** 15K0414-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 05:19	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 05:19	BK
71-43-2	Benzene	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 16:41	11/21/2015 05:19	BK
100-41-4	Ethyl Benzene	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 16:41	11/21/2015 05:19	BK
98-82-8	Isopropylbenzene	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 05:19	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 05:19	BK
91-20-3	Naphthalene	ND		ug/kg dry	5.8	23	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 05:19	BK
104-51-8	n-Butylbenzene	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 05:19	BK
103-65-1	n-Propylbenzene	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 05:19	BK
95-47-6	o-Xylene	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	11/20/2015 16:41	11/21/2015 05:19	BK
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	12	23	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	11/20/2015 16:41	11/21/2015 05:19	BK
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 05:19	BK
135-98-8	sec-Butylbenzene	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 05:19	BK
98-06-6	tert-Butylbenzene	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/20/2015 16:41	11/21/2015 05:19	BK
108-88-3	Toluene	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 16:41	11/21/2015 05:19	BK
1330-20-7	Xylenes, Total	ND		ug/kg dry	17	35	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2015 16:41	11/21/2015 05:19	BK

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*105 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*102 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*96.5 %*	*76-130*

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

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546 SVOA

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	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH

Sample Information

Client Sample ID: DUP-20151109 **York Sample ID:** 15K0414-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0414	NQ15100.40	Soil	November 9, 2015 3:00 pm	11/11/2015

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

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
208-96-8	Acenaphthylene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
120-12-7	Anthracene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
218-01-9	Chrysene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
206-44-0	Fluoranthene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
86-73-7	Fluorene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
91-20-3	**Naphthalene**	**170**	J	ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	11/16/2015 06:22	11/17/2015 00:01	KH
85-01-8	Phenanthrene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH
129-00-0	Pyrene	ND		ug/kg dry	130	260	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/16/2015 06:22	11/17/2015 00:01	KH

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*29.6 %*	*21-90*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*25.2 %*	*21-93*
1718-51-0	*Surrogate: Terphenyl-d14*	*33.1 %*	*18-102*

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**48.4**		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	11/11/2015 18:34	11/12/2015 13:46	CLS

Analytical Batch Summary

Batch ID: BK50605 **Preparation Method:** % Solids Prep **Prepared By:** CLS

YORK Sample ID	Client Sample ID	Preparation Date
15K0414-01	MW-01 4-6	11/11/15
15K0414-02	MW-01 8-10	11/11/15
15K0414-03	MW-02 4-6	11/11/15
15K0414-04	MW-02 18-20	11/11/15
15K0414-05	MW-03 4-6	11/11/15
15K0414-06	MW-03 23-25	11/11/15
15K0414-07	MW-04 4-6	11/11/15
15K0414-08	MW-04 13-15	11/11/15
15K0414-09	DUP-20151109	11/11/15
BK50605-DUP1	Duplicate	11/11/15

Batch ID: BK50767 **Preparation Method:** EPA 3546 SVOA **Prepared By:** TB

YORK Sample ID	Client Sample ID	Preparation Date
15K0414-03	MW-02 4-6	11/16/15
15K0414-05	MW-03 4-6	11/16/15
15K0414-09	DUP-20151109	11/16/15
BK50767-BLK1	Blank	11/16/15
BK50767-BS1	LCS	11/16/15
BK50767-BSD1	LCS Dup	11/16/15

Batch ID: BK50839 **Preparation Method:** EPA 3550C **Prepared By:** CM

YORK Sample ID	Client Sample ID	Preparation Date
15K0414-01	MW-01 4-6	11/17/15
15K0414-02	MW-01 8-10	11/17/15
15K0414-04	MW-02 18-20	11/17/15
15K0414-06	MW-03 23-25	11/17/15
15K0414-07	MW-04 4-6	11/17/15
15K0414-08	MW-04 13-15	11/17/15
BK50839-BLK1	Blank	11/17/15
BK50839-BS1	LCS	11/17/15

Batch ID: BK51049 **Preparation Method:** EPA 5035A **Prepared By:** OW

YORK Sample ID	Client Sample ID	Preparation Date
15K0414-01	MW-01 4-6	11/19/15
15K0414-02	MW-01 8-10	11/19/15
BK51049-BLK1	Blank	11/19/15
BK51049-BS1	LCS	11/19/15
BK51049-BSD1	LCS Dup	11/19/15

Batch ID: BK51085 **Preparation Method:** EPA 5035A **Prepared By:** BGS

YORK Sample ID	Client Sample ID	Preparation Date
15K0414-03	MW-02 4-6	11/20/15
15K0414-03RE1	MW-02 4-6	11/20/15
15K0414-04	MW-02 18-20	11/20/15
15K0414-05	MW-03 4-6	11/20/15
15K0414-05RE1	MW-03 4-6	11/20/15
15K0414-06	MW-03 23-25	11/20/15
15K0414-07	MW-04 4-6	11/20/15
BK51085-BLK1	Blank	11/20/15
BK51085-BS1	LCS	11/20/15
BK51085-BSD1	LCS Dup	11/20/15

Batch ID: BK51124 **Preparation Method:** EPA 5035A **Prepared By:** BK

YORK Sample ID	Client Sample ID	Preparation Date
15K0414-08	MW-04 13-15	11/20/15
15K0414-09	DUP-20151109	11/20/15
BK51124-BLK1	Blank	11/20/15
BK51124-BS1	LCS	11/20/15
BK51124-BSD1	LCS Dup	11/20/15

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK51049 - EPA 5035A											
Blank (BK51049-BLK1)								Prepared & Analyzed: 11/19/2015			
1,2,4-Trimethylbenzene	ND	5.0	ug/kg wet								
1,3,5-Trimethylbenzene	ND	5.0	"								
Benzene	ND	5.0	"								
Ethyl Benzene	ND	5.0	"								
Isopropylbenzene	ND	5.0	"								
Methyl tert-butyl ether (MTBE)	ND	5.0	"								
Naphthalene	ND	10	"								
n-Butylbenzene	ND	5.0	"								
n-Propylbenzene	ND	5.0	"								
o-Xylene	ND	5.0	"								
p- & m- Xylenes	ND	10	"								
p-Isopropyltoluene	ND	5.0	"								
sec-Butylbenzene	ND	5.0	"								
tert-Butylbenzene	ND	5.0	"								
Toluene	ND	5.0	"								
Xylenes, Total	ND	15	"								
Surrogate: 1,2-Dichloroethane-d4	*50.8*		*ug/L*	*50.0*		*102*	*77-125*				
Surrogate: Toluene-d8	*49.4*		*"*	*50.0*		*98.8*	*85-120*				
Surrogate: p-Bromofluorobenzene	*57.8*		*"*	*50.0*		*116*	*76-130*				
LCS (BK51049-BS1)								Prepared & Analyzed: 11/19/2015			
1,2,4-Trimethylbenzene	50		ug/L	50.0		101	84-125				
1,3,5-Trimethylbenzene	50		"	50.0		99.9	82-126				
Benzene	53		"	50.0		105	77-127				
Ethyl Benzene	50		"	50.0		99.5	84-125				
Isopropylbenzene	51		"	50.0		101	81-127				
Methyl tert-butyl ether (MTBE)	53		"	50.0		106	74-131				
Naphthalene	59		"	50.0		117	86-141				
n-Butylbenzene	48		"	50.0		95.7	80-130				
n-Propylbenzene	50		"	50.0		99.6	74-136				
o-Xylene	47		"	50.0		94.8	83-123				
p- & m- Xylenes	97		"	100		97.0	82-128				
p-Isopropyltoluene	50		"	50.0		101	85-125				
sec-Butylbenzene	50		"	50.0		101	83-125				
tert-Butylbenzene	51		"	50.0		103	80-127				
Toluene	50		"	50.0		100	85-121				
Surrogate: 1,2-Dichloroethane-d4	*51.1*		*"*	*50.0*		*102*	*77-125*				
Surrogate: Toluene-d8	*49.3*		*"*	*50.0*		*98.7*	*85-120*				
Surrogate: p-Bromofluorobenzene	*51.3*		*"*	*50.0*		*103*	*76-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK51049 - EPA 5035A											
LCS Dup (BK51049-BSD1)								Prepared & Analyzed: 11/19/2015			
1,2,4-Trimethylbenzene	49		ug/L	50.0		99.0	84-125		1.56	30	
1,3,5-Trimethylbenzene	49		"	50.0		97.0	82-126		2.95	30	
Benzene	54		"	50.0		107	77-127		2.07	30	
Ethyl Benzene	49		"	50.0		98.7	84-125		0.787	30	
Isopropylbenzene	50		"	50.0		101	81-127		0.812	30	
Methyl tert-butyl ether (MTBE)	55		"	50.0		109	74-131		2.80	30	
Naphthalene	58		"	50.0		117	86-141		0.633	30	
n-Butylbenzene	48		"	50.0		96.9	80-130		1.29	30	
n-Propylbenzene	49		"	50.0		98.0	74-136		1.60	30	
o-Xylene	48		"	50.0		95.6	83-123		0.819	30	
p- & m- Xylenes	96		"	100		96.4	82-128		0.693	30	
p-Isopropyltoluene	50		"	50.0		101	85-125		0.417	30	
sec-Butylbenzene	50		"	50.0		99.9	83-125		1.04	30	
tert-Butylbenzene	50		"	50.0		101	80-127		1.71	30	
Toluene	50		"	50.0		100	85-121		0.0399	30	
Surrogate: 1,2-Dichloroethane-d4	*52.4*		*"*	*50.0*		*105*	*77-125*				
Surrogate: Toluene-d8	*48.7*		*"*	*50.0*		*97.5*	*85-120*				
Surrogate: p-Bromofluorobenzene	*51.6*		*"*	*50.0*		*103*	*76-130*				
Batch BK51085 - EPA 5035A											
Blank (BK51085-BLK1)								Prepared & Analyzed: 11/20/2015			
1,2,4-Trimethylbenzene	ND	5.0	ug/kg wet								
1,3,5-Trimethylbenzene	ND	5.0	"								
Benzene	ND	5.0	"								
Ethyl Benzene	ND	5.0	"								
Isopropylbenzene	ND	5.0	"								
Methyl tert-butyl ether (MTBE)	ND	5.0	"								
Naphthalene	3.0	10	"								
n-Butylbenzene	ND	5.0	"								
n-Propylbenzene	ND	5.0	"								
o-Xylene	ND	5.0	"								
p- & m- Xylenes	ND	10	"								
p-Isopropyltoluene	ND	5.0	"								
sec-Butylbenzene	ND	5.0	"								
tert-Butylbenzene	ND	5.0	"								
Toluene	ND	5.0	"								
Xylenes, Total	ND	15	"								
Surrogate: 1,2-Dichloroethane-d4	*51.8*		*ug/L*	*50.0*		*104*	*77-125*				
Surrogate: Toluene-d8	*52.0*		*"*	*50.0*		*104*	*85-120*				
Surrogate: p-Bromofluorobenzene	*47.6*		*"*	*50.0*		*95.3*	*76-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK51085 - EPA 5035A											
LCS (BK51085-BS1)							Prepared & Analyzed: 11/20/2015				
1,2,4-Trimethylbenzene	51		ug/L	50.0		102	84-125				
1,3,5-Trimethylbenzene	51		"	50.0		102	82-126				
Benzene	53		"	50.0		106	77-127				
Ethyl Benzene	53		"	50.0		106	84-125				
Isopropylbenzene	52		"	50.0		104	81-127				
Methyl tert-butyl ether (MTBE)	49		"	50.0		97.2	74-131				
Naphthalene	50		"	50.0		100	86-141				
n-Butylbenzene	51		"	50.0		103	80-130				
n-Propylbenzene	52		"	50.0		104	74-136				
o-Xylene	50		"	50.0		100	83-123				
p- & m- Xylenes	100		"	100		103	82-128				
p-Isopropyltoluene	52		"	50.0		104	85-125				
sec-Butylbenzene	51		"	50.0		103	83-125				
tert-Butylbenzene	49		"	50.0		97.7	80-127				
Toluene	51		"	50.0		101	85-121				
Surrogate: 1,2-Dichloroethane-d4	*51.8*		*"*	*50.0*		*104*	*77-125*				
Surrogate: Toluene-d8	*50.5*		*"*	*50.0*		*101*	*85-120*				
Surrogate: p-Bromofluorobenzene	*48.8*		*"*	*50.0*		*97.6*	*76-130*				
LCS Dup (BK51085-BSD1)							Prepared & Analyzed: 11/20/2015				
1,2,4-Trimethylbenzene	56		ug/L	50.0		111	84-125		8.75	30	
1,3,5-Trimethylbenzene	55		"	50.0		109	82-126		7.09	30	
Benzene	58		"	50.0		115	77-127		8.08	30	
Ethyl Benzene	56		"	50.0		112	84-125		5.99	30	
Isopropylbenzene	54		"	50.0		109	81-127		4.96	30	
Methyl tert-butyl ether (MTBE)	53		"	50.0		106	74-131		8.26	30	
Naphthalene	51		"	50.0		102	86-141		1.43	30	
n-Butylbenzene	55		"	50.0		111	80-130		7.51	30	
n-Propylbenzene	56		"	50.0		113	74-136		7.88	30	
o-Xylene	54		"	50.0		108	83-123		7.30	30	
p- & m- Xylenes	110		"	100		111	82-128		7.86	30	
p-Isopropyltoluene	57		"	50.0		113	85-125		8.52	30	
sec-Butylbenzene	56		"	50.0		112	83-125		8.10	30	
tert-Butylbenzene	54		"	50.0		108	80-127		10.4	30	
Toluene	54		"	50.0		109	85-121		7.46	30	
Surrogate: 1,2-Dichloroethane-d4	*50.2*		*"*	*50.0*		*100*	*77-125*				
Surrogate: Toluene-d8	*49.9*		*"*	*50.0*		*99.8*	*85-120*				
Surrogate: p-Bromofluorobenzene	*47.2*		*"*	*50.0*		*94.4*	*76-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK51124 - EPA 5035A											
Blank (BK51124-BLK1)											Prepared: 11/20/2015 Analyzed: 11/21/2015
1,2,4-Trimethylbenzene	ND	5.0	ug/kg wet								
1,3,5-Trimethylbenzene	ND	5.0	"								
Benzene	ND	5.0	"								
Ethyl Benzene	ND	5.0	"								
Isopropylbenzene	ND	5.0	"								
Methyl tert-butyl ether (MTBE)	ND	5.0	"								
Naphthalene	2.5	10	"								
n-Butylbenzene	ND	5.0	"								
n-Propylbenzene	ND	5.0	"								
o-Xylene	ND	5.0	"								
p- & m- Xylenes	ND	10	"								
p-Isopropyltoluene	ND	5.0	"								
sec-Butylbenzene	ND	5.0	"								
tert-Butylbenzene	ND	5.0	"								
Toluene	ND	5.0	"								
Xylenes, Total	ND	15	"								
Surrogate: 1,2-Dichloroethane-d4	*49.0*		*ug/L*	*50.0*		*98.1*	*77-125*				
Surrogate: Toluene-d8	*52.1*		*"*	*50.0*		*104*	*85-120*				
Surrogate: p-Bromofluorobenzene	*48.6*		*"*	*50.0*		*97.2*	*76-130*				
LCS (BK51124-BS1)											Prepared: 11/20/2015 Analyzed: 11/21/2015
1,2,4-Trimethylbenzene	55		ug/L	50.0		109	84-125				
1,3,5-Trimethylbenzene	53		"	50.0		106	82-126				
Benzene	56		"	50.0		112	77-127				
Ethyl Benzene	50		"	50.0		101	84-125				
Isopropylbenzene	53		"	50.0		106	81-127				
Methyl tert-butyl ether (MTBE)	53		"	50.0		105	74-131				
Naphthalene	55		"	50.0		111	86-141				
n-Butylbenzene	49		"	50.0		98.2	80-130				
n-Propylbenzene	51		"	50.0		101	74-136				
o-Xylene	49		"	50.0		97.7	83-123				
p- & m- Xylenes	96		"	100		96.2	82-128				
p-Isopropyltoluene	53		"	50.0		107	85-125				
sec-Butylbenzene	54		"	50.0		107	83-125				
tert-Butylbenzene	55		"	50.0		110	80-127				
Toluene	50		"	50.0		101	85-121				
Surrogate: 1,2-Dichloroethane-d4	*48.7*		*"*	*50.0*		*97.4*	*77-125*				
Surrogate: Toluene-d8	*48.3*		*"*	*50.0*		*96.5*	*85-120*				
Surrogate: p-Bromofluorobenzene	*49.4*		*"*	*50.0*		*98.8*	*76-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK51124 - EPA 5035A											
LCS Dup (BK51124-BSD1)									Prepared: 11/20/2015 Analyzed: 11/21/2015		
1,2,4-Trimethylbenzene	53		ug/L	50.0		105	84-125		3.53	30	
1,3,5-Trimethylbenzene	53		"	50.0		105	82-126		0.208	30	
Benzene	55		"	50.0		110	77-127		2.11	30	
Ethyl Benzene	53		"	50.0		106	84-125		5.10	30	
Isopropylbenzene	55		"	50.0		109	81-127		3.41	30	
Methyl tert-butyl ether (MTBE)	54		"	50.0		109	74-131		3.03	30	
Naphthalene	57		"	50.0		114	86-141		2.80	30	
n-Butylbenzene	50		"	50.0		99.3	80-130		1.07	30	
n-Propylbenzene	52		"	50.0		105	74-136		3.14	30	
o-Xylene	52		"	50.0		103	83-123		5.36	30	
p- & m- Xylenes	100		"	100		103	82-128		6.40	30	
p-Isopropyltoluene	53		"	50.0		107	85-125		0.225	30	
sec-Butylbenzene	54		"	50.0		109	83-125		1.39	30	
tert-Butylbenzene	55		"	50.0		110	80-127		0.146	30	
Toluene	54		"	50.0		107	85-121		6.54	30	
Surrogate: 1,2-Dichloroethane-d4	*46.7*		*"*	*50.0*		*93.4*	*77-125*				
Surrogate: Toluene-d8	*50.0*		*"*	*50.0*		*100*	*85-120*				
Surrogate: p-Bromofluorobenzene	*48.7*		*"*	*50.0*		*97.4*	*76-130*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK50767 - EPA 3546 SVOA											
Blank (BK50767-BLK1)								Prepared & Analyzed: 11/16/2015			
Acenaphthene	ND	63	ug/kg wet								
Acenaphthylene	ND	63	"								
Anthracene	ND	63	"								
Benzo(a)anthracene	ND	63	"								
Benzo(a)pyrene	ND	63	"								
Benzo(b)fluoranthene	ND	63	"								
Benzo(g,h,i)perylene	ND	63	"								
Benzo(k)fluoranthene	ND	63	"								
Chrysene	ND	63	"								
Dibenzo(a,h)anthracene	ND	63	"								
Fluoranthene	ND	63	"								
Fluorene	ND	63	"								
Indeno(1,2,3-cd)pyrene	ND	63	"								
Naphthalene	ND	63	"								
Phenanthrene	ND	63	"								
Pyrene	ND	63	"								
Surrogate: Nitrobenzene-d5	*1100*		*"*	*2500*		*45.5*	*21-90*				
Surrogate: 2-Fluorobiphenyl	*980*		*"*	*2560*		*38.2*	*21-93*				
Surrogate: Terphenyl-d14	*1200*		*"*	*2490*		*49.3*	*18-102*				
LCS (BK50767-BS1)								Prepared & Analyzed: 11/16/2015			
Acenaphthene	1600	63	ug/kg wet	2500		64.3	17-124				
Acenaphthylene	1600	63	"	2500		62.6	16-124				
Anthracene	1600	63	"	2500		62.7	24-124				
Benzo(a)anthracene	1700	63	"	2500		66.8	25-134				
Benzo(a)pyrene	1500	63	"	2500		61.6	29-144				
Benzo(b)fluoranthene	1300	63	"	2500		51.2	20-151				
Benzo(g,h,i)perylene	1400	63	"	2500		55.9	10-153				
Benzo(k)fluoranthene	1600	63	"	2500		65.9	10-148				
Chrysene	1700	63	"	2500		66.4	24-116				
Dibenzo(a,h)anthracene	1500	63	"	2500		61.9	17-147				
Fluoranthene	1600	63	"	2500		64.0	36-125				
Fluorene	1700	63	"	2500		67.1	16-130				
Indeno(1,2,3-cd)pyrene	1500	63	"	2500		58.7	10-155				
Naphthalene	1500	63	"	2500		61.2	20-121				
Phenanthrene	1800	63	"	2500		70.8	24-123				
Pyrene	1900	63	"	2500		75.2	24-132				
Surrogate: Nitrobenzene-d5	*1400*		*"*	*2500*		*55.2*	*21-90*				
Surrogate: 2-Fluorobiphenyl	*1200*		*"*	*2560*		*47.3*	*21-93*				
Surrogate: Terphenyl-d14	*1500*		*"*	*2490*		*60.1*	*18-102*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK50767 - EPA 3546 SVOA											
LCS Dup (BK50767-BSD1)								Prepared & Analyzed: 11/16/2015			
Acenaphthene	1400	63	ug/kg wet	2500		57.4	17-124		11.4	30	
Acenaphthylene	1400	63	"	2500		54.8	16-124		13.4	30	
Anthracene	1400	63	"	2500		56.3	24-124		10.8	30	
Benzo(a)anthracene	1500	63	"	2500		61.2	25-134		8.72	30	
Benzo(a)pyrene	1300	63	"	2500		52.9	29-144		15.2	30	
Benzo(b)fluoranthene	1400	63	"	2500		56.4	20-151		9.55	30	
Benzo(g,h,i)perylene	1400	63	"	2500		55.9	10-153		0.00	30	
Benzo(k)fluoranthene	1400	63	"	2500		56.3	10-148		15.7	30	
Chrysene	1500	63	"	2500		58.8	24-116		12.2	30	
Dibenzo(a,h)anthracene	1500	63	"	2500		61.3	17-147		0.909	30	
Fluoranthene	1500	63	"	2500		59.1	36-125		7.92	30	
Fluorene	1500	63	"	2500		60.1	16-130		11.0	30	
Indeno(1,2,3-cd)pyrene	1500	63	"	2500		58.1	10-155		1.10	30	
Naphthalene	1400	63	"	2500		55.1	20-121		10.5	30	
Phenanthrene	1500	63	"	2500		61.6	24-123		13.9	30	
Pyrene	1700	63	"	2500		68.3	24-132		9.62	30	
Surrogate: Nitrobenzene-d5	*1100*		*"*	*2500*		*43.1*	*21-90*				
Surrogate: 2-Fluorobiphenyl	*960*		*"*	*2560*		*37.6*	*21-93*				
Surrogate: Terphenyl-d14	*1200*		*"*	*2490*		*47.7*	*18-102*				
Batch BK50839 - EPA 3550C											
Blank (BK50839-BLK1)								Prepared & Analyzed: 11/17/2015			
Acenaphthene	ND	42	ug/kg wet								
Acenaphthylene	ND	42	"								
Anthracene	ND	42	"								
Benzo(a)anthracene	ND	42	"								
Benzo(a)pyrene	ND	42	"								
Benzo(b)fluoranthene	ND	42	"								
Benzo(g,h,i)perylene	ND	42	"								
Benzo(k)fluoranthene	ND	42	"								
Chrysene	ND	42	"								
Dibenzo(a,h)anthracene	ND	42	"								
Fluoranthene	ND	42	"								
Fluorene	ND	42	"								
Indeno(1,2,3-cd)pyrene	ND	42	"								
Naphthalene	ND	42	"								
Phenanthrene	ND	42	"								
Pyrene	ND	42	"								
Surrogate: Nitrobenzene-d5	*1300*		*"*	*1670*		*77.9*	*21-90*				
Surrogate: 2-Fluorobiphenyl	*970*		*"*	*1670*		*58.0*	*21-93*				
Surrogate: Terphenyl-d14	*810*		*"*	*1680*		*48.4*	*18-102*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK50839 - EPA 3550C											
LCS (BK50839-BS1)								Prepared & Analyzed: 11/17/2015			
Acenaphthene	980	42	ug/kg wet	1670		58.5	17-124				
Acenaphthylene	990	42	"	1670		59.4	16-124				
Anthracene	1100	42	"	1670		64.4	24-124				
Benzo(a)anthracene	930	42	"	1670		55.9	25-134				
Benzo(a)pyrene	1200	42	"	1670		72.1	29-144				
Benzo(b)fluoranthene	1000	42	"	1670		62.0	20-151				
Benzo(g,h,i)perylene	2700	42	"	1670		162	10-153	High Bias			
Benzo(k)fluoranthene	880	42	"	1670		53.0	10-148				
Chrysene	1200	42	"	1670		72.5	24-116				
Dibenzo(a,h)anthracene	1100	42	"	1670		68.6	17-147				
Fluoranthene	1100	42	"	1670		64.0	36-125				
Fluorene	1100	42	"	1670		63.9	16-130				
Indeno(1,2,3-cd)pyrene	910	42	"	1670		54.4	10-155				
Naphthalene	1100	42	"	1670		65.2	20-121				
Phenanthrene	1100	42	"	1670		66.9	24-123				
Pyrene	1400	42	"	1670		82.6	24-132				
Surrogate: Nitrobenzene-d5	*1400*		*"*	*1670*		*83.7*	*21-90*				
Surrogate: 2-Fluorobiphenyl	*1000*		*"*	*1670*		*61.2*	*21-93*				
Surrogate: Terphenyl-d14	*1200*		*"*	*1680*		*70.1*	*18-102*				

Miscellaneous Physical Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK50605 - % Solids Prep											
Duplicate (BK50605-DUP1)	*Source sample: 15K0414-09 (DUP-20151109)								Prepared: 11/11/2015 Analyzed: 11/12/2015		
% Solids	56.0	0.100	%		48.4				14.5	20	

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
15K0414-01	MW-01 4-6	40mL Vial with Stir Bar-Cool 4° C
15K0414-02	MW-01 8-10	40mL Vial with Stir Bar-Cool 4° C
15K0414-03	MW-02 4-6	40mL Vial with Stir Bar-Cool 4° C
15K0414-04	MW-02 18-20	40mL Vial with Stir Bar-Cool 4° C
15K0414-05	MW-03 4-6	40mL Vial with Stir Bar-Cool 4° C
15K0414-06	MW-03 23-25	40mL Vial with Stir Bar-Cool 4° C
15K0414-07	MW-04 4-6	40mL Vial with Stir Bar-Cool 4° C
15K0414-08	MW-04 13-15	40mL Vial with Stir Bar-Cool 4° C
15K0414-09	DUP-20151109	40mL Vial with Stir Bar-Cool 4° C

Notes and Definitions

S-D	The surrogates were spiked at twice the normal concentration and recovery is within limits.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
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. Data users should consider anything <10x the blank value as artifact.

---

*	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
York Analytical Laboratories
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. 15K0414

YOUR Information	Report to:	Invoice To:	Your Project ID	Turn-Around Time	Report/Deliverable Type
Company: ESI	SAME [X]	SAME [X]	NQ15100.40	RUSH-Same Day ___	Summary Report X
Address: 24 Davis Avenue	Name:	Name: Brenda		RUSH-Next Day ___	QA Report ___
Poughkeepsie, NY	Company:	Company:	Purchase Order #	RUSH-Two Day ___	CT RCP ___
Phone.: 845-452-1658	Address:	Address:		RUSH-Three Day ___	CT RCP DQA/DUE Pkg ___
Contact: Tyler Goodnough				RUSH-Four Day ___	NY ASP A Package ___
E-mail: tyler@ecosystemsstrategies.com	E-mail:	E-mail	Samples from CT__ NY X NJ__	Standard (5-7day) X	NY ASP B Package ___

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): [signature]

Name (printed): Tyler Goodnough

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
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part360-Routine
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part360-Baseline
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part360-Expanded No Dioxins/Furans
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part360-Expanded Full List
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM

NJDEP Reduced Deliv
Excel ___
NYSDEC EQuIS ___
NJDEP SRP HazSite ___
EQuIS ___
GIS/KEY (std) ___
YORK Regulatory Comp Excel
compared to:
OTHER:

Sample Identification	Date+Time Sampled	Matrix	Analysis Requested (List above includes common analysis)	Container Description
MW-01 4-6	11/9/2015	S	CP-51 full list	1xVOA kit, 1x4oz jar
MW-01 8-10	↓	↓	↓	↓
MW-02 4-6	↓	↓	↓	↓
MW-02 18-20	↓	↓	↓	↓
MW-03 4-6	↓	↓	↓	↓
MW-03 23-25	↓	↓	↓	↓
MW-04 4-6	↓	↓	↓	↓
MW-04 13-15	↓	↓	↓	↓
Dup-20151109	↓	↓	↓	↓

Comments:
Attn: Rich August
NYCHA Site

Preservation (check all 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	Temperature on Receipt
[signature]	11/11/15	[signature] 11-11-15	12:50	3.7 °C
Samples Relinquished By	Date/Time	Samples Received in LAB by: [signature]	11/11/15 1611	

Technical Report

prepared for:

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie NY, 12603
Attention: Michelle Weisman

Report Date: 11/30/2015
Client Project ID: NQ15100.40
York Project (SDG) No.: 15K0700

Report Date: 11/30/2015
Client Project ID: NQ15100.40
York Project (SDG) No.: 15K0700

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie NY, 12603
Attention: Michelle Weisman

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 November 19, 2015 and listed below. The project was identified as your project: **NQ15100.40**.

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 Notes 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 attachment to 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
15K0700-01	MW-01	Water	11/18/2015	11/19/2015
15K0700-02	MW-02	Water	11/18/2015	11/19/2015
15K0700-03	MW-03	Water	11/18/2015	11/19/2015
15K0700-04	MW-04	Water	11/18/2015	11/19/2015
15K0700-05	Dup-20151118	Water	11/18/2015	11/19/2015
15K0700-06	TB-20151118	Water	11/18/2015	11/19/2015

General Notes for York Project (SDG) No.: 15K0700

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 samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By: 

Date: 11/30/2015

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: MW-01 **York Sample ID:** 15K0700-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Volatile Organics, CP-51 (STARS) Low level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

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/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854	11/25/2015 17:31	11/26/2015 03:50	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854	11/25/2015 17:31	11/26/2015 03:50	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	11/25/2015 17:31	11/26/2015 03:50	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*98.9 %*	*69-130*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*106 %*	*79-122*
2037-26-5	*Surrogate: Toluene-d8*	*102 %*	*81-117*

Semi-Volatiles, CP-51 (formerly STARS)-Low Level

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

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**	**0.150**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	11/24/2015 05:33	11/25/2015 11:49	SR

Sample Information

Client Sample ID: **MW-01** **York Sample ID:** **15K0700-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Semi-Volatiles, CP-51 (formerly STARS)-Low Level **Log-in Notes:** **Sample Notes:** **EXT-EM**

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
208-96-8	**Acenaphthylene**	**0.0500**	J	ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
120-12-7	Anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
218-01-9	Chrysene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
206-44-0	Fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
86-73-7	Fluorene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	NELAC-NY10854,NJDEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
91-20-3	Naphthalene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
85-01-8	Phenanthrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	NELAC-NY10854		
129-00-0	Pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 11:49	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*38.1 %*	*12-96*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*49.6 %*	*16-84*
1718-51-0	*Surrogate: Terphenyl-d14*	*67.0 %*	*15-106*

Sample Information

Client Sample ID: **MW-02** **York Sample ID:** **15K0700-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Volatile Organics, CP-51 (STARS) Low level **Log-in Notes:** **Sample Notes:**

Sample Information

Client Sample ID: **MW-02** **York Sample ID:** **15K0700-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Sample Prepared by Method: EPA 5030B

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**	**9.5**		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
100-41-4	**Ethyl Benzene**	**18**		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
108-88-3	**Toluene**	**38**		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
95-47-6	**o-Xylene**	**19**		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	NELAC-NY10854		
179601-23-1	**p- & m- Xylenes**	**40**		ug/L	0.50	1.0	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	NELAC-NY10854		
98-82-8	**Isopropylbenzene**	**1.2**		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
103-65-1	**n-Propylbenzene**	**2.2**		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
95-63-6	**1,2,4-Trimethylbenzene**	**12**		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
91-20-3	**Naphthalene**	**4.2**	CCV-E, SCAL-E	ug/L	1.0	2.0	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	NELAC-NY10854,NJDEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
1330-20-7	*** Xylenes, Total**	**59**		ug/L	0.60	1.5	1	EPA 8260C	11/25/2015 17:31	11/26/2015 04:16	SS
								Certifications:	CTDOH,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*97.2 %*	*69-130*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*104 %*	*79-122*
2037-26-5	*Surrogate: Toluene-d8*	*101 %*	*81-117*

Semi-Volatiles, CP-51 (formerly STARS)-Low Level

Log-in Notes:

Sample Notes: **EXT-EM**

Sample Prepared by Method: EPA 3510C

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**	**8.08**		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 10:36	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: **MW-02** **York Sample ID:** **15K0700-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Semi-Volatiles, CP-51 (formerly STARS)-Low Level **Log-in Notes:** **Sample Notes:** **EXT-EM**

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
208-96-8	**Acenaphthylene**	**0.0500**	J	ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
120-12-7	**Anthracene**	**0.200**		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
218-01-9	Chrysene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
206-44-0	**Fluoranthene**	**0.0900**		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
86-73-7	**Fluorene**	**0.190**		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	NELAC-NY10854,NJDEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
91-20-3	**Naphthalene**	**2.75**		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
85-01-8	**Phenanthrene**	**0.230**		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	NELAC-NY10854		
129-00-0	Pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D	11/24/2015 05:33	11/25/2015 12:19	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*58.9 %*	*12-96*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*62.5 %*	*16-84*
1718-51-0	*Surrogate: Terphenyl-d14*	*90.3 %*	*15-106*

Sample Information

Client Sample ID: **MW-03** **York Sample ID:** **15K0700-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Sample Information

Client Sample ID: MW-03 **York Sample ID:** 15K0700-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Volatile Organics, CP-51 (STARS) Low level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

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/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
100-41-4	Ethyl Benzene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
108-88-3	Toluene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
95-47-6	o-Xylene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854	11/25/2015 17:31	11/26/2015 04:43	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	5.0	10	10	EPA 8260C Certifications: NELAC-NY10854	11/25/2015 17:31	11/26/2015 04:43	SS
98-82-8	**Isopropylbenzene**	**14**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
103-65-1	**n-Propylbenzene**	**140**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
99-87-6	**p-Isopropyltoluene**	**5.1**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
95-63-6	**1,2,4-Trimethylbenzene**	**310**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
108-67-8	**1,3,5-Trimethylbenzene**	**210**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
104-51-8	**n-Butylbenzene**	**17**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
135-98-8	**sec-Butylbenzene**	**20**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
98-06-6	tert-Butylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
91-20-3	Naphthalene	ND	SCAL-E	ug/L	10	20	10	EPA 8260C Certifications: NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS
1330-20-7	* Xylenes, Total	ND		ug/L	6.0	15	10	EPA 8260C Certifications: CTDOH,NJDEP	11/25/2015 17:31	11/26/2015 04:43	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*97.0 %*	*69-130*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*105 %*	*79-122*
2037-26-5	*Surrogate: Toluene-d8*	*104 %*	*81-117*

Semi-Volatiles, CP-51 (formerly STARS)-Low Level

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

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**	**0.160**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	11/24/2015 05:33	11/25/2015 12:50	SR

Sample Information

Client Sample ID: MW-03 **York Sample ID:** 15K0700-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Semi-Volatiles, CP-51 (formerly STARS)-Low Level **Log-in Notes:** **Sample Notes:** EXT-EM

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
208-96-8	Acenaphthylene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
120-12-7	Anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
218-01-9	Chrysene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
206-44-0	Fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
86-73-7	**Fluorene**	**0.130**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
91-20-3	**Naphthalene**	**0.260**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR
85-01-8	**Phenanthrene**	**0.0800**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 NELAC-NY10854	11/25/2015 12:50	SR
129-00-0	Pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 12:50	SR

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*24.2 %*	*12-96*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*21.4 %*	*16-84*
1718-51-0	*Surrogate: Terphenyl-d14*	*30.5 %*	*15-106*

Sample Information

Client Sample ID: MW-04 **York Sample ID:** 15K0700-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Volatile Organics, CP-51 (STARS) Low level **Log-in Notes:** **Sample Notes:**

Sample Information

Client Sample ID: **MW-04** **York Sample ID:** **15K0700-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Sample Prepared by Method: EPA 5030B

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/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
100-41-4	**Ethyl Benzene**	**9.4**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
108-88-3	Toluene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
95-47-6	o-Xylene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854	11/25/2015 17:31	11/26/2015 05:09	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	5.0	10	10	EPA 8260C Certifications: NELAC-NY10854	11/25/2015 17:31	11/26/2015 05:09	SS
98-82-8	**Isopropylbenzene**	**19**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
103-65-1	**n-Propylbenzene**	**75**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
95-63-6	**1,2,4-Trimethylbenzene**	**220**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
108-67-8	**1,3,5-Trimethylbenzene**	**54**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
104-51-8	**n-Butylbenzene**	**7.5**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
135-98-8	**sec-Butylbenzene**	**7.0**		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
98-06-6	tert-Butylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
91-20-3	Naphthalene	ND		ug/L	10	20	10	EPA 8260C Certifications: NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS
1330-20-7	* Xylenes, Total	ND		ug/L	6.0	15	10	EPA 8260C Certifications: CTDOH,NJDEP	11/25/2015 17:31	11/26/2015 05:09	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*95.3 %*	*69-130*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*108 %*	*79-122*
2037-26-5	*Surrogate: Toluene-d8*	*104 %*	*81-117*

Semi-Volatiles, CP-51 (formerly STARS)-Low Level

Log-in Notes:

Sample Notes: **EXT-EM**

Sample Prepared by Method: EPA 3510C

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**	**0.130**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	11/24/2015 05:33	11/25/2015 13:20	SR
208-96-8	Acenaphthylene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	11/24/2015 05:33	11/25/2015 13:20	SR

Sample Information

Client Sample ID: MW-04 **York Sample ID:** 15K0700-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Semi-Volatiles, CP-51 (formerly STARS)-Low Level **Log-in Notes:** **Sample Notes:** EXT-EM

Sample Prepared by Method: EPA 3510C

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	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
218-01-9	Chrysene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
206-44-0	Fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
86-73-7	**Fluorene**	**0.0600**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
91-20-3	**Naphthalene**	**0.900**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR
85-01-8	**Phenanthrene**	**0.110**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 NELAC-NY10854	11/25/2015 13:20	SR
129-00-0	Pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:20	SR

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*43.9 %*	*12-96*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*41.4 %*	*16-84*
1718-51-0	*Surrogate: Terphenyl-d14*	*58.7 %*	*15-106*

Sample Information

Client Sample ID: Dup-20151118 **York Sample ID:** 15K0700-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Volatile Organics, CP-51 (STARS) Low level **Log-in Notes:** **Sample Notes:**

Sample Information

Client Sample ID: **Dup-20151118** **York Sample ID:** **15K0700-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Sample Prepared by Method: EPA 5030B

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/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 NELAC-NY10854	11/26/2015 05:36	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	11/25/2015 17:31 NELAC-NY10854	11/26/2015 05:36	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	11/25/2015 17:31 NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NELAC-NY10854,NJDEP	11/26/2015 05:36	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	11/25/2015 17:31 CTDOH,NJDEP	11/26/2015 05:36	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*100 %*	*69-130*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*105 %*	*79-122*
2037-26-5	*Surrogate: Toluene-d8*	*102 %*	*81-117*

Semi-Volatiles, CP-51 (formerly STARS)-Low Level

Log-in Notes:

Sample Notes: **EXT-EM**

Sample Prepared by Method: EPA 3510C

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**	**0.140**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
208-96-8	**Acenaphthylene**	**0.0500**	J	ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR

Sample Information

Client Sample ID: Dup-20151118 **York Sample ID:** 15K0700-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Semi-Volatiles, CP-51 (formerly STARS)-Low Level **Log-in Notes:** **Sample Notes:** EXT-EM

Sample Prepared by Method: EPA 3510C

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	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
218-01-9	Chrysene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
206-44-0	Fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
86-73-7	Fluorene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
91-20-3	Naphthalene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR
85-01-8	Phenanthrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 NELAC-NY10854	11/25/2015 13:51	SR
129-00-0	Pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	11/24/2015 05:33 CTDOH,NELAC-NY10854,NJDEP	11/25/2015 13:51	SR

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*48.1 %*	*12-96*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*43.0 %*	*16-84*
1718-51-0	*Surrogate: Terphenyl-d14*	*62.4 %*	*15-106*

Sample Information

Client Sample ID: TB-20151118 **York Sample ID:** 15K0700-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Volatile Organics, CP-51 (STARS) Low level **Log-in Notes:** **Sample Notes:**

Sample Information

Client Sample ID: **TB-20151118** **York Sample ID:** **15K0700-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15K0700	NQ15100.40	Water	November 18, 2015 3:00 pm	11/19/2015

Sample Prepared by Method: EPA 5030B

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/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS NELAC-NY10854
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS NELAC-NY10854
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS NELAC-NY10854,NJDEP
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NELAC-NY10854,NJDEP
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications:	11/25/2015 17:31	11/26/2015 06:03	SS CTDOH,NJDEP

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*96.7 %*	*69-130*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*106 %*	*79-122*
2037-26-5	*Surrogate: Toluene-d8*	*103 %*	*81-117*

Analytical Batch Summary

Batch ID: BK51224 **Preparation Method:** EPA 3510C **Prepared By:** TFD

YORK Sample ID	Client Sample ID	Preparation Date
15K0700-01	MW-01	11/24/15
15K0700-02	MW-02	11/24/15
15K0700-03	MW-03	11/24/15
15K0700-04	MW-04	11/24/15
15K0700-05	Dup-20151118	11/24/15
BK51224-BLK1	Blank	11/24/15
BK51224-BS1	LCS	11/24/15
BK51224-BS2	LCS	11/24/15
BK51224-BSD1	LCS Dup	11/24/15

Batch ID: BK51330 **Preparation Method:** EPA 5030B **Prepared By:** BGS

YORK Sample ID	Client Sample ID	Preparation Date
15K0700-01	MW-01	11/25/15
15K0700-02	MW-02	11/25/15
15K0700-03	MW-03	11/25/15
15K0700-04	MW-04	11/25/15
15K0700-05	Dup-20151118	11/25/15
15K0700-06	TB-20151118	11/25/15
BK51330-BLK1	Blank	11/25/15
BK51330-BS1	LCS	11/25/15
BK51330-BSD1	LCS Dup	11/25/15

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK51330 - EPA 5030B											
Blank (BK51330-BLK1)											Prepared: 11/25/2015 Analyzed: 11/26/2015
Benzene	ND	0.50	ug/L								
Ethyl Benzene	ND	0.50	"								
Toluene	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
Isopropylbenzene	ND	0.50	"								
n-Propylbenzene	ND	0.50	"								
p-Isopropyltoluene	ND	0.50	"								
1,2,4-Trimethylbenzene	ND	0.50	"								
1,3,5-Trimethylbenzene	ND	0.50	"								
n-Butylbenzene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
tert-Butylbenzene	ND	0.50	"								
Naphthalene	ND	2.0	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
Surrogate: 1,2-Dichloroethane-d4	*10.1*		*"*	*10.0*		*101*	*69-130*				
Surrogate: p-Bromofluorobenzene	*11.1*		*"*	*10.0*		*111*	*79-122*				
Surrogate: Toluene-d8	*10.2*		*"*	*10.0*		*102*	*81-117*				
LCS (BK51330-BS1)											Prepared: 11/25/2015 Analyzed: 11/26/2015
Benzene	10		ug/L	10.0		104	85-126				
Ethyl Benzene	11		"	10.0		112	80-131				
Toluene	11		"	10.0		109	80-127				
o-Xylene	11		"	10.0		110	78-130				
p- & m- Xylenes	23		"	20.0		114	77-133				
Isopropylbenzene	12		"	10.0		121	76-140				
n-Propylbenzene	12		"	10.0		119	78-133				
p-Isopropyltoluene	12		"	10.0		120	81-136				
1,2,4-Trimethylbenzene	12		"	10.0		122	82-132				
1,3,5-Trimethylbenzene	12		"	10.0		124	80-131				
n-Butylbenzene	12		"	10.0		120	79-132				
sec-Butylbenzene	12		"	10.0		118	79-137				
tert-Butylbenzene	12		"	10.0		118	77-138				
Naphthalene	9.0		"	10.0		89.6	70-147				
Methyl tert-butyl ether (MTBE)	9.7		"	10.0		97.3	76-135				
Surrogate: 1,2-Dichloroethane-d4	*9.74*		*"*	*10.0*		*97.4*	*69-130*				
Surrogate: p-Bromofluorobenzene	*10.7*		*"*	*10.0*		*107*	*79-122*				
Surrogate: Toluene-d8	*10.1*		*"*	*10.0*		*101*	*81-117*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK51330 - EPA 5030B											
LCS Dup (BK51330-BSD1)									Prepared: 11/25/2015 Analyzed: 11/26/2015		
Benzene	11		ug/L	10.0		110	85-126		4.95	30	
Ethyl Benzene	12		"	10.0		120	80-131		6.39	30	
Toluene	12		"	10.0		116	80-127		6.40	30	
o-Xylene	12		"	10.0		117	78-130		5.46	30	
p- & m- Xylenes	24		"	20.0		120	77-133		5.48	30	
Isopropylbenzene	12		"	10.0		124	76-140		2.29	30	
n-Propylbenzene	12		"	10.0		122	78-133		2.08	30	
p-Isopropyltoluene	13		"	10.0		126	81-136		4.79	30	
1,2,4-Trimethylbenzene	13		"	10.0		127	82-132		3.92	30	
1,3,5-Trimethylbenzene	13		"	10.0		128	80-131		2.94	30	
n-Butylbenzene	12		"	10.0		123	79-132		2.63	30	
sec-Butylbenzene	12		"	10.0		122	79-137		3.58	30	
tert-Butylbenzene	12		"	10.0		123	77-138		4.23	30	
Naphthalene	11		"	10.0		112	70-147		21.8	30	
Methyl tert-butyl ether (MTBE)	10		"	10.0		102	76-135		4.91	30	
Surrogate: 1,2-Dichloroethane-d4	*9.72*		*"*	*10.0*		*97.2*	*69-130*				
Surrogate: p-Bromofluorobenzene	*10.4*		*"*	*10.0*		*104*	*79-122*				
Surrogate: Toluene-d8	*10.2*		*"*	*10.0*		*102*	*81-117*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK51224 - EPA 3510C											
Blank (BK51224-BLK1)									Prepared & Analyzed: 11/24/2015		
Acenaphthene	ND	0.0500	ug/L								
Acenaphthylene	ND	0.0500	"								
Anthracene	ND	0.0500	"								
Benzo(a)anthracene	ND	0.0500	"								
Benzo(a)pyrene	ND	0.0500	"								
Benzo(b)fluoranthene	ND	0.0500	"								
Benzo(g,h,i)perylene	ND	0.0500	"								
Benzo(k)fluoranthene	ND	0.0500	"								
Chrysene	ND	0.0500	"								
Dibenzo(a,h)anthracene	ND	0.0500	"								
Fluoranthene	ND	0.0500	"								
Fluorene	ND	0.0500	"								
Indeno(1,2,3-cd)pyrene	ND	0.0500	"								
Naphthalene	ND	0.0500	"								
Phenanthrene	ND	0.0500	"								
Pyrene	ND	0.0500	"								
Surrogate: Nitrobenzene-d5	*25.1*		*"*	*50.2*		*50.0*	*12-96*				
Surrogate: 2-Fluorobiphenyl	*22.6*		*"*	*50.2*		*45.0*	*16-84*				
Surrogate: Terphenyl-d14	*19.6*		*"*	*50.4*		*38.9*	*15-106*				
LCS (BK51224-BS1)									Prepared & Analyzed: 11/24/2015		
Acenaphthene	25.3	0.0500	ug/L	50.0		50.7	24-114				
Acenaphthylene	26.0	0.0500	"	50.0		51.9	26-112				
Anthracene	29.6	0.0500	"	50.0		59.2	35-114				
Benzo(a)anthracene	19.2	0.0500	"	50.0		38.4	38-127				
Benzo(a)pyrene	33.0	0.0500	"	50.0		66.0	30-146				
Benzo(b)fluoranthene	60.3	0.0500	"	50.0		121	36-145				
Benzo(g,h,i)perylene	31.6	0.0500	"	50.0		63.1	10-163				
Benzo(k)fluoranthene	54.3	0.0500	"	50.0		109	16-149				
Chrysene	32.2	0.0500	"	50.0		64.4	33-120				
Dibenzo(a,h)anthracene	36.6	0.0500	"	50.0		73.1	10-149				
Fluoranthene	30.7	0.0500	"	50.0		61.3	33-126				
Fluorene	30.8	0.0500	"	50.0		61.5	28-117				
Indeno(1,2,3-cd)pyrene	30.7	0.0500	"	50.0		61.4	10-150				
Naphthalene	29.0	0.0500	"	50.0		58.0	30-99				
Phenanthrene	29.9	0.0500	"	50.0		59.9	31-112				
Pyrene	35.9	0.0500	"	50.0		71.8	42-125				
Surrogate: Nitrobenzene-d5	*28.5*		*"*	*50.2*		*56.8*	*12-96*				
Surrogate: 2-Fluorobiphenyl	*23.3*		*"*	*50.2*		*46.4*	*16-84*				
Surrogate: Terphenyl-d14	*27.8*		*"*	*50.4*		*55.1*	*15-106*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK51224 - EPA 3510C											
LCS (BK51224-BS2)								Prepared & Analyzed: 11/24/2015			
Acenaphthene	ND	0.0500	ug/L	1.00			24-114	Low Bias			
Acenaphthylene	ND	0.0500	"	1.00			26-112	Low Bias			
Anthracene	ND	0.0500	"	1.00			35-114	Low Bias			
Benzo(a)anthracene	ND	0.0500	"	1.00			38-127	Low Bias			
Benzo(a)pyrene	ND	0.0500	"	1.00			30-146	Low Bias			
Benzo(b)fluoranthene	ND	0.0500	"	1.00			36-145	Low Bias			
Benzo(g,h,i)perylene	ND	0.0500	"	1.00			10-163	Low Bias			
Benzo(k)fluoranthene	ND	0.0500	"	1.00			16-149	Low Bias			
Chrysene	ND	0.0500	"	1.00			33-120	Low Bias			
Dibenzo(a,h)anthracene	ND	0.0500	"	1.00			10-149	Low Bias			
Fluoranthene	ND	0.0500	"	1.00			33-126	Low Bias			
Fluorene	ND	0.0500	"	1.00			28-117	Low Bias			
Indeno(1,2,3-cd)pyrene	ND	0.0500	"	1.00			10-150	Low Bias			
Naphthalene	ND	0.0500	"	1.00			30-99	Low Bias			
Phenanthrene	ND	0.0500	"	1.00			31-112	Low Bias			
Pyrene	ND	0.0500	"	1.00			42-125	Low Bias			
Surrogate: Nitrobenzene-d5	*0.00*		"	*50.2*			*12-96*				
Surrogate: 2-Fluorobiphenyl	*0.00*		"	*50.2*			*16-84*				
Surrogate: Terphenyl-d14	*0.00*		"	*50.4*			*15-106*				
LCS Dup (BK51224-BSD1)								Prepared & Analyzed: 11/24/2015			
Acenaphthene	24.8	0.0500	ug/L	50.0		49.5	24-114		2.36	20	
Acenaphthylene	26.5	0.0500	"	50.0		53.0	26-112		2.06	20	
Anthracene	29.4	0.0500	"	50.0		58.8	35-114		0.610	20	
Benzo(a)anthracene	17.4	0.0500	"	50.0		34.8	38-127	Low Bias	9.90	20	
Benzo(a)pyrene	34.7	0.0500	"	50.0		69.4	30-146		5.05	20	
Benzo(b)fluoranthene	31.2	0.0500	"	50.0		62.3	36-145		63.8	20	Non-dir.
Benzo(g,h,i)perylene	42.9	0.0500	"	50.0		85.8	10-163		30.5	20	Non-dir.
Benzo(k)fluoranthene	28.2	0.0500	"	50.0		56.5	16-149		63.1	20	Non-dir.
Chrysene	32.3	0.0500	"	50.0		64.6	33-120		0.248	20	
Dibenzo(a,h)anthracene	43.4	0.0500	"	50.0		86.7	10-149		17.0	20	
Fluoranthene	30.3	0.0500	"	50.0		60.7	33-126		1.08	20	
Fluorene	29.9	0.0500	"	50.0		59.8	28-117		2.87	20	
Indeno(1,2,3-cd)pyrene	38.6	0.0500	"	50.0		77.3	10-150		22.9	20	Non-dir.
Naphthalene	28.8	0.0500	"	50.0		57.6	30-99		0.761	20	
Phenanthrene	30.1	0.0500	"	50.0		60.2	31-112		0.533	20	
Pyrene	36.2	0.0500	"	50.0		72.4	42-125		0.721	20	
Surrogate: Nitrobenzene-d5	*30.0*		"	*50.2*		*59.7*	*12-96*				
Surrogate: 2-Fluorobiphenyl	*22.7*		"	*50.2*		*45.2*	*16-84*				
Surrogate: Terphenyl-d14	*26.9*		"	*50.4*		*53.5*	*15-106*				

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
15K0700-01	MW-01	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15K0700-02	MW-02	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15K0700-03	MW-03	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15K0700-04	MW-04	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15K0700-05	Dup-20151118	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15K0700-06	TB-20151118	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Notes and Definitions

SCAL-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%).
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.
EXT-EM	The sample exhibited emulsion formation during the extraction process. This may affect surrogate recoveries.
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).

---

*	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
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. 15K0706

YOUR Information	Report to:	Invoice To:	Your Project ID	Turn-Around Time	Report/Deliverable Type
Company: Ecosystems Strategies Inc.	SAME [X]	SAME [X]	NQ15100	RUSH-Same Day	Summary Report X
Address: 24 Davis Avenue	Name:	Name: Attn: Brenda		RUSH-Next Day	QA Report
Poughkeepsie NY 12603	Company:	Company:	Purchase Order #	RUSH-Two Day	CT RCP
Phone.: 845-452-1658	Address:	Address:		RUSH-Three Day	CT RCP DQA/DUE Pkg
Contact: Michelle			NQ15100.40	RUSH-Four Day	NY ASP A Package
E-mail: michelle@ecosystemsstrategies.com		E-mail	Samples from CT__NY_X_NJ__	Standard (5-7day) X	NY ASP B Package
					NJDEP Reduced Deliv
					Excel X
					NYSDEC EQuIS
					NJDEP SRP HazSite
					EQuIS
					GIS/KEY (std)
					YORK Regulatory Comp Excel compared to:
					OTHER:

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)

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
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part360-Routine
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part360-Baseline
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part360-Expanded No Dioxins/Furans
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part360-Expanded Full List
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM

Sample Identification	Date+Time Sampled	Matrix	Analysis Requested (List above includes common analysis)	Container Description
MW-01	11/18/2015	GW	CP-51 (Full List)	1L Amber, 4x40mL Vials
MW-02	11/18/2015	GW	CP-51 (Full List)	1L Amber, 4x40mL Vials
MW-03	11/18/2015	GW	CP-51 (Full List)	1L Amber, 4x40mL Vials
MW-04	11/18/2015	GW	CP-51 (Full List)	1L Amber, 4x40mL Vials
Duplicate	11/18/2015	GW	CP-51 (Full List)	1L Amber, 4x40mL Vials
Trip Blank	11/18/2015	DI Water	VOCs 8260	2x40mL Vials

Comments:

Samples not field filtered

Preservation (check all appliciable): 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: 11/19/15 1:15

Samples Relinquished By — Date/Time:

Samples Received By — Date/Time: 11-19-15 13:15

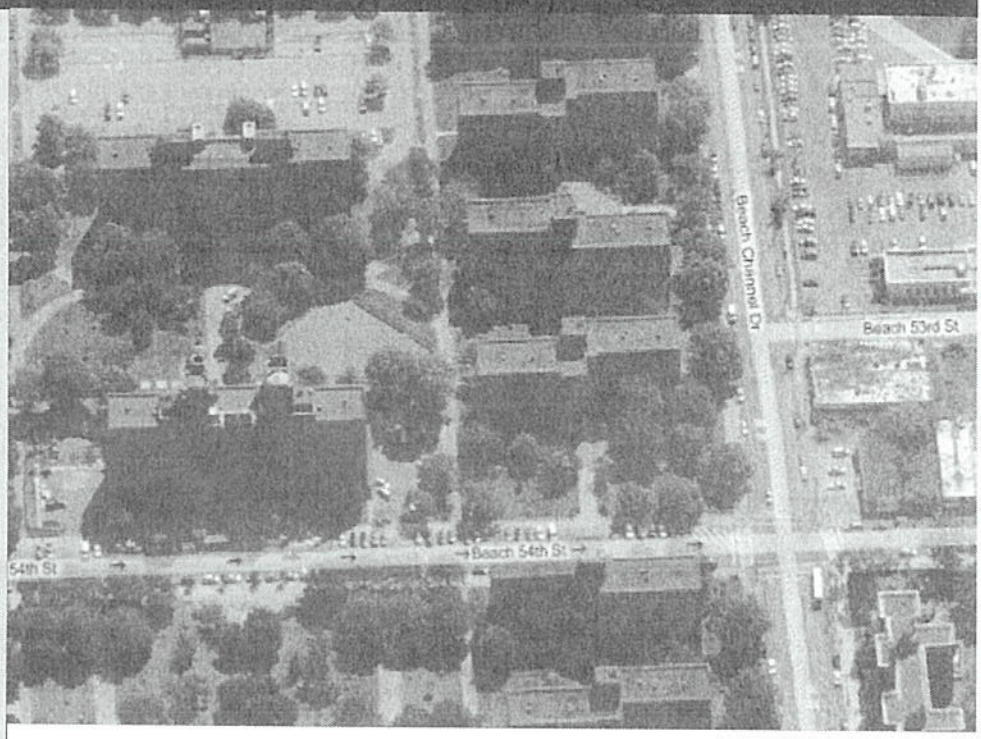
Samples Received in LAB by — Date/Time: 11/19/15 1550

Temperature on Receipt: 4.1 °C

APPENDIX E

Previous Field Investigation Work Plan

New York City Housing Authority
Long Island City, New York



SITE-SPECIFIC FIELD INVESTIGATION WORK PLAN
~~EDGEMERE~~ HOUSES
444 BEACH 54TH STREET
QUEENS, NEW YORK

January 2012

Gas station

Prepared By
GANNETT FLEMING
Suite 300
100 Crossways Park Drive West
Woodbury, New York 11797
Office: 516-364-4140
Fax: 516-921-1565

Office Contacts
Vincent Frisina, P.E.
Scott Narod

GF Project No.
55134.001

Gannett Fleming

NEW YORK CITY HOUSING AUTHORITY
EDGEMERE HOUSES WORK PLAN

TABLE OF CONTENTS

FIGURES

APPENDICES

1.0 INTRODUCTION

Gannett Fleming Engineers and Architects, P.C. (GF) prepared this investigation work plan for the New York City Housing Authority (NYCHA) Edgemere Houses, located at 444 Beach 54th St in Queens, New York (Figure 1).

The purpose of this site investigation is to determine the extent of impacts to soil and groundwater, if any, associated with New York State Department of Environmental Conservation (NYSDEC) Spill Number 0306202 at the location of the former gasoline station on the southeast corner of the intersection of Beach Channel Drive and Beach 54th Street.

2.0 SITE BACKGROUND

2.1 Site Location

The subject property is a building in the Edgemere Housing site, located on Block 16001 in a mixed-use area of Queens, New York. The subject property is bounded by Beach 54th Street to the west and Beach Channel Drive to the south. The former gasoline station is located on Block 15890, Lot 58. The former gasoline station is bounded by Beach Channel Drive to the north and Beach 54th Street to the west.

2.2 Site Fuel Storage History

Edgemere Houses are currently served by one 30,000-gallon single-walled steel UST which was installed in 1980, and one 30,000-gallon double-walled steel UST which was installed in 2000. The complex was previously served by two 30,000-gallon single-walled steel USTs installed in 1961 and 1980. The former USTs historically stored #4 and #6 fuel oils.

In 2000, the 30,000-gallon UST that was installed in 1961 was closed and removed. The UST that was installed in 1980 is still in service.

2.3 Historical Site Activities

The NYSDEC had assigned four spill numbers to this site. Spill numbers 94-01702, 9814156, and 9912548 have been closed indicating that the NYSDEC was satisfied with the remedial efforts. Spill number 0306202, which is currently open, was opened on September 11, 2003 due to the discovery of petroleum-impacted soil at a former gasoline station on the southeast corner of the intersection of Beach Channel Drive and Beach 54th Street.

GF completed a Freedom of Information Law (FOIL) request to the NYSDEC. To date, the FOIL request has not produced any information of significance to this work plan. A photo log of the site visit is presented in Appendix A.

3.0 PROPOSED SCOPE OF WORK

The purpose of this site investigation is to determine the extent of impacts to soil and groundwater, if any, associated with NYSDEC Spill Number 0306202, in the area of the former gasoline station on the southeast corner of the intersection of Beach Channel Drive and Beach 54th Street.

Activities will include the following:

- Geophysical survey and utilities clearance
- Soil boring and temporary monitoring well installation
- Permanent monitoring well installation
- Soil sample collection and analysis
- Groundwater sample collection and analysis
- Preparation of groundwater contour map

3.1 Geophysical Survey and Utilities Clearance

The drilling contractor will contact New York One-Call to perform public property utility mark-outs prior to initiating drilling activities. A geophysical survey will subsequently be performed to mark-out underground utilities at and in the vicinity of proposed drilling locations. A map detailing the results of the geophysical survey should be prepared.

3.2 Soil Boring Activities

Nine (9) soil borings will be advanced as presented on Figure 2. Based on the length and configuration of UST piping confirmed by the geophysical survey, additional borings may be necessary. The contractor will be responsible for determining the best practicable drilling methods for completing the objectives of this work plan.

Each boring will be hand cleared to five feet below ground surface (bgs) prior to drilling. Soil samples will be collected continuously from ground surface to 20 feet bgs or the water table (estimated at 10-15 feet bgs), whichever is encountered first, using the appropriate soil sample collection device for the drilling method selected. Soil lithology and field-screened organic vapor concentrations using a photoionization detector (PID) calibrated to a 100 parts per million (ppm) isobutylene standard will be documented.

In the event that visual, olfactory, and/or PID observations indicate the presence of petroleum-impacted soil during field screening, the installation of step-out borings may be necessary. Step-out borings will be advanced approximately 10 to 20 feet outward (with respect to the UST location) from the boring in which impacted soil is identified. Additional step-out borings may be advanced as necessary, until field observations indicate that the horizontal extent of subsurface impact has been delineated, or to the property boundary. The decision to install step-out borings will be based on field observations and the judgment of the Field Hydro geologist and Project Manager. Any step-out borings must be approved by NYCHA prior to installation.

For UST-related samples, one soil sample from each boring will be collected at the soil/water interface or at the depth interval exhibiting the highest PID reading. For piping-related samples, one soil sample from each boring will be collected within two-feet of the piping, from zero to six-inches below the piping, or at the depth interval exhibiting the highest PID reading. For a piping length of 15-feet, one (1) soil sample should be collected. An additional soil sample should be collected for each additional 20 linear-feet of piping confirmed by the geophysical survey.

Each retained soil sample will be placed into laboratory-supplied glassware, immediately stored in an ice-filled cooler, and delivered with chain-of-custody documentation to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-accredited laboratory. Each retained sample will be analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) listed in Table 2 and Table 3 of the

NYSDEC CP-51 Soil Cleanup Guidance (CP-51 SCG) by United States Environmental Protection Agency (USEPA) Methods 8260B and 8270C, respectively.

3.3 Monitoring Well Installation and Sampling

A minimum of five (7) groundwater samples will be collected during the investigation which will involve the installation of three (3) permanent monitoring wells and four (4) temporary monitoring wells at the locations presented on Figure 2. The total number of monitoring wells to be installed may be adjusted based on the presence and/or condition of any existing monitoring wells. The decision to install monitoring wells, as well as monitoring well locations, will be based on the decision of the Project Manager and NYCHA representative.

Based on regional maps published by the United States Geological Survey (USGS), groundwater is believed to flow towards the south, ultimately discharging into the Atlantic Ocean. Due to the proximity of the site to Jamaica Bay and the Atlantic Ocean, it is likely that there is a tidal influence on groundwater movement in the study area. The contractor will be responsible for determining the best practicable drilling method for the installation of temporary and permanent monitoring wells.

Each temporary well will be constructed of 1-inch diameter schedule 40 PVC pipe and a 10-foot screen section bisecting the water table, of 1-inch diameter, 0.020-inch (20-slot) PVC well screen.

Each permanent well will be constructed of 2-inch diameter schedule 40 PVC pipe and a 10-foot screen section of 2-inch diameter, 0.020-inch (20-slot) PVC well screen. The permanent wells will be constructed with a ten-foot screen section bisecting the water table and solid riser to grade.

Each temporary well will be purged using a properly decontaminated submersible pump and dedicated polyethylene tubing prior to groundwater sampling. Each well will be purged a

minimum of three well volumes of water. A groundwater sample will not be collected from wells containing free product.

The newly installed permanent wells will be developed using a properly decontaminated submersible pump and dedicated polyethylene tubing to ensure the removal of any drilling fines and to restore the hydraulic properties of the surrounding water bearing material. The flow rate of the pump will be controlled to create draw-down in the well but not dry the well. The monitoring wells will be developed until the turbidity is below 50 NTUs or three well volumes have been removed, whichever occurs first, to provide sediment-free water for sampling. The newly installed permanent monitoring wells will be sampled approximately two (2) weeks after well development.

The locations of all permanent monitoring wells and the elevations (top of manway and top of casing) of all permanent monitoring wells will be surveyed by a New York State licensed surveyor. The depth to water in each well will be measured to the nearest hundredth of a foot using an electronic water-level indicator and recorded on the sampling log. This information will be utilized to produce a groundwater contour map and to determine the site-specific groundwater flow gradient.

Groundwater samples will be placed into laboratory-supplied glassware, immediately stored in an ice-filled cooler, and delivered with chain-of-custody documentation to a NYSDOH ELAP-accredited laboratory. The samples will be analyzed for VOCs and SVOCs listed in Table 2 and Table 3 of the CP-51 SCG by USEPA Methods 8260B and 8270C respectively.

All downhole equipment must be decontaminated by the contractor before commencement of drilling activities and prior to advancing to each borehole.

Arrangements to restore the area must be coordinated with NYCHA. All temporary groundwater monitoring wells will be properly abandoned in accordance with NYSDEC protocols upon completion of sampling activities. Any landscaping, fencing, benches, etc. that are removed in

order to complete the work can be staged in an area acceptable to NYCHA. All grounds must be restored to their original condition following the use of drill rig/heavy equipment on grassy areas. All damaged sidewalk flags shall be properly restored or replaced in accordance with the New York City Highway Rules (Chapter 2 of Title 34 of the Rules of the City of New York). If grounds are not disturbed, no restoration will be necessary.

Drilling activities can be performed between 8:00am to 4:00pm Monday through Friday. No weekend work is to be scheduled.

3.4 Waste Disposal

All soil and groundwater waste will be drummed in 55-gallon drums supplied by the contractor. These drums will be properly labeled and stored on-site in a designated staging area as specified by the NYCHA representative. The contractor will be required to perform any necessary disposal characterization sampling. All drums must be removed from the site by the contractor within five days after receipt of laboratory data.

3.5 Site Investigation Summary Report Preparation

A Site Investigation Summary Report will be prepared and provide the following information:

- Summary of boring and temporary well installations;
- Description of field activities and observations;
- Summary of soil and groundwater analytical data, and;
- Conclusions and recommendations.

All work and the final assessment report must be completed within 90 days of NYSDEC approval of this work plan.

4.0 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) PROTOCOL

The overall quality assurance/quality control (QA/QC) objective is to develop and implement sampling, laboratory analyses, field measurement, and reporting procedures that will provide data consistent with its intended use.

4.1 Sample Containers and Sample Preservatives

Sample containers and sample preservatives will be selected based on the sample matrix, potential chemicals of concern, and the analytical methods, as outlines in USEPA SW-846. All sample containers will be prepared and quality controlled by the analytical laboratory.

Sample volumes, containers, preservatives, and holding times required for each analysis will meet USEPA or if more stringent, NYSDEC requirements.

4.2 Sample Holding, Shipping and Custody

Pertinent sample identification information will be recorded on the labels at the sampling location, and the labels will be affixed to the sample container and protected by clear waterproof tape. The sample jars will be placed in appropriate containers provided by the laboratory and maintained in a cooler with ice. A custody seal will be placed over the container lid to assure the integrity of the samples until they arrive at the laboratory.

Sample handling and chain-of-custody procedures will be maintained at all times. A chain-of-custody form will be initiated and completed by the laboratory performing the analyses. The chain-of-custody form will provide an accurate written record to trace sample possession and holding from the time of sampling through data analysis and reporting. The following information will be specified for each sample on the chain-of-custody form: 1) sample number, 2) sample collection date, 3) approximate sample collection time, 4) sample location (which may

be incorporated in the sample number), 5) sample preservation method, 6) sample matrix, and 7) analyses requested.

The chain-of-custody will be signed by the on-site field personnel and placed in a watertight plastic bag taped to the underside of the sample shipping container.

All sample containers will be shipped to the laboratory as soon as possible but no later than 24-hours after sample collection for a one day sampling effort. The samples will be shipped no later than 48 hours after sample collection, if either an overnight carrier is requires or the sampling effort exceeds one day.

The laboratory will retain the samples for 30 days after the analyses are complete.

4.3 Field Documentation

Bound field books will be used to record all field activities. Entries will be made in as much detail as possible in order to reconstruct a particular situation at a later date without relying on memory. Field ledgers will be assigned to all field personnel and will be stored in the project file. Each ledger will be identified by the project number and book number. All entries will be made in ink and no erasures will be made. If an incorrect entry is made, the information will be crossed out with a single mark. All pertinent calibration information, field measurements, descriptions, and photo log information will be documented.

4.4 Sample Location Identification

Data identifying the sample location will be maintained in a separate project logbook, and the logbook will contain the following sample information:

1. Date
2. Time
3. Location (measured from a fixed reference point)
4. Sample type
5. Sample preservation and analysis

6. Sample handling (such as field filtration)
7. Sampler's name and affiliation
8. Client's name and project number

4.5 Calibration Procedures and Frequency

All field and laboratory equipment will be calibrated prior to use. The calibration procedures will follow the manufacturer's instructions to assure that the equipment is functioning within the tolerances established by the manufacturer and analytical requirements.

Calibration of field instruments will be performed at the intervals specified by the manufacturer or more frequently, as conditions dictate. In the event than an internally calibrated field instrument fails to meet calibration/checkout procedures, it will be tagged and returned to the manufacturer for service.

Laboratory calibration will be performed in accord the laboratory's Standard Operating Procedures (SOP).

4.6 Field Measurements

The sampling activities will include field measurements to establish conditions at the time of sampling. Field measurements will be made under conditions, at frequencies, and for the length of time determined by the work and the characteristics of the chemicals of concern. Ancillary data such as weather conditions and the time of day will be collected to determine if related factors (e.g. rainfall) impact the sample quality.

4.7 Changes and Corrective Action

Changes from the work plan methodologies, procedures, and specifications may occur during the course of work because of new information, events, or the development of information that indicates that it would be advantageous to modify the work. Any changes must be approved by

NYSDEC and managed so that it is possible to demonstrate that the results of the project are acceptable and that the project objectives are achieved.

4.8 Decontamination Methodologies

All field and sampling equipment (e.g. split-spoons, stainless-steel mixing bowls, etc.) will be scrubbed with distilled water and a non-phosphate detergent, and then rinsed with distilled water. The use of hexane and methanol will be avoided since these chemicals can interfere with some of the laboratory analyses or become an artifact of the field decontamination process.

All drilling equipment (e.g. augers, drilling hand tools, etc.) will be decontaminated between borings using high-pressure steam to minimize the potential for cross contamination. Decontamination activities will be performed at a designated location on site.

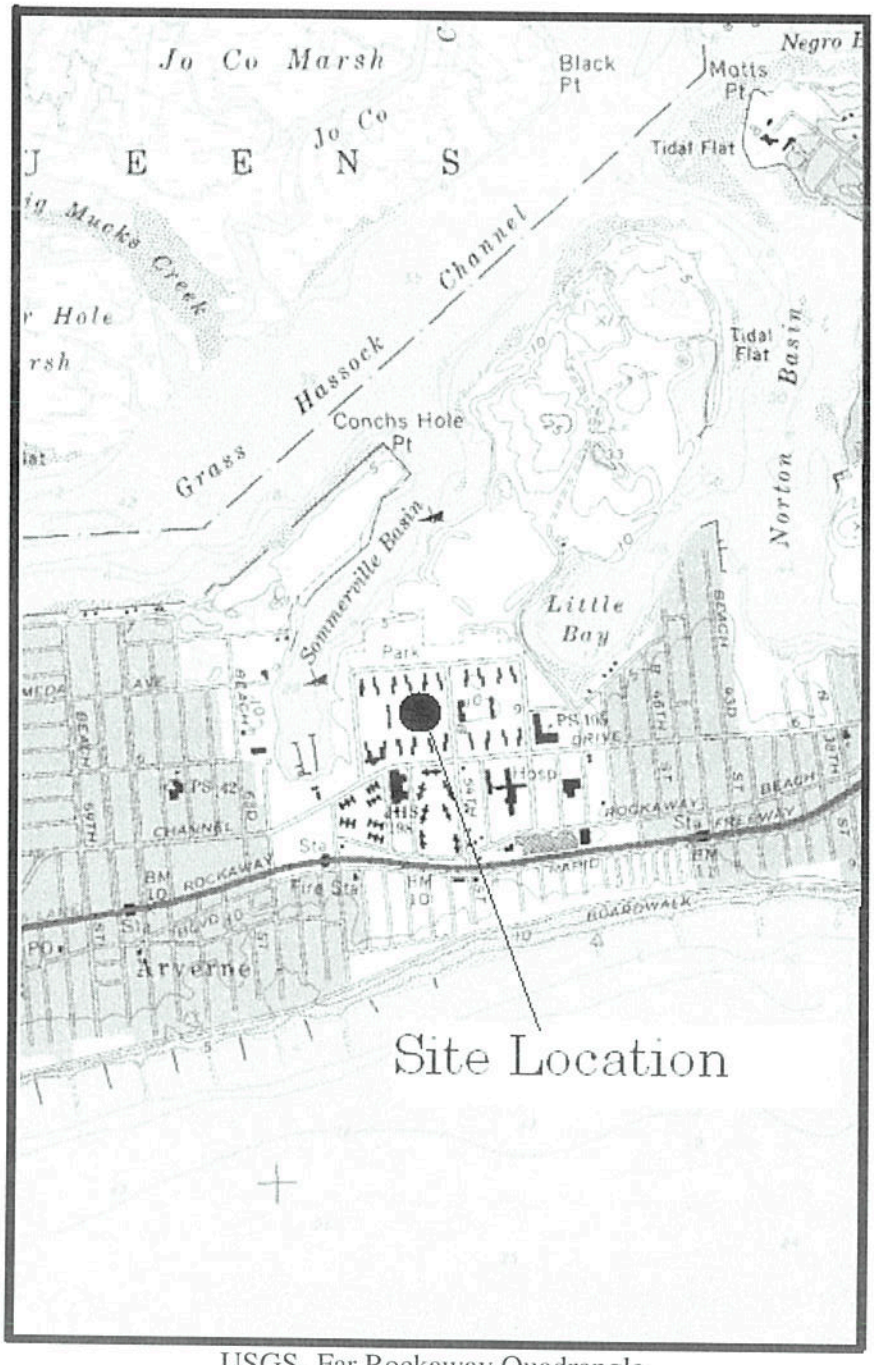
All drill cutting, drilling fluids, and decontamination wash water will be containerized in labeled 55-gallon steel drums and stored at a designated location on site. Final disposal of these materials will be determined based on waste characterization analyses and the disposal facility's final approval.

4.9 Quality Assurance/Quality Control Samples

For the purposes of QA/QC, one field blank and one duplicate will be collected after every twenty groundwater and twenty soil samples for the proposed sampling activities. One trip blank also will accompany each set of groundwater samples, at a frequency of one for each cooler containing VOC samples. The QA/QC samples will be analyzed for the same parameters as the soil and/or groundwater samples, with the exception of the trip blank (groundwater samples only), which will be analyzed only for VOCs. All QA/QC samples will be logged and shipped to the laboratory under full chain-of-custody procedures.

FIGURES

EDGEMERE
QUEENS, NEW YORK



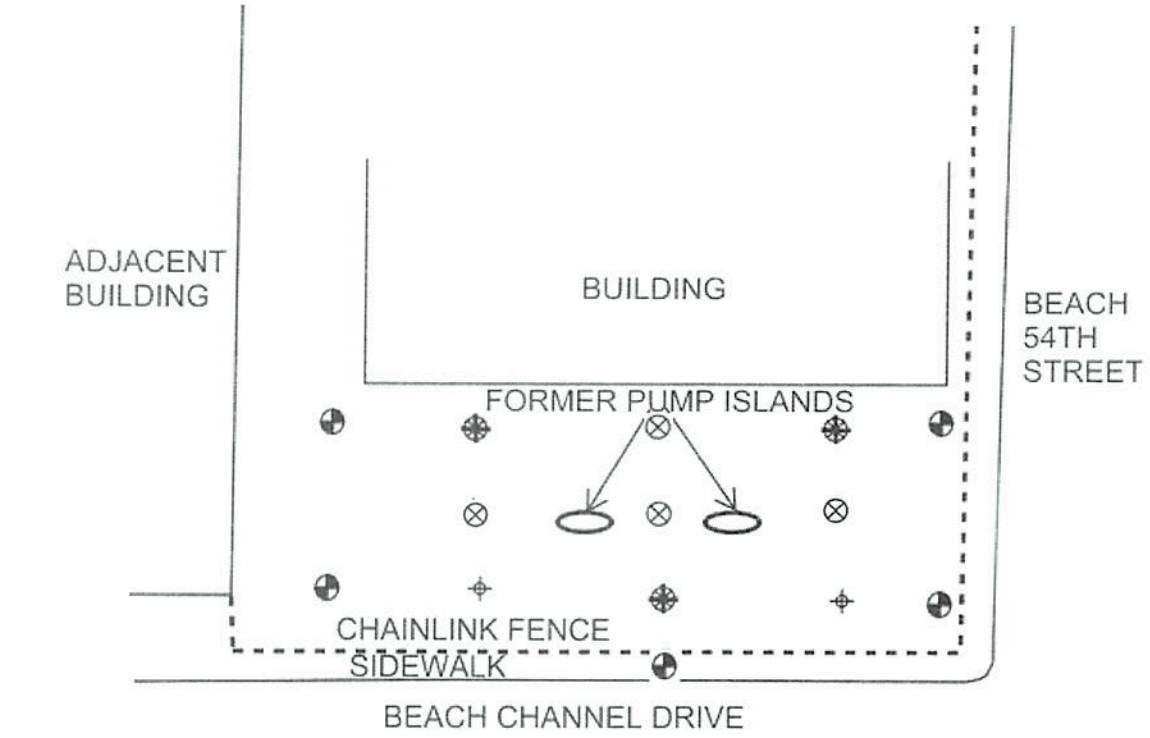
USGS- Far Rockaway Quadrangle

SITE LOCATION MAP

Gannett Fleming

FIGURE 2

NOT TO SCALE



LEGEND

- PROPOSED BORING LOCATIONS SOIL SAMPLE ONLY
- PROPOSED BORING LOCATIONS SOIL AND GROUNDWATER SAMPLING
- PROPOSED BORING LOCATIONS AND PERMANENT MONITORING WELL
- POTENTIAL STEP-OUT BORING LOCATION

SOIL BORING AND MONITORING WELL LOCATIONS

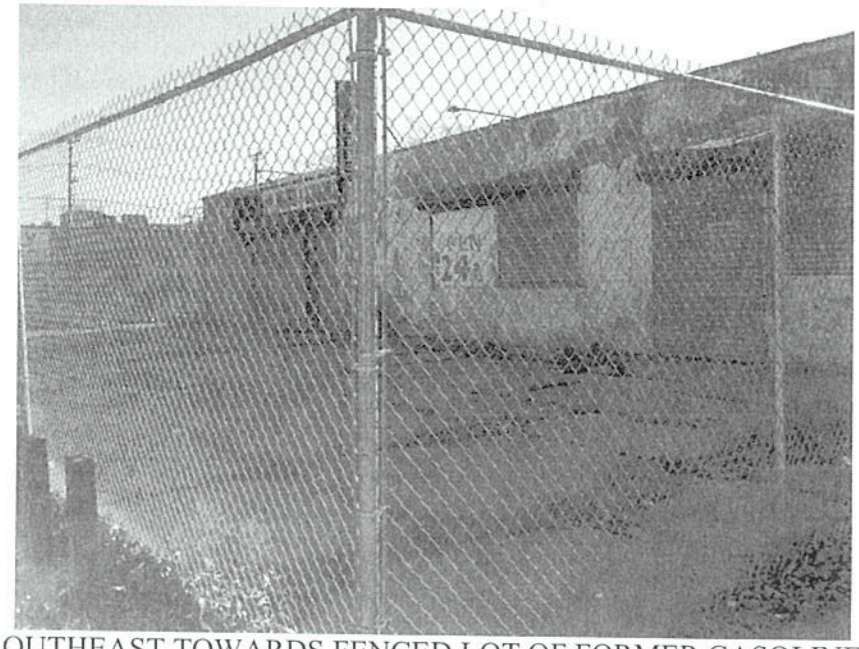
APPENDIX A

SITE PHOTOLOG

gas.

~~EDGEMERE~~ HOUSES
PHOTO LOG

FACING SOUTH ON BEACH 54TH STREET TOWARDS INTERSECTION OF BEACH 54TH STREET AND BEACH CHANNEL DRIVE. FORMER GASOLINE SECTION IS LOCATED ON THE SOUTHEAST CORNER OF THE INTERSECTION, VISIBLE IN THE CENTER OF PHOTO



FACING SOUTHEAST TOWARDS FENCED LOT OF FORMER GASOLINE STATION

Additional to the Work Plan (required by NYSDEC)

Based on the new information (December 2003 Report (will be provided upon receiving contract) submitted to the Department on March 2, 2015 regarding spill 0306202, a change should be made to the IWP(provided) for the referenced site approved in January 2015.

The contamination, based on the December 2003 Report, extends from the pump islands west.

Four permanent wells must be installed. One just to the east of the eastern pump island (likely upgradient of the plume), one in between the pump islands (suspected source area) and two on the western edge of the property/or in the sidewalk along Beach 54th Street.