



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 January 2019 Status Report

DATE: April 5, 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 January 1, 2019 through January 31, 2019. 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

(January 1, 2019 through January 31, 2019)

- | | |
|--|--------------------------------------|
| 1. Hours of operation during the reporting period: | 502 hours (67.5%) |
| 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: | 1,080,950 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: | 0.12 pound (see Graph 2) |
| 7. Cumulative mass of VOCs recovered since startup on 12/17/02:
(calculations can be provided upon request) | 229.6 pounds |
| 8. Effluent VOC vapor concentration for the reporting period: | 0.02 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 (0.00026 lbs./hr.) |



PUMP AND TREAT SYSTEM STATUS SUMMARY

The following table summarizes recovery well parameters for the operating recovery wells.

Well	Volume pumped (gal)	Total VOC Concentration (ug/L)
RW-2 ^{1/}	618,402	3.1
FRW-1 ^{2/}	15,205	19.5
FRW-2 ^{2/}	45,179	16.2
FRW-3 ^{2/}	73,618	99.8
FRW-4 ^{2/}	182,437	2.5

^{1/} The above table summarizes the parameters for RW-2 from January 1 to January 31, 2019. The operation of the RW-2 pump was restored on January 15, 2019, and this pump ran continuously for the remainder of the month.

^{2/} The above table summarizes the parameters for the FRWs from January 3, 2019 to February 1, 2019.

On January 15, 2019, a Rockwell field service technician was on-site to troubleshoot the flow issue associated with RW-2. Troubleshooting revealed that the PLC could not communicate to the pump motor in RW-2 due to a short circuit. The issue was corrected, the RW-2 pump was tested and it was determined to be operating normally. Additional details about system maintenance work are included in Table 1.

SUMMARY OF SAMPLING ACTIVITIES

January 2019 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 January 3, 2019

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 concentration in the groundwater sample collected at FRW-4 was below the ARAR in January. The cis-DCE concentrations in the groundwater sample collected at FRW-3 was above the ARAR in January. The cis-DCE concentrations in the groundwater samples collected from FRW-1, 2, and 4 were below the ARAR in January. The TCE in the groundwater samples collected from FRW-1, 2, 3 and 4 were below the ARAR. The VC and TCA concentrations in the groundwater samples collected at FRW-1, 2, 3 and 4 were all below the respective ARARs in January.

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 February 2019 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
Rebecca Spellissy, 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
 (January 1, 2019 through January 31, 2019)**

Date	Time	System Changes/Modifications	Personnel
1/3/19		FRW wells operating; RW-2 remains off awaiting Rockwell technician to troubleshoot on January 15.	EF
		Iron fouling removed from flow meter paddle wheels for FRW wells.	EF
1/5/19	10:00 am	FRW wells stop pumping for an unknown reason. No alarm occurs.	
1/15/19		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
	11:40 am	Troubleshooting of RW-2 revealed that the PLC could not communicate to the pump motor in RW-2. The communication issue was traced to a short circuit that caused a fuse to burn out in the RW-2 control panel. Replacing the fuse did not correct the problem; the problem wires were bypassed and the operation of the RW-2 pump was restored. The wires that shorted out serviced the local control panel display in the RW-2 control panel, which is not used. Once the wires were bypassed, the RW-2 pump was tested and it was determined to be operating normally. The root cause of the short circuit is not known but WSP suspects that moisture in the air over time may have caused the problem. WSP will order desiccant bags and place them in the RW-2 control panel to try to reduce moisture inside the control panel. RW-2 operation resumes.	Rockwell, EF
	1:15 pm	FRW well operation corrects itself after resetting the FP&T control panel. FRW pumps and FP&T system resume normal operation. Iron fouling removed from flow meter paddle wheels for FRW wells.	EF

Notes:

EF	Evan Foster, WSP USA
Rockwell	Rockwell Field Service Technician

H:\NABIS\2019\Monthly Reports\January\Table 1 Maintenance Record Jan 2019.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	---	---
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	0.0316
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 B	0.0574 B
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	0.0337
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	0.0492
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	0.252	ND<0.278
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	0.0369
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<0.278
1-Nov-18	6.8	193	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<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.838	ND<0.278
5-Dec-18	6.9	100	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<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.845	ND<0.278
3-Jan-19	6.9	85	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<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	1.32	ND<0.278

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 NA: Not Analyzed

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 December 18, 2018 was 6.85.
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 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-ethane (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 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
	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	0.370	0.260	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	0.250	ND<0.5	ND<0.5	0.370	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-18	ND<0.5	ND<0.5	ND<0.5	0.290	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-18	0.300 C,S	0.380	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-19	0.320	0.310	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

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.

C = CCV-E: The value reported is estimated. The value is estimated due to its behavior during continuing calibration verification.

S = SCAL-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration.

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	Bromomethane	Acetone
ARARs	5	5	5	2 ^{1/}	5	5	5 ^{1/}	5	5 ^{1/}	NE
2-Feb-17	460	8.5 C	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 S,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 C,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 C,S,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 C	0.220	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11.1 I
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	0.280	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										
1-Nov-18	5.12	0.780	3.30	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Dec-18	43.0 C,S	1.06	0.74	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
3-Jan-19	18.8	0.450	0.290	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 January 5 to January 15, 2019										

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 the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
- B: Method blank contamination, the associated method blank contains the target analyte at a reportable level.
- C = CCV-E: The value reported is estimated. The value is estimated due to its behavior during continuing calibration verification.
- S = SCAL-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration (average RF>20%).
- I = ICV-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
- ND: Not detected
- ARARs - Applicable Relevant and Appropriate Requirements for aquifer restoration established for the Site.

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
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 C	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 S
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 S,J
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 S
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	0.68	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	0.300	29.0 C	2.48	ND<0.5	0.510	ND<0.5	ND<2
21-Sep-18	11.9	1.83	14.5	0.730	ND<0.5	ND<0.5	ND<0.5	2.06
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								
1-Nov-18	3.20	0.610	0.950	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Dec-18	19.1 C,S	0.590	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.00 C
3-Jan-19	13.8	0.670	1.69	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from January 5 to January 15, 2019								

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 the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
- B: Method blank contamination, the associated method blank contains the target analyte at a reportable level.
- C = CCV-E: The value reported is estimated The value is estimated due to its behavior during continuing calibration
- S = SCAL-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration
- I = ICV-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
- 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
2-Feb-17	18 C	3.7	24	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.76	0.63 C	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 C,J,B
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 S
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 S,J
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 C	ND<0.5	ND<0.5	ND<0.5	0.48 C,J	0.40 C,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	7.9	0.25 C,J	ND<0.5	0.71	ND<0.5	0.20 J	ND<0.5	ND<0.5	ND<0.5	1.2 C,S,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												
28-Aug-18 ^{3/}	6.16	0.990	20.3 C	0.840	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.77 I
21-Sep-18	19.6	2.99	19.8	2.04	ND<0.5	ND<0.5	ND<0.5	0.220 J	0.300 J	ND<0.5	ND<0.5	1.53
5-Oct-18	0.730	0.530	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												
1-Nov-18	2.89	0.810	3.37	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
5-Dec-18	109 C,S	6.83	6.98	ND<0.5	ND<0.5	0.570	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.97 C
3-Jan-19	89.4	2.41	7.30	ND<0.5	ND<0.5	0.420	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from January 5 to January 15, 2019												

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 the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.

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

C = CCV-E: The value reported is estimated. The value is estimated due to its behavior during continuing calibration verification.

S = SCAL-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration (average RF>20%).

I = ICV-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).

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/}	5	NE
2-Feb-17	5.1 C	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 C	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 S,J
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 S,J
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 S,J
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	2.5	7.0	ND<0.5	0.27 J	2.5 S
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 J
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	0.450	4.95 C	ND<0.5	ND<0.5	10.3 I
21-Sep-18	4.21	1.02	1.38	ND<0.5	ND<0.5	ND<2
5-Oct-18	0.260	ND<0.5	0.630	ND<0.5	ND<0.5	1.23 C,S
The FRWs were off from October 27 to October 29, 2018						
1-Nov-18	0.870	0.280	1.49	ND<0.5	ND<0.5	ND<2
5-Dec-18	2.36 C,S	0.45	0.650	ND<0.5	ND<0.5	ND<2
3-Jan-19	1.28	ND<0.5	0.960	ND<0.5	ND<0.5	ND<2
The FRWs were off from January 5 to January 15, 2019						

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 the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.

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

C = CCV-E: The value reported is estimated. The value is estimated due to its behavior during continuing calibration verification.

S = SCAL-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration (average RF>20%).

I = ICV-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).

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
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
AQ011519:1300NP4-1	1/15/2019	13:00	0.0260	0.0110	0.0016	ND	0.0096	ND	0.0015	ND	ND	0.0019	0.0027	ND	0.0012	0.08

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
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
AQ011519:1305NP4-3	1/15/2019	13:05	ND	ND	0.0008	ND	0.0015	ND	0.0009	0.0016	ND	ND	0.0100	ND	ND	0.02

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.

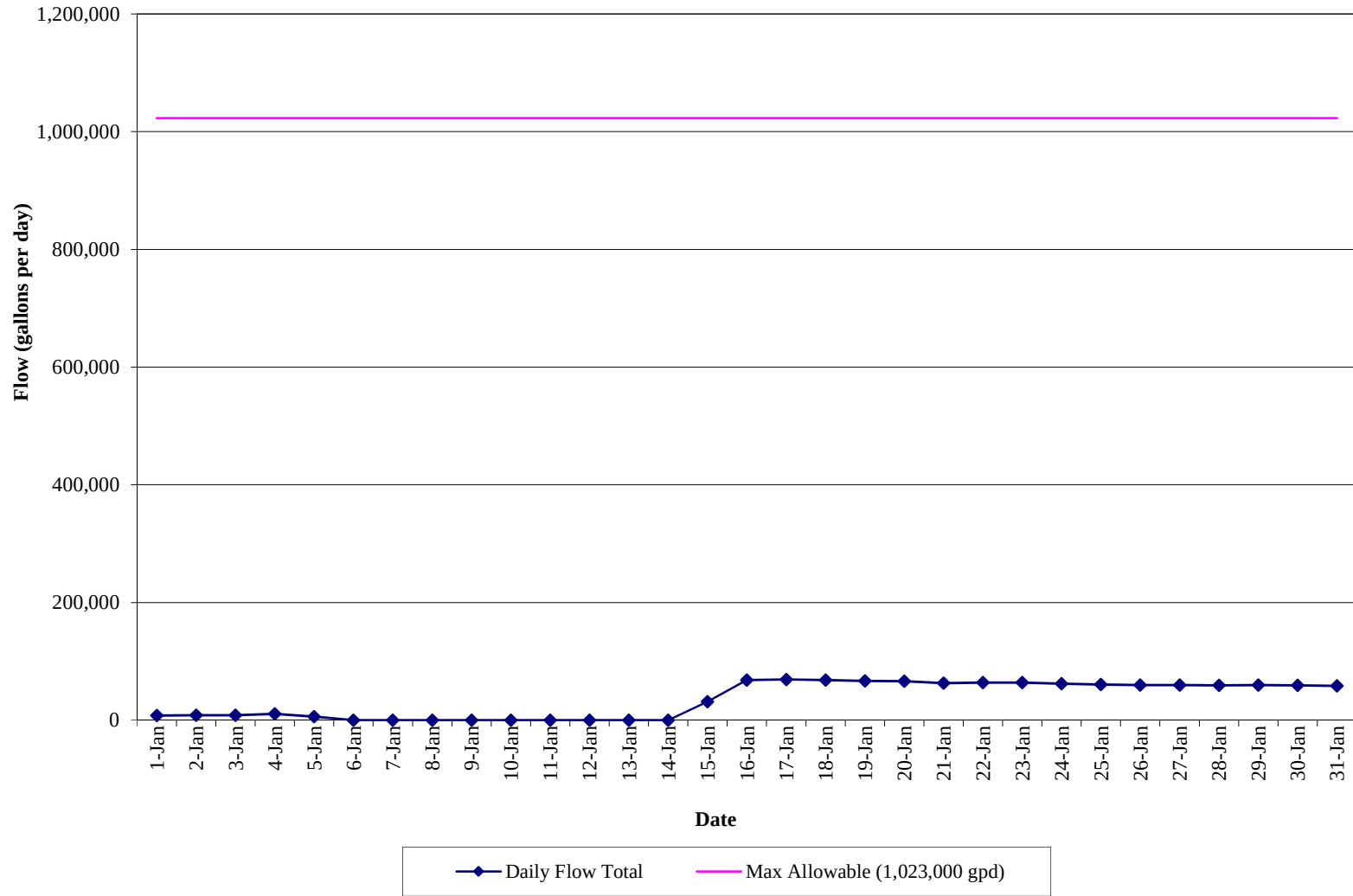
^{1/} Sample was inadvertently misslabeled as NP4-2 and is listed as such in the laboratory report and on the Chain of Custody. However, the air sample was collected from the NP4-3 sample port.



GRAPHS

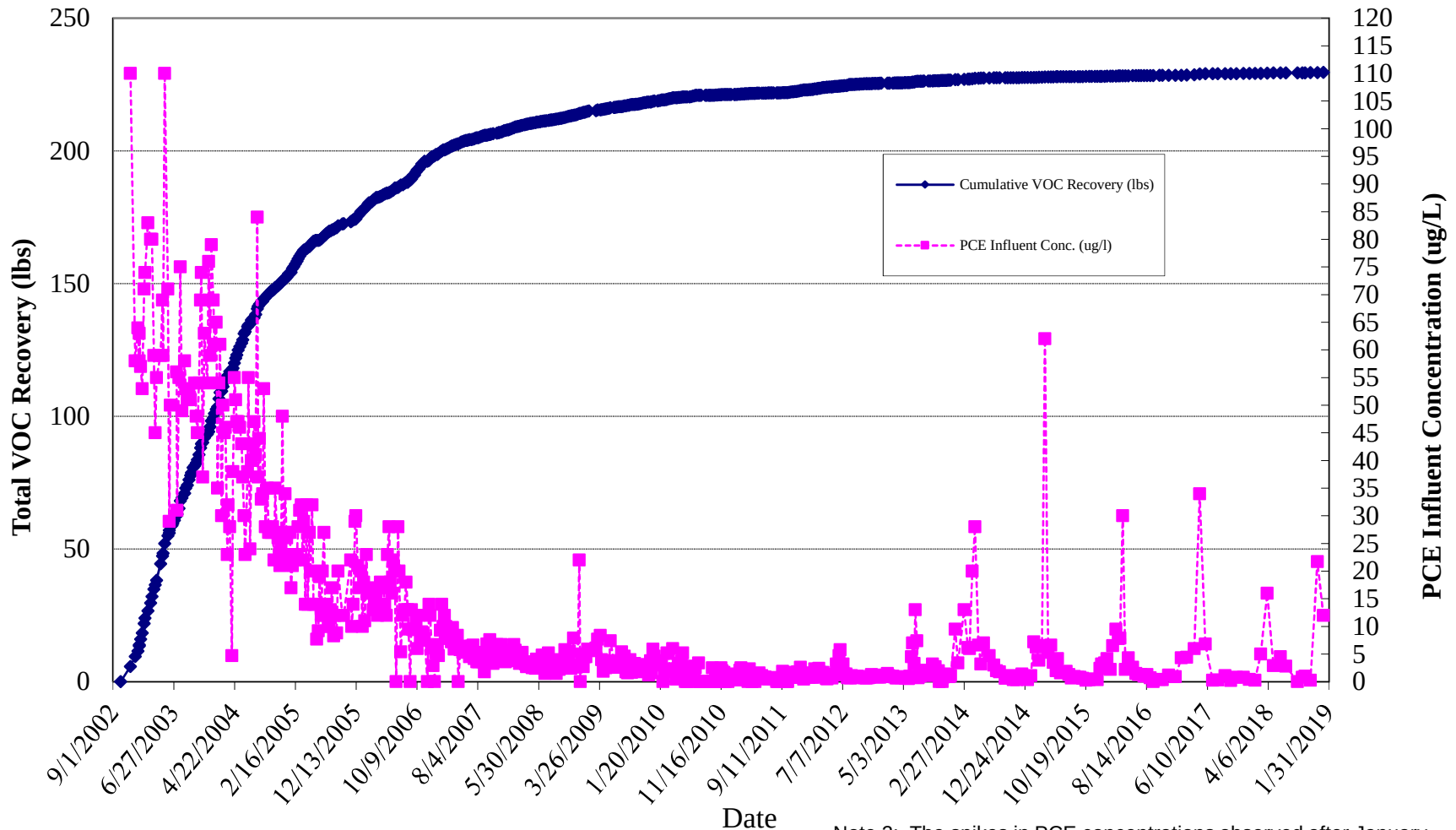
GRAPH 1
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

Effluent Flow Data
(January 1, 2019 to January 31, 2019)



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

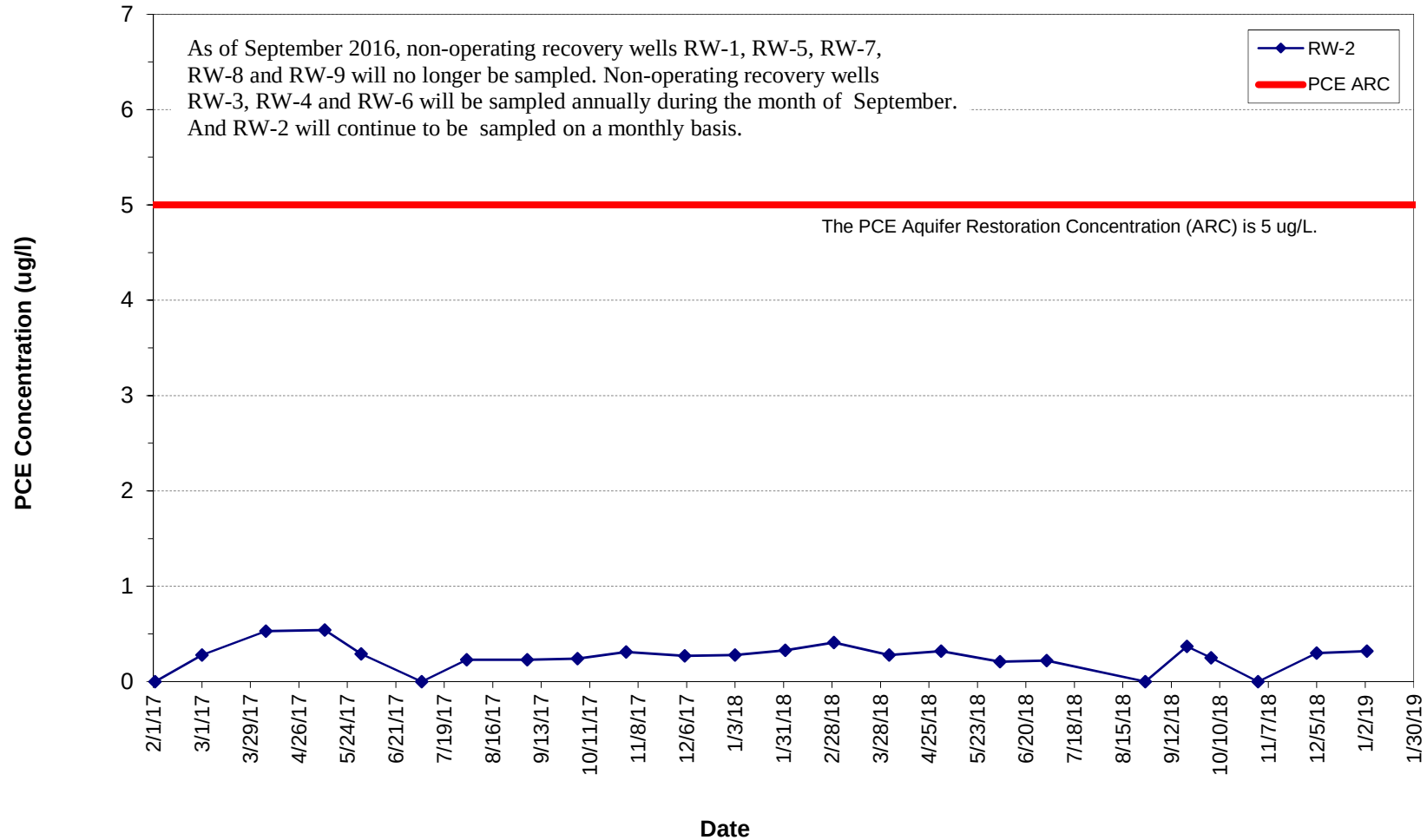


Note 1 : After September 22, 2008, the water recovered from the FP&T System is included in the results shown in this graph.

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.

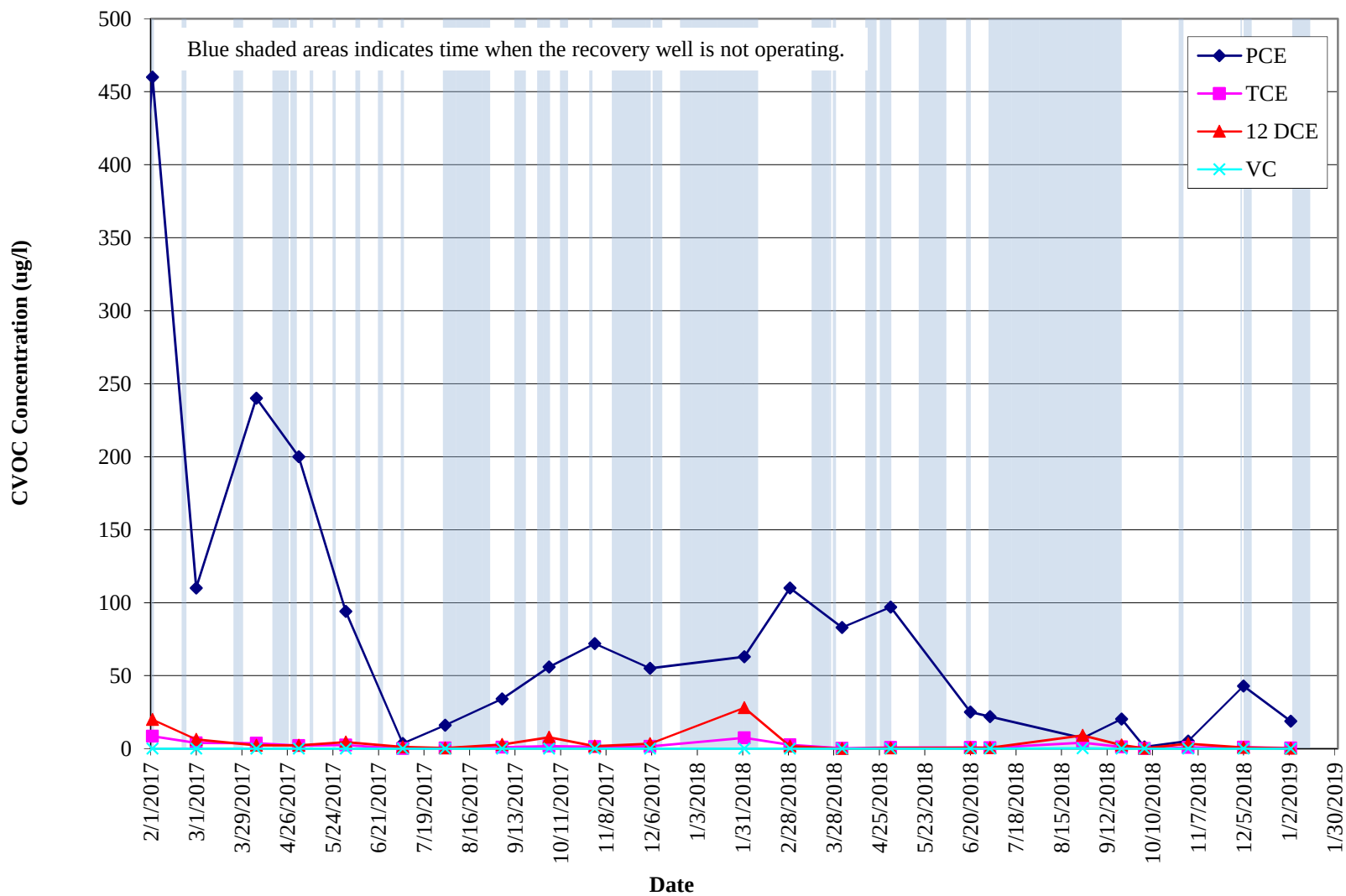
GRAPH 3 **GROUNDWATER REMEDIAL ACTION** **ROWE INDUSTRIES SUPERFUND SITE** **SAG HARBOR, NEW YORK**

FSP&T Recovery Well PCE Concentration



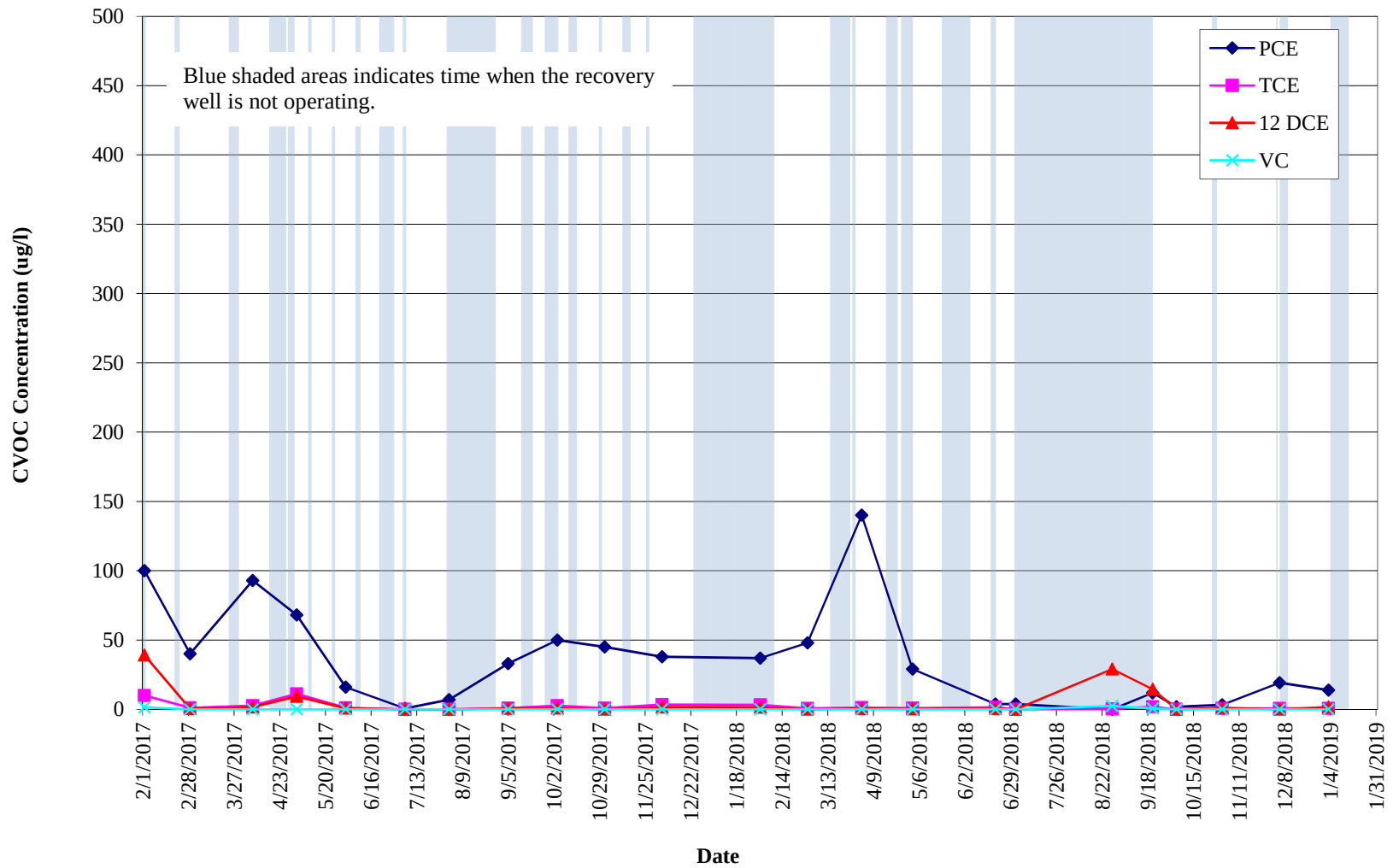
GRAPH 4
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-1



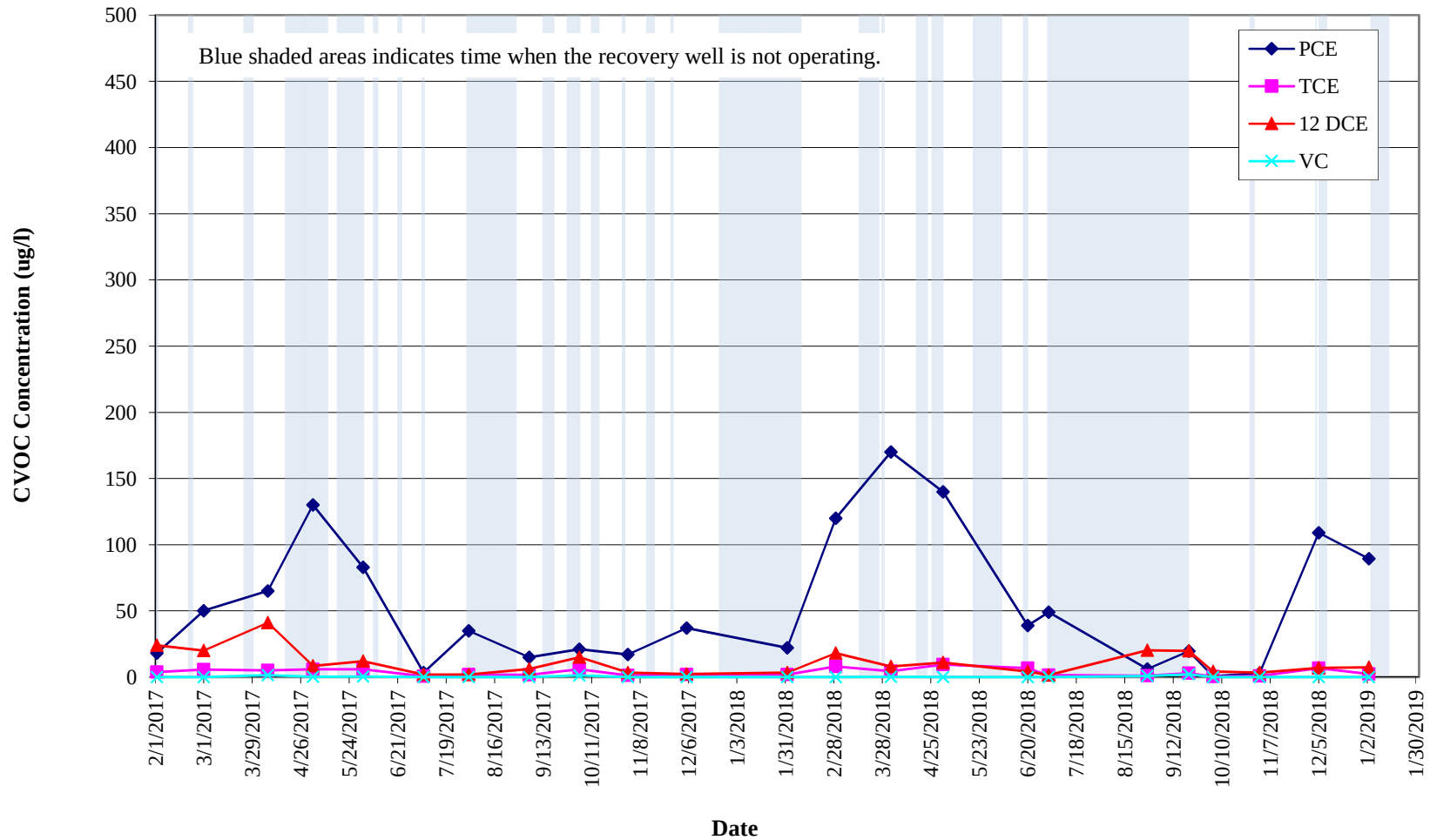
GRAPH 5
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-2



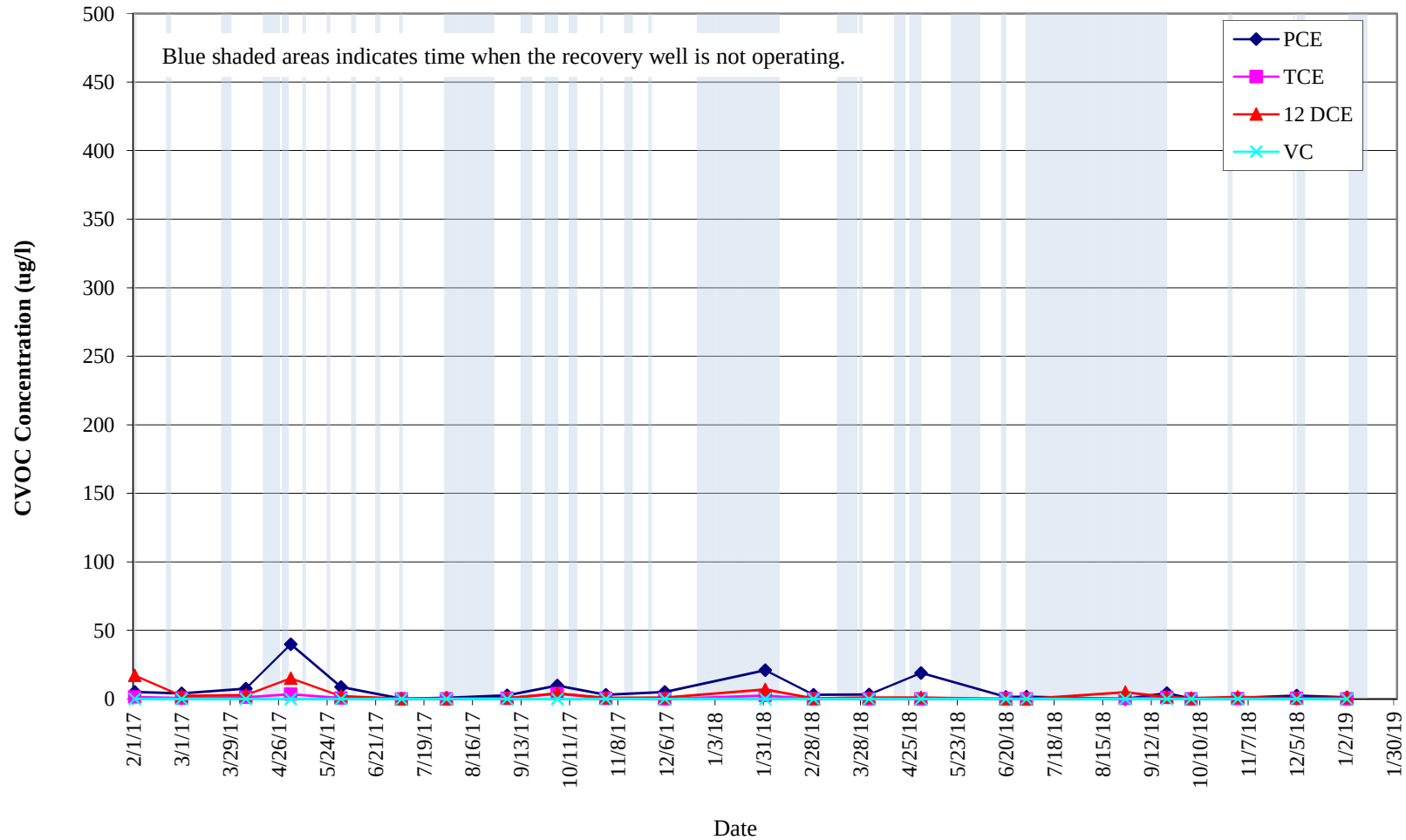
GRAPH 6
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

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
JANUARY 2019 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: 01/15/2019
Client Project ID: 31401451.000 Task 01.00
York Project (SDG) No.: 19A0251

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: 01/15/2019
Client Project ID: 31401451.000 Task 01.00
York Project (SDG) No.: 19A0251

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 January 08, 2019 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>
19A0251-01	WQ010319:1230NP2-6	Water	01/03/2019	01/08/2019
19A0251-02	WQ010319:1235NP2-10	Water	01/03/2019	01/08/2019

General Notes for York Project (SDG) No.: 19A0251

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: 01/15/2019





Sample Information

Client Sample ID: WQ010319:1230NP2-6

York Sample ID: 19A0251-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0251

31401451.000 Task 01.00

Water

January 3, 2019 12:30 pm

01/08/2019

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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS



Sample Information

Client Sample ID: WQ010319:1230NP2-6

York Sample ID: 19A0251-01

York Project (SDG) No.
19A0251

Client Project ID
31401451.000 Task 01.00

Matrix
Water

Collection Date/Time
January 3, 2019 12:30 pm

Date Received
01/08/2019

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: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
156-59-2	cis-1,2-Dichloroethylene	1.24		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS



Sample Information

Client Sample ID: WQ010319:1230NP2-6

York Sample ID: 19A0251-01

York Project (SDG) No.

19A0251

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

January 3, 2019 12:30 pm

Date Received

01/08/2019

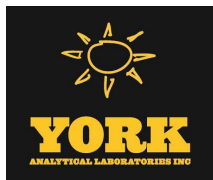
Volatile Organics, 8260 List - Low Level

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	01/11/2019 10:00	01/11/2019 20:02	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
127-18-4	Tetrachloroethylene	12.0		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	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	01/11/2019 10:00	01/11/2019 20:02	SS
79-01-6	Trichloroethylene	0.410		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:02	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 20:02	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	95.9 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	101 %	70-130								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	103 %	70-130								



Sample Information

Client Sample ID: WQ010319:1235NP2-10

York Sample ID: 19A0251-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0251

31401451.000 Task 01.00

Water

January 3, 2019 12:35 pm

01/08/2019

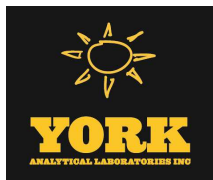
Volatile Organics, 8260 List - Low Level

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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:33	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	01/11/2019 10:00	01/11/2019 20:33	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:33	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 20:33	SS



Sample Information

Client Sample ID: WQ010319:1235NP2-10

York Sample ID: 19A0251-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0251

31401451.000 Task 01.00

Water

January 3, 2019 12:35 pm

01/08/2019

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:	01/11/2019 10:00	01/11/2019 20:33	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	01/11/2019 10:00	01/11/2019 20:33	SS



Sample Information

Client Sample ID: WQ010319:1235NP2-10

York Sample ID: 19A0251-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0251

31401451.000 Task 01.00

Water

January 3, 2019 12:35 pm

01/08/2019

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	1.32		mg/L	0.278	1	EPA 200.7	01/10/2019 13:21	01/10/2019 17:48	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	01/15/2019 12:13	01/15/2019 14:36	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	85.0		mg/L	10.0	1	SM 2540C	01/10/2019 16:17	01/10/2019 17:17	AA
							Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		



Analytical Batch Summary

Batch ID: BA90411 **Preparation Method:** EPA 200.7 **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
19A0251-02	WQ010319:1235NP2-10	01/10/19
BA90411-BLK1	Blank	01/10/19
BA90411-BS1	LCS	01/10/19

Batch ID: BA90426 **Preparation Method:** % Solids Prep **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
19A0251-02	WQ010319:1235NP2-10	01/10/19
BA90426-BLK1	Blank	01/10/19

Batch ID: BA90439 **Preparation Method:** EPA 5030B **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
19A0251-01	WQ010319:1230NP2-6	01/11/19
19A0251-02	WQ010319:1235NP2-10	01/11/19
BA90439-BLK1	Blank	01/11/19
BA90439-BS1	LCS	01/11/19
BA90439-BSD1	LCS Dup	01/11/19

Batch ID: BA90587 **Preparation Method:** EPA 3015A **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
19A0251-02	WQ010319:1235NP2-10	01/15/19
BA90587-BLK1	Blank	01/15/19
BA90587-BS1	LCS	01/15/19
BA90587-DUP1	Duplicate	01/15/19
BA90587-MS1	Matrix Spike	01/15/19



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 BA90439 - EPA 5030B											
Blank (BA90439-BLK1)										Prepared & Analyzed: 01/11/2019	
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 BA90439 - EPA 5030B											
Blank (BA90439-BLK1)											
Prepared & Analyzed: 01/11/2019											
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	9.50		"	10.0		95.0	70-130				
Surrogate: SURR: Toluene-d8	10.0		"	10.0		100	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.7		"	10.0		107	70-130				
LCS (BA90439-BS1)											
Prepared & Analyzed: 01/11/2019											
1,1,1,2-Tetrachloroethane	9.10		ug/L	10.0		91.0	82-126			30	
1,1,1-Trichloroethane	8.80		"	10.0		88.0	70-130			20	
1,1,2,2-Tetrachloroethane	9.43		"	10.0		94.3	70-130			20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.48		"	10.0		94.8	70-130			20	
1,1,2-Trichloroethane	8.89		"	10.0		88.9	70-130			20	
1,1-Dichloroethane	9.35		"	10.0		93.5	70-130			20	
1,1-Dichloroethylene	8.96		"	10.0		89.6	70-130			20	
1,1-Dichloropropylene	8.71		"	10.0		87.1	83-133			30	
1,2,3-Trichlorobenzene	8.86		"	10.0		88.6	70-130			20	
1,2,3-Trichloropropane	8.89		"	10.0		88.9	77-128			30	
1,2,4-Trichlorobenzene	8.57		"	10.0		85.7	70-130			20	
1,2,4-Trimethylbenzene	8.79		"	10.0		87.9	82-132			20	
1,2-Dibromo-3-chloropropane	8.49		"	10.0		84.9	40-160			20	
1,2-Dibromoethane	9.14		"	10.0		91.4	70-130			20	
1,2-Dichlorobenzene	8.75		"	10.0		87.5	70-130			20	
1,2-Dichloroethane	9.05		"	10.0		90.5	70-130			20	
1,2-Dichloropropane	9.07		"	10.0		90.7	70-130			20	
1,3,5-Trimethylbenzene	8.84		"	10.0		88.4	80-131			30	
1,3-Dichlorobenzene	8.49		"	10.0		84.9	70-130			20	
1,3-Dichloropropane	9.22		"	10.0		92.2	81-125			30	
1,4-Dichlorobenzene	8.52		"	10.0		85.2	70-130			20	
2,2-Dichloropropane	8.87		"	10.0		88.7	56-150			30	
2-Chlorotoluene	8.92		"	10.0		89.2	79-130			30	
2-Hexanone	8.61		"	10.0		86.1	40-160			20	
4-Chlorotoluene	8.71		"	10.0		87.1	79-128			30	
Acetone	7.18		"	10.0		71.8	40-160			20	
Benzene	9.54		"	10.0		95.4	70-130			20	
Bromobenzene	8.92		"	10.0		89.2	78-129			30	
Bromochloromethane	9.76		"	10.0		97.6	70-130			20	
Bromodichloromethane	9.02		"	10.0		90.2	70-130			20	
Bromoform	8.65		"	10.0		86.5	70-130			20	
Bromomethane	8.75		"	10.0		87.5	40-160			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 BA90439 - EPA 5030B

LCS (BA90439-BS1)

Prepared & Analyzed: 01/11/2019

Carbon tetrachloride	8.68		ug/L	10.0		86.8	70-130			20	
Chlorobenzene	8.92		"	10.0		89.2	70-130			20	
Chloroethane	9.74		"	10.0		97.4	40-160			20	
Chloroform	8.92		"	10.0		89.2	70-130			20	
Chloromethane	10.3		"	10.0		103	40-160			20	
cis-1,2-Dichloroethylene	9.29		"	10.0		92.9	70-130			20	
cis-1,3-Dichloropropylene	8.87		"	10.0		88.7	70-130			20	
Dibromochloromethane	8.69		"	10.0		86.9	70-130			20	
Dibromomethane	8.81		"	10.0		88.1	72-134			30	
Dichlorodifluoromethane	8.83		"	10.0		88.3	40-160			20	
Ethyl Benzene	9.08		"	10.0		90.8	70-130			20	
Hexachlorobutadiene	8.48		"	10.0		84.8	67-146			30	
Isopropylbenzene	8.71		"	10.0		87.1	70-130			20	
Methyl tert-butyl ether (MTBE)	9.26		"	10.0		92.6	70-130			20	
Methylene chloride	6.95		"	10.0		69.5	70-130	Low Bias		20	
Naphthalene	8.92		"	10.0		89.2	70-147			30	
n-Butylbenzene	8.71		"	10.0		87.1	79-132			30	
n-Propylbenzene	8.78		"	10.0		87.8	78-133			30	
o-Xylene	9.22		"	10.0		92.2	70-130			20	
p- & m- Xylenes	18.2		"	20.0		90.9	70-130			20	
p-Isopropyltoluene	8.62		"	10.0		86.2	81-136			30	
sec-Butylbenzene	9.21		"	10.0		92.1	79-137			30	
Styrene	9.05		"	10.0		90.5	70-130			20	
tert-Butylbenzene	8.60		"	10.0		86.0	77-138			30	
Tetrachloroethylene	6.13		"	10.0		61.3	70-130	Low Bias		20	
Toluene	9.19		"	10.0		91.9	70-130			20	
trans-1,2-Dichloroethylene	9.06		"	10.0		90.6	70-130			20	
trans-1,3-Dichloropropylene	8.38		"	10.0		83.8	70-130			20	
Trichloroethylene	8.78		"	10.0		87.8	70-130			20	
Trichlorofluoromethane	8.95		"	10.0		89.5	40-160			20	
Vinyl Chloride	9.90		"	10.0		99.0	70-130			20	
Surrogate: SURR: 1,2-Dichloroethane-d4	9.57		"	10.0		95.7	70-130				
Surrogate: SURR: Toluene-d8	9.96		"	10.0		99.6	70-130				
Surrogate: SURR: p-Bromofluorobenzene	9.96		"	10.0		99.6	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 BA90439 - EPA 5030B											
LCS Dup (BA90439-BSD1)						Prepared & Analyzed: 01/11/2019					
1,1,1,2-Tetrachloroethane	10.2		ug/L	10.0		102	82-126		10.9	30	
1,1,1-Trichloroethane	10.2		"	10.0		102	70-130		14.6	20	
1,1,2,2-Tetrachloroethane	10.9		"	10.0		109	70-130		14.4	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.4		"	10.0		104	70-130		8.87	20	
1,1,2-Trichloroethane	10.1		"	10.0		101	70-130		12.7	20	
1,1-Dichloroethane	10.8		"	10.0		108	70-130		14.7	20	
1,1-Dichloroethylene	10.5		"	10.0		105	70-130		15.5	20	
1,1-Dichloropropylene	10.2		"	10.0		102	83-133		15.5	30	
1,2,3-Trichlorobenzene	10.5		"	10.0		105	70-130		16.8	20	
1,2,3-Trichloropropane	10.6		"	10.0		106	77-128		17.7	30	
1,2,4-Trichlorobenzene	10.3		"	10.0		103	70-130		18.2	20	
1,2,4-Trimethylbenzene	10.6		"	10.0		106	82-132		18.3	20	
1,2-Dibromo-3-chloropropane	10.0		"	10.0		100	40-160		16.5	20	
1,2-Dibromoethane	10.2		"	10.0		102	70-130		11.4	20	
1,2-Dichlorobenzene	10.6		"	10.0		106	70-130		19.0	20	
1,2-Dichloroethane	10.4		"	10.0		104	70-130		14.3	20	
1,2-Dichloropropane	10.4		"	10.0		104	70-130		13.5	20	
1,3,5-Trimethylbenzene	10.6		"	10.0		106	80-131		18.5	30	
1,3-Dichlorobenzene	10.1		"	10.0		101	70-130		17.5	20	
1,3-Dichloropropane	10.3		"	10.0		103	81-125		11.1	30	
1,4-Dichlorobenzene	10.4		"	10.0		104	70-130		19.5	20	
2,2-Dichloropropane	10.1		"	10.0		101	56-150		12.7	30	
2-Chlorotoluene	10.6		"	10.0		106	79-130		17.4	30	
2-Hexanone	9.51		"	10.0		95.1	40-160		9.93	20	
4-Chlorotoluene	10.6		"	10.0		106	79-128		19.6	30	
Acetone	8.34		"	10.0		83.4	40-160		14.9	20	
Benzene	11.1		"	10.0		111	70-130		14.8	20	
Bromobenzene	10.7		"	10.0		107	78-129		17.8	30	
Bromochloromethane	11.2		"	10.0		112	70-130		13.7	20	
Bromodichloromethane	10.0		"	10.0		100	70-130		10.8	20	
Bromoform	9.87		"	10.0		98.7	70-130		13.2	20	
Bromomethane	10.1		"	10.0		101	40-160		14.7	20	
Carbon tetrachloride	9.96		"	10.0		99.6	70-130		13.7	20	
Chlorobenzene	10.2		"	10.0		102	70-130		12.9	20	
Chloroethane	11.6		"	10.0		116	40-160		17.1	20	
Chloroform	10.4		"	10.0		104	70-130		15.0	20	
Chloromethane	11.8		"	10.0		118	40-160		13.7	20	
cis-1,2-Dichloroethylene	10.6		"	10.0		106	70-130		13.5	20	
cis-1,3-Dichloropropylene	10.2		"	10.0		102	70-130		13.8	20	
Dibromochloromethane	10.0		"	10.0		100	70-130		14.2	20	
Dibromomethane	10.1		"	10.0		101	72-134		13.3	30	
Dichlorodifluoromethane	9.66		"	10.0		96.6	40-160		8.98	20	
Ethyl Benzene	10.4		"	10.0		104	70-130		13.9	20	
Hexachlorobutadiene	9.77		"	10.0		97.7	67-146		14.1	30	
Isopropylbenzene	10.4		"	10.0		104	70-130		18.1	20	
Methyl tert-butyl ether (MTBE)	10.7		"	10.0		107	70-130		14.6	20	
Methylene chloride	7.96		"	10.0		79.6	70-130		13.5	20	
Naphthalene	10.4		"	10.0		104	70-147		15.8	30	
n-Butylbenzene	9.55		"	10.0		95.5	79-132		9.20	30	
n-Propylbenzene	10.4		"	10.0		104	78-133		17.4	30	
o-Xylene	10.4		"	10.0		104	70-130		12.2	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 BA90439 - EPA 5030B

LCS Dup (BA90439-BSD1)

Prepared & Analyzed: 01/11/2019

p- & m- Xylenes	20.8		ug/L	20.0		104	70-130		13.4	20
p-Isopropyltoluene	10.4		"	10.0		104	81-136		18.3	30
sec-Butylbenzene	11.1		"	10.0		111	79-137		18.6	30
Styrene	10.3		"	10.0		103	70-130		13.0	20
tert-Butylbenzene	10.4		"	10.0		104	77-138		19.4	30
Tetrachloroethylene	6.94		"	10.0		69.4	70-130	Low Bias	12.4	20
Toluene	10.6		"	10.0		106	70-130		14.4	20
trans-1,2-Dichloroethylene	10.5		"	10.0		105	70-130		14.5	20
trans-1,3-Dichloropropylene	9.57		"	10.0		95.7	70-130		13.3	20
Trichloroethylene	9.77		"	10.0		97.7	70-130		10.7	20
Trichlorofluoromethane	9.88		"	10.0		98.8	40-160		9.88	20
Vinyl Chloride	11.2		"	10.0		112	70-130		12.0	20
Surrogate: SURR: 1,2-Dichloroethane-d4	9.48		"	10.0		94.8	70-130			
Surrogate: SURR: Toluene-d8	9.78		"	10.0		97.8	70-130			
Surrogate: SURR: p-Bromofluorobenzene	10.3		"	10.0		103	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 BA90411 - EPA 200.7											
Blank (BA90411-BLK1)								Prepared & Analyzed: 01/10/2019			
Iron	ND	0.278	mg/L								
LCS (BA90411-BS1)								Prepared & Analyzed: 01/10/2019			
Iron	1.09		ug/mL	1.00		109	85-115				
Batch BA90587 - EPA 3015A											
Blank (BA90587-BLK1)								Prepared & Analyzed: 01/15/2019			
Iron - Dissolved	ND	0.278	mg/L								
LCS (BA90587-BS1)								Prepared & Analyzed: 01/15/2019			
Iron - Dissolved	1.05		ug/mL	1.00		105	80-120				
Duplicate (BA90587-DUP1)		*Source sample: 19A0251-02 (WQ010319:1235NP2-10)						Prepared & Analyzed: 01/15/2019			
Iron - Dissolved	ND	0.278	mg/L		ND					20	
Matrix Spike (BA90587-MS1)		*Source sample: 19A0251-02 (WQ010319:1235NP2-10)						Prepared & Analyzed: 01/15/2019			
Iron - Dissolved	1.25	0.278	mg/L	1.11	ND	112	75-125				



Miscellaneous Physical Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BA90426 - % Solids Prep

Blank (BA90426-BLK1)

Prepared & Analyzed: 01/10/2019

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

Lab ID	Client Sample ID	Volatile Sample Container
19A0251-01	WQ010319:1230NP2-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0251-02	WQ010319:1235NP2-10	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.

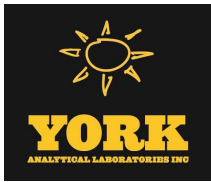
If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For 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.





Page 1 of 1

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.

YOUR INFORMATION		Report to:		Invoice To:		Your Project ID		Turn-Around Time		Report/Deliverable Type	
Company:	WSP USA	☒ SAME	☒ SAME	Name:		31401451.000 task		RUSH-Same Day		Summary Report	
Address:	4 Research Drive	Name:		Company:		01.00		RUSH-Next Day		QA Report	
Suite:	301, Shelton CT 06484	Address:		Purchase Order #		31401451.000 task		RUSH-Two Day		CT RCP	
Phone:	203.929.8555	Address:		01.00		01.00		RUSH-Three Day		CT RCP DQA/DUE Pkg	
Contact:	Tunde Sandor	E-mail:		Samples from CT_NY_x_NJ__		X		RUSH-Four Day		NY ASP A Package	
E-mail:		tunde.sandor@wsp.com		Volatiles		Semi-Vols.		Misc. Org.		Full Lists	
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		8260 full		8270 or 625		TPH GRO		Pri. Poll.	
S - soil		Other - specify (oil, etc.)		624		STARS list		TPH DRO		TCL Organics	
WW - wastewater		GW - groundwater		STARS list		BN Only		CT ETPH		TAL Met/ON	
DW - drinking water		Air-A - ambient air		BTEX		Suffolk Co.		NY 310-13		Full TCLP	
Air-SV - soil vapor		8021B list		MTBE		Ketones		TPH 1664		Full App IX	
Name (printed)		Date+Time Sampled		TCL list		Oxygenates		Air TO14A		GIS/KEY (std)	
Evan Foster		1-3-19 1230		TAGM list		TCLP list		Air TO15		YORK Regulatory Comp Excel	
Samples Collected/Authorized By (Signature)		1235		CT RCP list		524.2		Dissolved		compared to:	
				Arom. only		502.2		Air STARS		OTHER:	
				Halog. only		NJDEP list		SELP or TCLP		300's, 301's, 302's, 303's, 304's, 305's, 306's, 307's, 308's, 309's, 310's, 311's, 312's, 313's, 314's, 315's, 316's, 317's, 318's, 319's, 320's, 321's, 322's, 323's, 324's, 325's, 326's, 327's, 328's, 329's, 330's, 331's, 332's, 333's, 334's, 335's, 336's, 337's, 338's, 339's, 340's, 341's, 342's, 343's, 344's, 345's, 346's, 347's, 348's, 349's, 350's, 351's, 352's, 353's, 354's, 355's, 356's, 357's, 358's, 359's, 360's, 361's, 362's, 363's, 364's, 365's, 366's, 367's, 368's, 369's, 370's, 371's, 372's, 373's, 374's, 375's, 376's, 377's, 378's, 379's, 380's, 381's, 382's, 383's, 384's, 385's, 386's, 387's, 388's, 389's, 390's, 391's, 392's, 393's, 394's, 395's, 396's, 397's, 398's, 399's, 400's, 401's, 402's, 403's, 404's, 405's, 406's, 407's, 408's, 409's, 410's, 411's, 412's, 413's, 414's, 415's, 416's, 417's, 418's, 419's, 420's, 421's, 422's, 423's, 424's, 425's, 426's, 427's, 428's, 429's, 430's, 431's, 432's, 433's, 434's, 435's, 436's, 437's, 438's, 439's, 440's, 441's, 442's, 443's, 444's, 445's, 446's, 447's, 448's, 449's, 450's, 451's, 452's, 453's, 454's, 455's, 456's, 457's, 458's, 459's, 460's, 461's, 462's, 463's, 464's, 465's, 466's, 467's, 468's, 469's, 470's, 471's, 472's, 473's, 474's, 475's, 476's, 477's, 478's, 479's, 480's, 481's, 482's, 483's, 484's, 485's, 486's, 487's, 488's, 489's, 490's, 491's, 492's, 493's, 494's, 495's, 496's, 497's, 498's, 499's, 500's, 501's, 502's, 503's, 504's, 505's, 506's, 507's, 508's, 509's, 510's, 511's, 512's, 513's, 514's, 515's, 516's, 517's, 518's, 519's, 520's, 521's, 522's, 523's, 524's, 525's, 526's, 527's, 528's, 529's, 530's, 531's, 532's, 533's, 534's, 535's, 536's, 537's, 538's, 539's, 540's, 541's, 542's, 543's, 544's, 545's, 546's, 547's, 548's, 549's, 550's, 551's, 552's, 553's, 554's, 555's, 556's, 557's, 558's, 559's, 560's, 561's, 562's, 563's, 564's, 565's, 566's, 567's, 568's, 569's, 570's, 571's, 572's, 573's, 574's, 575's, 576's, 577's, 578's, 579's, 580's, 581's, 582's, 583's, 584's, 585's, 586's, 587's, 588's, 589's, 590's, 591's, 592's, 593's, 594's, 595's, 596's, 597's, 598's, 599's, 600's, 601's, 602's, 603's, 604's, 605's, 606's, 607's, 608's, 609's, 610's, 611's, 612's, 613's, 614's, 615's, 616's, 617's, 618's, 619's, 620's, 621's, 622's, 623's, 624's, 625's, 626's, 627's, 628's, 629's, 630's, 631's, 632's, 633's, 634's, 635's, 636's, 637's, 638's, 639's, 640's, 641's, 642's, 643's, 644's, 645's, 646's, 647's, 648's, 649's, 650's, 651's, 652's, 653's, 654's, 655's, 656's, 657's, 658's, 659's, 660's, 661's, 662's, 663's, 664's, 665's, 666's, 667's, 668's, 669's, 670's, 671's, 672's, 673's, 674's, 675's, 676's, 677's, 678's, 679's, 680's, 681's, 682's, 683's, 684's, 685's, 686's, 687's, 688's, 689's, 690's, 691's, 692's, 693's, 694's, 695's, 696's, 697's, 698's, 699's, 700's, 701's, 702's, 703's, 704's, 705's, 706's, 707's, 708's, 709's, 710's, 711's, 712's, 713's, 714's, 715's, 716's, 717's, 718's, 719's, 720's, 721's, 722's, 723's, 724	



APPENDIX II
JANUARY 2019 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: 01/14/2019
Client Project ID: 31401451.000 Task 01.00
York Project (SDG) No.: 19A0240

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: 01/14/2019
Client Project ID: 31401451.000 Task 01.00
York Project (SDG) No.: 19A0240

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 January 08, 2019 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>
19A0240-01	WQ010319:1200 FRW-1	Water	01/03/2019	01/08/2019
19A0240-02	WQ010319:1205 FRW-2	Water	01/03/2019	01/08/2019
19A0240-03	WQ010319:1210 FRW-3	Water	01/03/2019	01/08/2019
19A0240-04	WQ010319:1215 FRW-4	Water	01/03/2019	01/08/2019
19A0240-05	WQ010319:1240NP1-1-2	Water	01/03/2019	01/08/2019

General Notes for York Project (SDG) No.: 19A0240

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.

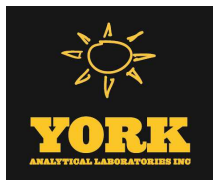
Approved By:



Benjamin Gulizia
Laboratory Director

Date: 01/14/2019





Sample Information

Client Sample ID: WQ010319:1200 FRW-1

York Sample ID: 19A0240-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0240

31401451.000 Task 01.00

Water

January 3, 2019 12:00 pm

01/08/2019

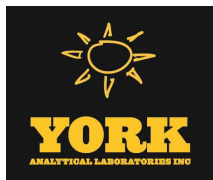
Volatile Organics, 8260 List - Low Level

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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS



Sample Information

Client Sample ID: WQ010319:1200 FRW-1

York Sample ID: 19A0240-01

York Project (SDG) No.

19A0240

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

January 3, 2019 12:00 pm

Date Received

01/08/2019

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: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
74-87-3	Chloromethane	0.210	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
156-59-2	cis-1,2-Dichloroethylene	0.290		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS



Sample Information

Client Sample ID: WQ010319:1200 FRW-1

York Sample ID: 19A0240-01

York Project (SDG) No.

19A0240

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

January 3, 2019 12:00 pm

Date Received

01/08/2019

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	01/11/2019 10:00	01/11/2019 17:24	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
127-18-4	Tetrachloroethylene	18.8		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	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	01/11/2019 10:00	01/11/2019 17:24	SS
79-01-6	Trichloroethylene	0.450		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:24	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 17:24	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	95.2 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	97.8 %	70-130								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	104 %	70-130								



Sample Information

Client Sample ID: WQ010319:1205 FRW-2

York Sample ID: 19A0240-02

York Project (SDG) No.

19A0240

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

January 3, 2019 12:05 pm

Date Received

01/08/2019

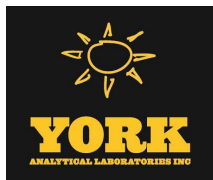
Volatile Organics, 8260 List - Low Level

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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS



Sample Information

Client Sample ID: WQ010319:1205 FRW-2

York Sample ID: 19A0240-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0240

31401451.000 Task 01.00

Water

January 3, 2019 12:05 pm

01/08/2019

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	01/11/2019 10:00	01/11/2019 17:56	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
156-59-2	cis-1,2-Dichloroethylene	1.69		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	SS



Sample Information

Client Sample ID: WQ010319:1205 FRW-2

York Sample ID: 19A0240-02

York Project (SDG) No.

19A0240

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

January 3, 2019 12:05 pm

Date Received

01/08/2019

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	01/11/2019 10:00	01/11/2019 17:56	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
127-18-4	Tetrachloroethylene	13.8		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	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	01/11/2019 10:00	01/11/2019 17:56	SS
79-01-6	Trichloroethylene	0.670		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 17:56	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 17:56	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	96.9 %	70-130								
2037-26-5	Surrogate: SURRE: Toluene-d8	100 %	70-130								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	105 %	70-130								



Sample Information

Client Sample ID: WQ010319:1210 FRW-3

York Sample ID: 19A0240-03

York Project (SDG) No.

19A0240

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

January 3, 2019 12:10 pm

Date Received

01/08/2019

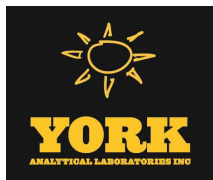
Volatile Organics, 8260 List - Low Level

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	01/11/2019 10:00	01/11/2019 18:27	SS
71-55-6	1,1,1-Trichloroethane	0.420		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS



Sample Information

Client Sample ID: WQ010319:1210 FRW-3

York Sample ID: 19A0240-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0240

31401451.000 Task 01.00

Water

January 3, 2019 12:10 pm

01/08/2019

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	01/11/2019 10:00	01/11/2019 18:27	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	SS
156-59-2	cis-1,2-Dichloroethylene	7.30		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	SS



Sample Information

Client Sample ID: WQ010319:1210 FRW-3

York Sample ID: 19A0240-03

York Project (SDG) No.
19A0240

Client Project ID
31401451.000 Task 01.00

Matrix
Water

Collection Date/Time
January 3, 2019 12:10 pm

Date Received
01/08/2019

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	01/11/2019 10:00	01/11/2019 18:27	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
127-18-4	Tetrachloroethylene	89.4		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	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	01/11/2019 10:00	01/11/2019 18:27	SS
79-01-6	Trichloroethylene	2.41		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:27	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 18:27	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	94.3 %	70-130								
2037-26-5	Surrogate: SURRE: Toluene-d8	97.0 %	70-130								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	107 %	70-130								



Sample Information

Client Sample ID: WQ010319:1215 FRW-4

York Sample ID: 19A0240-04

York Project (SDG) No.

19A0240

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

January 3, 2019 12:15 pm

Date Received

01/08/2019

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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS



Sample Information

Client Sample ID: WQ010319:1215 FRW-4

York Sample ID: 19A0240-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0240

31401451.000 Task 01.00

Water

January 3, 2019 12:15 pm

01/08/2019

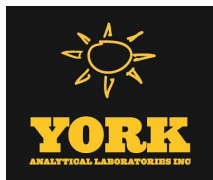
Volatile Organics, 8260 List - Low Level

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	01/11/2019 10:00	01/11/2019 18:59	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
74-87-3	Chloromethane	0.250	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
156-59-2	cis-1,2-Dichloroethylene	0.960		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	SS



Sample Information

Client Sample ID: WQ010319:1215 FRW-4

York Sample ID: 19A0240-04

York Project (SDG) No.
19A0240

Client Project ID
31401451.000 Task 01.00

Matrix
Water

Collection Date/Time
January 3, 2019 12:15 pm

Date Received
01/08/2019

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	01/11/2019 10:00	01/11/2019 18:59	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
127-18-4	Tetrachloroethylene	1.28		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	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	01/11/2019 10:00	01/11/2019 18:59	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 18:59	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 18:59	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	96.1 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	100 %	70-130								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	105 %	70-130								



Sample Information

Client Sample ID: WQ010319:1240NP1-1-2

York Sample ID: 19A0240-05

York Project (SDG) No.

19A0240

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

January 3, 2019 12:40 pm

Date Received

01/08/2019

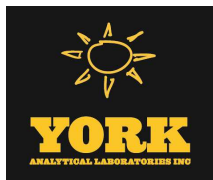
Volatile Organics, 8260 List - Low Level

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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS



Sample Information

Client Sample ID: WQ010319:1240NP1-1-2

York Sample ID: 19A0240-05

York Project (SDG) No.
19A0240

Client Project ID
31401451.000 Task 01.00

Matrix
Water

Collection Date/Time
January 3, 2019 12:40 pm

Date Received
01/08/2019

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	01/11/2019 10:00	01/11/2019 19:30	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
67-64-1	Acetone	2.48	CCV-E, SCAL-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	SS



Sample Information

Client Sample ID: WQ010319:1240NP1-1-2

York Sample ID: 19A0240-05

York Project (SDG) No.

19A0240

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

January 3, 2019 12:40 pm

Date Received

01/08/2019

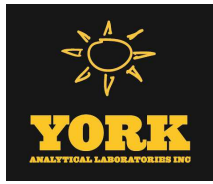
Volatile Organics, 8260 List - Low Level

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	01/11/2019 10:00	01/11/2019 19:30	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
127-18-4	Tetrachloroethylene	0.320		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	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	01/11/2019 10:00	01/11/2019 19:30	SS
79-01-6	Trichloroethylene	0.310		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/11/2019 10:00	01/11/2019 19:30	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/11/2019 10:00	01/11/2019 19:30	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	97.9 %	70-130								
2037-26-5	Surrogate: SURRE: Toluene-d8	101 %	70-130								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	103 %	70-130								



Analytical Batch Summary

Batch ID: BA90439

Preparation Method: EPA 5030B

Prepared By: RDS

YORK Sample ID	Client Sample ID	Preparation Date
19A0240-01	WQ010319:1200 FRW-1	01/11/19
19A0240-02	WQ010319:1205 FRW-2	01/11/19
19A0240-03	WQ010319:1210 FRW-3	01/11/19
19A0240-04	WQ010319:1215 FRW-4	01/11/19
19A0240-05	WQ010319:1240NP1-1-2	01/11/19
BA90439-BLK1	Blank	01/11/19
BA90439-BS1	LCS	01/11/19
BA90439-BSD1	LCS Dup	01/11/19



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 BA90439 - EPA 5030B											
Blank (BA90439-BLK1)										Prepared & Analyzed: 01/11/2019	
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
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Batch BA90439 - EPA 5030B

Blank (BA90439-BLK1)

Prepared & Analyzed: 01/11/2019

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

9.50

"

10.0

95.0

70-130

Surrogate: SURR: Toluene-d8

10.0

"

10.0

100

70-130

Surrogate: SURR: p-Bromofluorobenzene

10.7

"

10.0

107

70-130

LCS (BA90439-BS1)

Prepared & Analyzed: 01/11/2019

1,1,1,2-Tetrachloroethane	9.10	ug/L	10.0	91.0	82-126	30
1,1,1-Trichloroethane	8.80	"	10.0	88.0	70-130	20
1,1,2,2-Tetrachloroethane	9.43	"	10.0	94.3	70-130	20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.48	"	10.0	94.8	70-130	20
1,1,2-Trichloroethane	8.89	"	10.0	88.9	70-130	20
1,1-Dichloroethane	9.35	"	10.0	93.5	70-130	20
1,1-Dichloroethylene	8.96	"	10.0	89.6	70-130	20
1,1-Dichloropropylene	8.71	"	10.0	87.1	83-133	30
1,2,3-Trichlorobenzene	8.86	"	10.0	88.6	70-130	20
1,2,3-Trichloropropane	8.89	"	10.0	88.9	77-128	30
1,2,4-Trichlorobenzene	8.57	"	10.0	85.7	70-130	20
1,2,4-Trimethylbenzene	8.79	"	10.0	87.9	82-132	20
1,2-Dibromo-3-chloropropane	8.49	"	10.0	84.9	40-160	20
1,2-Dibromoethane	9.14	"	10.0	91.4	70-130	20
1,2-Dichlorobenzene	8.75	"	10.0	87.5	70-130	20
1,2-Dichloroethane	9.05	"	10.0	90.5	70-130	20
1,2-Dichloropropane	9.07	"	10.0	90.7	70-130	20
1,3,5-Trimethylbenzene	8.84	"	10.0	88.4	80-131	30
1,3-Dichlorobenzene	8.49	"	10.0	84.9	70-130	20
1,3-Dichloropropane	9.22	"	10.0	92.2	81-125	30
1,4-Dichlorobenzene	8.52	"	10.0	85.2	70-130	20
2,2-Dichloropropane	8.87	"	10.0	88.7	56-150	30
2-Chlorotoluene	8.92	"	10.0	89.2	79-130	30
2-Hexanone	8.61	"	10.0	86.1	40-160	20
4-Chlorotoluene	8.71	"	10.0	87.1	79-128	30
Acetone	7.18	"	10.0	71.8	40-160	20
Benzene	9.54	"	10.0	95.4	70-130	20
Bromobenzene	8.92	"	10.0	89.2	78-129	30
Bromochloromethane	9.76	"	10.0	97.6	70-130	20
Bromodichloromethane	9.02	"	10.0	90.2	70-130	20
Bromoform	8.65	"	10.0	86.5	70-130	20
Bromomethane	8.75	"	10.0	87.5	40-160	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 BA90439 - EPA 5030B

LCS (BA90439-BS1)

Prepared & Analyzed: 01/11/2019

Carbon tetrachloride	8.68		ug/L	10.0		86.8	70-130			20	
Chlorobenzene	8.92		"	10.0		89.2	70-130			20	
Chloroethane	9.74		"	10.0		97.4	40-160			20	
Chloroform	8.92		"	10.0		89.2	70-130			20	
Chloromethane	10.3		"	10.0		103	40-160			20	
cis-1,2-Dichloroethylene	9.29		"	10.0		92.9	70-130			20	
cis-1,3-Dichloropropylene	8.87		"	10.0		88.7	70-130			20	
Dibromochloromethane	8.69		"	10.0		86.9	70-130			20	
Dibromomethane	8.81		"	10.0		88.1	72-134			30	
Dichlorodifluoromethane	8.83		"	10.0		88.3	40-160			20	
Ethyl Benzene	9.08		"	10.0		90.8	70-130			20	
Hexachlorobutadiene	8.48		"	10.0		84.8	67-146			30	
Isopropylbenzene	8.71		"	10.0		87.1	70-130			20	
Methyl tert-butyl ether (MTBE)	9.26		"	10.0		92.6	70-130			20	
Methylene chloride	6.95		"	10.0		69.5	70-130	Low Bias		20	
Naphthalene	8.92		"	10.0		89.2	70-147			30	
n-Butylbenzene	8.71		"	10.0		87.1	79-132			30	
n-Propylbenzene	8.78		"	10.0		87.8	78-133			30	
o-Xylene	9.22		"	10.0		92.2	70-130			20	
p- & m- Xylenes	18.2		"	20.0		90.9	70-130			20	
p-Isopropyltoluene	8.62		"	10.0		86.2	81-136			30	
sec-Butylbenzene	9.21		"	10.0		92.1	79-137			30	
Styrene	9.05		"	10.0		90.5	70-130			20	
tert-Butylbenzene	8.60		"	10.0		86.0	77-138			30	
Tetrachloroethylene	6.13		"	10.0		61.3	70-130	Low Bias		20	
Toluene	9.19		"	10.0		91.9	70-130			20	
trans-1,2-Dichloroethylene	9.06		"	10.0		90.6	70-130			20	
trans-1,3-Dichloropropylene	8.38		"	10.0		83.8	70-130			20	
Trichloroethylene	8.78		"	10.0		87.8	70-130			20	
Trichlorofluoromethane	8.95		"	10.0		89.5	40-160			20	
Vinyl Chloride	9.90		"	10.0		99.0	70-130			20	
Surrogate: SURR: 1,2-Dichloroethane-d4	9.57		"	10.0		95.7	70-130				
Surrogate: SURR: Toluene-d8	9.96		"	10.0		99.6	70-130				
Surrogate: SURR: p-Bromofluorobenzene	9.96		"	10.0		99.6	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 BA90439 - EPA 5030B											
LCS Dup (BA90439-BSD1)						Prepared & Analyzed: 01/11/2019					
1,1,1,2-Tetrachloroethane	10.2		ug/L	10.0		102	82-126		10.9	30	
1,1,1-Trichloroethane	10.2		"	10.0		102	70-130		14.6	20	
1,1,2,2-Tetrachloroethane	10.9		"	10.0		109	70-130		14.4	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.4		"	10.0		104	70-130		8.87	20	
1,1,2-Trichloroethane	10.1		"	10.0		101	70-130		12.7	20	
1,1-Dichloroethane	10.8		"	10.0		108	70-130		14.7	20	
1,1-Dichloroethylene	10.5		"	10.0		105	70-130		15.5	20	
1,1-Dichloropropylene	10.2		"	10.0		102	83-133		15.5	30	
1,2,3-Trichlorobenzene	10.5		"	10.0		105	70-130		16.8	20	
1,2,3-Trichloropropane	10.6		"	10.0		106	77-128		17.7	30	
1,2,4-Trichlorobenzene	10.3		"	10.0		103	70-130		18.2	20	
1,2,4-Trimethylbenzene	10.6		"	10.0		106	82-132		18.3	20	
1,2-Dibromo-3-chloropropane	10.0		"	10.0		100	40-160		16.5	20	
1,2-Dibromoethane	10.2		"	10.0		102	70-130		11.4	20	
1,2-Dichlorobenzene	10.6		"	10.0		106	70-130		19.0	20	
1,2-Dichloroethane	10.4		"	10.0		104	70-130		14.3	20	
1,2-Dichloropropane	10.4		"	10.0		104	70-130		13.5	20	
1,3,5-Trimethylbenzene	10.6		"	10.0		106	80-131		18.5	30	
1,3-Dichlorobenzene	10.1		"	10.0		101	70-130		17.5	20	
1,3-Dichloropropane	10.3		"	10.0		103	81-125		11.1	30	
1,4-Dichlorobenzene	10.4		"	10.0		104	70-130		19.5	20	
2,2-Dichloropropane	10.1		"	10.0		101	56-150		12.7	30	
2-Chlorotoluene	10.6		"	10.0		106	79-130		17.4	30	
2-Hexanone	9.51		"	10.0		95.1	40-160		9.93	20	
4-Chlorotoluene	10.6		"	10.0		106	79-128		19.6	30	
Acetone	8.34		"	10.0		83.4	40-160		14.9	20	
Benzene	11.1		"	10.0		111	70-130		14.8	20	
Bromobenzene	10.7		"	10.0		107	78-129		17.8	30	
Bromochloromethane	11.2		"	10.0		112	70-130		13.7	20	
Bromodichloromethane	10.0		"	10.0		100	70-130		10.8	20	
Bromoform	9.87		"	10.0		98.7	70-130		13.2	20	
Bromomethane	10.1		"	10.0		101	40-160		14.7	20	
Carbon tetrachloride	9.96		"	10.0		99.6	70-130		13.7	20	
Chlorobenzene	10.2		"	10.0		102	70-130		12.9	20	
Chloroethane	11.6		"	10.0		116	40-160		17.1	20	
Chloroform	10.4		"	10.0		104	70-130		15.0	20	
Chloromethane	11.8		"	10.0		118	40-160		13.7	20	
cis-1,2-Dichloroethylene	10.6		"	10.0		106	70-130		13.5	20	
cis-1,3-Dichloropropylene	10.2		"	10.0		102	70-130		13.8	20	
Dibromochloromethane	10.0		"	10.0		100	70-130		14.2	20	
Dibromomethane	10.1		"	10.0		101	72-134		13.3	30	
Dichlorodifluoromethane	9.66		"	10.0		96.6	40-160		8.98	20	
Ethyl Benzene	10.4		"	10.0		104	70-130		13.9	20	
Hexachlorobutadiene	9.77		"	10.0		97.7	67-146		14.1	30	
Isopropylbenzene	10.4		"	10.0		104	70-130		18.1	20	
Methyl tert-butyl ether (MTBE)	10.7		"	10.0		107	70-130		14.6	20	
Methylene chloride	7.96		"	10.0		79.6	70-130		13.5	20	
Naphthalene	10.4		"	10.0		104	70-147		15.8	30	
n-Butylbenzene	9.55		"	10.0		95.5	79-132		9.20	30	
n-Propylbenzene	10.4		"	10.0		104	78-133		17.4	30	
o-Xylene	10.4		"	10.0		104	70-130		12.2	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 BA90439 - EPA 5030B

LCS Dup (BA90439-BSD1)

Prepared & Analyzed: 01/11/2019

p- & m- Xylenes	20.8		ug/L	20.0		104	70-130		13.4	20
p-Isopropyltoluene	10.4		"	10.0		104	81-136		18.3	30
sec-Butylbenzene	11.1		"	10.0		111	79-137		18.6	30
Styrene	10.3		"	10.0		103	70-130		13.0	20
tert-Butylbenzene	10.4		"	10.0		104	77-138		19.4	30
Tetrachloroethylene	6.94		"	10.0		69.4	70-130	Low Bias	12.4	20
Toluene	10.6		"	10.0		106	70-130		14.4	20
trans-1,2-Dichloroethylene	10.5		"	10.0		105	70-130		14.5	20
trans-1,3-Dichloropropylene	9.57		"	10.0		95.7	70-130		13.3	20
Trichloroethylene	9.77		"	10.0		97.7	70-130		10.7	20
Trichlorofluoromethane	9.88		"	10.0		98.8	40-160		9.88	20
Vinyl Chloride	11.2		"	10.0		112	70-130		12.0	20
Surrogate: SURR: 1,2-Dichloroethane-d4	9.48		"	10.0		94.8	70-130			
Surrogate: SURR: Toluene-d8	9.78		"	10.0		97.8	70-130			
Surrogate: SURR: p-Bromofluorobenzene	10.3		"	10.0		103	70-130			



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19A0240-01	WQ010319:1200 FRW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0240-02	WQ010319:1205 FRW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0240-03	WQ010319:1210 FRW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0240-04	WQ010319:1215 FRW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0240-05	WQ010319:1240NP1-1-2	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.

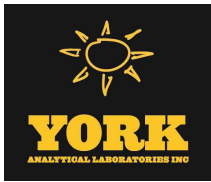
If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For 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.





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

YORK
ANALYTICAL LABORATORIES

Field Chain-of-Custody Record

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

York Project No. 19A0240

Page 1 of 1

YOUR INFORMATION		Report to:		Invoice To:		Your Project ID		Turn-Around Time		Report/Deliverable Type	
Company:	WSP USA	SAME ☒		SAME ☒		31401451.000 task	01.00	RUSH-Same Day	Summary Report	X, PDF	
Address:	4 Research Drive	Name:		Name:		Purchase Order #		RUSH-Next Day	QA Report	X, PDF	
Suite:	301, Shelton CT 06484	Company:		Company:				RUSH-Two Day	CT RCP		
Phone:	203.929.8555	Address:		Address:		31401451.000 task	01.00	RUSH-Three Day	CT RCP DQA/DUE Pkg		
Contact:	Tunde Sandor							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.

Samples Collected/Authorized By (Signature)
Evan Foster
Name (printed)

Volatiles	Seml. Vols.	PostPCB/Herb	Metals	Misc. Org.	Full Lists
8260 full	8270 or 625	8082PCB	RCA8	TPH GRO	Ph. Poll.
624	STARS list	8081Pest	FP13 list	TPH DRO	TCL Organics
STARS list	BN Only	8151Herb	TAL	CT ETPH	TAL MethCN
BTEX	Suffolk Co.	CT RCP	CT15 list	NY 310-13	Full TCLP
MTBE	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX
TCL list	TAGM list	Site Spec.	NIDEP list	Air TO14A	Part360-Routine
TAGM list	CT RCP list	SPL or TCLP	Total	Air TO15	Part360-Baseline
CT RCP list	524.2	TCLP Pest	Dissolved	Air STARS	Part360-Residual
Arom. only	502.2	TCLP Herb	SPL or TCLP	Air VPH	Part360-Residual
Halog. only	NIDEP list	App. IX	Chloride	Air TICs	NYDEP Seer
App. IX list	SPL or TCLP	608 Pest	LIST Below	Methane	NYDEP Seer
8021B list	SPL or TCLP	608 PCB	Helium		

Sample Identification	Date+Time Sampled	Matrix	Analysis Requested (List above includes common analysis)	Container Description
WAG00891200 FRW-1	1-3-19 1200	GW	VOCs 8260 full plus freon 113	3 voc's
1205 FRW-2	1205			
1210 FRW-3	1210			
1215 FRW-4	1215			
1240 NPI-1-2	1240			

Notes: 12-40 12-40

Preservation (check all applicable):
 4°C ☐ Frozen ☒ HCl ☒ MeOH ☒ HNO₃ ☐ NaOH ☐
 ZnAc ☐ Ascorbic Acid ☐ Other ☐

Special Instructions:
 Field Filtered ☐
 Lab to Filter ☐

Comments:

Temperature on Receipt: 1.9 °C

Samples Relinquished By: WSP Field Date/Time: 1-4-19 800
 Samples Received By: WSP Field Date/Time: 1-4-19 800
 Samples Relinquished By: WSP Field Date/Time: 1-8-19 1415
 Samples Received in LAB by: WSP Field Date/Time: 1-8-19 1415

(system)



APPENDIX III
JANUARY 2019 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: 01/23/2019
Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 19A0639

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: 01/23/2019
Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 19A0639

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 January 16, 2019 and listed below. The project was identified as your project: **31401451.000 Task 01.00 Rowe Industries.**

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>
19A0639-01	AQ011519:1300 NP4-1	Vapor Extraction	01/15/2019	01/16/2019
19A0639-02	AQ011519:1305 NP4-3	Vapor Extraction	01/15/2019	01/16/2019

General Notes for York Project (SDG) No.: 19A0639

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: 01/23/2019





Sample Information

Client Sample ID: AQ011519:1300 NP4-1

York Sample ID: 19A0639-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0639

31401451.000 Task 01.00 Rowe Industries

Vapor Extraction

January 15, 2019 1:00 pm

01/16/2019

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	1.546	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 21:12	AS
71-55-6	1,1,1-Trichloroethane	1.6		ug/m ³	0.84	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.1	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.2		ug/m ³	1.2	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.84	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.63	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.15	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	1.1	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.76	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.2	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.93	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.63	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.71	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.1	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.76	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	1.0	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.93	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.71	1.546	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 21:12	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.93	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	1.1	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
78-93-3	2-Butanone	0.46		ug/m ³	0.46	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	1.3	1.546	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 21:12	AS



Sample Information

Client Sample ID: AQ011519:1300 NP4-1

York Sample ID: 19A0639-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0639

31401451.000 Task 01.00 Rowe Industries

Vapor Extraction

January 15, 2019 1:00 pm

01/16/2019

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	2.4	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.63	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
67-64-1	Acetone	1.5		ug/m ³	0.73	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.34	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
71-43-2	Benzene	0.84		ug/m ³	0.49	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.80	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	1.0	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
75-25-2	Bromoform	ND		ug/m ³	1.6	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
74-83-9	Bromomethane	ND		ug/m ³	0.60	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.48	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
56-23-5	Carbon tetrachloride	0.88		ug/m ³	0.24	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.71	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
75-00-3	Chloroethane	ND		ug/m ³	0.41	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
67-66-3	Chloroform	1.9		ug/m ³	0.75	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
74-87-3	Chloromethane	2.0	CCV-A, QL-03, TO-L	ug/m ³	0.32	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
156-59-2	cis-1,2-Dichloroethylene	9.6		ug/m ³	0.15	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.70	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
110-82-7	Cyclohexane	ND		ug/m ³	0.53	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	1.3	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
75-71-8	Dichlorodifluoromethane	3.1	CCV-A, QL-03, TO-L	ug/m ³	0.76	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
141-78-6	* Ethyl acetate	ND		ug/m ³	1.1	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
100-41-4	Ethyl Benzene	ND		ug/m ³	0.67	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS



Sample Information

Client Sample ID: AQ011519:1300 NP4-1

York Sample ID: 19A0639-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0639

31401451.000 Task 01.00 Rowe Industries

Vapor Extraction

January 15, 2019 1:00 pm

01/16/2019

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
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.6	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
67-63-0	Isopropanol	ND		ug/m ³	0.76	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.63	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.56	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
75-09-2	Methylene chloride	2.7	CCV-A, B	ug/m ³	1.1	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
142-82-5	n-Heptane	ND		ug/m ³	0.63	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
110-54-3	n-Hexane	0.60		ug/m ³	0.54	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
95-47-6	o-Xylene	ND		ug/m ³	0.67	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
179601-23-1	p- & m- Xylenes	ND		ug/m ³	1.3	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.76	1.546	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 21:12	AS
115-07-1	* Propylene	0.67		ug/m ³	0.27	1.546	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 21:12	AS
100-42-5	Styrene	ND		ug/m ³	0.66	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
127-18-4	Tetrachloroethylene	26		ug/m ³	0.26	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.91	1.546	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 21:12	AS
108-88-3	Toluene	1.5		ug/m ³	0.58	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.61	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.70	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
79-01-6	Trichloroethylene	11		ug/m ³	0.21	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
75-69-4	Trichlorofluoromethane (Freon 11)	2.2		ug/m ³	0.87	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.54	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.68	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.099	1.546	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 21:12	AS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	93.7 %	70-130							



Sample Information

Client Sample ID: AQ011519:1300 NP4-1

York Sample ID: 19A0639-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
19A0639	31401451.000 Task 01.00 Rowe Industries	Vapor Extraction	January 15, 2019 1:00 pm	01/16/2019

Sample Information

Client Sample ID: AQ011519:1305 NP4-3

York Sample ID: 19A0639-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
19A0639	31401451.000 Task 01.00 Rowe Industries	Vapor Extraction	January 15, 2019 1:05 pm	01/16/2019

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	IS-LO	ug/m ³	1.0	1.489	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 22:17	AS
71-55-6	1,1,1-Trichloroethane	0.81		ug/m ³	0.81	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND	IS-LO	ug/m ³	1.0	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.1	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.81	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.60	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.15	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
120-82-1	1,2,4-Trichlorobenzene	ND	IS-LO	ug/m ³	1.1	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
95-63-6	1,2,4-Trimethylbenzene	ND	IS-LO	ug/m ³	0.73	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.1	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
95-50-1	1,2-Dichlorobenzene	ND	IS-LO	ug/m ³	0.90	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.60	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.69	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.0	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
108-67-8	1,3,5-Trimethylbenzene	ND	IS-LO	ug/m ³	0.73	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.99	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
541-73-1	1,3-Dichlorobenzene	ND	IS-LO	ug/m ³	0.90	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.69	1.489	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 22:17	AS
106-46-7	1,4-Dichlorobenzene	ND	IS-LO	ug/m ³	0.90	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS



Sample Information

Client Sample ID: AQ011519:1305 NP4-3

York Sample ID: 19A0639-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0639

31401451.000 Task 01.00 Rowe Industries

Vapor Extraction

January 15, 2019 1:05 pm

01/16/2019

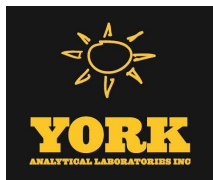
Volatile Organics, EPA TO15 Full List

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
123-91-1	1,4-Dioxane	ND		ug/m ³	1.1	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
78-93-3	2-Butanone	0.44		ug/m ³	0.44	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	1.2	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
107-05-1	3-Chloropropene	ND		ug/m ³	2.3	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.61	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
67-64-1	Acetone	1.3		ug/m ³	0.71	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.32	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
71-43-2	Benzene	ND		ug/m ³	0.48	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
100-44-7	Benzyl chloride	ND	IS-LO	ug/m ³	0.77	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	1.0	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
75-25-2	Bromoform	ND	IS-LO	ug/m ³	1.5	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
74-83-9	Bromomethane	ND		ug/m ³	0.58	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.46	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.23	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
108-90-7	Chlorobenzene	ND	IS-LO	ug/m ³	0.69	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
75-00-3	Chloroethane	ND		ug/m ³	0.39	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
67-66-3	Chloroform	ND		ug/m ³	0.73	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
74-87-3	Chloromethane	0.98	CCV-A, QL-03, TO-L	ug/m ³	0.31	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
156-59-2	cis-1,2-Dichloroethylene	1.5		ug/m ³	0.15	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.68	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
110-82-7	Cyclohexane	ND		ug/m ³	0.51	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	1.3	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS



Sample Information

Client Sample ID: AQ011519:1305 NP4-3

York Sample ID: 19A0639-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0639

31401451.000 Task 01.00 Rowe Industries

Vapor Extraction

January 15, 2019 1:05 pm

01/16/2019

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
75-71-8	Dichlorodifluoromethane	1.3	QL-03, TO-L, CCV-A	ug/m ³	0.74	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
141-78-6	* Ethyl acetate	ND		ug/m ³	1.1	1.489	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 22:17	AS
100-41-4	Ethyl Benzene	ND	IS-LO	ug/m ³	0.65	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
87-68-3	Hexachlorobutadiene	ND	IS-LO	ug/m ³	1.6	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
67-63-0	Isopropanol	ND		ug/m ³	0.73	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.61	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.54	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
75-09-2	Methylene chloride	10	B, CCV-A	ug/m ³	1.0	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
142-82-5	n-Heptane	ND		ug/m ³	0.61	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
110-54-3	n-Hexane	ND		ug/m ³	0.52	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
95-47-6	o-Xylene	ND	IS-LO	ug/m ³	0.65	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
179601-23-1	p- & m- Xylenes	1.6	IS-LO	ug/m ³	1.3	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
622-96-8	* p-Ethyltoluene	ND	IS-LO	ug/m ³	0.73	1.489	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 22:17	AS
115-07-1	* Propylene	0.56		ug/m ³	0.26	1.489	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 22:17	AS
100-42-5	Styrene	ND	IS-LO	ug/m ³	0.63	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
127-18-4	Tetrachloroethylene	ND		ug/m ³	0.25	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.88	1.489	EPA TO-15 Certifications:	01/22/2019 09:00	01/22/2019 22:17	AS
108-88-3	Toluene	4.2		ug/m ³	0.56	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.59	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.68	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.20	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
75-69-4	Trichlorofluoromethane (Freon 11)	0.92		ug/m ³	0.84	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.52	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS



Sample Information

Client Sample ID: AQ011519:1305 NP4-3

York Sample ID: 19A0639-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0639

31401451.000 Task 01.00 Rowe Industries

Vapor Extraction

January 15, 2019 1:05 pm

01/16/2019

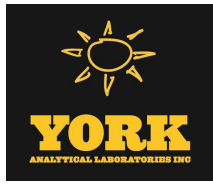
Volatile Organics, EPA TO15 Full List

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
593-60-2	Vinyl bromide	ND		ug/m ³	0.65	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.095	1.489	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/22/2019 09:00	01/22/2019 22:17	AS
Surrogate Recoveries		Result		Acceptance Range						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.7 %	IS-LO							70-130



Analytical Batch Summary

Batch ID: BA91016

Preparation Method: EPA TO15 PREP

Prepared By: AS

YORK Sample ID	Client Sample ID	Preparation Date
19A0639-01	AQ011519:1300 NP4-1	01/22/19
19A0639-02	AQ011519:1305 NP4-3	01/22/19
BA91016-BLK1	Blank	01/22/19
BA91016-BS1	LCS	01/22/19



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

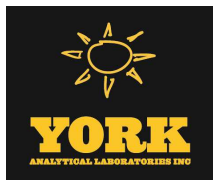
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Batch BA91016 - EPA TO15 PREP

Blank (BA91016-BLK1)

Prepared & Analyzed: 01/22/2019

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	1.6	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 BA91016 - EPA TO15 PREP

Blank (BA91016-BLK1)

Prepared & Analyzed: 01/22/2019

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: <i>SURR: p-Bromofluorobenzene</i>	8.75		ppbv	10.0		87.5	70-130
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LCS (BA91016-BS1)

Prepared & Analyzed: 01/22/2019

1,1,1,2-Tetrachloroethane	9.95		ppbv	10.0		99.5	70-130
1,1,1-Trichloroethane	12.1		"	10.0		121	70-130
1,1,2,2-Tetrachloroethane	10.9		"	10.0		109	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.7		"	10.0		117	70-130
1,1,2-Trichloroethane	9.43		"	10.0		94.3	70-130
1,1-Dichloroethane	12.3		"	10.0		123	70-130
1,1-Dichloroethylene	11.6		"	10.0		116	70-130
1,2,4-Trichlorobenzene	8.25		"	10.0		82.5	70-130
1,2,4-Trimethylbenzene	10.8		"	10.0		108	70-130
1,2-Dibromoethane	9.33		"	10.0		93.3	70-130
1,2-Dichlorobenzene	11.2		"	10.0		112	70-130
1,2-Dichloroethane	11.2		"	10.0		112	70-130
1,2-Dichloropropane	9.22		"	10.0		92.2	70-130
1,2-Dichlorotetrafluoroethane	14.3		"	10.0		143	70-130 High Bias
1,3,5-Trimethylbenzene	10.4		"	10.0		104	70-130
1,3-Butadiene	14.0		"	10.0		140	70-130 High Bias
1,3-Dichlorobenzene	11.2		"	10.0		112	70-130
1,3-Dichloropropane	9.19		"	10.0		91.9	70-130
1,4-Dichlorobenzene	11.3		"	10.0		113	70-130
1,4-Dioxane	8.86		"	10.0		88.6	70-130
2-Butanone	12.2		"	10.0		122	70-130
2-Hexanone	9.32		"	10.0		93.2	70-130
3-Chloropropene	11.7		"	10.0		117	70-130
4-Methyl-2-pentanone	9.38		"	10.0		93.8	70-130
Acetone	10.2		"	10.0		102	70-130
Acrylonitrile	12.0		"	10.0		120	70-130
Benzene	12.4		"	10.0		124	70-130
Benzyl chloride	9.78		"	10.0		97.8	70-130
Bromodichloromethane	9.22		"	10.0		92.2	70-130
Bromoform	11.3		"	10.0		113	70-130
Bromomethane	11.5		"	10.0		115	70-130
Carbon disulfide	12.5		"	10.0		125	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
Batch BA91016 - EPA TO15 PREP											
LCS (BA91016-BS1)						Prepared & Analyzed: 01/22/2019					
Carbon tetrachloride	11.6		ppbv	10.0		116	70-130				
Chlorobenzene	10.2		"	10.0		102	70-130				
Chloroethane	11.6		"	10.0		116	70-130				
Chloroform	12.0		"	10.0		120	70-130				
Chloromethane	15.6		"	10.0		156	70-130	High Bias			
cis-1,2-Dichloroethylene	11.2		"	10.0		112	70-130				
cis-1,3-Dichloropropylene	9.21		"	10.0		92.1	70-130				
Cyclohexane	12.0		"	10.0		120	70-130				
Dibromochloromethane	9.32		"	10.0		93.2	70-130				
Dichlorodifluoromethane	13.6		"	10.0		136	70-130	High Bias			
Ethyl acetate	12.4		"	10.0		124	70-130				
Ethyl Benzene	10.4		"	10.0		104	70-130				
Hexachlorobutadiene	11.4		"	10.0		114	70-130				
Isopropanol	11.6		"	10.0		116	70-130				
Methyl Methacrylate	9.38		"	10.0		93.8	70-130				
Methyl tert-butyl ether (MTBE)	10.4		"	10.0		104	70-130				
Methylene chloride	12.9		"	10.0		129	70-130				
n-Heptane	12.1		"	10.0		121	70-130				
n-Hexane	12.1		"	10.0		121	70-130				
o-Xylene	11.1		"	10.0		111	70-130				
p- & m- Xylenes	21.7		"	20.0		108	70-130				
p-Ethyltoluene	11.4		"	10.0		114	70-130				
Propylene	12.5		"	10.0		125	70-130				
Styrene	11.0		"	10.0		110	70-130				
Tetrachloroethylene	8.62		"	10.0		86.2	70-130				
Tetrahydrofuran	12.3		"	10.0		123	70-130				
Toluene	8.95		"	10.0		89.5	70-130				
trans-1,2-Dichloroethylene	11.9		"	10.0		119	70-130				
trans-1,3-Dichloropropylene	9.17		"	10.0		91.7	70-130				
Trichloroethylene	8.68		"	10.0		86.8	70-130				
Trichlorofluoromethane (Freon 11)	11.9		"	10.0		119	70-130				
Vinyl acetate	10.7		"	10.0		107	70-130				
Vinyl bromide	11.7		"	10.0		117	70-130				
Vinyl Chloride	14.2		"	10.0		142	70-130	High Bias			
Surrogate: SURR: p-Bromofluorobenzene	8.41		"	10.0		84.1	70-130				





Sample and Data Qualifiers Relating to This Work Order

TO-L	The 2nd source LCS for this compound was outside of control limits and biased high.
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.
IS-LO	The internal std associated with this target compound did not meet acceptance criteria (area <50% CCV) at the stated dilution due to matrix effects. Sample was rerun to confirm matrix effects.
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.
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

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

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

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

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



Certification for pH is no longer offered by NYDOH ELAP.

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

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