

**PROJECT STATUS MEMORANDUM**

**NO. 11-17**

**TO:** Pamela Tames, USEPA

**FROM:** Mark M. Goldberg, P.E.  
Tunde H. Komubes-Sandor, PG, CPG

**DATE:** March 1, 2018

**PROJECT:** Rowe Industries Superfund Site  
NYS Site ID No. 152106  
Groundwater Recovery and Treatment System  
November 2017 Status Report  
Sag Harbor, New York

LBG Hydrogeologic & Engineering Services, P.C. (LBGHES) 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 treats water extracted from RW-2 and FRW-1, 2, 3 and 4; the other FSP&T recovery wells (RW-1, RW-3, 4, 5, 6, 7, 8, and 9) have been shut down with USEPA approval after achieving remediation standards. This status report presents a summary of performance, operation and maintenance for both systems and monitoring activities for the site from November 1, 2017 through November 30, 2017. The report includes a summary of system performance parameters, system operation parameters, and analytical results for groundwater, system effluent samples, and air quality results.

**SUMMARY OF SYSTEM PERFORMANCE AND OPERATION**

*(November 1, 2017 through November 30, 2017)*

- |  |                          |
|--|--------------------------|
| 1. Hours of operation during the reporting period:   | 616 hours (85.6%)        |
| 2. Alarm conditions during the reporting period:   | See Table 1              |
| 3. Was the SPDES VOC discharge permit criteria achieved:   | yes, (see Table 2)       |
| 4. Total volume of water pumped during the reporting period:   | 1,415,475 gal.           |
| 5. Was the system effluent flow below the SPDES limit of 1,023,000 gpd:  | yes, (see Graph 1)       |
| 6. Mass of VOCs recovered during the reporting period:   | 0.01 pound (see Graph 2) |
| 7. Cumulative mass of VOCs recovered since startup on 12/17/02:<br>(calculations can be provided upon request) | 229.1 pounds             |

## PUMP AND TREAT SYSTEM STATUS SUMMARY

The following table summarizes recovery well parameters for the operating recovery wells. Note, the FSP&T system was not operational from November 12-16 and 26-27. Focused recovery well FRW-1 was not operational from November 12-30.

Well	Volume pumped (gal)	Total VOC Concentration ( $\mu\text{g/L}$ )	VOC Recovery (lbs)
RW-2 <sup>1/</sup>	998,271	0.7	0.01
FRW-1 <sup>2/</sup>	86	75.4	< 0.01
FRW-2 <sup>2</sup>	1,709	45.8	< 0.01
FRW-3 <sup>2/</sup>	29,025	22.2	0.01
FRW-4 <sup>2/</sup>	301,249	4.1	< 0.01

<sup>1/</sup> The above table summarizes the parameters for RW-2 from November 1 to November 30, 2017.

<sup>2/</sup> The above table summarizes the parameters for the FRWs from November 1, 2017 through December 5, 2017.

The RW-2 flow meter and the FRW-1 pump were discovered to be inoperable during the November 16, 2017 O&M site visit. Initial troubleshooting of the RW-2 flow meter revealed that either the flow meter assembly, the RCDL mount assembly reed switch or the transmitter were not functioning properly. Initial troubleshooting of the FRW-1 pump suggested the pump burned out. These two items are scheduled for repair during the next O&M site visit during the first week of December. Additional details about the maintenance activities are provided in Table 1.

## SUMMARY OF SAMPLING ACTIVITIES

November 2017 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.

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 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 and FRWs are included as Appendix II.

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

The PCE concentration from the groundwater samples collected at FRW-1, 2 and 3 were above the ARAR. The PCE concentration from the groundwater sample collected at FRW-4 was below the ARAR. The TCE, cis-DCE, VC and TCA concentrations from the groundwater samples collected at FRW-1, 2, 3 and 4 were below the respective ARARs; in some cases the concentrations were below laboratory reporting limits.

During the month of November, the monthly sample results are similar to historic observations over the last 12 months. Groundwater samples from RW-2 and the FRWs will continue to be collected and analyzed monthly for quality trends.

## FUTURE O&M ACTIVITIES

O&M activities scheduled for December 2017 include:

- normal bi-weekly/monthly O&M activities;
- troubleshoot and repair the RW-2 flow meter; and
- replace the FRW-1 pump.

MMG:nv

Attachments

cc: Brian Shuttleworth - Kraft Heinz Foods Company (as successor to Kraft Foods Group, Inc.)-.pdf  
Kevin Kyrias-Gann, Ramboll Environ -.pdf  
Renee (Petersen) DeBaene, Ramboll Environ -.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\2017\Monthly Reports\November\Draft Status Nov2017.docx

## **TABLES**

**TABLE 1**

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

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**MAINTENANCE LOG  
(November 1, 2017 through November 30, 2017)**

<b>Date</b>	<b>Time</b>	<b>System Changes/Modifications</b>	<b>Personnel</b>
11/1/2017		Completed routine O&M and sampling	EF
		Cleaned the FRW and FP&T system effluent flow meter paddle wheels.	EF
		Measured depth-to-water (DTW) in select monitor wells during pumping conditions.	EF
11/8/2017	9:33 AM	The PLC registered a power failure alarm, but the FSP&T and FP&T systems continued to operate.	
11/12/2017	9:59 PM	The FSP&T and FP&T systems shut down because of system leak alarm, which also indicates a communication failure. A system leak did not occur.	
11/16/2017	8:54 AM	Reset the FSP&T system alarms, rebooted the PLC and restarted the FSP&T system. Upon restart the RW-2 flow meter was not operating, however, the RW-2 pump was continuing to pump water at a flow rate of approximately 28 to 29 gpm based on manual measurements. Initial troubleshooting suggests that either the flow meter assembly, RCDL mount assembly reed switch or transmitter is not working. Further troubleshooting will continue on the next O&M visit scheduled for the first week of December. RW-2 continues to operate without issue.	TS
		Cleaned the FRW and FP&T system effluent flow meter paddle wheels. Observed that the FRW-1 indicator light was illuminated; however, the pump was not pumping any water. Troubleshooting suggests the pump in FRW-1 burned out. Pump replacement was scheduled for the next O&M visit during the first week of December. The FP&T system was turned on with FRW-2, 3 and 4 operating.	TS
		Inspected the condition of monitor wells MW-98-01A, MW-98-04 and 4B, MW-98-05AR and 05BR, MW-28A and 28B, MW-45A and 45B, MW-58A and 58B, MW-59A and 59B; and N-32, 32B. All wells were observed to be in good condition.	TS
		A technician from Verizon troubleshooted the malfunctioning phone line, and located a corroded wire in the communication box near Sag Harbor Turnpike. The wire was spliced and the phone line was tested successfully. Following the repair work, the phone line is functioning properly.	TS
11/26/2017	9:59 PM	The FSP&T and FP&T systems shut down due to a power failure alarm.	
11/27/2017	6:51 PM	Checked the FSP&T and FP&T systems, reset alarms and restarted the FSP&T and FP&T systems with RW-2, FRW-2, 3 and 4 operating.	JF

Notes:

- EF Evan Foster, LBGHES
- JF Jamie Forrester, LBGHES
- TS Tunde Komuves-Sandor, LBGHES

TABLE 2

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

**Effluent Water Quality Results**

Date Sampled <sup>2/</sup>	pH <sup>1/</sup>	TDS (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)
<b>SPDES Limits</b>	<b>6.5 to 8.5</b>	---	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	---	<b>10</b>	<b>7</b>	---	---
1-Nov-16	6.5	224	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	3.50	0.100
1-Dec-16	6.5	191	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	2.17	0.042
3-Jan-17	6.5	123	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	2.24	0.030
1-Feb-17	6.5	120	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	2.17	0.051
1-Mar-17	6.5	149	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	0.69	0.063
7-Apr-17	6.5	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	3.62	0.060
3-May-17	6.5	121	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	0.90	0.079
1-Jun-17	6.5	127	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	0.10	0.097
6-Jul-17	6.5	159	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	0.46	ND<0.02
1-Aug-17	6.8	143	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	3.00	0.193
5-Sep-17	6.8	298	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	2.12	0.051
4-Oct-17	6.5	162	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	2.24	0.036
1-Nov-17	6.8	196	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	0.66	0.043

SPDES: State Pollutant Discharge Elimination System

NM: Not Measured

mg/l: Milligrams per liter

TDS: Total dissolved solids

ug/l: Micrograms per liter

PCE: Tetrachloroethylene

---: Not established

1,1,1-TCA: 1,1,1-Trichloroethane

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

TCE: Trichloroethene

trans-1,2-DCE: trans-1,2-Dichloroethene

1,1-DCA: 1,1-Dichloroethane

1,1-DCE: 1,1-Dichloroethene

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

cis-1,2-DCE: cis-1,2-Dichloroethene

ND: Not detected

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.

2. "Effluent" samples were collected from sample port labeled NP2-10 unless otherwise noted.

3. Starting in October 2016, FSP&amp;T system samples are collected monthly instead of once every two weeks. The pH of the effluent water is measured two times per month.

TABLE 3

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

**Recovery Well Water Quality Results**

Recovery Well <sup>1/</sup>	Date Sampled	PCE (ug/L)	TCE (ug/L)	TCA (ug/L)	Chloroform (ug/L)	MTBE (ug/L)	1,1-Dichloroethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	1,1-Dichloroethene (ug/L)	Methylene Chloride (ug/L)	Toluene (ug/L)	Benzene (ug/L)	m,p-Xylene (ug/L)	o-Xylene (ug/L)
	ARAR's	<b>5</b>	<b>5</b>	<b>5</b>	<b>7</b>	NE	<b>5</b>	<b>5</b>	<b>5</b>	NE	NE	NE	<b>5</b>	<b>5</b>
RW-2	5-Nov-15	0.28 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
	2-Dec-15	0.35 J	0.53	0.26 J	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-Jan-16	ND<0.5	0.56	0.33 J	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-16	0.40 J	0.63	0.22 J	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-16	0.38 J	0.67	0.32 J	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-Apr-16	0.37 J	0.55	0.31 J	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-16	0.27 J	0.37 J	0.24 J	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
	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	ND<0.5	0.28 J	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5
	1-Jun-17	0.29	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

PCE: Tetrachloroethylene

MTBE: Methyl-tertiary-butyl-ether

TCE: Trichloroethylene

NS: Not sampled

TCA: 1,1,1-Trichloroethane

ND: Not detected

&lt;#: 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.

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.

<sup>1/</sup> 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 <sup>1/</sup>	5	5	5 <sup>1/</sup>	5	5 <sup>1/</sup>	NE
3-Dec-15	24	2.5	37	0.96	0.34 J	0.32 J	ND<2	ND<0.5	ND<0.5	2.7
The FRWs were shut down between December 5, 2015 and December 15, 2015										
6-Jan-16	170	1.8	3.2	ND<0.5	2.4	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<2
The FRWs were shut down between February 13, 2016 and February 16, 2016										
1-Feb-16	67	5.3	5.9	0.30 J	0.28 J	ND<0.5	ND<2	ND<0.5	ND<0.5	1.2 J
The FRWs were shut down between February 25, 2016 and February 27, 2016										
1-Mar-16	290	3.8	7.9	ND<0.5	2.6	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<2
The FRWs were shut down between March 10 and March 16, 2016 and again between March 18 and March 22, 2016										
5-Apr-16	140	4.0	7.9	ND<0.5	1.1	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<2
The FRWs were shut down between April 8 and April 12, 2016 and again between April 19 and 25, 2016										
2-May-16	78	2.8	5.7	ND<0.5	0.74	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<2
The FRWs were shut down between May 5 and May 17, 2016 and again between May 19 and 23, 2016										
7-Jun-16	57	1.6	3.0	ND<0.5	0.43	ND<0.5	ND<2	ND<0.5	ND<0.5	1.3 J
7-Jul-16	40	0.95	0.75	ND<0.5	0.30 J	ND<0.5	ND<2	ND<0.5	ND<0.5	1.6 J
The FRWs were shut down between July 15 and July 18, 2016 and again after July 29, 2016										
2-Aug-16	22	0.75	1.4	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	1.2 J
The FRWs were shut down between August 10 and August 13, 2016										
1-Sep-16	25	0.81	1.6	ND<0.5	0.20 J	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<2
FRW-1 was shut down between September 15 and 16, 2016 and again between September 21 and October 4, 2016										
17-Oct-16	29	2.60	8.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	0.56 J	ND<2
The FRWs were off between October 17 and November 14, 2016										
14-Nov-16	64	5.4	38	0.41 J	0.84	0.28 J	ND<2	ND<0.5	ND<0.5	ND<2
The FRWs were off between November 16 and December 1, 2016										
16-Dec-16	58	0.54	1.9	ND<0.5	0.51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off from December 28 to January 3, 2017 and January 5 to January 9, 2017										
9-Jan-17	120	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	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 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 <sup>2/</sup>	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 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										

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

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

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

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

PCE: Tetrachloroethylene  
cis12DCE: cis-1,2-Dichloroethene  
TCA: 1,1,1-Trichloroethane  
124TCB: 1,2,4-Trimethylbenzene

TCE: Trichloroethene  
VC: Vinyl Chloride  
11DCA: 1,1-Dichloroethane

TABLE 5

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

**Recovery Well FRW-2 VOC Concentrations, micrograms per liter**

FRW-2								
Date	PCE	TCE	cis12DCE	VC	TCA	Toluene	2-Hexanone	Acetone
ARARs	5	5	5	2 <sup>1/</sup>	5	5	NE	NE
3-Dec-15	37	8.1	34	0.83	ND<0.5	ND<0.5	ND<0.5	2.3
The FRWs were shut down between December 5, 2015 and December 15, 2015								
6-Jan-16	53	4.3	2.3	0.21 J	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were shut down between February 13, 2016 and February 16, 2016								
1-Feb-16	280	3.3	5.2	ND<0.5	3.3	ND<0.5	ND<0.5	2.5
The FRWs were shut down between February 25, 2016 and February 27, 2016								
1-Mar-16	55	1.8	1.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were shut down between March 10 and March 16, 2016 and again between March 18 and March 22, 2016								
5-Apr-16	32	0.72	0.31 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were shut down between April 8 and April 12, 2016 and again between April 19 and 25, 2016								
2-May-16	16	0.39 J	ND<0.5	ND<0.5	0.52	ND<0.5	ND<0.5	1.1 J
The FRWs were shut down between May 5 and May 17, 2016 and again between May 19 and 23, 2016								
7-Jun-16	39	5.7	2.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.3
7-Jul-16	21	1.4	0.30 J	ND<0.5	ND<0.5	0.22	ND<0.5	ND<2
The FRWs were shut down between July 15 and July 18, 2016 and again after July 29, 2016								
2-Aug-16	22	1.0	0.55	ND<0.5	ND<0.5	ND<0.5	1.1	1.6 J
The FRWs were shut down between August 10 and August 13, 2016.								
1-Sep-16	26	1.2	0.39 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
FRW-2 was shut down between September 1 and 16, 2016 and again between September 21 and October 4, 2016.								
17-Oct-16	3.1	2.7	41	4.1	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between October 17 and November 14, 2016								
14-Nov-16	19	6.5	19	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0 J
The FRWs were off between November 16 and December 1, 2016								
16-Dec-16	32	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<20
The FRWs were off between December 28 to January 3, 2017 and January 5 to January 9, 2017								
9-Jan-17	27	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	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
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
The FRWs were off from July 31 to August 28, 2017								
1-Aug-17 <sup>2/</sup>	7.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.1
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	0.8	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								

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.

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

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

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

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 <sup>J</sup>	5	5	5 <sup>J</sup>	5 <sup>J</sup>	5 <sup>J</sup>	5	NE	NE
3-Dec-15	34	3.8	96	0.70	0.29 J	0.38 J	ND<0.5	0.41 J	0.20 J	ND<0.5	ND<0.5	ND<2
The FRWs were shut down between December 5, 2015 and December 15, 2015												
6-Jan-16	34	3.1	15	0.60	ND<0.5	0.34 J	ND<0.5	1.0	0.48 J	1.3	ND<0.5	ND<2
The FRWs were shut down between February 13, 2016 and February 16, 2016												
1-Feb-16	50	4.1	23	1.40	ND<0.5	0.23 J	ND<0.5	1.2	0.52	1.4	ND<0.5	1.2 J
The FRWs were shut down between February 25, 2016 and February 27, 2016												
1-Mar-16	62	7.1	29	0.62	0.30 J	ND<0.5	ND<0.5	0.93	ND<0.5	ND<0.5	ND<0.5	1.4 J, B
The FRWs were shut down between March 10 and March 16, 2016 and again between March 18 and March 22, 2016												
5-Apr-16	43	2.5	24	0.27 J	ND<0.5	ND<0.5	ND<0.5	1.2	0.44 J	1.2	ND<0.5	ND<2
The FRWs were shut down between April 8 and April 12, 2016 and again between April 19 and 25, 2016												
2-May-16	150	7.3	17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.85	0.37 J	0.29 J	ND<0.5	ND<2
The FRWs were shut down between May 5 and May 17, 2016 and again between May 19 and 23, 2016												
7-Jun-16	54	4.8	7.8	ND<0.5	ND<0.5	0.29 J	ND<0.5	1.0	0.48 J	ND<0.5	ND<0.5	1.7
7-Jul-16	15	1.7	2.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.2	0.57	ND<0.5	7.3	ND<2
The FRWs were shut down between July 15 and July 18, 2016 and again after July 29, 2016												
2-Aug-16	8.1	0.7	1.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.71	0.43 J	ND<0.5	ND<0.5	2.3
The FRWs were shut down between August 10 and August 13, 2016.												
1-Sep-16	17	1.4	2.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.83	0.58	ND<0.5	ND<0.5	ND<2
FRW-3 was shut down between September 15 and 16, 2016 and again between September 21 and October 4, 2016												
17-Oct-16	9.0	2.4	23	1.1	ND<0.5	ND<0.5	ND<0.5	0.36 J	ND<0.5	ND<0.5	ND<0.5	ND<2
The FRWs were off between October 17 and November 14, 2016												
14-Nov-16	79	5.6	14	0.48 J	ND<0.5	0.67	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0
The FRWs were off between November 16 and December 1, 2016												
16-Dec-16	24	4.1	16	0.42 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.32 J	ND<0.5	ND<0.5	ND<2
The FRWs were off between December 28 to January 3, 2017 and January 5 to January 9, 2017												
9-Jan-17	53	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	3.7	24	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.76	0.63	ND<0.5	ND<0.5	ND<2
The FRWs were off between February 20 to February 22, 2017												
1-Mar-17	50	5.7	20	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.99	0.64	ND<0.5	ND<0.5	ND<2
The FRWs were off between March 24 and March 29, 2017												
7-Apr-17	65	5.0	41	1.4	ND<0.5	ND<0.5	ND<0.5	0.71	0.49	ND<0.5	ND<0.5	ND<2
FRW-3 was off from April 17 to April 26, 2017 and April 27 to May 11, 2017												
11-May-17	130	5.8	8.5	0.24 J	ND<0.5	0.35 J	ND<0.5	0.35 J	0.30 J	ND<0.5	ND<0.5	ND<2
FRW-3 was off from May 17 to June 1, 2017												
1-Jun-17	83	5.8	12	0.37 J	ND<0.5	ND<0.5	ND<0.5	0.38 J	0.38 J	ND<0.5	ND<0.5	1.0
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
The FRWs were off from July 31 to August 28, 2017												
1-Aug-17 <sup>2/</sup>	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
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	ND<0.5	ND<0.5	ND<0.5	0.48 J	0.40 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												

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.

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

B: Method

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 <sup>1/</sup>	5	NE
3-Dec-15	2.7	ND<0.5	0.28 J	ND<0.5	ND<0.5	ND<2
<b>The FRWs were shut down between December 5, 2015 and December 15, 2015</b>						
6-Jan-16	2.4	0.37 J	7.9	ND<0.5	ND<0.5	ND<2
<b>The FRWs were shut down between February 13, 2016 and February 16, 2016</b>						
1-Feb-16	5.0	0.68	4.4	ND<0.5	ND<0.5	ND<2
<b>The FRWs were shut down between February 25, 2016 and February 27, 2016</b>						
1-Mar-16	15	1.1	5.4	ND<0.5	ND<0.5	ND<2
<b>The FRWs were shut down between March 10 and March 16, 2016 and again between March 18 and March 22, 2016</b>						
5-Apr-16	11	0.70	3.5	ND<0.5	ND<0.5	ND<2
<b>The FRWs were shut down between April 8 and April 12, 2016 and again between April 19 and 25, 2016</b>						
2-May-16	6.7	0.82	1.2	ND<0.5	ND<0.5	ND<2
<b>The FRWs were shut down between May 5 and May 17, 2016 and again between May 19 and 23, 2016</b>						
7-Jun-16	8.5	0.91	1.4	ND<0.5	ND<0.5	1.2 J
7-Jul-16	7.5	0.78	1.4	ND<0.5	ND<0.5	ND<2
<b>The FRWs were shut down between July 15 and July 18, 2016 and again after July 29, 2016</b>						
2-Aug-16	3.5	0.50	2.6	ND<0.5	ND<0.5	ND<2
<b>The FRWs were shut down between August 10 and August 13, 2016.</b>						
1-Sep-16	2.2	0.48 J	3.8	ND<0.5	ND<0.5	ND<2
<b>FRW-3 was shut down between September 15 and 16, 2016 and again between September 21 and October 4, 2016</b>						
17-Oct-16	1.6	0.47 J	4.7	ND<0.5	ND<0.5	10
<b>The FRWs were off between October 17 and November 14, 2016</b>						
14-Nov-16	1.9	2.1	29	0.33 J	ND<0.5	ND<2
<b>The FRWs were off between November 16 and December 1, 2016</b>						
16-Dec-16	2.0	0.50	7.8	ND<0.5	ND<0.5	ND<2
<b>The FRWs were off between December 28 to January 3, 2017 and January 5 to January 9, 2017</b>						
9-Jan-17	16	1.8	6.4	ND<0.5	0.27 J	ND<2
<b>The FRWs were off between January 23 to February 2, 2017</b>						
2-Feb-17	5.1	1.4	17	ND<0.5	0.27 J	ND<2
<b>The FRWs were off between February 20 to February 22, 2017</b>						
1-Mar-17	4.0	0.60	2.2	ND<0.5	ND<0.5	ND<2
<b>The FRWs were off between March 24 and March 29, 2017</b>						
7-Apr-17	7.6	1.2	2.9	ND<0.5	ND<0.5	1.3
<b>The FRWs were off from April 17 to April 26, 2017 and April 27 to May 1, 2017</b>						
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
<b>The FRWs were off from June 7 to June 9 and from June 21 to 23, 2017</b>						
6-Jul-17	0.27 J	ND<0.5	0.28 J	ND<0.5	ND<0.5	1.1
<b>The FRWs were off from July 31 to August 28, 2017</b>						
1-Aug-17 <sup>2/</sup>	0.80	ND<0.5	0.28 J	ND<0.5	ND<0.5	1.6
5-Sep-17	2.7	0.42 J	0.51	ND<0.5	ND<0.5	ND<2
<b>The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017</b>						
4-Oct-17	9.8	3.9	4.1	ND<0.5	ND<0.5	ND<2
<b>The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017</b>						
1-Nov-17	3.0	0.32 J	0.78	ND<0.5	ND<0.5	ND<2
<b>The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017</b>						

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.

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

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

ND: Not detected

Comments:

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

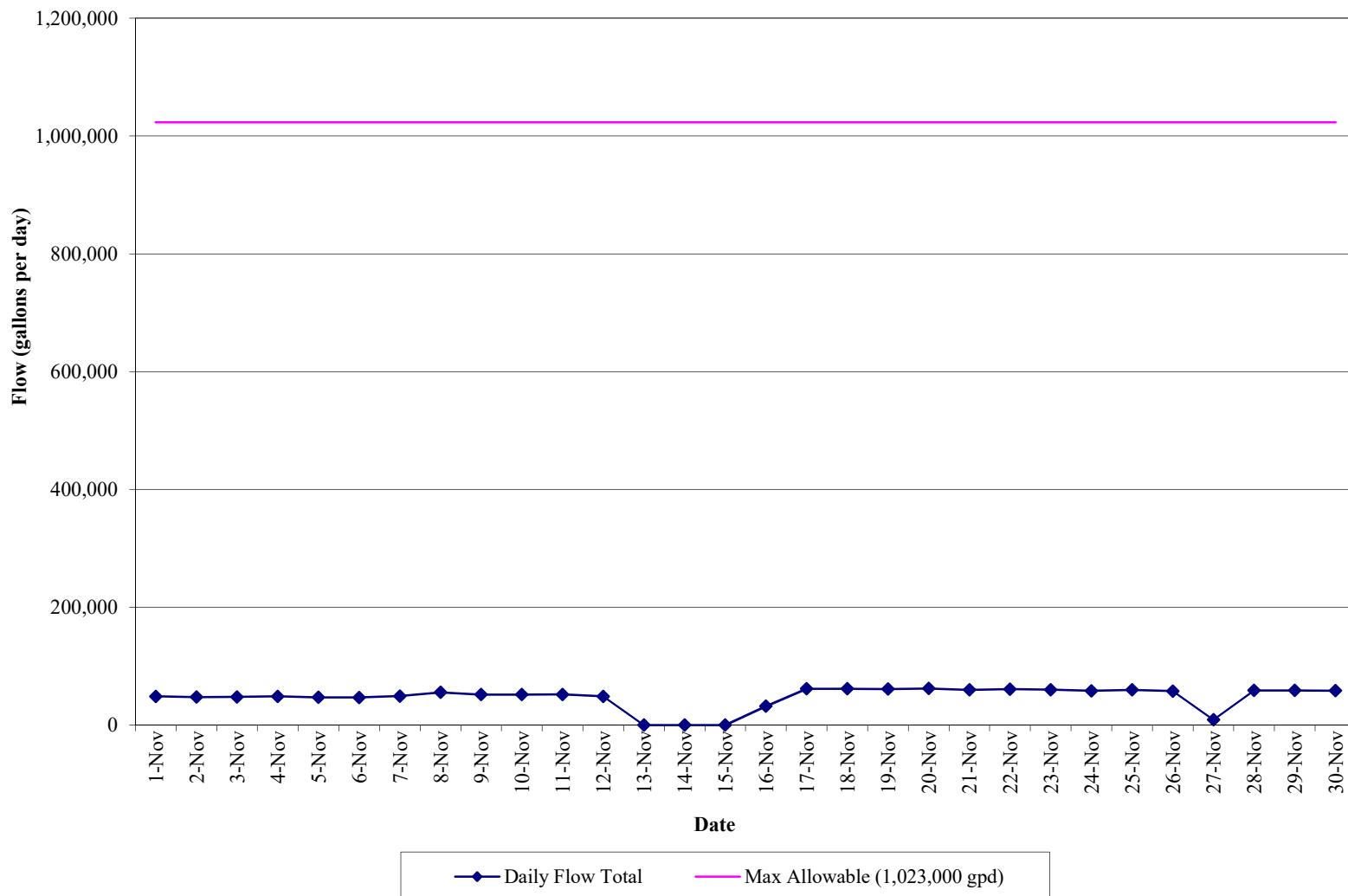
PCE: Tetrachloroethylene  
cis12DCE: cis-1,2-Dichloroethene  
TCA: 1,1,1-Trichloroethane

TCE: Trichloroethene  
VC: Vinyl Chloride

## **GRAPHS**

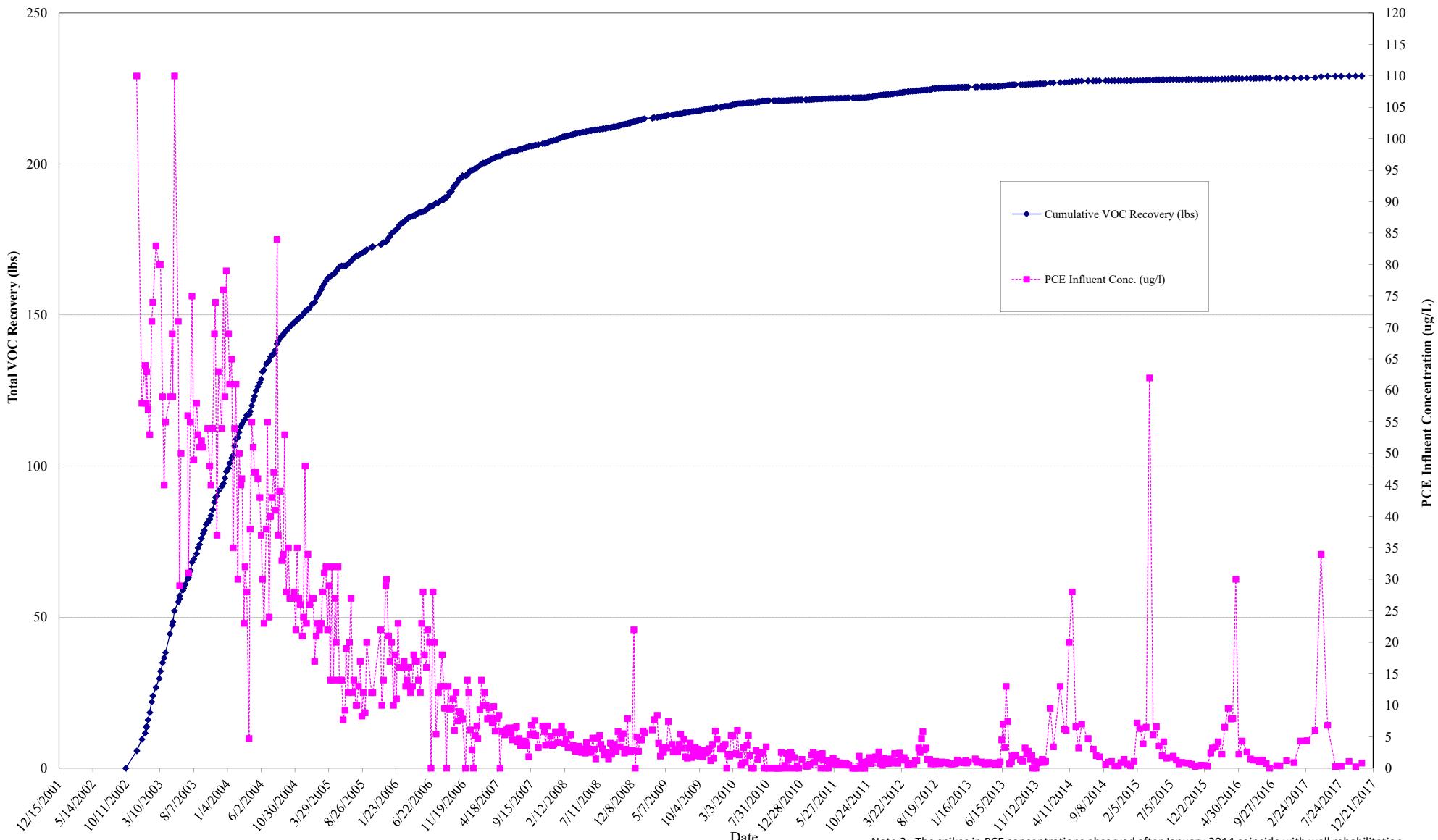
**GRAPH 1**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**

**Effluent Flow Data**  
**(November 1, 2017 to November 30, 2017)**



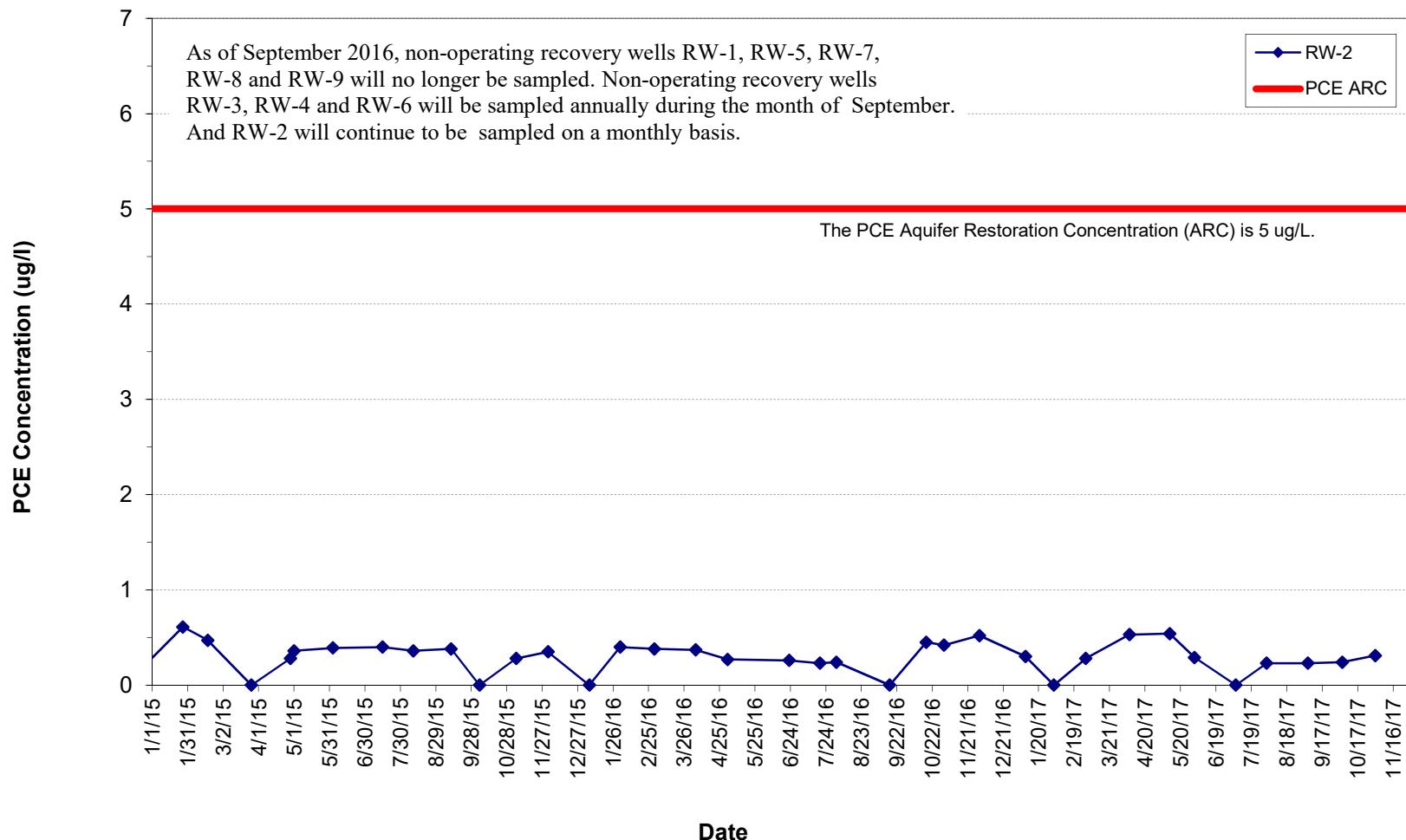
**GRAPH 2**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**

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



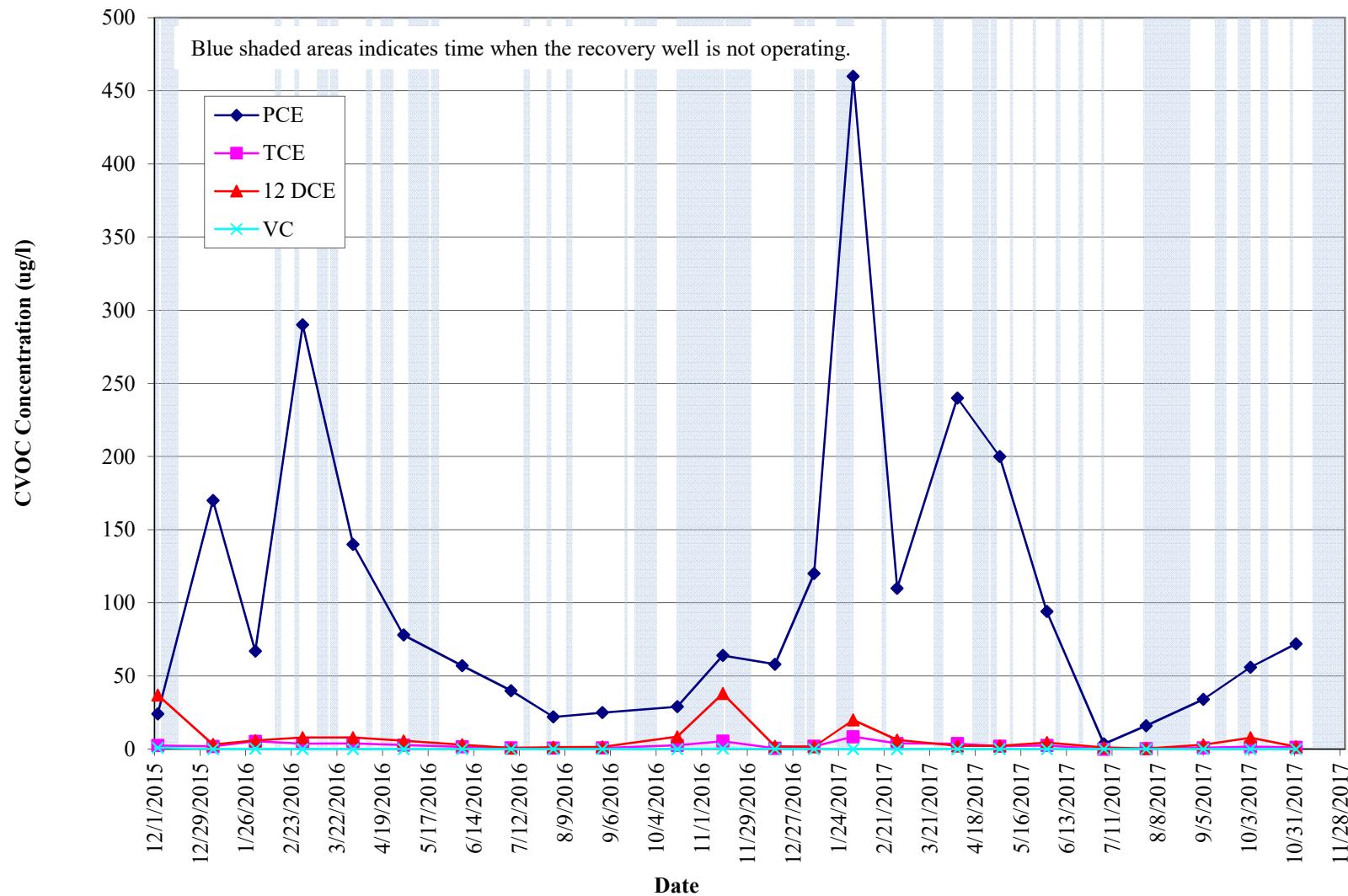
**GRAPH 3**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**

**FSP&T Recovery Well PCE Concentration**

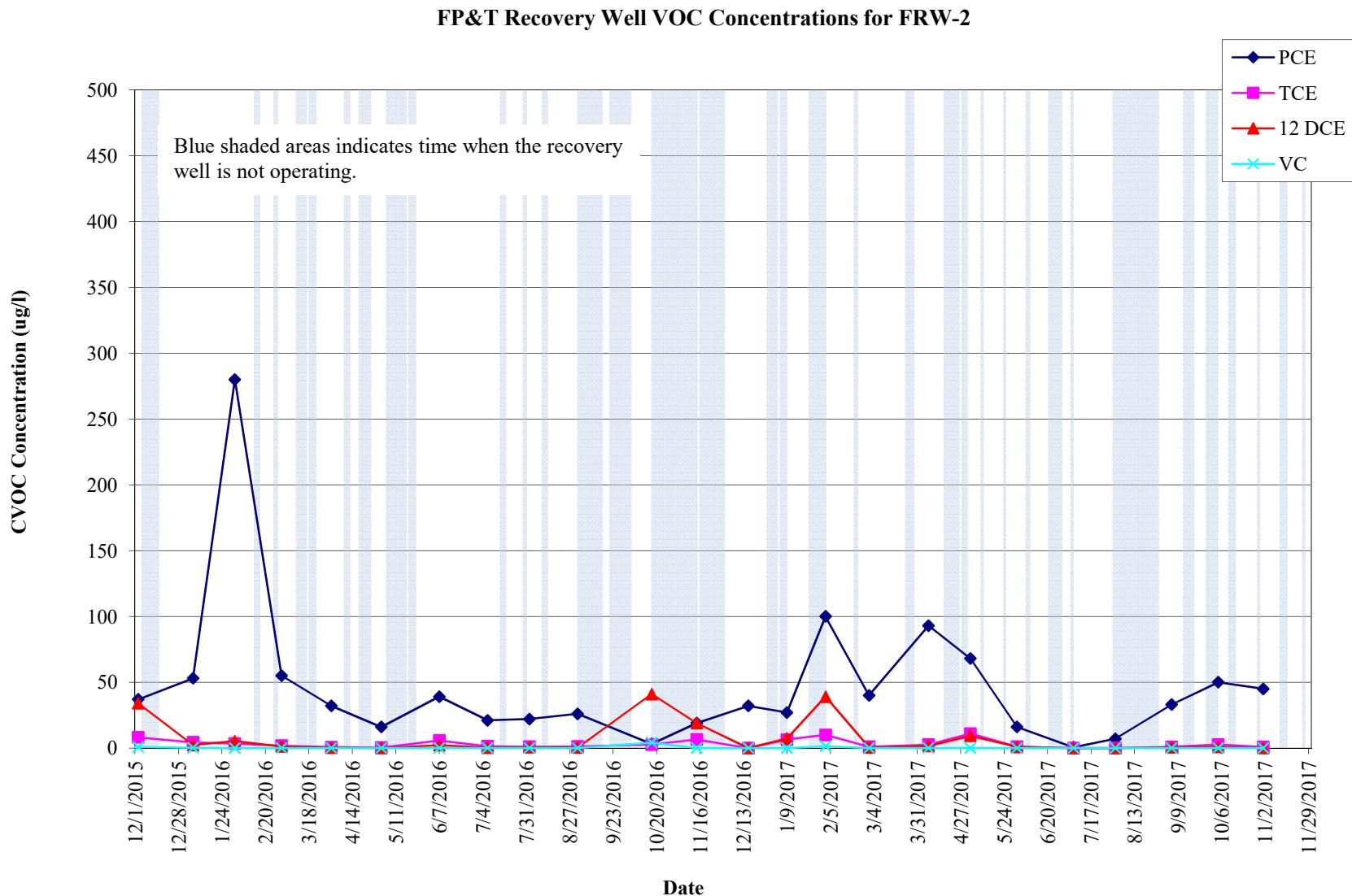


**GRAPH 4**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**

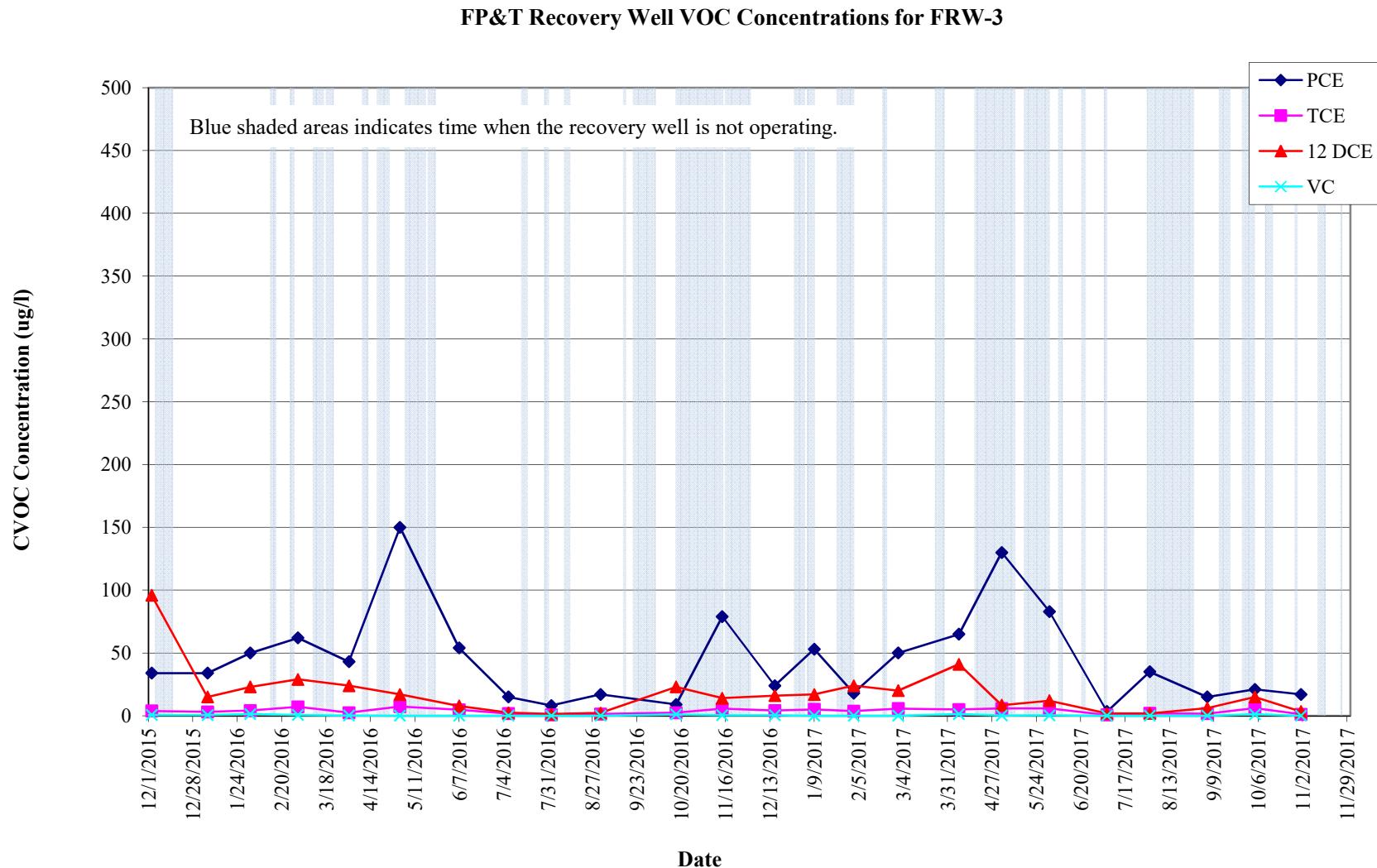
**FP&T Recovery Well VOC Concentrations for FRW-1**



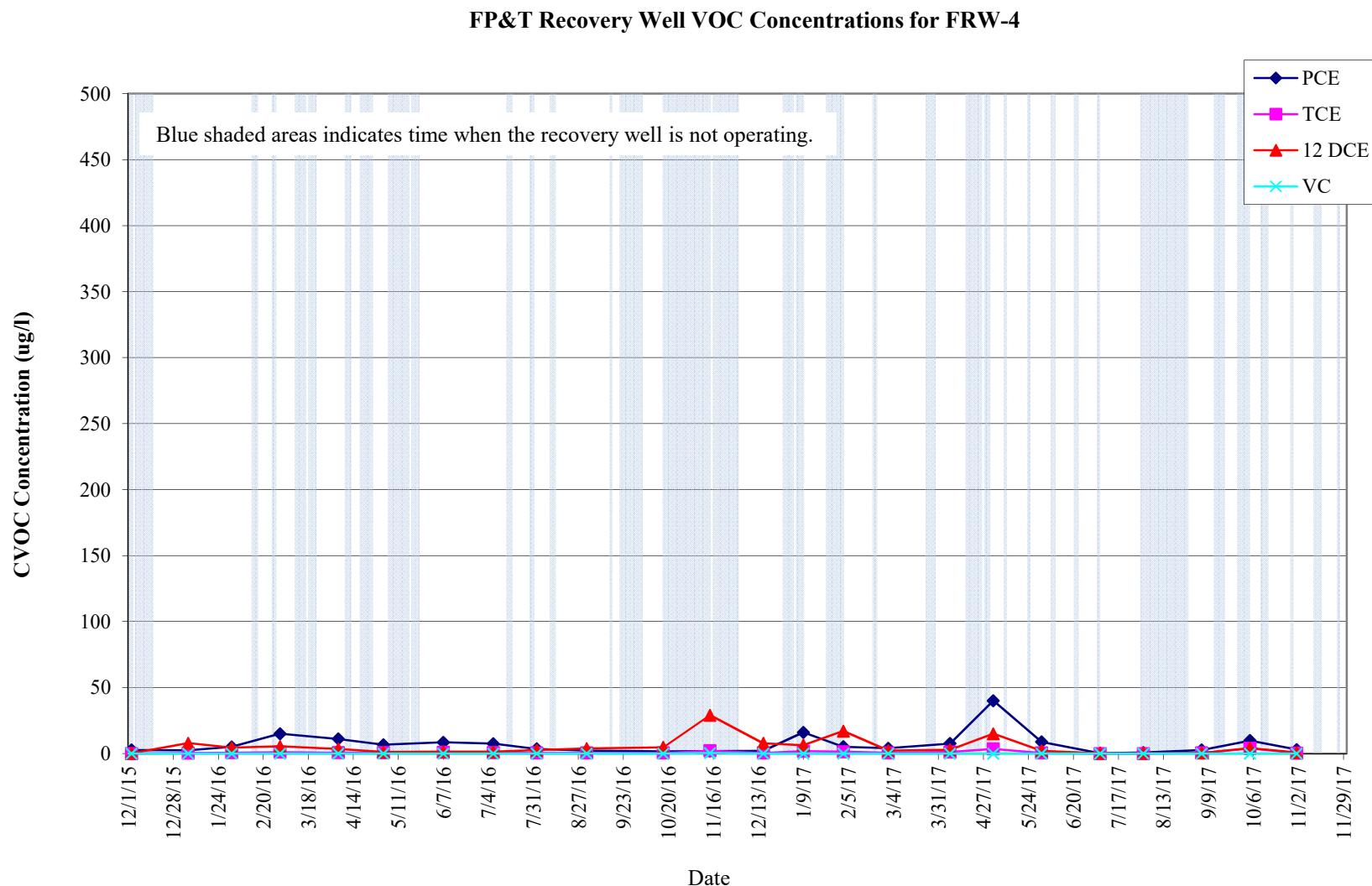
**GRAPH 5**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**



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



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



**APPENDIX I**  
**NOVEMBER 2017 LABORATORY ANALYTICAL REPORTS**  
**FOR FSP&T SYSTEM**



# Technical Report

prepared for:

**Leggette Brashears & Graham Shelton Office**  
4 Research Drive, Suite 204  
Shelton CT, 06484  
**Attention: Tunde Komuves-Sandor**

Report Date: 11/10/2017

**Client Project ID: Rowe Industries**  
York Project (SDG) No.: 17K0208

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
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■ 132-02 89th AVENUE  
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RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)

Report Date: 11/10/2017  
Client Project ID: Rowe Industries  
York Project (SDG) No.: 17K0208

**Leggette Brashears & Graham Shelton Office**  
4 Research Drive, Suite 204  
Shelton CT, 06484  
Attention: Tunde Komuves-Sandor

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## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on November 03, 2017 and listed below. The project was identified as your project: **Rowe Industries**.

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

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

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

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
17K0208-01	WQ110117:1130 NP2-6	Water	11/01/2017	11/03/2017
17K0211-01	WQ110117:1135 NP2-10	Water	11/01/2017	11/03/2017

## **General Notes for York Project (SDG) No.: 17K0208**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 11/10/2017





## Sample Information

Client Sample ID: WQ110117:1130 NP2-6

York Sample ID: 17K0208-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
17K0208	Rowe Industries	Water	November 1, 2017 11:30 am	11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS



## Sample Information

Client Sample ID: WQ110117:1130 NP2-6

York Sample ID: 17K0208-01

York Project (SDG) No.  
17K0208

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:30 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS



## Sample Information

Client Sample ID: WQ110117:1130 NP2-6

York Sample ID: 17K0208-01

York Project (SDG) No.  
17K0208

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:30 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:03	LDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 18:00	11/09/2017 05:03	LDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 18:00	11/09/2017 05:03	LDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
127-18-4	<b>Tetrachloroethylene</b>	<b>0.82</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
79-01-6	<b>Trichloroethylene</b>	<b>0.36</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:03	LDS

#### **Surrogate Recoveries**

	<b>Result</b>	<b>Acceptance Range</b>
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	125 %
2037-26-5	Surrogate: Toluene-d8	91.8 %
460-00-4	Surrogate: p-Bromofluorobenzene	95.4 %



## Sample Information

Client Sample ID: WQ110117:1135 NP2-10

York Sample ID: 17K0211-01

York Project (SDG) No.  
17K0211

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:35 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS



## Sample Information

Client Sample ID: WQ110117:1135 NP2-10

York Sample ID: 17K0211-01

York Project (SDG) No.  
17K0211

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:35 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS



## Sample Information

Client Sample ID: WQ110117:1135 NP2-10

York Sample ID: 17K0211-01

York Project (SDG) No.  
17K0211

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:35 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 13:38	11/09/2017 03:03	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 13:38	11/09/2017 03:03	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 13:38	11/09/2017 03:03	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 13:38	11/09/2017 03:03	SS

#### Surrogate Recoveries

#### Result

#### Acceptance Range

17060-07-0	Surrogate: 1,2-Dichloroethane-d4	99.6 %	69-130
2037-26-5	Surrogate: Toluene-d8	97.1 %	81-117
460-00-4	Surrogate: p-Bromofluorobenzene	117 %	79-122

### Iron by EPA 200.7

Sample Prepared by Method: EPA 200.7

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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@	Page 9 of 27	



## Sample Information

Client Sample ID: WQ110117:1135 NP2-10

York Sample ID: 17K0211-01

York Project (SDG) No.  
17K0211

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:35 am

Date Received  
11/03/2017

### Iron by EPA 200.7

Sample Prepared by Method: EPA 200.7

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	0.661	B	mg/L	0.0222	1	EPA 200.7	11/08/2017 08:31	11/10/2017 14:35	BML

Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP

### Iron, Dissolved by EPA 6010

Sample Prepared by Method: EPA 3015A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	0.0427		mg/L	0.0222	1	EPA 6010C	11/07/2017 08:46	11/07/2017 21:26	BML

Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP

### Total Dissolved Solids

Sample Prepared by Method: % Solids Prep

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Dissolved Solids	196		mg/L	10.0	1	SM 2540C	11/08/2017 02:42	11/08/2017 02:42	AA

Certifications: NELAC-NY10854-CT,CTDOH,NJDEP,PADEP



## Analytical Batch Summary

**Batch ID:** BK70349

**Preparation Method:** EPA 3015A

**Prepared By:** SY

YORK Sample ID

Client Sample ID

Preparation Date

17K0211-01

WQ110117:1135 NP2-10

11/07/17

BK70349-BLK1

Blank

11/07/17

BK70349-SRM1

Reference

11/07/17

**Batch ID:** BK70400

**Preparation Method:** % Solids Prep

**Prepared By:** AA

YORK Sample ID

Client Sample ID

Preparation Date

17K0211-01

WQ110117:1135 NP2-10

11/08/17

BK70400-BLK1

Blank

11/08/17

**Batch ID:** BK70422

**Preparation Method:** EPA 200.7

**Prepared By:** SY

YORK Sample ID

Client Sample ID

Preparation Date

17K0211-01

WQ110117:1135 NP2-10

11/08/17

BK70422-BLK1

Blank

11/08/17

BK70422-SRM1

Reference

11/08/17

**Batch ID:** BK70451

**Preparation Method:** EPA 5030B

**Prepared By:** RDS

YORK Sample ID

Client Sample ID

Preparation Date

17K0211-01

WQ110117:1135 NP2-10

11/08/17

BK70451-BLK1

Blank

11/08/17

BK70451-BS1

LCS

11/08/17

BK70451-BSD1

LCS Dup

11/08/17

**Batch ID:** BK70456

**Preparation Method:** EPA 5030B

**Prepared By:** AS

YORK Sample ID

Client Sample ID

Preparation Date

17K0208-01

WQ110117:1130 NP2-6

11/08/17

BK70456-BLK1

Blank

11/08/17

BK70456-BS1

LCS

11/08/17

BK70456-BSD1

LCS Dup

11/08/17



## Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BK70451 - EPA 5030B

#### Blank (BK70451-BLK1)

Prepared: 11/08/2017 Analyzed: 11/09/2017

1,1,1,2-Tetrachloroethane	ND	0.50	ug/L								
1,1,1-Trichloroethane	ND	0.50	"								
1,1,2,2-Tetrachloroethane	ND	0.50	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"								
1,1,2-Trichloroethane	ND	0.50	"								
1,1-Dichloroethane	ND	0.50	"								
1,1-Dichloroethylene	ND	0.50	"								
1,1-Dichloropropylene	ND	0.50	"								
1,2,3-Trichlorobenzene	0.24	0.50	"								
1,2,3-Trichloropropane	ND	0.50	"								
1,2,4-Trichlorobenzene	ND	0.50	"								
1,2,4-Trimethylbenzene	ND	0.50	"								
1,2-Dibromo-3-chloropropane	ND	0.50	"								
1,2-Dibromoethane	ND	0.50	"								
1,2-Dichlorobenzene	ND	0.50	"								
1,2-Dichloroethane	ND	0.50	"								
1,2-Dichloropropane	ND	0.50	"								
1,3,5-Trimethylbenzene	ND	0.50	"								
1,3-Dichlorobenzene	ND	0.50	"								
1,3-Dichloropropane	ND	0.50	"								
1,4-Dichlorobenzene	ND	0.50	"								
2,2-Dichloropropane	ND	0.50	"								
2-Chlorotoluene	ND	0.50	"								
2-Hexanone	ND	0.50	"								
4-Chlorotoluene	ND	0.50	"								
Acetone	1.6	2.0	"								
Benzene	ND	0.50	"								
Bromobenzene	ND	0.50	"								
Bromochloromethane	ND	0.50	"								
Bromodichloromethane	ND	0.50	"								
Bromoform	ND	0.50	"								
Bromomethane	ND	0.50	"								
Carbon tetrachloride	ND	0.50	"								
Chlorobenzene	ND	0.50	"								
Chloroethane	ND	0.50	"								
Chloroform	ND	0.50	"								
Chloromethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Dibromochloromethane	ND	0.50	"								
Dibromomethane	ND	0.50	"								
Dichlorodifluoromethane	ND	0.50	"								
Ethyl Benzene	ND	0.50	"								
Hexachlorobutadiene	ND	0.50	"								
Isopropylbenzene	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylene chloride	ND	2.0	"								
Naphthalene	ND	2.0	"								
n-Butylbenzene	ND	0.50	"								
n-Propylbenzene	ND	0.50	"								



## 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
<b>Batch BK70451 - EPA 5030B</b>											
<b>Blank (BK70451-BLK1)</b>											
o-Xylene	ND	0.50	ug/L								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butylbenzene	ND	0.50	"								
Tetrachloroethylene	ND	0.50	"								
Toluene	ND	0.50	"								
trans-1,2-Dichloroethylene	ND	0.50	"								
trans-1,3-Dichloropropylene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	10.2		"	10.0		102	69-130				
<i>Surrogate: Toluene-d8</i>	9.87		"	10.0		98.7	81-117				
<i>Surrogate: p-Bromofluorobenzene</i>	11.8		"	10.0		118	79-122				
<b>LCS (BK70451-BS1)</b>											
1,1,1,2-Tetrachloroethane	9.22		ug/L	10.0		92.2	82-126				
1,1,1-Trichloroethane	9.94		"	10.0		99.4	78-136				
1,1,2,2-Tetrachloroethane	10.6		"	10.0		106	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.2		"	10.0		102	54-165				
1,1,2-Trichloroethane	9.68		"	10.0		96.8	82-123				
1,1-Dichloroethane	9.97		"	10.0		99.7	82-129				
1,1-Dichloroethylene	10.5		"	5.00		210	68-138	High Bias			
1,1-Dichloropropylene	9.96		"	10.0		99.6	83-133				
1,2,3-Trichlorobenzene	6.29		"	10.0		62.9	76-136	Low Bias			
1,2,3-Trichloropropane	10.4		"	10.0		104	77-128				
1,2,4-Trichlorobenzene	6.95		"	10.0		69.5	76-137	Low Bias			
1,2,4-Trimethylbenzene	10.4		"	10.0		104	82-132				
1,2-Dibromo-3-chloropropane	9.33		"	10.0		93.3	45-147				
1,2-Dibromoethane	9.87		"	10.0		98.7	83-124				
1,2-Dichlorobenzene	9.72		"	10.0		97.2	79-123				
1,2-Dichloroethane	9.95		"	10.0		99.5	73-132				
1,2-Dichloropropane	10.1		"	10.0		101	78-126				
1,3,5-Trimethylbenzene	10.9		"	10.0		109	80-131				
1,3-Dichlorobenzene	9.41		"	10.0		94.1	86-122				
1,3-Dichloropropane	10.1		"	10.0		101	81-125				
1,4-Dichlorobenzene	9.89		"	10.0		98.9	85-124				
2,2-Dichloropropane	9.97		"	10.0		99.7	56-150				
2-Chlorotoluene	10.5		"	10.0		105	79-130				
2-Hexanone	10.4		"	10.0		104	51-146				
4-Chlorotoluene	10.9		"	10.0		109	79-128				
Acetone	9.34		"	10.0		93.4	14-150				
Benzene	9.70		"	10.0		97.0	85-126				
Bromobenzene	10.8		"	10.0		108	78-129				
Bromochloromethane	10.6		"	10.0		106	77-128				
Bromodichloromethane	9.65		"	10.0		96.5	79-128				
Bromoform	8.82		"	10.0		88.2	78-133				
Bromomethane	5.24		"	10.0		52.4	43-168				



## 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
<b>Batch BK70451 - EPA 5030B</b>											
<b>LCS (BK70451-BS1)</b>											
Prepared & Analyzed: 11/08/2017											
Carbon tetrachloride	9.75		ug/L	10.0	97.5	77-141					
Chlorobenzene	9.69		"	10.0	96.9	88-120					
Chloroethane	9.25		"	10.0	92.5	65-136					
Chloroform	9.78		"	10.0	97.8	82-128					
Chloromethane	9.22		"	10.0	92.2	43-155					
cis-1,2-Dichloroethylene	10.1		"	10.0	101	83-129					
cis-1,3-Dichloropropylene	9.81		"	10.0	98.1	80-131					
Dibromochloromethane	9.35		"	10.0	93.5	80-130					
Dibromomethane	9.66		"	10.0	96.6	72-134					
Dichlorodifluoromethane	9.63		"	10.0	96.3	44-144					
Ethyl Benzene	9.70		"	10.0	97.0	80-131					
Hexachlorobutadiene	5.68		"	10.0	56.8	67-146	Low Bias				
Isopropylbenzene	11.2		"	10.0	112	76-140					
Methyl tert-butyl ether (MTBE)	9.79		"	10.0	97.9	76-135					
Methylene chloride	10.6		"	10.0	106	55-137					
Naphthalene	7.57		"	10.0	75.7	70-147					
n-Butylbenzene	10.5		"	10.0	105	79-132					
n-Propylbenzene	11.1		"	10.0	111	78-133					
o-Xylene	9.61		"	10.0	96.1	78-130					
p- & m- Xylenes	19.8		"	20.0	99.2	77-133					
p-Isopropyltoluene	10.4		"	10.0	104	81-136					
sec-Butylbenzene	11.0		"	10.0	110	79-137					
Styrene	9.27		"	10.0	92.7	67-132					
tert-Butylbenzene	11.0		"	10.0	110	77-138					
Tetrachloroethylene	8.39		"	10.0	83.9	82-131					
Toluene	9.61		"	10.0	96.1	80-127					
trans-1,2-Dichloroethylene	10.2		"	10.0	102	80-132					
trans-1,3-Dichloropropylene	9.80		"	10.0	98.0	78-131					
Trichloroethylene	9.80		"	10.0	98.0	82-128					
Trichlorofluoromethane	9.06		"	10.0	90.6	67-139					
Vinyl Chloride	9.63		"	10.0	96.3	58-145					
<i>Surrogate: 1,2-Dichloroethane-d4</i>	10.1		"	10.0	101	69-130					
<i>Surrogate: Toluene-d8</i>	9.86		"	10.0	98.6	81-117					
<i>Surrogate: p-Bromofluorobenzene</i>	11.4		"	10.0	114	79-122					



## Volatile Organic Compounds by GC/MS - Quality Control Data

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### **Batch BK70451 - EPA 5030B**

LCS Dup (BK70451-BSD1)	Prepared: 11/08/2017 Analyzed: 11/09/2017									
1,1,1,2-Tetrachloroethane	9.35		ug/L	10.0	93.5	82-126			1.40	30
1,1,1-Trichloroethane	9.99		"	10.0	99.9	78-136			0.502	30
1,1,2,2-Tetrachloroethane	10.8		"	10.0	108	76-129			2.05	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.2		"	10.0	102	54-165			0.393	30
1,1,2-Trichloroethane	10.0		"	10.0	100	82-123			3.45	30
1,1-Dichloroethane	10.0		"	10.0	100	82-129			0.600	30
1,1-Dichloroethylene	10.6		"	5.00	212	68-138	High Bias		0.758	30
1,1-Dichloropropylene	9.89		"	10.0	98.9	83-133			0.705	30
1,2,3-Trichlorobenzene	6.51		"	10.0	65.1	76-136	Low Bias		3.44	30
1,2,3-Trichloropropane	10.4		"	10.0	104	77-128			0.481	30
1,2,4-Trichlorobenzene	7.20		"	10.0	72.0	76-137	Low Bias		3.53	30
1,2,4-Trimethylbenzene	10.6		"	10.0	106	82-132			1.90	30
1,2-Dibromo-3-chloropropane	9.56		"	10.0	95.6	45-147			2.44	30
1,2-Dibromoethane	10.1		"	10.0	101	83-124			2.30	30
1,2-Dichlorobenzene	10.0		"	10.0	100	79-123			2.84	30
1,2-Dichloroethane	10.1		"	10.0	101	73-132			1.79	30
1,2-Dichloropropane	10.2		"	10.0	102	78-126			0.981	30
1,3,5-Trimethylbenzene	11.0		"	10.0	110	80-131			1.18	30
1,3-Dichlorobenzene	9.65		"	10.0	96.5	86-122			2.52	30
1,3-Dichloropropane	10.4		"	10.0	104	81-125			2.44	30
1,4-Dichlorobenzene	10.2		"	10.0	102	85-124			3.28	30
2,2-Dichloropropane	9.84		"	10.0	98.4	56-150			1.31	30
2-Chlorotoluene	10.6		"	10.0	106	79-130			0.569	30
2-Hexanone	10.7		"	10.0	107	51-146			3.60	30
4-Chlorotoluene	11.0		"	10.0	110	79-128			0.915	30
Acetone	10.2		"	10.0	102	14-150			8.41	30
Benzene	9.82		"	10.0	98.2	85-126			1.23	30
Bromobenzene	11.0		"	10.0	110	78-129			2.21	30
Bromochloromethane	11.0		"	10.0	110	77-128			3.06	30
Bromodichloromethane	9.87		"	10.0	98.7	79-128			2.25	30
Bromoform	9.12		"	10.0	91.2	78-133			3.34	30
Bromomethane	5.69		"	10.0	56.9	43-168			8.23	30
Carbon tetrachloride	9.73		"	10.0	97.3	77-141			0.205	30
Chlorobenzene	9.87		"	10.0	98.7	88-120			1.84	30
Chloroethane	9.38		"	10.0	93.8	65-136			1.40	30
Chloroform	9.95		"	10.0	99.5	82-128			1.72	30
Chloromethane	9.53		"	10.0	95.3	43-155			3.31	30
cis-1,2-Dichloroethylene	10.2		"	10.0	102	83-129			1.18	30
cis-1,3-Dichloropropylene	10.0		"	10.0	100	80-131			2.32	30
Dibromochloromethane	9.62		"	10.0	96.2	80-130			2.85	30
Dibromomethane	9.93		"	10.0	99.3	72-134			2.76	30
Dichlorodifluoromethane	9.70		"	10.0	97.0	44-144			0.724	30
Ethyl Benzene	9.76		"	10.0	97.6	80-131			0.617	30
Hexachlorobutadiene	5.94		"	10.0	59.4	67-146	Low Bias		4.48	30
Isopropylbenzene	11.3		"	10.0	113	76-140			0.534	30
Methyl tert-butyl ether (MTBE)	10.1		"	10.0	101	76-135			2.82	30
Methylene chloride	10.7		"	10.0	107	55-137			1.60	30
Naphthalene	7.84		"	10.0	78.4	70-147			3.50	30
n-Butylbenzene	10.6		"	10.0	106	79-132			0.948	30
n-Propylbenzene	11.2		"	10.0	112	78-133			0.359	30
o-Xylene	9.76		"	10.0	97.6	78-130			1.55	30



## Volatile Organic Compounds by GC/MS - Quality Control Data

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BK70451 - EPA 5030B

LCS Dup (BK70451-BSD1)	Prepared: 11/08/2017 Analyzed: 11/09/2017									
p- & m-Xylenes	20.0		ug/L	20.0	99.8	77-133			0.603	30
p-Isopropyltoluene	10.5		"	10.0	105	81-136			1.34	30
sec-Butylbenzene	11.1		"	10.0	111	79-137			1.54	30
Styrene	9.44		"	10.0	94.4	67-132			1.82	30
tert-Butylbenzene	11.1		"	10.0	111	77-138			0.903	30
Tetrachloroethylene	8.46		"	10.0	84.6	82-131			0.831	30
Toluene	9.73		"	10.0	97.3	80-127			1.24	30
trans-1,2-Dichloroethylene	10.3		"	10.0	103	80-132			1.17	30
trans-1,3-Dichloropropylene	10.0		"	10.0	100	78-131			2.22	30
Trichloroethylene	9.88		"	10.0	98.8	82-128			0.813	30
Trichlorofluoromethane	9.12		"	10.0	91.2	67-139			0.660	30
Vinyl Chloride	9.71		"	10.0	97.1	58-145			0.827	30
<i>Surrogate: 1,2-Dichloroethane-d4</i>	10.0		"	10.0	100	69-130				
<i>Surrogate: Toluene-d8</i>	9.89		"	10.0	98.9	81-117				
<i>Surrogate: p-Bromofluorobenzene</i>	11.4		"	10.0	114	79-122				

### Batch BK70456 - EPA 5030B

Blank (BK70456-BLK1)	Prepared: 11/08/2017 Analyzed: 11/09/2017							
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L					
1,1,1-Trichloroethane	ND	0.50	"					
1,1,2,2-Tetrachloroethane	ND	0.50	"					
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"					
1,1,2-Trichloroethane	ND	0.50	"					
1,1-Dichloroethane	ND	0.50	"					
1,1-Dichloroethylene	ND	0.50	"					
1,1-Dichloropropylene	ND	0.50	"					
1,2,3-Trichlorobenzene	ND	0.50	"					
1,2,3-Trichloropropane	ND	0.50	"					
1,2,4-Trichlorobenzene	ND	0.50	"					
1,2,4-Trimethylbenzene	ND	0.50	"					
1,2-Dibromo-3-chloropropane	ND	0.50	"					
1,2-Dibromoethane	ND	0.50	"					
1,2-Dichlorobenzene	ND	0.50	"					
1,2-Dichloroethane	ND	0.50	"					
1,2-Dichloropropane	ND	0.50	"					
1,3,5-Trimethylbenzene	ND	0.50	"					
1,3-Dichlorobenzene	ND	0.50	"					
1,3-Dichloropropane	ND	0.50	"					
1,4-Dichlorobenzene	ND	0.50	"					
2,2-Dichloropropane	ND	0.50	"					
2-Chlorotoluene	ND	0.50	"					
2-Hexanone	ND	0.50	"					
4-Chlorotoluene	ND	0.50	"					
Acetone	ND	2.0	"					
Benzene	ND	0.50	"					
Bromobenzene	ND	0.50	"					
Bromochloromethane	ND	0.50	"					
Bromodichloromethane	ND	0.50	"					
Bromoform	ND	0.50	"					
Bromomethane	ND	0.50	"					



## 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	RPD Limit	RPD Flag
<b>Batch BK70456 - EPA 5030B</b>											
<b>Blank (BK70456-BLK1)</b>											
Carbon tetrachloride	ND	0.50	ug/L								
Chlorobenzene	ND	0.50	"								
Chloroethane	ND	0.50	"								
Chloroform	ND	0.50	"								
Chloromethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Dibromochloromethane	ND	0.50	"								
Dibromomethane	ND	0.50	"								
Dichlorodifluoromethane	ND	0.50	"								
Ethyl Benzene	ND	0.50	"								
Hexachlorobutadiene	ND	0.50	"								
Isopropylbenzene	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylene chloride	ND	2.0	"								
Naphthalene	ND	2.0	"								
n-Butylbenzene	ND	0.50	"								
n-Propylbenzene	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butylbenzene	ND	0.50	"								
Tetrachloroethylene	ND	0.50	"								
Toluene	ND	0.50	"								
trans-1,2-Dichloroethylene	ND	0.50	"								
trans-1,3-Dichloropropylene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	12.5		"	10.0		125	69-130				
<i>Surrogate: Toluene-d8</i>	9.31		"	10.0		93.1	81-117				
<i>Surrogate: p-Bromofluorobenzene</i>	9.36		"	10.0		93.6	79-122				



## Volatile Organic Compounds by GC/MS - Quality Control Data

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### **Batch BK70456 - EPA 5030B**

#### **LCS (BK70456-BS1)**

Prepared: 11/08/2017 Analyzed: 11/09/2017

1,1,1,2-Tetrachloroethane	11.0		ug/L	10.0	110	82-126					
1,1,1-Trichloroethane	12.0		"	10.0	120	78-136					
1,1,2,2-Tetrachloroethane	8.25		"	10.0	82.5	76-129					
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.79		"	10.0	97.9	54-165					
1,1,2-Trichloroethane	9.49		"	10.0	94.9	82-123					
1,1-Dichloroethane	9.66		"	10.0	96.6	82-129					
1,1-Dichloroethylene	9.32		"	10.0	93.2	68-138					
1,1-Dichloropropylene	9.68		"	10.0	96.8	83-133					
1,2,3-Trichlorobenzene	10.1		"	10.0	101	76-136					
1,2,3-Trichloropropane	10.2		"	10.0	102	77-128					
1,2,4-Trichlorobenzene	9.94		"	10.0	99.4	76-137					
1,2,4-Trimethylbenzene	9.99		"	10.0	99.9	82-132					
1,2-Dibromo-3-chloropropane	8.91		"	10.0	89.1	45-147					
1,2-Dibromoethane	9.91		"	10.0	99.1	83-124					
1,2-Dichlorobenzene	10.0		"	10.0	100	79-123					
1,2-Dichloroethane	11.7		"	10.0	117	73-132					
1,2-Dichloropropane	8.08		"	10.0	80.8	78-126					
1,3,5-Trimethylbenzene	10.1		"	10.0	101	80-131					
1,3-Dichlorobenzene	10.3		"	10.0	103	86-122					
1,3-Dichloropropane	9.07		"	10.0	90.7	81-125					
1,4-Dichlorobenzene	10.1		"	10.0	101	85-124					
2,2-Dichloropropane	9.68		"	10.0	96.8	56-150					
2-Chlorotoluene	9.75		"	10.0	97.5	79-130					
2-Hexanone	8.04		"	10.0	80.4	51-146					
4-Chlorotoluene	9.70		"	10.0	97.0	79-128					
Acetone	7.52		"	10.0	75.2	14-150					
Benzene	9.57		"	10.0	95.7	85-126					
Bromobenzene	8.88		"	10.0	88.8	78-129					
Bromochloromethane	9.03		"	10.0	90.3	77-128					
Bromodichloromethane	10.1		"	10.0	101	79-128					
Bromoform	11.6		"	10.0	116	78-133					
Bromomethane	9.47		"	10.0	94.7	43-168					
Carbon tetrachloride	12.0		"	10.0	120	77-141					
Chlorobenzene	10.1		"	10.0	101	88-120					
Chloroethane	8.22		"	10.0	82.2	65-136					
Chloroform	11.0		"	10.0	110	82-128					
Chloromethane	6.65		"	10.0	66.5	43-155					
cis-1,2-Dichloroethylene	9.59		"	10.0	95.9	83-129					
cis-1,3-Dichloropropylene	9.08		"	10.0	90.8	80-131					
Dibromochloromethane	10.8		"	10.0	108	80-130					
Dibromomethane	9.31		"	10.0	93.1	72-134					
Dichlorodifluoromethane	7.70		"	10.0	77.0	44-144					
Ethyl Benzene	10.1		"	10.0	101	80-131					
Hexachlorobutadiene	16.8		"	10.0	168	67-146	High Bias				
Isopropylbenzene	9.99		"	10.0	99.9	76-140					
Methyl tert-butyl ether (MTBE)	10.5		"	10.0	105	76-135					
Methylene chloride	8.67		"	10.0	86.7	55-137					
Naphthalene	7.78		"	10.0	77.8	70-147					
n-Butylbenzene	10.0		"	10.0	100	79-132					
n-Propylbenzene	9.68		"	10.0	96.8	78-133					
o-Xylene	10.3		"	10.0	103	78-130					



## 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
<b>Batch BK70456 - EPA 5030B</b>											
<b>LCS (BK70456-BS1)</b>											
Prepared: 11/08/2017 Analyzed: 11/09/2017											
p- & m- Xylenes	20.7		ug/L	20.0	104	77-133					
p-Isopropyltoluene	10.4		"	10.0	104	81-136					
sec-Butylbenzene	9.85		"	10.0	98.5	79-137					
Styrene	10.2		"	10.0	102	67-132					
tert-Butylbenzene	10.3		"	10.0	103	77-138					
Tetrachloroethylene	10.7		"	10.0	107	82-131					
Toluene	9.22		"	10.0	92.2	80-127					
trans-1,2-Dichloroethylene	9.26		"	10.0	92.6	80-132					
trans-1,3-Dichloropropylene	9.72		"	10.0	97.2	78-131					
Trichloroethylene	9.09		"	10.0	90.9	82-128					
Trichlorofluoromethane	11.1		"	10.0	111	67-139					
Vinyl Chloride	7.48		"	10.0	74.8	58-145					
<i>Surrogate: 1,2-Dichloroethane-d4</i>	12.6		"	10.0	126	69-130					
<i>Surrogate: Toluene-d8</i>	9.31		"	10.0	93.1	81-117					
<i>Surrogate: p-Bromofluorobenzene</i>	9.36		"	10.0	93.6	79-122					
<b>LCS Dup (BK70456-BSD1)</b>											
Prepared: 11/08/2017 Analyzed: 11/09/2017											
1,1,1,2-Tetrachloroethane	10.9		ug/L	10.0	109	82-126			0.730	30	
1,1,1-Trichloroethane	11.6		"	10.0	116	78-136			3.06	30	
1,1,2,2-Tetrachloroethane	8.22		"	10.0	82.2	76-129			0.364	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.38		"	10.0	93.8	54-165			4.28	30	
1,1,2-Trichloroethane	9.48		"	10.0	94.8	82-123			0.105	30	
1,1-Dichloroethane	9.27		"	10.0	92.7	82-129			4.12	30	
1,1-Dichloroethylene	9.01		"	10.0	90.1	68-138			3.38	30	
1,1-Dichloropropylene	9.34		"	10.0	93.4	83-133			3.58	30	
1,2,3-Trichlorobenzene	9.93		"	10.0	99.3	76-136			1.80	30	
1,2,3-Trichloropropane	9.80		"	10.0	98.0	77-128			3.80	30	
1,2,4-Trichlorobenzene	9.82		"	10.0	98.2	76-137			1.21	30	
1,2,4-Trimethylbenzene	9.72		"	10.0	97.2	82-132			2.74	30	
1,2-Dibromo-3-chloropropane	8.95		"	10.0	89.5	45-147			0.448	30	
1,2-Dibromoethane	9.68		"	10.0	96.8	83-124			2.35	30	
1,2-Dichlorobenzene	9.89		"	10.0	98.9	79-123			1.51	30	
1,2-Dichloroethane	12.0		"	10.0	120	73-132			2.03	30	
1,2-Dichloropropane	7.94		"	10.0	79.4	78-126			1.75	30	
1,3,5-Trimethylbenzene	9.82		"	10.0	98.2	80-131			3.11	30	
1,3-Dichlorobenzene	9.93		"	10.0	99.3	86-122			3.27	30	
1,3-Dichloropropane	9.21		"	10.0	92.1	81-125			1.53	30	
1,4-Dichlorobenzene	9.88		"	10.0	98.8	85-124			2.60	30	
2,2-Dichloropropane	9.36		"	10.0	93.6	56-150			3.36	30	
2-Chlorotoluene	9.38		"	10.0	93.8	79-130			3.87	30	
2-Hexanone	8.14		"	10.0	81.4	51-146			1.24	30	
4-Chlorotoluene	9.40		"	10.0	94.0	79-128			3.14	30	
Acetone	7.53		"	10.0	75.3	14-150			0.133	30	
Benzene	9.29		"	10.0	92.9	85-126			2.97	30	
Bromobenzene	8.74		"	10.0	87.4	78-129			1.59	30	
Bromochloromethane	8.87		"	10.0	88.7	77-128			1.79	30	
Bromodichloromethane	9.93		"	10.0	99.3	79-128			1.60	30	
Bromoform	12.1		"	10.0	121	78-133			4.14	30	
Bromomethane	9.58		"	10.0	95.8	43-168			1.15	30	
Carbon tetrachloride	11.7		"	10.0	117	77-141			3.29	30	
Chlorobenzene	9.90		"	10.0	99.0	88-120			1.80	30	



## Volatile Organic Compounds by GC/MS - Quality Control Data

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BK70456 - EPA 5030B</b>											
<b>LCS Dup (BK70456-BSD1)</b>											
Prepared: 11/08/2017 Analyzed: 11/09/2017											
Chloroethane	8.04		ug/L	10.0	80.4	65-136			2.21	30	
Chloroform	10.7		"	10.0	107	82-128			2.95	30	
Chloromethane	6.34		"	10.0	63.4	43-155			4.77	30	
cis-1,2-Dichloroethylene	9.41		"	10.0	94.1	83-129			1.89	30	
cis-1,3-Dichloropropylene	9.07		"	10.0	90.7	80-131			0.110	30	
Dibromochloromethane	10.8		"	10.0	108	80-130			0.184	30	
Dibromomethane	9.54		"	10.0	95.4	72-134			2.44	30	
Dichlorodifluoromethane	7.29		"	10.0	72.9	44-144			5.47	30	
Ethyl Benzene	9.90		"	10.0	99.0	80-131			2.20	30	
Hexachlorobutadiene	15.9		"	10.0	159	67-146	High Bias		5.82	30	
Isopropylbenzene	9.68		"	10.0	96.8	76-140			3.15	30	
Methyl tert-butyl ether (MTBE)	10.3		"	10.0	103	76-135			1.63	30	
Methylene chloride	8.54		"	10.0	85.4	55-137			1.51	30	
Naphthalene	7.74		"	10.0	77.4	70-147			0.515	30	
n-Butylbenzene	9.67		"	10.0	96.7	79-132			3.56	30	
n-Propylbenzene	9.30		"	10.0	93.0	78-133			4.00	30	
o-Xylene	10.1		"	10.0	101	78-130			2.25	30	
p- & m- Xylenes	20.3		"	20.0	102	77-133			1.90	30	
p-Isopropyltoluene	10.1		"	10.0	101	81-136			2.83	30	
sec-Butylbenzene	9.49		"	10.0	94.9	79-137			3.72	30	
Styrene	10.1		"	10.0	101	67-132			1.08	30	
tert-Butylbenzene	9.97		"	10.0	99.7	77-138			3.06	30	
Tetrachloroethylene	10.5		"	10.0	105	82-131			1.32	30	
Toluene	9.07		"	10.0	90.7	80-127			1.64	30	
trans-1,2-Dichloroethylene	8.87		"	10.0	88.7	80-132			4.30	30	
trans-1,3-Dichloropropylene	9.68		"	10.0	96.8	78-131			0.412	30	
Trichloroethylene	9.00		"	10.0	90.0	82-128			0.995	30	
Trichlorofluoromethane	10.8		"	10.0	108	67-139			2.92	30	
Vinyl Chloride	7.29		"	10.0	72.9	58-145			2.57	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	12.5		"	10.0	125	69-130					
<i>Surrogate: Toluene-d8</i>	9.32		"	10.0	93.2	81-117					
<i>Surrogate: p-Bromofluorobenzene</i>	9.23		"	10.0	92.3	79-122					



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD RPD	RPD Limit	RPD Flag
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**Batch BK70349 - EPA 3015A**

**Blank (BK70349-BLK1)**

Iron - Dissolved ND 0.0222 mg/L Prepared & Analyzed: 11/07/2017

**Reference (BK70349-SRM1)**

Iron - Dissolved 1.41 ug/mL 1.40 101 84.9-115 Prepared & Analyzed: 11/07/2017

**Batch BK70422 - EPA 200.7**

**Blank (BK70422-BLK1)**

Iron 0.0870 0.0222 mg/L Prepared & Analyzed: 11/08/2017

**Reference (BK70422-SRM1)**

Iron 1.63 ug/mL 1.40 117 84.9-115 High Bias Prepared & Analyzed: 11/08/2017



### 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	RPD Limit	RPD Flag
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#### Batch BK70400 - % Solids Prep

##### Blank (BK70400-BLK1)

Total Dissolved Solids ND 10.0 mg/L

Prepared & Analyzed: 11/08/2017



### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
17K0208-01	WQ110117:1130 NP2-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17K0211-01	WQ110117:1135 NP2-10	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



## Sample and Data Qualifiers Relating to This Work Order

- QL-02 This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
- J Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
- CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
- B Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

### Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.



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

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

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# YORK

ANALYTICAL LABORATORIES, INC.

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.

YOUR Information		Report To:	Invoice To:	YOUR Project ID	Turn-Around Time	Report Type
Company: <i>L.B.6</i>	Address: <i>4 Research Dr. Suite 3d1</i>	Company: <i>Same</i>	Address: <i>    </i>	RUSH - Same Day	<input type="checkbox"/>	Summary Report <i>X</i> , pdf
Phone No. <i>263-929-8555</i>	Phone No. <i>    </i>	Phone No. <i>    </i>	Phone No. <i>    </i>	RUSH - Next Day	<input type="checkbox"/>	Summary w/ QA Summary <i>X</i> , pdf
Contact Person: <i>Tunde Sander</i>	E-Mail Address: <i>Tsander@lbbt.com</i>	Attention: <i>    </i>	E-Mail Address: <i>    </i>	RUSH - Two Day	<input type="checkbox"/>	CT RCP Package
		Attention: <i>    </i>	E-Mail Address: <i>    </i>	RUSH - Three Day	<input type="checkbox"/>	CTRCP DQA/DUE Pkg
				RUSH - Four Day	<input type="checkbox"/>	NY ASP A Package
					<input type="checkbox"/>	NY ASP B Package <i>N/A TO ONLY</i>
					<input type="checkbox"/>	NJDEP Red. Deliv.
					<input type="checkbox"/>	Electronic Data Deliverables (EDD)
					<input checked="" type="checkbox"/>	Simple Excel <i>X</i>
					<input type="checkbox"/>	NY SEDCE EQuIS
					<input type="checkbox"/>	EQUIS (std)
					<input type="checkbox"/>	EZ-EDD (EQuIS)
					<input type="checkbox"/>	NJDEP HrSite EDD
					<input type="checkbox"/>	GIS/KEY (std)
					<input type="checkbox"/>	Other
					<input type="checkbox"/>	York Regulatory Comparison
					<input type="checkbox"/>	Excel Spreadsheet
					<input type="checkbox"/>	Compare to following Regs (please fill in)
Sample from: CT	NY	X	NJ	Standard(5-7 Days) <i>X</i>		
Semi-Volts	Particulates	Metals	Misc. Org.	Full Lists	Misc.	
3265 full	TCS	RCH48	TPH GRO	Ph/Poll.	Carcinogen	
8270 or 625	8082 PCB	PP13 list	TPH DRO	TCL Organics	Reactivity	
Site Spec	STARS list	808 Pest	CT ETPH	TAL MACN	Ignitability	
524	Nassau Co.	8151Herb	CT 15 list	NY 310-13	Flesh Point	
STARs list	BN Only	CT RCP	TAQMs list	TPH 1664	Steve Anal.	
87EX	Acids Only	PAH list	App. IX	Air TO-4A	Pat 329-Rearr.	
Safolk Co.	Ketones	PAH list	NAUPE list	Air TO15	Pat 340-Baader	TOX
MTBE	Oxygenates	TAQMs list	SP/Port/TCLP Total	Air STARS	Pat 340- <sup>new</sup>	BTU/B
TCL list	TCLP list	CT RCP list	TCLP Pest	Dissolved	Pat 340- <sup>new</sup>	Acute Tox.
S - soil	Other - specify (oil, etc.)	TCLP list	TCLP Herb	SP/Port/TCLP	NYCDEP Sewer	IOC
WW - wastewater	CT RCP list	S24-2	NAUPE list	Indiv. Metals	NYCDEP Sewer	
GW - groundwater	Atron only	502-2	NAUPE list	Mercury	Asbestos	
DW - drinking water	Hab. only	NJDEP list	App. IX	Lead	Silica	
Air-A - ambient air	App. IX list	SP/Port/TCLP	608 Pest	TAQMs		
Air-SV - soil vapor	SP/Port/TCLP	608 PCB	SP/Port/TCLP	Belton		
Name (printed)	Container Description(s)					
Sample Identification	Date Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below			
<i>WQ10117: 1130 NP2-6</i>	<i>11-1-17</i>	<i>G.W</i>	<i>3 VOA's</i>			
<i>WQ10117: 1135 NP2-10</i>	<i>11-1-17</i>	<i>G.W</i>	<i>3 VOA's</i>			
<p>Comments</p> <p>Preservation: <i>4°C</i> ✓ <i>Frozen</i> <input checked="" type="checkbox"/> <i>HCl</i> <input checked="" type="checkbox"/> <i>MeOH</i> <input checked="" type="checkbox"/> <i>HNO<sub>3</sub></i> <input checked="" type="checkbox"/> <i>NaOH</i> <input type="checkbox"/></p> <p>Check before Analytical Special Instructions: <i>✓</i> <i>ZnCl<sub>2</sub></i> <input checked="" type="checkbox"/> <i>Ascorbic Acid</i> <input checked="" type="checkbox"/> <i>Other</i></p> <p>Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/></p> <p>Samples Relinquished By: <i>J. T. C.</i></p> <p>Samples Received in LAB BY: <i>J. T. C.</i></p> <p>Date/Time: <i>11/17/17 8:20</i></p> <p>Date/Time: <i>11/17/17 2:25</i></p> <p>Date/Time: <i>11/17/17 2:25</i></p> <p>Temperature on Receipt: <i>24 °C</i></p> <p>System: <i>(system)</i></p>						

# YORK

PHYSICAL LABORATORIES

ANALYTICAL LABORATORIES, INC.

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.

**NOTE: York's D.O. Return is complete.**  
This document serves as your written authorization to York to proceed with the analyses requested and your

1771 1994 JOURNAL OF CLIMATE

(System)

**APPENDIX II**  
**NOVEMBER 2017 LABORATORY ANALYTICAL REPORTS**  
**FOR FSP&T AND FP&T RECOVERY WELLS**



# Technical Report

prepared for:

**Leggette Brashears & Graham Shelton Office**  
4 Research Drive, Suite 204  
Shelton CT, 06484  
**Attention: Tunde Komuves-Sandor**

Report Date: 11/10/2017

**Client Project ID: Rowe Industries**  
York Project (SDG) No.: 17K0213

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
(203) 325-1371



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

RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)

Report Date: 11/10/2017  
Client Project ID: Rowe Industries  
York Project (SDG) No.: 17K0213

**Leggette Brashears & Graham Shelton Office**  
4 Research Drive, Suite 204  
Shelton CT, 06484  
Attention: Tunde Komuves-Sandor

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## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on November 03, 2017 and listed below. The project was identified as your project: **Rowe Industries**.

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

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

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

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
17K0213-01	WQ110117:1100 FRW-1	Water	11/01/2017	11/03/2017
17K0213-02	WQ110117:1105 FRW-2	Water	11/01/2017	11/03/2017
17K0213-03	WQ110117:1110 FRW-3	Water	11/01/2017	11/03/2017
17K0213-04	WQ110117:1115 FRW-4	Water	11/01/2017	11/03/2017
17K0213-05	WQ110117:1140NP1-1-2	Water	11/01/2017	11/03/2017

## **General Notes for York Project (SDG) No.: 17K0213**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 11/10/2017





## Sample Information

**Client Sample ID:** WQ110117:1100 FRW-1

**York Sample ID:**

**17K0213-01**

**York Project (SDG) No.**  
17K0213

**Client Project ID**  
Rowe Industries

**Matrix**  
Water

**Collection Date/Time**  
November 1, 2017 11:00 am

**Date Received**  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
71-55-6	<b>1,1,1-Trichloroethane</b>	<b>0.37</b>	CCV-E, J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS



## Sample Information

Client Sample ID: WQ110117:1100 FRW-1

York Sample ID: 17K0213-01

York Project (SDG) No.  
17K0213

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:00 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
156-59-2	cis-1,2-Dichloroethylene	1.7		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS



## Sample Information

**Client Sample ID:** WQ110117:1100 FRW-1

**York Sample ID:** 17K0213-01

**York Project (SDG) No.**  
17K0213

**Client Project ID**  
Rowe Industries

**Matrix**  
Water

**Collection Date/Time**  
November 1, 2017 11:00 am

**Date Received**  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:29	LDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 18:00	11/09/2017 05:29	LDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 18:00	11/09/2017 05:29	LDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
127-18-4	<b>Tetrachloroethylene</b>	<b>72</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
79-01-6	<b>Trichloroethylene</b>	<b>1.3</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:29	LDS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	129 %	69-130								
2037-26-5	Surrogate: Toluene-d8	91.9 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	94.1 %	79-122								



## Sample Information

Client Sample ID: WQ110117:1105 FRW-2

York Sample ID: 17K0213-02

York Project (SDG) No.  
17K0213

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:05 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS



## Sample Information

Client Sample ID: WQ110117:1105 FRW-2

York Sample ID: 17K0213-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17K0213	Rowe Industries	Water	November 1, 2017 11:05 am	11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS



## Sample Information

Client Sample ID: WQ110117:1105 FRW-2

York Sample ID: 17K0213-02

York Project (SDG) No.  
17K0213

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:05 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 05:55	LDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 18:00	11/09/2017 05:55	LDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 18:00	11/09/2017 05:55	LDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
127-18-4	Tetrachloroethylene	45		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
79-01-6	Trichloroethylene	0.76		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 05:55	LDS

Surrogate Recoveries	Result	Acceptance Range
17060-07-0 Surrogate: 1,2-Dichloroethane-d4	123 %	69-130
2037-26-5 Surrogate: Toluene-d8	92.2 %	81-117
460-00-4 Surrogate: p-Bromofluorobenzene	92.6 %	79-122



## Sample Information

**Client Sample ID:** WQ110117:1110 FRW-3

**York Sample ID:** 17K0213-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17K0213	Rowe Industries	Water	November 1, 2017 11:10 am	11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS



## Sample Information

Client Sample ID: WQ110117:1110 FRW-3

York Sample ID: 17K0213-03

York Project (SDG) No.  
17K0213

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:10 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
156-59-2	cis-1,2-Dichloroethylene	3.4		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
98-82-8	Isopropylbenzene	0.33	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS



## Sample Information

Client Sample ID: WQ110117:1110 FRW-3

York Sample ID: 17K0213-03

York Project (SDG) No.  
17K0213

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:10 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
103-65-1	<b>n-Propylbenzene</b>	<b>0.30</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:22	LDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
127-18-4	<b>Tetrachloroethylene</b>	<b>17</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
79-01-6	<b>Trichloroethylene</b>	<b>1.2</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:22	LDS

#### Surrogate Recoveries      Acceptance Range

17060-07-0	Surrogate: 1,2-Dichloroethane-d4	127 %	69-130
2037-26-5	Surrogate: Toluene-d8	92.7 %	81-117
460-00-4	Surrogate: p-Bromofluorobenzene	101 %	79-122



## Sample Information

Client Sample ID: WQ110117:1115 FRW-4

York Sample ID: 17K0213-04

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
17K0213	Rowe Industries	Water	November 1, 2017 11:15 am	11/03/2017

### Volatile Organics, 8260 List - Low Level

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS



## Sample Information

Client Sample ID: WQ110117:1115 FRW-4

York Sample ID: 17K0213-04

York Project (SDG) No.  
17K0213

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:15 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
156-59-2	cis-1,2-Dichloroethylene	0.78		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS



## Sample Information

Client Sample ID: WQ110117:1115 FRW-4

York Sample ID: 17K0213-04

York Project (SDG) No.  
17K0213

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:15 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 06:48	LDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 18:00	11/09/2017 06:48	LDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 18:00	11/09/2017 06:48	LDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
127-18-4	Tetrachloroethylene	3.0		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
79-01-6	Trichloroethylene	0.32	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 06:48	LDS

Surrogate Recoveries	Result	Acceptance Range
17060-07-0 Surrogate: 1,2-Dichloroethane-d4	127 %	69-130
2037-26-5 Surrogate: Toluene-d8	91.8 %	81-117
460-00-4 Surrogate: p-Bromofluorobenzene	95.4 %	79-122



## Sample Information

Client Sample ID: WQ110117:1140NP1-1-2

York Sample ID: 17K0213-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17K0213	Rowe Industries	Water	November 1, 2017 11:40 am	11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 07:14	LDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 07:14	LDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 07:14	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 07:14	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 07:14	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 07:14	LDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS



## Sample Information

Client Sample ID: WQ110117:1140NP1-1-2

York Sample ID: 17K0213-05

York Project (SDG) No.  
17K0213

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
November 1, 2017 11:40 am

Date Received  
11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 07:14	LDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 07:14	LDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 07:14	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 07:14	LDS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS



## Sample Information

Client Sample ID: WQ110117:1140NP1-1-2

York Sample ID: 17K0213-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17K0213	Rowe Industries	Water	November 1, 2017 11:40 am	11/03/2017

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

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	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/08/2017 18:00	11/09/2017 07:14	LDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 18:00	11/09/2017 07:14	LDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/08/2017 18:00	11/09/2017 07:14	LDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
127-18-4	Tetrachloroethylene	0.31	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
79-01-6	Trichloroethylene	0.39	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/08/2017 18:00	11/09/2017 07:14	LDS

#### Surrogate Recoveries      Result      Acceptance Range

17060-07-0	Surrogate: 1,2-Dichloroethane-d4	128 %	69-130
2037-26-5	Surrogate: Toluene-d8	92.1 %	81-117
460-00-4	Surrogate: p-Bromofluorobenzene	92.5 %	79-122



## Analytical Batch Summary

**Batch ID:** BK70456

**Preparation Method:** EPA 5030B

**Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
17K0213-01	WQ110117:1100 FRW-1	11/08/17
17K0213-02	WQ110117:1105 FRW-2	11/08/17
17K0213-03	WQ110117:1110 FRW-3	11/08/17
17K0213-04	WQ110117:1115 FRW-4	11/08/17
17K0213-05	WQ110117:1140NP1-1-2	11/08/17
BK70456-BLK1	Blank	11/08/17
BK70456-BS1	LCS	11/08/17
BK70456-BSD1	LCS Dup	11/08/17



## 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	RPD Limit	Flag
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### Batch BK70456 - EPA 5030B

#### Blank (BK70456-BLK1)

Prepared: 11/08/2017 Analyzed: 11/09/2017

1,1,1,2-Tetrachloroethane	ND	0.50	ug/L								
1,1,1-Trichloroethane	ND	0.50	"								
1,1,2,2-Tetrachloroethane	ND	0.50	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"								
1,1,2-Trichloroethane	ND	0.50	"								
1,1-Dichloroethane	ND	0.50	"								
1,1-Dichloroethylene	ND	0.50	"								
1,1-Dichloropropylene	ND	0.50	"								
1,2,3-Trichlorobenzene	ND	0.50	"								
1,2,3-Trichloropropane	ND	0.50	"								
1,2,4-Trichlorobenzene	ND	0.50	"								
1,2,4-Trimethylbenzene	ND	0.50	"								
1,2-Dibromo-3-chloropropane	ND	0.50	"								
1,2-Dibromoethane	ND	0.50	"								
1,2-Dichlorobenzene	ND	0.50	"								
1,2-Dichloroethane	ND	0.50	"								
1,2-Dichloropropane	ND	0.50	"								
1,3,5-Trimethylbenzene	ND	0.50	"								
1,3-Dichlorobenzene	ND	0.50	"								
1,3-Dichloropropane	ND	0.50	"								
1,4-Dichlorobenzene	ND	0.50	"								
2,2-Dichloropropane	ND	0.50	"								
2-Chlorotoluene	ND	0.50	"								
2-Hexanone	ND	0.50	"								
4-Chlorotoluene	ND	0.50	"								
Acetone	ND	2.0	"								
Benzene	ND	0.50	"								
Bromobenzene	ND	0.50	"								
Bromochloromethane	ND	0.50	"								
Bromodichloromethane	ND	0.50	"								
Bromoform	ND	0.50	"								
Bromomethane	ND	0.50	"								
Carbon tetrachloride	ND	0.50	"								
Chlorobenzene	ND	0.50	"								
Chloroethane	ND	0.50	"								
Chloroform	ND	0.50	"								
Chloromethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Dibromochloromethane	ND	0.50	"								
Dibromomethane	ND	0.50	"								
Dichlorodifluoromethane	ND	0.50	"								
Ethyl Benzene	ND	0.50	"								
Hexachlorobutadiene	ND	0.50	"								
Isopropylbenzene	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylene chloride	ND	2.0	"								
Naphthalene	ND	2.0	"								
n-Butylbenzene	ND	0.50	"								
n-Propylbenzene	ND	0.50	"								



## 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
<b>Batch BK70456 - EPA 5030B</b>											
<b>Blank (BK70456-BLK1)</b>											
o-Xylene	ND	0.50	ug/L								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butylbenzene	ND	0.50	"								
Tetrachloroethylene	ND	0.50	"								
Toluene	ND	0.50	"								
trans-1,2-Dichloroethylene	ND	0.50	"								
trans-1,3-Dichloropropylene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
Surrogate: 1,2-Dichloroethane-d4	12.5		"	10.0		125	69-130				
Surrogate: Toluene-d8	9.31		"	10.0		93.1	81-117				
Surrogate: p-Bromofluorobenzene	9.36		"	10.0		93.6	79-122				
<b>LCS (BK70456-BS1)</b>											
1,1,1,2-Tetrachloroethane	11.0		ug/L	10.0		110	82-126				
1,1,1-Trichloroethane	12.0		"	10.0		120	78-136				
1,1,2,2-Tetrachloroethane	8.25		"	10.0		82.5	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.79		"	10.0		97.9	54-165				
1,1,2-Trichloroethane	9.49		"	10.0		94.9	82-123				
1,1-Dichloroethane	9.66		"	10.0		96.6	82-129				
1,1-Dichloroethylene	9.32		"	10.0		93.2	68-138				
1,1-Dichloropropylene	9.68		"	10.0		96.8	83-133				
1,2,3-Trichlorobenzene	10.1		"	10.0		101	76-136				
1,2,3-Trichloropropane	10.2		"	10.0		102	77-128				
1,2,4-Trichlorobenzene	9.94		"	10.0		99.4	76-137				
1,2,4-Trimethylbenzene	9.99		"	10.0		99.9	82-132				
1,2-Dibromo-3-chloropropane	8.91		"	10.0		89.1	45-147				
1,2-Dibromoethane	9.91		"	10.0		99.1	83-124				
1,2-Dichlorobenzene	10.0		"	10.0		100	79-123				
1,2-Dichloroethane	11.7		"	10.0		117	73-132				
1,2-Dichloropropane	8.08		"	10.0		80.8	78-126				
1,3,5-Trimethylbenzene	10.1		"	10.0		101	80-131				
1,3-Dichlorobenzene	10.3		"	10.0		103	86-122				
1,3-Dichloropropane	9.07		"	10.0		90.7	81-125				
1,4-Dichlorobenzene	10.1		"	10.0		101	85-124				
2,2-Dichloropropane	9.68		"	10.0		96.8	56-150				
2-Chlorotoluene	9.75		"	10.0		97.5	79-130				
2-Hexanone	8.04		"	10.0		80.4	51-146				
4-Chlorotoluene	9.70		"	10.0		97.0	79-128				
Acetone	7.52		"	10.0		75.2	14-150				
Benzene	9.57		"	10.0		95.7	85-126				
Bromobenzene	8.88		"	10.0		88.8	78-129				
Bromochloromethane	9.03		"	10.0		90.3	77-128				
Bromodichloromethane	10.1		"	10.0		101	79-128				
Bromoform	11.6		"	10.0		116	78-133				
Bromomethane	9.47		"	10.0		94.7	43-168				



## 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
<b>Batch BK70456 - EPA 5030B</b>											
<b>LCS (BK70456-BS1)</b>											
Prepared: 11/08/2017 Analyzed: 11/09/2017											
Carbon tetrachloride	12.0		ug/L	10.0		120	77-141				
Chlorobenzene	10.1		"	10.0		101	88-120				
Chloroethane	8.22		"	10.0		82.2	65-136				
Chloroform	11.0		"	10.0		110	82-128				
Chloromethane	6.65		"	10.0		66.5	43-155				
cis-1,2-Dichloroethylene	9.59		"	10.0		95.9	83-129				
cis-1,3-Dichloropropylene	9.08		"	10.0		90.8	80-131				
Dibromochloromethane	10.8		"	10.0		108	80-130				
Dibromomethane	9.31		"	10.0		93.1	72-134				
Dichlorodifluoromethane	7.70		"	10.0		77.0	44-144				
Ethyl Benzene	10.1		"	10.0		101	80-131				
Hexachlorobutadiene	16.8		"	10.0		168	67-146	High Bias			
Isopropylbenzene	9.99		"	10.0		99.9	76-140				
Methyl tert-butyl ether (MTBE)	10.5		"	10.0		105	76-135				
Methylene chloride	8.67		"	10.0		86.7	55-137				
Naphthalene	7.78		"	10.0		77.8	70-147				
n-Butylbenzene	10.0		"	10.0		100	79-132				
n-Propylbenzene	9.68		"	10.0		96.8	78-133				
o-Xylene	10.3		"	10.0		103	78-130				
p- & m- Xylenes	20.7		"	20.0		104	77-133				
p-Isopropyltoluene	10.4		"	10.0		104	81-136				
sec-Butylbenzene	9.85		"	10.0		98.5	79-137				
Styrene	10.2		"	10.0		102	67-132				
tert-Butylbenzene	10.3		"	10.0		103	77-138				
Tetrachloroethylene	10.7		"	10.0		107	82-131				
Toluene	9.22		"	10.0		92.2	80-127				
trans-1,2-Dichloroethylene	9.26		"	10.0		92.6	80-132				
trans-1,3-Dichloropropylene	9.72		"	10.0		97.2	78-131				
Trichloroethylene	9.09		"	10.0		90.9	82-128				
Trichlorofluoromethane	11.1		"	10.0		111	67-139				
Vinyl Chloride	7.48		"	10.0		74.8	58-145				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	12.6		"	10.0		126	69-130				
<i>Surrogate: Toluene-d8</i>	9.31		"	10.0		93.1	81-117				
<i>Surrogate: p-Bromofluorobenzene</i>	9.36		"	10.0		93.6	79-122				



## Volatile Organic Compounds by GC/MS - Quality Control Data

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BK70456 - EPA 5030B

LCS Dup (BK70456-BSD1)	Prepared: 11/08/2017 Analyzed: 11/09/2017									
1,1,1,2-Tetrachloroethane	10.9		ug/L	10.0	109	82-126			0.730	30
1,1,1-Trichloroethane	11.6		"	10.0	116	78-136			3.06	30
1,1,2,2-Tetrachloroethane	8.22		"	10.0	82.2	76-129			0.364	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.38		"	10.0	93.8	54-165			4.28	30
1,1,2-Trichloroethane	9.48		"	10.0	94.8	82-123			0.105	30
1,1-Dichloroethane	9.27		"	10.0	92.7	82-129			4.12	30
1,1-Dichloroethylene	9.01		"	10.0	90.1	68-138			3.38	30
1,1-Dichloropropylene	9.34		"	10.0	93.4	83-133			3.58	30
1,2,3-Trichlorobenzene	9.93		"	10.0	99.3	76-136			1.80	30
1,2,3-Trichloropropane	9.80		"	10.0	98.0	77-128			3.80	30
1,2,4-Trichlorobenzene	9.82		"	10.0	98.2	76-137			1.21	30
1,2,4-Trimethylbenzene	9.72		"	10.0	97.2	82-132			2.74	30
1,2-Dibromo-3-chloropropane	8.95		"	10.0	89.5	45-147			0.448	30
1,2-Dibromoethane	9.68		"	10.0	96.8	83-124			2.35	30
1,2-Dichlorobenzene	9.89		"	10.0	98.9	79-123			1.51	30
1,2-Dichloroethane	12.0		"	10.0	120	73-132			2.03	30
1,2-Dichloropropane	7.94		"	10.0	79.4	78-126			1.75	30
1,3,5-Trimethylbenzene	9.82		"	10.0	98.2	80-131			3.11	30
1,3-Dichlorobenzene	9.93		"	10.0	99.3	86-122			3.27	30
1,3-Dichloropropane	9.21		"	10.0	92.1	81-125			1.53	30
1,4-Dichlorobenzene	9.88		"	10.0	98.8	85-124			2.60	30
2,2-Dichloropropane	9.36		"	10.0	93.6	56-150			3.36	30
2-Chlorotoluene	9.38		"	10.0	93.8	79-130			3.87	30
2-Hexanone	8.14		"	10.0	81.4	51-146			1.24	30
4-Chlorotoluene	9.40		"	10.0	94.0	79-128			3.14	30
Acetone	7.53		"	10.0	75.3	14-150			0.133	30
Benzene	9.29		"	10.0	92.9	85-126			2.97	30
Bromobenzene	8.74		"	10.0	87.4	78-129			1.59	30
Bromochloromethane	8.87		"	10.0	88.7	77-128			1.79	30
Bromodichloromethane	9.93		"	10.0	99.3	79-128			1.60	30
Bromoform	12.1		"	10.0	121	78-133			4.14	30
Bromomethane	9.58		"	10.0	95.8	43-168			1.15	30
Carbon tetrachloride	11.7		"	10.0	117	77-141			3.29	30
Chlorobenzene	9.90		"	10.0	99.0	88-120			1.80	30
Chloroethane	8.04		"	10.0	80.4	65-136			2.21	30
Chloroform	10.7		"	10.0	107	82-128			2.95	30
Chloromethane	6.34		"	10.0	63.4	43-155			4.77	30
cis-1,2-Dichloroethylene	9.41		"	10.0	94.1	83-129			1.89	30
cis-1,3-Dichloropropylene	9.07		"	10.0	90.7	80-131			0.110	30
Dibromochloromethane	10.8		"	10.0	108	80-130			0.184	30
Dibromomethane	9.54		"	10.0	95.4	72-134			2.44	30
Dichlorodifluoromethane	7.29		"	10.0	72.9	44-144			5.47	30
Ethyl Benzene	9.90		"	10.0	99.0	80-131			2.20	30
Hexachlorobutadiene	15.9		"	10.0	159	67-146	High Bias		5.82	30
Isopropylbenzene	9.68		"	10.0	96.8	76-140			3.15	30
Methyl tert-butyl ether (MTBE)	10.3		"	10.0	103	76-135			1.63	30
Methylene chloride	8.54		"	10.0	85.4	55-137			1.51	30
Naphthalene	7.74		"	10.0	77.4	70-147			0.515	30
n-Butylbenzene	9.67		"	10.0	96.7	79-132			3.56	30
n-Propylbenzene	9.30		"	10.0	93.0	78-133			4.00	30
o-Xylene	10.1		"	10.0	101	78-130			2.25	30



## Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BK70456 - EPA 5030B</b>											
<b>LCS Dup (BK70456-BSD1)</b>											
Prepared: 11/08/2017 Analyzed: 11/09/2017											
p- & m- Xylenes	20.3		ug/L	20.0	102	77-133			1.90	30	
p-Isopropyltoluene	10.1		"	10.0	101	81-136			2.83	30	
sec-Butylbenzene	9.49		"	10.0	94.9	79-137			3.72	30	
Styrene	10.1		"	10.0	101	67-132			1.08	30	
tert-Butylbenzene	9.97		"	10.0	99.7	77-138			3.06	30	
Tetrachloroethylene	10.5		"	10.0	105	82-131			1.32	30	
Toluene	9.07		"	10.0	90.7	80-127			1.64	30	
trans-1,2-Dichloroethylene	8.87		"	10.0	88.7	80-132			4.30	30	
trans-1,3-Dichloropropylene	9.68		"	10.0	96.8	78-131			0.412	30	
Trichloroethylene	9.00		"	10.0	90.0	82-128			0.995	30	
Trichlorofluoromethane	10.8		"	10.0	108	67-139			2.92	30	
Vinyl Chloride	7.29		"	10.0	72.9	58-145			2.57	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	12.5		"	10.0	125	69-130					
<i>Surrogate: Toluene-d8</i>	9.32		"	10.0	93.2	81-117					
<i>Surrogate: p-Bromofluorobenzene</i>	9.23		"	10.0	92.3	79-122					



### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
17K0213-01	WQ110117:1100 FRW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17K0213-02	WQ110117:1105 FRW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17K0213-03	WQ110117:1110 FRW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17K0213-04	WQ110117:1115 FRW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17K0213-05	WQ110117:1140NP1-1-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



## Sample and Data Qualifiers Relating to This Work Order

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

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

CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

### Definitions and Other Explanations

\* Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.

ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)

RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.

LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.

LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.

MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.

Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.

NR Not reported

RPD Relative Percent Difference

Wet The data has been reported on an as-received (wet weight) basis

Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

Non-Dir. Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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



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

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**YORK**  
CANADA  
HYDRATORIE

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## **Field Chain-of-Custody Record**

**NOTE:** York's Std Terms & Conditions are listed on the back side of this document.

YORK LTD., YORK, ONTARIO, CANADA N3B 2L2  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Site Terms & Conditions.

(Row & Faw)