



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 2020 Status Report

DATE: May 12, 2020

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, 2020 through January 31, 2020. 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, 2020 through January 31, 2020)

- | | |
|---|--------------------------------------|
| 1. Hours of operation during the reporting period: | 738 hours (99.2%) |
| 2. Alarm conditions during the reporting period: | See Table 1 |
| 3. Were the State Pollutant Discharge Elimination System (SPDES) volatile organic compounds (VOC) discharge permit criteria achieved: | Yes, (see Table 2) |
| 4. Total volume of water pumped during the reporting period: | 1,335,953 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: | 0.08 pound (see Graph 2) |
| 7. Cumulative mass of VOCs recovered since startup on 12/17/02:
(calculations can be provided upon request) | 230.0 pounds |
| 8. Effluent VOC vapor concentration for the reporting period: | 0.07 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 (0.00081 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/}	1,050,997	0.6
FRW-1 ^{2/}	134,231	78.6
FRW-2 ^{2/}	52,307	5.8
FRW-3 ^{2/}	83,858	63.9
FRW-4 ^{2/}	84,947	2.5

^{1/} The above table summarizes the parameters for RW-2 from January 1 to January 31, 2020.

^{2/} The above table summarizes the parameters for the FRWs from January 7, 2020 to February 4, 2020.

On January 27, 2020, a fault condition for the RW-2 drive occurred, which shut down the RW-2 pump. This condition did not trigger the autodialler to activate; therefore, this condition was not known until the next scheduled O&M site visit on February 4, 2020. At that time, the fault in the drive was reset and the operation to RW-2 was restored. The remaining O&M activities for January 2020 are included in Table 1.

SUMMARY OF SAMPLING ACTIVITIES

January 2020 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 7, 2020;

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 tetrachloroethylene (PCE) concentrations for samples collected 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 recovery wells are included as Appendix II.

The PCE, trichloroethylene (TCE), cis-1,2-dichloroethylene (cis-DCE), vinyl chloride (VC) and trichloroethane (TCA) concentrations in the groundwater sample collected from RW-2 were below the respective Applicable or Relevant and Appropriate Requirements (ARARs); concentrations at RW-2 have been below the ARARs for over ten years.

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

Groundwater samples from RW-2 will continue to be collected and analyzed monthly. Groundwater samples from the FRWs will be collected in February after which the monitoring frequency will change to quarterly following enhanced reductive dechlorination injections scheduled for late February.



FUTURE O&M ACTIVITIES

O&M activities scheduled for February 2020 include:

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

MMG:cmm

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, 2020 through January 31, 2020)**

Date	Time	System Changes/Modifications	Personnel
1/7/20		Reset the power failure alarm that affected the FP&T system on 12/25/19. Restarted the FP&T system and checked operation; all equipment was functioning as intended.	SP
		Cleaned FRW-1, 2, 3 and 4 and FP&T effluent flow meter paddle wheels.	SP
		The FSP&T system (RW-2) was operating normally. The RW-2 pump motor speed was at 100% so WSP reduced the target flow rate for the RW-2 pump from 27 gpm to 25 gpm because of iron buildup in the pump, riser pipe and/or lateral pipes to reduce the chance of burning out the pump motor.	SP
1/21/20		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. Left System running normally.	SP
		The RW-2 pump motor speed was at 100% so WSP reduced the target flow rate for the RW-2 pump from 25 to 23 gpm because of iron buildup in the pump, riser pipe and/or lateral pipes to reduce the chance of burning out the pump motor. RW-2 well rehabilitation, pump maintenance/replacement and pipe cleaning is scheduled for the spring.	
		Cleaned FRW-1, 2, 3 and 4 and FP&T effluent flow meter paddle wheels.	SP
1/24/20	9:55AM	Power Failure at RW-6 (not running) and Communication Failure Alarms; systems shut down.	
	3:30 PM	Reset the RW-6 drive, reset the alarms and restarted the systems without issue.	JF
1/27/20	12:00 AM	The drive for RW-2 pump goes into a fault condition but this did not trigger the autodialler; therefore, this condition was not known until the February 4, 2020 O&M site visit. RW-2 is not operating; however, the FRW wells and the rest of the FSP&T system continues to operate.	

Notes:

JF
SP

Jamie Forrester, WSP USA
Scott Philbrick, WSP USA

H:\NABIS\2020\Monthly Rpts\January\Table 1 Maintenance Record Jan 2020.docx

TABLE 2

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

Effluent Water Quality Results

Date Sampled ^{2/}	pH ^{1/}	TDS ^{4/} (mg/l)	PCE (ug/l)	1,1,1-TCA (ug/l)	TCE (ug/l)	1,1-DCA (ug/l)	1,1-DCE (ug/l)	cis- 1,2-DCE (ug/l)	trans- 1,2-DCE (ug/l)	Xylene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Methylene Chloride (ug/l)	Freon 113 (ug/l)	Naphthalene (ug/l)	Chloroform (ug/l)	Total Iron (mg/l)	Dissolved Iron (mg/l)
SPDES Limits	6.5 to 8.5	---	5	5	5	5	5	5	5	5	5	5	5	---	10	7	---	---
3-Jan-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
1-Feb-19	6.9	126	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	0.641	ND<0.278
1-Mar-19	6.9	142	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	6.31	ND<0.278
2-Apr-19	6.9	153	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	1.27	ND<0.278
6-May-19	6.9	175	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	0.374	ND<0.278
4-Jun-19	6.0	139	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	0.620	ND<0.278
2-Jul-19	6.0	145	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	1.82 C,Q,B	ND<0.5	0.766	ND<0.278
1-Aug-19	6.8	168	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	1.30	1.24
5-Sep-19	6.8	172	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	0.291	ND<0.278
3-Oct-19	6.5	165	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	0.612	ND<0.278
4-Nov-19	6.0	102	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	0.536	ND<0.278
5-Dec-19	6.8	129	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	NA	NA
7-Jan-20	6.8	175	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	NA	NA

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

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

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

Notes:

- 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 effluent pH was 7.0 on January 21, 2020. Historic pH measurements from recovery wells indicate that natural background pH concentrations are less than 6.5.
- "Effluent" samples were collected from sample port labeled NP2-10 unless otherwise noted.
- 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.

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	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
	1-Feb-19	0.380	0.360 Q	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-19	0.320	0.200	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-19	0.270 Q	0.320	ND<0.5	0.280	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	0.220	ND<0.5	ND<1	ND<0.5
	6-May-19	0.340	0.270	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-Jun-19	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
	2-Jul-19	0.250	0.210	ND<0.5	0.210	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-19	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
	5-Sep-19	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
	3-Oct-19	ND<0.5	0.220	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-Nov-19	0.400	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
	5-Dec-19	0.270	0.300	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-Jan-20	0.250	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

PCE: Tetrachloroethylene

TCE: Trichloroethylene

TCA: 1,1,1-Trichloroethane

MTBE: Methyl-tertiary-butyl-ether

NS: Not sampled

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.

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

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
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-Feb-19	61.2	0.550	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 February 18 to March 1, 2019										
19-Mar-19	13.4 I	0.770	0.450	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
2-Apr-19	48.9	1.28	2.16	0.260	0.230	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from May 1, 2019 to May 3, 2019										
6-May-19	32.2	0.24	0.250	ND<0.5	ND<0.5	ND<0.5	0.470	0.210	ND<0.5	ND<2
4-Jun-19	11.3 C	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
FRW-1 was off from June 18, 2019 to October 15, 2019										
2-Jul-19	26.4	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
1-Aug-19	9.39 Q	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-Sep-19	21.3	0.360	0.390	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.30 C
3-Oct-19	10.7	1.67	4.47	1.46	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
FRW-1 was off from October 17, 2019 to November 14, 2019										
4-Nov-19	3.55	2.33	5.63	2.99	ND<0.5	ND<0.5	ND<0.5	0.290	ND<0.5	ND<2
5-Dec-19	8.10	0.270	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.40 C
The FRWs were off from December 10, 2019 to December 11, 2019 and December 25 to January 7, 2020										
7-Jan-20	78.0	0.620	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2

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).
- Q = QL-02: The analyte is outside Laboratory Recovery limits due to the analyte behavior using the reference method. The reference method has certain limitations with respect to analytes of this nature.
- 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 (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
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
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								
1-Feb-19	16.2	0.980	1.00	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from February 18 to March 1, 2019								
19-Mar-19	15.2 I	0.950	1.54	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
2-Apr-19	13.8 Q	0.470	0.990	ND<0.5	ND<0.5	0.280	ND<0.5	ND<2
The FRWs were off from May 1, 2019 to May 3, 2019								
6-May-19	3.46	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
4-Jun-19	3.75 C	0.980	1.46	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
2-Jul-19	4.11	0.290	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
1-Aug-19	1.58 Q	ND<0.5	0.800 C	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Sep-19	2.18	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
FRW-2 was not operating from approximately September 10, 2019 to October 15, 2019								
15-Oct-19	5.86 C	0.360	0.670	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.23
4-Nov-19	5.06	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.220	ND<0.5	ND<2
4-Dec-19	3.72	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 December 10, 2019 to December 11, 2019 and December 25 to January 7, 2020								
7-Jan-20	3.92	0.710	1.16	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2

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

1. NYSDDEC 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, other 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).

Q = QL-02: The analyte is outside Laboratory Recovery limits due to the analyte behavior using the reference method. The reference method has certain limitations with respect to analytes of this nature.

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
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												
1-Feb-19	76.4	1.41	3.69	ND<0.5	ND<0.5	0.330	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
FRW-3 was off from February 18 to April 30, 2019												
19-Mar-19 ^{4/}	38.8 I	1.03	3.93	ND<0.5	ND<0.5	0.240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
29-Apr-19 ^{4/}	20.2 I	0.550	1.17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.24
The FRWs were off from May 1, 2019 to May 3, 2019												
6-May-19	44.4	1.20	2.82	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.200	0.500	ND<0.5	ND<2
4-Jun-19	32.7 C	0.940	1.55	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
2-Jul-19	19.4	0.900	2.81	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.490	ND<0.5	ND<2
1-Aug-19	10.7 Q	0.620	3.38 C	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.35	ND<0.5	ND<2
5-Sep-19	6.57	0.360	1.64	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
3-Oct-19	5.77	0.300	2.02	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
4-Nov-19	12.2	0.510	1.90	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-19	9.83	0.400	0.830	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.50 C
The FRWs were off from December 10, 2019 to December 11, 2019 and December 25 to January 7, 2020												
7-Jan-20	55.70	2.27	4.68	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.28

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.

4. The FRW-3 pump is inoperable; therefore, the groundwater sample was collected using low-flow sampling techniques during the March and April 2019 groundwater sampling events.

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).

Q = QL-02: The analyte is outside Laboratory Recovery limits due to the analyte behavior using the reference method. The reference method has certain limitations with respect to analytes of this nature.

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-Propyl benzene

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

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
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	0.32 J	1.0	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	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						
1-Feb-19	1.22	ND<0.5	0.200	ND<0.5	ND<0.5	ND<2
The FRWs were off from February 18 to March 1, 2019						
19-Mar-19	1.02 I	ND<0.5	0.490	ND<0.5	ND<0.5	ND<2
2-Apr-19	1.38 Q	ND<0.5	2.05	ND<0.5	ND<0.5	ND<2
The FRWs were off from May 1, 2019 to May 3, 2019						
6-May-19	0.800	ND<0.5	0.230	ND<0.5	ND<0.5	ND<2
4-Jun-19	0.620 C	ND<0.5	1.01	ND<0.5	ND<0.5	ND<2
2-Jul-19	0.480	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
1-Aug-19	0.450 Q	ND<0.5	0.210 C	ND<0.5	ND<0.5	ND<2
5-Sep-19	0.820	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
3-Oct-19	1.07	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
4-Nov-19	1.12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Dec-19	0.400	ND<0.5	ND<0.5	ND<0.5	ND<0.5	279 ^{2/} C
The FRWs were off from December 10, 2019 to December 11, 2019 and December 25 to January 7, 2020						
7-Jan-20	1.41	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.10

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 high acetone concentration detected in FRW-4 on December 5, 2019 is suspected to be a laboratory contaminant. The concentration of acetone from the groundwater sample collected from FRW-4 on Jan. 7, 2020, was 1.10 ug/L.
 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).
- Q = QL-02: The analyte is outside Laboratory Recovery limits due to the analyte behavior using the reference method. The reference method has certain limitations with respect to analytes of this nature.
- 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
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
AQ041619:1300NP4-1	4/16/2019	13:00	0.0056	0.0047	0.0011	ND	0.0010	ND	ND	ND	ND	0.0047	0.0008	ND	ND	0.03
AQ071919:1055NP4-1	7/19/2019	10:55	0.0290	0.0074	ND	ND	0.0006	ND	0.0079	0.0050	0.0017	0.0017	0.0420	0.0019	ND	0.17
AQ101519:0812NP4-1	10/15/2019	8:12	ND	ND	ND	ND	ND	ND	0.0390	0.0041	0.0014	ND	ND	0.0013	ND	0.09
AQ012120NP4-1	1/21/2020		0.0290	0.0036	0.0085	ND	0.0022	ND	0.0009	ND	ND	0.0015	0.0011	ND	ND	1.09

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
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
AQ041619:1305:NP4-3	4/16/2019	13:05	0.0031	ND	0.0009	ND	0.0030	ND	0.0210	0.0120	0.0047	0.0011	0.0045	0.0035	ND	0.10
AQ071919:1100NP4-3	7/19/2019	11:00	ND	ND	ND	ND	0.0011	ND	0.0032	0.0013	0.0006	ND	0.0037	ND	ND	0.05
AQ101519:0814NP4-3	10/15/2019	8:14	ND	ND	0.0013	ND	0.0029	ND	0.0420	0.0120	0.0040	0.0009	0.0036	0.0040	0.0013	0.13
AQ012120NP4-3	1/21/2020		ND	ND	ND	ND	0.0012	ND	ND	ND	ND	ND	0.0027	ND	ND	0.07

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

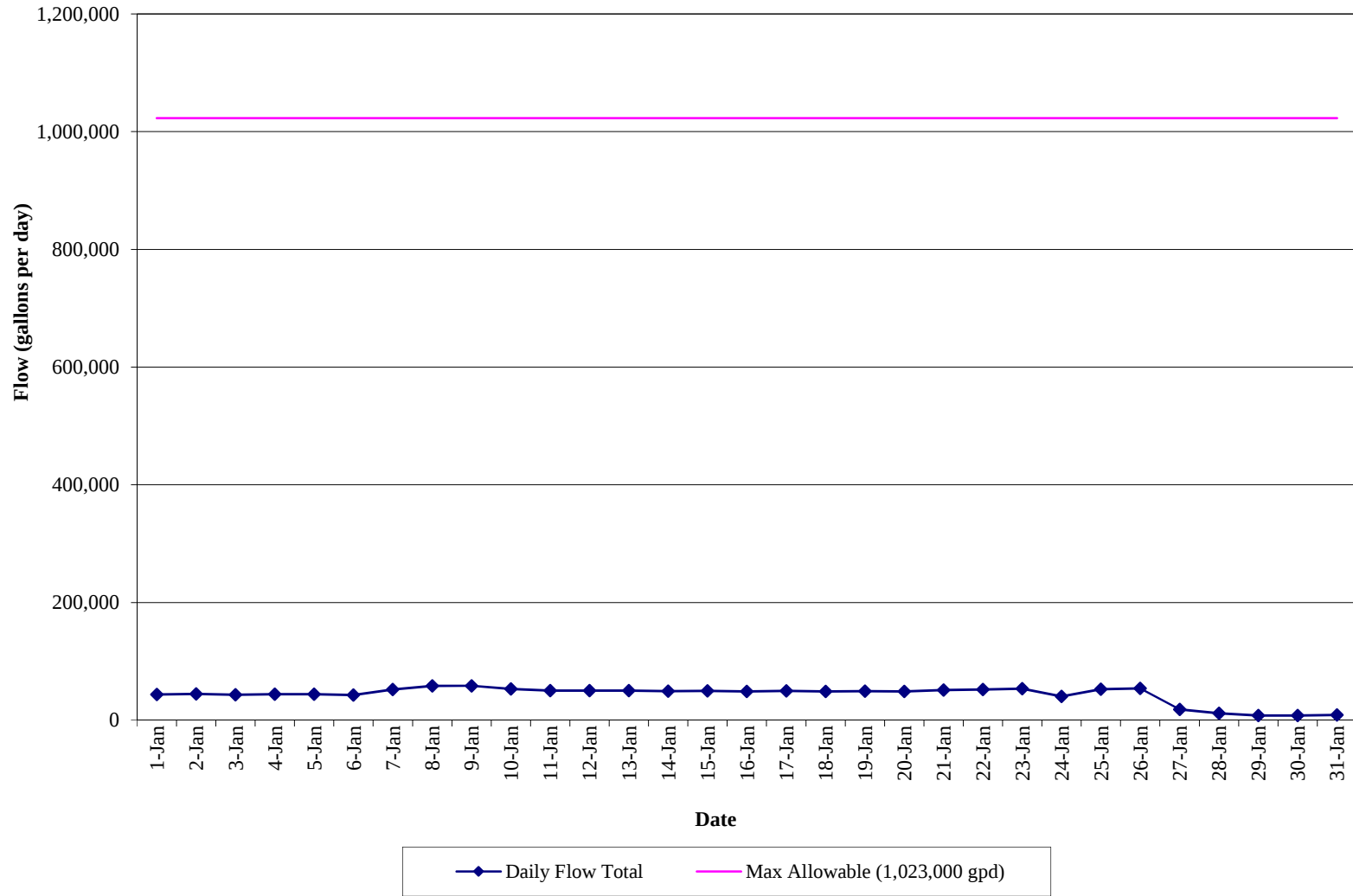
B - Method blank contamination, the associated method blank contains the target analyte at a reportable level.

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

GRAPHS

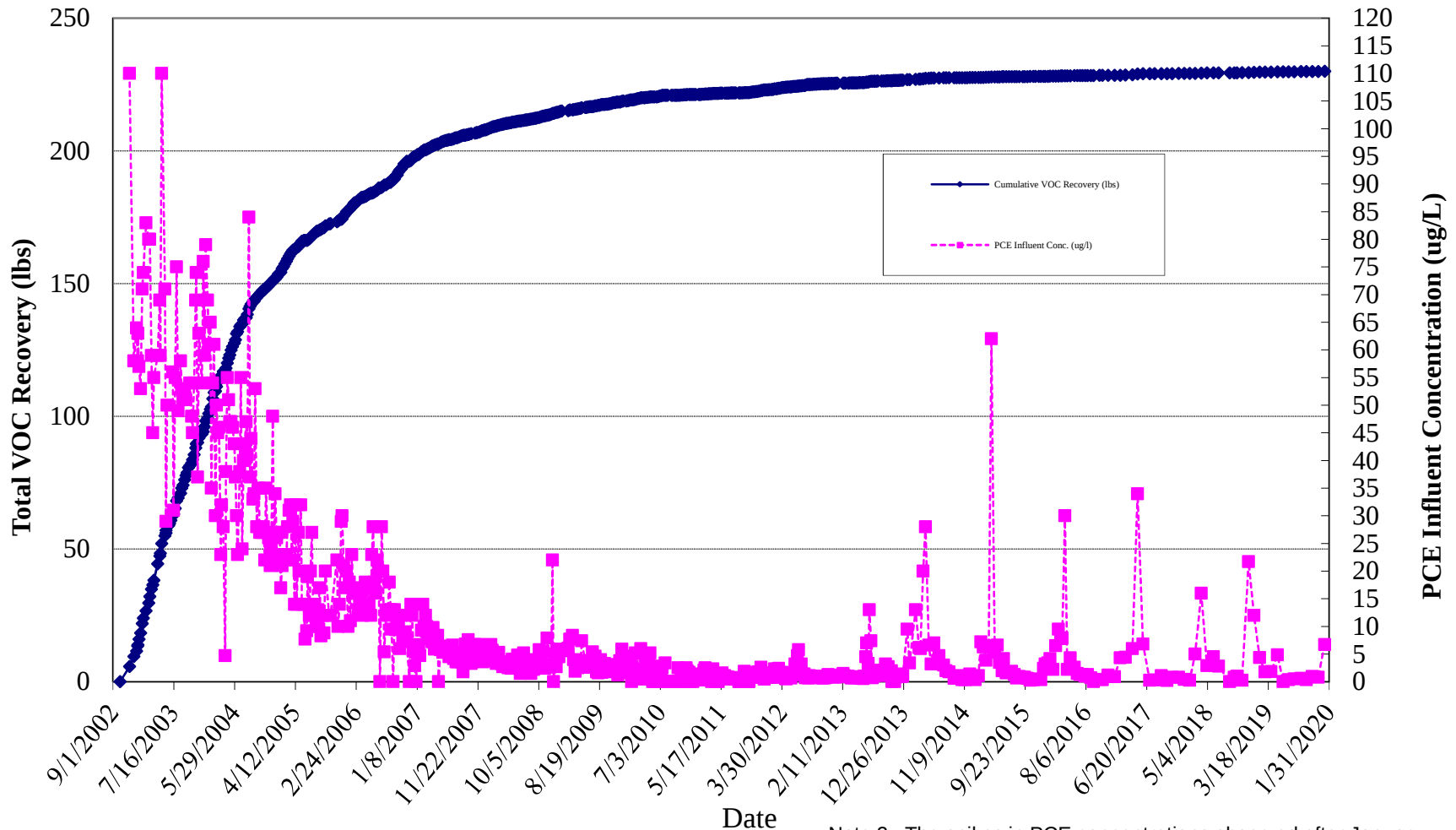
GRAPH 1
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

Effluent Flow Data
(January 1, 2020 to January 31, 2020)



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

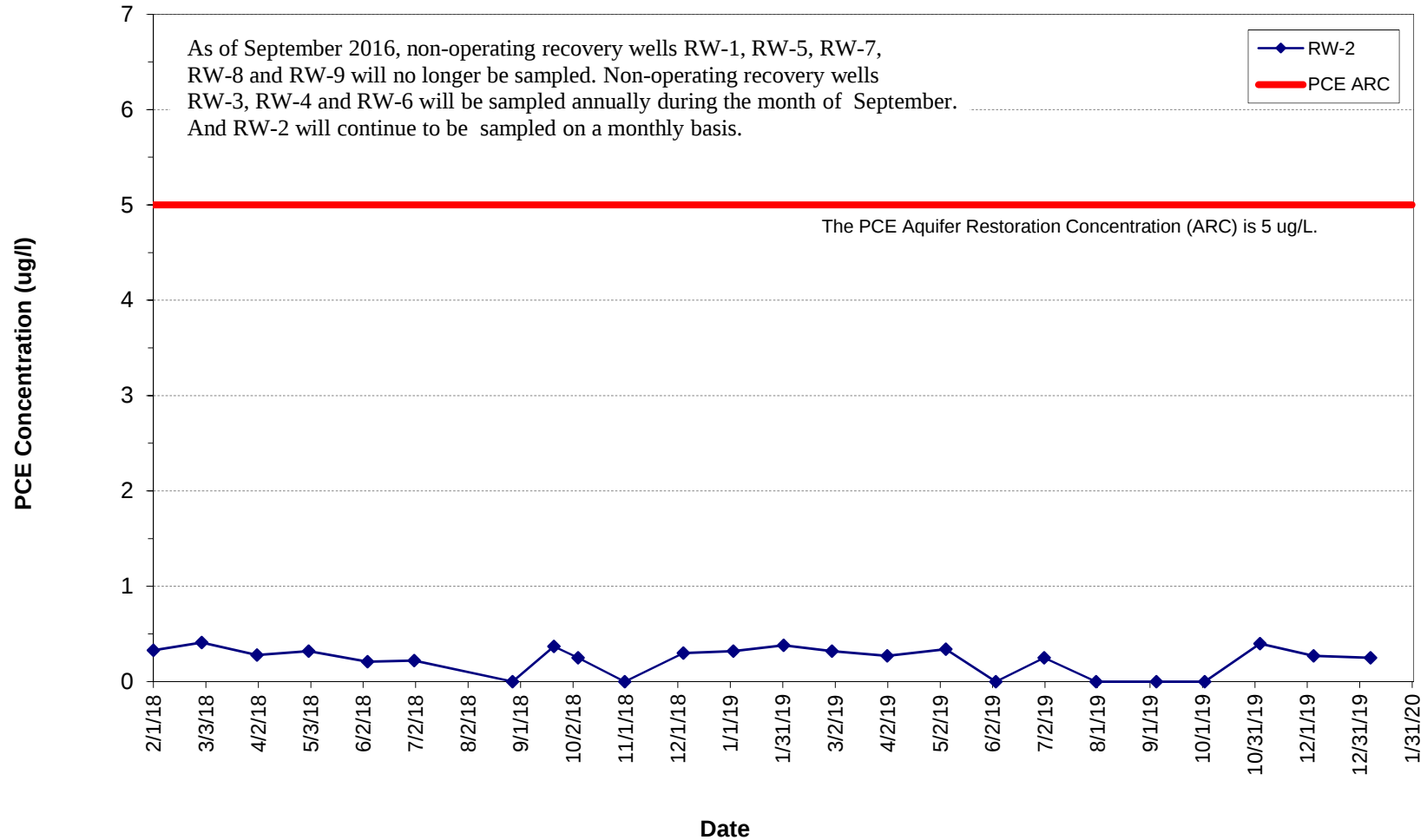


Note 1 : After September 22, 2008, the water recovered from the FP&T System is included in the results shown in this graph.

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.

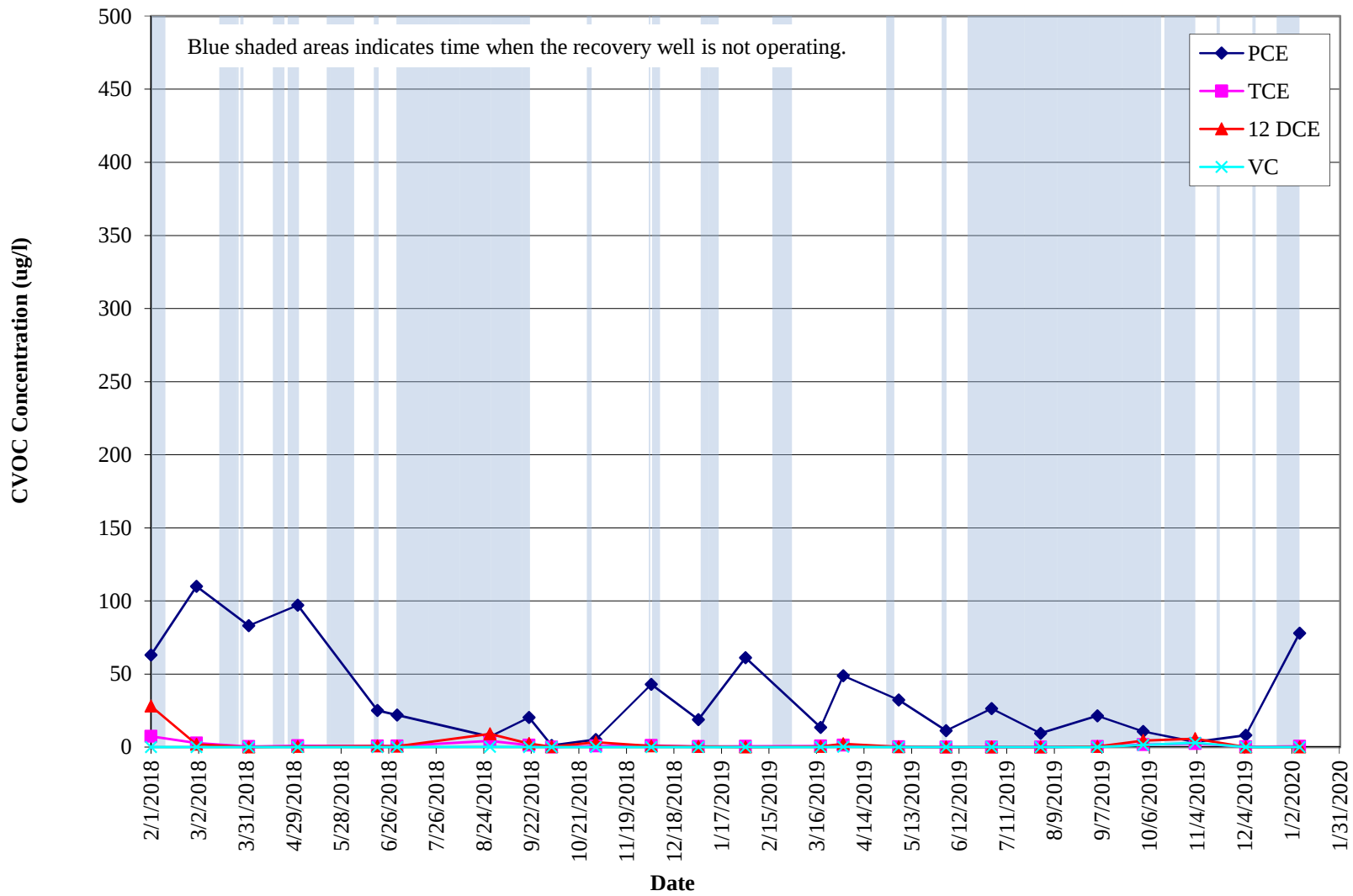
GRAPH 3 **GROUNDWATER REMEDIAL ACTION** **ROWE INDUSTRIES SUPERFUND SITE** **SAG HARBOR, NEW YORK**

FSP&T Recovery Well PCE Concentration



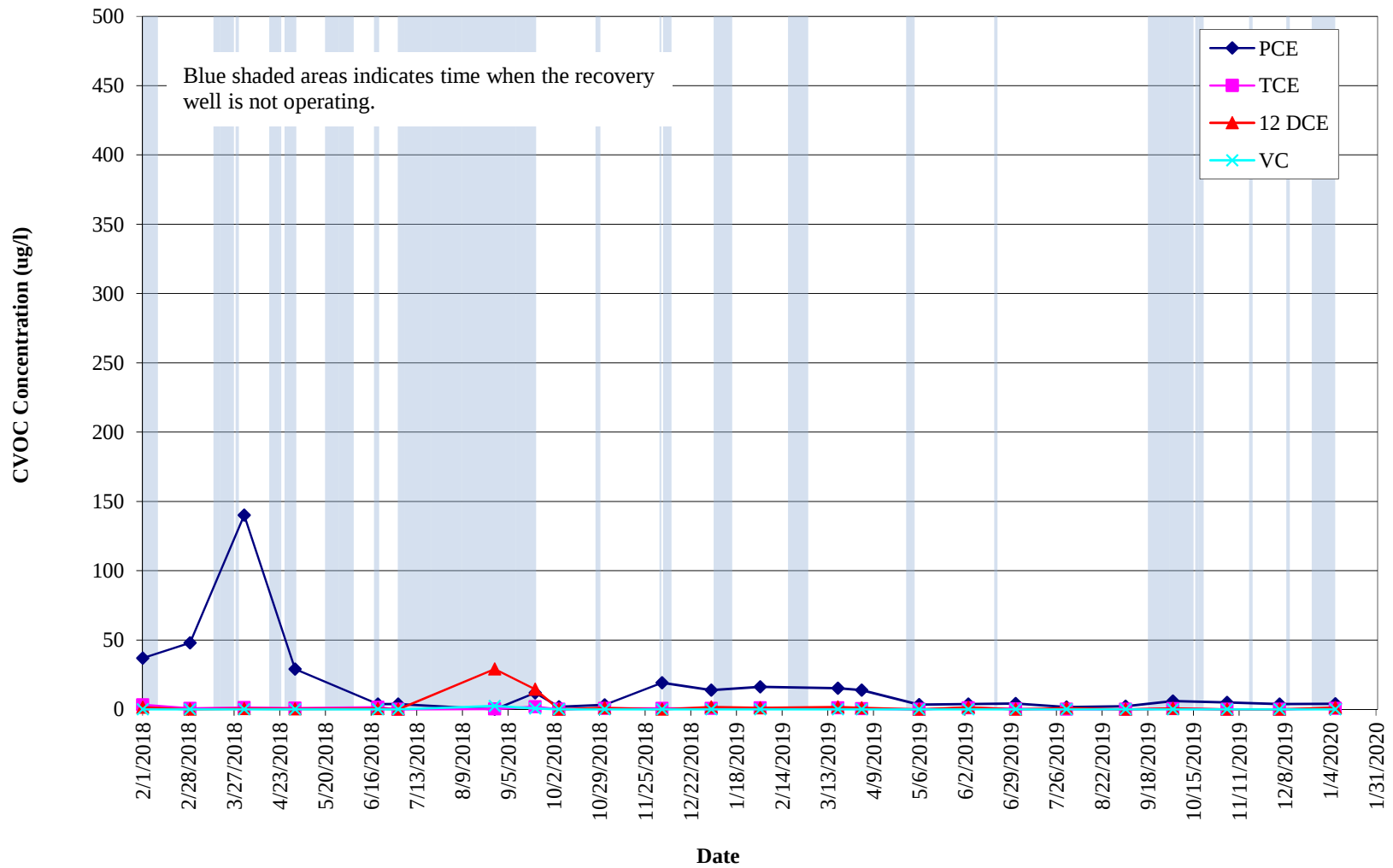
GRAPH 4
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-1



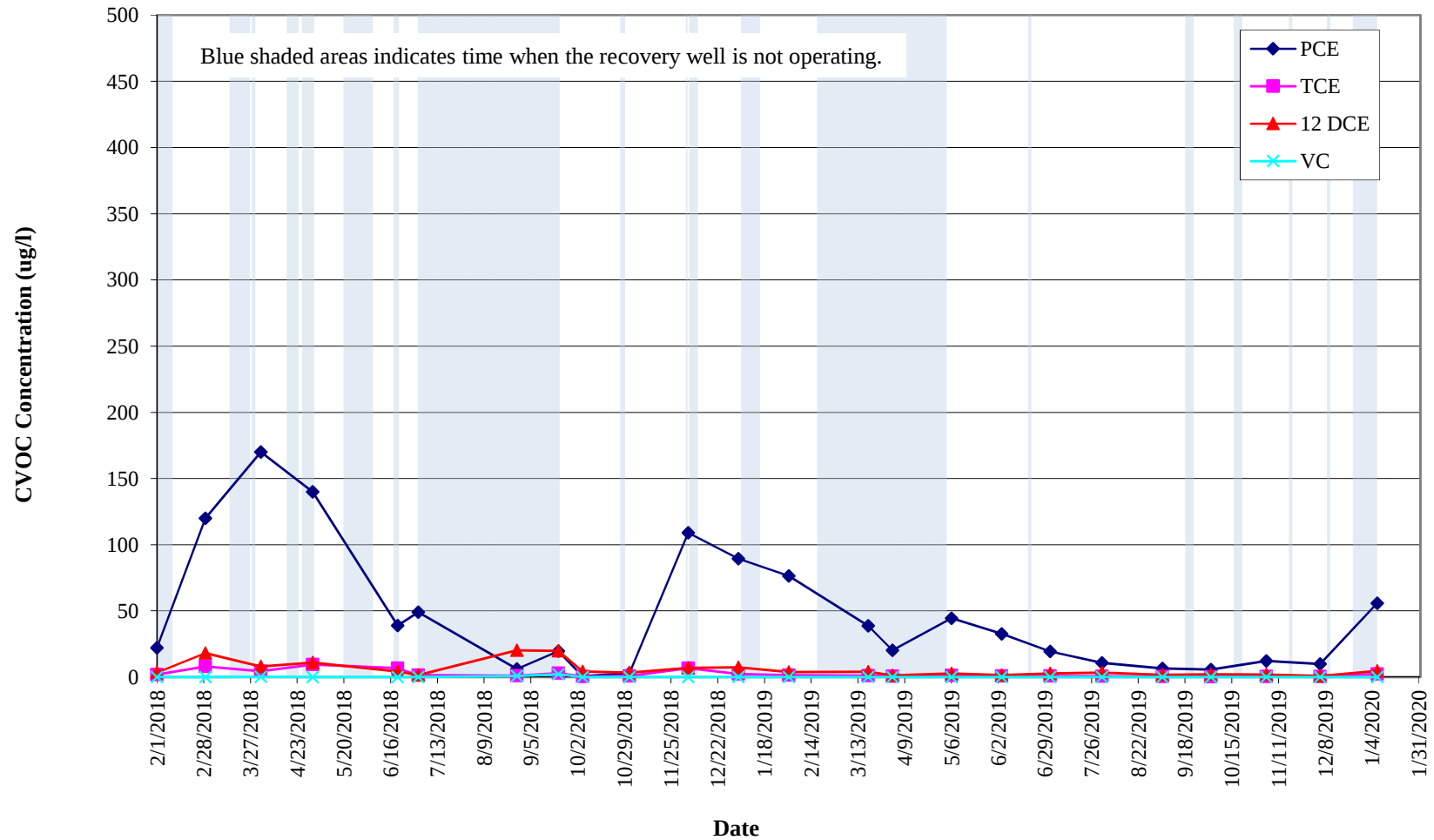
GRAPH 5
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-2



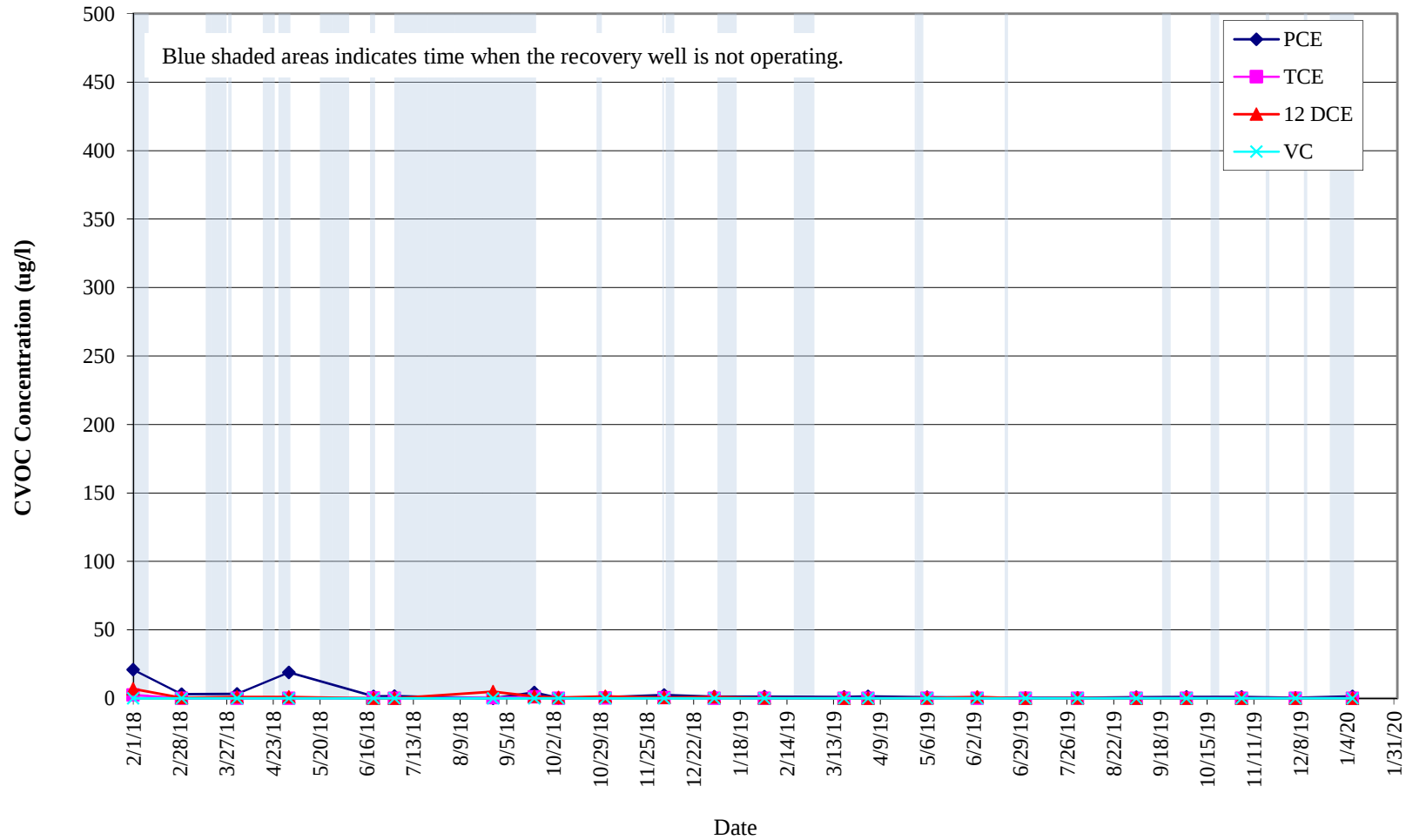
GRAPH 6
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-3

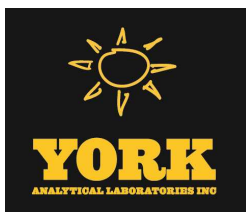


GRAPH 7
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-4



APPENDIX I
JANUARY 2020 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: 01/13/2020
Client Project ID: 31401451.000 Task 01.00
York Project (SDG) No.: 20A0182

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

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 01/13/2020
Client Project ID: 31401451.000 Task 01.00
York Project (SDG) No.: 20A0182

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 07, 2020 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>
20A0182-01	WQ010720: 1015 NP2-6	Water	01/07/2020	01/07/2020
20A0182-02	WQ010720: 1025 NP2-10	Water	01/07/2020	01/07/2020

General Notes for York Project (SDG) No.: 20A0182

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: 01/13/2020





Sample Information

Client Sample ID: WQ010720: 1015 NP2-6

York Sample ID: 20A0182-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0182

31401451.000 Task 01.00

Water

January 7, 2020 10:15 am

01/07/2020

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	01/08/2020 06:35	01/09/2020 17:46	LLJ
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	01/08/2020 06:35	01/09/2020 17:46	LLJ
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	01/08/2020 06:35	01/09/2020 17:46	LLJ
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	01/08/2020 06:35	01/09/2020 17:46	LLJ
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	01/08/2020 06:35	01/09/2020 17:46	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
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	01/08/2020 06:35	01/09/2020 17:46	LLJ
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	01/08/2020 06:35	01/09/2020 17:46	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
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	01/08/2020 06:35	01/09/2020 17:46	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ



Sample Information

Client Sample ID: WQ010720: 1015 NP2-6

York Sample ID: 20A0182-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0182

31401451.000 Task 01.00

Water

January 7, 2020 10:15 am

01/07/2020

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	01/08/2020 06:35	01/09/2020 17:46	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
156-59-2	cis-1,2-Dichloroethylene	0.270		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
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	01/08/2020 06:35	01/09/2020 17:46	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ



Sample Information

Client Sample ID: WQ010720: 1015 NP2-6

York Sample ID: 20A0182-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0182

31401451.000 Task 01.00

Water

January 7, 2020 10:15 am

01/07/2020

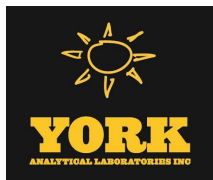
Volatile Organics, 8260 List - Low Level

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	01/08/2020 06:35	01/09/2020 17:46	LLJ
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
127-18-4	Tetrachloroethylene	6.73		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
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	01/08/2020 06:35	01/09/2020 17:46	LLJ
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	01/08/2020 06:35	01/09/2020 17:46	LLJ
79-01-6	Trichloroethylene	0.390		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 17:46	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	103 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	95.2 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	91.2 %	79-122								



Sample Information

Client Sample ID: WQ010720: 1025 NP2-10

York Sample ID: 20A0182-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0182

31401451.000 Task 01.00

Water

January 7, 2020 10:25 am

01/07/2020

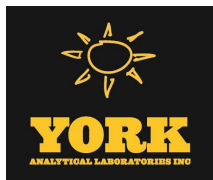
Volatile Organics, 8260 List - Low Level

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	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ



Sample Information

Client Sample ID: WQ010720: 1025 NP2-10

York Sample ID: 20A0182-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0182

31401451.000 Task 01.00

Water

January 7, 2020 10:25 am

01/07/2020

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	01/08/2020 06:35	01/09/2020 18:13	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ



Sample Information

Client Sample ID: WQ010720: 1025 NP2-10

York Sample ID: 20A0182-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0182

31401451.000 Task 01.00

Water

January 7, 2020 10:25 am

01/07/2020

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	01/08/2020 06:35	01/09/2020 18:13	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ
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	01/08/2020 06:35	01/09/2020 18:13	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 18:13	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	99.3 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	97.6 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	91.9 %	79-122								

Total Dissolved Solids

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: WQ010720: 1025 NP2-10

York Sample ID: 20A0182-02

York Project (SDG) No.

20A0182

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

January 7, 2020 10:25 am

Date Received

01/07/2020

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	175		mg/L	10.0	1	SM 2540C	01/08/2020 19:25	01/09/2020 23:40	AA
Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP										



Analytical Batch Summary

Batch ID: BA00146

Preparation Method: EPA 5030B

Prepared By: TMP

YORK Sample ID	Client Sample ID	Preparation Date
20A0182-01	WQ010720: 1015 NP2-6	01/08/20
20A0182-02	WQ010720: 1025 NP2-10	01/08/20
BA00146-BLK1	Blank	01/09/20
BA00146-BS1	LCS	01/09/20
BA00146-BSD1	LCS Dup	01/09/20

Batch ID: BA00310

Preparation Method: % Solids Prep

Prepared By: AA

YORK Sample ID	Client Sample ID	Preparation Date
20A0182-02	WQ010720: 1025 NP2-10	01/08/20
BA00310-BLK1	Blank	01/08/20



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
Batch BA00146 - EPA 5030B											
Blank (BA00146-BLK1)										Prepared & Analyzed: 01/09/2020	
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	"								



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 BA00146 - EPA 5030B											
Blank (BA00146-BLK1)											
Prepared & Analyzed: 01/09/2020											
n-Propylbenzene	ND	0.500	ug/L								
o-Xylene	ND	0.500	"								
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	9.98		"	10.0		99.8	69-130				
Surrogate: SURR: Toluene-d8	9.65		"	10.0		96.5	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.47		"	10.0		94.7	79-122				
LCS (BA00146-BS1)											
Prepared & Analyzed: 01/09/2020											
1,1,1,2-Tetrachloroethane	11.5		ug/L	10.0		115	82-126				
1,1,1-Trichloroethane	11.7		"	10.0		117	78-136				
1,1,2,2-Tetrachloroethane	10.8		"	10.0		108	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	13.7		"	10.0		137	54-165				
1,1,2-Trichloroethane	10.2		"	10.0		102	82-123				
1,1-Dichloroethane	10.7		"	10.0		107	82-129				
1,1-Dichloroethylene	11.4		"	10.0		114	68-138				
1,1-Dichloropropylene	11.3		"	10.0		113	83-133				
1,2,3-Trichlorobenzene	8.98		"	10.0		89.8	76-136				
1,2,3-Trichloropropane	11.4		"	10.0		114	77-128				
1,2,4-Trichlorobenzene	10.1		"	10.0		101	76-137				
1,2,4-Trimethylbenzene	11.5		"	10.0		115	82-132				
1,2-Dibromo-3-chloropropane	9.48		"	10.0		94.8	45-147				
1,2-Dibromoethane	10.7		"	10.0		107	83-124				
1,2-Dichlorobenzene	11.5		"	10.0		115	79-123				
1,2-Dichloroethane	11.0		"	10.0		110	73-132				
1,2-Dichloropropane	10.0		"	10.0		100	78-126				
1,3,5-Trimethylbenzene	11.0		"	10.0		110	80-131				
1,3-Dichlorobenzene	11.4		"	10.0		114	86-122				
1,3-Dichloropropane	10.5		"	10.0		105	81-125				
1,4-Dichlorobenzene	11.3		"	10.0		113	85-124				
2,2-Dichloropropane	10.2		"	10.0		102	56-150				
2-Chlorotoluene	10.7		"	10.0		107	79-130				
2-Hexanone	8.81		"	10.0		88.1	51-146				
4-Chlorotoluene	10.8		"	10.0		108	79-128				
Acetone	8.47		"	10.0		84.7	14-150				
Benzene	11.0		"	10.0		110	85-126				
Bromobenzene	10.4		"	10.0		104	78-129				
Bromochloromethane	9.45		"	10.0		94.5	77-128				
Bromodichloromethane	10.4		"	10.0		104	79-128				



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 BA00146 - EPA 5030B

LCS (BA00146-BS1)

Prepared & Analyzed: 01/09/2020

Bromoform	10.8		ug/L	10.0		108	78-133				
Bromomethane	3.14		"	10.0		31.4	43-168	Low Bias			
Carbon tetrachloride	11.2		"	10.0		112	77-141				
Chlorobenzene	10.9		"	10.0		109	88-120				
Chloroethane	7.60		"	10.0		76.0	65-136				
Chloroform	11.2		"	10.0		112	82-128				
Chloromethane	3.31		"	10.0		33.1	43-155	Low Bias			
cis-1,2-Dichloroethylene	10.9		"	10.0		109	83-129				
cis-1,3-Dichloropropylene	9.69		"	10.0		96.9	80-131				
Dibromochloromethane	10.6		"	10.0		106	80-130				
Dibromomethane	10.8		"	10.0		108	72-134				
Dichlorodifluoromethane	12.0		"	10.0		120	44-144				
Ethyl Benzene	10.8		"	10.0		108	80-131				
Hexachlorobutadiene	10.5		"	10.0		105	67-146				
Isopropylbenzene	10.8		"	10.0		108	76-140				
Methyl tert-butyl ether (MTBE)	10.8		"	10.0		108	76-135				
Methylene chloride	9.69		"	10.0		96.9	55-137				
Naphthalene	9.36		"	10.0		93.6	70-147				
n-Butylbenzene	11.0		"	10.0		110	79-132				
n-Propylbenzene	10.6		"	10.0		106	78-133				
o-Xylene	10.7		"	10.0		107	78-130				
p- & m- Xylenes	21.8		"	20.0		109	77-133				
p-Isopropyltoluene	11.5		"	10.0		115	81-136				
sec-Butylbenzene	11.3		"	10.0		113	79-137				
Styrene	11.6		"	10.0		116	67-132				
tert-Butylbenzene	9.66		"	10.0		96.6	77-138				
Tetrachloroethylene	10.1		"	10.0		101	82-131				
Toluene	10.5		"	10.0		105	80-127				
trans-1,2-Dichloroethylene	11.6		"	10.0		116	80-132				
trans-1,3-Dichloropropylene	9.66		"	10.0		96.6	78-131				
Trichloroethylene	10.7		"	10.0		107	82-128				
Trichlorofluoromethane	13.0		"	10.0		130	67-139				
Vinyl Chloride	6.82		"	10.0		68.2	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.75		"	10.0		97.5	69-130				
Surrogate: SURR: Toluene-d8	9.63		"	10.0		96.3	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.35		"	10.0		93.5	79-122				



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 BA00146 - EPA 5030B											
LCS Dup (BA00146-BSD1)						Prepared & Analyzed: 01/09/2020					
1,1,1,2-Tetrachloroethane	11.5		ug/L	10.0		115	82-126		0.261	30	
1,1,1-Trichloroethane	10.9		"	10.0		109	78-136		7.19	30	
1,1,2,2-Tetrachloroethane	10.8		"	10.0		108	76-129		0.00	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.8		"	10.0		128	54-165		6.34	30	
1,1,2-Trichloroethane	10.8		"	10.0		108	82-123		5.04	30	
1,1-Dichloroethane	9.88		"	10.0		98.8	82-129		8.06	30	
1,1-Dichloroethylene	10.7		"	10.0		107	68-138		6.77	30	
1,1-Dichloropropylene	10.5		"	10.0		105	83-133		7.90	30	
1,2,3-Trichlorobenzene	9.43		"	10.0		94.3	76-136		4.89	30	
1,2,3-Trichloropropane	11.6		"	10.0		116	77-128		1.04	30	
1,2,4-Trichlorobenzene	10.1		"	10.0		101	76-137		0.197	30	
1,2,4-Trimethylbenzene	10.9		"	10.0		109	82-132		5.28	30	
1,2-Dibromo-3-chloropropane	9.41		"	10.0		94.1	45-147		0.741	30	
1,2-Dibromoethane	11.0		"	10.0		110	83-124		3.13	30	
1,2-Dichlorobenzene	11.1		"	10.0		111	79-123		3.28	30	
1,2-Dichloroethane	10.6		"	10.0		106	73-132		3.90	30	
1,2-Dichloropropane	9.71		"	10.0		97.1	78-126		3.24	30	
1,3,5-Trimethylbenzene	10.8		"	10.0		108	80-131		2.20	30	
1,3-Dichlorobenzene	11.0		"	10.0		110	86-122		3.92	30	
1,3-Dichloropropane	11.1		"	10.0		111	81-125		5.27	30	
1,4-Dichlorobenzene	10.9		"	10.0		109	85-124		3.15	30	
2,2-Dichloropropane	9.74		"	10.0		97.4	56-150		4.71	30	
2-Chlorotoluene	9.90		"	10.0		99.0	79-130		7.86	30	
2-Hexanone	8.99		"	10.0		89.9	51-146		2.02	30	
4-Chlorotoluene	10.3		"	10.0		103	79-128		4.81	30	
Acetone	8.16		"	10.0		81.6	14-150		3.73	30	
Benzene	10.6		"	10.0		106	85-126		3.25	30	
Bromobenzene	10.0		"	10.0		100	78-129		4.31	30	
Bromochloromethane	9.17		"	10.0		91.7	77-128		3.01	30	
Bromodichloromethane	10.5		"	10.0		105	79-128		0.768	30	
Bromoform	10.7		"	10.0		107	78-133		0.930	30	
Bromomethane	3.07		"	10.0		30.7	43-168	Low Bias	2.25	30	
Carbon tetrachloride	10.7		"	10.0		107	77-141		4.11	30	
Chlorobenzene	10.9		"	10.0		109	88-120		0.275	30	
Chloroethane	6.96		"	10.0		69.6	65-136		8.79	30	
Chloroform	10.7		"	10.0		107	82-128		4.56	30	
Chloromethane	3.54		"	10.0		35.4	43-155	Low Bias	6.72	30	
cis-1,2-Dichloroethylene	10.1		"	10.0		101	83-129		8.29	30	
cis-1,3-Dichloropropylene	10.3		"	10.0		103	80-131		5.81	30	
Dibromochloromethane	11.1		"	10.0		111	80-130		4.51	30	
Dibromomethane	11.1		"	10.0		111	72-134		3.02	30	
Dichlorodifluoromethane	11.1		"	10.0		111	44-144		7.35	30	
Ethyl Benzene	10.7		"	10.0		107	80-131		1.49	30	
Hexachlorobutadiene	10.8		"	10.0		108	67-146		2.53	30	
Isopropylbenzene	10.0		"	10.0		100	76-140		7.59	30	
Methyl tert-butyl ether (MTBE)	10.9		"	10.0		109	76-135		0.736	30	
Methylene chloride	9.29		"	10.0		92.9	55-137		4.21	30	
Naphthalene	9.73		"	10.0		97.3	70-147		3.88	30	
n-Butylbenzene	10.4		"	10.0		104	79-132		5.34	30	
n-Propylbenzene	10.0		"	10.0		100	78-133		5.34	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

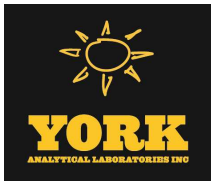
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BA00146 - EPA 5030B

LCS Dup (BA00146-BSD1)

Prepared & Analyzed: 01/09/2020

o-Xylene	10.7		ug/L	10.0		107	78-130		0.187	30	
p- & m- Xylenes	21.0		"	20.0		105	77-133		3.69	30	
p-Isopropyltoluene	11.0		"	10.0		110	81-136		4.89	30	
sec-Butylbenzene	10.9		"	10.0		109	79-137		4.24	30	
Styrene	11.4		"	10.0		114	67-132		2.44	30	
tert-Butylbenzene	9.27		"	10.0		92.7	77-138		4.12	30	
Tetrachloroethylene	9.95		"	10.0		99.5	82-131		1.89	30	
Toluene	10.4		"	10.0		104	80-127		0.766	30	
trans-1,2-Dichloroethylene	10.7		"	10.0		107	80-132		7.70	30	
trans-1,3-Dichloropropylene	9.92		"	10.0		99.2	78-131		2.66	30	
Trichloroethylene	10.4		"	10.0		104	82-128		3.51	30	
Trichlorofluoromethane	12.2		"	10.0		122	67-139		6.34	30	
Vinyl Chloride	6.61		"	10.0		66.1	58-145		3.13	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	10.0		"	10.0		100	69-130				
Surrogate: SURR: Toluene-d8	9.93		"	10.0		99.3	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.57		"	10.0		95.7	79-122				



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 BA00310 - % Solids Prep

Blank (BA00310-BLK1)

Prepared: 01/08/2020 Analyzed: 01/09/2020

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

Lab ID	Client Sample ID	Volatile Sample Container
20A0182-01	WQ010720: 1015 NP2-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
20A0182-02	WQ010720: 1025 NP2-10	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

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

Definitions and Other Explanations

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

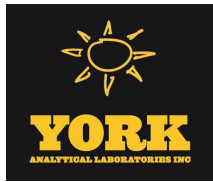
If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

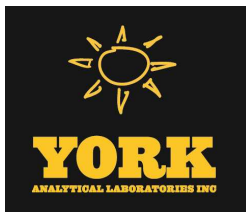
Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



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



APPENDIX II
JANUARY 2020 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: 01/13/2020
Client Project ID: 31401451.000 Task 01.00
York Project (SDG) No.: 20A0183

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

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 01/13/2020
Client Project ID: 31401451.000 Task 01.00
York Project (SDG) No.: 20A0183

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 07, 2020 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>
20A0183-01	WQ010720:0945 FRW-1	Water	01/07/2020	01/07/2020
20A0183-02	WQ010720:0950 FRW-2	Water	01/07/2020	01/07/2020
20A0183-03	WQ010720:0955 FRW-3	Water	01/07/2020	01/07/2020
20A0183-04	WQ010720:1000 FRW-4	Water	01/07/2020	01/07/2020
20A0183-05	WQ010720:1035 NP1-1-2	Water	01/07/2020	01/07/2020

General Notes for York Project (SDG) No.: 20A0183

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.

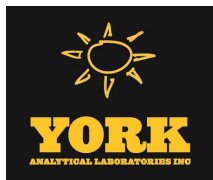
Approved By:



Benjamin Gulizia
Laboratory Director

Date: 01/13/2020





Sample Information

Client Sample ID: WQ010720:0945 FRW-1

York Sample ID: 20A0183-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 9:45 am

01/07/2020

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	01/08/2020 06:35	01/09/2020 18:39	LLJ
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	01/08/2020 06:35	01/09/2020 18:39	LLJ
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	01/08/2020 06:35	01/09/2020 18:39	LLJ
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	01/08/2020 06:35	01/09/2020 18:39	LLJ
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	01/08/2020 06:35	01/09/2020 18:39	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
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	01/08/2020 06:35	01/09/2020 18:39	LLJ
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	01/08/2020 06:35	01/09/2020 18:39	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
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	01/08/2020 06:35	01/09/2020 18:39	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ



Sample Information

Client Sample ID: WQ010720:0945 FRW-1

York Sample ID: 20A0183-01

York Project (SDG) No.

Client Project ID

Matrix

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Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 9:45 am

01/07/2020

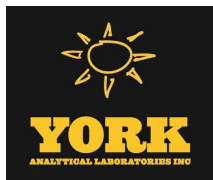
Volatile Organics, 8260 List - Low Level

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	01/08/2020 06:35	01/09/2020 18:39	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
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	01/08/2020 06:35	01/09/2020 18:39	LLJ
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	01/08/2020 06:35	01/09/2020 18:39	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ



Sample Information

Client Sample ID: WQ010720:0945 FRW-1

York Sample ID: 20A0183-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 9:45 am

01/07/2020

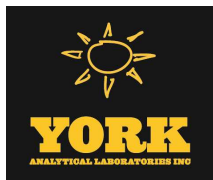
Volatile Organics, 8260 List - Low Level

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	01/08/2020 06:35	01/09/2020 18:39	LLJ
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
127-18-4	Tetrachloroethylene	78.0		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
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	01/08/2020 06:35	01/09/2020 18:39	LLJ
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	01/08/2020 06:35	01/09/2020 18:39	LLJ
79-01-6	Trichloroethylene	0.620		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 18:39	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	101 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	97.4 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	92.0 %	79-122								



Sample Information

Client Sample ID: WQ010720:0950 FRW-2

York Sample ID: 20A0183-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 9:50 am

01/07/2020

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	01/08/2020 06:35	01/09/2020 19:06	LLJ
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	01/08/2020 06:35	01/09/2020 19:06	LLJ
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	01/08/2020 06:35	01/09/2020 19:06	LLJ
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	01/08/2020 06:35	01/09/2020 19:06	LLJ
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	01/08/2020 06:35	01/09/2020 19:06	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
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	01/08/2020 06:35	01/09/2020 19:06	LLJ
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	01/08/2020 06:35	01/09/2020 19:06	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
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	01/08/2020 06:35	01/09/2020 19:06	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ



Sample Information

Client Sample ID: WQ010720:0950 FRW-2

York Sample ID: 20A0183-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 9:50 am

01/07/2020

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	01/08/2020 06:35	01/09/2020 19:06	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
156-59-2	cis-1,2-Dichloroethylene	1.16		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
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	01/08/2020 06:35	01/09/2020 19:06	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
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	01/08/2020 06:35	01/09/2020 19:06	LLJ



Sample Information

Client Sample ID: WQ010720:0950 FRW-2

York Sample ID: 20A0183-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 9:50 am

01/07/2020

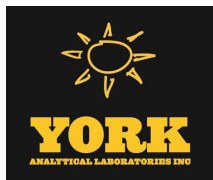
Volatile Organics, 8260 List - Low Level

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	01/08/2020 06:35	01/09/2020 19:06	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
127-18-4	Tetrachloroethylene	3.92		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
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	01/08/2020 06:35	01/09/2020 19:06	LLJ
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	01/08/2020 06:35	01/09/2020 19:06	LLJ
79-01-6	Trichloroethylene	0.710		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 19:06	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	104 %	69-130								
2037-26-5	Surrogate: SURRE: Toluene-d8	99.0 %	81-117								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	93.8 %	79-122								



Sample Information

Client Sample ID: WQ010720:0955 FRW-3

York Sample ID: 20A0183-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 9:55 am

01/07/2020

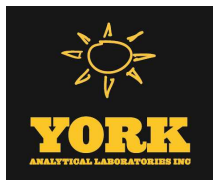
Volatile Organics, 8260 List - Low Level

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	01/08/2020 06:35	01/09/2020 19:33	LLJ
71-55-6	1,1,1-Trichloroethane	0.300		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
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	01/08/2020 06:35	01/09/2020 19:33	LLJ
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	01/08/2020 06:35	01/09/2020 19:33	LLJ
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	01/08/2020 06:35	01/09/2020 19:33	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
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	01/08/2020 06:35	01/09/2020 19:33	LLJ
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	01/08/2020 06:35	01/09/2020 19:33	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
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	01/08/2020 06:35	01/09/2020 19:33	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ



Sample Information

Client Sample ID: WQ010720:0955 FRW-3

York Sample ID: 20A0183-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 9:55 am

01/07/2020

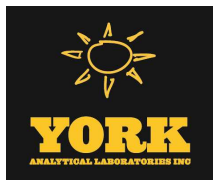
Volatile Organics, 8260 List - Low Level

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	01/08/2020 06:35	01/09/2020 19:33	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
67-64-1	Acetone	1.28		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
156-59-2	cis-1,2-Dichloroethylene	4.68		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
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	01/08/2020 06:35	01/09/2020 19:33	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
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	01/08/2020 06:35	01/09/2020 19:33	LLJ



Sample Information

Client Sample ID: WQ010720:0955 FRW-3

York Sample ID: 20A0183-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 9:55 am

01/07/2020

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	01/08/2020 06:35	01/09/2020 19:33	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
127-18-4	Tetrachloroethylene	55.7		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
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	01/08/2020 06:35	01/09/2020 19:33	LLJ
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	01/08/2020 06:35	01/09/2020 19:33	LLJ
79-01-6	Trichloroethylene	2.27		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 19:33	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	98.8 %	69-130								
2037-26-5	Surrogate: SURRE: Toluene-d8	97.4 %	81-117								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	92.7 %	79-122								



Sample Information

Client Sample ID: WQ010720:1000 FRW-4

York Sample ID: 20A0183-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 10:00 am

01/07/2020

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	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ



Sample Information

Client Sample ID: WQ010720:1000 FRW-4

York Sample ID: 20A0183-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 10:00 am

01/07/2020

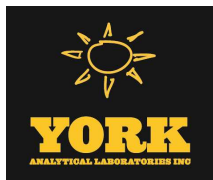
Volatile Organics, 8260 List - Low Level

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	01/08/2020 06:35	01/09/2020 20:00	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
67-64-1	Acetone	1.10		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ



Sample Information

Client Sample ID: WQ010720:1000 FRW-4

York Sample ID: 20A0183-04

York Project (SDG) No.
20A0183

Client Project ID
31401451.000 Task 01.00

Matrix
Water

Collection Date/Time
January 7, 2020 10:00 am

Date Received
01/07/2020

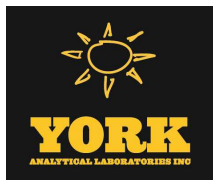
Volatile Organics, 8260 List - Low Level

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	01/08/2020 06:35	01/09/2020 20:00	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
127-18-4	Tetrachloroethylene	1.41		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ
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	01/08/2020 06:35	01/09/2020 20:00	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 20:00	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	101 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	93.8 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	93.1 %	79-122								



Sample Information

Client Sample ID: WQ010720:1035 NP1-1-2

York Sample ID: 20A0183-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 10:35 am

01/07/2020

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	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ



Sample Information

Client Sample ID: WQ010720:1035 NP1-1-2

York Sample ID: 20A0183-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 10:35 am

01/07/2020

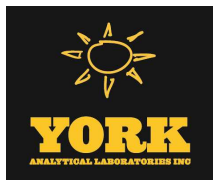
Volatile Organics, 8260 List - Low Level

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	01/08/2020 06:35	01/09/2020 20:27	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ



Sample Information

Client Sample ID: WQ010720:1035 NP1-1-2

York Sample ID: 20A0183-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0183

31401451.000 Task 01.00

Water

January 7, 2020 10:35 am

01/07/2020

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	01/08/2020 06:35	01/09/2020 20:27	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
127-18-4	Tetrachloroethylene	0.250		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ
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	01/08/2020 06:35	01/09/2020 20:27	LLJ
79-01-6	Trichloroethylene	0.380		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/08/2020 06:35	01/09/2020 20:27	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	99.3 %	69-130								
2037-26-5	Surrogate: SURRE: Toluene-d8	97.8 %	81-117								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	95.6 %	79-122								



Analytical Batch Summary

Batch ID: BA00146

Preparation Method: EPA 5030B

Prepared By: TMP

YORK Sample ID	Client Sample ID	Preparation Date
20A0183-01	WQ010720:0945 FRW-1	01/08/20
20A0183-02	WQ010720:0950 FRW-2	01/08/20
20A0183-03	WQ010720:0955 FRW-3	01/08/20
20A0183-04	WQ010720:1000 FRW-4	01/08/20
20A0183-05	WQ010720:1035 NP1-1-2	01/08/20
BA00146-BLK1	Blank	01/09/20
BA00146-BS1	LCS	01/09/20
BA00146-BSD1	LCS Dup	01/09/20



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
Batch BA00146 - EPA 5030B											
Blank (BA00146-BLK1)											
											Prepared & Analyzed: 01/09/2020
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	"								



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 BA00146 - EPA 5030B											
Blank (BA00146-BLK1)											
Prepared & Analyzed: 01/09/2020											
n-Propylbenzene	ND	0.500	ug/L								
o-Xylene	ND	0.500	"								
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	9.98		"	10.0		99.8	69-130				
Surrogate: SURR: Toluene-d8	9.65		"	10.0		96.5	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.47		"	10.0		94.7	79-122				
LCS (BA00146-BS1)											
Prepared & Analyzed: 01/09/2020											
1,1,1,2-Tetrachloroethane	11.5		ug/L	10.0		115	82-126				
1,1,1-Trichloroethane	11.7		"	10.0		117	78-136				
1,1,2,2-Tetrachloroethane	10.8		"	10.0		108	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	13.7		"	10.0		137	54-165				
1,1,2-Trichloroethane	10.2		"	10.0		102	82-123				
1,1-Dichloroethane	10.7		"	10.0		107	82-129				
1,1-Dichloroethylene	11.4		"	10.0		114	68-138				
1,1-Dichloropropylene	11.3		"	10.0		113	83-133				
1,2,3-Trichlorobenzene	8.98		"	10.0		89.8	76-136				
1,2,3-Trichloropropane	11.4		"	10.0		114	77-128				
1,2,4-Trichlorobenzene	10.1		"	10.0		101	76-137				
1,2,4-Trimethylbenzene	11.5		"	10.0		115	82-132				
1,2-Dibromo-3-chloropropane	9.48		"	10.0		94.8	45-147				
1,2-Dibromoethane	10.7		"	10.0		107	83-124				
1,2-Dichlorobenzene	11.5		"	10.0		115	79-123				
1,2-Dichloroethane	11.0		"	10.0		110	73-132				
1,2-Dichloropropane	10.0		"	10.0		100	78-126				
1,3,5-Trimethylbenzene	11.0		"	10.0		110	80-131				
1,3-Dichlorobenzene	11.4		"	10.0		114	86-122				
1,3-Dichloropropane	10.5		"	10.0		105	81-125				
1,4-Dichlorobenzene	11.3		"	10.0		113	85-124				
2,2-Dichloropropane	10.2		"	10.0		102	56-150				
2-Chlorotoluene	10.7		"	10.0		107	79-130				
2-Hexanone	8.81		"	10.0		88.1	51-146				
4-Chlorotoluene	10.8		"	10.0		108	79-128				
Acetone	8.47		"	10.0		84.7	14-150				
Benzene	11.0		"	10.0		110	85-126				
Bromobenzene	10.4		"	10.0		104	78-129				
Bromochloromethane	9.45		"	10.0		94.5	77-128				
Bromodichloromethane	10.4		"	10.0		104	79-128				



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 BA00146 - EPA 5030B

LCS (BA00146-BS1)

Prepared & Analyzed: 01/09/2020

Bromoform	10.8		ug/L	10.0		108	78-133				
Bromomethane	3.14		"	10.0		31.4	43-168	Low Bias			
Carbon tetrachloride	11.2		"	10.0		112	77-141				
Chlorobenzene	10.9		"	10.0		109	88-120				
Chloroethane	7.60		"	10.0		76.0	65-136				
Chloroform	11.2		"	10.0		112	82-128				
Chloromethane	3.31		"	10.0		33.1	43-155	Low Bias			
cis-1,2-Dichloroethylene	10.9		"	10.0		109	83-129				
cis-1,3-Dichloropropylene	9.69		"	10.0		96.9	80-131				
Dibromochloromethane	10.6		"	10.0		106	80-130				
Dibromomethane	10.8		"	10.0		108	72-134				
Dichlorodifluoromethane	12.0		"	10.0		120	44-144				
Ethyl Benzene	10.8		"	10.0		108	80-131				
Hexachlorobutadiene	10.5		"	10.0		105	67-146				
Isopropylbenzene	10.8		"	10.0		108	76-140				
Methyl tert-butyl ether (MTBE)	10.8		"	10.0		108	76-135				
Methylene chloride	9.69		"	10.0		96.9	55-137				
Naphthalene	9.36		"	10.0		93.6	70-147				
n-Butylbenzene	11.0		"	10.0		110	79-132				
n-Propylbenzene	10.6		"	10.0		106	78-133				
o-Xylene	10.7		"	10.0		107	78-130				
p- & m- Xylenes	21.8		"	20.0		109	77-133				
p-Isopropyltoluene	11.5		"	10.0		115	81-136				
sec-Butylbenzene	11.3		"	10.0		113	79-137				
Styrene	11.6		"	10.0		116	67-132				
tert-Butylbenzene	9.66		"	10.0		96.6	77-138				
Tetrachloroethylene	10.1		"	10.0		101	82-131				
Toluene	10.5		"	10.0		105	80-127				
trans-1,2-Dichloroethylene	11.6		"	10.0		116	80-132				
trans-1,3-Dichloropropylene	9.66		"	10.0		96.6	78-131				
Trichloroethylene	10.7		"	10.0		107	82-128				
Trichlorofluoromethane	13.0		"	10.0		130	67-139				
Vinyl Chloride	6.82		"	10.0		68.2	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.75		"	10.0		97.5	69-130				
Surrogate: SURR: Toluene-d8	9.63		"	10.0		96.3	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.35		"	10.0		93.5	79-122				



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 BA00146 - EPA 5030B											
LCS Dup (BA00146-BSD1)						Prepared & Analyzed: 01/09/2020					
1,1,1,2-Tetrachloroethane	11.5		ug/L	10.0		115	82-126		0.261	30	
1,1,1-Trichloroethane	10.9		"	10.0		109	78-136		7.19	30	
1,1,2,2-Tetrachloroethane	10.8		"	10.0		108	76-129		0.00	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.8		"	10.0		128	54-165		6.34	30	
1,1,2-Trichloroethane	10.8		"	10.0		108	82-123		5.04	30	
1,1-Dichloroethane	9.88		"	10.0		98.8	82-129		8.06	30	
1,1-Dichloroethylene	10.7		"	10.0		107	68-138		6.77	30	
1,1-Dichloropropylene	10.5		"	10.0		105	83-133		7.90	30	
1,2,3-Trichlorobenzene	9.43		"	10.0		94.3	76-136		4.89	30	
1,2,3-Trichloropropane	11.6		"	10.0		116	77-128		1.04	30	
1,2,4-Trichlorobenzene	10.1		"	10.0		101	76-137		0.197	30	
1,2,4-Trimethylbenzene	10.9		"	10.0		109	82-132		5.28	30	
1,2-Dibromo-3-chloropropane	9.41		"	10.0		94.1	45-147		0.741	30	
1,2-Dibromoethane	11.0		"	10.0		110	83-124		3.13	30	
1,2-Dichlorobenzene	11.1		"	10.0		111	79-123		3.28	30	
1,2-Dichloroethane	10.6		"	10.0		106	73-132		3.90	30	
1,2-Dichloropropane	9.71		"	10.0		97.1	78-126		3.24	30	
1,3,5-Trimethylbenzene	10.8		"	10.0		108	80-131		2.20	30	
1,3-Dichlorobenzene	11.0		"	10.0		110	86-122		3.92	30	
1,3-Dichloropropane	11.1		"	10.0		111	81-125		5.27	30	
1,4-Dichlorobenzene	10.9		"	10.0		109	85-124		3.15	30	
2,2-Dichloropropane	9.74		"	10.0		97.4	56-150		4.71	30	
2-Chlorotoluene	9.90		"	10.0		99.0	79-130		7.86	30	
2-Hexanone	8.99		"	10.0		89.9	51-146		2.02	30	
4-Chlorotoluene	10.3		"	10.0		103	79-128		4.81	30	
Acetone	8.16		"	10.0		81.6	14-150		3.73	30	
Benzene	10.6		"	10.0		106	85-126		3.25	30	
Bromobenzene	10.0		"	10.0		100	78-129		4.31	30	
Bromochloromethane	9.17		"	10.0		91.7	77-128		3.01	30	
Bromodichloromethane	10.5		"	10.0		105	79-128		0.768	30	
Bromoform	10.7		"	10.0		107	78-133		0.930	30	
Bromomethane	3.07		"	10.0		30.7	43-168	Low Bias	2.25	30	
Carbon tetrachloride	10.7		"	10.0		107	77-141		4.11	30	
Chlorobenzene	10.9		"	10.0		109	88-120		0.275	30	
Chloroethane	6.96		"	10.0		69.6	65-136		8.79	30	
Chloroform	10.7		"	10.0		107	82-128		4.56	30	
Chloromethane	3.54		"	10.0		35.4	43-155	Low Bias	6.72	30	
cis-1,2-Dichloroethylene	10.1		"	10.0		101	83-129		8.29	30	
cis-1,3-Dichloropropylene	10.3		"	10.0		103	80-131		5.81	30	
Dibromochloromethane	11.1		"	10.0		111	80-130		4.51	30	
Dibromomethane	11.1		"	10.0		111	72-134		3.02	30	
Dichlorodifluoromethane	11.1		"	10.0		111	44-144		7.35	30	
Ethyl Benzene	10.7		"	10.0		107	80-131		1.49	30	
Hexachlorobutadiene	10.8		"	10.0		108	67-146		2.53	30	
Isopropylbenzene	10.0		"	10.0		100	76-140		7.59	30	
Methyl tert-butyl ether (MTBE)	10.9		"	10.0		109	76-135		0.736	30	
Methylene chloride	9.29		"	10.0		92.9	55-137		4.21	30	
Naphthalene	9.73		"	10.0		97.3	70-147		3.88	30	
n-Butylbenzene	10.4		"	10.0		104	79-132		5.34	30	
n-Propylbenzene	10.0		"	10.0		100	78-133		5.34	30	



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 BA00146 - EPA 5030B

LCS Dup (BA00146-BSD1)

Prepared & Analyzed: 01/09/2020

o-Xylene	10.7		ug/L	10.0		107	78-130		0.187	30	
p- & m- Xylenes	21.0		"	20.0		105	77-133		3.69	30	
p-Isopropyltoluene	11.0		"	10.0		110	81-136		4.89	30	
sec-Butylbenzene	10.9		"	10.0		109	79-137		4.24	30	
Styrene	11.4		"	10.0		114	67-132		2.44	30	
tert-Butylbenzene	9.27		"	10.0		92.7	77-138		4.12	30	
Tetrachloroethylene	9.95		"	10.0		99.5	82-131		1.89	30	
Toluene	10.4		"	10.0		104	80-127		0.766	30	
trans-1,2-Dichloroethylene	10.7		"	10.0		107	80-132		7.70	30	
trans-1,3-Dichloropropylene	9.92		"	10.0		99.2	78-131		2.66	30	
Trichloroethylene	10.4		"	10.0		104	82-128		3.51	30	
Trichlorofluoromethane	12.2		"	10.0		122	67-139		6.34	30	
Vinyl Chloride	6.61		"	10.0		66.1	58-145		3.13	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	10.0		"	10.0		100	69-130				
Surrogate: SURR: Toluene-d8	9.93		"	10.0		99.3	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.57		"	10.0		95.7	79-122				



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
20A0183-01	WQ010720:0945 FRW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
20A0183-02	WQ010720:0950 FRW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
20A0183-03	WQ010720:0955 FRW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
20A0183-04	WQ010720:1000 FRW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
20A0183-05	WQ010720:1035 NP1-1-2	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.

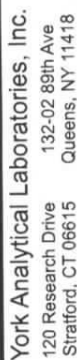
Certification for pH is no longer offered by NYDOH ELAP.

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.





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Field Chain-of-Custody Record

YORK Project No.

20A0183

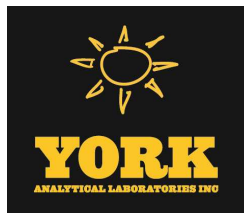
NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below.

Your signature binds you to YORK's Standard Terms & Conditions.

Page 1 of 1

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APPENDIX III
JANUARY 2020 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: 01/27/2020
Client Project ID: 31401451.000 Task01.00
York Project (SDG) No.: 20A0763

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
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STRATFORD, CT 06615
(203) 325-1371



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

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 01/27/2020
Client Project ID: 31401451.000 Task01.00
York Project (SDG) No.: 20A0763

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 21, 2020 and listed below. The project was identified as your project: **31401451.000 Task01.00**.

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>
20A0763-01	AQ012120 NP4-1	Vapor Extraction	01/21/2020	01/21/2020
20A0763-02	AQ012120 NP4-3	Vapor Extraction	01/21/2020	01/21/2020

General Notes for York Project (SDG) No.: 20A0763

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: 01/27/2020





Sample Information

Client Sample ID: AQ012120 NP4-1

York Sample ID: 20A0763-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0763

31401451.000 Task01.00

Vapor Extraction

January 21, 2020 12:00 am

01/21/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	0.89	1.303	EPA TO-15 Certifications:	01/24/2020 04:00	01/24/2020 23:46	AS
71-55-6	1,1,1-Trichloroethane	0.85		ug/m ³	0.71	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.89	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.0	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.71	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.53	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.13	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.97	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.64	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.0	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.78	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.53	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.60	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.91	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.64	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.86	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.78	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.60	1.303	EPA TO-15 Certifications:	01/24/2020 04:00	01/24/2020 23:46	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.78	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	0.94	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
78-93-3	2-Butanone	0.96		ug/m ³	0.38	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	1.1	1.303	EPA TO-15 Certifications:	01/24/2020 04:00	01/24/2020 23:46	AS



Sample Information

Client Sample ID: AQ012120 NP4-1

York Sample ID: 20A0763-01

York Project (SDG) No.
20A0763

Client Project ID
31401451.000 Task01.00

Matrix
Vapor Extraction

Collection Date/Time
January 21, 2020 12:00 am

Date Received
01/21/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

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	2.0	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.53	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
67-64-1	Acetone	10		ug/m ³	0.62	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.28	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
71-43-2	Benzene	0.46		ug/m ³	0.42	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.67	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	0.87	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
75-25-2	Bromoform	ND		ug/m ³	1.3	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
74-83-9	Bromomethane	ND		ug/m ³	0.51	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.41	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
56-23-5	Carbon tetrachloride	0.49		ug/m ³	0.20	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.60	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
75-00-3	Chloroethane	ND		ug/m ³	0.34	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
67-66-3	Chloroform	1.5		ug/m ³	0.64	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
74-87-3	Chloromethane	1.0		ug/m ³	0.27	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
156-59-2	cis-1,2-Dichloroethylene	2.2		ug/m ³	0.13	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.59	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
110-82-7	Cyclohexane	ND		ug/m ³	0.45	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	1.1	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
75-71-8	Dichlorodifluoromethane	1.9		ug/m ³	0.64	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
141-78-6	* Ethyl acetate	ND		ug/m ³	0.94	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
100-41-4	Ethyl Benzene	ND		ug/m ³	0.57	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.4	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS



Sample Information

Client Sample ID: AQ012120 NP4-1

York Sample ID: 20A0763-01

York Project (SDG) No.
20A0763

Client Project ID
31401451.000 Task01.00

Matrix
Vapor Extraction

Collection Date/Time
January 21, 2020 12:00 am

Date Received
01/21/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-63-0	Isopropanol	ND		ug/m ³	0.64	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.53	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.47	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
75-09-2	Methylene chloride	1.1		ug/m ³	0.91	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
142-82-5	n-Heptane	ND		ug/m ³	0.53	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
110-54-3	n-Hexane	2.2		ug/m ³	0.46	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
95-47-6	o-Xylene	ND		ug/m ³	0.57	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
179601-23-1	p- & m- Xylenes	ND		ug/m ³	1.1	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.64	1.303	EPA TO-15 Certifications:	01/24/2020 04:00	01/24/2020 23:46	AS
115-07-1	* Propylene	ND		ug/m ³	0.22	1.303	EPA TO-15 Certifications:	01/24/2020 04:00	01/24/2020 23:46	AS
100-42-5	Styrene	ND		ug/m ³	0.56	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
127-18-4	Tetrachloroethylene	29		ug/m ³	0.88	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.77	1.303	EPA TO-15 Certifications:	01/24/2020 04:00	01/24/2020 23:46	AS
108-88-3	Toluene	0.88		ug/m ³	0.49	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.52	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.59	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
79-01-6	Trichloroethylene	3.6		ug/m ³	0.18	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
75-69-4	Trichlorofluoromethane (Freon 11)	1.2		ug/m ³	0.73	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.46	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.57	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
75-01-4	Vinyl Chloride	0.13		ug/m ³	0.083	1.303	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/24/2020 23:46	AS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.3 %	70-130							



Sample Information

Client Sample ID: A Q012120 NP4-3

York Sample ID: 20A0763-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0763

31401451.000 Task01.00

Vapor Extraction

January 21, 2020 12:00 am

01/21/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	0.90	1.311	EPA TO-15 Certifications:	01/24/2020 04:00	01/25/2020 00:38	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.72	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.90	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.0	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.72	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.53	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.13	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.97	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.64	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.0	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.79	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.53	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.61	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.92	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.64	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.87	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.79	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.61	1.311	EPA TO-15 Certifications:	01/24/2020 04:00	01/25/2020 00:38	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.79	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	0.94	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
78-93-3	2-Butanone	8.4		ug/m ³	0.39	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	1.1	1.311	EPA TO-15 Certifications:	01/24/2020 04:00	01/25/2020 00:38	AS
107-05-1	3-Chloropropene	ND		ug/m ³	2.1	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS



Sample Information

Client Sample ID: AQ012120 NP4-3

York Sample ID: 20A0763-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20A0763

31401451.000 Task01.00

Vapor Extraction

January 21, 2020 12:00 am

01/21/2020

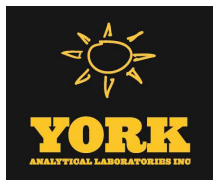
Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.54	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
67-64-1	Acetone	45		ug/m ³	0.62	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.28	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
71-43-2	Benzene	ND		ug/m ³	0.42	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.68	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	0.88	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
75-25-2	Bromoform	ND		ug/m ³	1.4	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
74-83-9	Bromomethane	ND		ug/m ³	0.51	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.41	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
56-23-5	Carbon tetrachloride	0.33		ug/m ³	0.21	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.60	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
75-00-3	Chloroethane	ND		ug/m ³	0.35	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
67-66-3	Chloroform	ND		ug/m ³	0.64	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
74-87-3	Chloromethane	0.97		ug/m ³	0.27	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
156-59-2	cis-1,2-Dichloroethylene	1.2		ug/m ³	0.13	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.60	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
110-82-7	Cyclohexane	ND		ug/m ³	0.45	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	1.1	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
75-71-8	Dichlorodifluoromethane	1.8		ug/m ³	0.65	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
141-78-6	* Ethyl acetate	ND		ug/m ³	0.94	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
100-41-4	Ethyl Benzene	ND		ug/m ³	0.57	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.4	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
67-63-0	Isopropanol	0.68		ug/m ³	0.64	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS



Sample Information

Client Sample ID: AQ012120 NP4-3

York Sample ID: 20A0763-02

York Project (SDG) No.
20A0763

Client Project ID
31401451.000 Task01.00

Matrix
Vapor Extraction

Collection Date/Time
January 21, 2020 12:00 am

Date Received
01/21/2020

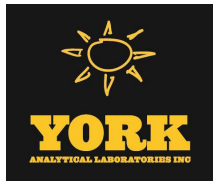
Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m³	0.54	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.47	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
75-09-2	Methylene chloride	2.7		ug/m³	0.91	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
142-82-5	n-Heptane	ND		ug/m³	0.54	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
110-54-3	n-Hexane	3.4		ug/m³	0.46	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
95-47-6	o-Xylene	ND		ug/m³	0.57	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.1	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.64	1.311	EPA TO-15 Certifications:	01/24/2020 04:00	01/25/2020 00:38	AS
115-07-1	* Propylene	ND		ug/m³	0.23	1.311	EPA TO-15 Certifications:	01/24/2020 04:00	01/25/2020 00:38	AS
100-42-5	Styrene	ND		ug/m³	0.56	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
127-18-4	Tetrachloroethylene	ND		ug/m³	0.89	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.77	1.311	EPA TO-15 Certifications:	01/24/2020 04:00	01/25/2020 00:38	AS
108-88-3	Toluene	ND		ug/m³	0.49	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.52	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.60	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
79-01-6	Trichloroethylene	ND		ug/m³	0.18	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
75-69-4	Trichlorofluoromethane (Freon 11)	1.0		ug/m³	0.74	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
108-05-4	Vinyl acetate	ND		ug/m³	0.46	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
593-60-2	Vinyl bromide	ND		ug/m³	0.57	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
75-01-4	Vinyl Chloride	ND		ug/m³	0.084	1.311	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	01/24/2020 04:00	01/25/2020 00:38	AS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	96.3 %	70-130							



Analytical Batch Summary

Batch ID: BA01137

Preparation Method: EPA TO15 PREP

Prepared By: AS

YORK Sample ID	Client Sample ID	Preparation Date
20A0763-01	AQ012120 NP4-1	01/24/20
20A0763-02	AQ012120 NP4-3	01/24/20
BA01137-BLK1	Blank	01/24/20
BA01137-BS1	LCS	01/24/20



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 BA01137 - EPA TO15 PREP											
Blank (BA01137-BLK1)										Prepared & Analyzed: 01/24/2020	
1,1,1,2-Tetrachloroethane	ND	0.69	ug/m ³								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.099	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								
Carbon disulfide	ND	0.31	"								
Carbon tetrachloride	ND	0.16	"								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.099	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	ND	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								



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 BA01137 - EPA TO15 PREP

Blank (BA01137-BLK1)

Prepared & Analyzed: 01/24/2020

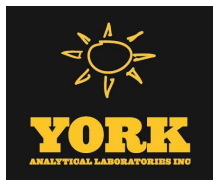
n-Heptane	ND	0.41	ug/m ³
n-Hexane	ND	0.35	"
o-Xylene	ND	0.43	"
p- & m- Xylenes	ND	0.87	"
p-Ethyltoluene	ND	0.49	"
Propylene	ND	0.17	"
Styrene	ND	0.43	"
Tetrachloroethylene	ND	0.68	"
Tetrahydrofuran	ND	0.59	"
Toluene	ND	0.38	"
trans-1,2-Dichloroethylene	ND	0.40	"
trans-1,3-Dichloropropylene	ND	0.45	"
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	"

<i>Surrogate: SURR: p-Bromofluorobenzene</i>	9.20		ppbv	10.0		92.0	70-130
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LCS (BA01137-BS1)

Prepared & Analyzed: 01/24/2020

1,1,1,2-Tetrachloroethane	9.66		ppbv	10.0		96.6	70-130
1,1,1-Trichloroethane	9.72		"	10.0		97.2	70-130
1,1,2,2-Tetrachloroethane	9.93		"	10.0		99.3	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.58		"	10.0		95.8	70-130
1,1,2-Trichloroethane	9.69		"	10.0		96.9	70-130
1,1-Dichloroethane	9.42		"	10.0		94.2	70-130
1,1-Dichloroethylene	9.57		"	10.0		95.7	70-130
1,2,4-Trichlorobenzene	9.59		"	10.0		95.9	70-130
1,2,4-Trimethylbenzene	10.1		"	10.0		101	70-130
1,2-Dibromoethane	9.78		"	10.0		97.8	70-130
1,2-Dichlorobenzene	10.5		"	10.0		105	70-130
1,2-Dichloroethane	9.61		"	10.0		96.1	70-130
1,2-Dichloropropane	9.42		"	10.0		94.2	70-130
1,2-Dichlorotetrafluoroethane	9.44		"	10.0		94.4	70-130
1,3,5-Trimethylbenzene	9.91		"	10.0		99.1	70-130
1,3-Butadiene	9.96		"	10.0		99.6	70-130
1,3-Dichlorobenzene	10.6		"	10.0		106	70-130
1,3-Dichloropropane	9.59		"	10.0		95.9	70-130
1,4-Dichlorobenzene	10.7		"	10.0		107	70-130
1,4-Dioxane	8.98		"	10.0		89.8	70-130
2-Butanone	9.03		"	10.0		90.3	70-130
2-Hexanone	9.48		"	10.0		94.8	70-130
3-Chloropropene	9.43		"	10.0		94.3	70-130
4-Methyl-2-pentanone	9.62		"	10.0		96.2	70-130
Acetone	8.71		"	10.0		87.1	70-130
Acrylonitrile	9.14		"	10.0		91.4	70-130
Benzene	9.25		"	10.0		92.5	70-130
Benzyl chloride	12.0		"	10.0		120	70-130
Bromodichloromethane	9.80		"	10.0		98.0	70-130
Bromoform	10.3		"	10.0		103	70-130



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BA01137 - EPA TO15 PREP

LCS (BA01137-BS1)

Prepared & Analyzed: 01/24/2020

Bromomethane	8.92		ppbv	10.0		89.2	70-130				
Carbon disulfide	9.87		"	10.0		98.7	70-130				
Carbon tetrachloride	9.63		"	10.0		96.3	70-130				
Chlorobenzene	9.51		"	10.0		95.1	70-130				
Chloroethane	9.34		"	10.0		93.4	70-130				
Chloroform	9.55		"	10.0		95.5	70-130				
Chloromethane	8.86		"	10.0		88.6	70-130				
cis-1,2-Dichloroethylene	9.01		"	10.0		90.1	70-130				
cis-1,3-Dichloropropylene	10.1		"	10.0		101	70-130				
Cyclohexane	9.39		"	10.0		93.9	70-130				
Dibromochloromethane	10.0		"	10.0		100	70-130				
Dichlorodifluoromethane	9.57		"	10.0		95.7	70-130				
Ethyl acetate	10.1		"	10.0		101	70-130				
Ethyl Benzene	9.41		"	10.0		94.1	70-130				
Hexachlorobutadiene	10.2		"	10.0		102	70-130				
Isopropanol	9.05		"	10.0		90.5	70-130				
Methyl Methacrylate	9.41		"	10.0		94.1	70-130				
Methyl tert-butyl ether (MTBE)	9.48		"	10.0		94.8	70-130				
Methylene chloride	9.78		"	10.0		97.8	70-130				
n-Heptane	9.44		"	10.0		94.4	70-130				
n-Hexane	9.21		"	10.0		92.1	70-130				
o-Xylene	9.55		"	10.0		95.5	70-130				
p- & m- Xylenes	19.3		"	20.0		96.4	70-130				
p-Ethyltoluene	10.1		"	10.0		101	70-130				
Propylene	8.85		"	10.0		88.5	70-130				
Styrene	10.1		"	10.0		101	70-130				
Tetrachloroethylene	8.66		"	10.0		86.6	70-130				
Tetrahydrofuran	9.14		"	10.0		91.4	70-130				
Toluene	9.40		"	10.0		94.0	70-130				
trans-1,2-Dichloroethylene	9.72		"	10.0		97.2	70-130				
trans-1,3-Dichloropropylene	9.83		"	10.0		98.3	70-130				
Trichloroethylene	8.96		"	10.0		89.6	70-130				
Trichlorofluoromethane (Freon 11)	9.46		"	10.0		94.6	70-130				
Vinyl acetate	9.17		"	10.0		91.7	70-130				
Vinyl bromide	9.40		"	10.0		94.0	70-130				
Vinyl Chloride	8.08		"	10.0		80.8	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.3		"	10.0		103	70-130				





Sample and Data Qualifiers Relating to This Work Order

TO-VAC The final vacuum in the canister was less than -2 inches Hg vacuum. The time integrated sampling may be affected and not reflect proper sampling over the time period. The data user should take note.

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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



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Field Chain-of-Custody Record - AIR

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

YORK Project No.

20A0763

Your

Page 1 of 1

YOUR Information			Report To:			Invoice To:			YOUR Project Number			Turn-Around Time																																			
Company:	WSP USA		Company:	Same		Company:	WSP USA Accounting		31401451.000 Task 01.00			RUSH - Next Day																																			
Address:	4 Research Drive, Suite 204 Shelton, CT 06484		Address:			Address:			YOUR Project Name			RUSH - Two Day																																			
Phone:	203-929-8555		Phone:			Phone:			Rowe Industries			RUSH - Three Day																																			
Contact:	Tunde Komuves-Sandor		Contact:			Contact:						RUSH - Four Day																																			
E-mail:	tunde.sandor@wsp.com		E-mail:			E-mail:			YOUR PO#: 31401451.000 Task 01.00			Standard (5-7 Day) X																																			
Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.						Report / EDD Type (circle selections)						YORK Reg. Comp.																																			
Samples Collected by: (print your name above and sign below)						Air Matrix Codes			Samples From			Report			Compared to the following Regulation(s): (please fill in)																																
						AI - Indoor Ambient Air			New York			Summary Report						Standard Excel EDD																													
						AO - Outdoor Amb. Air			New Jersey			QA Report						EQUIS (Standard)																													
						AE - Vapor Extraction Well/ Process Gas/Effluent			Connecticut			NY ASP A Package						NYSDEC EQUIS																													
						AS - Soil Vapor/Sub-Slab			Pennsylvania			NUDEP Reduced Deliv.			NUDEP SRP HazSite																																
									Other			NUDKOP																																			
												Other:																																			
Certified Canisters: Batch Individual												Reporting Units: ug/m ³ ppbv ppmv																																			
Sample Identification				Date/Time Sampled				Air Matrix				Canister Vacuum Before Sampling (in Hg)				Canister Vacuum After Sampling (in Hg)				Flow Cont. ID				Analysis Requested																							
NP4-1 AQ012120 NP4-1				11/21/20				AE				2.8 Hg				2.8 Hg				20664				TO-15																							
NP4-3 AQ012120 NP4-3				11/21/20				AE				2.8 Hg				2.8 Hg				19527				TO-15																							
Comments:												Detection Limits Required												Sampling Media																							
												≤ 1 ug/m ³ NYSDC V1 Limits												6 Liter Canister																							
												Routine Survey												Tedlar Bag																							
Samples Relinquished by / Company												Date/Time												Samples Relinquished by / Company												Date/Time											
Sacks Pk 2												11/21/20																																			
Samples Received by / Company												Date/Time												Samples Received by / Company												Date/Time											
Samples Relinquished by / Company												Date/Time												Samples Received in LAB by												Date/Time											
																								P. Drake 1-21-20												1515											