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 April 2019 Status Report

DATE: July 22, 2019

WSP USA (WSP) commenced operation of the Full-Scale Pump and Treat (FSP&T) groundwater remediation system at the above-referenced site on December 17, 2002. Starting in September 2008, the groundwater recovered by the Focus Pump and Treat (FP&T) system was routed to the FSP&T system for treatment. As of 2014, the FSP&T system only treats water extracted from RW-2 and FRW-1, 2, 3 and 4; the other FSP&T recovery wells (RW-1, 3, 4, 5, 6, 7, 8, and 9) have been shut down with USEPA approval after achieving remediation standards. This status report presents a summary of performance, operation and maintenance for both systems and monitoring activities for the site from April 1, 2019 through April 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

(April 1, 2019 through April 30, 2019)

1. Hours of operation during the reporting period:	681 hours (94.6%)
2. Alarm conditions during the reporting period:	See Table 1
3. Were the SPDES VOC discharge permit criteria achieved:	Yes, (see Table 2)
4. Total volume of water pumped during the reporting period:	1,032,642 gal.
5. Was the system effluent flow below the SPDES limit of 1,023,000 gpd:	Yes, (see Graph 1)
6. Mass of VOCs recovered during the reporting period:	0.02 pound (see Graph 2)
7. Cumulative mass of VOCs recovered since startup on 12/17/02: (calculations can be provided upon request)	229.7 pounds
8. Effluent VOC vapor concentration for the reporting period:	0.10 mg/m^3 (see Table 8)
9. Was the effluent VOC vapor emission rate below 0.022 lbs./hr.: (calculations can be provided upon request)	yes (0.00107 lbs./hr.)

WSP USA
Formerly
Leggette, Brashears & Graham
4 Research Drive Suite 204
Shelton, CT 06484

T +1-203-929-8555
wsp.com

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/]	864,797	1.1
FRW-1 [2/]	82,685	52.8
FRW-2 [2]	20,787	15.5
FRW-3 [2/]	375	25.2
FRW-4 [2/]	80,464	3.7

[1/] The above table summarizes the parameters for RW-2 from April 1 to April 30, 2019.

[2/] The above table summarizes the parameters for the FRWs from April 2, 2019 to May 3, 2019. The pump in FRW-3 did not operate for the month of April and resumed operation on May 3, 2019.

On April 16, 2019, the target flow rate for RW-2 was reduced from 23 gpm to 20 gpm because of iron fouling at the pump intake and the riser pipe. RW-2 well rehabilitation began on April 22, 2019 and concluded on April 29, 2019. The chemical rehabilitation of this well was successful since the target flow rate was reset to the normal 27 gpm and the percent motor speed was reduced from 100% to 58% (an indicator of how hard the motor works to achieve the target flow rate).

Annual maintenance on system components was conducted from April 22 to May 3. On April 29 and 30, 2019, mechanical well rehabilitation was conducted on FRW-1, 3 and 4. Details of well rehabilitation and annual maintenance activities conducted in April are provided in Table 1. The remaining annual maintenance task will be summarized in the May status memo. A more detailed discussion of the well rehabilitation work will be included in the 2019 annual report.

SUMMARY OF SAMPLING ACTIVITIES

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

- Monthly groundwater samples were collected from RW-2, FRW-1, FRW-2, and FRW-4 on April 2, 2019;
- A monthly groundwater sample was collected from FRW-3 on April 29, 2019;

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

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

PCE concentrations in FRW-1, 2 and 3 remain above the ARAR in April. The PCE concentration in the groundwater sample collected at FRW-4 was below the ARAR in April. The TCE, cis-DCE, TCA

and VC concentrations in the groundwater samples collected at FRW-1, 2, 3 and 4 were below their respective ARARs in April.

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 May 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
H:\NABIS\2019\Monthly Reports\April\Status_Apr_2019.docx

TABLES

TABLE 1

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

MAINTENANCE LOG
(April 1, 2019 through April 30, 2019)

Date	Time	System Changes/Modifications	Personnel
4/2/19		Changed the multi-bag filter bags (400 um) in Banks 1 and 2, seven of eight housings used. Banks 1 and 2 left open. Bank 3 closed.	EF
		Iron fouling removed from flow meter paddle wheels for FRW wells.	EF
		FRW-3 remains off due to a burnt-out motor and is scheduled to be replaced during annual maintenance activities that are scheduled to begin later this month.	
4/6/19	2:27 AM	Power failure alarm; the FP&T system shuts off; however, the FSP&T system (RW-2) remains in operation. This alarm did not trigger autodialler activation so this condition was not known until the next site visit, which occurred on April 16, 2019.	
4/16/19		Reset the power failure alarm and restarted the FP&T system except for FRW-3, which remains off.	EF
		Lowered flow rate for RW-2 from 23 gpm to 20 gpm to because of high iron content at the pump intake and in the riser pipe. RW-2 rehab scheduled to begin next week	EF
4/22/19		Mobilize to the site and set-up for well rehabilitation for RW-2. Remove and clean flow meter and drop pipe. Clean the riser pipe. Set up frac tank and transfer pump.	TS, Cisco
4/23/19		Removed the RW-2 pump and completed the pre-treatment pumping test. Started RW-2 well rehabilitation.	TS, Cisco
		Cleaned the trench drain in front of the FSP&T building.	TS, Cisco
4/24/19		Continued RW-2 well rehabilitation	TS, Cisco
		Cleaned the catch basin behind the FSP&T building.	TS, Cisco
		Cleaned below-grade pipes from RW-2 to the EQ tank in the FSP&T building.	TS, Cisco
4/25/19		Continued RW-2 well rehabilitation.	TS, Cisco
		Continued cleaning below-grade pipes from RW-2 to the EQ tank in the FSP&T building.	TS, Cisco
4/26/19		Continued RW-2 well rehabilitation.	TS, Cisco
4/29/19		Completed RW-2 well rehabilitation and installed a new RW-2 pump, pump motor and lead cable in the well. Completed a post-treatment pumping test. Re-assembled the RW-2 flow meter. Tested the RW-2 pump and it is operating normally. Set the target flow rate at 27 gpm.	TS, Cisco
		Cleaned the FSP&T building gutters.	TS, Cisco
	9:26 AM	Shut off FP&T system. Start removing, inspecting and cleaning FRW pumps and riser pipes.	TS, Cisco
4/30/19		Continue cleaning the FRW pumps and riser pipes. Cleaned below-grade lateral pipes from the FRW wells to the FP&T trailer.	TS, Cisco
		Mechanically brushing the well screen and surging the formation at FRW-1, 3 and 4.	TS, Cisco

Notes:

EF	Evan Foster, WSP USA
TS	Tunde Sandor, WSP USA
Cisco	Cisco Geotechnical, LLC

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**	**---**	**---**
2-Apr-18	6.8	136	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	2.99	0.0337
2-May-18	6.8	151	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	8.05	0.0492
5-Jun-18	6.8	138	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.252	ND<0.278
2-Jul-18	6.8	114	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	2.50	0.127
28-Aug-18	6.9	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.124	0.125
21-Sep-18	6.8	155	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	7.48	0.0369
5-Oct-18	6.9	145	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	1.66	ND<0.278
1-Nov-18	6.8	193	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.838	ND<0.278
5-Dec-18	6.9	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.845	ND<0.278
3-Jan-19	6.9	85	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	1.32	ND<0.278
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

SPDES: State Pollutant Discharge Elimination System
mg/l: Milligrams per liter
ug/l: Micrograms per liter
----: Not established
NM: Not Measured
TDS: Total dissolved solids
PCE: Tetrachloroethylene
1,1,1-TCA: 1,1,1-Trichloroethane
TCE: Trichloroethene
1,1-DCA: 1,1-Dichlorothane
1,1-DCE: 1,1-Dichloroethene
cis-1,2-DCE: cis-1,2-Dichloroethene
trans-1,2,-DCE: trans-1,2-Dichloroethene
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

Notes:
1. Based on the SPDES criteria from an NYSDEC letter dated on May 6, 2016, the allowable pH range for the Rowe Site is between 6.5 and 8.5. The pH of the effluent sample collected on April 16, 2019 was 6.9.
2. "Effluent" samples were collected from sample port labeled NP2-10 unless otherwise noted.
3. Starting in October 2016, FSP&T system samples are collected monthly instead of once every two weeks. The pH of the effluent water is measured two times per month in accordance with the SPDES requirements.
4. The laboratory mistakenly forgot to analyze the system effluent sample collected on August 28, 2018 for total dissolved solids (TDS).
5. The pH was inadvertantly not measured.

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	2-Feb-17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Mar-17	0.28 J	0.47 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	7-Apr-17	0.53	0.55	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	11-May-17	0.54	0.37 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.28 J	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Jun-17	0.29 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	6-Jul-17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Aug-17	0.23 J	0.26 J	ND<0.5	0.24 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Sep-17	0.23 J	0.32 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	4-Oct-17	0.24 J	0.34 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Nov-17	0.31 J	0.39 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Dec-17	0.27 J	0.42 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	3-Jan-18	0.28 J	0.70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Feb-18	0.33 J	0.59	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Mar-18	0.41 J	0.67	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Apr-18	0.28 J	0.36 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-May-18	0.32 J	0.22 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Jun-18	0.21 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Jul-18	0.22 J	ND<0.5	ND<0.5	0.28 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	28-Aug-18	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	21-Sep-18	0.370	0.260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Oct-18	0.250	ND<0.5	ND<0.5	0.370	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Nov-18	ND<0.5	ND<0.5	ND<0.5	0.290	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Dec-18	0.300 C,S	0.380	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	3-Jan-19	0.320	0.310	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	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

PCE: Tetrachloroethylene TCE: Trichloroethylene TCA: 1,1,1-Trichloroethane
MTBE: Methyl-tertiary-butyl-ether NS: Not sampled

ND: Not detected
<#: Less than method detection limit
ug/L: Micrograms per liter
-: Not analyzed
J: Analyte detected below quantitation limits, value shown is a laboratory estimate.
B: Analyte was found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.
C = CCV-E: The value reported is estimated The value is estimated due to its behavior during continuing calibration verification.
S = SCAL-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration.
Q = QL-02: This LCS analyte is outside Laboratory Recovery limits due to the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
ARAR's are chemical specific aquifer restoration goals for ground water at the Former Rowe Industries Superfund Site.
NE indicates that the ARAR goal was not established for this compound by the EPA.
Bold values indicate an exceedence of the ARAR standard established for the site.
[1/] In September 2016, the EPA granted approval to discontinue groundwater sampling at RW-1, RW-5, RW-7, RW-8 and RW-9.

TABLE 4

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

Recovery Well FRW-1 VOC Concentrations, micrograms per liter

FRW-1										
Date	**PCE**	**TCE**	**cis12DCE**	**VC**	**TCA**	**11DCA**	**124TCB**	**Toluene**	**Bromomethane**	**Acetone**
ARARs	**5**	**5**	**5**	**2** [1/]	**5**	**5**	**5** [1/]	**5**	**5** [1/]	**NE**
7-Apr-17	**240**	3.8	2.2	ND<0.5	2.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.3 S,J
The FRWs were off from April 17 to April 26, 2017 and April 27 to May 1, 2017										
3-May-17	**200**	2.0	2.3	ND<0.5	2.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.0
1-Jun-17	**94**	2.5	4.5	ND<0.5	0.55	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from June 7 to June 9 and from June 21 to 23, 2017										
6-Jul-17	3.6	ND<0.5	1.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 31 to August 28, 2017										
1-Aug-17 [2/]	**16**	0.41 J	0.44 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Sep-17	**34**	0.93	2.9	ND<0.5	0.22 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017										
4-Oct-17	**56**	1.7	**7.8**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017										
1-Nov-17	**72**	1.3	1.7	ND<0.5	0.37 C,J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to December 5, 2017										
5-Dec-17	**55**	1.5	3.4	ND<0.5	0.4 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
FRW-1 was off from December 6 to 12 and December 24, 2017 to February 9, 2018										
1-Feb-18	**63**	**7.4**	**28**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
1-Mar-18	**110**	**2.7**	1.8	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018										
2-Apr-18	**83**	0.31 J	ND<0.5	ND<0.5	0.25 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.2 C,S,J
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018										
2-May-18	**97**	0.86	0.46 J	ND<0.5	0.75	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018										
20-Jun-18	**25**	0.76	0.68	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
2-Jul-18	**22**	0.66	0.60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018										
28-Aug-18 [3/4]	**7.26**	4.16	**9.05 C**	0.220	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11.1 I
21-Sep-18	**20.2**	1.25	2.43	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Oct-18	1.19	ND<0.5	0.280	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 27 to October 29, 2018										
1-Nov-18	**5.12**	0.780	3.30	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Dec-18	**43.0 C,S**	1.06	0.74	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
3-Jan-19	**18.8**	0.450	0.290	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from January 5 to January 15, 2019										
1-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

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 conentration.
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 estmated. The value is estimated due to its behavior durig initial calibration verification (recovery exceeded 30% of expected value).

ND: Not detected
ARARs - Applicable Relevant and Appropriate Requirements for aquifer restoration established for the Site.

Comments:
As of September 1, 2011 the water samples are analyzed by York Analytical Laboratories, Inc. The laboratory typically uses a reporting limit (RL) for water of 5 ug/l for VOC. York reports

PCE: Tetracholoethylene
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**
7-Apr-17	**93**	2.6	1.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.1 S
The FRWs were off from April 17 to April 26, 2017 and April 27 to May 1, 2017								
3-May-17	**68**	**11**	**9.3**	ND<0.5	0.35 J	ND<0.5	ND<0.5	2.4
1-Jun-17	**16**	1.0	0.92	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRW-2 was off from June 7 to June 9 and from June 21 to 29, 2017								
6-Jul-17	0.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8 S,J
The FRWs were off from July 31 to August 28, 2017								
1-Aug-17 [2/]	**7.0**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.1 S
5-Sep-17	**33**	0.85	0.59	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017								
4-Oct-17	**50**	2.7	0.91	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.0
The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017								
1-Nov-17	**45**	0.76	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017								
5-Dec-17	**38**	3.4	1.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 24, 2017 to February 9, 2018								
1-Feb-18	**37**	3.2	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.8
1-Mar-18	**48**	0.68	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018								
2-Apr-18	**140**	1.2	0.36 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018								
2-May-18	**29**	0.92	0.29 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.6
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018								
20-Jun-18	3.8	1.4	0.44 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
2-Jul-18	3.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018								
28-Aug-18 [3/4]	ND<0.5	0.300	**29.0 C**	**2.48**	ND<0.5	0.510	ND<0.5	ND<2
21-Sep-18	**11.9**	1.83	**14.5**	0.730	ND<0.5	ND<0.5	ND<0.5	2.06
5-Oct-18	1.86	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 27 to October 29, 2018								
1-Nov-18	3.20	0.610	0.950	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Dec-18	**19.1 C,S**	0.590	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.00 C
3-Jan-19	**13.8**	0.670	1.69	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from January 5 to January 15, 2019								
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

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 emporarily 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 conentration.

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 estmated. The value is estimated due to its behavior durig 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-Mar-17	**50**	**5.7**	**20**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.99	0.64	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 24 and March 29, 2017												
7-Apr-17	**65**	**5.0**	**41**	1.4	ND<0.5	ND<0.5	ND<0.5	0.71	0.49	ND<0.5	ND<0.5	ND<2
FRW-3 was off from April 17 to April 26, 2017 and April 27 to May 11, 2017												
11-May-17	**130**	**5.8**	**8.5**	0.24 J	ND<0.5	0.35 J	ND<0.5	0.35 J	0.30 J	ND<0.5	ND<0.5	ND<2
FRW-3 was off from o May 17 to June 1, 2017												
1-Jun-17	**83**	**5.8**	**12**	0.37 J	ND<0.5	ND<0.5	ND<0.5	0.38 J	0.38 J	ND<0.5	ND<0.5	1.0 C,J,B
The FRWs were off from June 7 to June 9 and from June 21 to 23, 2017												
6-Jul-17	3.4	0.70	1.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.4 S
The FRWs were off from July 31 to August 28, 2017												
1-Aug-17 [2/]	**35**	1.9	1.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.6 S,J
5-Sep-17	**15**	1.7	**6.1**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017												
4-Oct-17	**21**	**6.0**	**15**	1.2 C	ND<0.5	ND<0.5	ND<0.5	0.48 C,J	0.40 C,J	ND<0.5	ND<0.5	2.7
The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017												
1-Nov-17	**17**	1.2	3.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.33 J	0.30 J	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017												
5-Dec-17	**37**	1.8	2.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.37 J	0.33 J	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 24, 2017 to February 9, 2018												
1-Feb-18	**22**	2.0	3.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.32 J	ND<0.5	ND<0.5	ND<0.5	ND<2
1-Mar-18	**120**	**7.9**	**18**	ND<0.5	0.26 J	0.65	ND<0.5	0.49 J	0.34 J	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018												
2-Apr-18	**170**	4.5	**7.9**	0.25 C,J	ND<0.5	0.71	ND<0.5	0.20 J	ND<0.5	ND<0.5	ND<0.5	1.2 C,S,J
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018												
2-May-18	**140**	**9.4**	**11**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.2
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018												
20-Jun-18	**39**	**6.8**	4.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.5 J
2-Jul-18	**49**	1.4	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018												
28-Aug-18 [3/]	**6.16**	0.990	**20.3 C**	0.840	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.77 I
21-Sep-18	**19.6**	2.99	**19.8**	**2.04**	ND<0.5	ND<0.5	ND<0.5	0.220 J	0.300 J	ND<0.5	ND<0.5	1.53
5-Oct-18	0.730	0.530	4.31	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 27 to October 29, 2018												
1-Nov-18	2.89	0.810	3.37	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Dec-18	**109 C,S**	**6.83**	**6.98**	ND<0.5	ND<0.5	0.570	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.97 C
3-Jan-19	**89.4**	2.41	**7.30**	ND<0.5	ND<0.5	0.420	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from January 5 to January 15, 2019												
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

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

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

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

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

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

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 conentration.
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 estmated. The value is estimated due to its behavior durig initial calibration verification (recovery exceeded 30% of expected value).
ND: Not detected

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

PCE: Tetrachloroethylene
cis12DCE: cis-1,2-Dichloroethene
11DCA: 1,1-Dichloroethane
135TMB: 1,3,5-Trimethylbenzene
NPB: n-Propylbenzene
TCE: Trichloroethene
VC: Vinyl Chloride
TCA: 1,1,1-Trichloroethane
IPB: Isopropylbenzene

TABLE 7

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

Recovery Well FRW-4 VOC Concentrations, micrograms per liter

FRW-4						
Date	**PCE**	**TCE**	**cis12DCE**	**VC**	**TCA**	**Acetone**
ARARs	**5**	**5**	**5**	**2** [1/]	**5**	**NE**
7-Apr-17	**7.6**	1.2	2.9	ND<0.5	ND<0.5	1.3 S,J
The FRWs were off from April 17 to April 26, 2017 and April 27 to May 1, 2017						
3-May-17	**40**	3.5	**15**	ND<0.5	0.42 J	2.1
1-Jun-17	**8.8**	0.5	2.1	ND<0.5	ND<0.5	ND<2
The FRWs were off from June 7 to June 9 and from June 21 to 23, 2017						
6-Jul-17	0.27 J	ND<0.5	0.28 J	ND<0.5	ND<0.5	1.1 S,J
The FRWs were off from July 31 to August 28, 2017						
1-Aug-17 [2/]	0.80	ND<0.5	0.28 J	ND<0.5	ND<0.5	1.6 S,J
5-Sep-17	2.7	0.42 J	0.51	ND<0.5	ND<0.5	ND<2
The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017						
4-Oct-17	**9.8**	3.9	4.1	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017						
1-Nov-17	3.0	0.32 J	0.78	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017						
5-Dec-17	**5.1**	ND<0.5	1.0	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 24, 2017 to February 9, 2018						
1-Feb-18	**21**	2.5	**7.0**	ND<0.5	0.27 J	2.5 S
1-Mar-18	3.0	ND<0.5	0.47 J	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018						
2-Apr-18	3.2	ND<0.5	1.0	ND<0.5	0.32 J	ND<2
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018						
2-May-18	**19**	ND<0.5	1.1	ND<0.5	ND<0.5	ND<2
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018						
20-Jun-18	1.4	0.22 J	ND<0.5	ND<0.5	ND<0.5	1.5 J
2-Jul-18	1.7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018						
28-Aug-18 [3/4]	ND<0.5	0.450	4.95 C	ND<0.5	ND<0.5	10.3 I
21-Sep-18	4.21	1.02	1.38	ND<0.5	ND<0.5	ND<2
5-Oct-18	0.260	ND<0.5	0.630	ND<0.5	ND<0.5	1.23 C,S
The FRWs were off from October 27 to October 29, 2018						
1-Nov-18	0.870	0.280	1.49	ND<0.5	ND<0.5	ND<2
5-Dec-18	2.36 C,S	0.45	0.650	ND<0.5	ND<0.5	ND<2
3-Jan-19	1.28	ND<0.5	0.960	ND<0.5	ND<0.5	ND<2
The FRWs were off from January 5 to January 15, 2019						
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

ARARs - Applicable Relevant and Appropriate Requirements for aquifer restoration established for the Site.
1. NYSDEC ambient water quality standards for these compounds are presented because site-specific ARARs for these compounds were not established.
2. The FP&T system was not operating because of a malfunctioning transfer pump. The FRWs were turned on manually to collect a groundwater sample.
3. Tetrahydrofuran, a common industrial solvent for polyvinyl chloride (PVC) and a component in varnishes, and a popular solvent used in laboratories was detected in the groundwater sample at 308 ug/L. However it was not detected in the laboratory blank or the laboratory duplicates. This is not a compound typically detected in groundwater samples from the site.
4. Other non-target COCs (tert-butyl alcohol, 2-butanone and/or acetone) were detected in the August 28, 2018 sample. For the case of acetone, this is a common laboratory artifact. The detections of the remaining non-target COCs is most likely attributed to collecting the sample that remained in close contact with PVC pipes for an extended time (i.e. from July 2 to August 28, 2018). Other than acetone, non-target COCs were not detected to any significant degree in the groundwater sample collected on September 21, 2018.
J : Analyte detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated conentration.
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 estmated. The value is estimated due to its behavior durig initial calibration verification (recovery exceeded 30% of expected value).
Q = QL-02: The analyte is outside Laboratory Recovery limits due to the analyte behavior using the reference method. The reference method has certain limitations with respect to analytes of this nature.
ND: Not detected

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

PCE: Tetrachloroethylene
cis12DCE: cis-1,2-Dichloroethene
TCA: 1,1,1-Trichloroethane
TCE: Trichloroethene
VC: Vinyl Chloride

TABLE 8

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

Carbon Unit System Air Quality Results

Precarbon			Parameters (mg/m3)													TOTAL
Sample Name	**Date**	**Time**	**PCE**	**TCE**	**TCA**	**DCA**	**cis-DCE**	**trans-DCE**	**Toluene**	**m&p-Xylenes**	**o-Xylene**	**CF**	**MC**	**EB**	**Freon 113**	**VOCs**
AQ040218:1405NP4-1	4/2/2018	14:05	0.0110	0.0003	ND	ND	0.0002	ND	0.0065	ND	ND	ND	ND	ND	ND	0.03
AQ082818:800NP4-1	8/28/2018	8:00	0.0055	ND	ND	ND	ND	ND	0.0034	ND	ND	ND	ND	ND	ND	0.02
AQ100518:1230NP4-1	10/5/2018	12:30	0.0038	0.0004	ND	ND	0.0007	ND	0.0037	0.3100	0.0096	ND	ND	0.0084	ND	0.37
AQ011519:1300NP4-1	1/15/2019	13:00	0.0260	0.0110	0.0016	ND	0.0096	ND	0.0015	ND	ND	0.0019	0.0027	ND	0.0012	0.08
AQ041619:1300NP4-1	4/16/2019	13:00	0.0056	0.0047	0.0011	ND	0.0010	ND	ND	ND	ND	0.0047	0.0008	ND	ND	0.03

Postcarbon			Parameters (mg/m3)													TOTAL
Sample Name	**Date**	**Time**	**PCE**	**TCE**	**TCA**	**DCA**	**cis-DCE**	**trans-DCE**	**Toluene**	**m&p-Xylenes**	**o-Xylene**	**CF**	**MC**	**EB**	**Freon 113**	**VOCs**
AQ040218:1400NP4-3	4/2/2018	14:00	0.0015	ND	0.0009	ND	0.0027	ND	ND	ND	ND	ND	ND	ND	ND	0.01
AQ082818:205NP4-3	8/28/2018	8:05	0.0062	ND	ND	ND	0.0061	ND	ND	ND	ND	ND	ND	ND	ND	0.01
AQ100518:1235NP4-3	10/5/2018	12:30	ND	ND	ND	ND	0.0022	ND	0.0041	0.0027	0.0008	ND	0.0057	0.0007	ND	0.04
AQ011519:1305NP4-3	1/15/2019	13:05	ND	ND	0.0008	ND	0.0015	ND	0.0009	0.0016	ND	ND	0.0100	ND	ND	0.02
AQ041619:1305:NP4-3	4/16/2019	13:05	0.0031	ND	0.0009	ND	0.0030	ND	0.0210	0.0120	0.0047	0.0011	0.0045	0.0035	ND	0.10

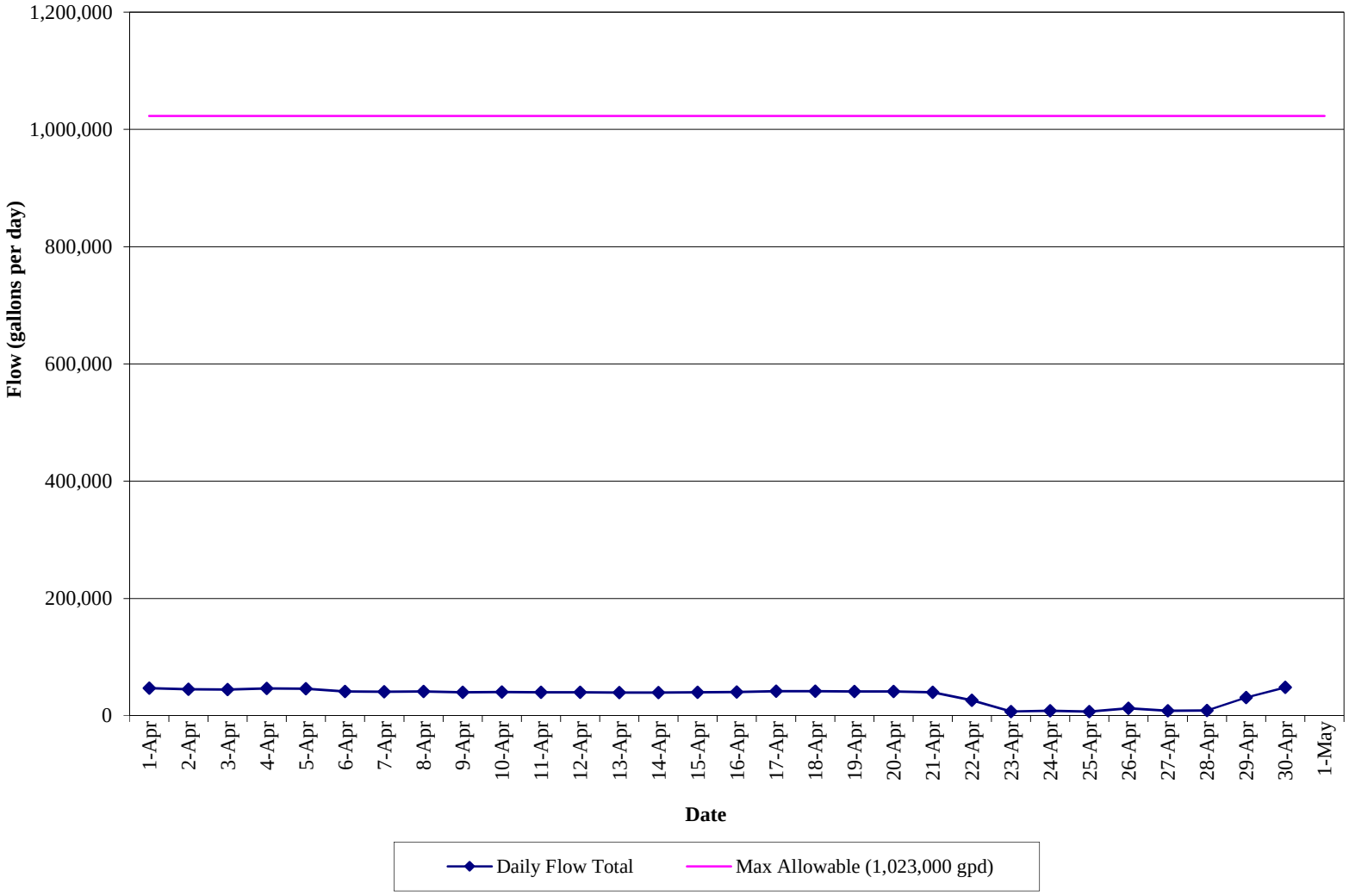
PCE: Tetrachoroethylene TCE: Trichloroethene TCA: 1,1,1-Trichloroethane DCE: 1,1-Dichloroethene
DCA: 1,1-Dichloroethane cis-DCE: cis-1,2-Dichloroethene trans-DCE: trans-1,2-Dichloroethylene CF: Chloroform
MC: Methylene Chloride EB: Ethilbenzene

Note: NA - Not Applicable. Method blank contamination. The associated method blank contains the target analyte at a reportable level.
NS - Not Sampled
ND - Not Detected
B - Method blank contamination, the associated method blank contains the target analyte at a reportable level.
The air quality results summarized above are for the compounds listed in the FSP&T groundwater discharge permit. Low concentrations of additional compounds are accounted for in the Total VOCs column, however, are not listed.

GRAPHS

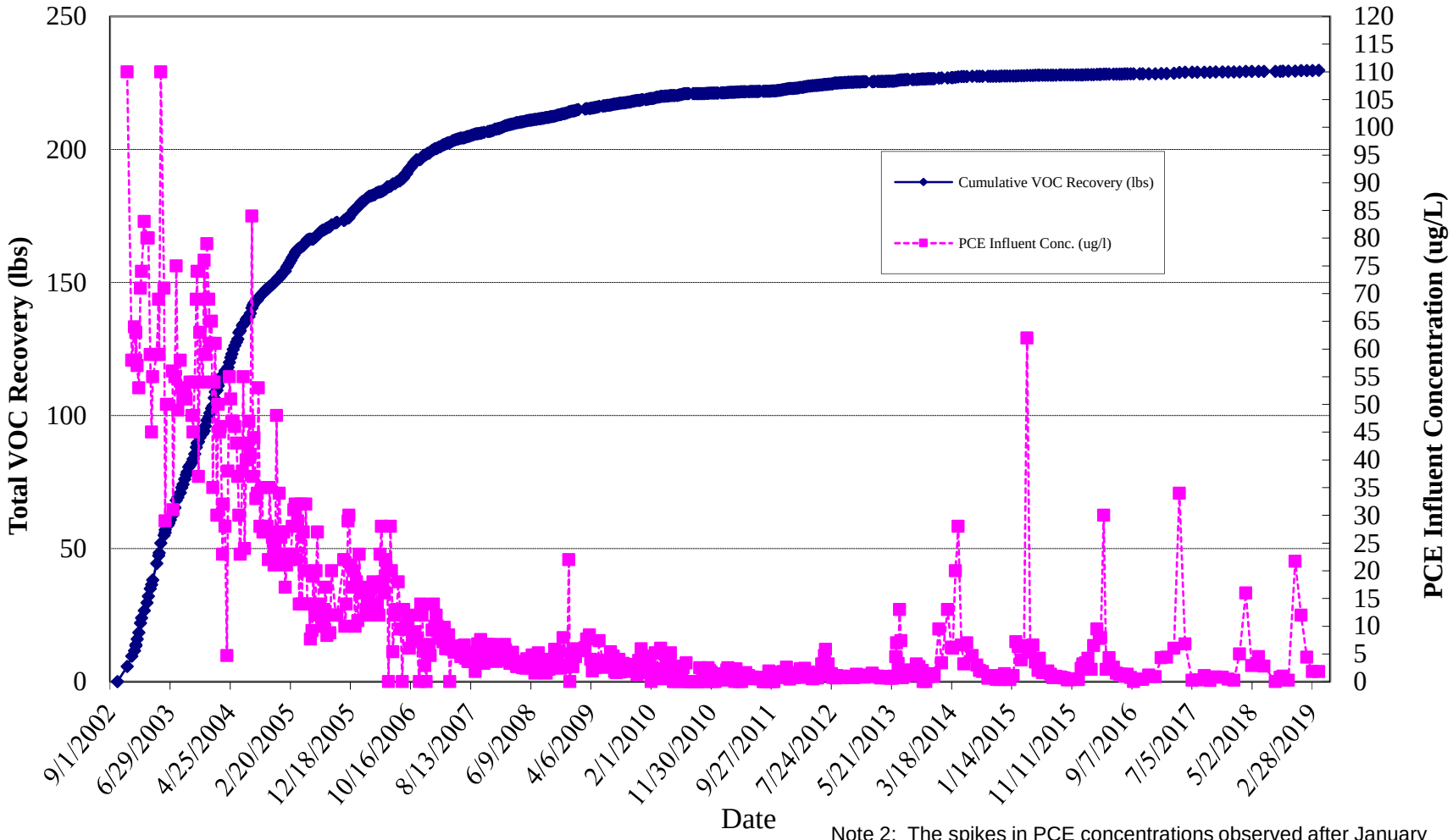
GRAPH 1
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

Effluent Flow Data
(April 1, 2019 to April 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



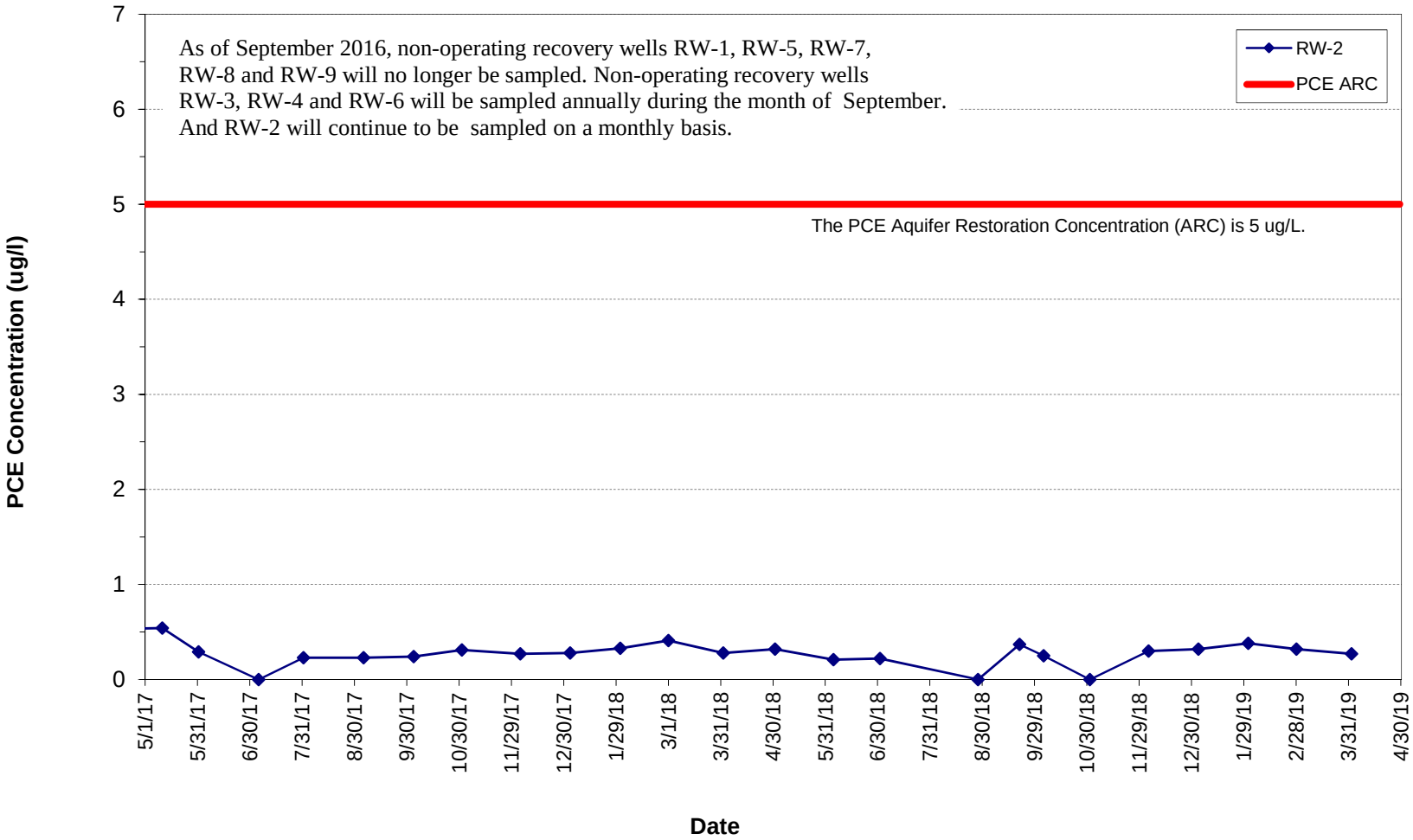
Note 1 : After September 22, 2008, the water recovered from the FP&T System is included in the results shown in this graph.

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

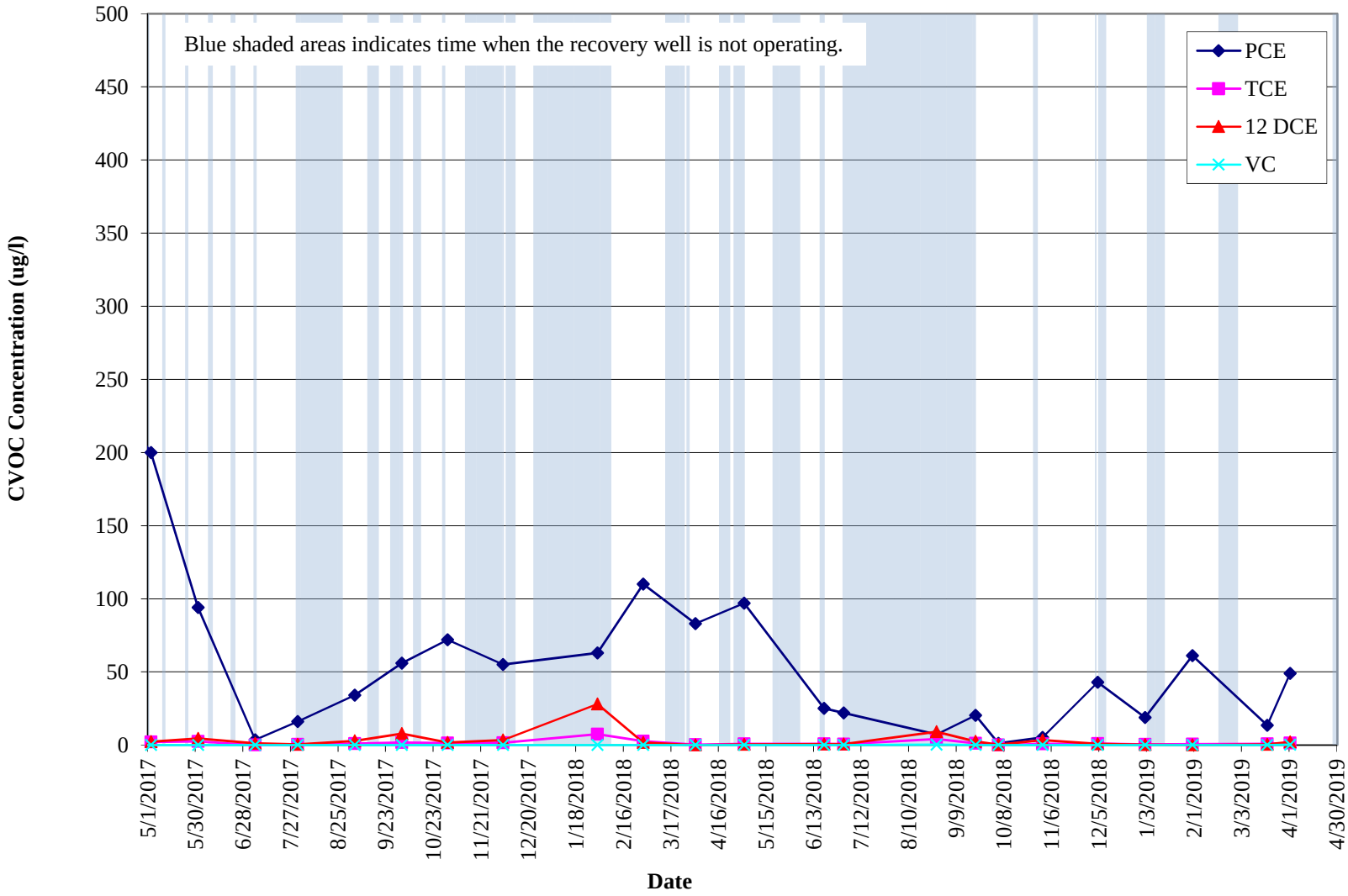
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FSP&T Recovery Well PCE Concentration



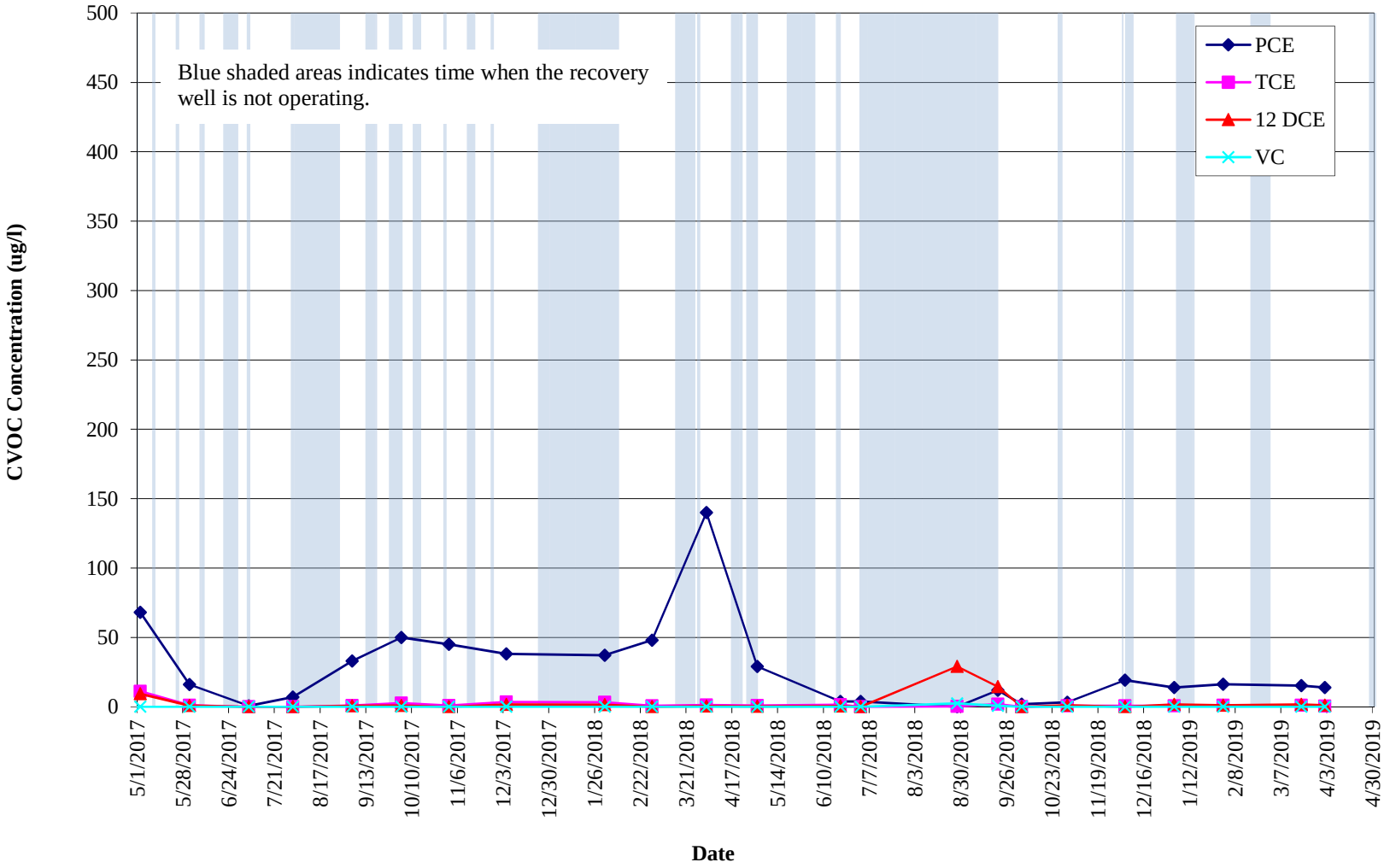
GRAPH 4
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-1



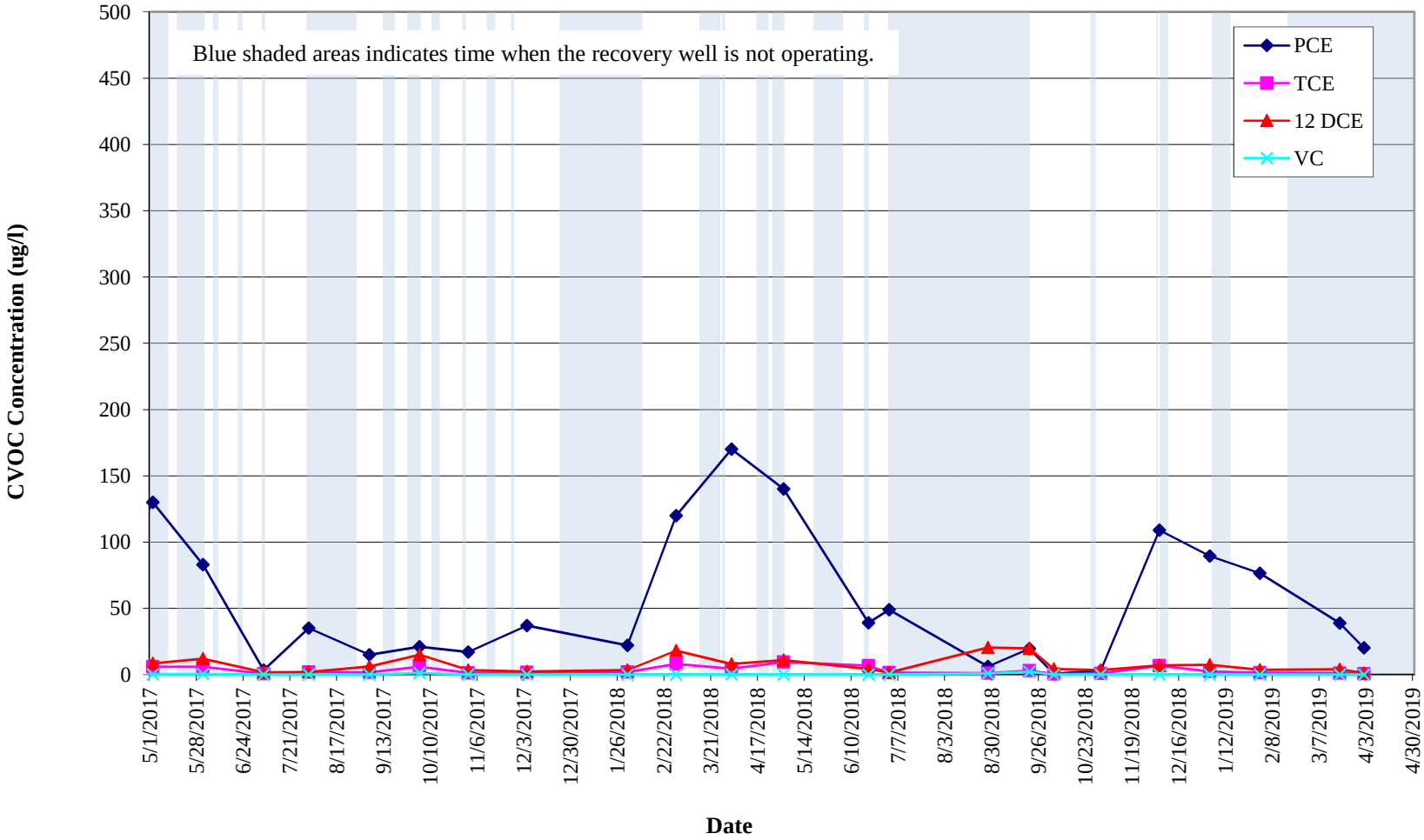
GRAPH 5
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-2



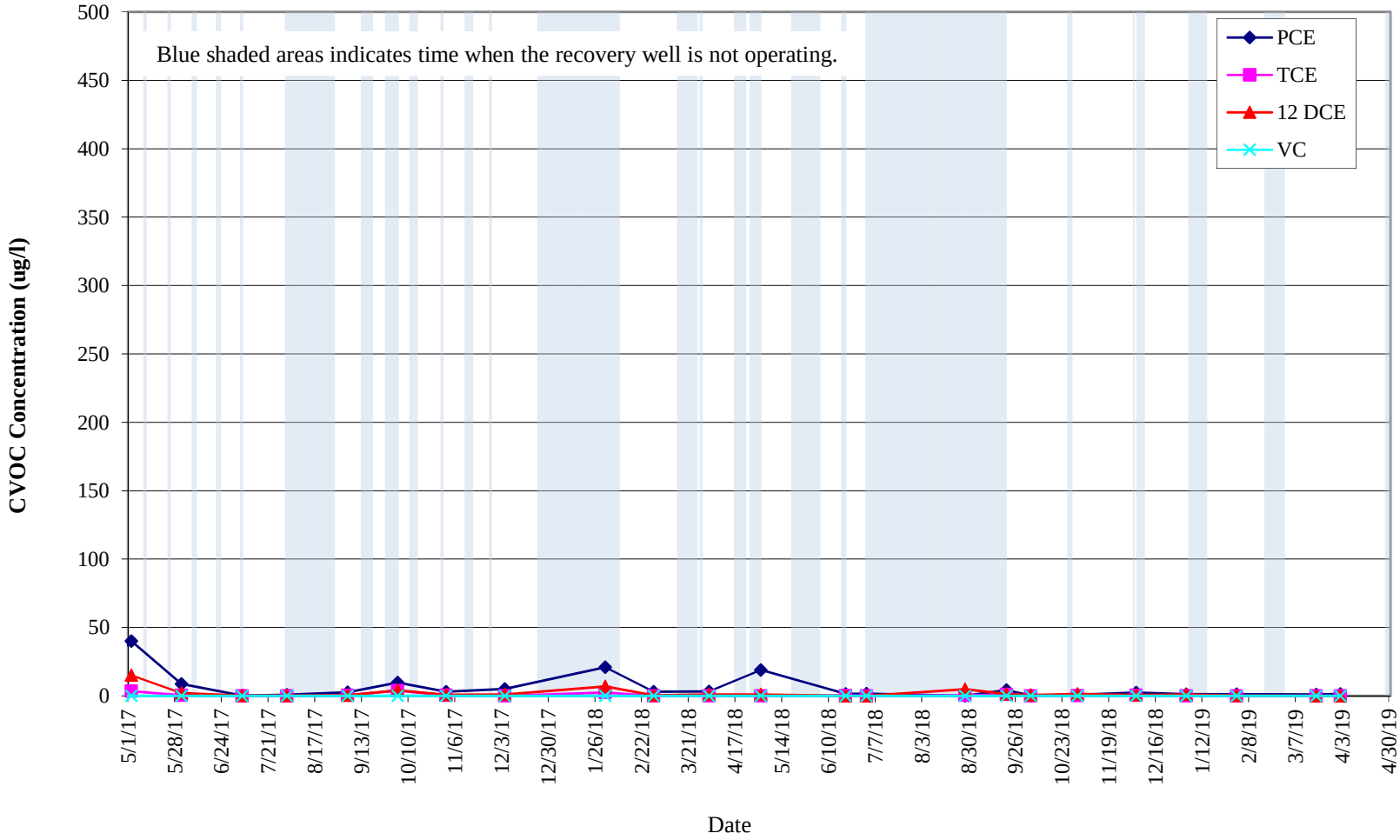
GRAPH 6
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

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
APRIL 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: 04/17/2019
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 19D0185

1.0

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 04/17/2019
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 19D0185

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 April 04, 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.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
19D0185-01	WQ040219: 1325 NP2-6	Water	04/02/2019	04/04/2019
19D0185-02	WQ040219: 1330 NP2-10	Water	04/02/2019	04/04/2019

General Notes for York Project (SDG) No.: 19D0185

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: 

Date: 04/17/2019

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: WQ040219: 1325 NP2-6

York Sample ID: 19D0185-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0185	31401451.000 task 01.00	Water	April 2, 2019 1:25 pm	04/04/2019

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:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	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:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 NELAC-NY10854,NELAC-NY12058,NJDEP	04/15/2019 12:26	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
95-63-6	**1,2,4-Trimethylbenzene**	**0.410**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/15/2019 12:26	LLJ

Sample Information

Client Sample ID: WQ040219: 1325 NP2-6 **York Sample ID:** 19D0185-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0185	31401451.000 task 01.00	Water	April 2, 2019 1:25 pm	04/04/2019

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:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
156-59-2	**cis-1,2-Dichloroethylene**	**0.300**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ

Sample Information

Client Sample ID: WQ040219: 1325 NP2-6 **York Sample ID:** 19D0185-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0185	31401451.000 task 01.00	Water	April 2, 2019 1:25 pm	04/04/2019

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:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
127-18-4	**Tetrachloroethylene**	**1.82**	CCV-E, QL-02	ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-01-6	**Trichloroethylene**	**0.340**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:26 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	LLJ

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*115 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*100 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*112 %*	*70-130*

Sample Information

Client Sample ID: WQ040219: 1330 NP2-10 **York Sample ID:** 19D0185-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0185	31401451.000 task 01.00	Water	April 2, 2019 1:30 pm	04/04/2019

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:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	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:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ

Sample Information

Client Sample ID: WQ040219: 1330 NP2-10 **York Sample ID:** 19D0185-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0185	31401451.000 task 01.00	Water	April 2, 2019 1:30 pm	04/04/2019

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:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ

Sample Information

Client Sample ID: WQ040219: 1330 NP2-10 **York Sample ID:** 19D0185-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0185	31401451.000 task 01.00	Water	April 2, 2019 1:30 pm	04/04/2019

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:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	04/15/2019 06:54	04/15/2019 12:53 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	LLJ

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*112 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*98.3 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*115 %*	*70-130*

Iron by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 200.7

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

Sample Information

Client Sample ID: WQ040219: 1330 NP2-10 **York Sample ID:** 19D0185-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0185	31401451.000 task 01.00	Water	April 2, 2019 1:30 pm	04/04/2019

Iron by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 200.7

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	**Iron**	**1.27**		mg/L	0.278	1	EPA 200.7	04/05/2019 11:58	04/08/2019 12:14	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Iron, Dissolved by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	ND		mg/L	0.278	1	EPA 6010D	04/08/2019 14:24	04/10/2019 12:02	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Total Dissolved Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Dissolved Solids	**153**		mg/L	10.0	1	SM 2540C	04/05/2019 17:27	04/09/2019 02:02	AA
							Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Analytical Batch Summary

Batch ID: BD90348 **Preparation Method:** EPA 200.7 **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
19D0185-02	WQ040219: 1330 NP2-10	04/05/19
BD90348-BLK1	Blank	04/05/19
BD90348-BS1	LCS	04/05/19

Batch ID: BD90375 **Preparation Method:** % Solids Prep **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
19D0185-02	WQ040219: 1330 NP2-10	04/05/19
BD90375-BLK1	Blank	04/05/19

Batch ID: BD90427 **Preparation Method:** EPA 3015A **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
19D0185-02	WQ040219: 1330 NP2-10	04/08/19
BD90427-BLK1	Blank	04/08/19
BD90427-BS1	LCS	04/08/19

Batch ID: BD90795 **Preparation Method:** EPA 5030B **Prepared By:** TMP

YORK Sample ID	Client Sample ID	Preparation Date
19D0185-01	WQ040219: 1325 NP2-6	04/15/19
19D0185-02	WQ040219: 1330 NP2-10	04/15/19
BD90795-BLK1	Blank	04/15/19
BD90795-BS1	LCS	04/15/19
BD90795-BSD1	LCS Dup	04/15/19

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90795 - EPA 5030B											
Blank (BD90795-BLK1)											Prepared & Analyzed: 04/15/2019
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,1-Dichloropropylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
2,2-Dichloropropane	ND	0.500	"								
2-Chlorotoluene	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Chlorotoluene	ND	0.500	"								
Acetone	ND	2.00	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90795 - EPA 5030B											
Blank (BD90795-BLK1)								Prepared & Analyzed: 04/15/2019			
o-Xylene	ND	0.500	ug/L								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*11.6*		*"*	*10.0*		*116*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.81*		*"*	*10.0*		*98.1*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*11.3*		*"*	*10.0*		*113*	*70-130*				
LCS (BD90795-BS1)								Prepared & Analyzed: 04/15/2019			
1,1,1,2-Tetrachloroethane	8.47		ug/L	10.0		84.7	82-126			30	
1,1,1-Trichloroethane	11.1		"	10.0		111	70-130			20	
1,1,2,2-Tetrachloroethane	10.9		"	10.0		109	70-130			20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.3		"	10.0		113	70-130			20	
1,1,2-Trichloroethane	8.58		"	10.0		85.8	70-130			20	
1,1-Dichloroethane	10.3		"	10.0		103	70-130			20	
1,1-Dichloroethylene	10.2		"	10.0		102	70-130			20	
1,1-Dichloropropylene	10.2		"	10.0		102	83-133			30	
1,2,3-Trichlorobenzene	6.69		"	10.0		66.9	70-130	Low Bias		20	
1,2,3-Trichloropropane	11.8		"	10.0		118	77-128			30	
1,2,4-Trichlorobenzene	7.25		"	10.0		72.5	70-130			20	
1,2,4-Trimethylbenzene	10.3		"	10.0		103	82-132			20	
1,2-Dibromo-3-chloropropane	9.50		"	10.0		95.0	40-160			20	
1,2-Dibromoethane	8.90		"	10.0		89.0	70-130			20	
1,2-Dichlorobenzene	10.0		"	10.0		100	70-130			20	
1,2-Dichloroethane	10.6		"	10.0		106	70-130			20	
1,2-Dichloropropane	8.51		"	10.0		85.1	70-130			20	
1,3,5-Trimethylbenzene	10.8		"	10.0		108	80-131			30	
1,3-Dichlorobenzene	9.83		"	10.0		98.3	70-130			20	
1,3-Dichloropropane	8.75		"	10.0		87.5	81-125			30	
1,4-Dichlorobenzene	9.91		"	10.0		99.1	70-130			20	
2,2-Dichloropropane	11.7		"	10.0		117	56-150			30	
2-Chlorotoluene	11.2		"	10.0		112	79-130			30	
2-Hexanone	8.56		"	10.0		85.6	40-160			20	
4-Chlorotoluene	10.7		"	10.0		107	79-128			30	
Acetone	7.30		"	10.0		73.0	40-160			20	
Benzene	10.1		"	10.0		101	70-130			20	
Bromobenzene	10.6		"	10.0		106	78-129			30	
Bromochloromethane	11.0		"	10.0		110	70-130			20	
Bromodichloromethane	8.86		"	10.0		88.6	70-130			20	
Bromoform	6.77		"	10.0		67.7	70-130	Low Bias		20	
Bromomethane	13.5		"	10.0		135	40-160			20	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90795 - EPA 5030B											
LCS (BD90795-BS1)								Prepared & Analyzed: 04/15/2019			
Carbon tetrachloride	10.3		ug/L	10.0		103	70-130			20	
Chlorobenzene	8.95		"	10.0		89.5	70-130			20	
Chloroethane	10.4		"	10.0		104	40-160			20	
Chloroform	10.4		"	10.0		104	70-130			20	
Chloromethane	14.2		"	10.0		142	40-160			20	
cis-1,2-Dichloroethylene	10.5		"	10.0		105	70-130			20	
cis-1,3-Dichloropropylene	8.49		"	10.0		84.9	70-130			20	
Dibromochloromethane	8.36		"	10.0		83.6	70-130			20	
Dibromomethane	9.03		"	10.0		90.3	72-134			30	
Dichlorodifluoromethane	9.09		"	10.0		90.9	40-160			20	
Ethyl Benzene	9.41		"	10.0		94.1	70-130			20	
Hexachlorobutadiene	4.87		"	10.0		48.7	67-146	Low Bias		30	
Isopropylbenzene	11.4		"	10.0		114	70-130			20	
Methyl tert-butyl ether (MTBE)	10.2		"	10.0		102	70-130			20	
Methylene chloride	11.7		"	10.0		117	70-130			20	
Naphthalene	7.94		"	10.0		79.4	70-147			30	
n-Butylbenzene	10.6		"	10.0		106	79-132			30	
n-Propylbenzene	11.4		"	10.0		114	78-133			30	
o-Xylene	9.08		"	10.0		90.8	70-130			20	
p- & m- Xylenes	19.1		"	20.0		95.6	70-130			20	
p-Isopropyltoluene	10.2		"	10.0		102	81-136			30	
sec-Butylbenzene	10.9		"	10.0		109	79-137			30	
Styrene	8.65		"	10.0		86.5	70-130			20	
tert-Butylbenzene	10.7		"	10.0		107	77-138			30	
Tetrachloroethylene	6.97		"	10.0		69.7	70-130	Low Bias		20	
Toluene	9.21		"	10.0		92.1	70-130			20	
trans-1,2-Dichloroethylene	10.0		"	10.0		100	70-130			20	
trans-1,3-Dichloropropylene	8.37		"	10.0		83.7	70-130			20	
Trichloroethylene	8.86		"	10.0		88.6	70-130			20	
Trichlorofluoromethane	10.8		"	10.0		108	40-160			20	
Vinyl Chloride	12.2		"	10.0		122	70-130			20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.8*		*"*	*10.0*		*108*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.97*		*"*	*10.0*		*99.7*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*11.6*		*"*	*10.0*		*116*	*70-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90795 - EPA 5030B											
LCS Dup (BD90795-BSD1)								Prepared & Analyzed: 04/15/2019			
1,1,1,2-Tetrachloroethane	8.71		ug/L	10.0		87.1	82-126		2.79	30	
1,1,1-Trichloroethane	11.7		"	10.0		117	70-130		5.52	20	
1,1,2,2-Tetrachloroethane	10.8		"	10.0		108	70-130		0.736	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.1		"	10.0		121	70-130		7.26	20	
1,1,2-Trichloroethane	8.81		"	10.0		88.1	70-130		2.65	20	
1,1-Dichloroethane	11.1		"	10.0		111	70-130		7.09	20	
1,1-Dichloroethylene	11.2		"	10.0		112	70-130		9.04	20	
1,1-Dichloropropylene	10.9		"	10.0		109	83-133		6.73	30	
1,2,3-Trichlorobenzene	6.92		"	10.0		69.2	70-130	Low Bias	3.38	20	
1,2,3-Trichloropropane	11.3		"	10.0		113	77-128		4.60	30	
1,2,4-Trichlorobenzene	7.45		"	10.0		74.5	70-130		2.72	20	
1,2,4-Trimethylbenzene	10.9		"	10.0		109	82-132		5.46	20	
1,2-Dibromo-3-chloropropane	9.39		"	10.0		93.9	40-160		1.16	20	
1,2-Dibromoethane	8.95		"	10.0		89.5	70-130		0.560	20	
1,2-Dichlorobenzene	10.1		"	10.0		101	70-130		1.39	20	
1,2-Dichloroethane	11.2		"	10.0		112	70-130		4.77	20	
1,2-Dichloropropane	8.54		"	10.0		85.4	70-130		0.352	20	
1,3,5-Trimethylbenzene	11.3		"	10.0		113	80-131		4.51	30	
1,3-Dichlorobenzene	10.0		"	10.0		100	70-130		2.11	20	
1,3-Dichloropropane	8.60		"	10.0		86.0	81-125		1.73	30	
1,4-Dichlorobenzene	9.92		"	10.0		99.2	70-130		0.101	20	
2,2-Dichloropropane	12.5		"	10.0		125	56-150		6.87	30	
2-Chlorotoluene	11.7		"	10.0		117	79-130		4.37	30	
2-Hexanone	8.46		"	10.0		84.6	40-160		1.18	20	
4-Chlorotoluene	11.1		"	10.0		111	79-128		3.67	30	
Acetone	7.77		"	10.0		77.7	40-160		6.24	20	
Benzene	10.7		"	10.0		107	70-130		5.19	20	
Bromobenzene	10.8		"	10.0		108	78-129		2.33	30	
Bromochloromethane	11.4		"	10.0		114	70-130		2.68	20	
Bromodichloromethane	9.05		"	10.0		90.5	70-130		2.12	20	
Bromoform	6.94		"	10.0		69.4	70-130	Low Bias	2.48	20	
Bromomethane	14.2		"	10.0		142	40-160		5.48	20	
Carbon tetrachloride	11.3		"	10.0		113	70-130		9.07	20	
Chlorobenzene	9.00		"	10.0		90.0	70-130		0.557	20	
Chloroethane	11.1		"	10.0		111	40-160		6.40	20	
Chloroform	10.9		"	10.0		109	70-130		4.97	20	
Chloromethane	15.2		"	10.0		152	40-160		6.79	20	
cis-1,2-Dichloroethylene	11.1		"	10.0		111	70-130		5.55	20	
cis-1,3-Dichloropropylene	8.59		"	10.0		85.9	70-130		1.17	20	
Dibromochloromethane	8.39		"	10.0		83.9	70-130		0.358	20	
Dibromomethane	9.07		"	10.0		90.7	72-134		0.442	30	
Dichlorodifluoromethane	16.1		"	10.0		161	40-160	High Bias	55.5	20	Non-dir.
Ethyl Benzene	9.67		"	10.0		96.7	70-130		2.73	20	
Hexachlorobutadiene	5.91		"	10.0		59.1	67-146	Low Bias	19.3	30	
Isopropylbenzene	11.7		"	10.0		117	70-130		2.86	20	
Methyl tert-butyl ether (MTBE)	10.4		"	10.0		104	70-130		1.93	20	
Methylene chloride	12.2		"	10.0		122	70-130		3.94	20	
Naphthalene	8.15		"	10.0		81.5	70-147		2.61	30	
n-Butylbenzene	11.8		"	10.0		118	79-132		11.0	30	
n-Propylbenzene	11.9		"	10.0		119	78-133		4.56	30	
o-Xylene	9.28		"	10.0		92.8	70-130		2.18	20	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90795 - EPA 5030B											
LCS Dup (BD90795-BSD1)								Prepared & Analyzed: 04/15/2019			
p- & m- Xylenes	19.6		ug/L	20.0		98.1	70-130		2.53	20	
p-Isopropyltoluene	11.2		"	10.0		112	81-136		8.70	30	
sec-Butylbenzene	12.0		"	10.0		120	79-137		9.08	30	
Styrene	8.89		"	10.0		88.9	70-130		2.74	20	
tert-Butylbenzene	11.2		"	10.0		112	77-138		4.67	30	
Tetrachloroethylene	7.28		"	10.0		72.8	70-130		4.35	20	
Toluene	9.35		"	10.0		93.5	70-130		1.51	20	
trans-1,2-Dichloroethylene	10.7		"	10.0		107	70-130		6.18	20	
trans-1,3-Dichloropropylene	8.44		"	10.0		84.4	70-130		0.833	20	
Trichloroethylene	9.28		"	10.0		92.8	70-130		4.63	20	
Trichlorofluoromethane	11.8		"	10.0		118	40-160		9.00	20	
Vinyl Chloride	8.27		"	10.0		82.7	70-130		38.0	20	Non-dir.
Surrogate: SURR: 1,2-Dichloroethane-d4	*11.4*		*"*	*10.0*		*114*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.69*		*"*	*10.0*		*96.9*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*11.8*		*"*	*10.0*		*118*	*70-130*				

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90348 - EPA 200.7											
Blank (BD90348-BLK1)									Prepared: 04/05/2019 Analyzed: 04/08/2019		
Iron	ND	0.278	mg/L								
LCS (BD90348-BS1)									Prepared: 04/05/2019 Analyzed: 04/08/2019		
Iron	1.15	0.278	mg/L	1.11		103	85-115				
Batch BD90427 - EPA 3015A											
Blank (BD90427-BLK1)									Prepared: 04/08/2019 Analyzed: 04/10/2019		
Iron - Dissolved	ND	0.278	mg/L								
LCS (BD90427-BS1)									Prepared: 04/08/2019 Analyzed: 04/10/2019		
Iron - Dissolved	0.993	0.278	mg/L	1.11		89.4	80-120				

Miscellaneous Physical Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90375 - % Solids Prep											
Blank (BD90375-BLK1)											Prepared: 04/05/2019 Analyzed: 04/09/2019
Total Dissolved Solids	ND	10.0	mg/L								

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19D0185-01	WQ040219: 1325 NP2-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19D0185-02	WQ040219: 1330 NP2-10	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.
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).

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

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

Field Chain-of-Custody Record

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

York Project No. 19D0185

YOUR Information	Report to:	Invoice To:	Your Project ID	Turn-Around Time
Company: WSP USA	SAME [X]	SAME [X]	31401451.000 task 01.00	RUSH-Same Day
Address: 4 Research Drive	Name:	Name:		RUSH-Next Day
Suite 301, Shelton CT 06484	Company:	Company:	Purchase Order #	RUSH-Two Day
Phone.: 203.929.8555	Address:	Address:	31401451.000 task 01.00	RUSH-Three Day
Contact: Tunde Sandor				RUSH-Four Day
E-mail: tunde.sandor@wsp.com		E-mail	Samples from CT__NY x_NJ__	Standard (5-7day) X

Report/Deliverable Type	
Summary Report	X, PDF
QA Report	X, PDF
CT RCP	
CT RCP DQA/DUE Pkg	
NY ASP A Package	
NY ASP B Package	X, PDF
NJDEP Reduced Deliv	
Excel	X
NYSDEC EQuIS	
NJDEP SRP HazSite	
EQuIS	
GIS/KEY (std)	

YORK Regulatory Comp Excel *compared to:*

OTHER:

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature)

Evan Foster
Name (printed)

Matrix Codes
S - soil
Other - specify (oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

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

Sample Identification	Date+Time Sampled	Matrix	Analysis Requested (List above includes common analysis)	Container Description
WQ040219.1325NP2-6	4-2-19 1325	GW	VOCs 8260 full plus freon 113	3voa
WQ040219.1330NP2-10	" 1330	GW	Fe by EPA 200.7; Fe dissolved by EPA 6010; VOCs 8260 full plus freon 113; TDS	3voa, 3plastic

Rcd By: [signature] 4/4/19 11:13

Comments:

(system)

Preservation (check all applicable): 4°C ✓ Frozen ___ HCl ✓ MeOH ___ HNO_3 ✓ H_2SO_4 ___ NaOH ___ ZnAc ___ Ascorbic Acid ___ Other ___

Special Instructions
Field Filtered ☐
Lab to Filter ☐

Samples Relinquished By	Date/Time 4/3/19 800	Samples Received By WSP Fridge	Date/Time 4/3/19 800	Temperature on Receipt
Samples Relinquished By	Date/Time 4/4/19 1330	Samples Received in LAB by [signature]	Date/Time 4-4-19 1330	23 °C

APPENDIX II

APRIL 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: 04/11/2019
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 19D0192

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 04/11/2019
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 19D0192

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 April 04, 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.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
19D0192-01	WQ040219: 1300 FRW-1	Water	04/02/2019	04/04/2019
19D0192-02	WQ040219: 1305 FRW-2	Water	04/02/2019	04/04/2019
19D0192-03	WQ040219: 1310 FRW-4	Water	04/02/2019	04/04/2019
19D0192-04	WQ040219: 1340 NP1-1-2	Water	04/02/2019	04/04/2019

General Notes for York Project (SDG) No.: 19D0192

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: 

Date: 04/11/2019

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: **WQ040219: 1300 FRW-1** **York Sample ID:** **19D0192-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:00 pm	04/04/2019

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:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
71-55-6	**1,1,1-Trichloroethane**	**0.230**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP	04/10/2019 16:39	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/10/2019 16:39	LLJ

Sample Information

Client Sample ID: WQ040219: 1300 FRW-1 **York Sample ID:** 19D0192-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:00 pm	04/04/2019

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:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
156-59-2	**cis-1,2-Dichloroethylene**	**2.16**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39	LLJ CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP

Sample Information

Client Sample ID: WQ040219: 1300 FRW-1 **York Sample ID:** 19D0192-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:00 pm	04/04/2019

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:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
127-18-4	**Tetrachloroethylene**	**48.9**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-01-6	**Trichloroethylene**	**1.28**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-01-4	**Vinyl Chloride**	**0.260**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	04/09/2019 07:00	04/10/2019 16:39 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	LLJ

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*111 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*100 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*119 %*	*70-130*

Sample Information

Client Sample ID: WQ040219: 1305 FRW-2 **York Sample ID:** 19D0192-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:05 pm	04/04/2019

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:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	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:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 NELAC-NY10854,NELAC-NY12058,NJDEP	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ

Sample Information

Client Sample ID: WQ040219: 1305 FRW-2 **York Sample ID:** 19D0192-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:05 pm	04/04/2019

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:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
156-59-2	**cis-1,2-Dichloroethylene**	**0.990**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:19 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ

Sample Information

Client Sample ID: WQ040219: 1305 FRW-2 **York Sample ID:** 19D0192-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:05 pm	04/04/2019

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:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	04/09/2019 18:19	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	04/09/2019 18:19	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
127-18-4	**Tetrachloroethylene**	**13.8**	QL-02	ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
108-88-3	**Toluene**	**0.280**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
79-01-6	**Trichloroethylene**	**0.470**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:19	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	04/09/2019 18:19	LLJ

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*109 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*103 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*119 %*	*70-130*

Sample Information

Client Sample ID: WQ040219: 1310 FRW-4 **York Sample ID:** 19D0192-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:10 pm	04/04/2019

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:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	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:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 NELAC-NY10854,NELAC-NY12058,NJDEP	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ

Sample Information

Client Sample ID: WQ040219: 1310 FRW-4 **York Sample ID:** 19D0192-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:10 pm	04/04/2019

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:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
156-59-2	**cis-1,2-Dichloroethylene**	**2.05**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 18:46	LLJ

Sample Information

Client Sample ID: WQ040219: 1310 FRW-4 **York Sample ID:** 19D0192-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:10 pm	04/04/2019

Volatile Organics, 8260 List - Low Level

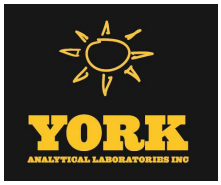
Log-in Notes:

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:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
127-18-4	**Tetrachloroethylene**	**1.38**	QL-02	ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-88-3	**Toluene**	**0.260**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 18:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	LLJ

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*109 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*103 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*120 %*	*70-130*



Sample Information

Client Sample ID: WQ040219: 1340 NP1-1-2 **York Sample ID:** 19D0192-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:40 pm	04/04/2019

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:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	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:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 NELAC-NY10854,NELAC-NY12058,NJDEP	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ

Sample Information

Client Sample ID: WQ040219: 1340 NP1-1-2 **York Sample ID:** 19D0192-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:40 pm	04/04/2019

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:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
67-66-3	**Chloroform**	**0.280**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/09/2019 19:15	LLJ

Sample Information

Client Sample ID: WQ040219: 1340 NP1-1-2 **York Sample ID:** 19D0192-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D0192	31401451.000 task 01.00	Water	April 2, 2019 1:40 pm	04/04/2019

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:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
127-18-4	**Tetrachloroethylene**	**0.270**	QL-02	ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
108-88-3	**Toluene**	**0.220**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
79-01-6	**Trichloroethylene**	**0.320**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	04/09/2019 07:00	04/09/2019 19:15 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	LLJ

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*108 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*103 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*115 %*	*70-130*

Analytical Batch Summary

Batch ID: BD90266 **Preparation Method:** EPA 5030B **Prepared By:** LLJ

YORK Sample ID	Client Sample ID	Preparation Date
19D0192-02	WQ040219: 1305 FRW-2	04/09/19
19D0192-03	WQ040219: 1310 FRW-4	04/09/19
19D0192-04	WQ040219: 1340 NP1-1-2	04/09/19
BD90266-BLK1	Blank	04/09/19
BD90266-BS1	LCS	04/09/19
BD90266-BSD1	LCS Dup	04/09/19

Batch ID: BD90581 **Preparation Method:** EPA 5030B **Prepared By:** LLJ

YORK Sample ID	Client Sample ID	Preparation Date
19D0192-01	WQ040219: 1300 FRW-1	04/09/19
BD90581-BLK1	Blank	04/10/19
BD90581-BS1	LCS	04/10/19
BD90581-BSD1	LCS Dup	04/10/19

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90266 - EPA 5030B											
Blank (BD90266-BLK1)									Prepared & Analyzed: 04/09/2019		
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	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
2,2-Dichloropropane	ND	0.500	"								
2-Chlorotoluene	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Chlorotoluene	ND	0.500	"								
Acetone	ND	2.00	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	1.21	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90266 - EPA 5030B											
Blank (BD90266-BLK1)								Prepared & Analyzed: 04/09/2019			
o-Xylene	ND	0.500	ug/L								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.6*		*"*	*10.0*		*106*	*70-130*				
Surrogate: SURR: Toluene-d8	*10.4*		*"*	*10.0*		*104*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*12.0*		*"*	*10.0*		*120*	*70-130*				
LCS (BD90266-BS1)								Prepared & Analyzed: 04/09/2019			
1,1,1,2-Tetrachloroethane	8.81		ug/L	10.0		88.1	82-126			30	
1,1,1-Trichloroethane	11.1		"	10.0		111	70-130			20	
1,1,2,2-Tetrachloroethane	11.0		"	10.0		110	70-130			20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.1		"	10.0		111	70-130			20	
1,1,2-Trichloroethane	8.64		"	10.0		86.4	70-130			20	
1,1-Dichloroethane	10.8		"	10.0		108	70-130			20	
1,1-Dichloroethylene	10.8		"	10.0		108	70-130			20	
1,1-Dichloropropylene	10.2		"	10.0		102	83-133			30	
1,2,3-Trichlorobenzene	6.87		"	10.0		68.7	70-130	Low Bias		20	
1,2,3-Trichloropropane	10.9		"	10.0		109	77-128			30	
1,2,4-Trichlorobenzene	7.39		"	10.0		73.9	70-130			20	
1,2,4-Trimethylbenzene	11.4		"	10.0		114	82-132			20	
1,2-Dibromo-3-chloropropane	9.21		"	10.0		92.1	40-160			20	
1,2-Dibromoethane	8.70		"	10.0		87.0	70-130			20	
1,2-Dichlorobenzene	10.4		"	10.0		104	70-130			20	
1,2-Dichloroethane	9.86		"	10.0		98.6	70-130			20	
1,2-Dichloropropane	9.21		"	10.0		92.1	70-130			20	
1,3,5-Trimethylbenzene	11.9		"	10.0		119	80-131			30	
1,3-Dichlorobenzene	10.5		"	10.0		105	70-130			20	
1,3-Dichloropropane	8.80		"	10.0		88.0	81-125			30	
1,4-Dichlorobenzene	10.4		"	10.0		104	70-130			20	
2,2-Dichloropropane	4.34		"	10.0		43.4	56-150	Low Bias		30	
2-Chlorotoluene	12.2		"	10.0		122	79-130			30	
2-Hexanone	5.96		"	10.0		59.6	40-160			20	
4-Chlorotoluene	11.9		"	10.0		119	79-128			30	
Acetone	9.35		"	10.0		93.5	40-160			20	
Benzene	10.3		"	10.0		103	70-130			20	
Bromobenzene	11.4		"	10.0		114	78-129			30	
Bromochloromethane	10.4		"	10.0		104	70-130			20	
Bromodichloromethane	9.29		"	10.0		92.9	70-130			20	
Bromoform	6.25		"	10.0		62.5	70-130	Low Bias		20	
Bromomethane	7.94		"	10.0		79.4	40-160			20	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90266 - EPA 5030B											
LCS (BD90266-BS1)								Prepared & Analyzed: 04/09/2019			
Carbon tetrachloride	10.3		ug/L	10.0		103	70-130			20	
Chlorobenzene	9.52		"	10.0		95.2	70-130			20	
Chloroethane	9.94		"	10.0		99.4	40-160			20	
Chloroform	10.4		"	10.0		104	70-130			20	
Chloromethane	11.8		"	10.0		118	40-160			20	
cis-1,2-Dichloroethylene	9.67		"	10.0		96.7	70-130			20	
cis-1,3-Dichloropropylene	7.72		"	10.0		77.2	70-130			20	
Dibromochloromethane	8.18		"	10.0		81.8	70-130			20	
Dibromomethane	9.12		"	10.0		91.2	72-134			30	
Dichlorodifluoromethane	12.0		"	10.0		120	40-160			20	
Ethyl Benzene	10.2		"	10.0		102	70-130			20	
Hexachlorobutadiene	5.73		"	10.0		57.3	67-146	Low Bias		30	
Isopropylbenzene	12.6		"	10.0		126	70-130			20	
Methyl tert-butyl ether (MTBE)	10.1		"	10.0		101	70-130			20	
Methylene chloride	11.1		"	10.0		111	70-130			20	
Naphthalene	8.07		"	10.0		80.7	70-147			30	
n-Butylbenzene	11.7		"	10.0		117	79-132			30	
n-Propylbenzene	12.6		"	10.0		126	78-133			30	
o-Xylene	9.89		"	10.0		98.9	70-130			20	
p- & m- Xylenes	20.7		"	20.0		103	70-130			20	
p-Isopropyltoluene	11.1		"	10.0		111	81-136			30	
sec-Butylbenzene	12.3		"	10.0		123	79-137			30	
Styrene	9.36		"	10.0		93.6	70-130			20	
tert-Butylbenzene	12.0		"	10.0		120	77-138			30	
Tetrachloroethylene	7.54		"	10.0		75.4	70-130			20	
Toluene	10.0		"	10.0		100	70-130			20	
trans-1,2-Dichloroethylene	10.1		"	10.0		101	70-130			20	
trans-1,3-Dichloropropylene	7.11		"	10.0		71.1	70-130			20	
Trichloroethylene	9.82		"	10.0		98.2	70-130			20	
Trichlorofluoromethane	10.9		"	10.0		109	40-160			20	
Vinyl Chloride	11.2		"	10.0		112	70-130			20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.4*		*"*	*10.0*		*104*	*70-130*				
Surrogate: SURR: Toluene-d8	*10.1*		*"*	*10.0*		*101*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*11.9*		*"*	*10.0*		*119*	*70-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90266 - EPA 5030B											
LCS Dup (BD90266-BSD1)								Prepared & Analyzed: 04/09/2019			
1,1,1,2-Tetrachloroethane	8.32		ug/L	10.0		83.2	82-126		5.72	30	
1,1,1-Trichloroethane	10.4		"	10.0		104	70-130		6.80	20	
1,1,2,2-Tetrachloroethane	10.4		"	10.0		104	70-130		5.51	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.4		"	10.0		104	70-130		6.88	20	
1,1,2-Trichloroethane	8.23		"	10.0		82.3	70-130		4.86	20	
1,1-Dichloroethane	9.89		"	10.0		98.9	70-130		8.43	20	
1,1-Dichloroethylene	9.96		"	10.0		99.6	70-130		7.63	20	
1,1-Dichloropropylene	9.56		"	10.0		95.6	83-133		6.09	30	
1,2,3-Trichlorobenzene	6.66		"	10.0		66.6	70-130	Low Bias	3.10	20	
1,2,3-Trichloropropane	10.6		"	10.0		106	77-128		2.98	30	
1,2,4-Trichlorobenzene	7.26		"	10.0		72.6	70-130		1.77	20	
1,2,4-Trimethylbenzene	10.9		"	10.0		109	82-132		4.92	20	
1,2-Dibromo-3-chloropropane	8.51		"	10.0		85.1	40-160		7.90	20	
1,2-Dibromoethane	8.42		"	10.0		84.2	70-130		3.27	20	
1,2-Dichlorobenzene	10.1		"	10.0		101	70-130		3.11	20	
1,2-Dichloroethane	9.78		"	10.0		97.8	70-130		0.815	20	
1,2-Dichloropropane	8.62		"	10.0		86.2	70-130		6.62	20	
1,3,5-Trimethylbenzene	11.2		"	10.0		112	80-131		5.70	30	
1,3-Dichlorobenzene	10.2		"	10.0		102	70-130		2.91	20	
1,3-Dichloropropane	8.53		"	10.0		85.3	81-125		3.12	30	
1,4-Dichlorobenzene	9.96		"	10.0		99.6	70-130		4.61	20	
2,2-Dichloropropane	3.92		"	10.0		39.2	56-150	Low Bias	10.2	30	
2-Chlorotoluene	11.6		"	10.0		116	79-130		5.28	30	
2-Hexanone	6.89		"	10.0		68.9	40-160		14.5	20	
4-Chlorotoluene	11.2		"	10.0		112	79-128		5.71	30	
Acetone	8.90		"	10.0		89.0	40-160		4.93	20	
Benzene	9.61		"	10.0		96.1	70-130		6.54	20	
Bromobenzene	11.0		"	10.0		110	78-129		3.92	30	
Bromochloromethane	9.71		"	10.0		97.1	70-130		6.86	20	
Bromodichloromethane	8.82		"	10.0		88.2	70-130		5.19	20	
Bromoform	6.11		"	10.0		61.1	70-130	Low Bias	2.27	20	
Bromomethane	8.51		"	10.0		85.1	40-160		6.93	20	
Carbon tetrachloride	9.58		"	10.0		95.8	70-130		7.15	20	
Chlorobenzene	8.99		"	10.0		89.9	70-130		5.73	20	
Chloroethane	9.11		"	10.0		91.1	40-160		8.71	20	
Chloroform	9.76		"	10.0		97.6	70-130		6.54	20	
Chloromethane	10.3		"	10.0		103	40-160		12.8	20	
cis-1,2-Dichloroethylene	8.96		"	10.0		89.6	70-130		7.62	20	
cis-1,3-Dichloropropylene	7.32		"	10.0		73.2	70-130		5.32	20	
Dibromochloromethane	7.88		"	10.0		78.8	70-130		3.74	20	
Dibromomethane	8.64		"	10.0		86.4	72-134		5.41	30	
Dichlorodifluoromethane	11.0		"	10.0		110	40-160		8.71	20	
Ethyl Benzene	9.53		"	10.0		95.3	70-130		6.89	20	
Hexachlorobutadiene	5.67		"	10.0		56.7	67-146	Low Bias	1.05	30	
Isopropylbenzene	11.8		"	10.0		118	70-130		6.64	20	
Methyl tert-butyl ether (MTBE)	9.56		"	10.0		95.6	70-130		5.39	20	
Methylene chloride	10.4		"	10.0		104	70-130		6.52	20	
Naphthalene	7.96		"	10.0		79.6	70-147		1.37	30	
n-Butylbenzene	11.1		"	10.0		111	79-132		4.65	30	
n-Propylbenzene	11.9		"	10.0		119	78-133		5.07	30	
o-Xylene	9.29		"	10.0		92.9	70-130		6.26	20	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90266 - EPA 5030B											
LCS Dup (BD90266-BSD1)								Prepared & Analyzed: 04/09/2019			
p- & m- Xylenes	19.3		ug/L	20.0		96.5	70-130		6.81	20	
p-Isopropyltoluene	10.6		"	10.0		106	81-136		4.88	30	
sec-Butylbenzene	11.5		"	10.0		115	79-137		6.65	30	
Styrene	8.77		"	10.0		87.7	70-130		6.51	20	
tert-Butylbenzene	11.4		"	10.0		114	77-138		5.23	30	
Tetrachloroethylene	7.00		"	10.0		70.0	70-130		7.43	20	
Toluene	9.50		"	10.0		95.0	70-130		5.53	20	
trans-1,2-Dichloroethylene	9.41		"	10.0		94.1	70-130		6.78	20	
trans-1,3-Dichloropropylene	7.34		"	10.0		73.4	70-130		3.18	20	
Trichloroethylene	9.09		"	10.0		90.9	70-130		7.72	20	
Trichlorofluoromethane	9.90		"	10.0		99.0	40-160		9.43	20	
Vinyl Chloride	10.1		"	10.0		101	70-130		10.2	20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.3*		*"*	*10.0*		*103*	*70-130*				
Surrogate: SURR: Toluene-d8	*10.2*		*"*	*10.0*		*102*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*11.8*		*"*	*10.0*		*118*	*70-130*				
Batch BD90581 - EPA 5030B											
Blank (BD90581-BLK1)								Prepared & Analyzed: 04/10/2019			
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,1-Dichloropropylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
2,2-Dichloropropane	ND	0.500	"								
2-Chlorotoluene	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Chlorotoluene	ND	0.500	"								
Acetone	ND	2.00	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								

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 BD90581 - EPA 5030B											
Blank (BD90581-BLK1)											
Prepared & Analyzed: 04/10/2019											
Carbon tetrachloride	ND	0.500	ug/L								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								
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	*10.8*		*"*	*10.0*		*108*	*70-130*				
Surrogate: SURR: Toluene-d8	*10.1*		*"*	*10.0*		*101*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*11.5*		*"*	*10.0*		*115*	*70-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90581 - EPA 5030B											
LCS (BD90581-BS1)								Prepared & Analyzed: 04/10/2019			
1,1,1,2-Tetrachloroethane	8.86		ug/L	10.0		88.6	82-126			30	
1,1,1-Trichloroethane	11.4		"	10.0		114	70-130			20	
1,1,2,2-Tetrachloroethane	10.5		"	10.0		105	70-130			20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.3		"	10.0		113	70-130			20	
1,1,2-Trichloroethane	8.62		"	10.0		86.2	70-130			20	
1,1-Dichloroethane	10.7		"	10.0		107	70-130			20	
1,1-Dichloroethylene	10.6		"	10.0		106	70-130			20	
1,1-Dichloropropylene	10.5		"	10.0		105	83-133			30	
1,2,3-Trichlorobenzene	6.32		"	10.0		63.2	70-130	Low Bias		20	
1,2,3-Trichloropropane	11.4		"	10.0		114	77-128			30	
1,2,4-Trichlorobenzene	7.66		"	10.0		76.6	70-130			20	
1,2,4-Trimethylbenzene	11.5		"	10.0		115	82-132			20	
1,2-Dibromo-3-chloropropane	8.82		"	10.0		88.2	40-160			20	
1,2-Dibromoethane	8.77		"	10.0		87.7	70-130			20	
1,2-Dichlorobenzene	10.7		"	10.0		107	70-130			20	
1,2-Dichloroethane	10.0		"	10.0		100	70-130			20	
1,2-Dichloropropane	8.86		"	10.0		88.6	70-130			20	
1,3,5-Trimethylbenzene	12.0		"	10.0		120	80-131			30	
1,3-Dichlorobenzene	10.9		"	10.0		109	70-130			20	
1,3-Dichloropropane	8.38		"	10.0		83.8	81-125			30	
1,4-Dichlorobenzene	10.8		"	10.0		108	70-130			20	
2,2-Dichloropropane	10.8		"	10.0		108	56-150			30	
2-Chlorotoluene	12.4		"	10.0		124	79-130			30	
2-Hexanone	8.42		"	10.0		84.2	40-160			20	
4-Chlorotoluene	11.7		"	10.0		117	79-128			30	
Acetone	7.37		"	10.0		73.7	40-160			20	
Benzene	10.4		"	10.0		104	70-130			20	
Bromobenzene	11.3		"	10.0		113	78-129			30	
Bromochloromethane	10.6		"	10.0		106	70-130			20	
Bromodichloromethane	9.15		"	10.0		91.5	70-130			20	
Bromoform	6.34		"	10.0		63.4	70-130	Low Bias		20	
Bromomethane	8.16		"	10.0		81.6	40-160			20	
Carbon tetrachloride	10.6		"	10.0		106	70-130			20	
Chlorobenzene	9.47		"	10.0		94.7	70-130			20	
Chloroethane	9.54		"	10.0		95.4	40-160			20	
Chloroform	10.7		"	10.0		107	70-130			20	
Chloromethane	12.5		"	10.0		125	40-160			20	
cis-1,2-Dichloroethylene	10.5		"	10.0		105	70-130			20	
cis-1,3-Dichloropropylene	8.50		"	10.0		85.0	70-130			20	
Dibromochloromethane	8.25		"	10.0		82.5	70-130			20	
Dibromomethane	9.02		"	10.0		90.2	72-134			30	
Dichlorodifluoromethane	11.4		"	10.0		114	40-160			20	
Ethyl Benzene	10.1		"	10.0		101	70-130			20	
Hexachlorobutadiene	6.52		"	10.0		65.2	67-146	Low Bias		30	
Isopropylbenzene	12.6		"	10.0		126	70-130			20	
Methyl tert-butyl ether (MTBE)	10.1		"	10.0		101	70-130			20	
Methylene chloride	11.4		"	10.0		114	70-130			20	
Naphthalene	7.24		"	10.0		72.4	70-147			30	
n-Butylbenzene	12.6		"	10.0		126	79-132			30	
n-Propylbenzene	12.6		"	10.0		126	78-133			30	
o-Xylene	9.78		"	10.0		97.8	70-130			20	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90581 - EPA 5030B											
LCS (BD90581-BS1)					Prepared & Analyzed: 04/10/2019						
p- & m- Xylenes	20.5		ug/L	20.0		103	70-130			20	
p-Isopropyltoluene	11.8		"	10.0		118	81-136			30	
sec-Butylbenzene	12.5		"	10.0		125	79-137			30	
Styrene	9.25		"	10.0		92.5	70-130			20	
tert-Butylbenzene	12.2		"	10.0		122	77-138			30	
Tetrachloroethylene	7.77		"	10.0		77.7	70-130			20	
Toluene	9.72		"	10.0		97.2	70-130			20	
trans-1,2-Dichloroethylene	10.1		"	10.0		101	70-130			20	
trans-1,3-Dichloropropylene	8.07		"	10.0		80.7	70-130			20	
Trichloroethylene	9.35		"	10.0		93.5	70-130			20	
Trichlorofluoromethane	10.8		"	10.0		108	40-160			20	
Vinyl Chloride	11.4		"	10.0		114	70-130			20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.5*		*"*	*10.0*		*105*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.97*		*"*	*10.0*		*99.7*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*11.4*		*"*	*10.0*		*114*	*70-130*				
LCS Dup (BD90581-BSD1)					Prepared & Analyzed: 04/10/2019						
1,1,1,2-Tetrachloroethane	8.69		ug/L	10.0		86.9	82-126		1.94	30	
1,1,1-Trichloroethane	11.1		"	10.0		111	70-130		1.87	20	
1,1,2,2-Tetrachloroethane	10.7		"	10.0		107	70-130		1.88	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.3		"	10.0		113	70-130		0.0887	20	
1,1,2-Trichloroethane	8.66		"	10.0		86.6	70-130		0.463	20	
1,1-Dichloroethane	10.5		"	10.0		105	70-130		2.07	20	
1,1-Dichloroethylene	10.6		"	10.0		106	70-130		0.189	20	
1,1-Dichloropropylene	10.4		"	10.0		104	83-133		1.06	30	
1,2,3-Trichlorobenzene	6.53		"	10.0		65.3	70-130	Low Bias	3.27	20	
1,2,3-Trichloropropane	10.8		"	10.0		108	77-128		5.58	30	
1,2,4-Trichlorobenzene	7.64		"	10.0		76.4	70-130		0.261	20	
1,2,4-Trimethylbenzene	11.3		"	10.0		113	82-132		2.28	20	
1,2-Dibromo-3-chloropropane	8.50		"	10.0		85.0	40-160		3.70	20	
1,2-Dibromoethane	8.90		"	10.0		89.0	70-130		1.47	20	
1,2-Dichlorobenzene	10.6		"	10.0		106	70-130		1.60	20	
1,2-Dichloroethane	10.4		"	10.0		104	70-130		3.72	20	
1,2-Dichloropropane	8.76		"	10.0		87.6	70-130		1.14	20	
1,3,5-Trimethylbenzene	11.7		"	10.0		117	80-131		2.28	30	
1,3-Dichlorobenzene	10.6		"	10.0		106	70-130		2.60	20	
1,3-Dichloropropane	8.70		"	10.0		87.0	81-125		3.75	30	
1,4-Dichlorobenzene	10.4		"	10.0		104	70-130		3.11	20	
2,2-Dichloropropane	10.7		"	10.0		107	56-150		0.928	30	
2-Chlorotoluene	11.8		"	10.0		118	79-130		4.87	30	
2-Hexanone	8.31		"	10.0		83.1	40-160		1.31	20	
4-Chlorotoluene	11.3		"	10.0		113	79-128		3.56	30	
Acetone	7.57		"	10.0		75.7	40-160		2.68	20	
Benzene	10.2		"	10.0		102	70-130		1.75	20	
Bromobenzene	10.9		"	10.0		109	78-129		3.70	30	
Bromochloromethane	11.0		"	10.0		110	70-130		3.05	20	
Bromodichloromethane	9.06		"	10.0		90.6	70-130		0.988	20	
Bromoform	6.36		"	10.0		63.6	70-130	Low Bias	0.315	20	
Bromomethane	9.31		"	10.0		93.1	40-160		13.2	20	
Carbon tetrachloride	10.6		"	10.0		106	70-130		0.377	20	
Chlorobenzene	9.30		"	10.0		93.0	70-130		1.81	20	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD90581 - EPA 5030B											
LCS Dup (BD90581-BSD1)								Prepared & Analyzed: 04/10/2019			
Chloroethane	9.49		ug/L	10.0		94.9	40-160		0.525	20	
Chloroform	10.6		"	10.0		106	70-130		1.32	20	
Chloromethane	12.3		"	10.0		123	40-160		1.45	20	
cis-1,2-Dichloroethylene	10.6		"	10.0		106	70-130		0.853	20	
cis-1,3-Dichloropropylene	8.38		"	10.0		83.8	70-130		1.42	20	
Dibromochloromethane	8.25		"	10.0		82.5	70-130		0.00	20	
Dibromomethane	8.95		"	10.0		89.5	72-134		0.779	30	
Dichlorodifluoromethane	11.0		"	10.0		110	40-160		3.59	20	
Ethyl Benzene	9.82		"	10.0		98.2	70-130		2.51	20	
Hexachlorobutadiene	6.37		"	10.0		63.7	67-146	Low Bias	2.33	30	
Isopropylbenzene	12.0		"	10.0		120	70-130		4.47	20	
Methyl tert-butyl ether (MTBE)	10.2		"	10.0		102	70-130		0.988	20	
Methylene chloride	11.4		"	10.0		114	70-130		0.262	20	
Naphthalene	7.47		"	10.0		74.7	70-147		3.13	30	
n-Butylbenzene	12.4		"	10.0		124	79-132		1.20	30	
n-Propylbenzene	12.1		"	10.0		121	78-133		4.14	30	
o-Xylene	9.54		"	10.0		95.4	70-130		2.48	20	
p- & m- Xylenes	20.0		"	20.0		100	70-130		2.47	20	
p-Isopropyltoluene	11.5		"	10.0		115	81-136		3.09	30	
sec-Butylbenzene	12.3		"	10.0		123	79-137		1.69	30	
Styrene	9.17		"	10.0		91.7	70-130		0.869	20	
tert-Butylbenzene	11.8		"	10.0		118	77-138		3.09	30	
Tetrachloroethylene	7.59		"	10.0		75.9	70-130		2.34	20	
Toluene	9.52		"	10.0		95.2	70-130		2.08	20	
trans-1,2-Dichloroethylene	9.77		"	10.0		97.7	70-130		3.12	20	
trans-1,3-Dichloropropylene	8.02		"	10.0		80.2	70-130		0.621	20	
Trichloroethylene	9.05		"	10.0		90.5	70-130		3.26	20	
Trichlorofluoromethane	10.5		"	10.0		105	40-160		2.44	20	
Vinyl Chloride	10.6		"	10.0		106	70-130		8.09	20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.8*		*"*	*10.0*		*108*	*70-130*				
Surrogate: SURR: Toluene-d8	*10.1*		*"*	*10.0*		*101*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*11.3*		*"*	*10.0*		*113*	*70-130*				

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19D0192-01	WQ040219: 1300 FRW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19D0192-02	WQ040219: 1305 FRW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19D0192-03	WQ040219: 1310 FRW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19D0192-04	WQ040219: 1340 NP1-1-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Sample and Data Qualifiers Relating to This Work Order

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

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

Field Chain-of-Custody Record

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

York Project No. 19D0192

YOUR Information	Report to:	Invoice To:	Your Project ID	Turn-Around Time
Company: WSP USA	SAME [X]	SAME [X]	31401451.000 task 01.00	RUSH-Same Day
Address: 4 Research Drive	Name:	Name:		RUSH-Next Day
Suite 301, Shelton CT 06484	Company:	Company:	Purchase Order #	RUSH-Two Day
Phone.: 203.929.8555	Address:	Address:	31401451.000 task 01.00	RUSH-Three Day
Contact: Tunde Sandor				RUSH-Four Day
E-mail: tunde.sandor@wsp.com		E-mail	Samples from CT__ NY x_ NJ__	Standard (5-7day) X

Report/Deliverable Type	
Summary Report	X, PDF
QA Report	X, PDF
CT RCP	
CT RCP DQA/DUE Pkg	
NY ASP A Package	
NY ASP B Package	X, PDF
NJDEP Reduced Deliv	
Excel	X
NYSDEC EQuIS	
NJDEP SRP HazSite	
EQuIS	
GIS/KEY (std)	
YORK Regulatory Comp Excel compared to:	
OTHER:	

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature)

Evan Foster
Name (printed)

Matrix Codes
S - soil
Other - specify (oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part360-Routine
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part360-Baseline
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded No Dioxins/Furans
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM

Sample Identification	Date+Time Sampled	Matrix	Analysis Requested (List above includes common analysis)	Container Description
WQ040219: 1300 FRW-1	4-2-19	GW	VOCs 8260 full plus freon 113	3 VOA
1305 FRW-2				
(EF) [redacted]				
1310 FRW-4				
1340 NPI-1-2			Rel Ky = [redacted] 4/4/19 11:13	

Comments:

Preservation (check all applicable): 4°C ✓ Frozen ____ HCl ✓ MeOH ____ HNO_3 ____ H_2SO_4 ____ NaOH ____ ZnAc ____ Ascorbic Acid ____ Other ____

Special Instructions
Field Filtered ☐
Lab to Filter ☐

(system)

Samples Relinquished By	4-3-19 800 Date/Time	WSP Fridge	4-2-19 900 Date/Time
Samples Relinquished By	4/4/19 Date/Time	Samples Received in LAB by	4-4-19 1330 Date/Time

1330

Temperature on Receipt: 2-3 °C

Technical Report

prepared for:

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

Report Date: 05/03/2019
Client Project ID: Rowe Industries
York Project (SDG) No.: 19D1406

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 05/03/2019
Client Project ID: Rowe Industries
York Project (SDG) No.: 19D1406

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 April 30, 2019 and listed below. The project was identified as your project: **Rowe Industries**.

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

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

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

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

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
19D1406-01	WQ042919:1045 FRW-3	Water	04/29/2019	04/30/2019

General Notes for York Project (SDG) No.: 19D1406

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: 

Date: 05/03/2019

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: WQ042919:1045 FRW-3 **York Sample ID:** 19D1406-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D1406	Rowe Industries	Water	April 29, 2019 10:45 am	04/30/2019

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:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS NELAC-NY10854,NELAC-NY12058,NJDEP
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59	RDS NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP

Sample Information

Client Sample ID: WQ042919:1045 FRW-3 **York Sample ID:** 19D1406-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D1406	Rowe Industries	Water	April 29, 2019 10:45 am	04/30/2019

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:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
67-64-1	**Acetone**	**3.24**		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
156-59-2	**cis-1,2-Dichloroethylene**	**1.17**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/03/2019 08:59	RDS

Sample Information

Client Sample ID: WQ042919:1045 FRW-3 **York Sample ID:** 19D1406-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D1406	Rowe Industries	Water	April 29, 2019 10:45 am	04/30/2019

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:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	RDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	RDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
127-18-4	**Tetrachloroethylene**	**20.2**	ICV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
79-01-6	**Trichloroethylene**	**0.550**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	RDS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	05/01/2019 12:30	05/03/2019 08:59 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	RDS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*97.2 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*99.1 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*105 %*	*70-130*

Analytical Batch Summary

Batch ID: BE90133 **Preparation Method:** EPA 5030B **Prepared By:** AB

YORK Sample ID	Client Sample ID	Preparation Date
19D1406-01	WQ042919:1045 FRW-3	05/01/19
BE90133-BLK1	Blank	05/02/19
BE90133-BS1	LCS	05/02/19
BE90133-BSD1	LCS Dup	05/02/19

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE90133 - EPA 5030B											
Blank (BE90133-BLK1)											
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,1-Dichloropropylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
2,2-Dichloropropane	ND	0.500	"								
2-Chlorotoluene	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Chlorotoluene	ND	0.500	"								
Acetone	ND	2.00	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								

Prepared: 05/02/2019 Analyzed: 05/03/2019

Volatile Organic Compounds by GC/MS - Quality Control Data

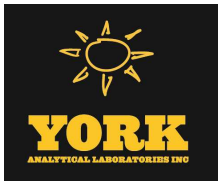
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE90133 - EPA 5030B											
Blank (BE90133-BLK1)											Prepared: 05/02/2019 Analyzed: 05/03/2019
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	*9.50*		*"*	*10.0*		*95.0*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.90*		*"*	*10.0*		*99.0*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*10.5*		*"*	*10.0*		*105*	*70-130*				
LCS (BE90133-BS1)											Prepared & Analyzed: 05/02/2019
1,1,1,2-Tetrachloroethane	9.82		ug/L	10.0		98.2	82-126			30	
1,1,1-Trichloroethane	9.71		"	10.0		97.1	70-130			20	
1,1,2,2-Tetrachloroethane	10.0		"	10.0		100	70-130			20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.2		"	10.0		102	70-130			20	
1,1,2-Trichloroethane	9.55		"	10.0		95.5	70-130			20	
1,1-Dichloroethane	9.89		"	10.0		98.9	70-130			20	
1,1-Dichloroethylene	9.87		"	10.0		98.7	70-130			20	
1,1-Dichloropropylene	9.90		"	10.0		99.0	83-133			30	
1,2,3-Trichlorobenzene	9.83		"	10.0		98.3	70-130			20	
1,2,3-Trichloropropane	9.94		"	10.0		99.4	77-128			30	
1,2,4-Trichlorobenzene	9.48		"	10.0		94.8	70-130			20	
1,2,4-Trimethylbenzene	9.93		"	10.0		99.3	82-132			20	
1,2-Dibromo-3-chloropropane	9.44		"	10.0		94.4	40-160			20	
1,2-Dibromoethane	9.91		"	10.0		99.1	70-130			20	
1,2-Dichlorobenzene	9.75		"	10.0		97.5	70-130			20	
1,2-Dichloroethane	10.0		"	10.0		100	70-130			20	
1,2-Dichloropropane	9.64		"	10.0		96.4	70-130			20	
1,3,5-Trimethylbenzene	9.92		"	10.0		99.2	80-131			30	
1,3-Dichlorobenzene	9.67		"	10.0		96.7	70-130			20	
1,3-Dichloropropane	9.87		"	10.0		98.7	81-125			30	
1,4-Dichlorobenzene	9.60		"	10.0		96.0	70-130			20	
2,2-Dichloropropane	8.64		"	10.0		86.4	56-150			30	
2-Chlorotoluene	9.95		"	10.0		99.5	79-130			30	
2-Hexanone	9.59		"	10.0		95.9	40-160			20	
4-Chlorotoluene	9.84		"	10.0		98.4	79-128			30	
Acetone	7.85		"	10.0		78.5	40-160			20	
Benzene	10.2		"	10.0		102	70-130			20	
Bromobenzene	9.91		"	10.0		99.1	78-129			30	
Bromochloromethane	10.1		"	10.0		101	70-130			20	
Bromodichloromethane	9.71		"	10.0		97.1	70-130			20	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE90133 - EPA 5030B											
LCS (BE90133-BS1)								Prepared & Analyzed: 05/02/2019			
Bromoform	9.20		ug/L	10.0		92.0	70-130			20	
Bromomethane	8.72		"	10.0		87.2	40-160			20	
Carbon tetrachloride	9.76		"	10.0		97.6	70-130			20	
Chlorobenzene	9.75		"	10.0		97.5	70-130			20	
Chloroethane	10.9		"	10.0		109	40-160			20	
Chloroform	9.71		"	10.0		97.1	70-130			20	
Chloromethane	11.0		"	10.0		110	40-160			20	
cis-1,2-Dichloroethylene	9.90		"	10.0		99.0	70-130			20	
cis-1,3-Dichloropropylene	9.52		"	10.0		95.2	70-130			20	
Dibromochloromethane	9.59		"	10.0		95.9	70-130			20	
Dibromomethane	9.38		"	10.0		93.8	72-134			30	
Dichlorodifluoromethane	12.1		"	10.0		121	40-160			20	
Ethyl Benzene	10.0		"	10.0		100	70-130			20	
Hexachlorobutadiene	9.87		"	10.0		98.7	67-146			30	
Isopropylbenzene	9.93		"	10.0		99.3	70-130			20	
Methyl tert-butyl ether (MTBE)	9.84		"	10.0		98.4	70-130			20	
Methylene chloride	9.07		"	10.0		90.7	70-130			20	
Naphthalene	9.64		"	10.0		96.4	70-147			30	
n-Butylbenzene	10.2		"	10.0		102	79-132			30	
n-Propylbenzene	10.1		"	10.0		101	78-133			30	
o-Xylene	9.96		"	10.0		99.6	70-130			20	
p- & m- Xylenes	20.2		"	20.0		101	70-130			20	
p-Isopropyltoluene	10.2		"	10.0		102	81-136			30	
sec-Butylbenzene	10.7		"	10.0		107	79-137			30	
Styrene	9.96		"	10.0		99.6	70-130			20	
tert-Butylbenzene	10.0		"	10.0		100	77-138			30	
Tetrachloroethylene	6.86		"	10.0		68.6	70-130	Low Bias		20	
Toluene	9.93		"	10.0		99.3	70-130			20	
trans-1,2-Dichloroethylene	9.69		"	10.0		96.9	70-130			20	
trans-1,3-Dichloropropylene	9.31		"	10.0		93.1	70-130			20	
Trichloroethylene	9.81		"	10.0		98.1	70-130			20	
Trichlorofluoromethane	11.4		"	10.0		114	40-160			20	
Vinyl Chloride	11.8		"	10.0		118	70-130			20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*9.85*		*"*	*10.0*		*98.5*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.95*		*"*	*10.0*		*99.5*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*10.2*		*"*	*10.0*		*102*	*70-130*				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE90133 - EPA 5030B											
LCS Dup (BE90133-BSD1)							Prepared & Analyzed: 05/02/2019				
1,1,1,2-Tetrachloroethane	9.57		ug/L	10.0		95.7	82-126		2.58	30	
1,1,1-Trichloroethane	9.25		"	10.0		92.5	70-130		4.85	20	
1,1,2,2-Tetrachloroethane	9.95		"	10.0		99.5	70-130		0.801	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.77		"	10.0		97.7	70-130		4.31	20	
1,1,2-Trichloroethane	9.48		"	10.0		94.8	70-130		0.736	20	
1,1-Dichloroethane	9.60		"	10.0		96.0	70-130		2.98	20	
1,1-Dichloroethylene	9.36		"	10.0		93.6	70-130		5.30	20	
1,1-Dichloropropylene	9.42		"	10.0		94.2	83-133		4.97	30	
1,2,3-Trichlorobenzene	10.3		"	10.0		103	70-130		4.38	20	
1,2,3-Trichloropropane	10.0		"	10.0		100	77-128		0.702	30	
1,2,4-Trichlorobenzene	9.46		"	10.0		94.6	70-130		0.211	20	
1,2,4-Trimethylbenzene	9.56		"	10.0		95.6	82-132		3.80	20	
1,2-Dibromo-3-chloropropane	9.55		"	10.0		95.5	40-160		1.16	20	
1,2-Dibromoethane	9.74		"	10.0		97.4	70-130		1.73	20	
1,2-Dichlorobenzene	9.49		"	10.0		94.9	70-130		2.70	20	
1,2-Dichloroethane	9.78		"	10.0		97.8	70-130		2.62	20	
1,2-Dichloropropane	9.38		"	10.0		93.8	70-130		2.73	20	
1,3,5-Trimethylbenzene	9.53		"	10.0		95.3	80-131		4.01	30	
1,3-Dichlorobenzene	9.34		"	10.0		93.4	70-130		3.47	20	
1,3-Dichloropropane	9.84		"	10.0		98.4	81-125		0.304	30	
1,4-Dichlorobenzene	9.30		"	10.0		93.0	70-130		3.17	20	
2,2-Dichloropropane	8.22		"	10.0		82.2	56-150		4.98	30	
2-Chlorotoluene	9.50		"	10.0		95.0	79-130		4.63	30	
2-Hexanone	9.99		"	10.0		99.9	40-160		4.09	20	
4-Chlorotoluene	9.46		"	10.0		94.6	79-128		3.94	30	
Acetone	7.82		"	10.0		78.2	40-160		0.383	20	
Benzene	9.87		"	10.0		98.7	70-130		2.99	20	
Bromobenzene	9.70		"	10.0		97.0	78-129		2.14	30	
Bromochloromethane	9.93		"	10.0		99.3	70-130		1.60	20	
Bromodichloromethane	9.45		"	10.0		94.5	70-130		2.71	20	
Bromoform	9.21		"	10.0		92.1	70-130		0.109	20	
Bromomethane	8.51		"	10.0		85.1	40-160		2.44	20	
Carbon tetrachloride	9.40		"	10.0		94.0	70-130		3.76	20	
Chlorobenzene	9.48		"	10.0		94.8	70-130		2.81	20	
Chloroethane	10.4		"	10.0		104	40-160		4.04	20	
Chloroform	9.54		"	10.0		95.4	70-130		1.77	20	
Chloromethane	10.2		"	10.0		102	40-160		7.71	20	
cis-1,2-Dichloroethylene	9.53		"	10.0		95.3	70-130		3.81	20	
cis-1,3-Dichloropropylene	9.29		"	10.0		92.9	70-130		2.45	20	
Dibromochloromethane	9.59		"	10.0		95.9	70-130		0.00	20	
Dibromomethane	9.33		"	10.0		93.3	72-134		0.534	30	
Dichlorodifluoromethane	11.4		"	10.0		114	40-160		5.79	20	
Ethyl Benzene	9.70		"	10.0		97.0	70-130		3.54	20	
Hexachlorobutadiene	9.63		"	10.0		96.3	67-146		2.46	30	
Isopropylbenzene	9.45		"	10.0		94.5	70-130		4.95	20	
Methyl tert-butyl ether (MTBE)	9.95		"	10.0		99.5	70-130		1.11	20	
Methylene chloride	8.96		"	10.0		89.6	70-130		1.22	20	
Naphthalene	9.84		"	10.0		98.4	70-147		2.05	30	
n-Butylbenzene	9.83		"	10.0		98.3	79-132		3.79	30	
n-Propylbenzene	9.66		"	10.0		96.6	78-133		4.85	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
Batch BE90133 - EPA 5030B											
LCS Dup (BE90133-BSD1)								Prepared & Analyzed: 05/02/2019			
o-Xylene	9.69		ug/L	10.0		96.9	70-130		2.75	20	
p- & m- Xylenes	19.5		"	20.0		97.7	70-130		3.12	20	
p-Isopropyltoluene	9.78		"	10.0		97.8	81-136		4.40	30	
sec-Butylbenzene	10.1		"	10.0		101	79-137		5.20	30	
Styrene	9.78		"	10.0		97.8	70-130		1.82	20	
tert-Butylbenzene	9.59		"	10.0		95.9	77-138		4.29	30	
Tetrachloroethylene	6.59		"	10.0		65.9	70-130	Low Bias	4.01	20	
Toluene	9.55		"	10.0		95.5	70-130		3.90	20	
trans-1,2-Dichloroethylene	9.35		"	10.0		93.5	70-130		3.57	20	
trans-1,3-Dichloropropylene	9.06		"	10.0		90.6	70-130		2.72	20	
Trichloroethylene	9.48		"	10.0		94.8	70-130		3.42	20	
Trichlorofluoromethane	10.9		"	10.0		109	40-160		5.11	20	
Vinyl Chloride	11.2		"	10.0		112	70-130		5.39	20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*10.1*		*"*	*10.0*		*101*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.84*		*"*	*10.0*		*98.4*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*10.2*		*"*	*10.0*		*102*	*70-130*				

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19D1406-01	WQ042919:1045 FRW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Sample and Data Qualifiers Relating to This Work Order

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

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

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

Field Chain-of-Custody Record

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

York Project No. 19D1406

YOUR Information

Company: LBG
Address: 4 Research Dr Suite 204 Shelton CT 06484
Phone No. 203-929-8555
Contact Person: Tunde Sandor
E-Mail Address: Tunde.Sandor@wsp.com

Report To:

Company:
Address: SAME
Phone No.
Attention:
E-Mail Address:

Invoice To:

Company: WSP ACCOUNTING
Address:
Phone No.
Attention:
E-Mail Address:

YOUR Project ID

ROW Industries

Purchase Order No.

Samples from: CT___ NY X NJ___

Turn-Around Time

- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) X

Report Type

- Summary Report pdf
- Summary w/ QA Summary pdf
- CT RCP Package
- CTRCP DQA/DUE Pkg
- NY ASP A Package
- NY ASP B Package pdf.
- NJDEP Red. Deliv.

Electronic Data Deliverables (EDD)

- Simple Excel X
- NYSDEC EQuIS
- EQuIS (std)
- EZ-EDD (EQuIS)
- NJDEP SRP HazSite EDD
- GIS/KEY (std)
- Other
- **York Regulatory Comparison**
- **Excel Spreadsheet**

Compare to the following Regs. (please fill in):

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature)

TUNDE KOMUVES-SANDOR
Name (printed)

Matrix Codes

S - soil
Other - specify(oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN	Ignitability
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part 360-Routine	Heterotrophs
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part 360-Baseline	TOX
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded No Dioxins/Furans	BTU/lb.
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
WQ0429/19:1045 FRW-3	4/29/19 1045	GW	VOC 8260 full list (EPA SW846-8260B) plus Freon 113	3V

Comments

Preservation Check those Applicable
4°C____ Frozen____ HCl____ MeOH____ HNO_3____ H_2SO_4____ NaOH____
ZnAc Ascorbic Acid Other

Special Instructions
Field Filtered ☐
Lab to Filter ☐

Samples Relinquished By	Date/Time	Samples Received By	Date/Time
	4.30.19 1455	K Barkyork	4/30/19 1455
K Barkyork	4/30/19 1812		
Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time
			4-30-19 1812

Temperature on Receipt 3.6 °C

APPENDIX III

APRIL 2019 LABORATORY ANALYTICAL REPORT
FOR AIR SAMPLES

Technical Report

prepared for:

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

Report Date: 05/01/2019
Client Project ID: 31401451.000 task 01 Rowe
York Project (SDG) No.: 19D1208

Report Date: 05/01/2019
Client Project ID: 31401451.000 task 01 Rowe
York Project (SDG) No.: 19D1208

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 April 25, 2019 and listed below. The project was identified as your project: **31401451.000 task 01 Rowe**.

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.

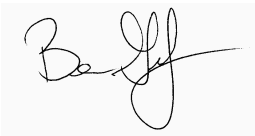
The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
19D1208-01	WQ041619: 1300 NP4-1	Vapor Extraction	04/16/2019	04/25/2019
19D1208-02	WQ041619: 1305 NP4-3	Vapor Extraction	04/16/2019	04/25/2019

General Notes for York Project (SDG) No.: 19D1208

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: 

Date: 05/01/2019

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: **WQ041619: 1300 NP4-1** **York Sample ID:** **19D1208-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D1208	31401451.000 task 01 Rowe	Vapor Extraction	April 16, 2019 1:00 pm	04/25/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.1	1.596	EPA TO-15 Certifications:	04/29/2019 09:00	04/29/2019 21:48	AS
71-55-6	**1,1,1-Trichloroethane**	**1.1**		ug/m³	0.87	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.2	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.87	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.65	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.16	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.78	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.2	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.96	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.65	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.74	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.1	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.78	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
106-99-0	1,3-Butadiene	ND		ug/m³	1.1	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.96	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.74	1.596	EPA TO-15 Certifications:	04/29/2019 09:00	04/29/2019 21:48	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.96	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
123-91-1	1,4-Dioxane	ND		ug/m³	1.2	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
78-93-3	**2-Butanone**	**0.71**		ug/m³	0.47	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
591-78-6	* 2-Hexanone	ND		ug/m³	1.3	1.596	EPA TO-15 Certifications:	04/29/2019 09:00	04/29/2019 21:48	AS

Sample Information

Client Sample ID: WQ041619: 1300 NP4-1 **York Sample ID:** 19D1208-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D1208	31401451.000 task 01 Rowe	Vapor Extraction	April 16, 2019 1:00 pm	04/25/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	2.5	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.65	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
67-64-1	**Acetone**	**5.2**		ug/m³	0.76	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
107-13-1	Acrylonitrile	ND		ug/m³	0.35	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
71-43-2	Benzene	ND		ug/m³	0.51	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
100-44-7	Benzyl chloride	ND		ug/m³	0.83	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
75-25-2	Bromoform	ND		ug/m³	1.6	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
74-83-9	Bromomethane	ND		ug/m³	0.62	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
75-15-0	Carbon disulfide	ND		ug/m³	0.50	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
56-23-5	Carbon tetrachloride	ND		ug/m³	0.25	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
108-90-7	Chlorobenzene	ND		ug/m³	0.73	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
75-00-3	Chloroethane	ND		ug/m³	0.42	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
67-66-3	**Chloroform**	**4.7**		ug/m³	0.78	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
74-87-3	**Chloromethane**	**0.76**	TO-LC S-L	ug/m³	0.33	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
156-59-2	**cis-1,2-Dichloroethylene**	**1.0**		ug/m³	0.16	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.72	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
110-82-7	Cyclohexane	ND		ug/m³	0.55	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
75-71-8	**Dichlorodifluoromethane**	**2.4**		ug/m³	0.79	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
141-78-6	* Ethyl acetate	ND		ug/m³	1.2	1.596	EPA TO-15 Certifications:	04/29/2019 09:00	04/29/2019 21:48	AS
100-41-4	Ethyl Benzene	ND		ug/m³	0.69	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.7	1.596	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 21:48	AS

Sample Information

Client Sample ID: **WQ041619: 1300 NP4-1** **York Sample ID:** **19D1208-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D1208	31401451.000 task 01 Rowe	Vapor Extraction	April 16, 2019 1:00 pm	04/25/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-63-0	**Isopropanol**	**2.9**		ug/m³	0.78	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	Methyl Methacrylate	ND		ug/m³	0.65	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.58	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	Methylene chloride	ND		ug/m³	1.1	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	n-Heptane	ND		ug/m³	0.65	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	n-Hexane	ND		ug/m³	0.56	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	o-Xylene	ND		ug/m³	0.69	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.4	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.78	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications:			
115-07-1	*** Propylene**	**1.3**		ug/m³	0.27	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.68	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**5.6**		ug/m³	0.27	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.94	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications:			
108-88-3	Toluene	ND		ug/m³	0.60	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.63	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.72	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	**Trichloroethylene**	**4.7**		ug/m³	0.21	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.5**		ug/m³	0.90	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.56	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.70	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.10	1.596	EPA TO-15	04/29/2019 09:00	04/29/2019 21:48	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*94.7 %*	*70-130*

Sample Information

Client Sample ID: WQ041619: 1305 NP4-3 **York Sample ID:** 19D1208-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D1208	31401451.000 task 01 Rowe	Vapor Extraction	April 16, 2019 1:05 pm	04/25/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.98	1.431	EPA TO-15 Certifications:	04/29/2019 09:00	04/29/2019 22:40	AS
71-55-6	**1,1,1-Trichloroethane**	**0.94**		ug/m³	0.78	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.98	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.1	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.78	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.58	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.14	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.1	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
95-63-6	**1,2,4-Trimethylbenzene**	**3.4**		ug/m³	0.70	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.1	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.86	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.58	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.66	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.0	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
108-67-8	**1,3,5-Trimethylbenzene**	**0.98**		ug/m³	0.70	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
106-99-0	1,3-Butadiene	ND		ug/m³	0.95	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.86	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.66	1.431	EPA TO-15 Certifications:	04/29/2019 09:00	04/29/2019 22:40	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.86	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
123-91-1	1,4-Dioxane	ND		ug/m³	1.0	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
78-93-3	2-Butanone	ND		ug/m³	0.42	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
591-78-6	* 2-Hexanone	ND		ug/m³	1.2	1.431	EPA TO-15 Certifications:	04/29/2019 09:00	04/29/2019 22:40	AS
107-05-1	3-Chloropropene	ND		ug/m³	2.2	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS

Sample Information

Client Sample ID: WQ041619: 1305 NP4-3 **York Sample ID:** 19D1208-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D1208	31401451.000 task 01 Rowe	Vapor Extraction	April 16, 2019 1:05 pm	04/25/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.59	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
67-64-1	**Acetone**	**8.2**		ug/m³	0.68	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
107-13-1	Acrylonitrile	ND		ug/m³	0.31	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
71-43-2	**Benzene**	**2.3**		ug/m³	0.46	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
100-44-7	Benzyl chloride	ND		ug/m³	0.74	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
75-27-4	Bromodichloromethane	ND		ug/m³	0.96	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
75-25-2	Bromoform	ND		ug/m³	1.5	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
74-83-9	Bromomethane	ND		ug/m³	0.56	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
75-15-0	Carbon disulfide	ND		ug/m³	0.45	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
56-23-5	Carbon tetrachloride	ND		ug/m³	0.23	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
108-90-7	Chlorobenzene	ND		ug/m³	0.66	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
75-00-3	Chloroethane	ND		ug/m³	0.38	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
67-66-3	**Chloroform**	**1.1**		ug/m³	0.70	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
74-87-3	**Chloromethane**	**1.0**	TO-LC S-L	ug/m³	0.30	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
156-59-2	**cis-1,2-Dichloroethylene**	**3.0**		ug/m³	0.14	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.65	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
110-82-7	**Cyclohexane**	**2.3**		ug/m³	0.49	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
124-48-1	Dibromochloromethane	ND		ug/m³	1.2	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
75-71-8	**Dichlorodifluoromethane**	**2.4**		ug/m³	0.71	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
141-78-6	* Ethyl acetate	ND		ug/m³	1.0	1.431	EPA TO-15 Certifications:	04/29/2019 09:00	04/29/2019 22:40	AS
100-41-4	**Ethyl Benzene**	**3.5**		ug/m³	0.62	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.5	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
67-63-0	**Isopropanol**	**1.1**		ug/m³	0.70	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS

Sample Information

Client Sample ID: **WQ041619: 1305 NP4-3** **York Sample ID:** **19D1208-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19D1208	31401451.000 task 01 Rowe	Vapor Extraction	April 16, 2019 1:05 pm	04/25/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m³	0.59	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.52	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
75-09-2	**Methylene chloride**	**4.5**		ug/m³	0.99	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
142-82-5	**n-Heptane**	**7.3**		ug/m³	0.59	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
110-54-3	**n-Hexane**	**8.6**		ug/m³	0.50	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
95-47-6	**o-Xylene**	**4.7**		ug/m³	0.62	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
179601-23-1	**p- & m- Xylenes**	**12**		ug/m³	1.2	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
622-96-8	*** p-Ethyltoluene**	**3.0**		ug/m³	0.70	1.431	EPA TO-15 Certifications:	04/29/2019 09:00	04/29/2019 22:40	AS
115-07-1	* Propylene	ND		ug/m³	0.25	1.431	EPA TO-15 Certifications:	04/29/2019 09:00	04/29/2019 22:40	AS
100-42-5	Styrene	ND		ug/m³	0.61	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
127-18-4	**Tetrachloroethylene**	**3.1**		ug/m³	0.24	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.84	1.431	EPA TO-15 Certifications:	04/29/2019 09:00	04/29/2019 22:40	AS
108-88-3	**Toluene**	**21**		ug/m³	0.54	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.57	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.65	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
79-01-6	Trichloroethylene	ND		ug/m³	0.19	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.6**		ug/m³	0.80	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
108-05-4	Vinyl acetate	ND		ug/m³	0.50	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
593-60-2	Vinyl bromide	ND		ug/m³	0.63	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS
75-01-4	Vinyl Chloride	ND		ug/m³	0.091	1.431	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/29/2019 09:00	04/29/2019 22:40	AS

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*102 %*	*70-130*

Analytical Batch Summary

Batch ID: BD91574 **Preparation Method:** EPA TO15 PREP **Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
19D1208-01	WQ041619: 1300 NP4-1	04/29/19
19D1208-02	WQ041619: 1305 NP4-3	04/29/19
BD91574-BLK1	Blank	04/29/19
BD91574-BS1	LCS	04/29/19
BD91574-DUP1	Duplicate	04/29/19

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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD91574 - EPA TO15 PREP											
Blank (BD91574-BLK1)											Prepared & Analyzed: 04/29/2019
1,1,1,2-Tetrachloroethane	ND	0.69	ug/m³								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.099	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								
Carbon disulfide	ND	0.31	"								
Carbon tetrachloride	ND	0.16	"								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.099	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	ND	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								

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

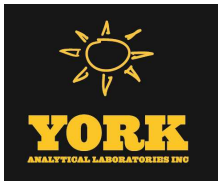
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD91574 - EPA TO15 PREP											
Blank (BD91574-BLK1)								Prepared & Analyzed: 04/29/2019			
n-Heptane	ND	0.41	ug/m³								
n-Hexane	ND	0.35	"								
o-Xylene	ND	0.43	"								
p- & m- Xylenes	ND	0.87	"								
p-Ethyltoluene	ND	0.49	"								
Propylene	ND	0.17	"								
Styrene	ND	0.43	"								
Tetrachloroethylene	ND	0.17	"								
Tetrahydrofuran	ND	0.59	"								
Toluene	ND	0.38	"								
trans-1,2-Dichloroethylene	ND	0.40	"								
trans-1,3-Dichloropropylene	ND	0.45	"								
Trichloroethylene	ND	0.13	"								
Trichlorofluoromethane (Freon 11)	ND	0.56	"								
Vinyl acetate	ND	0.35	"								
Vinyl bromide	ND	0.44	"								
Vinyl Chloride	ND	0.064	"								
Surrogate: SURR: p-Bromofluorobenzene	*9.05*		*ppbv*	*10.0*		*90.5*	*70-130*				
LCS (BD91574-BS1)								Prepared & Analyzed: 04/29/2019			
1,1,1,2-Tetrachloroethane	10.5		ppbv	10.0		105	70-130				
1,1,1-Trichloroethane	11.1		"	10.0		111	70-130				
1,1,2,2-Tetrachloroethane	10.8		"	10.0		108	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.6		"	10.0		116	70-130				
1,1,2-Trichloroethane	10.1		"	10.0		101	70-130				
1,1-Dichloroethane	11.1		"	10.0		111	70-130				
1,1-Dichloroethylene	11.9		"	10.0		119	70-130				
1,2,4-Trichlorobenzene	12.0		"	10.0		120	70-130				
1,2,4-Trimethylbenzene	11.1		"	10.0		111	70-130				
1,2-Dibromoethane	10.5		"	10.0		105	70-130				
1,2-Dichlorobenzene	12.4		"	10.0		124	70-130				
1,2-Dichloroethane	10.9		"	10.0		109	70-130				
1,2-Dichloropropane	10.0		"	10.0		100	70-130				
1,2-Dichlorotetrafluoroethane	9.35		"	10.0		93.5	70-130				
1,3,5-Trimethylbenzene	10.6		"	10.0		106	70-130				
1,3-Butadiene	7.20		"	10.0		72.0	70-130				
1,3-Dichlorobenzene	12.3		"	10.0		123	70-130				
1,3-Dichloropropane	10.3		"	10.0		103	70-130				
1,4-Dichlorobenzene	12.6		"	10.0		126	70-130				
1,4-Dioxane	9.33		"	10.0		93.3	70-130				
2-Butanone	9.85		"	10.0		98.5	70-130				
2-Hexanone	9.54		"	10.0		95.4	70-130				
3-Chloropropene	10.1		"	10.0		101	70-130				
4-Methyl-2-pentanone	9.29		"	10.0		92.9	70-130				
Acetone	9.50		"	10.0		95.0	70-130				
Acrylonitrile	10.4		"	10.0		104	70-130				
Benzene	10.6		"	10.0		106	70-130				
Benzyl chloride	14.1		"	10.0		141	70-130	High Bias			
Bromodichloromethane	10.5		"	10.0		105	70-130				
Bromoform	10.8		"	10.0		108	70-130				

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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD91574 - EPA TO15 PREP											
LCS (BD91574-BS1)								Prepared & Analyzed: 04/29/2019			
Bromomethane	11.8		ppbv	10.0		118	70-130				
Carbon disulfide	11.9		"	10.0		119	70-130				
Carbon tetrachloride	12.1		"	10.0		121	70-130				
Chlorobenzene	10.5		"	10.0		105	70-130				
Chloroethane	11.3		"	10.0		113	70-130				
Chloroform	11.2		"	10.0		112	70-130				
Chloromethane	6.73		"	10.0		67.3	70-130	Low Bias			
cis-1,2-Dichloroethylene	11.5		"	10.0		115	70-130				
cis-1,3-Dichloropropylene	10.7		"	10.0		107	70-130				
Cyclohexane	10.5		"	10.0		105	70-130				
Dibromochloromethane	10.7		"	10.0		107	70-130				
Dichlorodifluoromethane	10.4		"	10.0		104	70-130				
Ethyl acetate	11.0		"	10.0		110	70-130				
Ethyl Benzene	10.3		"	10.0		103	70-130				
Hexachlorobutadiene	11.0		"	10.0		110	70-130				
Isopropanol	9.75		"	10.0		97.5	70-130				
Methyl Methacrylate	10.0		"	10.0		100	70-130				
Methyl tert-butyl ether (MTBE)	11.0		"	10.0		110	70-130				
Methylene chloride	10.1		"	10.0		101	70-130				
n-Heptane	9.98		"	10.0		99.8	70-130				
n-Hexane	10.7		"	10.0		107	70-130				
o-Xylene	10.3		"	10.0		103	70-130				
p- & m- Xylenes	21.0		"	20.0		105	70-130				
p-Ethyltoluene	11.1		"	10.0		111	70-130				
Propylene	8.41		"	10.0		84.1	70-130				
Styrene	10.5		"	10.0		105	70-130				
Tetrachloroethylene	10.2		"	10.0		102	70-130				
Tetrahydrofuran	9.94		"	10.0		99.4	70-130				
Toluene	10.1		"	10.0		101	70-130				
trans-1,2-Dichloroethylene	11.3		"	10.0		113	70-130				
trans-1,3-Dichloropropylene	10.3		"	10.0		103	70-130				
Trichloroethylene	11.1		"	10.0		111	70-130				
Trichlorofluoromethane (Freon 11)	11.5		"	10.0		115	70-130				
Vinyl acetate	10.1		"	10.0		101	70-130				
Vinyl bromide	11.6		"	10.0		116	70-130				
Vinyl Chloride	8.95		"	10.0		89.5	70-130				
Surrogate: SURR: p-Bromofluorobenzene	*10.1*		*"*	*10.0*		*101*	*70-130*				



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD91574 - EPA TO15 PREP											
Duplicate (BD91574-DUP1)	*Source sample: 19D1208-02 (WQ041619: 1305 NP4-3)								Prepared & Analyzed: 04/29/2019		
1,1,1,2-Tetrachloroethane	ND	0.98	ug/m³		ND					25	
1,1,1-Trichloroethane	0.86	0.78	"		0.94				8.70	25	
1,1,2,2-Tetrachloroethane	ND	0.98	"		ND					25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.1	"		ND					25	
1,1,2-Trichloroethane	ND	0.78	"		ND					25	
1,1-Dichloroethane	ND	0.58	"		ND					25	
1,1-Dichloroethylene	ND	0.14	"		ND					25	
1,2,4-Trichlorobenzene	ND	1.1	"		ND					25	
1,2,4-Trimethylbenzene	3.2	0.70	"		3.4				4.26	25	
1,2-Dibromoethane	ND	1.1	"		ND					25	
1,2-Dichlorobenzene	ND	0.86	"		ND					25	
1,2-Dichloroethane	ND	0.58	"		ND					25	
1,2-Dichloropropane	ND	0.66	"		ND					25	
1,2-Dichlorotetrafluoroethane	ND	1.0	"		ND					25	
1,3,5-Trimethylbenzene	0.77	0.70	"		0.98				24.0	25	
1,3-Butadiene	ND	0.95	"		ND					25	
1,3-Dichlorobenzene	ND	0.86	"		ND					25	
1,3-Dichloropropane	ND	0.66	"		ND					25	
1,4-Dichlorobenzene	ND	0.86	"		ND					25	
1,4-Dioxane	ND	1.0	"		ND					25	
2-Butanone	ND	0.42	"		ND					25	
2-Hexanone	ND	1.2	"		ND					25	
3-Chloropropene	ND	2.2	"		ND					25	
4-Methyl-2-pentanone	ND	0.59	"		ND					25	
Acetone	7.9	0.68	"		8.2				3.39	25	
Acrylonitrile	ND	0.31	"		ND					25	
Benzene	2.2	0.46	"		2.3				2.02	25	
Benzyl chloride	ND	0.74	"		ND					25	
Bromodichloromethane	ND	0.96	"		ND					25	
Bromoform	ND	1.5	"		ND					25	
Bromomethane	ND	0.56	"		ND					25	
Carbon disulfide	ND	0.45	"		ND					25	
Carbon tetrachloride	ND	0.23	"		ND					25	
Chlorobenzene	ND	0.66	"		ND					25	
Chloroethane	ND	0.38	"		ND					25	
Chloroform	1.0	0.70	"		1.1				6.45	25	
Chloromethane	0.92	0.30	"		1.0				9.23	25	
cis-1,2-Dichloroethylene	3.0	0.14	"		3.0				1.90	25	
cis-1,3-Dichloropropylene	ND	0.65	"		ND					25	
Cyclohexane	2.4	0.49	"		2.3				6.32	25	
Dibromochloromethane	ND	1.2	"		ND					25	
Dichlorodifluoromethane	2.2	0.71	"		2.4				9.23	25	
Ethyl acetate	ND	1.0	"		ND					25	
Ethyl Benzene	3.4	0.62	"		3.5				3.57	25	
Hexachlorobutadiene	ND	1.5	"		ND					25	
Isopropanol	1.1	0.70	"		1.1				0.00	25	
Methyl Methacrylate	ND	0.59	"		ND					25	
Methyl tert-butyl ether (MTBE)	ND	0.52	"		ND					25	
Methylene chloride	4.5	0.99	"		4.5				0.00	25	
n-Heptane	7.0	0.59	"		7.3				4.12	25	

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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD91574 - EPA TO15 PREP											
Duplicate (BD91574-DUP1)	*Source sample: 19D1208-02 (WQ041619: 1305 NP4-3)								Prepared & Analyzed: 04/29/2019		
n-Hexane	8.4	0.50	ug/m³		8.6				2.38	25	
o-Xylene	4.6	0.62	"		4.7				2.67	25	
p- & m- Xylenes	12	1.2	"		12				3.67	25	
p-Ethyltoluene	2.9	0.70	"		3.0				2.41	25	
Propylene	ND	0.25	"		ND					25	
Styrene	ND	0.61	"		ND					25	
Tetrachloroethylene	3.6	0.24	"		3.1				14.5	25	
Tetrahydrofuran	ND	0.84	"		ND					25	
Toluene	21	0.54	"		21				2.32	25	
trans-1,2-Dichloroethylene	ND	0.57	"		ND					25	
trans-1,3-Dichloropropylene	ND	0.65	"		ND					25	
Trichloroethylene	ND	0.19	"		ND					25	
Trichlorofluoromethane (Freon 11)	1.6	0.80	"		1.6				0.00	25	
Vinyl acetate	ND	0.50	"		ND					25	
Vinyl bromide	ND	0.63	"		ND					25	
Vinyl Chloride	ND	0.091	"		ND					25	
Surrogate: SURR: p-Bromofluorobenzene	*10.2*		*ppbv*	*10.0*		*102*	*70-130*				

Sample and Data Qualifiers Relating to This Work Order

TO-VAC	The final vacuum in the canister was less than -2 inches Hg vacuum. The time integrated sampling may be affected and not reflect proper sampling over the time period. The data user should take note.
TO-LCS-L	The result reported for this compound may be biased low due to its behavior in the analysis batch LCS where it recovered less 70% of the expected value.
TO-LCS-H	The result reported for this compound may be biased high due to its behavior in the analysis batch LCS where it recovered greater than 130% of the expected value.

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

YORK
ANALYTICAL LABORATORIES, INC.

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

Field Chain-of-Custody Record - AIR

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

York Project No. 19D1208

YOUR Information
Company: WSP USA
Address: 4 Research Dr. Ste 204 Shelton CT 06484
Phone No. 203-929-8555
Contact Person: Tunde Sand
E-Mail Address: Tunde.Sand@wsp.com

Report To:
Company: Same
Address:
Phone No.
Attention:
E-Mail Address:

Invoice To:
Company: Same
Address:
Phone No.
Attention:
E-Mail Address:

YOUR Project ID
Rowe
31401451.000 task 01

Purchase Order No.

Samples from: CT ___ NY X NJ ___

Turn-Around Time
- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) ☒

Report Type/Deliverables
- Summary Report X
- Summary w/ QA Summary X
- CT RCP Package ___
- NY ASP A Package ___
- NY ASP B/CLP Pkg X
- NJDEP Reduced ___

Electronic Deliverables:
- EDD (Specify Type) X
- Standard Excel X
- Regulatory Comparison Excel ___

Special Instructions

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature)

Evan Foster
Name (printed)

Air Matrix Codes
- AI - INDOOR Ambient Air
- AO- OUTDOOR Amb. Air
- AE- Vapor Extraction Well/ Process Gas/Effluent
- AS- SOIL Vapor/Sub-Slab

TO15 Volatiles and Other Gas Analyses
- EPA TO-15 List
- NYSDEC VI list
- NYSDEC STARS List
- **Project Specific List by TO-15**
- NJDEP Target List
- CTDEP RCP Target List
- EPA TO-14A List
- Tentatively Identified Compounds
- Air VPH
- Helium
- Methane
- OTHER ___

Detection Limits Required
- ≤ 1 ug/m³ ___
- NYSDEC VI Limits ___ (VI = vapor instrusion)
- NJDEP low level ___
- Routine Survey ___
- Other ___

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Choose Analyses Needed from the Menu Above and Enter Below	Sampling Media
WQ041619: 1300 NP4-1	4-16-19	AE	-30	-5.0	EPA TO-15 List	6 Liter Summa canister 1 / Tedlar Bag
WQ041619: 1305 NP4-3	↓	AE	-30	-5.0	EPA TO-15 List	6 Liter Summa canister 1 / Tedlar Bag
						6 Liter Summa canister ___ / Tedlar Bag
						6 Liter Summa canister ___ / Tedlar Bag
			Rcd by		4/25/19 1025	6 Liter Summa canister ___ / Tedlar Bag
			Recieved by: KK		4-25-19 - 19:39	6 Liter Summa canister ___ / Tedlar Bag
						6 Liter Summa canister ___ / Tedlar Bag
						6 Liter Summa canister ___ / Tedlar Bag
						6 Liter Summa canister ___ / Tedlar Bag

Comments

Samples Relinquished By — 4-17-19 800 Date/Time

Samples Relinquished By — 4/25/19 215 Date/Time

WSP Fridge — 4-17-19 800
Samples Received By — Date/Time

Samples Received in LAB by — 4/25/19 215
Date/Time