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 December 2018 Status Report

DATE: February 13, 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 December 1, 2018 through December 31, 2018. The report includes a summary of system performance parameters, system operation parameters, and analytical results for groundwater, system effluent samples, and air quality results.

SUMMARY OF SYSTEM PERFORMANCE AND OPERATION

(December 1, 2018 through December 31, 2018)

1. Hours of operation during the reporting period:	630 hours (84.7%)
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:	311,956 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:	0.06 pound (see Graph 2)
7. Cumulative mass of VOCs recovered since startup on 12/17/02: (calculations can be provided upon request)	229.5 pounds

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/]	0	1.0
FRW-1 [2/]	32,977	45.0
FRW-2 [2]	27,783	21.0
FRW-3 [2/]	58,057	125.6
FRW-4 [2/]	177,476	3.5

[1/] The above table summarizes the parameters for RW-2 from December 1 to December 31, 2018. The pump in RW-2 was not pumping water in December 2018.

[2/] The above table summarizes the parameters for the FRWs from December 5, 2018 to January 3, 2019.

On December 4 and 5, 2018, the FSP&T and FP&T systems were cleaned without incident. During the cleaning event, the malfunctioning pump in FRW-1 was replaced and the pump was tested and operated normally. On December 8, 2018, the recharge basins were rehabilitated (i.e. vegetation removed and primary basin rototilled) without issue.

As discussed in the November report, review of the November operational data in December indicated water stopped pumping from RW-2. Initial troubleshooting of the RW-2 flow issue on December 18th verified that the pump was not pumping water from RW-2. The drive for RW-2 was reset and the keypad was replaced; however, these actions did not correct the problem. To investigate this issue further, a Rockwell field technician was contacted and is scheduled to troubleshoot this problem in January. Additional details about system maintenance work are included in Table 1.

SUMMARY OF SAMPLING ACTIVITIES

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

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

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

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

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

samples collected from FRW-1, 2 and 4 were below the respective ARARs in December. The VC and TCA concentrations in the groundwater samples collected at FRW-1, 2, 3 and 4 were all below the respective ARARs in December.

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 January 2019 include:

- troubleshoot RW-2 flow and operational data issue; and
- 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\2018\Monthly Reports\Dec\Draft Status_Dec_2018.docx

TABLES

TABLE 1

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

MAINTENANCE LOG
(December 1, 2018 through December 31, 2018)

Date	Time	System Changes/Modifications	Personnel
12/4/18		Changed the multi-bag filter bags (400 um) in Banks 1 and 2, seven of eight housings used. Banks 1 and 2 left open. Bank 3 closed.	EF
		Day 1 of FSP&T/FP&T cleaning: clean RW-2 riser pipe, lateral below-grade pipes, vault pipes, RW-2 flow meter and FSP&T equipment. During cleaning of the RW-2 flow meter/piping, the transmitter for the RW-2 flow meter was replaced.	Cisco, EF
		The upstairs heater unit stopped working; contact vendor to schedule replacement of heater.	
12/5/18		Iron fouling removed from flow meter paddle wheels for four FRWs.	EF
		Day 2 of FSP&T/FP&T cleaning: FRW below-grade lateral pipes, FP&T trailer pipes and below-grade lateral pipe between FP&T and FSP&T building was cleaned. The FRW-1 pump was replaced after it was noticed in the prior month that the instantaneous flow rate decreased significantly. Following FRW-1 pump replacement, the pump was operating normally.	Cisco, EF
12/6/18		Shut system off for recharge basin rehabilitation.	JF
		Following download of November data, it appears that water is not being pumped from RW-2. It is also noticed at this time that other operational data for RW-2 is showing constant values on an hourly basis (i.e. voltage, amperage, frequency, etc…); this operational data usually fluctuates slightly from hour to hour. Troubleshooting to evaluate the RW-2 flow and operational data begins.	TS, MG
12/7/18		Recharge basin rehabilitation was completed.	Renner
12/10/18		System restarted following Recharge Basin Rehabilitation	JF
12/18/18		The malfunctioning upstairs heater unit for the FSP&T Building was replaced.	EF, Absolute Control
		Iron fouling removed from flow meter paddle wheels for four FRWs.	EF
		Troubleshoot RW-2 issue; verified that RW-2 was not pumping water by allowing RW-2 to operate without the FRWs in operation. Verified that the effluent flow meter and FRW flow meters were functioning properly. Attempted to clear the RW-2 drive and switch the keypad on the RW-2 drive but these actions did not correct the problem. Contact the vendor to schedule a Rockwell field service technician to discuss the problem regarding lack of flow from RW-2. The pump for RW-2 was shut off until further troubleshooting by a Rockwell technician can be completed. The FRWs remain in operation.	EF

Notes:

EF	Evan Foster, WSP USA
JF	Jamie Foster
Renner	Renner Landscaping Company
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**	**---**	**---**
3-Jan-18	6.9	114	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.0247	0.0247
1-Feb-18	6.8	157	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	4.43	0.0316
1-Mar-18	6.8	147	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	3.15 B	0.0574 B
2-Apr-18	6.8	136	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	2.99	0.0337
2-May-18	6.8	151	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	8.05	0.0492
5-Jun-18	6.8	138	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.252	ND<0.278
2-Jul-18	6.8	114	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	2.50	0.127
28-Aug-18	6.9	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.124	0.125
21-Sep-18	6.8	155	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	7.48	0.0369
5-Oct-18	6.9	145	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	1.66	ND<0.278
1-Nov-18	6.8	193	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.838	ND<0.278
5-Dec-18	6.9	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	0.845	ND<0.278

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 December 18, 2018 was 6.85.
2. "Effluent" samples were collected from sample port labeled NP2-10 unless otherwise noted.
3. Starting in October 2016, FSP&T system samples are collected monthly instead of once every two weeks. The pH of the effluent water is measured two times per month in accordance with the SPDES requirements.
4. The laboratory mistakenly forgot to analyze the system effluent sample collected on August 28, 2018 for total dissolved solids (TDS).

TABLE 3

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

Recovery Well Water Quality Results

Recovery Well [1/]	Date Sampled	PCE (ug/L)	TCE (ug/L)	TCA (ug/L)	Chloroform (ug/L)	MTBE (ug/L)	1,1-Dichloro-ethane (ug/L)	cis-1,2-Dichloro-ethene (ug/L)	1,1-Dichloro-ethene (ug/L)	Methylene Chloride (ug/L)	Toluene (ug/L)	Benzene (ug/L)	m,p-Xylene (ug/L)	o-Xylene (ug/L)
	ARAR's	**5**	**5**	**5**	**7**	**NE**	**5**	**5**	**5**	**5**	**NE**	**NE**	**5**	**5**
RW-2	23-Jun-16	0.26 J	0.34 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	19-Jul-16	0.23 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Aug-16	0.24 J	0.37 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	16-Sep-16	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	17-Oct-16	0.45 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Nov-16	0.42 J	0.44 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Dec-16	0.52	0.39 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	9-Jan-17	0.30 J	0.43 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Feb-17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Mar-17	0.28 J	0.47 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	7-Apr-17	0.53	0.55	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	11-May-17	0.54	0.37 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.28 J	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Jun-17	0.29 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	6-Jul-17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Aug-17	0.23 J	0.26 J	ND<0.5	0.24 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Sep-17	0.23 J	0.32 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	4-Oct-17	0.24 J	0.34 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Nov-17	0.31 J	0.39 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Dec-17	0.27 J	0.42 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	3-Jan-18	0.28 J	0.70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Feb-18	0.33 J	0.59	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Mar-18	0.41 J	0.67	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Apr-18	0.28 J	0.36 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-May-18	0.32 J	0.22 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Jun-18	0.21 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Jul-18	0.22 J	ND<0.5	ND<0.5	0.28 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	28-Aug-18	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	21-Sep-18	0.370	0.260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Oct-18	0.250	ND<0.5	ND<0.5	0.370	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Nov-18	ND<0.5	ND<0.5	ND<0.5	0.290	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Dec-18	0.300 C,S	0.380	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5

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.
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**
9-Jan-17	**120 I**	1.9	1.7	ND<0.5	1.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between January 23 and February 2, 2017										
2-Feb-17	**460**	**8.5 C**	**20**	ND<0.5	3.5	0.59 J	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between February 20 and February 22, 2017										
1-Mar-17	**110**	3.9	**6.3**	ND<0.5	0.82	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 24 and March 29, 2017										
7-Apr-17	**240**	3.8	2.2	ND<0.5	2.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.3 S,J
The FRWs were off from April 17 to April 26, 2017 and April 27 to May 1, 2017										
3-May-17	**200**	2.0	2.3	ND<0.5	2.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.0
1-Jun-17	**94**	2.5	4.5	ND<0.5	0.55	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from June 7 to June 9 and from June 21 to 23, 2017										
6-Jul-17	3.6	ND<0.5	1.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 31 to August 28, 2017										
1-Aug-17 [2/]	**16**	0.41 J	0.44 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Sep-17	**34**	0.93	2.9	ND<0.5	0.22 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017										
4-Oct-17	**56**	1.7	**7.8**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017										
1-Nov-17	**72**	1.3	1.7	ND<0.5	0.37 C,J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to December 5, 2017										
5-Dec-17	**55**	1.5	3.4	ND<0.5	0.4 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
FRW-1 was off from December 6 to 12 and December 24, 2017 to February 9, 2018										
1-Feb-18	**63**	**7.4**	**28**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
1-Mar-18	**110**	**2.7**	1.8	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018										
2-Apr-18	**83**	0.31 J	ND<0.5	ND<0.5	0.25 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.2 C,S,J
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018										
2-May-18	**97**	0.86	0.46 J	ND<0.5	0.75	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018										
20-Jun-18	**25**	0.76	0.68	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
2-Jul-18	**22**	0.66	0.60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018										
28-Aug-18 [3/4]	**7.26**	4.16	**9.05 C**	0.220	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11.1 I
21-Sep-18	**20.2**	1.25	2.43	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Oct-18	1.19	ND<0.5	0.280	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 27 to October 29, 2018										
1-Nov-18	**5.12**	0.780	3.30	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Dec-18	**43.0 C,S**	1.06	0.74	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2

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

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**
9-Jan-17	**27 I**	**6.4**	**7.3**	ND<5.0	ND<5.0	ND<5.0	ND<0.5	ND<2
The FRWs were off between January 23 to February 2, 2017								
2-Feb-17	**100**	**10**	**39**	1.4	0.63	ND<5.0	ND<0.5	2.2
The FRWs were off between February 20 to February 22, 2017								
1-Mar-17	**40 C**	1.0	0.52	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 24 and March 29, 2017								
7-Apr-17	**93**	2.6	1.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.1 S
The FRWs were off from April 17 to April 26, 2017 and April 27 to May 1, 2017								
3-May-17	**68**	**11**	**9.3**	ND<0.5	0.35 J	ND<0.5	ND<0.5	2.4
1-Jun-17	**16**	1.0	0.92	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRW-2 was off from June 7 to June 9 and from June 21 to 29, 2017								
6-Jul-17	0.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8 S,J
The FRWs were off from July 31 to August 28, 2017								
1-Aug-17 [2/]	**7.0**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.1 S
5-Sep-17	**33**	0.85	0.59	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017								
4-Oct-17	**50**	2.7	0.91	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.0
The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017								
1-Nov-17	**45**	0.76	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017								
5-Dec-17	**38**	3.4	1.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 24, 2017 to February 9, 2018								
1-Feb-18	**37**	3.2	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.8
1-Mar-18	**48**	0.68	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018								
2-Apr-18	**140**	1.2	0.36 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018								
2-May-18	**29**	0.92	0.29 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.6
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018								
20-Jun-18	3.8	1.4	0.44 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
2-Jul-18	3.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018								
28-Aug-18 [3/4]	ND<0.5	0.300	**29.0 C**	**2.48**	ND<0.5	0.510	ND<0.5	ND<2
21-Sep-18	**11.9**	1.83	**14.5**	0.730	ND<0.5	ND<0.5	ND<0.5	2.06
5-Oct-18	1.86	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 27 to October 29, 2018								
1-Nov-18	3.20	0.610	0.950	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
5-Dec-18	**19.1 C,S**	0.590	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.00 C

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).

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**
9-Jan-17	**53 I**	**5.1**	**17**	ND<0.5	ND<0.5	0.40 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between January 23 to February 2, 2017												
2-Feb-17	**18 C**	3.7	**24**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.76	0.63 C	ND<0.5	ND<0.5	ND<2
The FRWs were off between February 20 to February 22, 2017												
1-Mar-17	**50**	**5.7**	**20**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.99	0.64	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 24 and March 29, 2017												
7-Apr-17	**65**	**5.0**	**41**	1.4	ND<0.5	ND<0.5	ND<0.5	0.71	0.49	ND<0.5	ND<0.5	ND<2
FRW-3 was off from April 17 to April 26, 2017 and April 27 to May 11, 2017												
11-May-17	**130**	**5.8**	**8.5**	0.24 J	ND<0.5	0.35 J	ND<0.5	0.35 J	0.30 J	ND<0.5	ND<0.5	ND<2
FRW-3 was off from 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

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

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

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

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

J : Analyte detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated 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**
9-Jan-17	**16 I**	1.8	**6.4**	ND<0.5	0.27 J	ND<2
The FRWs were off between January 23 to February 2, 2017						
2-Feb-17	**5.1 C**	1.4	**17**	ND<0.5	0.27 J	ND<2
The FRWs were off between February 20 to February 22, 2017						
1-Mar-17	4.0 C	0.60	2.2	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 24 and March 29, 2017						
7-Apr-17	**7.6**	1.2	2.9	ND<0.5	ND<0.5	1.3 S,J
The FRWs were off from April 17 to April 26, 2017 and April 27 to May 1, 2017						
3-May-17	**40**	3.5	**15**	ND<0.5	0.42 J	2.1
1-Jun-17	**8.8**	0.5	2.1	ND<0.5	ND<0.5	ND<2
The FRWs were off from June 7 to June 9 and from June 21 to 23, 2017						
6-Jul-17	0.27 J	ND<0.5	0.28 J	ND<0.5	ND<0.5	1.1 S,J
The FRWs were off from July 31 to August 28, 2017						
1-Aug-17 [2/]	0.80	ND<0.5	0.28 J	ND<0.5	ND<0.5	1.6 S,J
5-Sep-17	2.7	0.42 J	0.51	ND<0.5	ND<0.5	ND<2
The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017						
4-Oct-17	**9.8**	3.9	4.1	ND<0.5	ND<0.5	ND<2
The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017						
1-Nov-17	3.0	0.32 J	0.78	ND<0.5	ND<0.5	ND<2
The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017						
5-Dec-17	**5.1**	ND<0.5	1.0	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 24, 2017 to February 9, 2018						
1-Feb-18	**21**	2.5	**7.0**	ND<0.5	0.27 J	2.5 S
1-Mar-18	3.0	ND<0.5	0.47 J	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018						
2-Apr-18	3.2	ND<0.5	1.0	ND<0.5	0.32 J	ND<2
The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018						
2-May-18	**19**	ND<0.5	1.1	ND<0.5	ND<0.5	ND<2
The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018						
20-Jun-18	1.4	0.22 J	ND<0.5	ND<0.5	ND<0.5	1.5 J
2-Jul-18	1.7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from July 2 to September 21, 2018						
28-Aug-18 [3/4]	ND<0.5	0.450	4.95 C	ND<0.5	ND<0.5	10.3 I
21-Sep-18	4.21	1.02	1.38	ND<0.5	ND<0.5	ND<2
5-Oct-18	0.260	ND<0.5	0.630	ND<0.5	ND<0.5	1.23 C,S
The FRWs were off from October 27 to October 29, 2018						
1-Nov-18	0.870	0.280	1.49	ND<0.5	ND<0.5	ND<2
5-Dec-18	2.36 C,S	0.45	0.650	ND<0.5	ND<0.5	ND<2

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).

ND: Not detected

Comments:

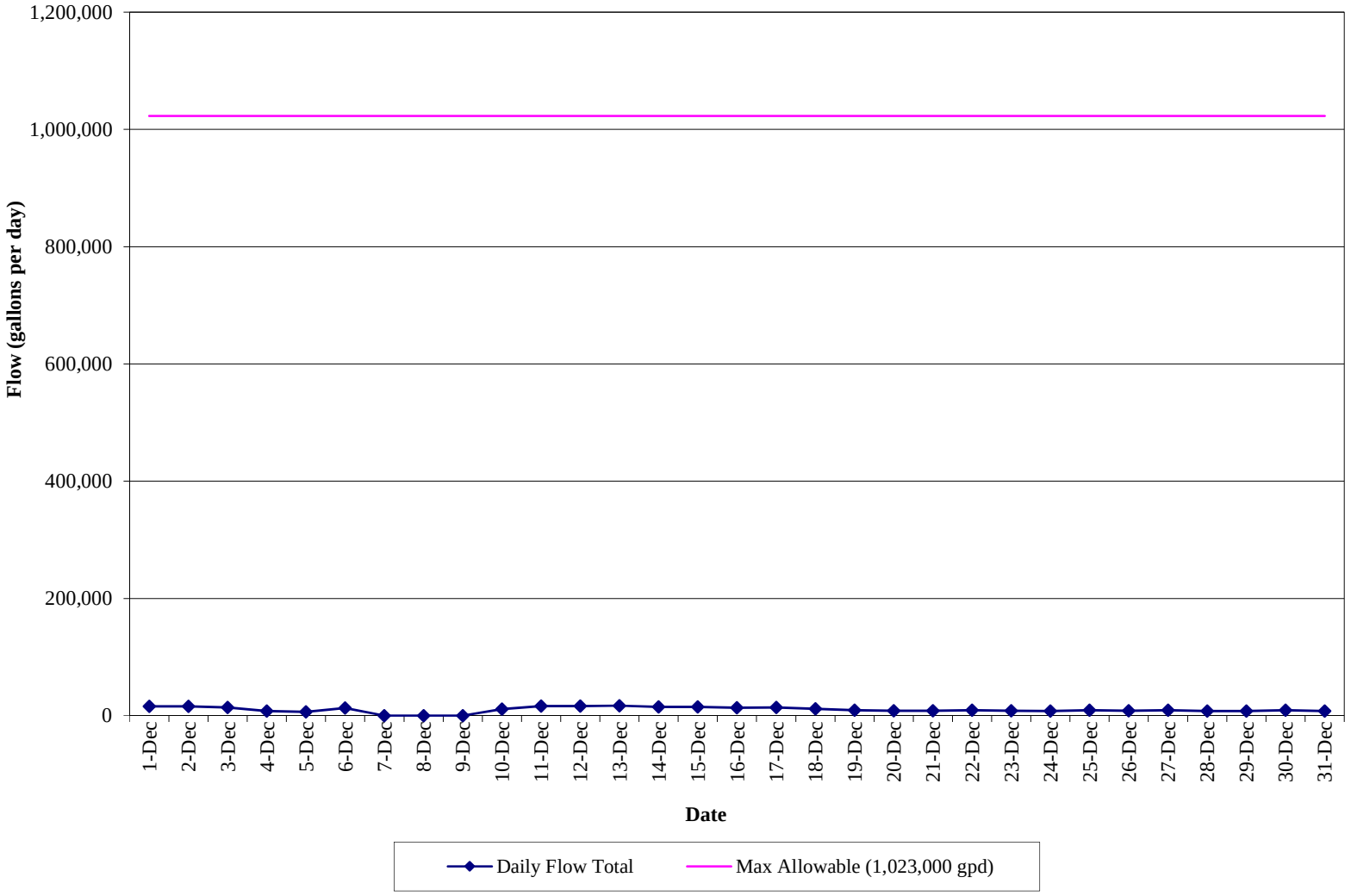
As of September 1, 2011 the water samples are analyzed by York Analytical Laboratories, Inc. The laboratory typically uses a reporting limit (RL) for water of 5 ug/l for VOC. York reports detections below 0.5 ug/l as an estimated value; these values are below the RL but greater than or equal to the method 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
TCE: Trichloroethene
cis12DCE: cis-1,2-Dichloroethene
VC: Vinyl Chloride
TCA: 1,1,1-Trichloroethane

GRAPHS

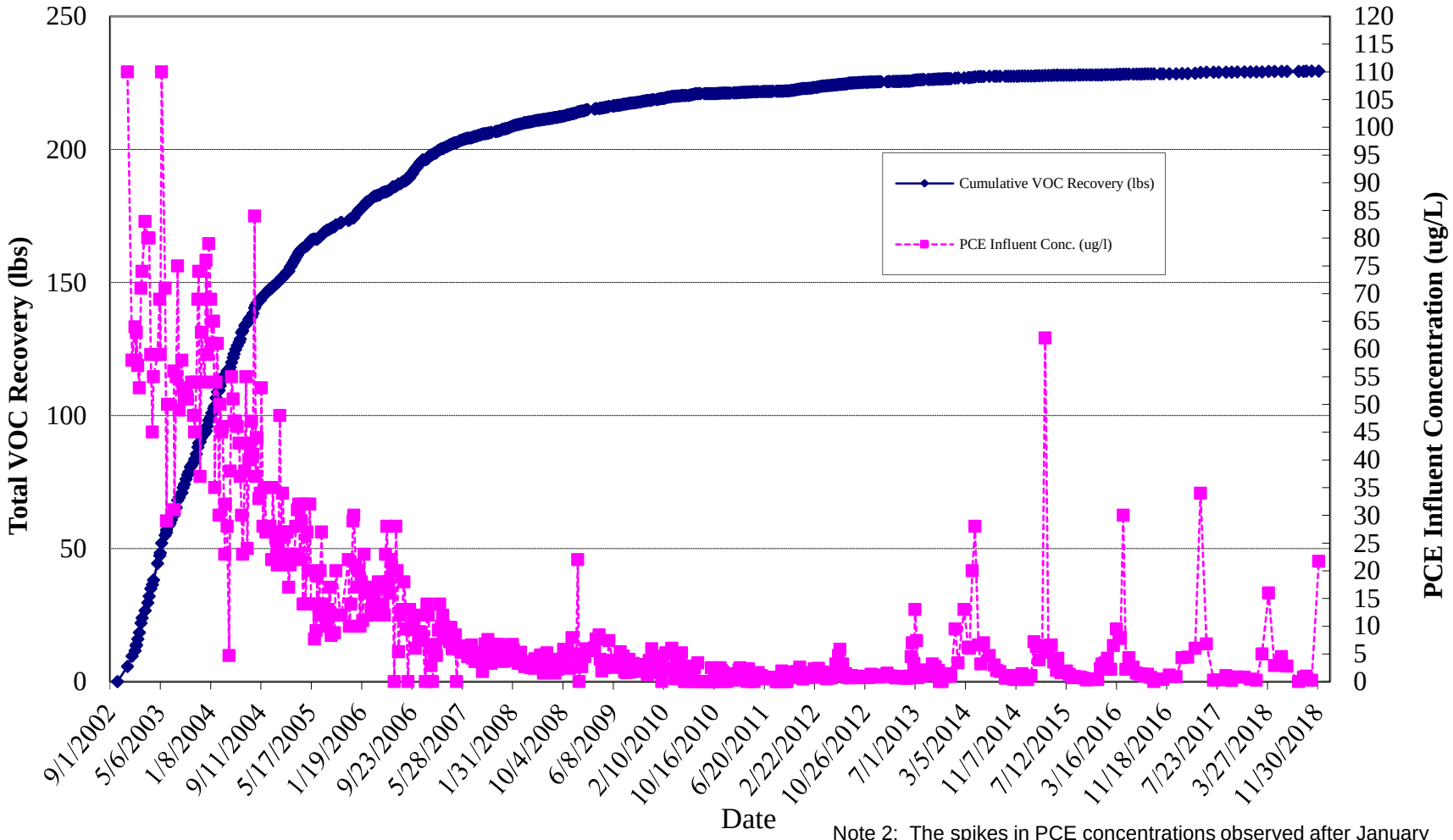
GRAPH 1
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

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



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

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



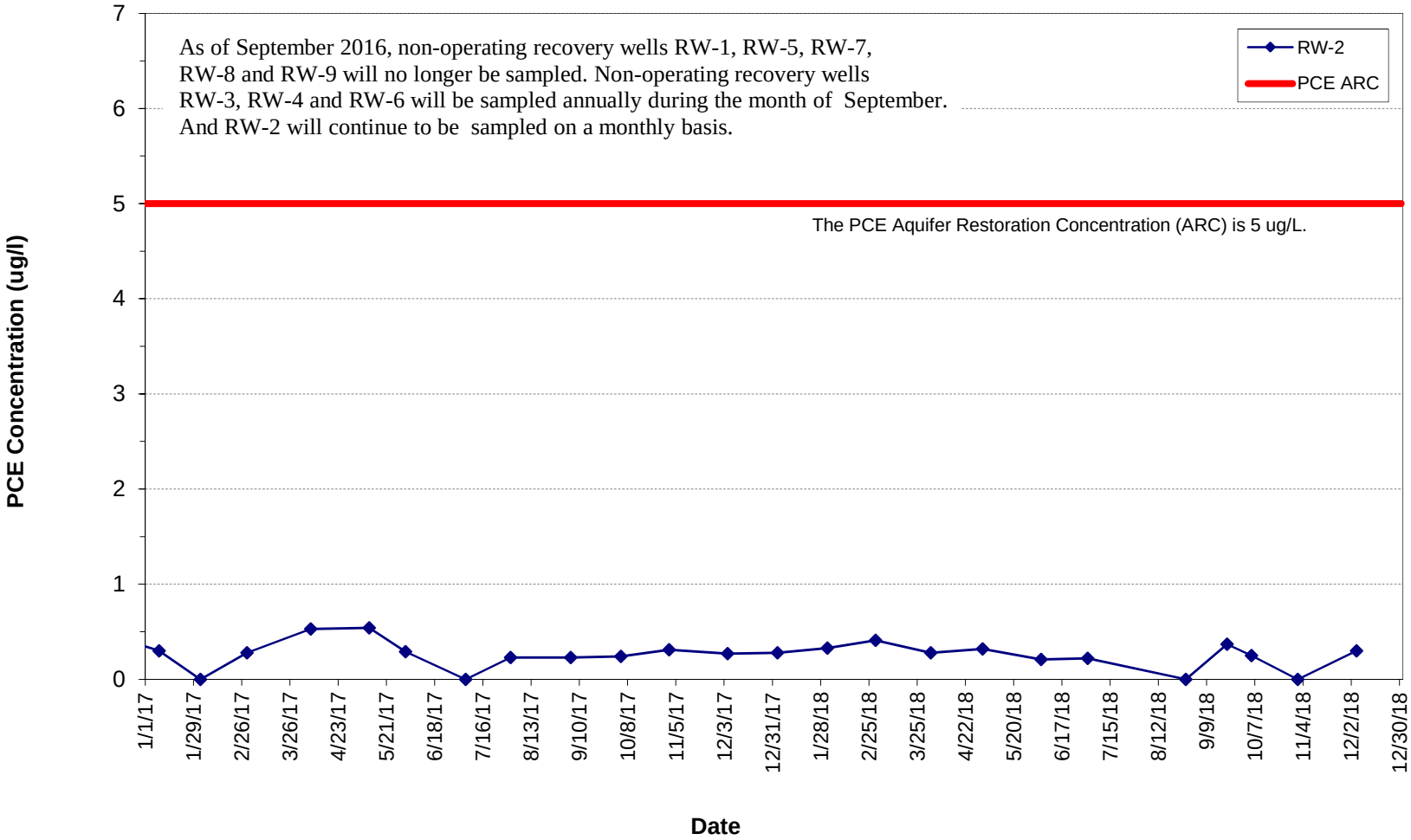
Note 1 : After September 22, 2008, the water recovered from the FP&T System is included in the results shown in this graph.

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

GRAPH 3

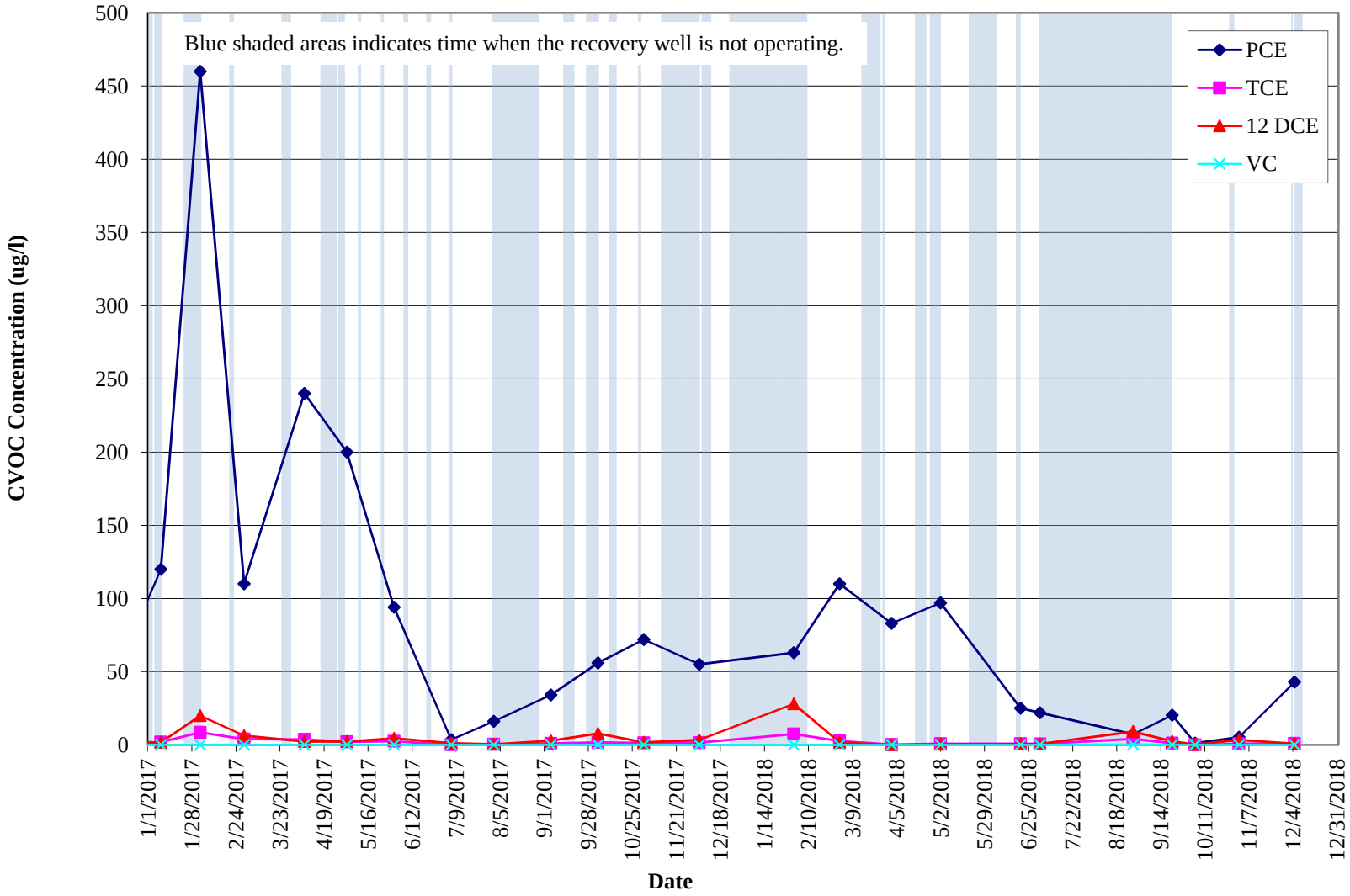
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FSP&T Recovery Well PCE Concentration



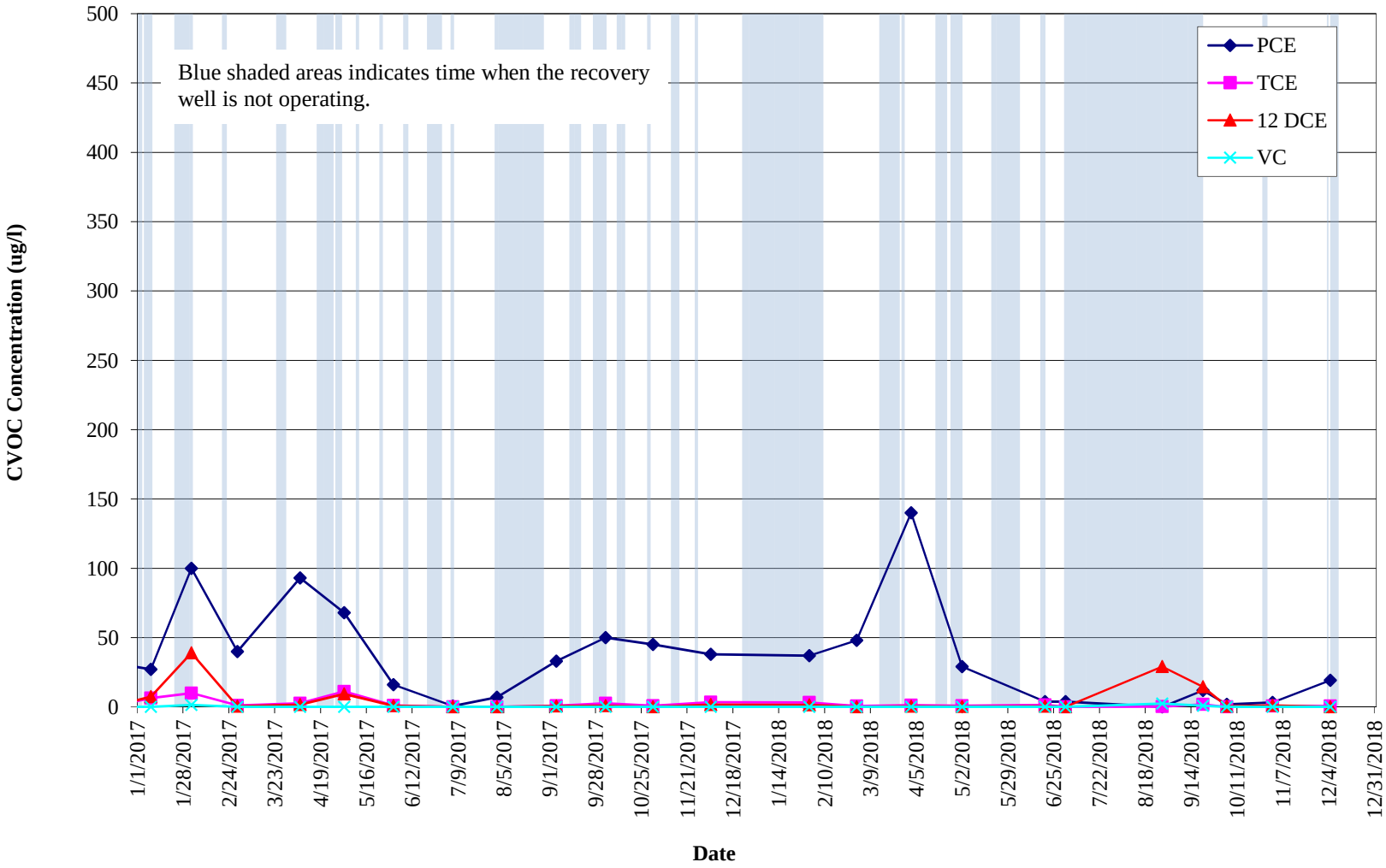
GRAPH 4
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-1



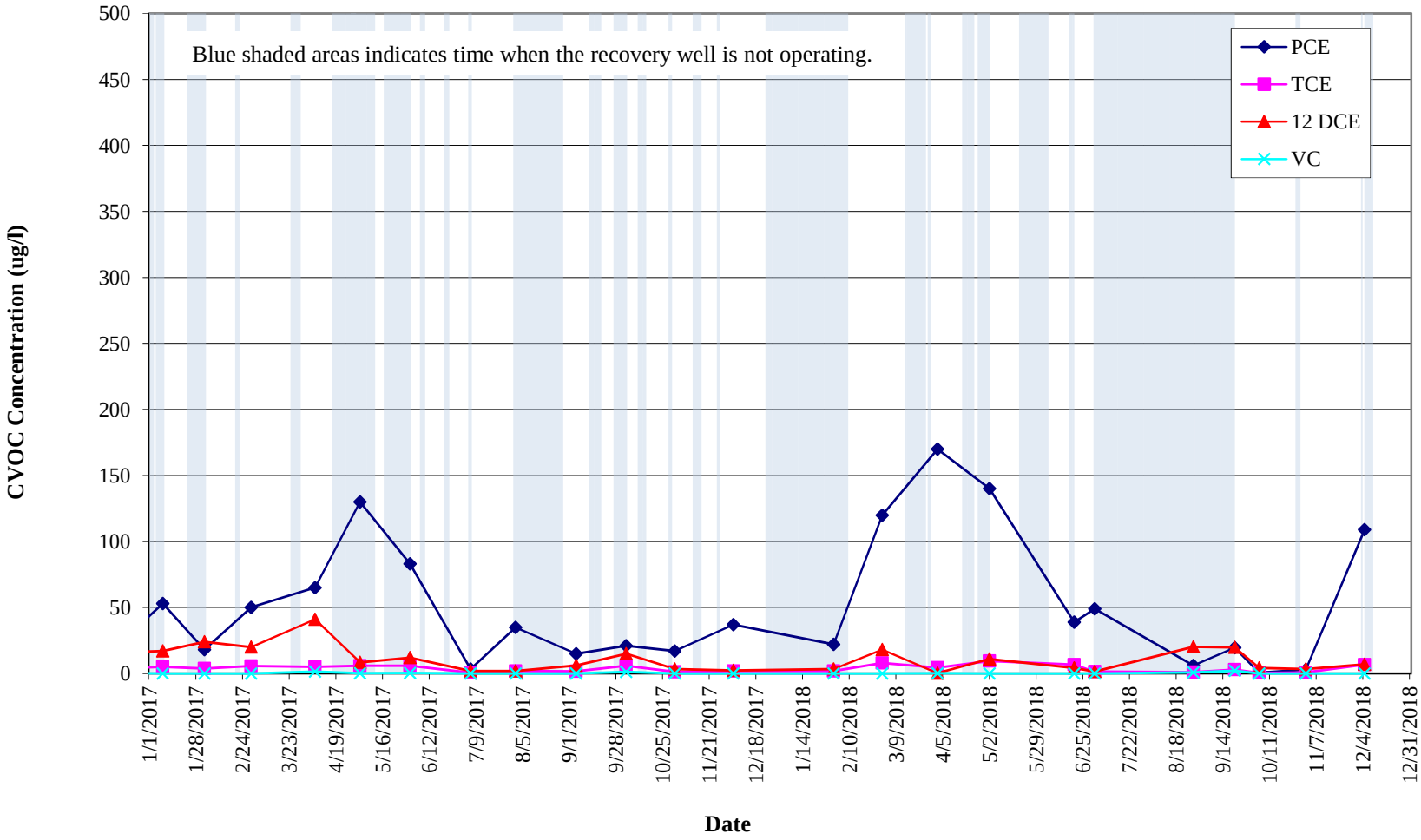
GRAPH 5
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-2



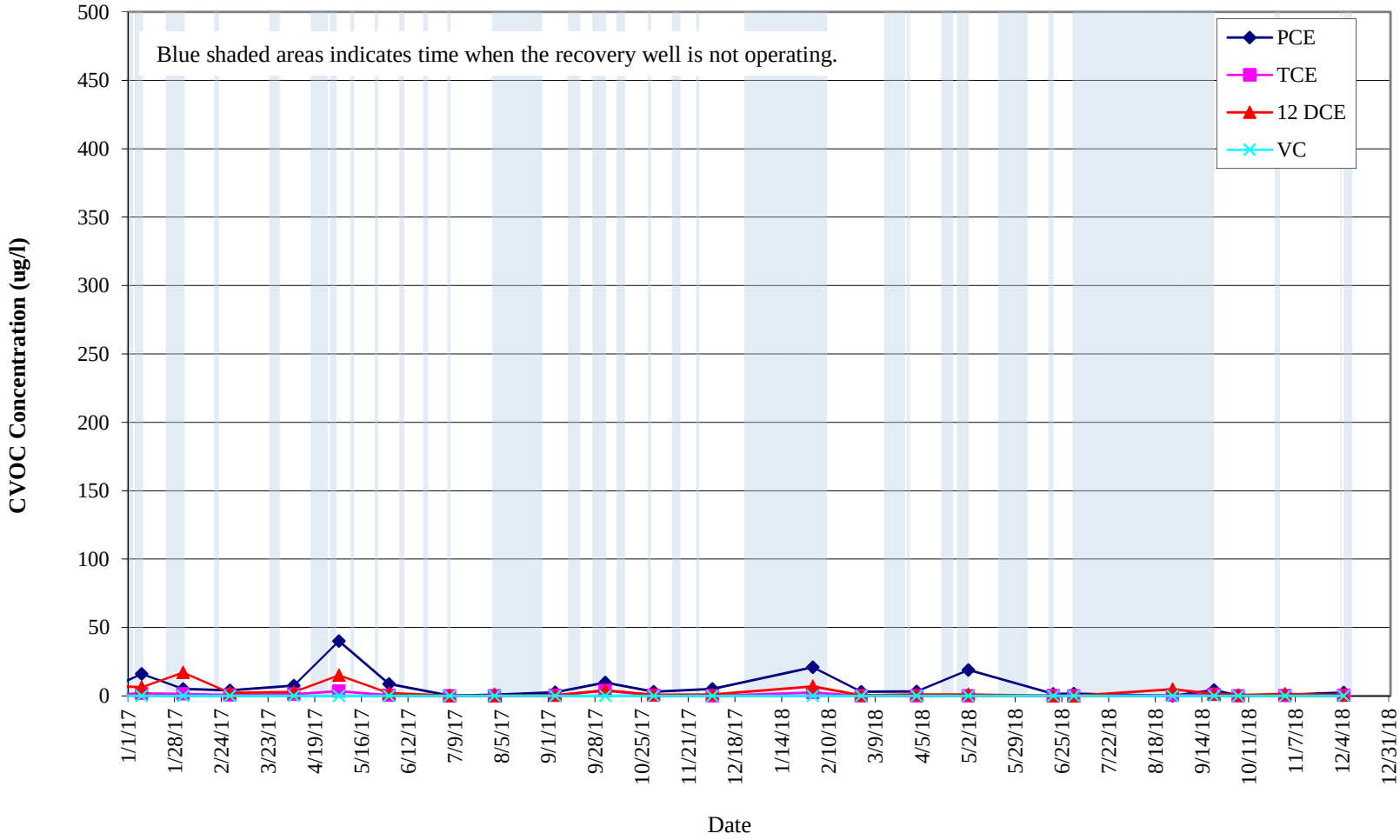
GRAPH 6
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

FP&T Recovery Well VOC Concentrations for FRW-3



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

FP&T Recovery Well VOC Concentrations for FRW-4



APPENDIX I

DECEMBER 2018 LABORATORY ANALYTICAL REPORTS

FOR FSP&T SYSTEM

Technical Report

prepared for:

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

Report Date: 12/19/2018
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 18L0502

Report Date: 12/19/2018
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 18L0502

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 December 12, 2018 and listed below. The project was identified as your project: **31401451.000 task 01.00**.

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

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

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

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

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
18L0502-01	WQ120518:1500 NP2-6	Water	12/05/2018	12/12/2018
18L0502-02	WQ120518:1505 NP2-10	Water	12/05/2018	12/12/2018

General Notes for York Project (SDG) No.: 18L0502

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: 12/19/2018

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: WQ120518:1500 NP2-6 **York Sample ID:** 18L0502-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0502	31401451.000 task 01.00	Water	December 5, 2018 3:00 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP	12/19/2018 01:14	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS

Sample Information

Client Sample ID: WQ120518:1500 NP2-6 **York Sample ID:** 18L0502-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0502	31401451.000 task 01.00	Water	December 5, 2018 3:00 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
156-59-2	**cis-1,2-Dichloroethylene**	**0.700**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:14	SS

Sample Information

Client Sample ID: WQ120518:1500 NP2-6 **York Sample ID:** 18L0502-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0502	31401451.000 task 01.00	Water	December 5, 2018 3:00 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
127-18-4	**Tetrachloroethylene**	**21.7**	CCV-E, SCAL-E	ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
79-01-6	**Trichloroethylene**	**0.660**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:14 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*94.1 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*97.6 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*103 %*	*70-130*

Sample Information

Client Sample ID: WQ120518:1505 NP2-10 **York Sample ID:** 18L0502-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0502	31401451.000 task 01.00	Water	December 5, 2018 3:05 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 NELAC-NY10854,NELAC-NY12058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 01:46 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS

Sample Information

Client Sample ID: WQ120518:1505 NP2-10 **York Sample ID:** 18L0502-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0502	31401451.000 task 01.00	Water	December 5, 2018 3:05 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
74-87-3	**Chloromethane**	**0.240**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS

Sample Information

Client Sample ID: WQ120518:1505 NP2-10 **York Sample ID:** 18L0502-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0502	31401451.000 task 01.00	Water	December 5, 2018 3:05 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/19/2018 01:46	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/19/2018 01:46	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 01:46	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/19/2018 01:46	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*95.4 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*97.8 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*103 %*	*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: WQ120518:1505 NP2-10 **York Sample ID:** 18L0502-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0502	31401451.000 task 01.00	Water	December 5, 2018 3:05 pm	12/12/2018

Iron by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 200.7

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	**Iron**	**0.845**		mg/L	0.278	1	EPA 200.7	12/18/2018 12:12	12/18/2018 14:12	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	12/19/2018 12:54	12/19/2018 13:57	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	**100**		mg/L	10.0	1	SM 2540C	12/12/2018 19:29	12/12/2018 21:29	AA
							Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Analytical Batch Summary

Batch ID: BL80653 **Preparation Method:** % Solids Prep **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
18L0502-02	WQ120518:1505 NP2-10	12/12/18
BL80653-BLK1	Blank	12/12/18
BL80653-DUP2	Duplicate	12/12/18

Batch ID: BL80942 **Preparation Method:** EPA 200.7 **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
18L0502-02	WQ120518:1505 NP2-10	12/18/18
BL80942-BLK1	Blank	12/18/18
BL80942-BS1	LCS	12/18/18

Batch ID: BL80947 **Preparation Method:** EPA 5030B **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
18L0502-01	WQ120518:1500 NP2-6	12/18/18
18L0502-02	WQ120518:1505 NP2-10	12/18/18
BL80947-BLK1	Blank	12/18/18
BL80947-BS1	LCS	12/18/18
BL80947-BSD1	LCS Dup	12/18/18

Batch ID: BL81021 **Preparation Method:** EPA 3015A **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
18L0502-02	WQ120518:1505 NP2-10	12/19/18
BL81021-BLK1	Blank	12/19/18
BL81021-BS1	LCS	12/19/18

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL80947 - EPA 5030B											
Blank (BL80947-BLK1)											
Prepared: 12/18/2018 Analyzed: 12/19/2018											
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,1-Dichloropropylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
2,2-Dichloropropane	ND	0.500	"								
2-Chlorotoluene	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Chlorotoluene	ND	0.500	"								
Acetone	ND	2.00	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL80947 - EPA 5030B											
Blank (BL80947-BLK1)											Prepared: 12/18/2018 Analyzed: 12/19/2018
o-Xylene	ND	0.500	ug/L								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*9.42*		*"*	*10.0*		*94.2*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.71*		*"*	*10.0*		*97.1*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*10.1*		*"*	*10.0*		*101*	*70-130*				
LCS (BL80947-BS1)											Prepared & Analyzed: 12/18/2018
1,1,1,2-Tetrachloroethane	9.33		ug/L	10.0		93.3	82-126			30	
1,1,1-Trichloroethane	9.73		"	10.0		97.3	70-130			20	
1,1,2,2-Tetrachloroethane	8.98		"	10.0		89.8	70-130			20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3		"	10.0		103	70-130			20	
1,1,2-Trichloroethane	9.48		"	10.0		94.8	70-130			20	
1,1-Dichloroethane	10.2		"	10.0		102	70-130			20	
1,1-Dichloroethylene	10.0		"	10.0		100	70-130			20	
1,1-Dichloropropylene	9.73		"	10.0		97.3	83-133			30	
1,2,3-Trichlorobenzene	9.33		"	10.0		93.3	70-130			20	
1,2,3-Trichloropropane	9.09		"	10.0		90.9	77-128			30	
1,2,4-Trichlorobenzene	8.91		"	10.0		89.1	70-130			20	
1,2,4-Trimethylbenzene	9.22		"	10.0		92.2	82-132			20	
1,2-Dibromo-3-chloropropane	9.24		"	10.0		92.4	40-160			20	
1,2-Dibromoethane	9.69		"	10.0		96.9	70-130			20	
1,2-Dichlorobenzene	9.33		"	10.0		93.3	70-130			20	
1,2-Dichloroethane	9.85		"	10.0		98.5	70-130			20	
1,2-Dichloropropane	9.49		"	10.0		94.9	70-130			20	
1,3,5-Trimethylbenzene	9.37		"	10.0		93.7	80-131			30	
1,3-Dichlorobenzene	9.12		"	10.0		91.2	70-130			20	
1,3-Dichloropropane	9.62		"	10.0		96.2	81-125			30	
1,4-Dichlorobenzene	9.12		"	10.0		91.2	70-130			20	
2,2-Dichloropropane	8.52		"	10.0		85.2	56-150			30	
2-Chlorotoluene	9.26		"	10.0		92.6	79-130			30	
2-Hexanone	9.28		"	10.0		92.8	40-160			20	
4-Chlorotoluene	9.24		"	10.0		92.4	79-128			30	
Acetone	7.51		"	10.0		75.1	40-160			20	
Benzene	10.5		"	10.0		105	70-130			20	
Bromobenzene	9.10		"	10.0		91.0	78-129			30	
Bromochloromethane	10.6		"	10.0		106	70-130			20	
Bromodichloromethane	9.29		"	10.0		92.9	70-130			20	
Bromoform	8.83		"	10.0		88.3	70-130			20	
Bromomethane	10.6		"	10.0		106	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 BL80947 - EPA 5030B											
LCS (BL80947-BS1)								Prepared & Analyzed: 12/18/2018			
Carbon tetrachloride	9.79		ug/L	10.0		97.9	70-130			20	
Chlorobenzene	9.46		"	10.0		94.6	70-130			20	
Chloroethane	11.7		"	10.0		117	40-160			20	
Chloroform	9.94		"	10.0		99.4	70-130			20	
Chloromethane	10.8		"	10.0		108	40-160			20	
cis-1,2-Dichloroethylene	9.83		"	10.0		98.3	70-130			20	
cis-1,3-Dichloropropylene	9.34		"	10.0		93.4	70-130			20	
Dibromochloromethane	9.45		"	10.0		94.5	70-130			20	
Dibromomethane	9.45		"	10.0		94.5	72-134			30	
Dichlorodifluoromethane	8.46		"	10.0		84.6	40-160			20	
Ethyl Benzene	9.49		"	10.0		94.9	70-130			20	
Hexachlorobutadiene	8.78		"	10.0		87.8	67-146			30	
Isopropylbenzene	9.19		"	10.0		91.9	70-130			20	
Methyl tert-butyl ether (MTBE)	10.5		"	10.0		105	70-130			20	
Methylene chloride	10.4		"	10.0		104	70-130			20	
Naphthalene	9.65		"	10.0		96.5	70-147			30	
n-Butylbenzene	9.37		"	10.0		93.7	79-132			30	
n-Propylbenzene	9.35		"	10.0		93.5	78-133			30	
o-Xylene	9.38		"	10.0		93.8	70-130			20	
p- & m- Xylenes	15.9		"	20.0		79.6	70-130			20	
p-Isopropyltoluene	9.40		"	10.0		94.0	81-136			30	
sec-Butylbenzene	9.86		"	10.0		98.6	79-137			30	
Styrene	9.11		"	10.0		91.1	70-130			20	
tert-Butylbenzene	9.28		"	10.0		92.8	77-138			30	
Tetrachloroethylene	6.94		"	10.0		69.4	70-130	Low Bias		20	
Toluene	9.67		"	10.0		96.7	70-130			20	
trans-1,2-Dichloroethylene	9.95		"	10.0		99.5	70-130			20	
trans-1,3-Dichloropropylene	9.11		"	10.0		91.1	70-130			20	
Trichloroethylene	10.2		"	10.0		102	70-130			20	
Trichlorofluoromethane	12.1		"	10.0		121	40-160			20	
Vinyl Chloride	10.8		"	10.0		108	70-130			20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*9.35*		*"*	*10.0*		*93.5*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.68*		*"*	*10.0*		*96.8*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*9.76*		*"*	*10.0*		*97.6*	*70-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL80947 - EPA 5030B											
LCS Dup (BL80947-BSD1)								Prepared & Analyzed: 12/18/2018			
1,1,1,2-Tetrachloroethane	9.19		ug/L	10.0		91.9	82-126		1.51	30	
1,1,1-Trichloroethane	9.42		"	10.0		94.2	70-130		3.24	20	
1,1,2,2-Tetrachloroethane	8.77		"	10.0		87.7	70-130		2.37	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.91		"	10.0		99.1	70-130		3.96	20	
1,1,2-Trichloroethane	9.47		"	10.0		94.7	70-130		0.106	20	
1,1-Dichloroethane	9.89		"	10.0		98.9	70-130		2.99	20	
1,1-Dichloroethylene	9.74		"	10.0		97.4	70-130		2.83	20	
1,1-Dichloropropylene	9.46		"	10.0		94.6	83-133		2.81	30	
1,2,3-Trichlorobenzene	8.98		"	10.0		89.8	70-130		3.82	20	
1,2,3-Trichloropropane	9.10		"	10.0		91.0	77-128		0.110	30	
1,2,4-Trichlorobenzene	8.63		"	10.0		86.3	70-130		3.19	20	
1,2,4-Trimethylbenzene	9.05		"	10.0		90.5	82-132		1.86	20	
1,2-Dibromo-3-chloropropane	9.12		"	10.0		91.2	40-160		1.31	20	
1,2-Dibromoethane	9.56		"	10.0		95.6	70-130		1.35	20	
1,2-Dichlorobenzene	9.06		"	10.0		90.6	70-130		2.94	20	
1,2-Dichloroethane	9.74		"	10.0		97.4	70-130		1.12	20	
1,2-Dichloropropane	9.42		"	10.0		94.2	70-130		0.740	20	
1,3,5-Trimethylbenzene	9.01		"	10.0		90.1	80-131		3.92	30	
1,3-Dichlorobenzene	8.95		"	10.0		89.5	70-130		1.88	20	
1,3-Dichloropropane	9.51		"	10.0		95.1	81-125		1.15	30	
1,4-Dichlorobenzene	8.97		"	10.0		89.7	70-130		1.66	20	
2,2-Dichloropropane	8.08		"	10.0		80.8	56-150		5.30	30	
2-Chlorotoluene	9.03		"	10.0		90.3	79-130		2.52	30	
2-Hexanone	9.36		"	10.0		93.6	40-160		0.858	20	
4-Chlorotoluene	9.02		"	10.0		90.2	79-128		2.41	30	
Acetone	7.74		"	10.0		77.4	40-160		3.02	20	
Benzene	10.2		"	10.0		102	70-130		3.10	20	
Bromobenzene	9.00		"	10.0		90.0	78-129		1.10	30	
Bromochloromethane	10.3		"	10.0		103	70-130		2.77	20	
Bromodichloromethane	9.18		"	10.0		91.8	70-130		1.19	20	
Bromoform	8.71		"	10.0		87.1	70-130		1.37	20	
Bromomethane	10.8		"	10.0		108	40-160		1.22	20	
Carbon tetrachloride	9.49		"	10.0		94.9	70-130		3.11	20	
Chlorobenzene	9.27		"	10.0		92.7	70-130		2.03	20	
Chloroethane	11.2		"	10.0		112	40-160		4.02	20	
Chloroform	9.72		"	10.0		97.2	70-130		2.24	20	
Chloromethane	10.2		"	10.0		102	40-160		6.47	20	
cis-1,2-Dichloroethylene	9.61		"	10.0		96.1	70-130		2.26	20	
cis-1,3-Dichloropropylene	9.18		"	10.0		91.8	70-130		1.73	20	
Dibromochloromethane	9.32		"	10.0		93.2	70-130		1.39	20	
Dibromomethane	9.37		"	10.0		93.7	72-134		0.850	30	
Dichlorodifluoromethane	8.43		"	10.0		84.3	40-160		0.355	20	
Ethyl Benzene	9.26		"	10.0		92.6	70-130		2.45	20	
Hexachlorobutadiene	8.30		"	10.0		83.0	67-146		5.62	30	
Isopropylbenzene	8.93		"	10.0		89.3	70-130		2.87	20	
Methyl tert-butyl ether (MTBE)	10.4		"	10.0		104	70-130		0.191	20	
Methylene chloride	10.4		"	10.0		104	70-130		0.384	20	
Naphthalene	9.43		"	10.0		94.3	70-147		2.31	30	
n-Butylbenzene	8.19		"	10.0		81.9	79-132		13.4	30	
n-Propylbenzene	9.06		"	10.0		90.6	78-133		3.15	30	
o-Xylene	9.23		"	10.0		92.3	70-130		1.61	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 BL80947 - EPA 5030B											
LCS Dup (BL80947-BSD1)								Prepared & Analyzed: 12/18/2018			
p- & m- Xylenes	15.5		ug/L	20.0		77.6	70-130		2.48	20	
p-Isopropyltoluene	9.07		"	10.0		90.7	81-136		3.57	30	
sec-Butylbenzene	9.54		"	10.0		95.4	79-137		3.30	30	
Styrene	8.99		"	10.0		89.9	70-130		1.33	20	
tert-Butylbenzene	9.03		"	10.0		90.3	77-138		2.73	30	
Tetrachloroethylene	6.84		"	10.0		68.4	70-130	Low Bias	1.45	20	
Toluene	9.48		"	10.0		94.8	70-130		1.98	20	
trans-1,2-Dichloroethylene	9.61		"	10.0		96.1	70-130		3.48	20	
trans-1,3-Dichloropropylene	8.89		"	10.0		88.9	70-130		2.44	20	
Trichloroethylene	9.92		"	10.0		99.2	70-130		2.69	20	
Trichlorofluoromethane	11.7		"	10.0		117	40-160		3.95	20	
Vinyl Chloride	10.2		"	10.0		102	70-130		5.79	20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*9.45*		*"*	*10.0*		*94.5*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.84*		*"*	*10.0*		*98.4*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*9.76*		*"*	*10.0*		*97.6*	*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 BL80942 - EPA 200.7											
Blank (BL80942-BLK1)								Prepared & Analyzed: 12/18/2018			
Iron	ND	0.278	mg/L								
LCS (BL80942-BS1)								Prepared & Analyzed: 12/18/2018			
Iron	1.01		ug/mL	1.00		101	85-115				
Batch BL81021 - EPA 3015A											
Blank (BL81021-BLK1)								Prepared & Analyzed: 12/19/2018			
Iron - Dissolved	ND	0.278	mg/L								
LCS (BL81021-BS1)								Prepared & Analyzed: 12/19/2018			
Iron - Dissolved	1.04		ug/mL	1.00		104	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 BL80653 - % Solids Prep											
Blank (BL80653-BLK1)								Prepared & Analyzed: 12/12/2018			
Total Dissolved Solids	ND	10.0	mg/L								
Duplicate (BL80653-DUP2)	*Source sample: 18L0502-02 (WQ120518:1505 NP2-10)							Prepared & Analyzed: 12/12/2018			
Total Dissolved Solids	105	10.0	mg/L		100				4.88	15	

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18L0502-01	WQ120518:1500 NP2-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0502-02	WQ120518:1505 NP2-10	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Sample and Data Qualifiers Relating to This Work Order

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

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

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

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. 18L0502

YOUR Information	Report to:	Invoice To:	Your Project ID	Turn-Around Time	Report/Deliverable Type
Company: WSP USA	SAME [X]	SAME [X]	31401451.000 task 01.00	RUSH-Same Day	Summary Report: X, PDF
Address: 4 Research Drive	Name:	Name:		RUSH-Next Day	QA Report: X, PDF
Suite 301, Shelton CT 06484	Company:	Company:	Purchase Order #	RUSH-Two Day	CT RCP
Phone.: 203.929.8555	Address:	Address:	31401451.000 task 01.00	RUSH-Three Day	CT RCP DQA/DUE Pkg
Contact: Tunde Sandor				RUSH-Four Day	NY ASP A Package
E-mail: tunde.sandor@wsp.com		E-mail	Samples from CT__NY x_NJ__	Standard (5-7day) X	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
W0120518.1500NP2-6	12-5-18 1500	GW	VOCs 8260 full plus freon 113	3 voa
↓ 1505NP2-10	↓ 1505	GW	Fe by EPA 200.7; Fe dissolved by EPA 6010; VOCs 8260 full plus freon 113; TDS	3 voa, 3 plastic

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

Comments:

Special Instructions
Field Filtered ☐
Lab to Filter ☐

(system)

Samples Relinquished By	12-6-18 1900	WSP Fridge	12-6-18 1900	Temperature on Receipt: 1.4 °C
Samples Relinquished By	12/12/18 1316	Samples Received in LAB by	12-12-18 1316	

Rec by: 12/12/18

APPENDIX II

DECEMBER 2018 LABORATORY ANALYTICAL REPORTS

FOR FSP&T AND FP&T RECOVERY WELLS

Technical Report

prepared for:

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

Report Date: 12/20/2018
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 18L0504

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: 12/20/2018
Client Project ID: 31401451.000 task 01.00
York Project (SDG) No.: 18L0504

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 December 12, 2018 and listed below. The project was identified as your project: **31401451.000 task 01.00**.

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

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

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

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

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
18L0504-01	WQ120518:1510 FRW-1	Water	12/05/2018	12/12/2018
18L0504-02	WQ120518:1515 FRW-2	Water	12/05/2018	12/12/2018
18L0504-03	WQ120518:1520 FRW-3	Water	12/05/2018	12/12/2018
18L0504-04	WQ120518:1525 FRW-4	Water	12/05/2018	12/12/2018
18L0504-05	WQ120518:1450 NP1-1-2	Water	12/05/2018	12/12/2018

General Notes for York Project (SDG) No.: 18L0504

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: 12/20/2018

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: WQ120518:1510 FRW-1 **York Sample ID:** 18L0504-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:10 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP	12/19/2018 02:17	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS

Sample Information

Client Sample ID: WQ120518:1510 FRW-1 **York Sample ID:** 18L0504-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:10 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
74-87-3	**Chloromethane**	**0.220**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
156-59-2	**cis-1,2-Dichloroethylene**	**0.740**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:17	SS

Sample Information

Client Sample ID: WQ120518:1510 FRW-1 **York Sample ID:** 18L0504-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:10 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
127-18-4	**Tetrachloroethylene**	**43.0**	CCV-E, SCAL-E	ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
79-01-6	**Trichloroethylene**	**1.06**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 02:17 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*93.6 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*96.6 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*104 %*	*70-130*

Sample Information

Client Sample ID: WQ120518:1515 FRW-2 **York Sample ID:** 18L0504-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:15 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP	12/19/2018 02:49	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS

Sample Information

Client Sample ID: WQ120518:1515 FRW-2 **York Sample ID:** 18L0504-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:15 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
67-64-1	**Acetone**	**1.00**	CCV-E	ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
74-87-3	**Chloromethane**	**0.330**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS

Sample Information

Client Sample ID: WQ120518:1515 FRW-2 **York Sample ID:** 18L0504-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:15 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

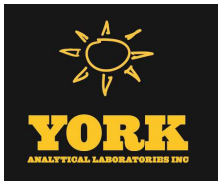
Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/19/2018 02:49	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/19/2018 02:49	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
127-18-4	**Tetrachloroethylene**	**19.1**	CCV-E, SCAL-E	ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
79-01-6	**Trichloroethylene**	**0.590**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 02:49	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/19/2018 02:49	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*95.0 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*97.3 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*103 %*	*70-130*



Sample Information

Client Sample ID: **WQ120518:1520 FRW-3** **York Sample ID:** **18L0504-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:20 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
71-55-6	**1,1,1-Trichloroethane**	**0.570**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS 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:	12/18/2018 12:30	12/19/2018 03:21	SS 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:	12/18/2018 12:30	12/19/2018 03:21	SS 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:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS NELAC-NY10854,NELAC-NY12058,NJDEP
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS 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:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS 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:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:21	SS CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP

Sample Information

Client Sample ID: WQ120518:1520 FRW-3 **York Sample ID:** 18L0504-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:20 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
67-64-1	**Acetone**	**1.97**	CCV-E	ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
74-87-3	**Chloromethane**	**0.250**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
156-59-2	**cis-1,2-Dichloroethylene**	**6.98**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS

Sample Information

Client Sample ID: WQ120518:1520 FRW-3 **York Sample ID:** 18L0504-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:20 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/19/2018 03:21	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/19/2018 03:21	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
127-18-4	**Tetrachloroethylene**	**109**	CCV-E, SCAL-E	ug/L	1.00	2.50	5	EPA 8260C Certifications:	12/19/2018 15:09 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 18:35	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
79-01-6	**Trichloroethylene**	**6.83**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:21	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/19/2018 03:21	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*94.2 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*97.7 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*106 %*	*70-130*

Sample Information

Client Sample ID: WQ120518:1525 FRW-4 **York Sample ID:** 18L0504-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:25 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 NELAC-NY10854,NELAC-NY12058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS

Sample Information

Client Sample ID: WQ120518:1525 FRW-4 **York Sample ID:** 18L0504-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:25 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
156-59-2	**cis-1,2-Dichloroethylene**	**0.650**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30	12/19/2018 03:52 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	SS

Sample Information

Client Sample ID: WQ120518:1525 FRW-4 **York Sample ID:** 18L0504-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 3:25 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/19/2018 03:52	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/19/2018 03:52	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
127-18-4	**Tetrachloroethylene**	**2.36**	CCV-E, SCAL-E	ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
79-01-6	**Trichloroethylene**	**0.450**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 03:52	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/19/2018 03:52	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*95.0 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*97.3 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*105 %*	*70-130*

Sample Information

Client Sample ID: WQ120518:1450 NP1-1-2 **York Sample ID:** 18L0504-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 2:50 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP	12/19/2018 04:24	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS

Sample Information

Client Sample ID: WQ120518:1450 NP1-1-2 **York Sample ID:** 18L0504-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 2:50 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
74-87-3	**Chloromethane**	**0.270**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS

Sample Information

Client Sample ID: WQ120518:1450 NP1-1-2 **York Sample ID:** 18L0504-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18L0504	31401451.000 task 01.00	Water	December 5, 2018 2:50 pm	12/12/2018

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	12/18/2018 12:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/19/2018 04:24	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/19/2018 04:24	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
127-18-4	**Tetrachloroethylene**	**0.300**	CCV-E, SCAL-E	ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
79-01-6	**Trichloroethylene**	**0.380**		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/19/2018 04:24	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	12/18/2018 12:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/19/2018 04:24	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*95.6 %*	*70-130*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*97.7 %*	*70-130*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*101 %*	*70-130*

Analytical Batch Summary

Batch ID: BL80947 **Preparation Method:** EPA 5030B **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
18L0504-01	WQ120518:1510 FRW-1	12/18/18
18L0504-02	WQ120518:1515 FRW-2	12/18/18
18L0504-03	WQ120518:1520 FRW-3	12/18/18
18L0504-04	WQ120518:1525 FRW-4	12/18/18
18L0504-05	WQ120518:1450 NP1-1-2	12/18/18
BL80947-BLK1	Blank	12/18/18
BL80947-BS1	LCS	12/18/18
BL80947-BSD1	LCS Dup	12/18/18

Batch ID: BL81003 **Preparation Method:** EPA 5030B **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
18L0504-03RE1	WQ120518:1520 FRW-3	12/19/18
BL81003-BLK1	Blank	12/19/18
BL81003-BS1	LCS	12/19/18
BL81003-BSD1	LCS Dup	12/19/18

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL80947 - EPA 5030B											
Blank (BL80947-BLK1)											
Prepared: 12/18/2018 Analyzed: 12/19/2018											
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,1-Dichloropropylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
2,2-Dichloropropane	ND	0.500	"								
2-Chlorotoluene	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Chlorotoluene	ND	0.500	"								
Acetone	ND	2.00	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL80947 - EPA 5030B											
Blank (BL80947-BLK1)											Prepared: 12/18/2018 Analyzed: 12/19/2018
o-Xylene	ND	0.500	ug/L								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*9.42*		*"*	*10.0*		*94.2*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.71*		*"*	*10.0*		*97.1*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*10.1*		*"*	*10.0*		*101*	*70-130*				
LCS (BL80947-BS1)											Prepared & Analyzed: 12/18/2018
1,1,1,2-Tetrachloroethane	9.33		ug/L	10.0		93.3	82-126			30	
1,1,1-Trichloroethane	9.73		"	10.0		97.3	70-130			20	
1,1,2,2-Tetrachloroethane	8.98		"	10.0		89.8	70-130			20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3		"	10.0		103	70-130			20	
1,1,2-Trichloroethane	9.48		"	10.0		94.8	70-130			20	
1,1-Dichloroethane	10.2		"	10.0		102	70-130			20	
1,1-Dichloroethylene	10.0		"	10.0		100	70-130			20	
1,1-Dichloropropylene	9.73		"	10.0		97.3	83-133			30	
1,2,3-Trichlorobenzene	9.33		"	10.0		93.3	70-130			20	
1,2,3-Trichloropropane	9.09		"	10.0		90.9	77-128			30	
1,2,4-Trichlorobenzene	8.91		"	10.0		89.1	70-130			20	
1,2,4-Trimethylbenzene	9.22		"	10.0		92.2	82-132			20	
1,2-Dibromo-3-chloropropane	9.24		"	10.0		92.4	40-160			20	
1,2-Dibromoethane	9.69		"	10.0		96.9	70-130			20	
1,2-Dichlorobenzene	9.33		"	10.0		93.3	70-130			20	
1,2-Dichloroethane	9.85		"	10.0		98.5	70-130			20	
1,2-Dichloropropane	9.49		"	10.0		94.9	70-130			20	
1,3,5-Trimethylbenzene	9.37		"	10.0		93.7	80-131			30	
1,3-Dichlorobenzene	9.12		"	10.0		91.2	70-130			20	
1,3-Dichloropropane	9.62		"	10.0		96.2	81-125			30	
1,4-Dichlorobenzene	9.12		"	10.0		91.2	70-130			20	
2,2-Dichloropropane	8.52		"	10.0		85.2	56-150			30	
2-Chlorotoluene	9.26		"	10.0		92.6	79-130			30	
2-Hexanone	9.28		"	10.0		92.8	40-160			20	
4-Chlorotoluene	9.24		"	10.0		92.4	79-128			30	
Acetone	7.51		"	10.0		75.1	40-160			20	
Benzene	10.5		"	10.0		105	70-130			20	
Bromobenzene	9.10		"	10.0		91.0	78-129			30	
Bromochloromethane	10.6		"	10.0		106	70-130			20	
Bromodichloromethane	9.29		"	10.0		92.9	70-130			20	
Bromoform	8.83		"	10.0		88.3	70-130			20	
Bromomethane	10.6		"	10.0		106	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 BL80947 - EPA 5030B											
LCS (BL80947-BS1)								Prepared & Analyzed: 12/18/2018			
Carbon tetrachloride	9.79		ug/L	10.0		97.9	70-130			20	
Chlorobenzene	9.46		"	10.0		94.6	70-130			20	
Chloroethane	11.7		"	10.0		117	40-160			20	
Chloroform	9.94		"	10.0		99.4	70-130			20	
Chloromethane	10.8		"	10.0		108	40-160			20	
cis-1,2-Dichloroethylene	9.83		"	10.0		98.3	70-130			20	
cis-1,3-Dichloropropylene	9.34		"	10.0		93.4	70-130			20	
Dibromochloromethane	9.45		"	10.0		94.5	70-130			20	
Dibromomethane	9.45		"	10.0		94.5	72-134			30	
Dichlorodifluoromethane	8.46		"	10.0		84.6	40-160			20	
Ethyl Benzene	9.49		"	10.0		94.9	70-130			20	
Hexachlorobutadiene	8.78		"	10.0		87.8	67-146			30	
Isopropylbenzene	9.19		"	10.0		91.9	70-130			20	
Methyl tert-butyl ether (MTBE)	10.5		"	10.0		105	70-130			20	
Methylene chloride	10.4		"	10.0		104	70-130			20	
Naphthalene	9.65		"	10.0		96.5	70-147			30	
n-Butylbenzene	9.37		"	10.0		93.7	79-132			30	
n-Propylbenzene	9.35		"	10.0		93.5	78-133			30	
o-Xylene	9.38		"	10.0		93.8	70-130			20	
p- & m- Xylenes	15.9		"	20.0		79.6	70-130			20	
p-Isopropyltoluene	9.40		"	10.0		94.0	81-136			30	
sec-Butylbenzene	9.86		"	10.0		98.6	79-137			30	
Styrene	9.11		"	10.0		91.1	70-130			20	
tert-Butylbenzene	9.28		"	10.0		92.8	77-138			30	
Tetrachloroethylene	6.94		"	10.0		69.4	70-130	Low Bias		20	
Toluene	9.67		"	10.0		96.7	70-130			20	
trans-1,2-Dichloroethylene	9.95		"	10.0		99.5	70-130			20	
trans-1,3-Dichloropropylene	9.11		"	10.0		91.1	70-130			20	
Trichloroethylene	10.2		"	10.0		102	70-130			20	
Trichlorofluoromethane	12.1		"	10.0		121	40-160			20	
Vinyl Chloride	10.8		"	10.0		108	70-130			20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*9.35*		*"*	*10.0*		*93.5*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.68*		*"*	*10.0*		*96.8*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*9.76*		*"*	*10.0*		*97.6*	*70-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL80947 - EPA 5030B											
LCS Dup (BL80947-BSD1)								Prepared & Analyzed: 12/18/2018			
1,1,1,2-Tetrachloroethane	9.19		ug/L	10.0		91.9	82-126		1.51	30	
1,1,1-Trichloroethane	9.42		"	10.0		94.2	70-130		3.24	20	
1,1,2,2-Tetrachloroethane	8.77		"	10.0		87.7	70-130		2.37	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.91		"	10.0		99.1	70-130		3.96	20	
1,1,2-Trichloroethane	9.47		"	10.0		94.7	70-130		0.106	20	
1,1-Dichloroethane	9.89		"	10.0		98.9	70-130		2.99	20	
1,1-Dichloroethylene	9.74		"	10.0		97.4	70-130		2.83	20	
1,1-Dichloropropylene	9.46		"	10.0		94.6	83-133		2.81	30	
1,2,3-Trichlorobenzene	8.98		"	10.0		89.8	70-130		3.82	20	
1,2,3-Trichloropropane	9.10		"	10.0		91.0	77-128		0.110	30	
1,2,4-Trichlorobenzene	8.63		"	10.0		86.3	70-130		3.19	20	
1,2,4-Trimethylbenzene	9.05		"	10.0		90.5	82-132		1.86	20	
1,2-Dibromo-3-chloropropane	9.12		"	10.0		91.2	40-160		1.31	20	
1,2-Dibromoethane	9.56		"	10.0		95.6	70-130		1.35	20	
1,2-Dichlorobenzene	9.06		"	10.0		90.6	70-130		2.94	20	
1,2-Dichloroethane	9.74		"	10.0		97.4	70-130		1.12	20	
1,2-Dichloropropane	9.42		"	10.0		94.2	70-130		0.740	20	
1,3,5-Trimethylbenzene	9.01		"	10.0		90.1	80-131		3.92	30	
1,3-Dichlorobenzene	8.95		"	10.0		89.5	70-130		1.88	20	
1,3-Dichloropropane	9.51		"	10.0		95.1	81-125		1.15	30	
1,4-Dichlorobenzene	8.97		"	10.0		89.7	70-130		1.66	20	
2,2-Dichloropropane	8.08		"	10.0		80.8	56-150		5.30	30	
2-Chlorotoluene	9.03		"	10.0		90.3	79-130		2.52	30	
2-Hexanone	9.36		"	10.0		93.6	40-160		0.858	20	
4-Chlorotoluene	9.02		"	10.0		90.2	79-128		2.41	30	
Acetone	7.74		"	10.0		77.4	40-160		3.02	20	
Benzene	10.2		"	10.0		102	70-130		3.10	20	
Bromobenzene	9.00		"	10.0		90.0	78-129		1.10	30	
Bromochloromethane	10.3		"	10.0		103	70-130		2.77	20	
Bromodichloromethane	9.18		"	10.0		91.8	70-130		1.19	20	
Bromoform	8.71		"	10.0		87.1	70-130		1.37	20	
Bromomethane	10.8		"	10.0		108	40-160		1.22	20	
Carbon tetrachloride	9.49		"	10.0		94.9	70-130		3.11	20	
Chlorobenzene	9.27		"	10.0		92.7	70-130		2.03	20	
Chloroethane	11.2		"	10.0		112	40-160		4.02	20	
Chloroform	9.72		"	10.0		97.2	70-130		2.24	20	
Chloromethane	10.2		"	10.0		102	40-160		6.47	20	
cis-1,2-Dichloroethylene	9.61		"	10.0		96.1	70-130		2.26	20	
cis-1,3-Dichloropropylene	9.18		"	10.0		91.8	70-130		1.73	20	
Dibromochloromethane	9.32		"	10.0		93.2	70-130		1.39	20	
Dibromomethane	9.37		"	10.0		93.7	72-134		0.850	30	
Dichlorodifluoromethane	8.43		"	10.0		84.3	40-160		0.355	20	
Ethyl Benzene	9.26		"	10.0		92.6	70-130		2.45	20	
Hexachlorobutadiene	8.30		"	10.0		83.0	67-146		5.62	30	
Isopropylbenzene	8.93		"	10.0		89.3	70-130		2.87	20	
Methyl tert-butyl ether (MTBE)	10.4		"	10.0		104	70-130		0.191	20	
Methylene chloride	10.4		"	10.0		104	70-130		0.384	20	
Naphthalene	9.43		"	10.0		94.3	70-147		2.31	30	
n-Butylbenzene	8.19		"	10.0		81.9	79-132		13.4	30	
n-Propylbenzene	9.06		"	10.0		90.6	78-133		3.15	30	
o-Xylene	9.23		"	10.0		92.3	70-130		1.61	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 BL80947 - EPA 5030B											
LCS Dup (BL80947-BSD1)								Prepared & Analyzed: 12/18/2018			
p- & m- Xylenes	15.5		ug/L	20.0		77.6	70-130		2.48	20	
p-Isopropyltoluene	9.07		"	10.0		90.7	81-136		3.57	30	
sec-Butylbenzene	9.54		"	10.0		95.4	79-137		3.30	30	
Styrene	8.99		"	10.0		89.9	70-130		1.33	20	
tert-Butylbenzene	9.03		"	10.0		90.3	77-138		2.73	30	
Tetrachloroethylene	6.84		"	10.0		68.4	70-130	Low Bias	1.45	20	
Toluene	9.48		"	10.0		94.8	70-130		1.98	20	
trans-1,2-Dichloroethylene	9.61		"	10.0		96.1	70-130		3.48	20	
trans-1,3-Dichloropropylene	8.89		"	10.0		88.9	70-130		2.44	20	
Trichloroethylene	9.92		"	10.0		99.2	70-130		2.69	20	
Trichlorofluoromethane	11.7		"	10.0		117	40-160		3.95	20	
Vinyl Chloride	10.2		"	10.0		102	70-130		5.79	20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*9.45*		*"*	*10.0*		*94.5*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.84*		*"*	*10.0*		*98.4*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*9.76*		*"*	*10.0*		*97.6*	*70-130*				
Batch BL81003 - EPA 5030B											
Blank (BL81003-BLK1)								Prepared & Analyzed: 12/19/2018			
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,1-Dichloropropylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
2,2-Dichloropropane	ND	0.500	"								
2-Chlorotoluene	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Chlorotoluene	ND	0.500	"								
Acetone	ND	2.00	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								

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 BL81003 - EPA 5030B											
Blank (BL81003-BLK1)											
Prepared & Analyzed: 12/19/2018											
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	*9.23*		*"*	*10.0*		*92.3*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.74*		*"*	*10.0*		*97.4*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*10.4*		*"*	*10.0*		*104*	*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 BL81003 - EPA 5030B											
LCS (BL81003-BS1)								Prepared & Analyzed: 12/19/2018			
1,1,1,2-Tetrachloroethane	9.75		ug/L	10.0		97.5	82-126			30	
1,1,1-Trichloroethane	10.2		"	10.0		102	70-130			20	
1,1,2,2-Tetrachloroethane	10.6		"	10.0		106	70-130			20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.6		"	10.0		106	70-130			20	
1,1,2-Trichloroethane	10.2		"	10.0		102	70-130			20	
1,1-Dichloroethane	10.9		"	10.0		109	70-130			20	
1,1-Dichloroethylene	10.4		"	10.0		104	70-130			20	
1,1-Dichloropropylene	10.4		"	10.0		104	83-133			30	
1,2,3-Trichlorobenzene	9.71		"	10.0		97.1	70-130			20	
1,2,3-Trichloropropane	10.0		"	10.0		100	77-128			30	
1,2,4-Trichlorobenzene	9.27		"	10.0		92.7	70-130			20	
1,2,4-Trimethylbenzene	9.40		"	10.0		94.0	82-132			20	
1,2-Dibromo-3-chloropropane	9.96		"	10.0		99.6	40-160			20	
1,2-Dibromoethane	10.4		"	10.0		104	70-130			20	
1,2-Dichlorobenzene	9.64		"	10.0		96.4	70-130			20	
1,2-Dichloroethane	10.6		"	10.0		106	70-130			20	
1,2-Dichloropropane	10.2		"	10.0		102	70-130			20	
1,3,5-Trimethylbenzene	9.38		"	10.0		93.8	80-131			30	
1,3-Dichlorobenzene	9.32		"	10.0		93.2	70-130			20	
1,3-Dichloropropane	10.4		"	10.0		104	81-125			30	
1,4-Dichlorobenzene	9.41		"	10.0		94.1	70-130			20	
2,2-Dichloropropane	9.52		"	10.0		95.2	56-150			30	
2-Chlorotoluene	9.42		"	10.0		94.2	79-130			30	
2-Hexanone	10.0		"	10.0		100	40-160			20	
4-Chlorotoluene	9.43		"	10.0		94.3	79-128			30	
Acetone	6.85		"	10.0		68.5	40-160			20	
Benzene	11.2		"	10.0		112	70-130			20	
Bromobenzene	9.36		"	10.0		93.6	78-129			30	
Bromochloromethane	11.8		"	10.0		118	70-130			20	
Bromodichloromethane	9.91		"	10.0		99.1	70-130			20	
Bromoform	9.55		"	10.0		95.5	70-130			20	
Bromomethane	13.0		"	10.0		130	40-160			20	
Carbon tetrachloride	10.1		"	10.0		101	70-130			20	
Chlorobenzene	9.88		"	10.0		98.8	70-130			20	
Chloroethane	12.7		"	10.0		127	40-160			20	
Chloroform	10.6		"	10.0		106	70-130			20	
Chloromethane	11.1		"	10.0		111	40-160			20	
cis-1,2-Dichloroethylene	10.5		"	10.0		105	70-130			20	
cis-1,3-Dichloropropylene	9.94		"	10.0		99.4	70-130			20	
Dibromochloromethane	10.1		"	10.0		101	70-130			20	
Dibromomethane	10.2		"	10.0		102	72-134			30	
Dichlorodifluoromethane	7.99		"	10.0		79.9	40-160			20	
Ethyl Benzene	9.96		"	10.0		99.6	70-130			20	
Hexachlorobutadiene	8.75		"	10.0		87.5	67-146			30	
Isopropylbenzene	9.31		"	10.0		93.1	70-130			20	
Methyl tert-butyl ether (MTBE)	11.3		"	10.0		113	70-130			20	
Methylene chloride	11.2		"	10.0		112	70-130			20	
Naphthalene	10.2		"	10.0		102	70-147			30	
n-Butylbenzene	10.0		"	10.0		100	79-132			30	
n-Propylbenzene	9.50		"	10.0		95.0	78-133			30	
o-Xylene	9.82		"	10.0		98.2	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 BL81003 - EPA 5030B											
LCS (BL81003-BS1)							Prepared & Analyzed: 12/19/2018				
p- & m- Xylenes	16.5		ug/L	20.0		82.6	70-130			20	
p-Isopropyltoluene	9.47		"	10.0		94.7	81-136			30	
sec-Butylbenzene	9.89		"	10.0		98.9	79-137			30	
Styrene	9.67		"	10.0		96.7	70-130			20	
tert-Butylbenzene	9.32		"	10.0		93.2	77-138			30	
Tetrachloroethylene	7.18		"	10.0		71.8	70-130			20	
Toluene	10.1		"	10.0		101	70-130			20	
trans-1,2-Dichloroethylene	10.4		"	10.0		104	70-130			20	
trans-1,3-Dichloropropylene	9.81		"	10.0		98.1	70-130			20	
Trichloroethylene	9.58		"	10.0		95.8	70-130			20	
Trichlorofluoromethane	13.4		"	10.0		134	40-160			20	
Vinyl Chloride	11.2		"	10.0		112	70-130			20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*9.70*		*"*	*10.0*		*97.0*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.72*		*"*	*10.0*		*97.2*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*9.45*		*"*	*10.0*		*94.5*	*70-130*				
LCS Dup (BL81003-BSD1)							Prepared & Analyzed: 12/19/2018				
1,1,1,2-Tetrachloroethane	9.68		ug/L	10.0		96.8	82-126		0.721	30	
1,1,1-Trichloroethane	9.86		"	10.0		98.6	70-130		2.90	20	
1,1,2,2-Tetrachloroethane	10.6		"	10.0		106	70-130		0.471	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.4		"	10.0		104	70-130		1.99	20	
1,1,2-Trichloroethane	10.1		"	10.0		101	70-130		1.08	20	
1,1-Dichloroethane	10.6		"	10.0		106	70-130		1.95	20	
1,1-Dichloroethylene	10.2		"	10.0		102	70-130		2.13	20	
1,1-Dichloropropylene	10.1		"	10.0		101	83-133		2.84	30	
1,2,3-Trichlorobenzene	10.1		"	10.0		101	70-130		4.33	20	
1,2,3-Trichloropropane	9.96		"	10.0		99.6	77-128		0.601	30	
1,2,4-Trichlorobenzene	9.54		"	10.0		95.4	70-130		2.87	20	
1,2,4-Trimethylbenzene	9.50		"	10.0		95.0	82-132		1.06	20	
1,2-Dibromo-3-chloropropane	10.0		"	10.0		100	40-160		0.900	20	
1,2-Dibromoethane	10.3		"	10.0		103	70-130		1.16	20	
1,2-Dichlorobenzene	9.75		"	10.0		97.5	70-130		1.13	20	
1,2-Dichloroethane	10.4		"	10.0		104	70-130		2.00	20	
1,2-Dichloropropane	10.1		"	10.0		101	70-130		1.48	20	
1,3,5-Trimethylbenzene	9.49		"	10.0		94.9	80-131		1.17	30	
1,3-Dichlorobenzene	9.53		"	10.0		95.3	70-130		2.23	20	
1,3-Dichloropropane	10.4		"	10.0		104	81-125		0.385	30	
1,4-Dichlorobenzene	9.53		"	10.0		95.3	70-130		1.27	20	
2,2-Dichloropropane	9.27		"	10.0		92.7	56-150		2.66	30	
2-Chlorotoluene	9.57		"	10.0		95.7	79-130		1.58	30	
2-Hexanone	10.1		"	10.0		101	40-160		0.892	20	
4-Chlorotoluene	9.56		"	10.0		95.6	79-128		1.37	30	
Acetone	7.12		"	10.0		71.2	40-160		3.87	20	
Benzene	11.0		"	10.0		110	70-130		1.90	20	
Bromobenzene	9.49		"	10.0		94.9	78-129		1.38	30	
Bromochloromethane	11.7		"	10.0		117	70-130		1.02	20	
Bromodichloromethane	9.87		"	10.0		98.7	70-130		0.404	20	
Bromoform	9.45		"	10.0		94.5	70-130		1.05	20	
Bromomethane	13.3		"	10.0		133	40-160		2.52	20	
Carbon tetrachloride	9.90		"	10.0		99.0	70-130		2.10	20	
Chlorobenzene	9.87		"	10.0		98.7	70-130		0.101	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 BL81003 - EPA 5030B											
LCS Dup (BL81003-BSD1)								Prepared & Analyzed: 12/19/2018			
Chloroethane	12.6		ug/L	10.0		126	40-160		1.18	20	
Chloroform	10.4		"	10.0		104	70-130		1.14	20	
Chloromethane	11.0		"	10.0		110	40-160		1.27	20	
cis-1,2-Dichloroethylene	10.5		"	10.0		105	70-130		0.381	20	
cis-1,3-Dichloropropylene	9.94		"	10.0		99.4	70-130		0.00	20	
Dibromochloromethane	10.1		"	10.0		101	70-130		0.0988	20	
Dibromomethane	10.2		"	10.0		102	72-134		0.0984	30	
Dichlorodifluoromethane	7.88		"	10.0		78.8	40-160		1.39	20	
Ethyl Benzene	9.71		"	10.0		97.1	70-130		2.54	20	
Hexachlorobutadiene	8.69		"	10.0		86.9	67-146		0.688	30	
Isopropylbenzene	9.41		"	10.0		94.1	70-130		1.07	20	
Methyl tert-butyl ether (MTBE)	11.3		"	10.0		113	70-130		0.354	20	
Methylene chloride	11.2		"	10.0		112	70-130		0.625	20	
Naphthalene	10.6		"	10.0		106	70-147		4.05	30	
n-Butylbenzene	8.81		"	10.0		88.1	79-132		12.9	30	
n-Propylbenzene	9.60		"	10.0		96.0	78-133		1.05	30	
o-Xylene	9.65		"	10.0		96.5	70-130		1.75	20	
p- & m- Xylenes	16.2		"	20.0		81.2	70-130		1.71	20	
p-Isopropyltoluene	9.59		"	10.0		95.9	81-136		1.26	30	
sec-Butylbenzene	9.95		"	10.0		99.5	79-137		0.605	30	
Styrene	9.61		"	10.0		96.1	70-130		0.622	20	
tert-Butylbenzene	9.39		"	10.0		93.9	77-138		0.748	30	
Tetrachloroethylene	7.05		"	10.0		70.5	70-130		1.83	20	
Toluene	9.90		"	10.0		99.0	70-130		1.80	20	
trans-1,2-Dichloroethylene	10.3		"	10.0		103	70-130		0.193	20	
trans-1,3-Dichloropropylene	9.73		"	10.0		97.3	70-130		0.819	20	
Trichloroethylene	9.50		"	10.0		95.0	70-130		0.839	20	
Trichlorofluoromethane	12.7		"	10.0		127	40-160		4.98	20	
Vinyl Chloride	10.8		"	10.0		108	70-130		3.44	20	
Surrogate: SURR: 1,2-Dichloroethane-d4	*9.52*		*"*	*10.0*		*95.2*	*70-130*				
Surrogate: SURR: Toluene-d8	*9.72*		*"*	*10.0*		*97.2*	*70-130*				
Surrogate: SURR: p-Bromofluorobenzene	*9.74*		*"*	*10.0*		*97.4*	*70-130*				

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18L0504-01	WQ120518:1510 FRW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0504-02	WQ120518:1515 FRW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0504-03	WQ120518:1520 FRW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0504-04	WQ120518:1525 FRW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0504-05	WQ120518:1450 NP1-1-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Sample and Data Qualifiers Relating to This Work Order

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

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

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. 18L0504

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
WQ120518:1510 FRW-1	12-5-18; 1510	GW	VOCs 8260 full plus freon 113	3 voa's
:1515 FRW-2	1515			
:1520 FRW-3	1520			
:1525 FRW-4	1525			
:1450 NPI-1-2	1450			

Comments:

(system)

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

Special Instructions
Field Filtered ☐
Lab to Filter ☐

	Date/Time		Date/Time	Temperature on Receipt
Samples Relinquished By	12-6-18 1900	Samples Received By	WSP Fridge 12-6-18 1900	1.4 °C
Samples Relinquished By	12/12/18 1314	Samples Received in LAB by	12-12-18 1316	

Relinquished By 12/12/18