



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 November 2019 Status Report

DATE: February 24, 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 November 1, 2019 through November 30, 2019. The report includes a summary of system performance parameters, system operation parameters, and analytical results for groundwater, system effluent samples, and air quality results.

SUMMARY OF SYSTEM PERFORMANCE AND OPERATION

(November 1, 2019 through November 30, 2019)

- | | |
|---|----------------------------|
| 1. Hours of operation during the reporting period: | 670 hours (93.1%) |
| 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: | 1,411,255 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: | < 0.01 pound (see Graph 2) |
| 7. Cumulative mass of VOCs recovered since startup on 12/17/02:
(calculations can be provided upon request) | 229.8 pounds |



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/}	916,047	0.8
FRW-1 ^{2/}	133,763	20.6
FRW-2 ^{2/}	30,394	6.6
FRW-3 ^{2/}	88,565	15.4
FRW-4 ^{2/}	177,454	1.6

^{1/} The above table summarizes the parameters for RW-2 from November 1 to November 31, 2019.

^{2/} The above table summarizes the parameters for the FRWs from November 4, 2019 to December 5, 2019.

On November 4, 2019, troubleshooting with a computer programmer identified and corrected PLC communication issues to restore operation of the RW-2 drive and FRW-1 pump. During program modification, other system operations were reviewed to take advantage of the computer programmer's time on-site. One adjustment was made to reduce the pump-on delay start times to 5 minutes for all four FRWs to optimize the pump on-off cycle. The start delay was added to allow more time for recharge into the well to reduce pre-mature motor failure from constant on-off operation. Monitoring of pump cycling and water levels indicated that the delay was longer than the typical recharge time and could be reduced. This reduction in delayed start times should help increase the total volume of water pumped from all four FRW wells.

From November 18 to 21, 2019, system maintenance was successfully completed for RW-2, FRW-1, 2, 3 and 4, associated piping and tanks, and the recharge basins. November maintenance details are provided in Table 1.

SUMMARY OF SAMPLING ACTIVITIES

November 2019 groundwater quality sampling was completed for the following wells:

- Monthly groundwater samples were collected from RW-2, FRW-1, FRW-2, FRW-3 and FRW-4 on November 4, 2019;

Tables 3 to 7 present a summary of the quality results for water samples collected from downgradient recovery well RW-2 and FRW-1, 2, 3, and 4. Graphs 3 to 7 present 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 FRW-2 and 3 were above the ARAR in November. The PCE concentration in the groundwater samples collected at FRW-1 and 4 were below the ARAR in November. The cis-DCE



and VC concentrations in FRW-1 were above the ARAR. The remaining target compounds were not detected above ARARs in FRW-1. The TCE, cis-DCE, TCA and VC concentrations in the groundwater samples collected at FRW-2, 3 and 4 were below their respective ARARs in November, as applicable.

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

FUTURE O&M ACTIVITIES

O&M activities scheduled for December 2019 include:

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

MMG:nv

Attachments

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

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TABLES

TABLE 1

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

**MAINTENANCE LOG
(November 1, 2019 through November 30, 2019)**

Date	Time	System Changes/Modifications	Personnel
11/4/19		The drive was not communicating with the PLC; reset and restored the communication to the RW-2 drive. Following testing, RW-2 resumed normal operation.	MG, SP, JK
		A malfunctioning analog input channel on the FP&T PLC was the root cause of the issues associated with the operation of the pump in FRW-1. Moved wiring from the bad channel to a spare (good) channel in the PLC and updated the FP&T PLC program accordingly. Following testing, the pump in FRW-1 resumed normal operation. All wells (RW-2, FRW-1, 2, 3 and 4) are operating normally.	MG, SP, JK
11/14/19		Changed the multi-bag filter bags (400 um) in Banks 1 and 2, seven of eight housings used. Banks 1 and 2 left open. Bank 3 closed. Left System running normally.	SP
		Cleaned FRW-1, 2, 3 and 4 flow meter paddle wheels.	SP
11/18/19		Clean the RW-2 riser pipe, vault piping, RW-2 flow meter and lateral piping to EQ tank. Remove vegetation from the recharge basins and clear paths to monitoring wells located within fenced area of the recharge basin.	TS, Cisco
11/19/19		Finish Recharge basin vegetation removal. Remove and clean the pumps for FRW-1, 2 and 3. Conduct mechanical brushing and surging of FRW-1, 2 and 3. Clean lateral pipes for FRW-1, 2 and 3. Temporary repair leaks in the FP&T trailer roof.	TS, Cisco
11/20/19		Remove and replace the FRW-4 pump. Conduct mechanical brushing and surging of FRW-4. Complete hazardous waste drum pick-up and new drum drop-off at the Site. Clean holding tank and piping in FP&T trailer. Clean trunk line from FP&T trailer to the EQ tank in the FSP&T building. Inspect and clean FSP&T recovery well vaults (RW-4, 5, 6, 7, 8 and 9). Broken vault springs noted for RW-8 and RW-9.	TS, Cisco
11/21/19		Replaced broken vault springs in RW-8 and RW-9. Housekeeping of site conducted.	TS, Cisco

Notes:

MG	Mark Goldberg, WSP USA
SP	Scott Philbrick, WSP USA
TS	Tunde Sandor, WSP USA
Cisco	Cisco Geotechnical, LLC
JK	Jeffrey Koenig, Hesco

H:\NABIS\2019\Monthly Reports\November\Table 1 Maintenance Record Nov 2019.docx

TABLE 2

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

Effluent Water Quality Results

Date Sampled ^{2/}	pH ^{1/}	TDS ^{4/} (mg/l)	PCE (ug/l)	1,1,1-TCA (ug/l)	TCE (ug/l)	1,1-DCA (ug/l)	1,1-DCE (ug/l)	cis- 1,2-DCE (ug/l)	trans- 1,2-DCE (ug/l)	Xylene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Methylene Chloride (ug/l)	Freon 113 (ug/l)	Naphthalene (ug/l)	Chloroform (ug/l)	Total Iron (mg/l)	Dissolved Iron (mg/l)
SPDES Limits	6.5 to 8.5	---	5	5	5	5	5	5	5	5	5	5	5	---	10	7	---	---
1-Nov-18	6.8	193	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.838	ND<0.278
5-Dec-18	6.9	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.845	ND<0.278
3-Jan-19	6.9	85	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	1.32	ND<0.278
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<3	ND<0.5	ND<0.5	ND<0.5	0.536	ND<0.278

SPDES: State Pollutant Discharge Elimination System

mg/l: Milligrams per liter

ug/l: Micrograms per liter

----: Not established

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

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

ND: Not detected NA: Not Analyzed

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

TABLE 3

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

Recovery Well Water Quality Results

Recovery Well ^{1/}	Date Sampled	PCE (ug/L)	TCE (ug/L)	TCA (ug/L)	Chloroform (ug/L)	MTBE (ug/L)	1,1-Dichloro-ethane (ug/L)	cis-1,2-Dichloro-ethene (ug/L)	1,1-Dichloro-ethene (ug/L)	Methylene Chloride (ug/L)	Toluene (ug/L)	Benzene (ug/L)	m,p-Xylene (ug/L)	o-Xylene (ug/L)
	ARAR's	5	5	5	7	NE	5	5	5	5	NE	NE	5	5
RW-2	1-Nov-18	ND<0.5	ND<0.5	ND<0.5	0.290	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Dec-18	0.300 C,S	0.380	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	3-Jan-19	0.320	0.310	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	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

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

TCE: Trichloroethylene
NS: Not sampled

TCA: 1,1,1-Trichloroethane

ND: Not detected

<#: Less than method detection limit

ug/L: Micrograms per liter

-: Not analyzed

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

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

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

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

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
1-Nov-17	72	1.3	1.7	ND<0.5	0.37 C,J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to December 5, 2017										
5-Dec-17	55	1.5	3.4	ND<0.5	0.4 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
FRW-1 was off from December 6 to 12 and December 24, 2017 to February 9, 2018										
1-Feb-18	63	7.4	28	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
1-Mar-18	110	2.7	1.8	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018										
2-Apr-18	83	0.31 J	ND<0.5	ND<0.5	0.25 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.2 C,S,J
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018										
2-May-18	97	0.86	0.46 J	ND<0.5	0.75	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018										
20-Jun-18	25	0.76	0.68	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
2-Jul-18	22	0.66	0.60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018										
28-Aug-18 ^{3/4}	7.26	4.16	9.05 C	0.220	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11.1 I
21-Sep-18	20.2	1.25	2.43	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Oct-18	1.19	ND<0.5	0.280	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 27 to October 29, 2018										
1-Nov-18	5.12	0.780	3.30	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Dec-18	43.0 C,S	1.06	0.74	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
3-Jan-19	18.8	0.450	0.290	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from January 5 to January 15, 2019										
1-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

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 -

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

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-Nov-17	45	0.76	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017								
5-Dec-17	38	3.4	1.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 24, 2017 to February 9, 2018								
1-Feb-18	37	3.2	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.8
1-Mar-18	48	0.68	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018								
2-Apr-18	140	1.2	0.36 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018								
2-May-18	29	0.92	0.29 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.6
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018								
20-Jun-18	3.8	1.4	0.44 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
2-Jul-18	3.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018								
28-Aug-18 ^{3/4}	ND<0.5	0.300	29.0 C	2.48	ND<0.5	0.510	ND<0.5	ND<2
21-Sep-18	11.9	1.83	14.5	0.730	ND<0.5	ND<0.5	ND<0.5	2.06
5-Oct-18	1.86	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 27 to October 29, 2018								
1-Nov-18	3.20	0.610	0.950	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Dec-18	19.1 C,S	0.590	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.00 C
3-Jan-19	13.8	0.670	1.69	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from January 5 to January 15, 2019								
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

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

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

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

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

C = CCV-E: The value reported is estimated The value is estimated due to its behavior during continuing calibration 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-Nov-17	17	1.2	3.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.33 J	0.30 J	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017												
5-Dec-17	37	1.8	2.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.37 J	0.33 J	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 24, 2017 to February 9, 2018												
1-Feb-18	22	2.0	3.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.32 J	ND<0.5	ND<0.5	ND<0.5	ND<2
1-Mar-18	120	7.9	18	ND<0.5	0.26 J	0.65	ND<0.5	0.49 J	0.34 J	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018												
2-Apr-18	170	4.5	7.9	0.25 C,J	ND<0.5	0.71	ND<0.5	0.20 J	ND<0.5	ND<0.5	ND<0.5	1.2 C,S,J
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018												
2-May-18	140	9.4	11	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.2
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018												
20-Jun-18	39	6.8	4.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.5 J
2-Jul-18	49	1.4	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018												
28-Aug-18 ^{3/}	6.16	0.990	20.3 C	0.840	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.77 I
21-Sep-18	19.6	2.99	19.8	2.04	ND<0.5	ND<0.5	ND<0.5	0.220 J	0.300 J	ND<0.5	ND<0.5	1.53
5-Oct-18	0.730	0.530	4.31	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 27 to October 29, 2018												
1-Nov-18	2.89	0.810	3.37	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Dec-18	109 C,S	6.83	6.98	ND<0.5	ND<0.5	0.570	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.97 C
3-Jan-19	89.4	2.41	7.30	ND<0.5	ND<0.5	0.420	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from January 5 to January 15, 2019												
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

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

1. NYSDCE 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-Propylbenzene

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

TABLE 7

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

Recovery Well FRW-4 VOC Concentrations, micrograms per liter

FRW-4						
Date	PCE	TCE	cis12DCE	VC	TCA	Acetone
ARARs	5	5	5	2 ^{1/}	5	NE
1-Nov-17	3.0	0.32 J	0.78	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017						
5-Dec-17	5.1	ND<0.5	1.0	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 24, 2017 to February 9, 2018						
1-Feb-18	21	2.5	7.0	ND<0.5	0.27 J	2.5 S
1-Mar-18	3.0	ND<0.5	0.47 J	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018						
2-Apr-18	3.2	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

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

1. NYSDEC ambient water quality standards for these compounds are presented because site-specific ARARs for these compounds were not established.
2. The FP&T system was not operating because of a malfunctioning transfer pump. The FRWs were turned on manually to collect a groundwater sample.
3. Tetrahydrofuran, a common industrial solvent for polyvinyl chloride (PVC) and a component in varnishes, and a popular solvent used in laboratories was detected in the groundwater

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.

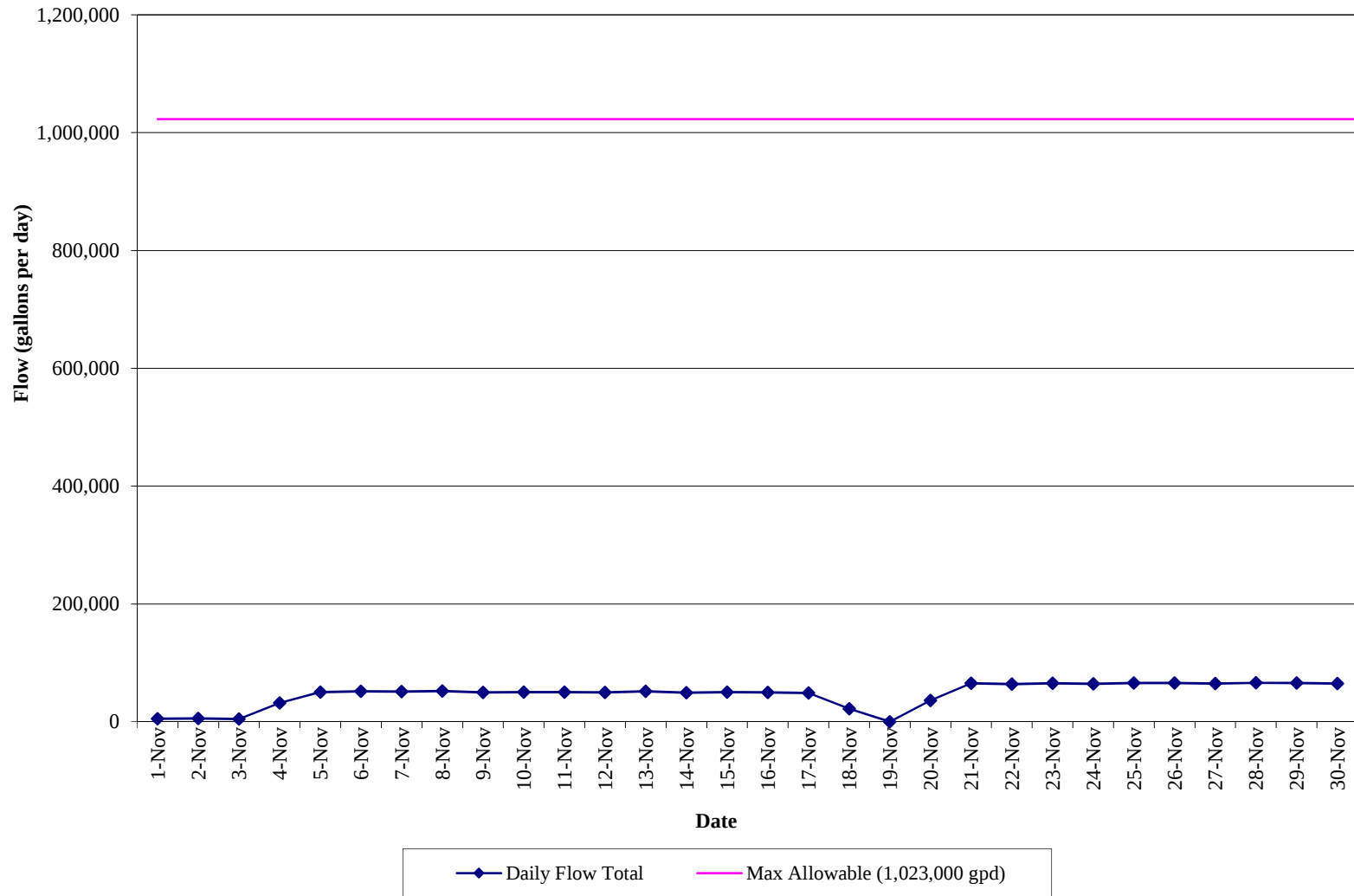
PCE: Tetrachloroethylene
cis12DCE: cis-1,2-Dichloroethene
TCA: 1,1,1-Trichloroethane

TCE: Trichloroethene
VC: Vinyl Chloride

GRAPHS

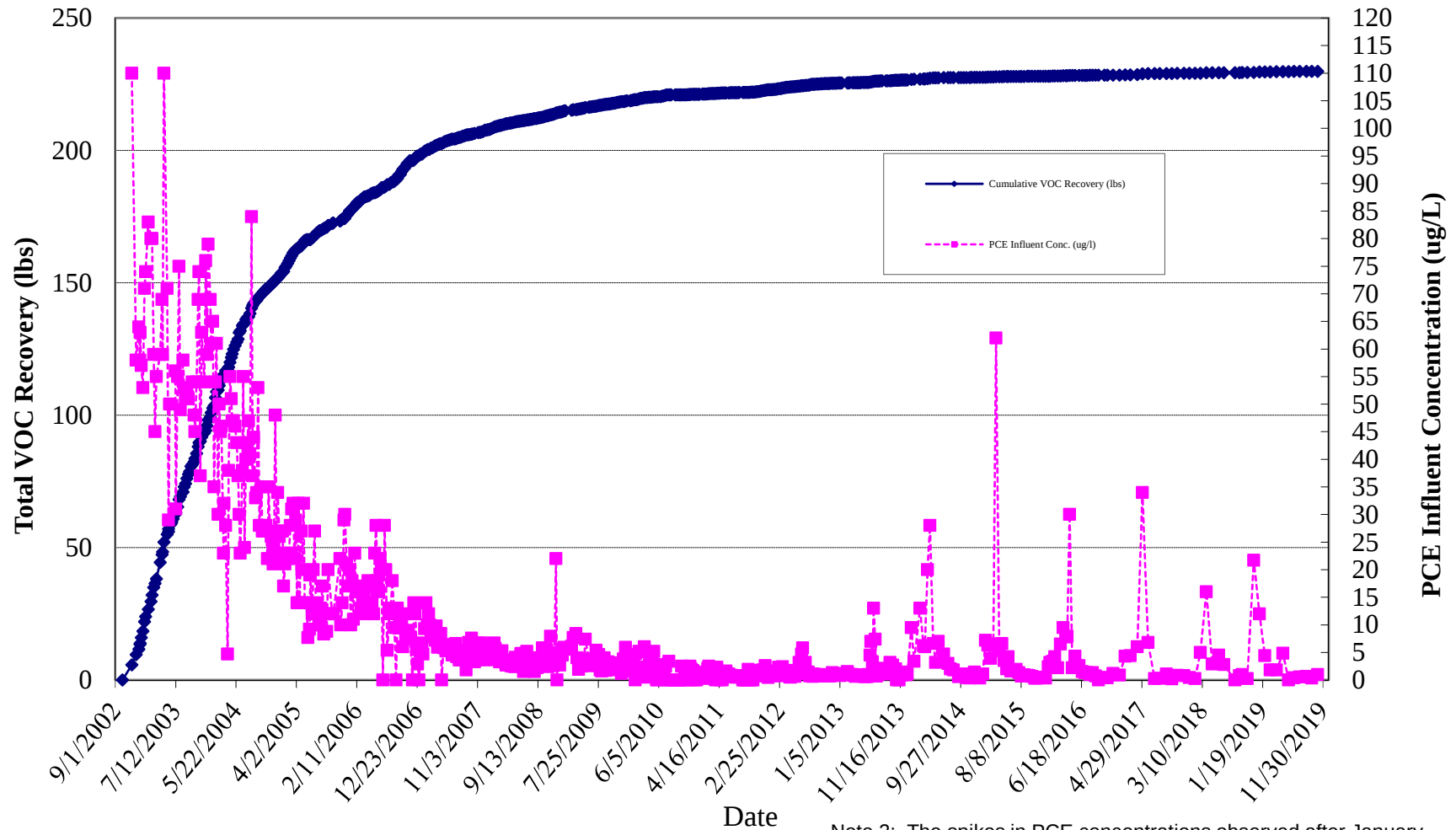
GRAPH 1
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

Effluent Flow Data
(November 1, 2019 to November 30, 2019)



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

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

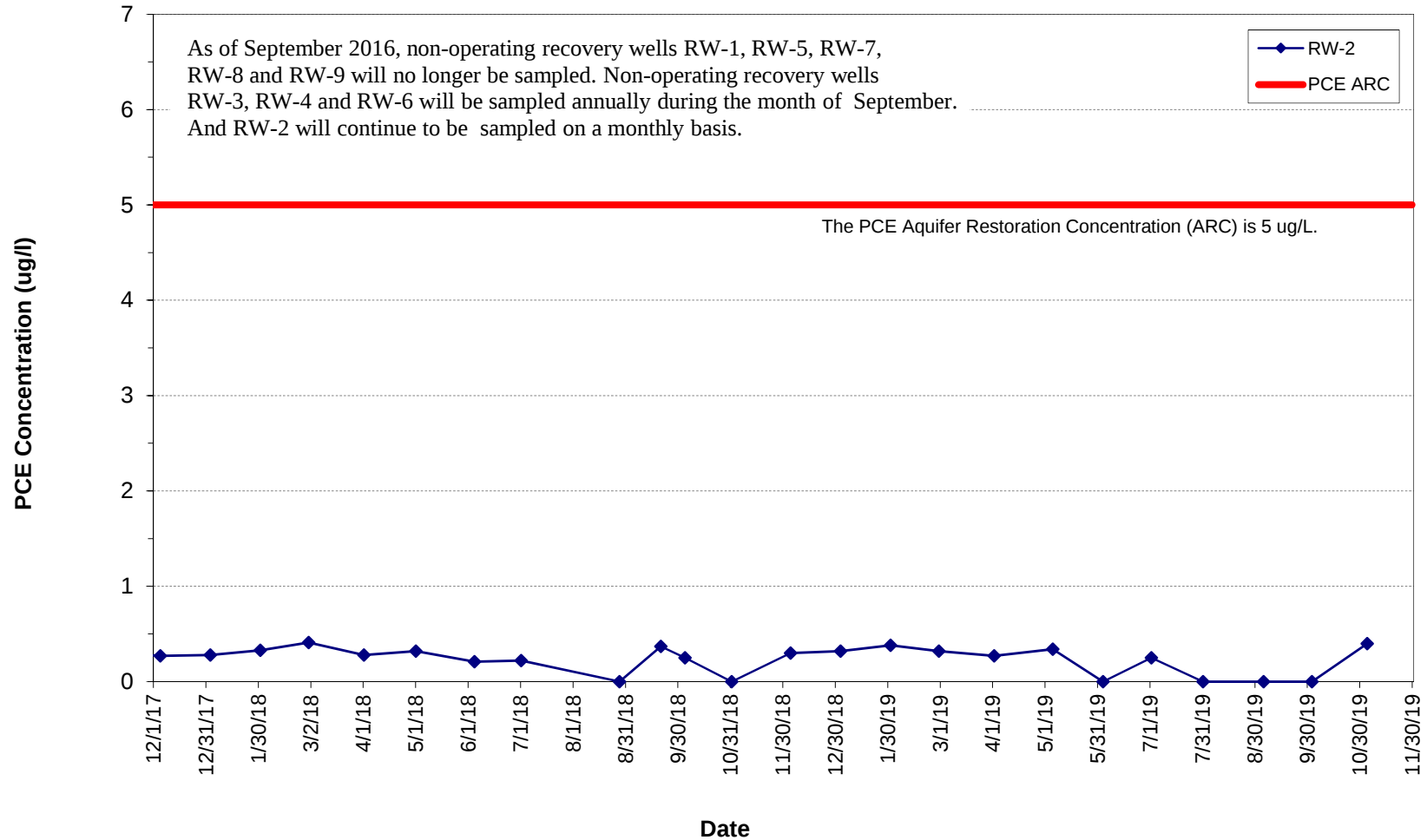


Note 1 : After September 22, 2008, the water recovered from the FP&T System is included in the results shown in this graph.

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

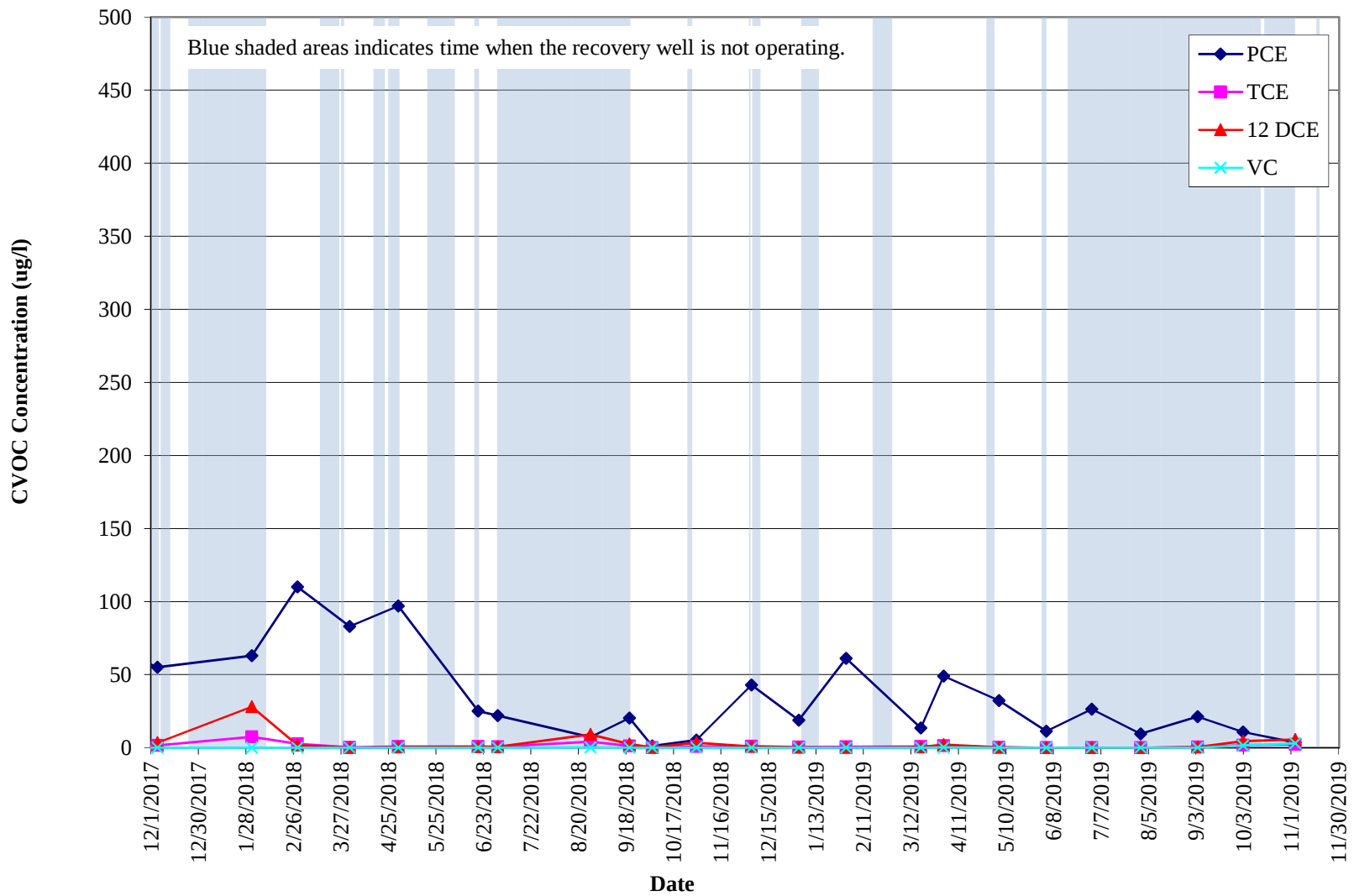
GRAPH 3 **GROUNDWATER REMEDIAL ACTION** **ROWE INDUSTRIES SUPERFUND SITE** **SAG HARBOR, NEW YORK**

FSP&T Recovery Well PCE Concentration



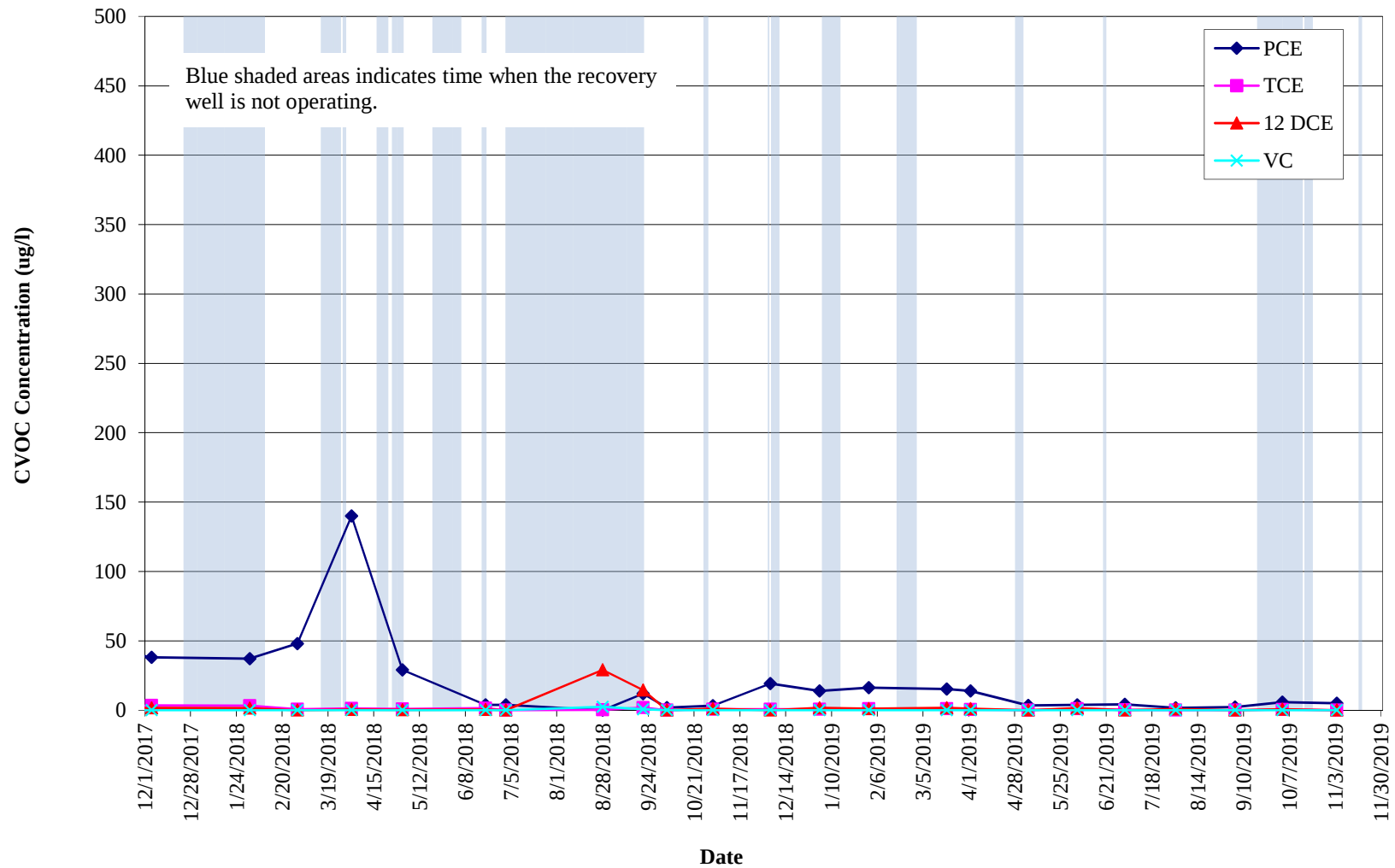
GRAPH 4
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-1



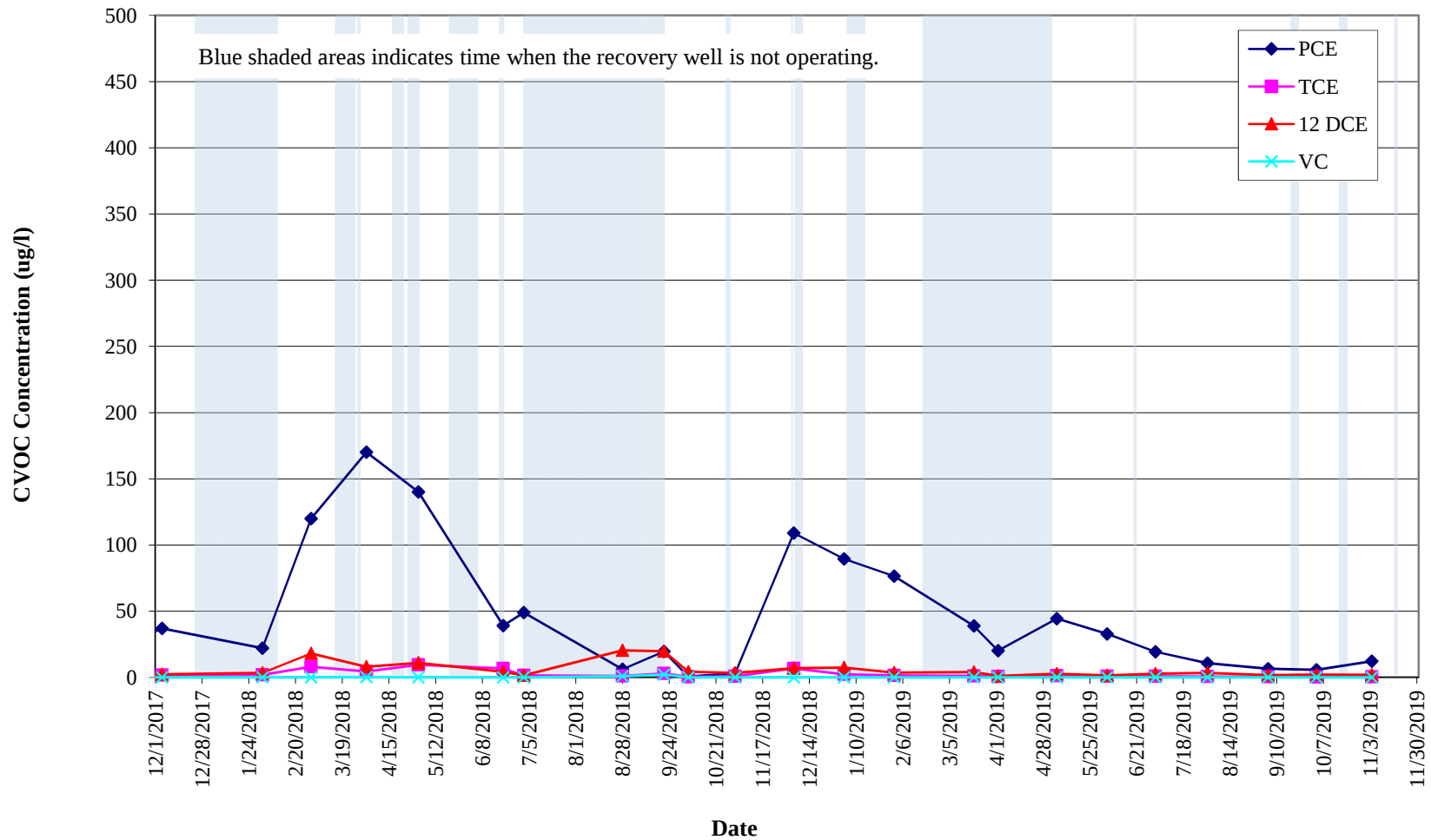
**GRAPH 5
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK**

FP&T Recovery Well VOC Concentrations for FRW-2



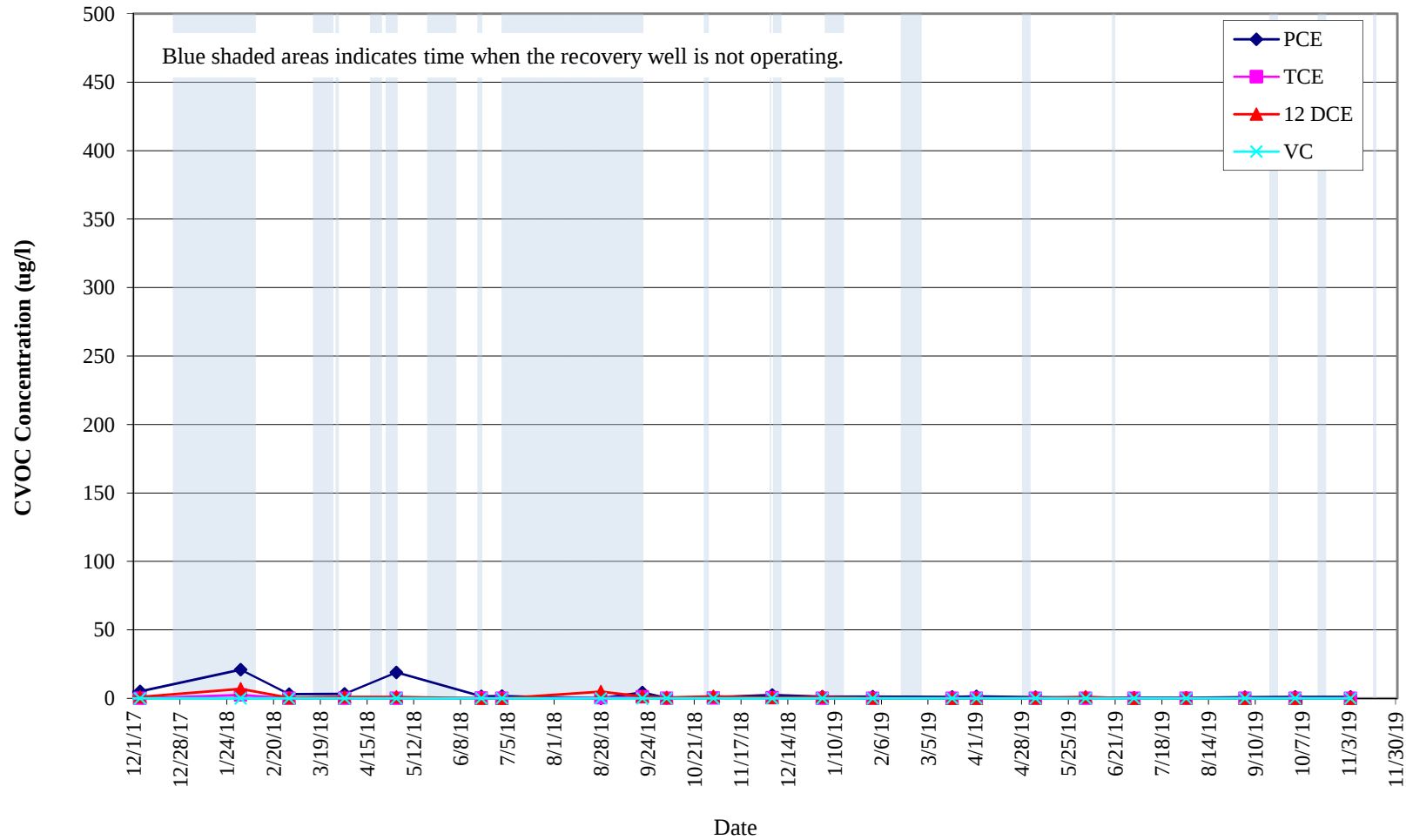
GRAPH 6
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-3

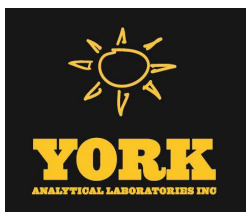


GRAPH 7
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-4



APPENDIX I
NOVEMBER 2019 LABORATORY ANALYTICAL REPORTS
FOR FSP&T SYSTEM



Technical Report

prepared for:

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

Report Date: 11/12/2019
Client Project ID: 31401451.000 Task 01.00
York Project (SDG) No.: 19K0138

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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Report Date: 11/12/2019
Client Project ID: 31401451.000 Task 01.00
York Project (SDG) No.: 19K0138

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 November 05, 2019 and listed below. The project was identified as your project: **31401451.000 Task 01.00**.

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

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

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

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
19K0138-01	WQ1110419:1015 NP2-6	Water	11/04/2019	11/05/2019
19K0138-02	WQ1110419:1020 NP2-10	Water	11/04/2019	11/05/2019

General Notes for York Project (SDG) No.: 19K0138

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: 11/12/2019





Sample Information

Client Sample ID: WQ1110419:1015 NP2-6

York Sample ID: 19K0138-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19K0138

31401451.000 Task 01.00

Water

November 4, 2019 10:15 am

11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ



Sample Information

Client Sample ID: WQ1110419:1015 NP2-6

York Sample ID: 19K0138-01

York Project (SDG) No.

19K0138

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

November 4, 2019 10:15 am

Date Received

11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
156-59-2	cis-1,2-Dichloroethylene	0.280		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ



Sample Information

Client Sample ID: WQ1110419:1015 NP2-6

York Sample ID: 19K0138-01

York Project (SDG) No.

19K0138

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

November 4, 2019 10:15 am

Date Received

11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
127-18-4	Tetrachloroethylene	0.970		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	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	11/08/2019 06:07	11/09/2019 04:32	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 06:07	11/09/2019 04:32	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	102 %	69-130								
2037-26-5	Surrogate: SURRE: Toluene-d8	98.0 %	81-117								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	98.1 %	79-122								

Iron by EPA 200.7

Log-in Notes:

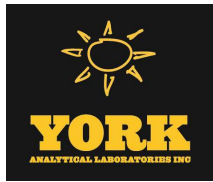
Sample Notes:

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



Sample Information

Client Sample ID: WQ1110419:1015 NP2-6

York Sample ID: 19K0138-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19K0138

31401451.000 Task 01.00

Water

November 4, 2019 10:15 am

11/05/2019

Sample Prepared by Method: EPA 200.7

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	29.8		mg/L	0.278	1	EPA 200.7 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/06/2019 11:02	11/06/2019 14:37	KML

Sample Information

Client Sample ID: WQ1110419:1020 NP2-10

York Sample ID: 19K0138-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19K0138

31401451.000 Task 01.00

Water

November 4, 2019 10:20 am

11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	LLJ



Sample Information

Client Sample ID: WQ1110419:1020 NP2-10

York Sample ID: 19K0138-02

York Project (SDG) No.

19K0138

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

November 4, 2019 10:20 am

Date Received

11/05/2019

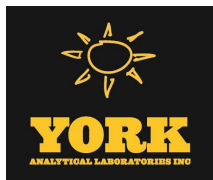
Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	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	11/08/2019 06:07	11/09/2019 04:58	LLJ



Sample Information

Client Sample ID: WQ1110419:1020 NP2-10

York Sample ID: 19K0138-02

York Project (SDG) No.

19K0138

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

November 4, 2019 10:20 am

Date Received

11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	11/08/2019 06:07 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:07 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/09/2019 04:58	LLJ



Sample Information

Client Sample ID: WQ1110419:1020 NP2-10

York Sample ID: 19K0138-02

York Project (SDG) No.

19K0138

Client Project ID

31401451.000 Task 01.00

Matrix

Water

Collection Date/Time

November 4, 2019 10:20 am

Date Received

11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:07	11/09/2019 04:58	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 06:07	11/09/2019 04:58	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	99.8 %			81-117						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.9 %			79-122						

Iron by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 200.7

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	0.536		mg/L	0.278	1	EPA 200.7 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/06/2019 11:02	11/06/2019 14:40	KML

Iron, Dissolved by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	ND		mg/L	0.278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/12/2019 11:23	11/12/2019 12:08	KML

Total Dissolved Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Dissolved Solids	102		mg/L	10.0	1	SM 2540C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	11/05/2019 18:47	11/07/2019 04:10	AA



Analytical Batch Summary

Batch ID: BK90208 **Preparation Method:** % Solids Prep **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
19K0138-02	WQ1110419:1020 NP2-10	11/05/19
BK90208-BLK1	Blank	11/05/19

Batch ID: BK90244 **Preparation Method:** EPA 200.7 **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
19K0138-01	WQ1110419:1015 NP2-6	11/06/19
19K0138-02	WQ1110419:1020 NP2-10	11/06/19
BK90244-BLK1	Blank	11/06/19
BK90244-BS1	LCS	11/06/19

Batch ID: BK90429 **Preparation Method:** EPA 5030B **Prepared By:** LLJ

YORK Sample ID	Client Sample ID	Preparation Date
19K0138-01	WQ1110419:1015 NP2-6	11/08/19
19K0138-02	WQ1110419:1020 NP2-10	11/08/19
BK90429-BLK1	Blank	11/08/19
BK90429-BS1	LCS	11/08/19
BK90429-BSD1	LCS Dup	11/08/19

Batch ID: BK90550 **Preparation Method:** EPA 3015A **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
19K0138-02	WQ1110419:1020 NP2-10	11/12/19
BK90550-BLK1	Blank	11/12/19
BK90550-BS1	LCS	11/12/19
BK90550-DUP1	Duplicate	11/12/19
BK90550-MS1	Matrix Spike	11/12/19
BK90550-PS1	Post Spike	11/12/19



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BK90429 - EPA 5030B

Blank (BK90429-BLK1)

Prepared: 11/08/2019 Analyzed: 11/09/2019

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,1-Dichloropropylene	ND	0.500	"
1,2,3-Trichlorobenzene	0.660	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	0.320	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	0.400	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
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Batch BK90429 - EPA 5030B

Blank (BK90429-BLK1)

Prepared: 11/08/2019 Analyzed: 11/09/2019

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	9.96	"	10.0	99.6	69-130
Surrogate: SURR: Toluene-d8	9.91	"	10.0	99.1	81-117
Surrogate: SURR: p-Bromofluorobenzene	9.97	"	10.0	99.7	79-122

LCS (BK90429-BS1)

Prepared: 11/08/2019 Analyzed: 11/09/2019

1,1,1,2-Tetrachloroethane	9.98	ug/L	10.0	99.8	82-126
1,1,1-Trichloroethane	9.58	"	10.0	95.8	78-136
1,1,2,2-Tetrachloroethane	10.1	"	10.0	101	76-129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.47	"	10.0	94.7	54-165
1,1,2-Trichloroethane	9.82	"	10.0	98.2	82-123
1,1-Dichloroethane	10.1	"	10.0	101	82-129
1,1-Dichloroethylene	9.23	"	10.0	92.3	68-138
1,1-Dichloropropylene	8.99	"	10.0	89.9	83-133
1,2,3-Trichlorobenzene	7.50	"	10.0	75.0	76-136
1,2,3-Trichloropropane	9.91	"	10.0	99.1	77-128
1,2,4-Trichlorobenzene	8.20	"	10.0	82.0	76-137
1,2,4-Trimethylbenzene	9.41	"	10.0	94.1	82-132
1,2-Dibromo-3-chloropropane	8.19	"	10.0	81.9	45-147
1,2-Dibromoethane	10.3	"	10.0	103	83-124
1,2-Dichlorobenzene	9.65	"	10.0	96.5	79-123
1,2-Dichloroethane	9.84	"	10.0	98.4	73-132
1,2-Dichloropropane	9.67	"	10.0	96.7	78-126
1,3,5-Trimethylbenzene	9.46	"	10.0	94.6	80-131
1,3-Dichlorobenzene	9.54	"	10.0	95.4	86-122
1,3-Dichloropropane	10.3	"	10.0	103	81-125
1,4-Dichlorobenzene	9.51	"	10.0	95.1	85-124
2,2-Dichloropropane	8.37	"	10.0	83.7	56-150
2-Chlorotoluene	9.28	"	10.0	92.8	79-130
2-Hexanone	8.97	"	10.0	89.7	51-146
4-Chlorotoluene	9.44	"	10.0	94.4	79-128
Acetone	7.06	"	10.0	70.6	14-150
Benzene	10.8	"	10.0	108	85-126
Bromobenzene	9.75	"	10.0	97.5	78-129
Bromochloromethane	10.8	"	10.0	108	77-128
Bromodichloromethane	9.64	"	10.0	96.4	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 BK90429 - EPA 5030B

LCS (BK90429-BS1)

Prepared: 11/08/2019 Analyzed: 11/09/2019

Bromoform	9.44		ug/L	10.0		94.4	78-133				
Bromomethane	2.37		"	10.0		23.7	43-168	Low Bias			
Carbon tetrachloride	8.56		"	10.0		85.6	77-141				
Chlorobenzene	10.1		"	10.0		101	88-120				
Chloroethane	10.6		"	10.0		106	65-136				
Chloroform	9.88		"	10.0		98.8	82-128				
Chloromethane	7.95		"	10.0		79.5	43-155				
cis-1,2-Dichloroethylene	9.90		"	10.0		99.0	83-129				
cis-1,3-Dichloropropylene	9.61		"	10.0		96.1	80-131				
Dibromochloromethane	9.79		"	10.0		97.9	80-130				
Dibromomethane	9.85		"	10.0		98.5	72-134				
Dichlorodifluoromethane	6.23		"	10.0		62.3	44-144				
Ethyl Benzene	10.5		"	10.0		105	80-131				
Hexachlorobutadiene	8.55		"	10.0		85.5	67-146				
Isopropylbenzene	9.46		"	10.0		94.6	76-140				
Methyl tert-butyl ether (MTBE)	10.1		"	10.0		101	76-135				
Methylene chloride	11.2		"	10.0		112	55-137				
Naphthalene	7.86		"	10.0		78.6	70-147				
n-Butylbenzene	8.51		"	10.0		85.1	79-132				
n-Propylbenzene	9.51		"	10.0		95.1	78-133				
o-Xylene	10.2		"	10.0		102	78-130				
p- & m- Xylenes	18.1		"	20.0		90.3	77-133				
p-Isopropyltoluene	9.08		"	10.0		90.8	81-136				
sec-Butylbenzene	9.19		"	10.0		91.9	79-137				
Styrene	10.1		"	10.0		101	67-132				
tert-Butylbenzene	7.45		"	10.0		74.5	77-138	Low Bias			
Tetrachloroethylene	8.33		"	10.0		83.3	82-131				
Toluene	10.5		"	10.0		105	80-127				
trans-1,2-Dichloroethylene	9.74		"	10.0		97.4	80-132				
trans-1,3-Dichloropropylene	9.38		"	10.0		93.8	78-131				
Trichloroethylene	9.18		"	10.0		91.8	82-128				
Trichlorofluoromethane	10.2		"	10.0		102	67-139				
Vinyl Chloride	8.63		"	10.0		86.3	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.76		"	10.0		97.6	69-130				
Surrogate: SURR: Toluene-d8	9.93		"	10.0		99.3	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.94		"	10.0		99.4	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 BK90429 - EPA 5030B											
LCS Dup (BK90429-BSD1)						Prepared: 11/08/2019 Analyzed: 11/09/2019					
1,1,1,2-Tetrachloroethane	10.3		ug/L	10.0		103	82-126		3.35	30	
1,1,1-Trichloroethane	10.2		"	10.0		102	78-136		6.37	30	
1,1,2,2-Tetrachloroethane	10.1		"	10.0		101	76-129		0.298	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.1		"	10.0		101	54-165		6.34	30	
1,1,2-Trichloroethane	10.0		"	10.0		100	82-123		2.22	30	
1,1-Dichloroethane	10.7		"	10.0		107	82-129		5.79	30	
1,1-Dichloroethylene	10.0		"	10.0		100	68-138		8.41	30	
1,1-Dichloropropylene	9.60		"	10.0		96.0	83-133		6.56	30	
1,2,3-Trichlorobenzene	7.68		"	10.0		76.8	76-136		2.37	30	
1,2,3-Trichloropropane	10.3		"	10.0		103	77-128		3.47	30	
1,2,4-Trichlorobenzene	8.53		"	10.0		85.3	76-137		3.95	30	
1,2,4-Trimethylbenzene	9.91		"	10.0		99.1	82-132		5.18	30	
1,2-Dibromo-3-chloropropane	8.44		"	10.0		84.4	45-147		3.01	30	
1,2-Dibromoethane	10.5		"	10.0		105	83-124		2.50	30	
1,2-Dichlorobenzene	10.1		"	10.0		101	79-123		4.56	30	
1,2-Dichloroethane	10.1		"	10.0		101	73-132		2.31	30	
1,2-Dichloropropane	10.1		"	10.0		101	78-126		4.25	30	
1,3,5-Trimethylbenzene	9.94		"	10.0		99.4	80-131		4.95	30	
1,3-Dichlorobenzene	9.94		"	10.0		99.4	86-122		4.11	30	
1,3-Dichloropropane	10.5		"	10.0		105	81-125		2.12	30	
1,4-Dichlorobenzene	9.89		"	10.0		98.9	85-124		3.92	30	
2,2-Dichloropropane	8.93		"	10.0		89.3	56-150		6.47	30	
2-Chlorotoluene	9.76		"	10.0		97.6	79-130		5.04	30	
2-Hexanone	9.15		"	10.0		91.5	51-146		1.99	30	
4-Chlorotoluene	9.92		"	10.0		99.2	79-128		4.96	30	
Acetone	7.78		"	10.0		77.8	14-150		9.70	30	
Benzene	11.5		"	10.0		115	85-126		6.01	30	
Bromobenzene	10.0		"	10.0		100	78-129		2.83	30	
Bromochloromethane	11.2		"	10.0		112	77-128		3.90	30	
Bromodichloromethane	10.0		"	10.0		100	79-128		3.87	30	
Bromoform	9.62		"	10.0		96.2	78-133		1.89	30	
Bromomethane	2.96		"	10.0		29.6	43-168	Low Bias	22.1	30	
Carbon tetrachloride	9.23		"	10.0		92.3	77-141		7.53	30	
Chlorobenzene	10.6		"	10.0		106	88-120		4.44	30	
Chloroethane	11.2		"	10.0		112	65-136		6.15	30	
Chloroform	10.4		"	10.0		104	82-128		4.84	30	
Chloromethane	8.66		"	10.0		86.6	43-155		8.55	30	
cis-1,2-Dichloroethylene	10.4		"	10.0		104	83-129		5.02	30	
cis-1,3-Dichloropropylene	9.93		"	10.0		99.3	80-131		3.28	30	
Dibromochloromethane	10.1		"	10.0		101	80-130		3.02	30	
Dibromomethane	10.1		"	10.0		101	72-134		2.61	30	
Dichlorodifluoromethane	11.0		"	10.0		110	44-144		55.3	30	Non-dir.
Ethyl Benzene	11.0		"	10.0		110	80-131		4.63	30	
Hexachlorobutadiene	9.36		"	10.0		93.6	67-146		9.05	30	
Isopropylbenzene	9.96		"	10.0		99.6	76-140		5.15	30	
Methyl tert-butyl ether (MTBE)	10.4		"	10.0		104	76-135		2.73	30	
Methylene chloride	11.8		"	10.0		118	55-137		4.70	30	
Naphthalene	7.96		"	10.0		79.6	70-147		1.26	30	
n-Butylbenzene	9.07		"	10.0		90.7	79-132		6.37	30	
n-Propylbenzene	10.1		"	10.0		101	78-133		5.72	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 BK90429 - EPA 5030B

LCS Dup (BK90429-BSD1)

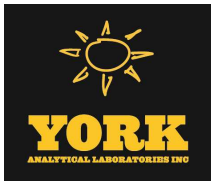
Prepared: 11/08/2019 Analyzed: 11/09/2019

o-Xylene	10.6		ug/L	10.0		106	78-130		4.42	30	
p- & m- Xylenes	18.9		"	20.0		94.6	77-133		4.70	30	
p-Isopropyltoluene	9.59		"	10.0		95.9	81-136		5.46	30	
sec-Butylbenzene	9.76		"	10.0		97.6	79-137		6.02	30	
Styrene	10.5		"	10.0		105	67-132		3.70	30	
tert-Butylbenzene	7.91		"	10.0		79.1	77-138		5.99	30	
Tetrachloroethylene	8.82		"	10.0		88.2	82-131		5.71	30	
Toluene	11.1		"	10.0		111	80-127		5.38	30	
trans-1,2-Dichloroethylene	10.4		"	10.0		104	80-132		6.75	30	
trans-1,3-Dichloropropylene	9.77		"	10.0		97.7	78-131		4.07	30	
Trichloroethylene	9.71		"	10.0		97.1	82-128		5.61	30	
Trichlorofluoromethane	11.0		"	10.0		110	67-139		7.16	30	
Vinyl Chloride	9.38		"	10.0		93.8	58-145		8.33	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	9.86		"	10.0		98.6	69-130				
Surrogate: SURR: Toluene-d8	9.88		"	10.0		98.8	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.90		"	10.0		99.0	79-122				



Metals by ICP - Quality Control Data
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK90244 - EPA 200.7											
Blank (BK90244-BLK1)								Prepared & Analyzed: 11/06/2019			
Iron	ND	0.278	mg/L								
LCS (BK90244-BS1)								Prepared & Analyzed: 11/06/2019			
Iron	0.980		ug/mL	1.00		98.0	85-115				
Batch BK90550 - EPA 3015A											
Blank (BK90550-BLK1)								Prepared & Analyzed: 11/12/2019			
Iron - Dissolved	ND	0.278	mg/L								
LCS (BK90550-BS1)								Prepared & Analyzed: 11/12/2019			
Iron - Dissolved	1.02		ug/mL	1.00		102	80-120				
Duplicate (BK90550-DUP1)								Prepared & Analyzed: 11/12/2019			
Iron - Dissolved	ND	0.278	mg/L		ND					20	
Matrix Spike (BK90550-MS1)								Prepared & Analyzed: 11/12/2019			
Iron - Dissolved	1.14	0.278	mg/L	1.11	ND	103	75-125				
Post Spike (BK90550-PS1)								Prepared & Analyzed: 11/12/2019			
Iron - Dissolved	1.03		ug/mL	1.00	0.0486	98.1	75-125				



Miscellaneous Physical Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BK90208 - % Solids Prep

Blank (BK90208-BLK1)

Prepared: 11/05/2019 Analyzed: 11/07/2019

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

Lab ID	Client Sample ID	Volatile Sample Container
19K0138-01	WQ1110419:1015 NP2-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19K0138-02	WQ1110419:1020 NP2-10	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
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).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

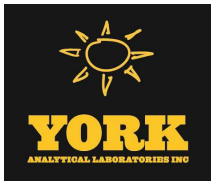
*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration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

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

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

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

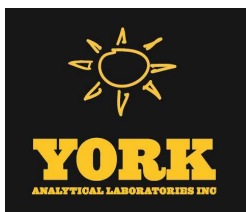
Certification for pH is no longer offered by NYDOH ELAP.



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

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

APPENDIX II
NOVEMBER 2019 LABORATORY ANALYTICAL REPORTS
FOR FSP&T AND FP&T RECOVERY WELLS



Technical Report

prepared for:

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

Report Date: 11/12/2019
Client Project ID: 31401451.000 Task01.00
York Project (SDG) No.: 19K0139

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 11/12/2019
Client Project ID: 31401451.000 Task01.00
York Project (SDG) No.: 19K0139

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 November 05, 2019 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>
19K0139-01	WQ110419:0920 FRW-1	Water	11/04/2019	11/05/2019
19K0139-02	WQ110419:0925 FRW-2	Water	11/04/2019	11/05/2019
19K0139-03	WQ110419:0930 FRW-3	Water	11/04/2019	11/05/2019
19K0139-04	WQ110419:09:35 FRW-4	Water	11/04/2019	11/05/2019
19K0139-05	WQ110419:11:25 NP1-1-2	Water	11/04/2019	11/05/2019

General Notes for York Project (SDG) No.: 19K0139

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: 11/12/2019





Sample Information

Client Sample ID: WQ110419:0920 FRW-1

York Sample ID: 19K0139-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19K0139

31401451.000 Task01.00

Water

November 4, 2019 9:20 am

11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	LLJ
95-63-6	1,2,4-Trimethylbenzene	1.19		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	LLJ
108-67-8	1,3,5-Trimethylbenzene	0.280		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ



Sample Information

Client Sample ID: WQ110419:0920 FRW-1

York Sample ID: 19K0139-01

York Project (SDG) No.
19K0139

Client Project ID
31401451.000 Task01.00

Matrix
Water

Collection Date/Time
November 4, 2019 9:20 am

Date Received
11/05/2019

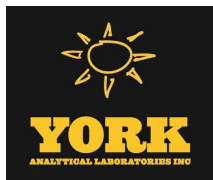
Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
74-87-3	Chloromethane	0.230		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
156-59-2	cis-1,2-Dichloroethylene	5.63		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
100-41-4	Ethyl Benzene	0.300		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ



Sample Information

Client Sample ID: WQ110419:0920 FRW-1

York Sample ID: 19K0139-01

York Project (SDG) No.
19K0139

Client Project ID
31401451.000 Task01.00

Matrix
Water

Collection Date/Time
November 4, 2019 9:20 am

Date Received
11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
91-20-3	Naphthalene	2.49	CCV-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
95-47-6	o-Xylene	0.450		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
127-18-4	Tetrachloroethylene	3.55		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
108-88-3	Toluene	0.290		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	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	11/08/2019 06:18	11/08/2019 22:27	LLJ
79-01-6	Trichloroethylene	2.33		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
75-01-4	Vinyl Chloride	2.99		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
1330-20-7	Xylenes, Total	0.820		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 06:18	11/08/2019 22:27	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	106 %	69-130								
2037-26-5	Surrogate: SURRE: Toluene-d8	99.8 %	81-117								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	98.8 %	79-122								



Sample Information

Client Sample ID: WQ110419:0925 FRW-2

York Sample ID: 19K0139-02

York Project (SDG) No.

19K0139

Client Project ID

31401451.000 Task01.00

Matrix

Water

Collection Date/Time

November 4, 2019 9:25 am

Date Received

11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	LLJ
95-63-6	1,2,4-Trimethylbenzene	0.770		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ



Sample Information

Client Sample ID: WQ110419:0925 FRW-2

York Sample ID: 19K0139-02

York Project (SDG) No.
19K0139

Client Project ID
31401451.000 Task01.00

Matrix
Water

Collection Date/Time
November 4, 2019 9:25 am

Date Received
11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
100-41-4	Ethyl Benzene	0.220		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	LLJ



Sample Information

Client Sample ID: WQ110419:0925 FRW-2

York Sample ID: 19K0139-02

York Project (SDG) No.
19K0139

Client Project ID
31401451.000 Task01.00

Matrix
Water

Collection Date/Time
November 4, 2019 9:25 am

Date Received
11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
95-47-6	o-Xylene	0.310		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
127-18-4	Tetrachloroethylene	5.06		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
108-88-3	Toluene	0.220		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	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	11/08/2019 06:18	11/08/2019 22:53	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 06:18	11/08/2019 22:53	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	106 %	69-130								
2037-26-5	Surrogate: SURRE: Toluene-d8	99.5 %	81-117								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	98.3 %	79-122								



Sample Information

Client Sample ID: WQ110419:0930 FRW-3

York Sample ID: 19K0139-03

York Project (SDG) No.

19K0139

Client Project ID

31401451.000 Task01.00

Matrix

Water

Collection Date/Time

November 4, 2019 9:30 am

Date Received

11/05/2019

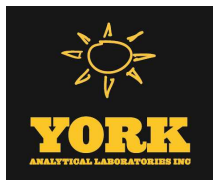
Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	LLJ
95-63-6	1,2,4-Trimethylbenzene	0.560		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ



Sample Information

Client Sample ID: WQ110419:0930 FRW-3

York Sample ID: 19K0139-03

York Project (SDG) No.
19K0139

Client Project ID
31401451.000 Task01.00

Matrix
Water

Collection Date/Time
November 4, 2019 9:30 am

Date Received
11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
156-59-2	cis-1,2-Dichloroethylene	1.90		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:19	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	11/08/2019 06:18	11/08/2019 23:19	LLJ



Sample Information

Client Sample ID: WQ110419:0930 FRW-3

York Sample ID: 19K0139-03

York Project (SDG) No.
19K0139

Client Project ID
31401451.000 Task01.00

Matrix
Water

Collection Date/Time
November 4, 2019 9:30 am

Date Received
11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	11/08/2019 06:18 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
95-47-6	o-Xylene	0.240		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	11/08/2019 23:19	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	11/08/2019 23:19	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
127-18-4	Tetrachloroethylene	12.2		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
79-01-6	Trichloroethylene	0.510		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 23:19	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	11/08/2019 06:18 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 23:19	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	106 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	99.5 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.1 %	79-122								



Sample Information

Client Sample ID: WQ110419:09:35 FRW-4

York Sample ID: 19K0139-04

York Project (SDG) No.

19K0139

Client Project ID

31401451.000 Task01.00

Matrix

Water

Collection Date/Time

November 4, 2019 9:35 am

Date Received

11/05/2019

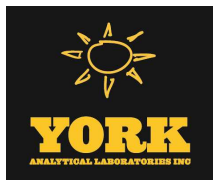
Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	LLJ
95-63-6	1,2,4-Trimethylbenzene	0.450		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ



Sample Information

Client Sample ID: WQ110419:09:35 FRW-4

York Sample ID: 19K0139-04

York Project (SDG) No.
19K0139

Client Project ID
31401451.000 Task01.00

Matrix
Water

Collection Date/Time
November 4, 2019 9:35 am

Date Received
11/05/2019

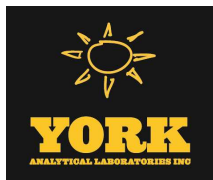
Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	LLJ



Sample Information

Client Sample ID: WQ110419:09:35 FRW-4

York Sample ID: 19K0139-04

York Project (SDG) No.
19K0139

Client Project ID
31401451.000 Task01.00

Matrix
Water

Collection Date/Time
November 4, 2019 9:35 am

Date Received
11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
127-18-4	Tetrachloroethylene	1.12		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	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	11/08/2019 06:18	11/08/2019 23:45	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 06:18	11/08/2019 23:45	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	106 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	98.9 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.8 %	79-122								



Sample Information

Client Sample ID: WQ110419:11:25 NP1-1-2

York Sample ID: 19K0139-05

York Project (SDG) No.

19K0139

Client Project ID

31401451.000 Task01.00

Matrix

Water

Collection Date/Time

November 4, 2019 11:25 am

Date Received

11/05/2019

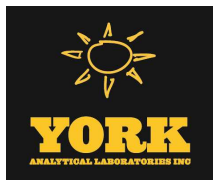
Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	LLJ
95-63-6	1,2,4-Trimethylbenzene	0.360		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ



Sample Information

Client Sample ID: WQ110419:11:25 NP1-1-2

York Sample ID: 19K0139-05

York Project (SDG) No.
19K0139

Client Project ID
31401451.000 Task01.00

Matrix
Water

Collection Date/Time
November 4, 2019 11:25 am

Date Received
11/05/2019

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	LLJ



Sample Information

Client Sample ID: WQ110419:11:25 NP1-1-2

York Sample ID: 19K0139-05

York Project (SDG) No.
19K0139

Client Project ID
31401451.000 Task01.00

Matrix
Water

Collection Date/Time
November 4, 2019 11:25 am

Date Received
11/05/2019

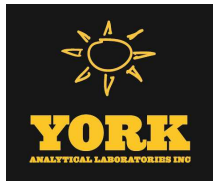
Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
127-18-4	Tetrachloroethylene	0.400		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	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	11/08/2019 16:07	11/09/2019 00:11	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/08/2019 16:07	11/09/2019 00:11	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	104 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	99.1 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.6 %	79-122								



Analytical Batch Summary

Batch ID: BK90258

Preparation Method: EPA 5030B

Prepared By: LLJ

YORK Sample ID	Client Sample ID	Preparation Date
19K0139-01	WQ110419:0920 FRW-1	11/08/19
19K0139-02	WQ110419:0925 FRW-2	11/08/19
19K0139-03	WQ110419:0930 FRW-3	11/08/19
19K0139-04	WQ110419:09:35 FRW-4	11/08/19
19K0139-05	WQ110419:11:25 NP1-1-2	11/08/19
BK90258-BLK1	Blank	11/08/19
BK90258-BS1	LCS	11/08/19
BK90258-BSD1	LCS Dup	11/08/19



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BK90258 - EPA 5030B

Blank (BK90258-BLK1)

Prepared & Analyzed: 11/08/2019

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,1-Dichloropropylene	ND	0.500	"
1,2,3-Trichlorobenzene	0.630	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	0.320	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
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Batch BK90258 - EPA 5030B

Blank (BK90258-BLK1)

Prepared & Analyzed: 11/08/2019

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	9.70	"	10.0	97.0	69-130
Surrogate: SURR: Toluene-d8	9.90	"	10.0	99.0	81-117
Surrogate: SURR: p-Bromofluorobenzene	9.90	"	10.0	99.0	79-122

LCS (BK90258-BS1)

Prepared & Analyzed: 11/08/2019

1,1,1,2-Tetrachloroethane	10.6	ug/L	10.0	106	82-126
1,1,1-Trichloroethane	10.7	"	10.0	107	78-136
1,1,2,2-Tetrachloroethane	10.3	"	10.0	103	76-129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.6	"	10.0	106	54-165
1,1,2-Trichloroethane	10.3	"	10.0	103	82-123
1,1-Dichloroethane	11.2	"	10.0	112	82-129
1,1-Dichloroethylene	10.5	"	10.0	105	68-138
1,1-Dichloropropylene	10.3	"	10.0	103	83-133
1,2,3-Trichlorobenzene	7.39	"	10.0	73.9	76-136
1,2,3-Trichloropropane	10.2	"	10.0	102	77-128
1,2,4-Trichlorobenzene	8.57	"	10.0	85.7	76-137
1,2,4-Trimethylbenzene	10.2	"	10.0	102	82-132
1,2-Dibromo-3-chloropropane	8.59	"	10.0	85.9	45-147
1,2-Dibromoethane	11.0	"	10.0	110	83-124
1,2-Dichlorobenzene	10.4	"	10.0	104	79-123
1,2-Dichloroethane	10.6	"	10.0	106	73-132
1,2-Dichloropropane	10.5	"	10.0	105	78-126
1,3,5-Trimethylbenzene	10.4	"	10.0	104	80-131
1,3-Dichlorobenzene	10.3	"	10.0	103	86-122
1,3-Dichloropropane	10.8	"	10.0	108	81-125
1,4-Dichlorobenzene	10.4	"	10.0	104	85-124
2,2-Dichloropropane	10.2	"	10.0	102	56-150
2-Chlorotoluene	10.2	"	10.0	102	79-130
2-Hexanone	9.49	"	10.0	94.9	51-146
4-Chlorotoluene	10.3	"	10.0	103	79-128
Acetone	7.82	"	10.0	78.2	14-150
Benzene	12.1	"	10.0	121	85-126
Bromobenzene	10.4	"	10.0	104	78-129
Bromochloromethane	11.4	"	10.0	114	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 BK90258 - EPA 5030B

LCS (BK90258-BS1)

Prepared & Analyzed: 11/08/2019

Bromoform	10.0		ug/L	10.0		100	78-133				
Bromomethane	1.35		"	10.0		13.5	43-168	Low Bias			
Carbon tetrachloride	9.72		"	10.0		97.2	77-141				
Chlorobenzene	11.1		"	10.0		111	88-120				
Chloroethane	11.8		"	10.0		118	65-136				
Chloroform	11.0		"	10.0		110	82-128				
Chloromethane	9.48		"	10.0		94.8	43-155				
cis-1,2-Dichloroethylene	11.2		"	10.0		112	83-129				
cis-1,3-Dichloropropylene	10.4		"	10.0		104	80-131				
Dibromochloromethane	10.6		"	10.0		106	80-130				
Dibromomethane	10.5		"	10.0		105	72-134				
Dichlorodifluoromethane	11.9		"	10.0		119	44-144				
Ethyl Benzene	11.7		"	10.0		117	80-131				
Hexachlorobutadiene	9.46		"	10.0		94.6	67-146				
Isopropylbenzene	10.3		"	10.0		103	76-140				
Methyl tert-butyl ether (MTBE)	10.7		"	10.0		107	76-135				
Methylene chloride	12.2		"	10.0		122	55-137				
Naphthalene	7.43		"	10.0		74.3	70-147				
n-Butylbenzene	9.65		"	10.0		96.5	79-132				
n-Propylbenzene	10.5		"	10.0		105	78-133				
o-Xylene	11.2		"	10.0		112	78-130				
p- & m- Xylenes	20.2		"	20.0		101	77-133				
p-Isopropyltoluene	10.1		"	10.0		101	81-136				
sec-Butylbenzene	10.2		"	10.0		102	79-137				
Styrene	11.2		"	10.0		112	67-132				
tert-Butylbenzene	8.19		"	10.0		81.9	77-138				
Tetrachloroethylene	9.40		"	10.0		94.0	82-131				
Toluene	11.6		"	10.0		116	80-127				
trans-1,2-Dichloroethylene	11.0		"	10.0		110	80-132				
trans-1,3-Dichloropropylene	10.2		"	10.0		102	78-131				
Trichloroethylene	10.4		"	10.0		104	82-128				
Trichlorofluoromethane	11.3		"	10.0		113	67-139				
Vinyl Chloride	9.91		"	10.0		99.1	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.93		"	10.0		99.3	69-130				
Surrogate: SURR: Toluene-d8	9.82		"	10.0		98.2	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.88		"	10.0		98.8	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 BK90258 - EPA 5030B											
LCS Dup (BK90258-BSD1)						Prepared & Analyzed: 11/08/2019					
1,1,1,2-Tetrachloroethane	10.6		ug/L	10.0		106	82-126		0.755	30	
1,1,1-Trichloroethane	10.3		"	10.0		103	78-136		4.09	30	
1,1,2,2-Tetrachloroethane	9.96		"	10.0		99.6	76-129		3.65	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.2		"	10.0		102	54-165		3.83	30	
1,1,2-Trichloroethane	9.92		"	10.0		99.2	82-123		3.66	30	
1,1-Dichloroethane	10.8		"	10.0		108	82-129		3.74	30	
1,1-Dichloroethylene	9.94		"	10.0		99.4	68-138		5.38	30	
1,1-Dichloropropylene	9.82		"	10.0		98.2	83-133		4.58	30	
1,2,3-Trichlorobenzene	8.17		"	10.0		81.7	76-136		10.0	30	
1,2,3-Trichloropropane	10.1		"	10.0		101	77-128		1.58	30	
1,2,4-Trichlorobenzene	8.96		"	10.0		89.6	76-137		4.45	30	
1,2,4-Trimethylbenzene	10.1		"	10.0		101	82-132		1.09	30	
1,2-Dibromo-3-chloropropane	8.30		"	10.0		83.0	45-147		3.43	30	
1,2-Dibromoethane	10.6		"	10.0		106	83-124		3.34	30	
1,2-Dichlorobenzene	10.2		"	10.0		102	79-123		2.04	30	
1,2-Dichloroethane	10.4		"	10.0		104	73-132		1.91	30	
1,2-Dichloropropane	10.2		"	10.0		102	78-126		2.90	30	
1,3,5-Trimethylbenzene	10.2		"	10.0		102	80-131		2.03	30	
1,3-Dichlorobenzene	10.1		"	10.0		101	86-122		2.26	30	
1,3-Dichloropropane	10.5		"	10.0		105	81-125		3.38	30	
1,4-Dichlorobenzene	10.1		"	10.0		101	85-124		2.83	30	
2,2-Dichloropropane	9.56		"	10.0		95.6	56-150		6.58	30	
2-Chlorotoluene	9.96		"	10.0		99.6	79-130		1.89	30	
2-Hexanone	9.10		"	10.0		91.0	51-146		4.20	30	
4-Chlorotoluene	10.1		"	10.0		101	79-128		1.76	30	
Acetone	7.82		"	10.0		78.2	14-150		0.00	30	
Benzene	11.7		"	10.0		117	85-126		2.77	30	
Bromobenzene	10.2		"	10.0		102	78-129		2.04	30	
Bromochloromethane	11.2		"	10.0		112	77-128		1.85	30	
Bromodichloromethane	10.2		"	10.0		102	79-128		2.63	30	
Bromoform	9.84		"	10.0		98.4	78-133		1.81	30	
Bromomethane	2.45		"	10.0		24.5	43-168	Low Bias	57.9	30	Non-dir.
Carbon tetrachloride	9.35		"	10.0		93.5	77-141		3.88	30	
Chlorobenzene	10.7		"	10.0		107	88-120		3.40	30	
Chloroethane	11.3		"	10.0		113	65-136		3.81	30	
Chloroform	10.7		"	10.0		107	82-128		2.77	30	
Chloromethane	8.83		"	10.0		88.3	43-155		7.10	30	
cis-1,2-Dichloroethylene	10.8		"	10.0		108	83-129		4.36	30	
cis-1,3-Dichloropropylene	10.1		"	10.0		101	80-131		3.12	30	
Dibromochloromethane	10.2		"	10.0		102	80-130		3.08	30	
Dibromomethane	10.2		"	10.0		102	72-134		3.39	30	
Dichlorodifluoromethane	11.2		"	10.0		112	44-144		5.87	30	
Ethyl Benzene	11.2		"	10.0		112	80-131		3.92	30	
Hexachlorobutadiene	9.23		"	10.0		92.3	67-146		2.46	30	
Isopropylbenzene	10.2		"	10.0		102	76-140		1.66	30	
Methyl tert-butyl ether (MTBE)	10.6		"	10.0		106	76-135		0.750	30	
Methylene chloride	12.0		"	10.0		120	55-137		1.82	30	
Naphthalene	8.13		"	10.0		81.3	70-147		9.00	30	
n-Butylbenzene	9.49		"	10.0		94.9	79-132		1.67	30	
n-Propylbenzene	10.3		"	10.0		103	78-133		2.11	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 BK90258 - EPA 5030B

LCS Dup (BK90258-BSD1)

Prepared & Analyzed: 11/08/2019

o-Xylene	10.9		ug/L	10.0		109	78-130		2.99	30	
p- & m- Xylenes	19.3		"	20.0		96.7	77-133		4.10	30	
p-Isopropyltoluene	9.94		"	10.0		99.4	81-136		1.20	30	
sec-Butylbenzene	10.1		"	10.0		101	79-137		1.18	30	
Styrene	10.7		"	10.0		107	67-132		3.84	30	
tert-Butylbenzene	8.15		"	10.0		81.5	77-138		0.490	30	
Tetrachloroethylene	8.93		"	10.0		89.3	82-131		5.13	30	
Toluene	11.2		"	10.0		112	80-127		3.59	30	
trans-1,2-Dichloroethylene	10.4		"	10.0		104	80-132		5.13	30	
trans-1,3-Dichloropropylene	9.90		"	10.0		99.0	78-131		2.89	30	
Trichloroethylene	9.96		"	10.0		99.6	82-128		4.42	30	
Trichlorofluoromethane	10.8		"	10.0		108	67-139		4.16	30	
Vinyl Chloride	9.39		"	10.0		93.9	58-145		5.39	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	9.72		"	10.0		97.2	69-130				
Surrogate: SURR: Toluene-d8	9.87		"	10.0		98.7	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.78		"	10.0		97.8	79-122				



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19K0139-01	WQ110419:0920 FRW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19K0139-02	WQ110419:0925 FRW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19K0139-03	WQ110419:0930 FRW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19K0139-04	WQ110419:09:35 FRW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19K0139-05	WQ110419:11:25 NP1-1-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

QR-04	The RPD exceeded control limits for the LCS/LCSD QC.
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).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.



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

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



Field Chain-of-Custody Record

YORK Project No.

19K0139

Page 1 of 1

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.

YOUR Information		Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company:		Company:			RUSH - Next Day
Address:		Address:			RUSH - Two Day
				YOUR Project Name	RUSH - Three Day
Phone:		Phone:			RUSH - Four Day
Contact:		Contact:			Standard (5-7 Day)
E-mail:		E-mail:		YOUR PO#:	

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.

Scott Philbrick

Samples Collected by: (print your name above and sign below)

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
WQ 110419:0920 FRW-1	GLW	9:20	VOC's 8260 Plus Freedom 113	3 VOC's
0925 FRW-2		9:25		
0930 FRW-3		9:30		
0935 FRW-4	↓	9:35		
NPT-1-2-SP				
11:25 NPT-1-2	GLW	11:25		

Comments:

Comments:	Preservation: (check all that apply)				Special Instruction	
	HCl	MeOH	HNO ₃	H ₂ SO ₄	NaOH	ZnAc
	☒					
	Ascorbic Acid	Other:				
	Date/Time	11/5/19 1130				
	Samples Relinquished by / Company					
	Received by / Company					
	Date/Time	11/5/19 1130				
	Samples Relinquished by / Company					
	Received by / Company					
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