



PROJECT STATUS MEMORANDUM

TO: Pamela Tames, USEPA

FROM: Mark M. Goldberg, P.E.
Tunde H. Komuves-Sandor, PG, CPG

SUBJECT: Rowe Industries Superfund Site
NYS Site ID No. 152106
Groundwater Recovery and Treatment System
DRAFT October 2018 Status Report

DATE: February 8, 2019

WSP USA (WSP) commenced operation of the Full-Scale Pump and Treat (FSP&T) groundwater remediation system at the above-referenced site on December 17, 2002. Starting in September 2008, the groundwater recovered by the Focus Pump and Treat (FP&T) system was routed to the FSP&T system for treatment. As of 2014, the FSP&T system only treats water extracted from RW-2 and FRW-1, 2, 3 and 4; the other FSP&T recovery wells (RW-1, 3, 4, 5, 6, 7, 8, and 9) have been shut down with USEPA approval after achieving remediation standards. This status report presents a summary of performance, operation and maintenance for both systems and monitoring activities for the site from October 1, 2018 through October 31, 2018. The report includes a summary of system performance parameters, system operation parameters, and analytical results for groundwater, system effluent samples, and air quality results.

SUMMARY OF SYSTEM PERFORMANCE AND OPERATION

(October 1, 2018 through October 31, 2018)

- | | |
|--|--------------------------------------|
| 1. Hours of operation during the reporting period: | 690 hours (92.8%) |
| 2. Alarm conditions during the reporting period: | See Table 1 |
| 3. Were the SPDES VOC discharge permit criteria achieved: | Yes, (see Table 2) |
| 4. Total volume of water pumped during the reporting period: | 1,337,009 gal. |
| 5. Was the system effluent flow below the SPDES limit of 1,023,000 gpd: | Yes, (see Graph 1) |
| 6. Mass of VOCs recovered during the reporting period: | 0.02 pound (see Graph 2) |
| 7. Cumulative mass of VOCs recovered since startup on 12/17/02:
(calculations can be provided upon request) | 229.4 pounds |
| 8. Effluent VOC vapor concentration for the reporting period: | 0.04 mg/m ³ (see Table 8) |
| 9. Was the effluent VOC vapor emission rate below 0.022 lbs./hr.:
(calculations can be provided upon request) | yes (0.00039 lbs./hr.) |



PUMP AND TREAT SYSTEM STATUS SUMMARY

The following table summarizes recovery well parameters for the operating recovery wells. The system was operational during the month except from October 27th to October 29th when the system was shut-down for a power failure alarm.

Well	Volume pumped (gal)	Total VOC Concentration (ug/L)
RW-2 ^{1/}	1,195,200	2.2
FRW-1 ^{2/}	75,318	1.5
FRW-2 ^{2/}	7,687	2.4
FRW-3 ^{2/}	11,548	6.4
FRW-4 ^{2/}	259,371	2.0

^{1/} The above table summarizes the parameters for RW-2 from October 1 to October 31, 2018.

^{2/} The above table summarizes the parameters for the FRWs from October 5 to November 1, 2018.

On October 16, 2018, a new cell unit was installed for the fire and security monitoring system. The main function of the cell unit is to transmit the signal to the fire/security monitoring company. The fire and security monitoring system was tested and was confirmed to provide a signal to the fire and security monitoring company. Additional details about system maintenance work are included in Table 1.

SUMMARY OF SAMPLING ACTIVITIES

October 2018 groundwater quality sampling was completed for the following wells:

- Monthly groundwater samples were collected from RW-2, FRW-1, FRW-2, FRW-3 and FRW-4 on October 5, 2018

Tables 3 to 7 present a summary of the quality results for water samples collected from downgradient recovery well RW-2 and FRW-1, 2, 3, and 4. Graphs 3 to 7 present PCE concentrations for samples from RW-2 and FRW-1, 2, 3, and 4 for the last 24 months. Laboratory analytical reports for the water samples collected from the RWs are included as Appendix II.

The PCE, TCE, cis-DCE, VC and TCA concentrations in the groundwater sample collected from RW-2 were below the respective ARARs; concentrations at RW-2 have been below the ARARs for over 8 years.

The PCE, TCE, cis-DCE, VC and TCA concentrations in the groundwater samples collected at FRW-1, 2, 3 and 4 were all below ARARs in October.

Groundwater samples from RW-2 and the FRWs will continue to be collected and analyzed monthly.



FUTURE O&M ACTIVITIES

O&M activities scheduled for November 2018 include:

- normal bi-weekly/monthly O&M activities.

MMG:nv

Attachments

cc: Brian Shuttleworth - Kraft Heinz Foods Company (as successor to Kraft Foods Group, Inc.)-.pdf
Kevin Kyrias-Gann, Ramboll -.pdf
Renee (Petersen) DeBaene, Ramboll -.pdf
Payson Long, NYSDEC-.pdf
Chief-Operation Maintenance and Support Section, NYSDEC-.pdf
Anthony Leung, RWM, R-1, NYSDEC-.pdf
Sundy Schermeyer, Town of Southampton, Town Clerk-.pdf
Mark Sergott, NYSDOH-.pdf

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TABLES

TABLE 1

**GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK**

**MAINTENANCE LOG
(October 1, 2018 through October 31, 2018)**

Date	Time	System Changes/Modifications	Personnel
10/5/18		Changed the multi-bag filter bags (400 um) in Banks 1 and 2, seven of eight housings used. Banks 1 and 2 left open. Bank 3 closed.	EF
10/16/18		A new cell unit was installed for the fire and security monitoring system for the FSP&T building. The main function of the cell unit is to transmit the signal to the fire/security monitoring company. The fire and security monitoring system was tested and was confirmed to provide a signal to the fire and security monitoring company.	EF, ATP
10/27/18	9:18 AM	Power Failure alarm; FSP&T and FP&T systems shut down.	
10/29/18	11:35 AM	Reset and restarted the FSP&T System; no issues observed.	JF
	11:40 AM	Reset and restarted the FP&T System; no issues observed.	JF

Notes:

EF	Evan Foster, WSP USA
JF	Jamie Forrester, WSP USA
ATP	American Total Protection, LLC

H:\NABIS\2018\Monthly Reports\October\Table 1 Maintenance Record Oct 2018 w wkb.docx

TABLE 2

**GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK**

Effluent Water Quality Results

Date Sampled ^{2/}	pH ^{1/}	TDS ^{4/} (mg/l)	PCE (ug/l)	1,1,1-TCA (ug/l)	TCE (ug/l)	1,1-DCA (ug/l)	1,1-DCE (ug/l)	cis- 1,2-DCE (ug/l)	trans- 1,2-DCE (ug/l)	Xylene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Methylene Chloride (ug/l)	Freon 113 (ug/l)	Naphthalene (ug/l)	Chloroform (ug/l)	Total Iron (mg/l)	Dissolved Iron (mg/l)
SPDES Limits	6.5 to 8.5	---	5	5	5	5	5	5	5	5	5	5	5	---	10	7	---	---
3-Jan-18	6.9	114	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.02	0.025
1-Feb-18	6.8	157	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	4.43	0.032
1-Mar-18	6.8	147	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	3.15	0.057
2-Apr-18	6.8	136	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	2.99	0.034
2-May-18	6.8	151	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	8.05	0.049
5-Jun-18	6.8	138	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.25	ND<0.2
2-Jul-18	6.8	114	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	2.50	0.127
28-Aug-18	6.9	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.124	0.125
21-Sep-18	6.8	155	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	7.48	0.037
5-Oct-18	6.9	145	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	1.66	ND<0.2

SPDES: State Pollutant Discharge Elimination System

mg/l: Milligrams per liter

ug/l: Micrograms per liter

----: Not established

J: Analyte detected below quantitation limits, value shown is a laboratory estimate.

B: Analyte was found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

ND: Not detected

NM: Not Measured

TDS: Total dissolved solids

PCE: Tetrachloroethylene

1,1,1-TCA: 1,1,1-Trichloroethane

TCE: Trichloroethene

1,1-DCA: 1,1-Dichloroethane

1,1-DCE: 1,1-Dichloroethene

cis-1,2-DCE: cis-1,2-Dichloroethene

trans-1,2,-DCE: trans-1,2-Dichloroethene

Notes:

1. Based on the SPDES criteria from an NYSDEC letter dated on May 6, 2016, the allowable pH range for the Rowe Site is between 6.5 and 8.5. The pH of the effluent sample collected on October 16, 2018 was 6.9.
2. "Effluent" samples were collected from sample port labeled NP2-10 unless otherwise noted.
3. Starting in October 2016, FSP&T system samples are collected monthly instead of once every two weeks. The pH of the effluent water is measured two times per month in accordance with the SPDES requirements.
4. The laboratory mistakenly forgot to analyze the system effluent sample collected on August 28, 2018 for total dissolved solids (TDS).

TABLE 2

**GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK**

Effluent Water Quality Results

Date Sampled ^{2/}	pH ^{1/}	TDS ^{4/} (mg/l)	PCE (ug/l)	1,1,1-TCA (ug/l)	TCE (ug/l)	1,1-DCA (ug/l)	1,1-DCE (ug/l)	cis- 1,2-DCE (ug/l)	trans- 1,2-DCE (ug/l)	Xylene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Methylene Chloride (ug/l)	Freon 113 (ug/l)	Naphthalene (ug/l)	Chloroform (ug/l)	Total Iron (mg/l)	Dissolved Iron (mg/l)
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Notes:

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4. The laboratory mistakenly forgot to analyze the system effluent sample collected on August 28, 2018 for total dissolved solids (TDS).

TABLE 3

**GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK**

Recovery Well Water Quality Results

Recovery Well ^{1/}	Date Sampled	PCE (ug/L)	TCE (ug/L)	TCA (ug/L)	Chloroform (ug/L)	MTBE (ug/L)	1,1-Dichloro-ethene (ug/L)	cis-1,2-Dichloro-ethene (ug/L)	1,1-Dichloro-ethene (ug/L)	Methylene Chloride (ug/L)	Toluene (ug/L)	Benzene (ug/L)	m,p-Xylene (ug/L)	o-Xylene (ug/L)
	ARAR's	5	5	5	7	NE	5	5	5	5	NE	NE	5	5
RW-2	23-Jun-16	0.26 J	0.34 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	19-Jul-16	0.23 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Aug-16	0.24 J	0.37 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	16-Sep-16	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	17-Oct-16	0.45 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Nov-16	0.42 J	0.44 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Dec-16	0.52	0.39 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	9-Jan-17	0.30 J	0.43 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Feb-17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Mar-17	0.28 J	0.47 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	7-Apr-17	0.53	0.55	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	11-May-17	0.54	0.37 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.28 J	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Jun-17	0.29	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	6-Jul-17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Aug-17	0.23 J	0.26 J	ND<0.5	0.24 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Sep-17	0.23 J	0.32 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	4-Oct-17	0.24 J	0.34 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Nov-17	0.31 J	0.39 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Dec-17	0.27 J	0.42 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	3-Jan-18	0.28 J	0.70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Feb-18	0.33 J	0.59	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Mar-18	0.41 J	0.67	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Apr-18	0.28 J	0.36 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-May-18	0.32 J	0.22 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Jun-18	0.21 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Jul-18	0.22 J	ND<0.5	ND<0.5	0.28 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	28-Aug-18	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	21-Sep-18	0.37 J	0.26 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Oct-18	0.25 J	ND<0.5	ND<0.5	0.37	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5

PCE: Tetrachloroethylene
MTBE: Methyl-tertiary-butyl-ether

TCE: Trichloroethylene
NS: Not sampled

TCA: 1,1,1-Trichloroethane

ND: Not detected

<#: Less than method detection limit

ug/L: Micrograms per liter

-: Not analyzed

J: Analyte detected below quantitation limits, value shown is a laboratory estimate.

B: Analyte was found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

ARAR's are chemical specific aquifer restoration goals for ground water at the Former Rowe Industries Superfund Site.

NE indicates that the ARAR goal was not established for this compound by the EPA.

Bold values indicate an exceedence of the ARAR standard established for the site.

^{1/} In September 2016, the EPA granted approval to discontinue groundwater sampling at RW-1, RW-5, RW-7, RW-8 and RW-9.

TABLE 4

**GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK**

Recovery Well FRW-1 VOC Concentrations, micrograms per liter

FRW-1										
Date	PCE	TCE	cis12DCE	VC	TCA	11DCA	124TCB	Toluene	Bromomet hane	Acetone
ARARs	5	5	5	2 ^{1/2}	5	5	5 ^{1/2}	5	5 ^{1/2}	NE
FRW-1 was shut down between September 15 and 16, 2016 and again between September 21 and October 4, 2016										
17-Oct-16	29	2.60	8.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	0.56 J	ND<2
The FRWs were off between October 17 and November 14, 2016										
14-Nov-16	64	5.4	38	0.41 J	0.84	0.28 J	ND<2	ND<0.5	ND<0.5	ND<2
The FRWs were off between November 16 and December 1, 2016										
16-Dec-16	58	0.54	1.9	ND<0.5	0.51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 28 to January 3, 2017 and January 5 to January 9, 2017										
9-Jan-17	120	1.9	1.7	ND<0.5	1.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between January 23 and February 2, 2017										
2-Feb-17	460	8.5	20	ND<0.5	3.5	0.59 J	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between February 20 and February 22, 2017										
1-Mar-17	110	3.9	6.3	ND<0.5	0.82	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 24 and March 29, 2017										
7-Apr-17	240	3.8	2.2	ND<0.5	2.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.3 J
The FRWs were off from April 17 to April 26, 2017 and April 27 to May 1, 2017										
3-May-17	200	2.0	2.3	ND<0.5	2.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.0
1-Jun-17	94	2.5	4.5	ND<0.5	0.55	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from June 7 to June 9 and from June 21 to 23, 2017										
6-Jul-17	3.6	ND<0.5	1.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 31 to August 28, 2017										
1-Aug-17 ^{2/}	16	0.41 J	0.44 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Sep-17	34	0.93	2.9	ND<0.5	0.22 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017										
4-Oct-17	56	1.7	7.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017										
1-Nov-17	72	1.3	1.7	ND<0.5	0.37 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to December 5, 2017										
5-Dec-17	55	1.5	3.4	ND<0.5	0.4 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
FRW-1 was off from December 6 to 12 and December 24, 2017 to February 9, 2018										
1-Feb-18	63	7.4	28	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
1-Mar-18	110	2.7	1.8	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018										
2-Apr-18	83	0.31 J	ND<0.5	ND<0.5	0.25 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.2 J
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018										
2-May-18	97	0.86	0.46 J	ND<0.5	0.75	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018										
20-Jun-18	25	0.76	0.68	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
2-Jul-18	22	0.66	0.60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018										
28-Aug-18 ^{3/4}	7.26	4.16	9.05	0.22	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11.1
21-Sep-18	20.2	1.25	2.43	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Oct-18	1.19	ND<0.5	0.28	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 27 to October 29, 2018										

ARARs - Applicable Relevant and Appropriate Requirements for aquifer restoration established for the Site.

1. NYSDEC ambient water quality standards for these compounds are presented because site-specific ARARs for these compounds were not established.

2. The FP&T system was not operating because of a malfunctioning transfer pump. The FRWs were turned on manually to collect a groundwater sample.

3. Tetrahydrofuran, a common industrial solvent for polyvinyl chloride (PVC) and a component in varnishes, and a popular solvent used in laboratories was detected in the groundwater sample at 278 ug/L. However it was not detected in the laboratory blank or the laboratory duplicates. This is not a compound typically detected in groundwater samples from the site. Turned wells on only long enough to collect sample.

4. Other non-target COCs (tert-butyl alcohol, 2-butanone and/or acetone) were detected in the August 28, 2018 sample. For the case of acetone, this is a common laboratory artifact. The detections of the remaining non-target COCs is most likely attributed to collecting the sample that remained in close contact with PVC pipes for an extended time (i.e. from July 2 to August 28, 2018). Other than acetone, non-target COCs were not detected to any significant degree in the groundwater sample collected on September 21, 2018.

J : Analyte detected below quantitation limits, value shown is a laboratory estimate.

B: Method blank contamination, the associated method blank contains the target analyte at a reportable level.

ND: Not detected

Comments:

As of September 1, 2011 the water samples are analyzed by York Analytical Laboratories, Inc. The laboratory typically uses a reporting limit

PCE: Tetrachloroethylene
cis12DCE: cis-1,2-Dichloroethene
TCA: 1,1,1-Trichloroethane
124TCB: 1,2,4-Trimethylbenzene

TCE: Trichloroethene
VC: Vinyl Chloride
11DCA: 1,1-Dichloroethane

TABLE 5

**GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK**

Recovery Well FRW-2 VOC Concentrations, micrograms per liter

FRW-2								
Date	PCE	TCE	cis12DCE	VC	TCA	Toluene	2-Hexanone	Acetone
ARARs	5	5	5	2 ^{1/}	5	5	NE	NE
FRW-2 was shut down between September 1 and 16, 2016 and again between September 21 and October 4, 2016.								
17-Oct-16	3.1	2.7	41	4.1	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between October 17 and November 14, 2016								
14-Nov-16	19	6.5	19	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0 J
The FRWs were off between November 16 and December 1, 2016								
16-Dec-16	32	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<20
The FRWs were off between December 28 to January 3, 2017 and January 5 to January 9, 2017								
9-Jan-17	27	6.4	7.3	ND<5.0	ND<5.0	ND<5.0	ND<0.5	ND<2
The FRWs were off between January 23 to February 2, 2017								
2-Feb-17	100	10	39	1.4	0.63	ND<5.0	ND<0.5	2.2
The FRWs were off between February 20 to February 22, 2017								
1-Mar-17	40	1.0	0.52	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 24 and March 29, 2017								
7-Apr-17	93	2.6	1.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.1
The FRWs were off from April 17 to April 26, 2017 and April 27 to May 1, 2017								
3-May-17	68	11	9.3	ND<0.5	0.35 J	ND<0.5	ND<0.5	2.4
1-Jun-17	16	1.0	0.92	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRW-2 was off from June 7 to June 9 and from June 21 to 29, 2017								
6-Jul-17	0.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8
The FRWs were off from July 31 to August 28, 2017								
1-Aug-17 ^{2/}	7.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.1
5-Sep-17	33	0.85	0.59	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017								
4-Oct-17	50	2.7	0.91	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.0
The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017								
1-Nov-17	45	0.76	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017								
5-Dec-17	38	3.4	1.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 24, 2017 to February 9, 2018								
1-Feb-18	37	3.2	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.8
1-Mar-18	48	0.7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018								
2-Apr-18	140	1.2	0.36 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018								
2-May-18	29	0.92	0.29 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.6
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018								
20-Jun-18	3.8	1.4	0.44 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
2-Jul-18	3.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018								
28-Aug-18 ^{3/4}	ND<0.5	0.30	29	2.48	ND<0.5	0.51	ND<0.5	ND<2
21-Sep-18	11.9	1.83	14.5	0.73	ND<0.5	ND<0.5	ND<0.5	2.1
5-Oct-18	1.86	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 27 to October 29, 2018								

ARARs - Applicable Relevant and Appropriate Requirements for aquifer restoration established for the Site.

1. NYSDEC ambient water quality standards for these compounds are presented because site-specific ARARs for these compounds were not established.
 2. The FP&T system was not operating because of a malfunctioning transfer pump. The FRWs were turned on manually to collect a groundwater sample.
 3. Tetrahydrofuran, a common industrial solvent for polyvinyl chloride (PVC) and a component in varnishes, and a popular solvent used in laboratories was detected in the groundwater sample at 204 ug/L. However it was not detected in the laboratory blank or the laboratory duplicates. This is not a compound typically detected in groundwater samples from the site. Turned wells on only temporarily to collect groundwater sample.
 4. Other non-target COCs (tert-butyl alcohol, 2-butanone and/or acetone) were detected in the August 28, 2018 sample. For the case of acetone, this is a common laboratory artifact. The detections of the remaining non-target COCs is most likely attributed to collecting the sample that remained in close contact with PVC pipes for an extended time (i.e. from July 2 to August 28, 2018). Other than acetone, non-target COCs were not detected to any significant degree in the groundwater sample collected on September 21, 2018.
- J : Analyte detected below quantitation limits, value shown is a laboratory estimate.
B: Method blank contamination, the associated method blank contains the target analyte at a reportable level.
ND: Not detected

Comments:

As of September 1, 2011 the water samples are analyzed by York Analytical Laboratories, Inc. The laboratory typically uses a reporting limit (RL) for water of 5 ug/l for VOC. York reports detections below 0.5 ug/l as an estimated value; these values are below the RL but greater than or equal to the method detection limit (MDL). A value reported below the RL but above the MDL is considered an estimated value and flagged with a "J". The calibration curve was adjusted to a reporting limit of 0.5 ug/l during October 2011.

PCE: Tetrachloroethylene
cis12DCE: cis-1,2-Dichloroethene
TCA: 1,1,1-Trichloroethane

TCE: Trichloroethene
VC: Vinyl chloride

TABLE 6

**GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK**

Recovery Well FRW-3 VOC Concentrations, micrograms per liter

FRW-3												
Date	PCE	TCE	cis12DCE	VC	11DCA	TCA	135TMB	IPB	NPB	Toluene	2-Hexanone	Acetone
ARARs	5	5	5	2 ^{1/}	5	5	5 ^{1/}	5 ^{1/}	5 ^{1/}	5	NE	NE
FRW-3 was shut down between September 15 and 16, 2016 and again between September 21 and October 4, 2016												
17-Oct-16	9.0	2.4	23	1.1	ND<0.5	ND<0.5	ND<0.5	0.36 J	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between October 17 and November 14, 2016												
14-Nov-16	79	5.6	14	0.48 J	ND<0.5	0.67	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0
The FRWs were off between November 16 and December 1, 2016												
16-Dec-16	24	4.1	16	0.42 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.32 J	ND<0.5	ND<0.5	ND<2
The FRWs were off between December 28 to January 3, 2017 and January 5 to January 9, 2017												
9-Jan-17	53	5.1	17	ND<0.5	ND<0.5	0.40 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between January 23 to February 2, 2017												
2-Feb-17	18	3.7	24	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.76	0.63	ND<0.5	ND<0.5	ND<2
The FRWs were off between February 20 to February 22, 2017												
1-Mar-17	50	5.7	20	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.99	0.64	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 24 and March 29, 2017												
7-Apr-17	65	5.0	41	1.4	ND<0.5	ND<0.5	ND<0.5	0.71	0.49	ND<0.5	ND<0.5	ND<2
FRW-3 was off from April 17 to April 26, 2017 and April 27 to May 11, 2017												
11-May-17	130	5.8	8.5	0.24 J	ND<0.5	0.35 J	ND<0.5	0.35 J	0.30 J	ND<0.5	ND<0.5	ND<2
FRW-3 was off from May 17 to June 1, 2017												
1-Jun-17	83	5.8	12	0.37 J	ND<0.5	ND<0.5	ND<0.5	0.38 J	0.38 J	ND<0.5	ND<0.5	1.0
The FRWs were off from June 7 to June 9 and from June 21 to 23, 2017												
6-Jul-17	3.4	0.70	1.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.4
The FRWs were off from July 31 to August 28, 2017												
1-Aug-17 ^{2/}	35	1.9	1.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.6
5-Sep-17	15	1.7	6.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017												
4-Oct-17	21	6.0	15	1.2	ND<0.5	ND<0.5	ND<0.5	0.48 J	0.40 J	ND<0.5	ND<0.5	2.7
The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017												
1-Nov-17	17	1.2	3.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.33 J	0.30 J	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017												
5-Dec-17	37	1.8	2.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.37 J	0.33 J	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 24, 2017 to February 9, 2018												
1-Feb-18	22	2.0	3.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.32 J	ND<0.5	ND<0.5	ND<0.5	ND<2
1-Mar-18	120	7.9	18	ND<0.5	0.26 J	0.65	ND<0.5	0.49 J	0.34 J	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018												
2-Apr-18	170	4.5	0.2 J	0.25 J	ND<0.5	0.71	ND<0.5	0.20 J	ND<0.5	ND<0.5	ND<0.5	1.2 J
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018												
2-May-18	140	9.4	11	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.2
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018												
20-Jun-18	39	6.8	4.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.5 J
2-Jul-18	49	1.4	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018												
8/28/2018 ^{3/}	6.2	0.99	20.3	0.84	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.77 J
21-Sep-18	19.6	2.99	19.8	2.04	ND<0.5	ND<0.5	ND<0.5	0.22 J	0.30 J	ND<0.5	ND<0.5	1.53 J
5-Oct-18	0.73	0.53	4.31	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 27 to October 29, 2018												

ARARs - Applicable Relevant and Appropriate Requirements for aquifer restoration established for the Site.

1. NYSDEC ambient water quality standards for these compounds are presented because site-specific ARARs for these compounds were not established.

2. The FP&T system was not operating because of a malfunctioning transfer pump. The FRWs were turned on manually to collect a groundwater sample.

3. Other non-target COCs (tert-butyl alcohol, 2-butanone and/or acetone) were detected in the August 28, 2018 sample. For the case of acetone, this is a common laboratory artifact. The detections of the remaining non-target COCs is most likely attributed to collecting the sample that remained in close contact with PVC pipes for an extended time (i.e. from July 2 to August 28, 2018). Other than acetone, non-target COCs were not detected to any significant degree in the groundwater sample collected on September 21, 2018.

J : Analyte detected below quantitation limits, value shown is a laboratory estimate.

B: Method

ND: Not detected

Comments:

As of September 1, 2011 the water samples are analyzed by York Analytical Laboratories, Inc. The laboratory typically uses a reporting limit (RL) for water of 5 ug/l for VOC. York reports detections below 0.5 ug/l as an estimated value; these values are below the RL but greater than or equal to the method detection limit (MDL). A value reported below the RL but above the MDL is considered an estimated value and flagged with a "J". The calibration curve was adjusted to a reporting limit of 0.5 ug/l during October 2011.

PCE: Tetrachloroethylene
cis12DCE: cis-1,2-Dichloroethene
11DCA: 1,1-Dichloroethane
135TMB: 1,3,5-Trimethylbenzene
NPB: n-Propylbenzene

TCE: Trichloroethene
VC: Vinyl Chloride
TCA: 1,1,1-Trichloroethane
IPB: Isopropylbenzene

TABLE 7

**GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK**

Recovery Well FRW-4 VOC Concentrations, micrograms per liter

FRW-4						
Date	PCE	TCE	cis12DCE	VC	TCA	Acetone
ARARs	5	5	5	2 ^{1/2}	5	NE
FRW-3 was shut down between September 15 and 16, 2016 and again between September 21 and October 4, 2016						
17-Oct-16	1.6	0.47 J	4.7	ND<0.5	ND<0.5	10
The FRWs were off between October 17 and November 14, 2016						
14-Nov-16	1.9	2.1	29	0.33 J	ND<0.5	ND<2
The FRWs were off between November 16 and December 1, 2016						
16-Dec-16	2.0	0.50	7.8	ND<0.5	ND<0.5	ND<2
The FRWs were off between December 28 to January 3, 2017 and January 5 to January 9, 2017						
9-Jan-17	16	1.8	6.4	ND<0.5	0.27 J	ND<2
The FRWs were off between January 23 to February 2, 2017						
2-Feb-17	5.1	1.4	17	ND<0.5	0.27 J	ND<2
The FRWs were off between February 20 to February 22, 2017						
1-Mar-17	4.0	0.60	2.2	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 24 and March 29, 2017						
7-Apr-17	7.6	1.2	2.9	ND<0.5	ND<0.5	1.3
The FRWs were off from April 17 to April 26, 2017 and April 27 to May 1, 2017						
3-May-17	40	3.5	15	ND<0.5	0.42 J	2.1
1-Jun-17	8.8	0.5	2.1	ND<0.5	ND<0.5	ND<2
The FRWs were off from June 7 to June 9 and from June 21 to 23, 2017						
6-Jul-17	0.27 J	ND<0.5	0.28 J	ND<0.5	ND<0.5	1.1
The FRWs were off from July 31 to August 28, 2017						
1-Aug-17 ^{2/}	0.80	ND<0.5	0.28 J	ND<0.5	ND<0.5	1.6
5-Sep-17	2.7	0.42 J	0.51	ND<0.5	ND<0.5	ND<2
The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017						
4-Oct-17	9.8	3.9	4.1	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017						
1-Nov-17	3.0	0.32 J	0.78	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017						
5-Dec-17	5.1	ND<0.5	1.0	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 24, 2017 to February 9, 2018						
1-Feb-18	21.0	2.5	7.0	ND<0.5	0.27 J	2.5
1-Mar-18	3.0	ND<0.5	0.47 J	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018						
2-Apr-18	3.2	ND<0.5	1.0	ND<0.5	0.32 J	ND<2
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018						
2-May-18	19	ND<0.5	1.1	ND<0.5	ND<0.5	ND<2
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018						
20-Jun-18	1.4	0.22 J	ND<0.5	ND<0.5	ND<0.5	1.5
2-Jul-18	1.7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018						
28-Aug-18 ^{3/4}	ND<0.5	0.45 J	4.95	ND<0.5	ND<0.5	10.3
21-Sep-18	4.21	1.02	1.38	ND<0.5	ND<0.5	ND<1
5-Oct-18	0.26	ND<0.5	0.63	ND<0.5	ND<0.5	1.23
The FRWs were off from October 27 to October 29, 2018						

ARARs - Applicable Relevant and Appropriate Requirements for aquifer restoration established for the Site.

1. NYSDEC ambient water quality standards for these compounds are presented because site-specific ARARs for these compounds were not established.

2. The FP&T system was not operating because of a malfunctioning transfer pump. The FRWs were turned on manually to collect a groundwater sample.

3. Tetrahydrofuran, a common industrial solvent for polyvinyl chloride (PVC) and a component in varnishes, and a popular solvent used in laboratories was detected in the groundwater sample at 308 ug/L. However it was not detected in the laboratory blank or the laboratory duplicates. This is not a compound typically detected in groundwater samples from the site.

4. Other non-target COCs (tert-butyl alcohol, 2-butanone and/or acetone) were detected in the August 28, 2018 sample. For the case of acetone, this is a common laboratory artifact. The detections of the remaining non-target COCs is most likely attributed to collecting the sample that remained in close contact with PVC pipes for an extended time (i.e. from July 2 to August 28, 2018). Other than acetone, non-target COCs were not detected to any significant degree in the groundwater sample collected on September 21, 2018.

J : Analyte detected below quantitation limits, value shown is a laboratory estimate.

B: Method blank contamination, the associated method blank contains the target analyte at a reportable level.

ND: Not detected

Comments:

As of September 1, 2011 the water samples are analyzed by York Analytical Laboratories, Inc. The laboratory typically uses a reporting limit (RL) for water of 5 ug/l for VOC. York reports detections below 0.5 ug/l as an estimated value; these values are below the RL but greater than or equal to the method detection limit (MDL). A value reported below the RL but above the MDL is considered an estimated value and flagged with a "J". The calibration curve was adjusted to a reporting limit of 0.5 ug/l during October 2011.

PCE: Tetrachloroethylene
cis12DCE: cis-1,2-Dichloroethene
TCA: 1,1,1-Trichloroethane

TCE: Trichloroethene
VC: Vinyl Chloride

TABLE 8

**GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK**

Carbon Unit System Air Quality Results

Precarbon			Parameters (mg/m3)													TOTAL
Sample Name	Date	Time	PCE	TCE	TCA	DCA	cis-DCE	trans-DCE	Toluene	m&p-Xylenes	o-Xylene	CF	MC	EB	Freon 113	VOCs
AQ040717:1400NP4-1	4/7/2017	14:00	0.0009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01
AQ040717:1400NP4-1	7/19/2017	13:45	0.0067	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01
AQ100417:945NP4-1	10/4/2017	9:45	0.0037	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01
AQ011718:1430NP4-1	1/17/2018	14:30	0.0042	0.0032	0.0008	ND	0.0020	ND	0.0012	ND	ND	0.0010	0.0220	ND	ND	0.06
AQ040218:1405NP4-1	4/2/2018	14:05	0.0110	0.0003	ND	ND	0.0002	ND	0.0065	ND	ND	ND	ND	ND	ND	0.03
AQ082818:800NP4-1	8/28/2018	8:00	0.0055	ND	ND	ND	ND	ND	0.0034	ND	ND	ND	ND	ND	ND	0.02
AQ100518:1230NP4-1	10/5/2018	12:30	0.0038	0.0004	ND	ND	0.0007	ND	0.0037	0.3100	0.0096	ND	ND	0.0084	ND	0.37

Postcarbon			Parameters (mg/m3)													TOTAL
Sample Name	Date	Time	PCE	TCE	TCA	DCA	cis-DCE	trans-DCE	Toluene	m&p-Xylenes	o-Xylene	CF	MC	EB	Freon 113	VOCs
AQ040717:1405NP4-3 ^{1/}	4/7/2017	14:05	0.0007	ND	0.0018	ND	0.0033	ND	ND	ND	ND	ND	0.0032	ND	ND	0.02
AQ040717:1405NP4-3	7/19/2017	13:50	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00
AQ100417:945NP4-3	10/4/2017	9:45	0.0028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01
AQ011718:1435NP-3	1/17/2018	14:35	0.0011	ND	ND	ND	0.0003	ND	0.0006	ND	ND	ND	0.0460	ND	ND	0.09
AQ040218:1400NP4-3	4/2/2018	14:00	0.0015	ND	0.0009	ND	0.0027	ND	ND	ND	ND	ND	ND	ND	ND	0.01
AQ082818:205NP4-3	8/28/2018	8:05	0.0062	ND	ND	ND	0.0061	ND	ND	ND	ND	ND	ND	ND	ND	0.01
AQ100518:1235NP4-3	10/5/2018	12:30	ND	ND	ND	ND	0.0022	ND	0.0041	0.0027	0.0008	ND	0.0057	0.0007	ND	0.04

PCE: Tetrachloroethylene
DCA: 1,1-Dichloroethane
MC: Methylene Chloride

TCE: Trichloroethene
cis-DCE: cis-1,2-Dichloroethene
EB: Ethylbenzene

TCA: 1,1,1-Trichloroethane
trans-DCE: trans-1,2-Dichloroethylene

DCE: 1,1-Dichloroethene
CF: Chloroform

Note: NA - Not Applicable. Method blank contamination. The associated method blank contains the target analyte at a reportable level.

NS - Not Sampled

ND - Not Detected

B - Method blank contamination, the associated method blank contains the target analyte at a reportable level.

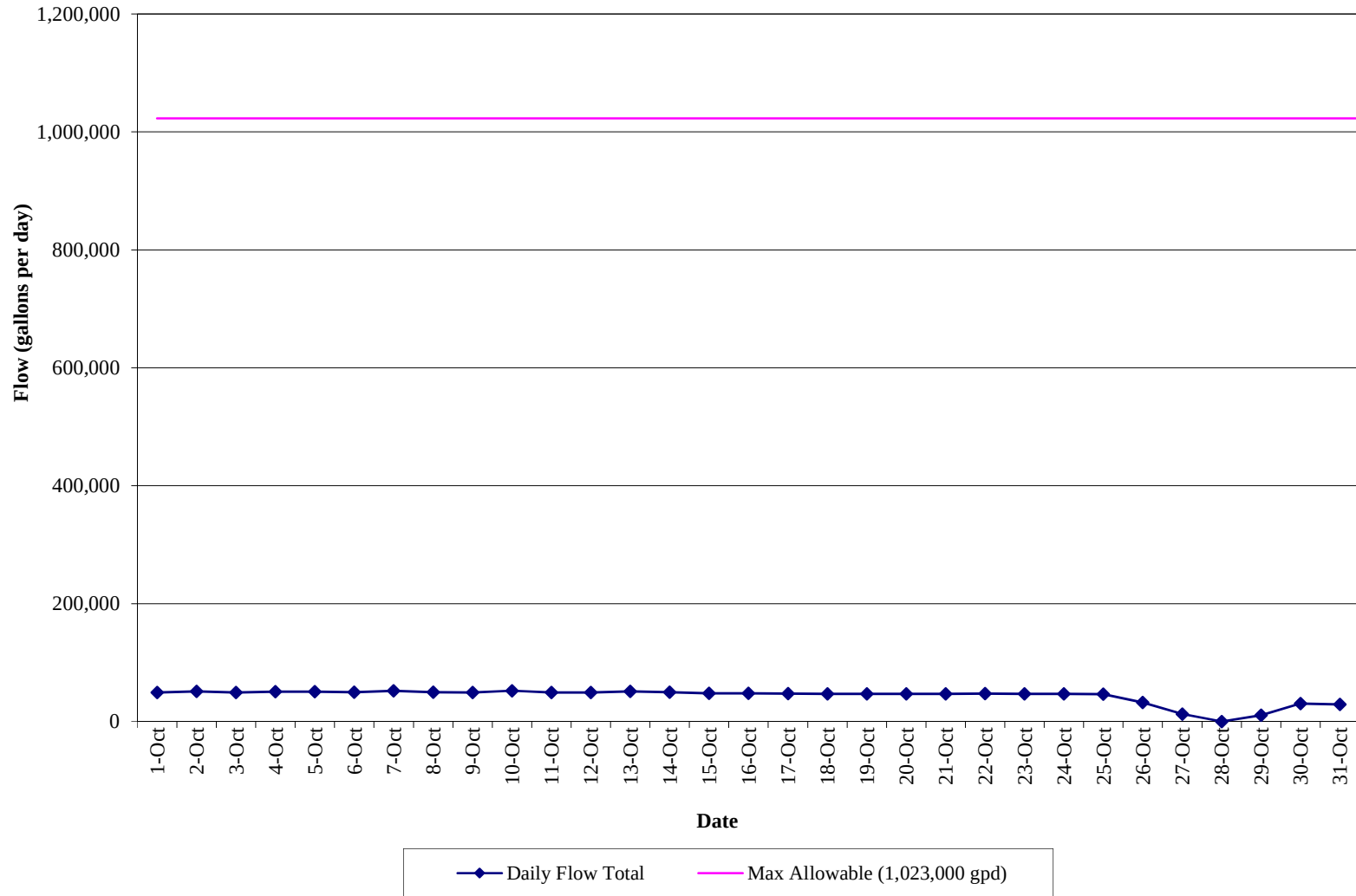
The air quality results summarized above are for the compounds listed in the FSP&T groundwater discharge permit. Low concentrations of additional compounds are accounted for in the Total VOCs column, however, are not listed.

^{1/} Sample was inadvertently mislabeled as NP4-2 and is listed as such in the laboratory report and on the Chain of Custody. However, the air sample was collected from the NP4-3 sample port.

GRAPHS

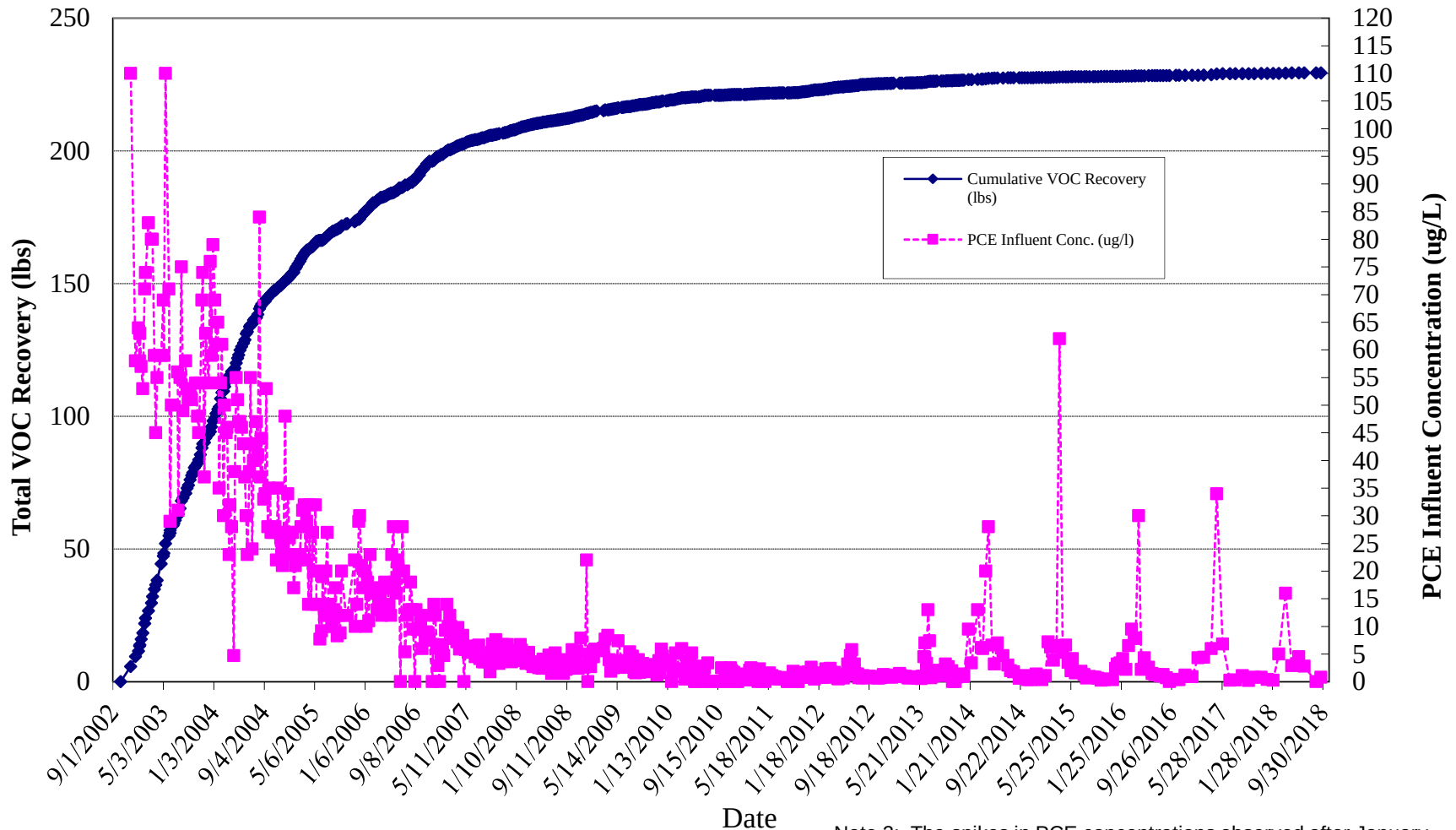
GRAPH 1
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

Effluent Flow Data
(October 1, 2018 to October 31, 2018)



GRAPH 2
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FSP&T System Cumulative VOC Recovery and Influent PCE Concentraions vs. Time

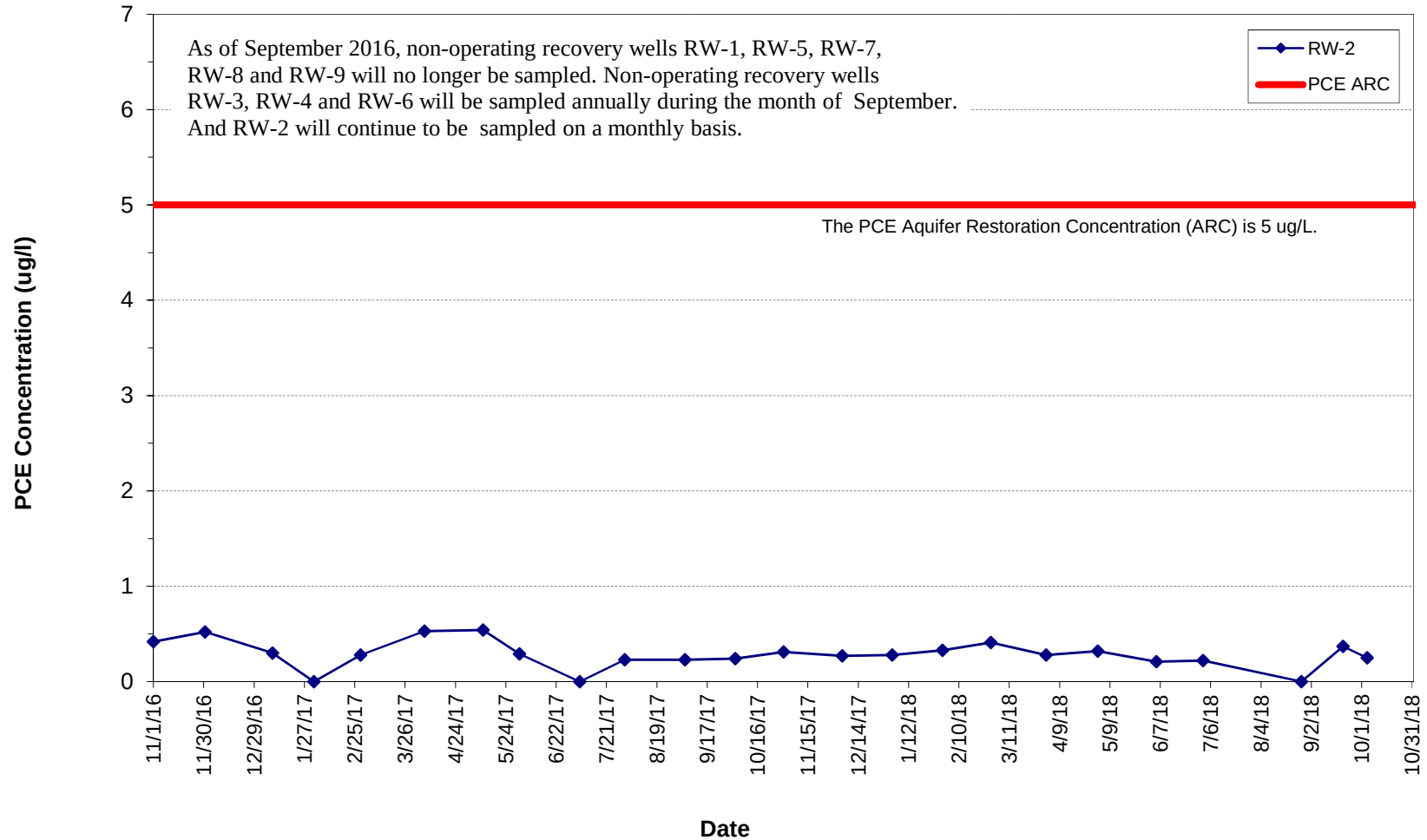


Note 1 : After September 22, 2008, the water recovered from the FP&T System is included in the results shown in this graph.

Note 2: The spikes in PCE concentrations observed after January 2014 coincide with well rehabilitation and annual maintenance events. During well rehabilitation and annual maintenance work, FSP&T system samples are collected when water from the FP&T system is not diluted with water extracted from RW-2.

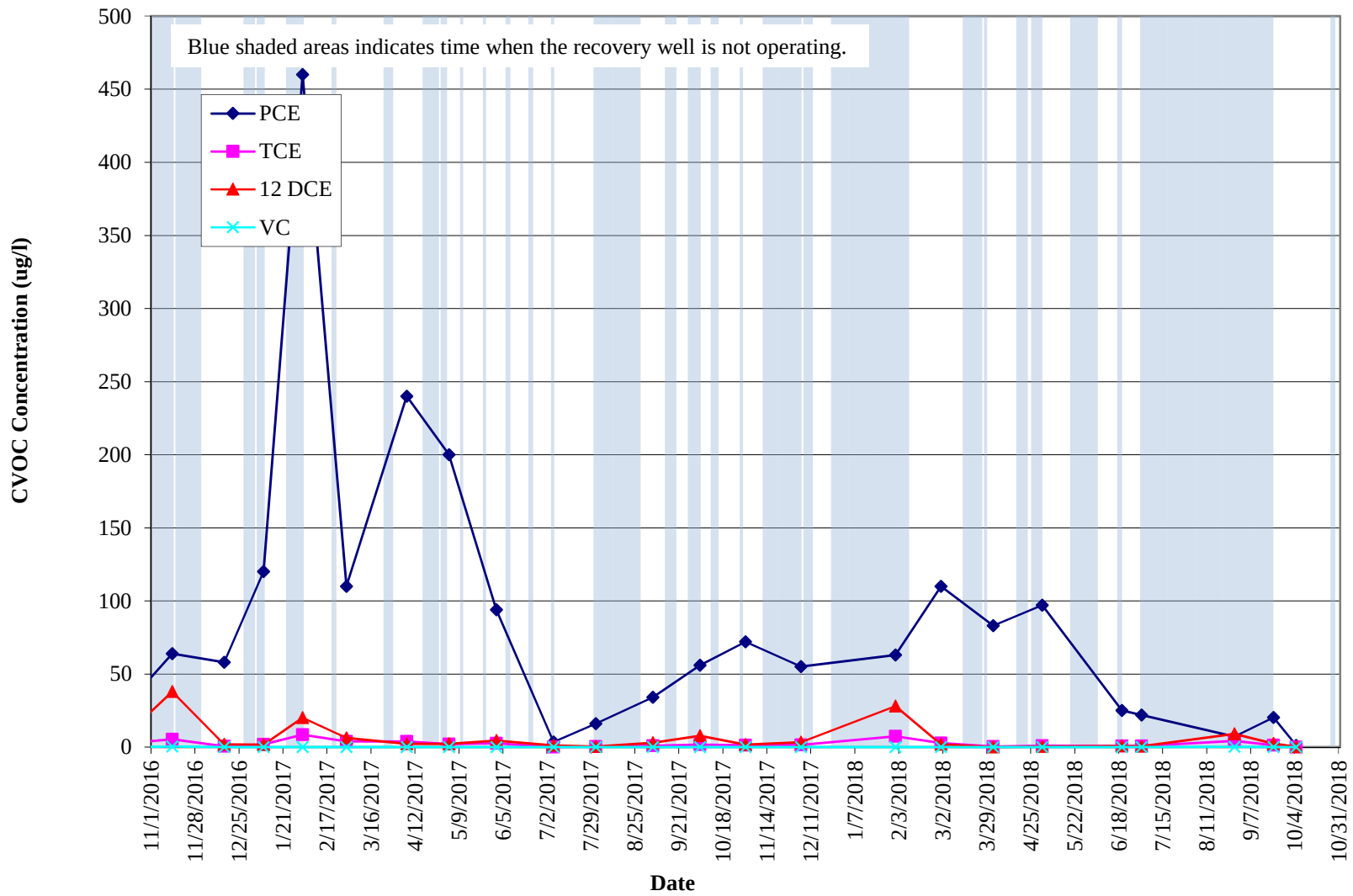
GRAPH 3 **GROUNDWATER REMEDIAL ACTION** **ROWE INDUSTRIES SUPERFUND SITE** **SAG HARBOR, NEW YORK**

FSP&T Recovery Well PCE Concentration



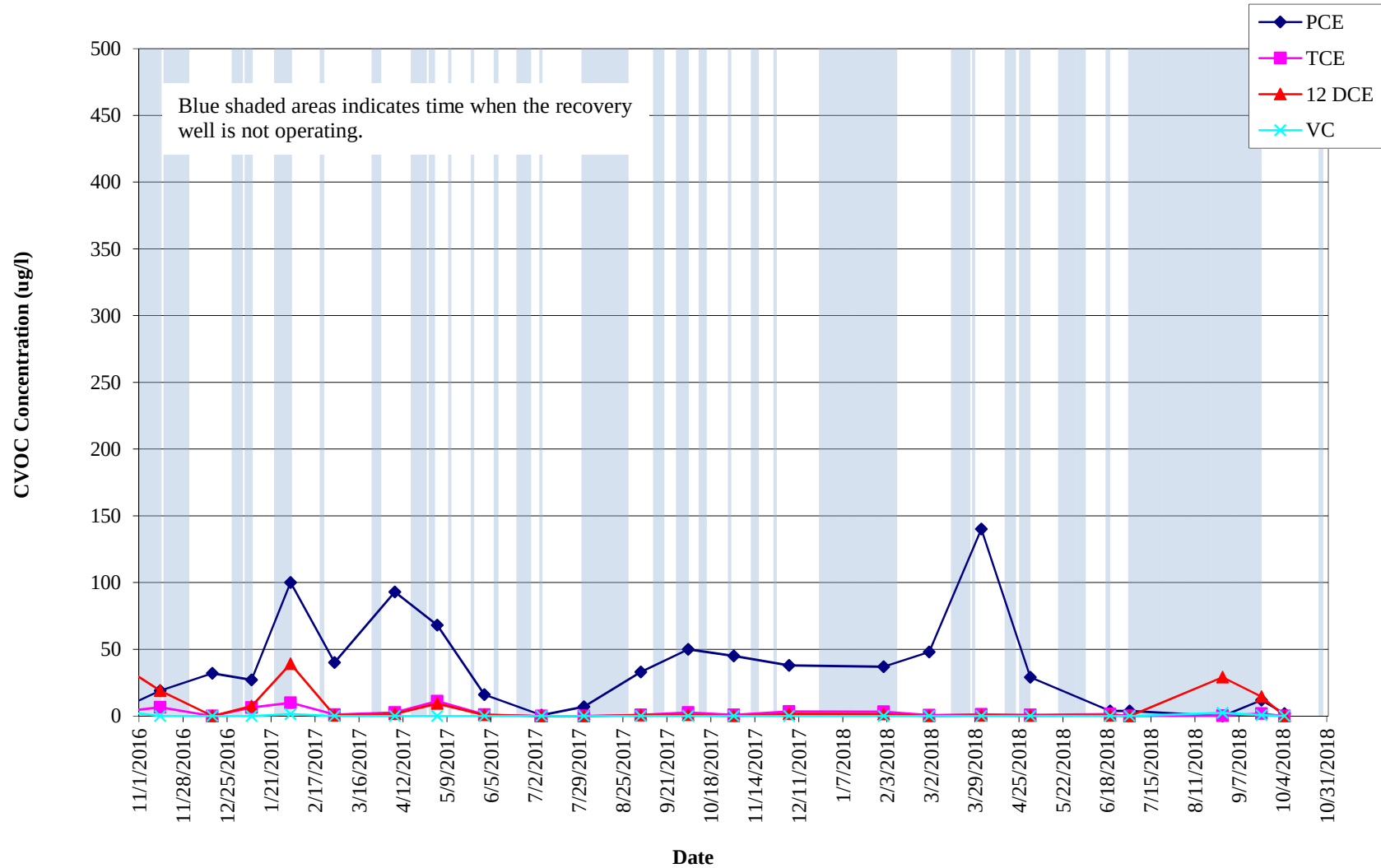
GRAPH 4
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-1



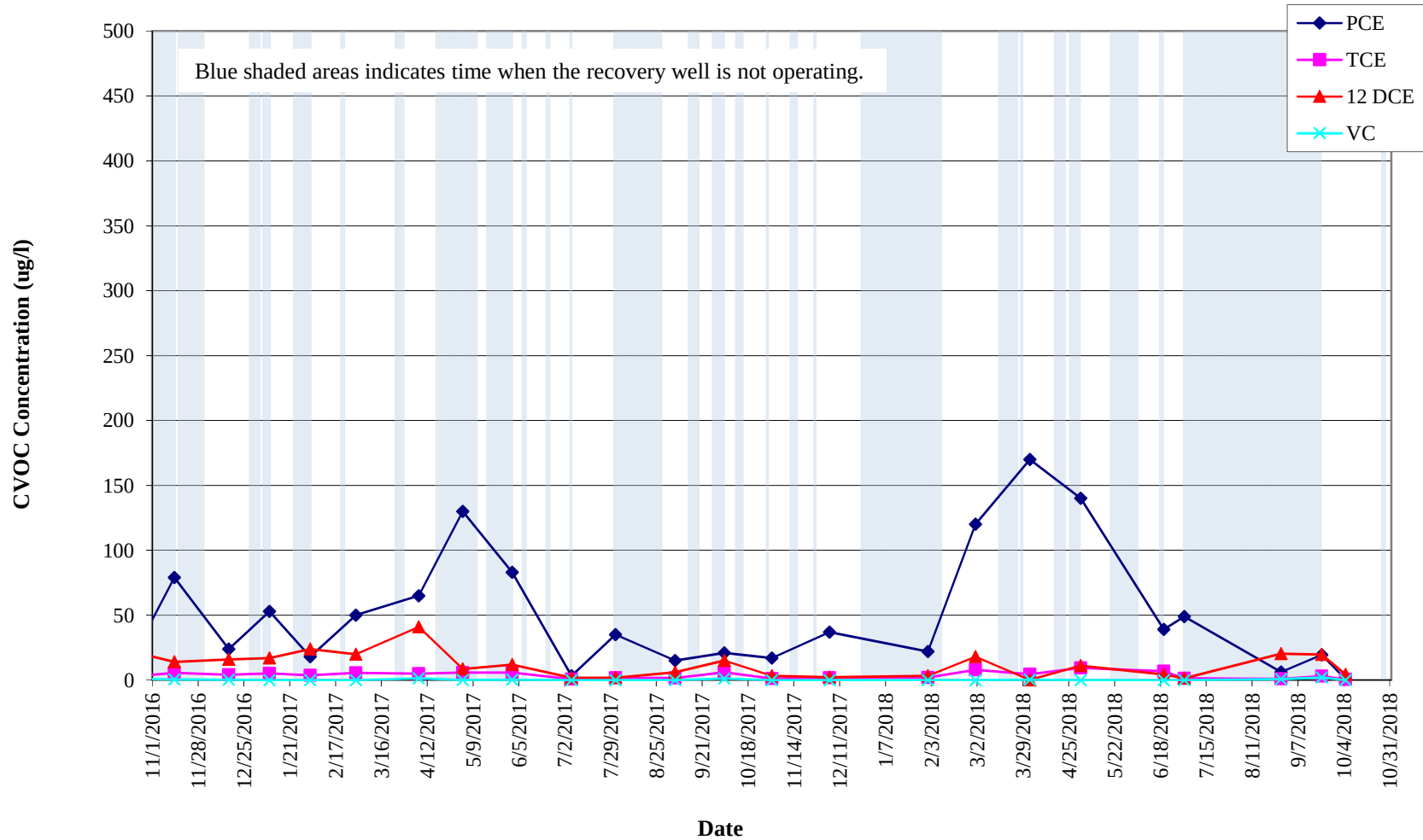
**GRAPH 5
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK**

FP&T Recovery Well VOC Concentrations for FRW-2



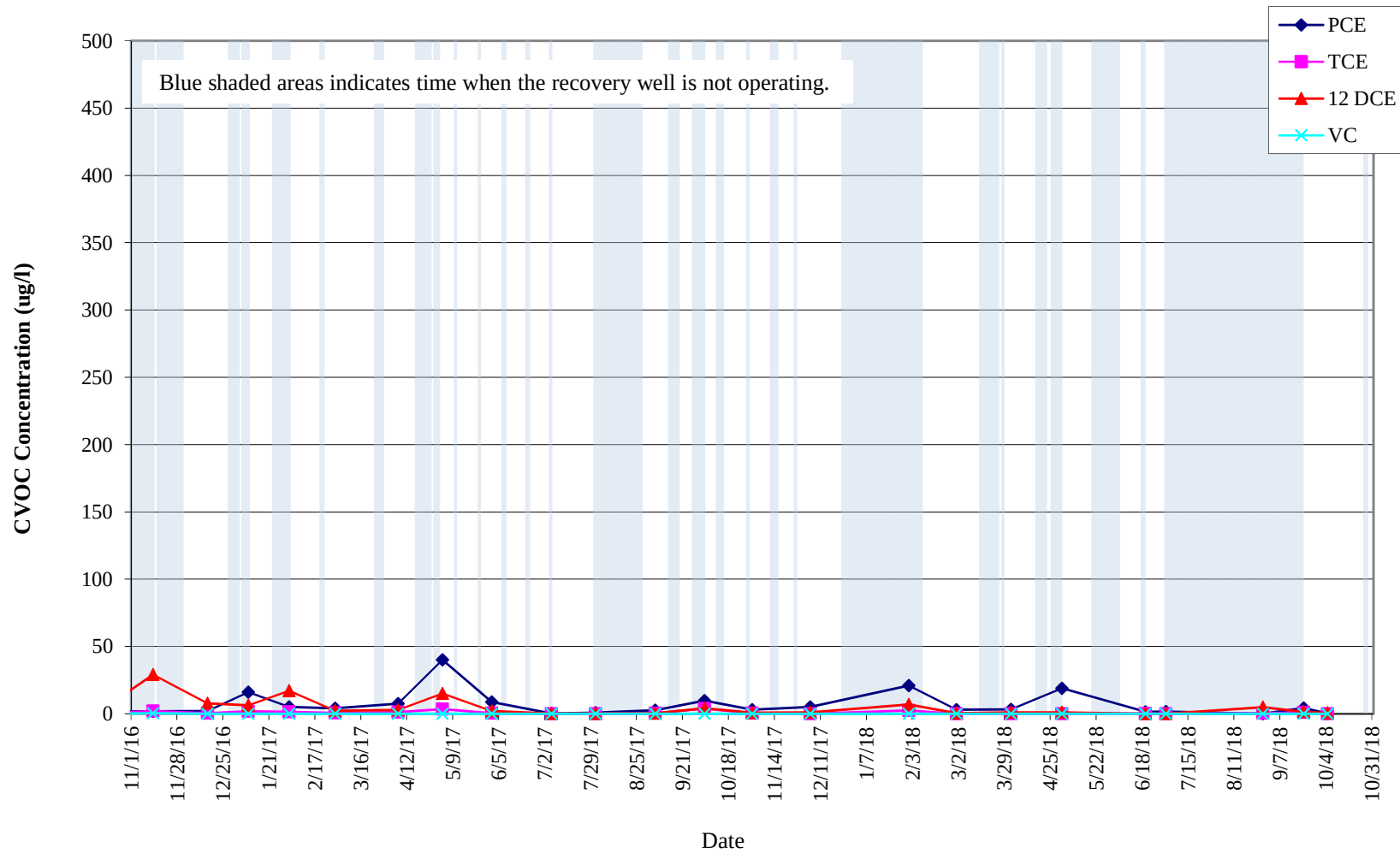
GRAPH 6
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-3



GRAPH 7
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-4



APPENDIX I
OCTOBER 2018 LABORATORY ANALYTICAL REPORTS
FOR FSP&T SYSTEM



Technical Report

prepared for:

WSP USA, Inc. (Shelton)
4 Research Drive, Suite 204
Shelton CT, 06484
Attention: Tunde Komuves-Sandor

Report Date: 10/16/2018
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 18J0417

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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132-02 89th AVENUE
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RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 10/16/2018
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 18J0417

WSP USA, Inc. (Shelton)
4 Research Drive, Suite 204
Shelton CT, 06484
Attention: Tunde Komuves-Sandor

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 October 09, 2018 and listed below. The project was identified as your project: **31401451.000 task 01.00**.

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

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

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

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18J0417-01	WQ100518:1255 NP2-6	Water	10/05/2018	10/09/2018
18J0417-02	WQ100518:1300 NP2-10	Water	10/05/2018	10/09/2018

General Notes for York Project (SDG) No.: 18J0417

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

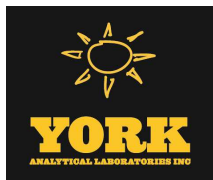
Approved By:



Benjamin Gulizia
Laboratory Director

Date: 10/16/2018





Sample Information

Client Sample ID: WQ100518:1255 NP2-6

York Sample ID: 18J0417-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18J0417

31401451.000 task 01.00

Water

October 5, 2018 12:55 pm

10/09/2018

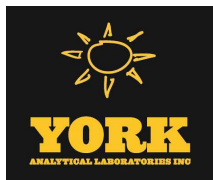
Volatile Organics, 8260 List - Low Level

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
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 14:03	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS



Sample Information

Client Sample ID: WQ100518:1255 NP2-6

York Sample ID: 18J0417-01

York Project (SDG) No.

18J0417

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 12:55 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
67-66-3	Chloroform	0.280		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
156-59-2	cis-1,2-Dichloroethylene	0.270		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:03	SS



Sample Information

Client Sample ID: WQ100518:1255 NP2-6

York Sample ID: 18J0417-01

York Project (SDG) No.

18J0417

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 12:55 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
127-18-4	Tetrachloroethylene	0.980		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
79-01-6	Trichloroethylene	0.220		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:03	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 14:03	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	105 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	92.9 %	70-130								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	104 %	70-130								



Sample Information

Client Sample ID: WQ100518:1300 NP2-10

York Sample ID: 18J0417-02

York Project (SDG) No.

18J0417

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 1:00 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 14:35	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS



Sample Information

Client Sample ID: WQ100518:1300 NP2-10

York Sample ID: 18J0417-02

York Project (SDG) No.

18J0417

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 1:00 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 14:35	SS

Sample Information

Client Sample ID: WO100518:1300 NP2-10

York Sample ID: 18.J0417-02

York Project (SDG) No.
18J0417

Client Project ID
31401451.000 task 01.00

Matrix
Water

Collection Date/Time
October 5, 2018 1:00 pm

Date Received
10/09/2018

Volatile Organics, 8260 List - 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
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	10/12/2018 14:35	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	10/12/2018 14:35	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 14:35	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 14:35	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %	70-130
2037-26-5	Surrogate: SURR: Toluene-d8	92.0 %	70-130
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	101 %	70-130

Iron by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 200.7

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

Client Sample ID: WQ100518:1300 NP2-10

York Sample ID: 18J0417-02

York Project (SDG) No.

18J0417

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 1:00 pm

Date Received

10/09/2018

Iron by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 200.7

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	1.66		mg/L	0.278	1	EPA 200.7	10/12/2018 11:37	10/16/2018 12:57	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Iron, Dissolved by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	ND		mg/L	0.278	1	EPA 6010D	10/16/2018 11:35	10/16/2018 16:26	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Total Dissolved Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Dissolved Solids	145		mg/L	10.0	1	SM 2540C	10/09/2018 18:36	10/10/2018 20:39	AA
							Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		



Analytical Batch Summary

Batch ID: BJ80523 **Preparation Method:** % Solids Prep **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
18J0417-02	WQ100518:1300 NP2-10	10/09/18
BJ80523-BLK1	Blank	10/09/18

Batch ID: BJ80702 **Preparation Method:** EPA 5030B **Prepared By:** TAB

YORK Sample ID	Client Sample ID	Preparation Date
18J0417-01	WQ100518:1255 NP2-6	10/12/18
18J0417-02	WQ100518:1300 NP2-10	10/12/18
BJ80702-BLK1	Blank	10/12/18
BJ80702-BS1	LCS	10/12/18
BJ80702-BSD1	LCS Dup	10/12/18

Batch ID: BJ80739 **Preparation Method:** EPA 200.7 **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
18J0417-02	WQ100518:1300 NP2-10	10/12/18
BJ80739-BLK1	Blank	10/12/18
BJ80739-BS1	LCS	10/12/18

Batch ID: BJ80878 **Preparation Method:** EPA 3015A **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
18J0417-02	WQ100518:1300 NP2-10	10/16/18
BJ80878-BLK1	Blank	10/16/18
BJ80878-BS1	LCS	10/16/18
BJ80878-DUP1	Duplicate	10/16/18
BJ80878-MS1	Matrix Spike	10/16/18



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 BJ80702 - EPA 5030B											
Blank (BJ80702-BLK1)										Prepared & Analyzed: 10/12/2018	
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,1-Dichloropropylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
2,2-Dichloropropane	ND	0.500	"								
2-Chlorotoluene	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Chlorotoluene	ND	0.500	"								
Acetone	ND	2.00	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								



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 BJ80702 - EPA 5030B											
Blank (BJ80702-BLK1)											
Prepared & Analyzed: 10/12/2018											
o-Xylene	ND	0.500	ug/L								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	10.8		"	10.0		108	70-130				
Surrogate: SURR: Toluene-d8	9.68		"	10.0		96.8	70-130				
Surrogate: SURR: p-Bromofluorobenzene	9.90		"	10.0		99.0	70-130				
LCS (BJ80702-BS1)											
Prepared & Analyzed: 10/12/2018											
1,1,1,2-Tetrachloroethane	10.4		ug/L	10.0		104	82-126			30	
1,1,1-Trichloroethane	11.7		"	10.0		117	70-130			20	
1,1,2,2-Tetrachloroethane	9.74		"	10.0		97.4	70-130			20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2		"	10.0		112	70-130			20	
1,1,2-Trichloroethane	10.1		"	10.0		101	70-130			20	
1,1-Dichloroethane	11.4		"	10.0		114	70-130			20	
1,1-Dichloroethylene	10.4		"	10.0		104	70-130			20	
1,1-Dichloropropylene	11.2		"	10.0		112	83-133			30	
1,2,3-Trichlorobenzene	8.05		"	10.0		80.5	70-130			20	
1,2,3-Trichloropropane	9.69		"	10.0		96.9	77-128			30	
1,2,4-Trichlorobenzene	8.30		"	10.0		83.0	70-130			20	
1,2,4-Trimethylbenzene	9.45		"	10.0		94.5	82-132			20	
1,2-Dibromo-3-chloropropane	8.86		"	10.0		88.6	40-160			20	
1,2-Dibromoethane	10.0		"	10.0		100	70-130			20	
1,2-Dichlorobenzene	9.72		"	10.0		97.2	70-130			20	
1,2-Dichloroethane	12.9		"	10.0		129	70-130			20	
1,2-Dichloropropane	9.60		"	10.0		96.0	70-130			20	
1,3,5-Trimethylbenzene	9.35		"	10.0		93.5	80-131			30	
1,3-Dichlorobenzene	9.72		"	10.0		97.2	70-130			20	
1,3-Dichloropropane	10.5		"	10.0		105	81-125			30	
1,4-Dichlorobenzene	9.58		"	10.0		95.8	70-130			20	
2,2-Dichloropropane	12.1		"	10.0		121	56-150			30	
2-Chlorotoluene	9.72		"	10.0		97.2	79-130			30	
2-Hexanone	9.00		"	10.0		90.0	40-160			20	
4-Chlorotoluene	9.69		"	10.0		96.9	79-128			30	
Acetone	9.51		"	10.0		95.1	40-160			20	
Benzene	11.8		"	10.0		118	70-130			20	
Bromobenzene	9.34		"	10.0		93.4	78-129			30	
Bromochloromethane	11.0		"	10.0		110	70-130			20	
Bromodichloromethane	10.4		"	10.0		104	70-130			20	
Bromoform	9.36		"	10.0		93.6	70-130			20	
Bromomethane	2.38		"	10.0		23.8	40-160	Low Bias		20	



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
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Batch BJ80702 - EPA 5030B

LCS (BJ80702-BS1)

Prepared & Analyzed: 10/12/2018

Carbon tetrachloride	11.8		ug/L	10.0		118	70-130			20	
Chlorobenzene	10.4		"	10.0		104	70-130			20	
Chloroethane	12.0		"	10.0		120	40-160			20	
Chloroform	12.1		"	10.0		121	70-130			20	
Chloromethane	7.37		"	10.0		73.7	40-160			20	
cis-1,2-Dichloroethylene	11.4		"	10.0		114	70-130			20	
cis-1,3-Dichloropropylene	10.2		"	10.0		102	70-130			20	
Dibromochloromethane	9.98		"	10.0		99.8	70-130			20	
Dibromomethane	10.8		"	10.0		108	72-134			30	
Dichlorodifluoromethane	13.2		"	10.0		132	40-160			20	
Ethyl Benzene	10.4		"	10.0		104	70-130			20	
Hexachlorobutadiene	8.34		"	10.0		83.4	67-146			30	
Isopropylbenzene	8.96		"	10.0		89.6	70-130			20	
Methyl tert-butyl ether (MTBE)	12.3		"	10.0		123	70-130			20	
Methylene chloride	9.96		"	10.0		99.6	70-130			20	
Naphthalene	7.97		"	10.0		79.7	70-147			30	
n-Butylbenzene	8.39		"	10.0		83.9	79-132			30	
n-Propylbenzene	9.40		"	10.0		94.0	78-133			30	
o-Xylene	10.5		"	10.0		105	70-130			20	
p- & m- Xylenes	17.6		"	20.0		88.2	70-130			20	
p-Isopropyltoluene	9.42		"	10.0		94.2	81-136			30	
sec-Butylbenzene	9.76		"	10.0		97.6	79-137			30	
Styrene	10.1		"	10.0		101	70-130			20	
tert-Butylbenzene	9.19		"	10.0		91.9	77-138			30	
Tetrachloroethylene	7.41		"	10.0		74.1	70-130			20	
Toluene	10.4		"	10.0		104	70-130			20	
trans-1,2-Dichloroethylene	10.8		"	10.0		108	70-130			20	
trans-1,3-Dichloropropylene	10.0		"	10.0		100	70-130			20	
Trichloroethylene	9.70		"	10.0		97.0	70-130			20	
Trichlorofluoromethane	13.6		"	10.0		136	40-160			20	
Vinyl Chloride	11.5		"	10.0		115	70-130			20	
Surrogate: SURR: 1,2-Dichloroethane-d4	11.2		"	10.0		112	70-130				
Surrogate: SURR: Toluene-d8	9.33		"	10.0		93.3	70-130				
Surrogate: SURR: p-Bromofluorobenzene	9.59		"	10.0		95.9	70-130				



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 BJ80702 - EPA 5030B											
LCS Dup (BJ80702-BSD1)						Prepared & Analyzed: 10/12/2018					
1,1,1,2-Tetrachloroethane	10.3		ug/L	10.0		103	82-126		1.25	30	
1,1,1-Trichloroethane	11.9		"	10.0		119	70-130		1.87	20	
1,1,2,2-Tetrachloroethane	8.84		"	10.0		88.4	70-130		9.69	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.5		"	10.0		115	70-130		2.64	20	
1,1,2-Trichloroethane	9.69		"	10.0		96.9	70-130		3.95	20	
1,1-Dichloroethane	11.2		"	10.0		112	70-130		1.95	20	
1,1-Dichloroethylene	10.7		"	10.0		107	70-130		2.84	20	
1,1-Dichloropropylene	11.6		"	10.0		116	83-133		3.43	30	
1,2,3-Trichlorobenzene	8.22		"	10.0		82.2	70-130		2.09	20	
1,2,3-Trichloropropane	8.93		"	10.0		89.3	77-128		8.16	30	
1,2,4-Trichlorobenzene	8.19		"	10.0		81.9	70-130		1.33	20	
1,2,4-Trimethylbenzene	9.13		"	10.0		91.3	82-132		3.44	20	
1,2-Dibromo-3-chloropropane	8.08		"	10.0		80.8	40-160		9.21	20	
1,2-Dibromoethane	9.35		"	10.0		93.5	70-130		6.82	20	
1,2-Dichlorobenzene	9.30		"	10.0		93.0	70-130		4.42	20	
1,2-Dichloroethane	12.2		"	10.0		122	70-130		5.81	20	
1,2-Dichloropropane	9.38		"	10.0		93.8	70-130		2.32	20	
1,3,5-Trimethylbenzene	9.13		"	10.0		91.3	80-131		2.38	30	
1,3-Dichlorobenzene	9.27		"	10.0		92.7	70-130		4.74	20	
1,3-Dichloropropane	10.0		"	10.0		100	81-125		4.96	30	
1,4-Dichlorobenzene	9.19		"	10.0		91.9	70-130		4.16	20	
2,2-Dichloropropane	12.0		"	10.0		120	56-150		0.332	30	
2-Chlorotoluene	9.40		"	10.0		94.0	79-130		3.35	30	
2-Hexanone	8.30		"	10.0		83.0	40-160		8.09	20	
4-Chlorotoluene	9.34		"	10.0		93.4	79-128		3.68	30	
Acetone	8.92		"	10.0		89.2	40-160		6.40	20	
Benzene	11.6		"	10.0		116	70-130		1.88	20	
Bromobenzene	8.87		"	10.0		88.7	78-129		5.16	30	
Bromochloromethane	10.3		"	10.0		103	70-130		6.09	20	
Bromodichloromethane	10.0		"	10.0		100	70-130		3.62	20	
Bromoform	8.73		"	10.0		87.3	70-130		6.97	20	
Bromomethane	2.56		"	10.0		25.6	40-160	Low Bias	7.29	20	
Carbon tetrachloride	12.1		"	10.0		121	70-130		2.59	20	
Chlorobenzene	10.3		"	10.0		103	70-130		1.26	20	
Chloroethane	12.0		"	10.0		120	40-160		0.250	20	
Chloroform	11.6		"	10.0		116	70-130		3.63	20	
Chloromethane	7.30		"	10.0		73.0	40-160		0.954	20	
cis-1,2-Dichloroethylene	11.2		"	10.0		112	70-130		1.85	20	
cis-1,3-Dichloropropylene	9.75		"	10.0		97.5	70-130		4.51	20	
Dibromochloromethane	9.59		"	10.0		95.9	70-130		3.99	20	
Dibromomethane	10.2		"	10.0		102	72-134		5.60	30	
Dichlorodifluoromethane	13.8		"	10.0		138	40-160		4.96	20	
Ethyl Benzene	10.5		"	10.0		105	70-130		1.44	20	
Hexachlorobutadiene	8.28		"	10.0		82.8	67-146		0.722	30	
Isopropylbenzene	8.87		"	10.0		88.7	70-130		1.01	20	
Methyl tert-butyl ether (MTBE)	11.6		"	10.0		116	70-130		5.43	20	
Methylene chloride	9.57		"	10.0		95.7	70-130		3.99	20	
Naphthalene	7.76		"	10.0		77.6	70-147		2.67	30	
n-Butylbenzene	8.43		"	10.0		84.3	79-132		0.476	30	
n-Propylbenzene	9.25		"	10.0		92.5	78-133		1.61	30	
o-Xylene	10.4		"	10.0		104	70-130		0.668	20	



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
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Batch BJ80702 - EPA 5030B

LCS Dup (BJ80702-BSD1)

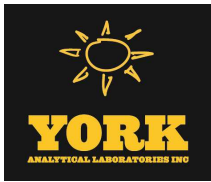
Prepared & Analyzed: 10/12/2018

p- & m- Xylenes	17.9		ug/L	20.0		89.6	70-130		1.52	20
p-Isopropyltoluene	9.29		"	10.0		92.9	81-136		1.39	30
sec-Butylbenzene	9.66		"	10.0		96.6	79-137		1.03	30
Styrene	10.0		"	10.0		100	70-130		0.698	20
tert-Butylbenzene	9.07		"	10.0		90.7	77-138		1.31	30
Tetrachloroethylene	7.71		"	10.0		77.1	70-130		3.97	20
Toluene	10.5		"	10.0		105	70-130		1.15	20
trans-1,2-Dichloroethylene	10.8		"	10.0		108	70-130		0.0926	20
trans-1,3-Dichloropropylene	9.53		"	10.0		95.3	70-130		5.01	20
Trichloroethylene	9.75		"	10.0		97.5	70-130		0.514	20
Trichlorofluoromethane	14.0		"	10.0		140	40-160		2.25	20
Vinyl Chloride	11.8		"	10.0		118	70-130		3.26	20
Surrogate: SURR: 1,2-Dichloroethane-d4	10.7		"	10.0		107	70-130			
Surrogate: SURR: Toluene-d8	9.54		"	10.0		95.4	70-130			
Surrogate: SURR: p-Bromofluorobenzene	9.52		"	10.0		95.2	70-130			



Metals by ICP - 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 BJ80739 - EPA 200.7											
Blank (BJ80739-BLK1)								Prepared & Analyzed: 10/12/2018			
Iron	ND	0.278	mg/L								
LCS (BJ80739-BS1)								Prepared & Analyzed: 10/12/2018			
Iron	1.03		ug/mL	1.00		103	85-115				
Batch BJ80878 - EPA 3015A											
Blank (BJ80878-BLK1)								Prepared & Analyzed: 10/16/2018			
Iron - Dissolved	ND	0.278	mg/L								
LCS (BJ80878-BS1)								Prepared & Analyzed: 10/16/2018			
Iron - Dissolved	1.03		ug/mL	1.00		103	80-120				
Duplicate (BJ80878-DUP1)		*Source sample: 18J0417-02 (WQ100518:1300 NP2-10)						Prepared & Analyzed: 10/16/2018			
Iron - Dissolved	ND	0.278	mg/L		ND					20	
Matrix Spike (BJ80878-MS1)		*Source sample: 18J0417-02 (WQ100518:1300 NP2-10)						Prepared & Analyzed: 10/16/2018			
Iron - Dissolved	1.14	0.278	mg/L	1.11	ND	102	75-125				



Miscellaneous Physical Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD Limit	Flag
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Batch BJ80523 - % Solids Prep

Blank (BJ80523-BLK1)

Prepared: 10/09/2018 Analyzed: 10/10/2018

Total Dissolved Solids	ND	10.0	mg/L
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Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18J0417-01	WQ100518:1255 NP2-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18J0417-02	WQ100518:1300 NP2-10	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
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).

Definitions and Other Explanations

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

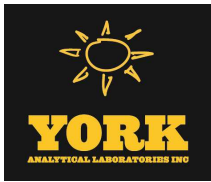
If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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



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





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

Field Chain-of-Custody Record

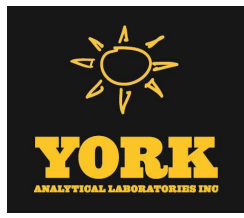
Page 1 of 1

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. 18J0417

YOUR INFORMATION		Report to:		Invoice To:		Your Project ID		Turn-Around Time		Report/Deliverable Type	
Company:	WSP USA	☒ SAME	☒ X	31401451.000 task		RUSH-Same Day		Summary Report		X, PDF	
Address:	4 Research Drive	Name:		01.00		RUSH-Next Day		QA Report		X, PDF	
Suite:	301, Shelton CT 06484	Company:		Purchase Order #		RUSH-Two Day		CT RCP			
Phone:	203.929.8555	Address:		31401451.000 task		RUSH-Three Day		CT RCP DQ/DUE Pkg			
Contact:	Tunde Sandor			01.00		RUSH-Four Day		NY ASP A Package			
E-mail:	tunde.sandor@wsp.com	E-mail:		Samples from CT_NY_X_NJ_		Standard (5-7day)		NY ASP B Package		X, PDF	
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. Matrix Codes S - soil Other - specify (oil, etc.) WW - wastewater GW - groundwater DW - drinking water Air-A - ambient air Air-SV - soil vapor Samples Collected/Authorized By (Signature) <u>Evan Foster</u> Name (printed)											
Sample Identification		Date+Time Sampled		Matrix		Analysis Requested (List above includes common analysis)		Container Description		OTHER:	
WQ00518: 1255 NP2-6		10-5-18 1255		GW		VOCs 8260 full plus freon 113		300A			
+ 1300 NP2-10		1300		GW		Fe by EPA 2007; Fe dissolved by EPA 6010; VOCs 8260 full plus freon 113; TDS		300A, 3Plastic			
Preservation (check all applicable) ☒ 4°C ☒ Frozen ☒ HCl ☒ MeOH ☒ HNO₃ ☒ H₂SO₄ ☒ NaOH ☐ ZnAc ☐ Ascorbic Acid ☐ Other Special Instructions ☐ Field Filtered ☐ Lab to Filter											
Comments: <u>WSP Fadar</u> 10-5-18 1950 <u>10/19/18 1310</u> <u>10/18 1310</u> <u>12:05</u>											
Temperature on Receipt <u>5.1 °C</u>											

APPENDIX II
OCTOBER 2018 LABORATORY ANALYTICAL REPORTS
FOR FSP&T AND FP&T RECOVERY WELLS



Technical Report

prepared for:

WSP USA, Inc. (Shelton)
4 Research Drive, Suite 204
Shelton CT, 06484
Attention: Tunde Komuves-Sandor

Report Date: 12/07/2018
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 18J0413

Revision No. 1.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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STRATFORD, CT 06615
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132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 12/07/2018
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 18J0413

WSP USA, Inc. (Shelton)
4 Research Drive, Suite 204
Shelton CT, 06484
Attention: Tunde Komuves-Sandor

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 October 09, 2018 and listed below. The project was identified as your project: **31401451.000 task 01.00**.

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

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

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

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18J0413-01	WQ100518:1400 FRW-1	Water	10/05/2018	10/09/2018
18J0413-02	WQ100518:1405 FRW-2	Water	10/05/2018	10/09/2018
18J0413-03	WQ100518:1410 FRW-3	Water	10/05/2018	10/09/2018
18J0413-04	WQ100518:1415 FRW-4	Water	10/05/2018	10/09/2018
18J0413-05	WQ100518:1310 NP1-1-2	Water	10/05/2018	10/09/2018

General Notes for York Project (SDG) No.: 18J0413

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

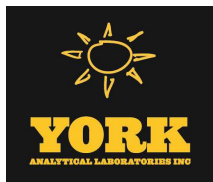
Approved By:



Benjamin Gulizia
Laboratory Director

Date: 12/07/2018





Sample Information

Client Sample ID: WQ100518:1400 FRW-1

York Sample ID: 18J0413-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18J0413

31401451.000 task 01.00

Water

October 5, 2018 2:00 pm

10/09/2018

Volatile Organics, 8260 List - 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
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 15:07	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS



Sample Information

Client Sample ID: WQ100518:1400 FRW-1

York Sample ID: 18J0413-01

York Project (SDG) No.

18J0413

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 2:00 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
156-59-2	cis-1,2-Dichloroethylene	0.280		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 15:07	SS



Sample Information

Client Sample ID: WQ100518:1400 FRW-1

York Sample ID: 18J0413-01

York Project (SDG) No.

18J0413

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 2:00 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
127-18-4	Tetrachloroethylene	1.19		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:07	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 15:07	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	91.9 %	70-130								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	102 %	70-130								



Sample Information

Client Sample ID: WQ100518:1405 FRW-2

York Sample ID: 18J0413-02

York Project (SDG) No.

18J0413

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 2:05 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 15:39	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS



Sample Information

Client Sample ID: WQ100518:1405 FRW-2

York Sample ID: 18J0413-02

York Project (SDG) No.
18J0413

Client Project ID
31401451.000 task 01.00

Matrix
Water

Collection Date/Time
October 5, 2018 2:05 pm

Date Received
10/09/2018

Volatile Organics, 8260 List - 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
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS



Sample Information

Client Sample ID: WQ100518:1405 FRW-2

York Sample ID: 18J0413-02

York Project (SDG) No.
18J0413

Client Project ID
31401451.000 task 01.00

Matrix
Water

Collection Date/Time
October 5, 2018 2:05 pm

Date Received
10/09/2018

Volatile Organics, 8260 List - 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
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
127-18-4	Tetrachloroethylene	1.86		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 15:39	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 15:39	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	91.9 %	70-130								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	104 %	70-130								



Sample Information

Client Sample ID: WQ100518:1410 FRW-3

York Sample ID: 18J0413-03

York Project (SDG) No.

18J0413

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 2:10 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 16:11	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS



Sample Information

Client Sample ID: WQ100518:1410 FRW-3

York Sample ID: 18J0413-03

York Project (SDG) No.

18J0413

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 2:10 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
156-59-2	cis-1,2-Dichloroethylene	4.31		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30	10/12/2018 16:11	SS



Sample Information

Client Sample ID: WQ100518:1410 FRW-3

York Sample ID: 18J0413-03

York Project (SDG) No.

18J0413

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 2:10 pm

Date Received

10/09/2018

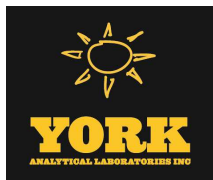
Volatile Organics, 8260 List - Low Level

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
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
127-18-4	Tetrachloroethylene	0.730		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
79-01-6	Trichloroethylene	0.530		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:11	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 16:11	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	108 %	70-130								
2037-26-5	Surrogate: SURRE: Toluene-d8	91.7 %	70-130								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	104 %	70-130								



Sample Information

Client Sample ID: WQ100518:1415 FRW-4

York Sample ID: 18J0413-04

York Project (SDG) No.

18J0413

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 2:15 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 16:43	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS



Sample Information

Client Sample ID: WQ100518:1415 FRW-4

York Sample ID: 18J0413-04

York Project (SDG) No.
18J0413

Client Project ID
31401451.000 task 01.00

Matrix
Water

Collection Date/Time
October 5, 2018 2:15 pm

Date Received
10/09/2018

Volatile Organics, 8260 List - 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
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
67-64-1	Acetone	1.23	CCV-E, SCAL-E	ug/L	1.00	2.00	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
74-87-3	Chloromethane	0.560	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
156-59-2	cis-1,2-Dichloroethylene	0.630		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 16:43	SS



Sample Information

Client Sample ID: WQ100518:1415 FRW-4

York Sample ID: 18J0413-04

York Project (SDG) No.
18J0413

Client Project ID
31401451.000 task 01.00

Matrix
Water

Collection Date/Time
October 5, 2018 2:15 pm

Date Received
10/09/2018

Volatile Organics, 8260 List - 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
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
127-18-4	Tetrachloroethylene	0.260		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 16:43	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 16:43	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	91.4 %	70-130								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	105 %	70-130								



Sample Information

Client Sample ID: WQ100518:1310 NP1-1-2

York Sample ID: 18J0413-05

York Project (SDG) No.

18J0413

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 1:10 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 07:30	10/12/2018 17:15	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS



Sample Information

Client Sample ID: WQ100518:1310 NP1-1-2

York Sample ID: 18J0413-05

York Project (SDG) No.

18J0413

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 1:10 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
67-66-3	Chloroform	0.370		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
74-87-3	Chloromethane	0.300	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 07:30	10/12/2018 17:15	SS



Sample Information

Client Sample ID: WQ100518:1310 NP1-1-2

York Sample ID: 18J0413-05

York Project (SDG) No.

18J0413

Client Project ID

31401451.000 task 01.00

Matrix

Water

Collection Date/Time

October 5, 2018 1:10 pm

Date Received

10/09/2018

Volatile Organics, 8260 List - 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
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	10/12/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	10/12/2018 17:15	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	10/12/2018 17:15	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
127-18-4	Tetrachloroethylene	0.250		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	10/12/2018 17:15	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	10/12/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	10/12/2018 17:15	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	106 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	93.1 %	70-130								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	121 %	70-130								



Analytical Batch Summary

Batch ID: BJ80702

Preparation Method: EPA 5030B

Prepared By: TAB

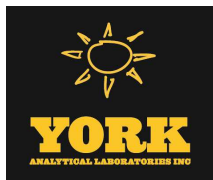
YORK Sample ID	Client Sample ID	Preparation Date
18J0413-01	WQ100518:1400 FRW-1	10/12/18
18J0413-02	WQ100518:1405 FRW-2	10/12/18
18J0413-03	WQ100518:1410 FRW-3	10/12/18
18J0413-04	WQ100518:1415 FRW-4	10/12/18
18J0413-05	WQ100518:1310 NP1-1-2	10/12/18
BJ80702-BLK1	Blank	10/12/18
BJ80702-BS1	LCS	10/12/18
BJ80702-BSD1	LCS Dup	10/12/18



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 BJ80702 - EPA 5030B											
Blank (BJ80702-BLK1)										Prepared & Analyzed: 10/12/2018	
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,1-Dichloropropylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
2,2-Dichloropropane	ND	0.500	"								
2-Chlorotoluene	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Chlorotoluene	ND	0.500	"								
Acetone	ND	2.00	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								



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 BJ80702 - EPA 5030B											
Blank (BJ80702-BLK1)											
Prepared & Analyzed: 10/12/2018											
o-Xylene	ND	0.500	ug/L								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	10.8		"	10.0		108	70-130				
Surrogate: SURR: Toluene-d8	9.68		"	10.0		96.8	70-130				
Surrogate: SURR: p-Bromofluorobenzene	9.90		"	10.0		99.0	70-130				
LCS (BJ80702-BS1)											
Prepared & Analyzed: 10/12/2018											
1,1,1,2-Tetrachloroethane	10.4		ug/L	10.0		104	82-126			30	
1,1,1-Trichloroethane	11.7		"	10.0		117	70-130			20	
1,1,2,2-Tetrachloroethane	9.74		"	10.0		97.4	70-130			20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2		"	10.0		112	70-130			20	
1,1,2-Trichloroethane	10.1		"	10.0		101	70-130			20	
1,1-Dichloroethane	11.4		"	10.0		114	70-130			20	
1,1-Dichloroethylene	10.4		"	10.0		104	70-130			20	
1,1-Dichloropropylene	11.2		"	10.0		112	83-133			30	
1,2,3-Trichlorobenzene	8.05		"	10.0		80.5	70-130			20	
1,2,3-Trichloropropane	9.69		"	10.0		96.9	77-128			30	
1,2,4-Trichlorobenzene	8.30		"	10.0		83.0	70-130			20	
1,2,4-Trimethylbenzene	9.45		"	10.0		94.5	82-132			20	
1,2-Dibromo-3-chloropropane	8.86		"	10.0		88.6	40-160			20	
1,2-Dibromoethane	10.0		"	10.0		100	70-130			20	
1,2-Dichlorobenzene	9.72		"	10.0		97.2	70-130			20	
1,2-Dichloroethane	12.9		"	10.0		129	70-130			20	
1,2-Dichloropropane	9.60		"	10.0		96.0	70-130			20	
1,3,5-Trimethylbenzene	9.35		"	10.0		93.5	80-131			30	
1,3-Dichlorobenzene	9.72		"	10.0		97.2	70-130			20	
1,3-Dichloropropane	10.5		"	10.0		105	81-125			30	
1,4-Dichlorobenzene	9.58		"	10.0		95.8	70-130			20	
2,2-Dichloropropane	12.1		"	10.0		121	56-150			30	
2-Chlorotoluene	9.72		"	10.0		97.2	79-130			30	
2-Hexanone	9.00		"	10.0		90.0	40-160			20	
4-Chlorotoluene	9.69		"	10.0		96.9	79-128			30	
Acetone	9.51		"	10.0		95.1	40-160			20	
Benzene	11.8		"	10.0		118	70-130			20	
Bromobenzene	9.34		"	10.0		93.4	78-129			30	
Bromochloromethane	11.0		"	10.0		110	70-130			20	
Bromodichloromethane	10.4		"	10.0		104	70-130			20	
Bromoform	9.36		"	10.0		93.6	70-130			20	
Bromomethane	2.38		"	10.0		23.8	40-160	Low Bias		20	



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
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Batch BJ80702 - EPA 5030B

LCS (BJ80702-BS1)

Prepared & Analyzed: 10/12/2018

Carbon tetrachloride	11.8		ug/L	10.0		118	70-130			20	
Chlorobenzene	10.4		"	10.0		104	70-130			20	
Chloroethane	12.0		"	10.0		120	40-160			20	
Chloroform	12.1		"	10.0		121	70-130			20	
Chloromethane	7.37		"	10.0		73.7	40-160			20	
cis-1,2-Dichloroethylene	11.4		"	10.0		114	70-130			20	
cis-1,3-Dichloropropylene	10.2		"	10.0		102	70-130			20	
Dibromochloromethane	9.98		"	10.0		99.8	70-130			20	
Dibromomethane	10.8		"	10.0		108	72-134			30	
Dichlorodifluoromethane	13.2		"	10.0		132	40-160			20	
Ethyl Benzene	10.4		"	10.0		104	70-130			20	
Hexachlorobutadiene	8.34		"	10.0		83.4	67-146			30	
Isopropylbenzene	8.96		"	10.0		89.6	70-130			20	
Methyl tert-butyl ether (MTBE)	12.3		"	10.0		123	70-130			20	
Methylene chloride	9.96		"	10.0		99.6	70-130			20	
Naphthalene	7.97		"	10.0		79.7	70-147			30	
n-Butylbenzene	8.39		"	10.0		83.9	79-132			30	
n-Propylbenzene	9.40		"	10.0		94.0	78-133			30	
o-Xylene	10.5		"	10.0		105	70-130			20	
p- & m- Xylenes	17.6		"	20.0		88.2	70-130			20	
p-Isopropyltoluene	9.42		"	10.0		94.2	81-136			30	
sec-Butylbenzene	9.76		"	10.0		97.6	79-137			30	
Styrene	10.1		"	10.0		101	70-130			20	
tert-Butylbenzene	9.19		"	10.0		91.9	77-138			30	
Tetrachloroethylene	7.41		"	10.0		74.1	70-130			20	
Toluene	10.4		"	10.0		104	70-130			20	
trans-1,2-Dichloroethylene	10.8		"	10.0		108	70-130			20	
trans-1,3-Dichloropropylene	10.0		"	10.0		100	70-130			20	
Trichloroethylene	9.70		"	10.0		97.0	70-130			20	
Trichlorofluoromethane	13.6		"	10.0		136	40-160			20	
Vinyl Chloride	11.5		"	10.0		115	70-130			20	
Surrogate: SURR: 1,2-Dichloroethane-d4	11.2		"	10.0		112	70-130				
Surrogate: SURR: Toluene-d8	9.33		"	10.0		93.3	70-130				
Surrogate: SURR: p-Bromofluorobenzene	9.59		"	10.0		95.9	70-130				



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 BJ80702 - EPA 5030B											
LCS Dup (BJ80702-BSD1)						Prepared & Analyzed: 10/12/2018					
1,1,1,2-Tetrachloroethane	10.3		ug/L	10.0		103	82-126		1.25	30	
1,1,1-Trichloroethane	11.9		"	10.0		119	70-130		1.87	20	
1,1,2,2-Tetrachloroethane	8.84		"	10.0		88.4	70-130		9.69	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.5		"	10.0		115	70-130		2.64	20	
1,1,2-Trichloroethane	9.69		"	10.0		96.9	70-130		3.95	20	
1,1-Dichloroethane	11.2		"	10.0		112	70-130		1.95	20	
1,1-Dichloroethylene	10.7		"	10.0		107	70-130		2.84	20	
1,1-Dichloropropylene	11.6		"	10.0		116	83-133		3.43	30	
1,2,3-Trichlorobenzene	8.22		"	10.0		82.2	70-130		2.09	20	
1,2,3-Trichloropropane	8.93		"	10.0		89.3	77-128		8.16	30	
1,2,4-Trichlorobenzene	8.19		"	10.0		81.9	70-130		1.33	20	
1,2,4-Trimethylbenzene	9.13		"	10.0		91.3	82-132		3.44	20	
1,2-Dibromo-3-chloropropane	8.08		"	10.0		80.8	40-160		9.21	20	
1,2-Dibromoethane	9.35		"	10.0		93.5	70-130		6.82	20	
1,2-Dichlorobenzene	9.30		"	10.0		93.0	70-130		4.42	20	
1,2-Dichloroethane	12.2		"	10.0		122	70-130		5.81	20	
1,2-Dichloropropane	9.38		"	10.0		93.8	70-130		2.32	20	
1,3,5-Trimethylbenzene	9.13		"	10.0		91.3	80-131		2.38	30	
1,3-Dichlorobenzene	9.27		"	10.0		92.7	70-130		4.74	20	
1,3-Dichloropropane	10.0		"	10.0		100	81-125		4.96	30	
1,4-Dichlorobenzene	9.19		"	10.0		91.9	70-130		4.16	20	
2,2-Dichloropropane	12.0		"	10.0		120	56-150		0.332	30	
2-Chlorotoluene	9.40		"	10.0		94.0	79-130		3.35	30	
2-Hexanone	8.30		"	10.0		83.0	40-160		8.09	20	
4-Chlorotoluene	9.34		"	10.0		93.4	79-128		3.68	30	
Acetone	8.92		"	10.0		89.2	40-160		6.40	20	
Benzene	11.6		"	10.0		116	70-130		1.88	20	
Bromobenzene	8.87		"	10.0		88.7	78-129		5.16	30	
Bromochloromethane	10.3		"	10.0		103	70-130		6.09	20	
Bromodichloromethane	10.0		"	10.0		100	70-130		3.62	20	
Bromoform	8.73		"	10.0		87.3	70-130		6.97	20	
Bromomethane	2.56		"	10.0		25.6	40-160	Low Bias	7.29	20	
Carbon tetrachloride	12.1		"	10.0		121	70-130		2.59	20	
Chlorobenzene	10.3		"	10.0		103	70-130		1.26	20	
Chloroethane	12.0		"	10.0		120	40-160		0.250	20	
Chloroform	11.6		"	10.0		116	70-130		3.63	20	
Chloromethane	7.30		"	10.0		73.0	40-160		0.954	20	
cis-1,2-Dichloroethylene	11.2		"	10.0		112	70-130		1.85	20	
cis-1,3-Dichloropropylene	9.75		"	10.0		97.5	70-130		4.51	20	
Dibromochloromethane	9.59		"	10.0		95.9	70-130		3.99	20	
Dibromomethane	10.2		"	10.0		102	72-134		5.60	30	
Dichlorodifluoromethane	13.8		"	10.0		138	40-160		4.96	20	
Ethyl Benzene	10.5		"	10.0		105	70-130		1.44	20	
Hexachlorobutadiene	8.28		"	10.0		82.8	67-146		0.722	30	
Isopropylbenzene	8.87		"	10.0		88.7	70-130		1.01	20	
Methyl tert-butyl ether (MTBE)	11.6		"	10.0		116	70-130		5.43	20	
Methylene chloride	9.57		"	10.0		95.7	70-130		3.99	20	
Naphthalene	7.76		"	10.0		77.6	70-147		2.67	30	
n-Butylbenzene	8.43		"	10.0		84.3	79-132		0.476	30	
n-Propylbenzene	9.25		"	10.0		92.5	78-133		1.61	30	
o-Xylene	10.4		"	10.0		104	70-130		0.668	20	



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
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Batch BJ80702 - EPA 5030B

LCS Dup (BJ80702-BSD1)

Prepared & Analyzed: 10/12/2018

p- & m- Xylenes	17.9		ug/L	20.0		89.6	70-130		1.52	20
p-Isopropyltoluene	9.29		"	10.0		92.9	81-136		1.39	30
sec-Butylbenzene	9.66		"	10.0		96.6	79-137		1.03	30
Styrene	10.0		"	10.0		100	70-130		0.698	20
tert-Butylbenzene	9.07		"	10.0		90.7	77-138		1.31	30
Tetrachloroethylene	7.71		"	10.0		77.1	70-130		3.97	20
Toluene	10.5		"	10.0		105	70-130		1.15	20
trans-1,2-Dichloroethylene	10.8		"	10.0		108	70-130		0.0926	20
trans-1,3-Dichloropropylene	9.53		"	10.0		95.3	70-130		5.01	20
Trichloroethylene	9.75		"	10.0		97.5	70-130		0.514	20
Trichlorofluoromethane	14.0		"	10.0		140	40-160		2.25	20
Vinyl Chloride	11.8		"	10.0		118	70-130		3.26	20
Surrogate: SURR: 1,2-Dichloroethane-d4	10.7		"	10.0		107	70-130			
Surrogate: SURR: Toluene-d8	9.54		"	10.0		95.4	70-130			
Surrogate: SURR: p-Bromofluorobenzene	9.52		"	10.0		95.2	70-130			



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18J0413-01	WQ100518:1400 FRW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18J0413-02	WQ100518:1405 FRW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18J0413-03	WQ100518:1410 FRW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18J0413-04	WQ100518:1415 FRW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18J0413-05	WQ100518:1310 NP1-1-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

SCAL-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%).
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
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).

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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



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

Revision Description: This report has been revised to correct VOA results for Sample -02.



Field Chain-of-Custody Record

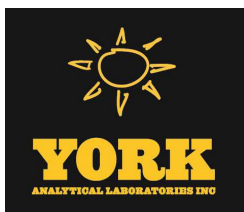
YORK ANALYTICAL LABORATORIES
120 RESEARCH DR.
STRATFORD, CT 06615
(203) 325-1371
FAX (203) 357-0166

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. 18J0413

YOUR INFORMATION		Report to:		Invoice To:		Your Project ID		Turn-Around Time		Report/Deliverable Type			
Company:	WSP USA	SAME ☒		SAME ☒		31401451.000 task		RUSH-Same Day	Summary Report	X, PDF			
Address:	4 Research Drive	Name:		Name:		01.00		RUSH-Next Day	QA Report	X, PDF			
Suite:	301, Shelton CT 06484	Company:		Company:		Purchase Order #		RUSH-Two Day	CT RCP				
Phone:	203.929.8555	Address:		Address:		31401451.000 task		RUSH-Three Day	CT RCP DQA/DUE Pkg				
Contact:	Tunde Sandor					01.00		RUSH-Four Day	NY ASP A Package				
E-mail:	tunde.sandor@wsp.com					Samples from CT_NY_NJ_		Standard (5-7day)	NY ASP B Package	X, PDF			
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) <i>Evan Foster</i> Name (printed) Evan Foster		Volatiles 8260 full 624 STARS list BTEX MTBE TCL list TAGM list CT RCP list Arom. only Halog. only App. IX list 8021B list		Semi-Volatiles 8270 or 625 STARS list BN Only Acids Only PAH list TAGM list CT RCP list TCL list NIDEP list App. IX SEL for TCLP 608 PCB		Metals RCRA8 PPI3 list TAL CT15 list TAGM list NIDEP list Total Dissolved SEL for TCLP Indic. Metals LIST Below Hedim		Misc. Org. TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS SEL for TCLP Air VPH Air TCS Methane TAGM		Full Lists Ph. Poll. TCL Organics TAL Met/CN Full TCLP Full App. IX Part 300-Reg. 192 Part 300-Reg. 193 Part 300-Reg. 194 NYCDEP Seer NYCDEP Seer TAGM		Report/Deliverable Type Excel X NYSDEC EquiS NUDEP SRP HazSite EquiS GIS/KEY (std) YORK Regulatory Comp Excel compared to: OTHER:	
Matrix GW		Analysis Requested (List above includes common analysis) VOCs 8260 full plus freon 113		Container Description 3000's + 2000's									
Sample Identification WQ00518-1400 FRLW-1 : 1405 FRLW-2 : 1410 FRLW-3 : 1415 FRLW-4 : 1310NPI-1-2		Date+Time Sampled 10-5-18 1400 1405 1410 1415 1310		Comments: WSP Foster 10-5-18 1930 10-5-18 1930 10-5-18 1310 10-5-18 1310									
Preservation (check all applicable) 4°C ☒ Frozen ☒ HCl ☒ MeOH ☒ Ascorbic Acid ☒ ZnAc ☒ HNO₃ ☒ H₂SO₄ ☒ NaOH ☒ Other		Special Instructions Field Filtered ☐ Lab to Filter ☐		Temperature on Receipt 5.1 °C									

APPENDIX III
OCTOBER 2018 LABORATORY ANALYTICAL REPORT
FOR AIR SAMPLES



Technical Report

prepared for:

WSP USA, Inc. (Shelton)
4 Research Drive, Suite 204
Shelton CT, 06484
Attention: Tunde Komuves-Sandor

Report Date: 10/16/2018
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 18J0419

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371

132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 10/16/2018
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 18J0419

WSP USA, Inc. (Shelton)
4 Research Drive, Suite 204
Shelton CT, 06484
Attention: Tunde Komuves-Sandor

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 October 09, 2018 and listed below. The project was identified as your project: **31401451.000 task 01.00**.

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

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

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

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18J0419-01	AQ100518:1230 NP4-1	Soil Vapor	10/05/2018	10/09/2018
18J0419-02	AQ100518:1235 NP4-3	Soil Vapor	10/05/2018	10/09/2018

General Notes for York Project (SDG) No.: 18J0419

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

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 10/16/2018





Sample Information

Client Sample ID: AQ100518:1230 NP4-1

York Sample ID: 18J0419-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18J0419

31401451.000 task 01.00

Soil Vapor

October 5, 2018 12:30 pm

10/09/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	1.1	1.648	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 12:31	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.90	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.1	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.3	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.90	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.67	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.16	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	1.2	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
95-63-6	1,2,4-Trimethylbenzene	9.2		ug/m ³	0.81	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.3	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.99	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.67	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.76	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.2	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
108-67-8	1,3,5-Trimethylbenzene	2.5		ug/m ³	0.81	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	1.1	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.99	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.76	1.648	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 12:31	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.99	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	1.2	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
78-93-3	2-Butanone	ND		ug/m ³	0.49	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	1.4	1.648	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 12:31	AS



Sample Information

Client Sample ID: AQ100518:1230 NP4-1

York Sample ID: 18J0419-01

York Project (SDG) No.
18J0419

Client Project ID
31401451.000 task 01.00

Matrix
Soil Vapor

Collection Date/Time
October 5, 2018 12:30 pm

Date Received
10/09/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m ³	2.6	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.68	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
67-64-1	Acetone	3.2		ug/m ³	0.78	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.36	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
71-43-2	Benzene	ND		ug/m ³	0.53	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.85	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	1.1	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
75-25-2	Bromoform	ND		ug/m ³	1.7	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
74-83-9	Bromomethane	ND		ug/m ³	0.64	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.51	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.26	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.76	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
75-00-3	Chloroethane	ND		ug/m ³	0.43	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
67-66-3	Chloroform	ND		ug/m ³	0.80	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
74-87-3	Chloromethane	ND		ug/m ³	0.34	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
156-59-2	cis-1,2-Dichloroethylene	0.65		ug/m ³	0.16	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.75	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
110-82-7	Cyclohexane	ND		ug/m ³	0.57	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	1.4	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
75-71-8	Dichlorodifluoromethane	2.2		ug/m ³	0.81	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
141-78-6	* Ethyl acetate	ND		ug/m ³	1.2	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
100-41-4	Ethyl Benzene	8.4		ug/m ³	0.72	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.8	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS



Sample Information

Client Sample ID: AQ100518:1230 NP4-1

York Sample ID: 18J0419-01

York Project (SDG) No.

18J0419

Client Project ID

31401451.000 task 01.00

Matrix

Soil Vapor

Collection Date/Time

October 5, 2018 12:30 pm

Date Received

10/09/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-63-0	Isopropanol	8.1		ug/m ³	0.81	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.67	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.59	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
75-09-2	Methylene chloride	ND		ug/m ³	1.1	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
142-82-5	n-Heptane	ND		ug/m ³	0.68	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
110-54-3	n-Hexane	ND		ug/m ³	0.58	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
95-47-6	o-Xylene	9.6		ug/m ³	0.72	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
179601-23-1	p- & m- Xylenes	31		ug/m ³	1.4	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
622-96-8	* p-Ethyltoluene	9.6		ug/m ³	0.81	1.648	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 12:31	AS
115-07-1	* Propylene	ND		ug/m ³	0.28	1.648	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 12:31	AS
100-42-5	Styrene	ND		ug/m ³	0.70	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
127-18-4	Tetrachloroethylene	3.8		ug/m ³	0.28	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.97	1.648	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 12:31	AS
108-88-3	Toluene	3.7		ug/m ³	0.62	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.65	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.75	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
79-01-6	Trichloroethylene	0.35		ug/m ³	0.22	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m ³	0.93	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.58	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.72	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.11	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 12:31	AS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.2 %	70-130							



Sample Information

Client Sample ID: AQ100518:1235 NP4-3

York Sample ID: 18J0419-02

York Project (SDG) No.

18J0419

Client Project ID

31401451.000 task 01.00

Matrix

Soil Vapor

Collection Date/Time

October 5, 2018 12:35 pm

Date Received

10/09/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	0.99	1.436	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 13:23	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.78	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.99	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.1	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.78	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.58	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.14	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	1.1	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.71	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.1	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.86	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.58	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.66	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.0	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.71	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.95	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.86	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.66	1.436	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 13:23	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.86	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	1.0	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
78-93-3	2-Butanone	3.9		ug/m ³	0.42	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	1.2	1.436	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 13:23	AS
107-05-1	3-Chloropropene	ND		ug/m ³	2.2	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS



Sample Information

Client Sample ID: AQ100518:1235 NP4-3

York Sample ID: 18J0419-02

York Project (SDG) No.
18J0419

Client Project ID
31401451.000 task 01.00

Matrix
Soil Vapor

Collection Date/Time
October 5, 2018 12:35 pm

Date Received
10/09/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	0.76		ug/m³	0.59	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
67-64-1	Acetone	11		ug/m³	0.68	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
107-13-1	Acrylonitrile	ND		ug/m³	0.31	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
71-43-2	Benzene	ND		ug/m³	0.46	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
100-44-7	Benzyl chloride	ND		ug/m³	0.74	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
75-27-4	Bromodichloromethane	ND		ug/m³	0.96	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
75-25-2	Bromoform	ND		ug/m³	1.5	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
74-83-9	Bromomethane	ND		ug/m³	0.56	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
75-15-0	Carbon disulfide	ND		ug/m³	0.45	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
56-23-5	Carbon tetrachloride	ND		ug/m³	0.23	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
108-90-7	Chlorobenzene	ND		ug/m³	0.66	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
75-00-3	Chloroethane	ND		ug/m³	0.38	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
67-66-3	Chloroform	ND		ug/m³	0.70	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
74-87-3	Chloromethane	ND		ug/m³	0.30	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
156-59-2	cis-1,2-Dichloroethylene	2.2		ug/m³	0.14	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.65	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
110-82-7	Cyclohexane	ND		ug/m³	0.49	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
124-48-1	Dibromochloromethane	ND		ug/m³	1.2	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
75-71-8	Dichlorodifluoromethane	2.3		ug/m³	0.71	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
141-78-6	* Ethyl acetate	ND		ug/m³	1.0	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
100-41-4	Ethyl Benzene	0.69		ug/m³	0.62	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.5	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
67-63-0	Isopropanol	ND		ug/m³	0.71	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS



Sample Information

Client Sample ID: AQ100518:1235 NP4-3

York Sample ID: 18J0419-02

York Project (SDG) No.

18J0419

Client Project ID

31401451.000 task 01.00

Matrix

Soil Vapor

Collection Date/Time

October 5, 2018 12:35 pm

Date Received

10/09/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.59	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.52	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
75-09-2	Methylene chloride	5.7		ug/m ³	1.0	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
142-82-5	n-Heptane	ND		ug/m ³	0.59	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
110-54-3	n-Hexane	2.4		ug/m ³	0.51	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
95-47-6	o-Xylene	0.81		ug/m ³	0.62	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
179601-23-1	p- & m- Xylenes	2.7		ug/m ³	1.2	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.71	1.436	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 13:23	AS
115-07-1	* Propylene	0.74		ug/m ³	0.25	1.436	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 13:23	AS
100-42-5	Styrene	ND		ug/m ³	0.61	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
127-18-4	Tetrachloroethylene	ND		ug/m ³	0.24	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.85	1.436	EPA TO-15 Certifications:	10/10/2018 16:00	10/11/2018 13:23	AS
108-88-3	Toluene	4.1		ug/m ³	0.54	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.57	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.65	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.19	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
75-69-4	Trichlorofluoromethane (Freon 11)	1.7		ug/m ³	0.81	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.51	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.63	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.092	1.436	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/10/2018 16:00	10/11/2018 13:23	AS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	96.1 %	70-130							



Analytical Batch Summary

Batch ID: BJ80685

Preparation Method: EPA TO15 PREP

Prepared By: AS

YORK Sample ID	Client Sample ID	Preparation Date
18J0419-01	AQ100518:1230 NP4-1	10/10/18
18J0419-02	AQ100518:1235 NP4-3	10/10/18
BJ80685-BLK1	Blank	10/10/18
BJ80685-BS1	LCS	10/10/18



Volatile Organic Compounds in Air 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
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Batch BJ80685 - EPA TO15 PREP

Blank (BJ80685-BLK1)

Prepared & Analyzed: 10/10/2018

1,1,1,2-Tetrachloroethane	ND	0.69	ug/m ³
1,1,1-Trichloroethane	ND	0.55	"
1,1,2,2-Tetrachloroethane	ND	0.69	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"
1,1,2-Trichloroethane	ND	0.55	"
1,1-Dichloroethane	ND	0.40	"
1,1-Dichloroethylene	ND	0.099	"
1,2,4-Trichlorobenzene	ND	0.74	"
1,2,4-Trimethylbenzene	ND	0.49	"
1,2-Dibromoethane	ND	0.77	"
1,2-Dichlorobenzene	ND	0.60	"
1,2-Dichloroethane	ND	0.40	"
1,2-Dichloropropane	ND	0.46	"
1,2-Dichlorotetrafluoroethane	ND	0.70	"
1,3,5-Trimethylbenzene	ND	0.49	"
1,3-Butadiene	ND	0.66	"
1,3-Dichlorobenzene	ND	0.60	"
1,3-Dichloropropane	ND	0.46	"
1,4-Dichlorobenzene	ND	0.60	"
1,4-Dioxane	ND	0.72	"
2-Butanone	ND	0.29	"
2-Hexanone	ND	0.82	"
3-Chloropropene	ND	1.6	"
4-Methyl-2-pentanone	ND	0.41	"
Acetone	ND	0.48	"
Acrylonitrile	ND	0.22	"
Benzene	ND	0.32	"
Benzyl chloride	ND	0.52	"
Bromodichloromethane	ND	0.67	"
Bromoform	ND	1.0	"
Bromomethane	ND	0.39	"
Carbon disulfide	ND	0.31	"
Carbon tetrachloride	ND	0.16	"
Chlorobenzene	ND	0.46	"
Chloroethane	ND	0.26	"
Chloroform	ND	0.49	"
Chloromethane	ND	0.21	"
cis-1,2-Dichloroethylene	ND	0.099	"
cis-1,3-Dichloropropylene	ND	0.45	"
Cyclohexane	ND	0.34	"
Dibromochloromethane	ND	0.85	"
Dichlorodifluoromethane	ND	0.49	"
Ethyl acetate	ND	0.72	"
Ethyl Benzene	ND	0.43	"
Hexachlorobutadiene	ND	1.1	"
Isopropanol	ND	0.49	"
Methyl Methacrylate	ND	0.41	"
Methyl tert-butyl ether (MTBE)	ND	0.36	"
Methylene chloride	ND	0.69	"
n-Heptane	ND	0.41	"



Volatile Organic Compounds in Air 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
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Batch BJ80685 - EPA TO15 PREP

Blank (BJ80685-BLK1)

Prepared & Analyzed: 10/10/2018

n-Hexane	ND	0.35	ug/m ³
o-Xylene	ND	0.43	"
p- & m- Xylenes	ND	0.87	"
p-Ethyltoluene	ND	0.49	"
Propylene	ND	0.17	"
Styrene	ND	0.43	"
Tetrachloroethylene	ND	0.17	"
Tetrahydrofuran	ND	0.59	"
Toluene	ND	0.38	"
trans-1,2-Dichloroethylene	ND	0.40	"
trans-1,3-Dichloropropylene	ND	0.45	"
Trichloroethylene	ND	0.13	"
Trichlorofluoromethane (Freon 11)	ND	0.56	"
Vinyl acetate	ND	0.35	"
Vinyl bromide	ND	0.44	"
Vinyl Chloride	ND	0.064	"

Surrogate: *SURR: p-Bromofluorobenzene* 8.67 ppbv 10.0 86.7 70-130

LCS (BJ80685-BS1)

Prepared & Analyzed: 10/10/2018

1,1,1,2-Tetrachloroethane	9.34	ppbv	10.0	93.4	70-130
1,1,1-Trichloroethane	10.5	"	10.0	105	70-130
1,1,2,2-Tetrachloroethane	8.58	"	10.0	85.8	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.4	"	10.0	104	70-130
1,1,2-Trichloroethane	8.89	"	10.0	88.9	70-130
1,1-Dichloroethane	9.29	"	10.0	92.9	70-130
1,1-Dichloroethylene	8.54	"	10.0	85.4	70-130
1,2,4-Trichlorobenzene	10.0	"	10.0	100	70-130
1,2,4-Trimethylbenzene	9.31	"	10.0	93.1	70-130
1,2-Dibromoethane	8.82	"	10.0	88.2	70-130
1,2-Dichlorobenzene	10.7	"	10.0	107	70-130
1,2-Dichloroethane	9.17	"	10.0	91.7	70-130
1,2-Dichloropropane	7.93	"	10.0	79.3	70-130
1,2-Dichlorotetrafluoroethane	10.2	"	10.0	102	70-130
1,3,5-Trimethylbenzene	8.89	"	10.0	88.9	70-130
1,3-Butadiene	9.03	"	10.0	90.3	70-130
1,3-Dichlorobenzene	10.9	"	10.0	109	70-130
1,3-Dichloropropane	8.48	"	10.0	84.8	70-130
1,4-Dichlorobenzene	11.1	"	10.0	111	70-130
1,4-Dioxane	7.90	"	10.0	79.0	70-130
2-Butanone	7.90	"	10.0	79.0	70-130
2-Hexanone	7.53	"	10.0	75.3	70-130
3-Chloropropene	7.88	"	10.0	78.8	70-130
4-Methyl-2-pentanone	7.12	"	10.0	71.2	70-130
Acetone	7.70	"	10.0	77.0	70-130
Acrylonitrile	8.46	"	10.0	84.6	70-130
Benzene	9.29	"	10.0	92.9	70-130
Benzyl chloride	9.66	"	10.0	96.6	70-130
Bromodichloromethane	8.86	"	10.0	88.6	70-130
Bromoform	10.1	"	10.0	101	70-130
Bromomethane	10.2	"	10.0	102	70-130
Carbon disulfide	9.83	"	10.0	98.3	70-130



Volatile Organic Compounds in Air 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
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Batch BJ80685 - EPA TO15 PREP

LCS (BJ80685-BS1)

Prepared & Analyzed: 10/10/2018

Carbon tetrachloride	10.2		ppbv	10.0		102	70-130				
Chlorobenzene	8.87		"	10.0		88.7	70-130				
Chloroethane	10.6		"	10.0		106	70-130				
Chloroform	10.1		"	10.0		101	70-130				
Chloromethane	8.73		"	10.0		87.3	70-130				
cis-1,2-Dichloroethylene	8.96		"	10.0		89.6	70-130				
cis-1,3-Dichloropropylene	8.48		"	10.0		84.8	70-130				
Cyclohexane	8.65		"	10.0		86.5	70-130				
Dibromochloromethane	9.68		"	10.0		96.8	70-130				
Dichlorodifluoromethane	9.80		"	10.0		98.0	70-130				
Ethyl acetate	8.37		"	10.0		83.7	70-130				
Ethyl Benzene	8.08		"	10.0		80.8	70-130				
Hexachlorobutadiene	10.5		"	10.0		105	70-130				
Isopropanol	7.56		"	10.0		75.6	70-130				
Methyl Methacrylate	8.33		"	10.0		83.3	70-130				
Methyl tert-butyl ether (MTBE)	5.56		"	10.0		55.6	70-130	Low Bias			
Methylene chloride	8.56		"	10.0		85.6	70-130				
n-Heptane	7.51		"	10.0		75.1	70-130				
n-Hexane	8.62		"	10.0		86.2	70-130				
o-Xylene	8.48		"	10.0		84.8	70-130				
p- & m- Xylenes	17.3		"	20.0		86.4	70-130				
p-Ethyltoluene	9.84		"	10.0		98.4	70-130				
Propylene	7.61		"	10.0		76.1	70-130				
Styrene	8.96		"	10.0		89.6	70-130				
Tetrachloroethylene	9.70		"	10.0		97.0	70-130				
Tetrahydrofuran	7.88		"	10.0		78.8	70-130				
Toluene	8.47		"	10.0		84.7	70-130				
trans-1,2-Dichloroethylene	8.95		"	10.0		89.5	70-130				
trans-1,3-Dichloropropylene	8.73		"	10.0		87.3	70-130				
Trichloroethylene	8.04		"	10.0		80.4	70-130				
Trichlorofluoromethane (Freon 11)	10.7		"	10.0		107	70-130				
Vinyl acetate	5.46		"	10.0		54.6	70-130	Low Bias			
Vinyl bromide	10.5		"	10.0		105	70-130				
Vinyl Chloride	8.96		"	10.0		89.6	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.2		"	10.0		102	70-130				





Sample and Data Qualifiers Relating to This Work Order

QL-03	This LCS analyte recovered outside of acceptance limits. The LCS contains approximately 70 compounds, a limited number of which may be outside acceptance windows.
CCV-A	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>30% Difference for average Rf). This applies to detected analytes only.

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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



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



