

**SUMMARY OF SYSTEM OPERATIONS**  
*(October 1, 2017 through October 31, 2017)*

<i>Reporting period:</i>	31 days
<i>Volume of contaminated groundwater treated:</i>	1,107,632 gallons
<i>Volume of contaminated groundwater treated since 12/17/02:</i>	1,426,687,632 gallons
<i>Mass of Volatile Organics (VOCS) removed from groundwater:</i>	0.01 pounds
<i>Cumulative mass of VOCs removed from groundwater since 12/17/02:</i>	229.1 pounds
<i>No. hours of operation during reporting period:</i>	557 hours (75.0%)*
<i>No. of operating recovery wells:</i>	1 out of 9 full-scale pump and treat recovery wells and focused recovery wells FRW-1 through FRW-4. With EPA approval: RW-1 was shut down on July 13, 2005; RW-3 was shut down on May 21, 2012; RW-4 was shut down on January 1, 2014; RW-5 was shut down on May 23, 2012; RW-6 was shut down on January 1, 2014; RW-7 was shut down on January 1, 2014; RW-8 was shut down on April 30, 2012; and RW-9 was shut down on April 30, 2012.

\*Downtime includes maintenance periods.

**COMMUNITY INVOLVEMENT**

EPA will continue to send out this type of update to let the community know how the site cleanup is progressing. A copy of this update and other site-related documents are available at the John Jermain Library for the public's review. If you have any questions about this update or the site in general, please contact:

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e-mail: [tames.pam@epa.gov](mailto:tames.pam@epa.gov)

or

Cecilia Echols  
Community Involvement Coordinator  
telephone: 1-800-346-5009  
e-mail: [echols.cecilia@epa.gov](mailto:echols.cecilia@epa.gov)

**PROJECT STATUS MEMORANDUM**

**NO. 10-17**

**TO:** Pamela Tames, USEPA

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

**DATE:** December 12, 2017

**PROJECT:** Rowe Industries Superfund Site  
NYS Site ID No. 152106  
Groundwater Recovery and Treatment System  
October 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 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 October 1, 2017 through October 31, 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**

*(October 1, 2017 through October 31, 2017)*

- |  |                                      |
|--|--------------------------------------|
| 1. Hours of operation during the reporting period:   | 557 hours (75.0%)                    |
| 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:   | 1,107,632 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                           |
| 7. Cumulative mass of VOCs recovered since startup on 12/17/02:<br>(calculations can be provided upon request)   | 229.1 pounds                         |
| 8. Effluent VOC vapor concentration for the reporting period:  | 0.01 mg/m <sup>3</sup> (see Table 8) |
| 9. Was the effluent VOC vapor emission rate below 0.022 lbs./hr.:<br>(calculations can be provided upon request) | yes (0.00006 lbs./hr.)               |

## PUMP AND TREAT SYSTEM STATUS SUMMARY

The following table summarizes recovery well parameters for the operating recovery wells. Note, system was not operational from October 11-16, 25-26 and 29-31.

Well	Volume pumped (gal)	Total VOC Concentration ( $\mu\text{g/L}$ )	VOC Recovery (lbs)
RW-2 <sup>1/</sup>	973,527	0.6	< 0.01
FRW-1 <sup>2/</sup>	19,456	65.5	0.01
FRW-2 <sup>2/</sup>	3,543	58.6	< 0.01
FRW-3 <sup>2/</sup>	445	46.8	< 0.01
FRW-4 <sup>2/</sup>	65,179	17.8	0.01

<sup>1/</sup>The above table summarizes the parameters for RW-2 from October 1 to October 31, 2017.

<sup>2/</sup>The above table summarizes the parameters for the FRWs from October 4, 2017 through November 1, 2017.

On October 11, 2017, the system was shut-down due to a power failure but was left off until October 16, 2017 to facilitate the discharge basin maintenance work. On October 12, 2017, the FP&T transfer pump malfunctioned due to uneven voltage from a damaged electrical lead wire. D&D Electric repaired this electrical problem on October 16, 2017. Power failure alarms shut-down the system on October 26 and 29, 2017; the system was returned to operation following system diagnostic checks.

On October 14, 2017, the recharge basins were rehabilitated by Renner Landscaping, Inc. On October 17, 2017, representatives of Kraft Heinz Foods Company, the EPA, the NYSDEC and LBGHES met at the site for the five-year inspection as part of the required work associated with the EPA five-year review. Additional details about the maintenance activities are provided in Table 1.

### SUMMARY OF SAMPLING ACTIVITIES

October 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 3-7 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 2-6 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 was below the ARAR; concentrations at RW-2 have been below the ARAR for over 8 years.

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

The monthly sample results are similar to historic observations during the month of October. 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 November 2017 include:

- normal bi-weekly/monthly O&M activities; and,
- measure depth-to-water during pumping conditions.

MMG:cmm

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

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## **TABLES**

**TABLE 1**

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

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**MAINTENANCE LOG  
(October 1, 2017 through October 31, 2017)**

<b>Date</b>	<b>Time</b>	<b>System Changes/Modifications</b>	<b>Personnel</b>
10/4/2017		The FP&T system was off since 9/27/17 with a high level alarm in the holding tank. Troubleshooting included taking voltage and current readings going to the transfer pump motor and these readings were within tolerances. The contactor for the FP&T transfer pump appeared to be functioning normally. No obstructions/clogs were found in the pump or piping. Further troubleshooting revealed that the capacitor in the pump motor failed. The transfer pump was replaced with the spare pump and the broken transfer pump was returned to the D&D Electric shop for evaluation and repair.	MG/SP/ RR
		Troubleshooting of the FRW-4 Level Mate revealed faulty wiring between the Level Mate and the FP&T control panel. The wiring was replaced and this action corrected the pressure transducer water level display reading on the FRW-4 Level Mate meter.	MG/SP/ RR
		Cleaned the FRW and FP&T system effluent flow meter paddle wheels and restarted the FRW wells.	MG/SP/ RR
10/11/2017	1:59 PM	The FSP&T and FP&T systems shut down due to a power failure alarm.	
10/12/2017	11:28 AM	Checked the FSP&T and FP&T systems prior to acknowledging and resetting the alarm. The FP&T transfer pump motor malfunctioned causing a high water level in the FP&T holding tank. D&D Electric was contacted and was requested to conduct a site visit on Monday, 10/16/17 to assess the situation. Left the treatment systems off in preparation for the recharge basin rehabilitation work.	JF
10/14/17		Renner Landscaping completed recharge basin rehabilitation for the primary and secondary recharge basins.	Renner Landscaping
10/16/2017		Changed the multi-bag filter bags (400 um) in Banks 1 and 2, seven of eight housings used. Banks 1 and 2 left open. Bank 3 closed.	EF
		Troubleshooting of the FP&T transfer pump by D&D Electric revealed that the pump was not damaged and that inconsistent, uneven voltage was being transmitted from one of two electric lead wires in a junction box that provides electric service to the FP&T trailer. D&D electric replaced the faulty electric lead wire with a compatible, spare lead wire that was also located in the junction box (the spare lead wire was previously used for a heat exchanger, which was previously decommissioned and removed from the Site). Following this electrical repair work, the FP&T trailer was receiving consistent, even voltage from both lead wires in the electrical junction box. The transfer pump currently being used was reset and restarted without issue. The FP&T transfer pump was monitored for approximately two hours and appeared to be operating normally. The previously broken transfer pump discussed in the 10/4/17 entry was fixed by D&D Electric and returned to the site. This pump will be stored on-site as a spare in the event the existing FP&T transfer pump malfunctions.	EF/RR
	1:28 PM	Cleaned the FRW and FP&T system effluent flow meter paddle wheels and restarted the FP&T system with FRW-1, 2, 3 and 4 operating.	EF

**TABLE 1**

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

---

**MAINTENANCE LOG  
(October 1, 2017 through October 31, 2017)**

<b>Date</b>	<b>Time</b>	<b>System Changes/Modifications</b>	<b>Personnel</b>
10/17/2017		The EPA 5-Year Inspection was completed in preparation for EPA's 5-year review. Representatives from Kraft Heinz Foods Company, EPA, NYSDEC and LBGHES were present.	EF/MG/WB/ KG/PT/JT/PL
10/25/2017	1:59 PM	The FSP&T and FP&T systems shut down due to a power failure alarm.	
10/26/2017	5:38 PM	Checked the FSP&T and FP&T systems, acknowledged and reset alarms and restarted the FSP&T and FP&T treatment systems.	JF
10/29/2017	10:16 PM	The FSP&T and FP&T systems shut down due to a power failure alarm.	
10/31/2017	12:04 PM	Checked the FSP&T and FP&T systems, acknowledged and reset alarms and restarted the FSP&T and FP&T treatment systems.	JF

Notes:

EF	Evan Foster, LBGHES	RR	Richard Ramirez, D&D Electric
JF	Jamie Forrester, LBGHES	WB	William Beckman, LBGHES
MG	Mark Goldberg, LBGHES	SP	Scott Philbrick, LBGHES
KG	Kevin Kyrias-Gann, Kraft	PT	Pamela Tames, EPA
JT	Jeffrey Trad, NYSDEC	PL	Payson Long, NYSDEC

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)
SPDES Limits	6.5 to 8.5	---	5	5	5	5	5	5	5	5	5	5	5	---	10	7	---	---
17-Oct-16 <sup>3/</sup>	6.5	141	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	1.27	0.455
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

SPDES: State Pollutant Discharge Elimination System

mg/l: Milligrams per liter

ug/l: Micrograms per liter

---: Not established

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

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

ND: Not detected

NM: Not Measured

TDS: Total dissolved solids

PCE: Tetrachloroethylene

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

TCE: Trichloroethylene

1,1-DCA: 1,1-Dichloroethane

1,1-DCE: 1,1-Dichloroethene

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

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

## Notes:

- Based on the SPDES criteria from an NYSDEC letter dated on May 6, 2016, the allowable pH range for the Rowe Site is between 6.5 and 8.5. The pH on October 16, 2017, was 6.8.
- "Effluent" samples were collected from sample port labeled NP2-10 unless otherwise noted.
- Starting in October 2016, FSP&T system samples are collected monthly instead of once every two weeks. The pH of the effluent water is measured two times per month.

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	TCE	TCA	Chloroform	MTBE	1,1-Dichloro-ethane	cis-1,2-Dichloro-ethene	1,1-Dichloro-ethene	Methylene Chloride	Toluene	Benzene	m,p-Xylene	o-Xylene
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(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-Oct-15	ND<0.5	0.46 J	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-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	0.28 J	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	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

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 exceedance 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>v</sup>	5	5	5 <sup>v</sup>	5	5 <sup>v</sup>	NE
5-Nov-15	53	3.6	29	0.76	0.78	ND<0.5	ND<2	ND<0.5	ND<0.5	1.8 J
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<0.5	ND<2	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										

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
5-Nov-15	49	4.2	3.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.4 J
The FRWs were shut down between November 18 and November 25, 2015.								
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								

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
5-Nov-15	30	3.6	49	0.41 J	ND<0.5	0.30 J	0.29 J	0.49 J	0.22 J	ND<0.5	ND<0.5	1.0 J
The FRWs were shut down between November 18 and November 25, 2015.												
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 o May 17 to June 1, 2017												
1-Jun-17	83	5.8	12	0.37 J	ND<0.5	ND<0.5	ND<0.5	0.38 J	0.38 J	ND<0.5	ND<0.5	1.0
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												

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.

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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
<b>FRW-4 shut down sometime between October 20 and November 5, 2015, and did not operate during the month of November</b>						
5-Nov-15	0.87	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2
<b>FRW-4 was restarted on December 3, 2015</b>						
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>						

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 8

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

Carbon Unit System Air Quality Results																		
Precarbon	Sample Name	Date	Time	Parameters (mg/m <sup>3</sup> )													TOTAL VOCs	
				PCE	TCE	TCA	DCA	cis-DCE	trans-DCE	Toluene	m&p-Xylenes	o-Xylene	CF	MC	EB	Freon 113		
	AQ101716:1300NP4-1	10/17/2016 <sup>1/</sup>	13:00	0.0140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	
	AQ011817:1200NP4-1	1/18/2017	12:00	0.0150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	
	AQ040717:1400NP4-1	4/7/2017	14:00	0.0009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	
	AQ040717:1400NP4-1	7/19/2017	13:45	0.0067	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	
	AQ100417:945NP4-1	10/4/2017	9:45	0.0037	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	

Postcarbon																		
Postcarbon	Sample Name	Date	Time	Parameters (mg/m <sup>3</sup> )													TOTAL VOCs	
				PCE	TCE	TCA	DCA	cis-DCE	trans-DCE	Toluene	m&p-Xylenes	o-Xylene	CF	MC	EB	Freon 113		
	AQ101716:1310NP4-3	10/17/2016 <sup>1/</sup>	13:10	0.150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15	
	AQ011817:1210NP4-3	1/18/2017 <sup>2/</sup>	12:10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	
	AQ040717:1405NP4-3 <sup>3/</sup>	4/7/2017	14:05	0.0007	ND	0.0018	ND	0.0033	ND	ND	ND	ND	ND	0.0032	ND	ND	0.02	
	AQ040717:1405NP4-3	7/19/2017	13:50	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00	
	AQ100417:945NP4-3	10/4/2017	9:45	0.0028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	

PCE: Tetrachloroethylene  
DCA: 1,1-Dichloroethane  
MC: Methylene Chloride

TCE: Trichloroethene  
cis-DCE: cis-1,2-Dichloroethene  
EB: Ethylbenzene

TCA: 1,1,1-Trichloroethane  
trans-DCE: trans-1,2-Dichloroethylene

DCE: 1,1-Dichloroethene  
CF: Chloroform

Note: NA - Not Applicable. Method blank contamination. The associated method blank contains the target analyte at a reportable level.

NS - Not Sampled

ND - Not Detected

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

The air quality results summarized above are for the compounds listed in the FSP&T groundwater discharge permit. Low concentrations of additional compounds are accounted for in the Total VOCs column, however, are not listed.

<sup>1/</sup> Starting with September 2016 only influent and effluent air samples will be collected, samples will be collected on a quarterly basis during January, April, July and October.

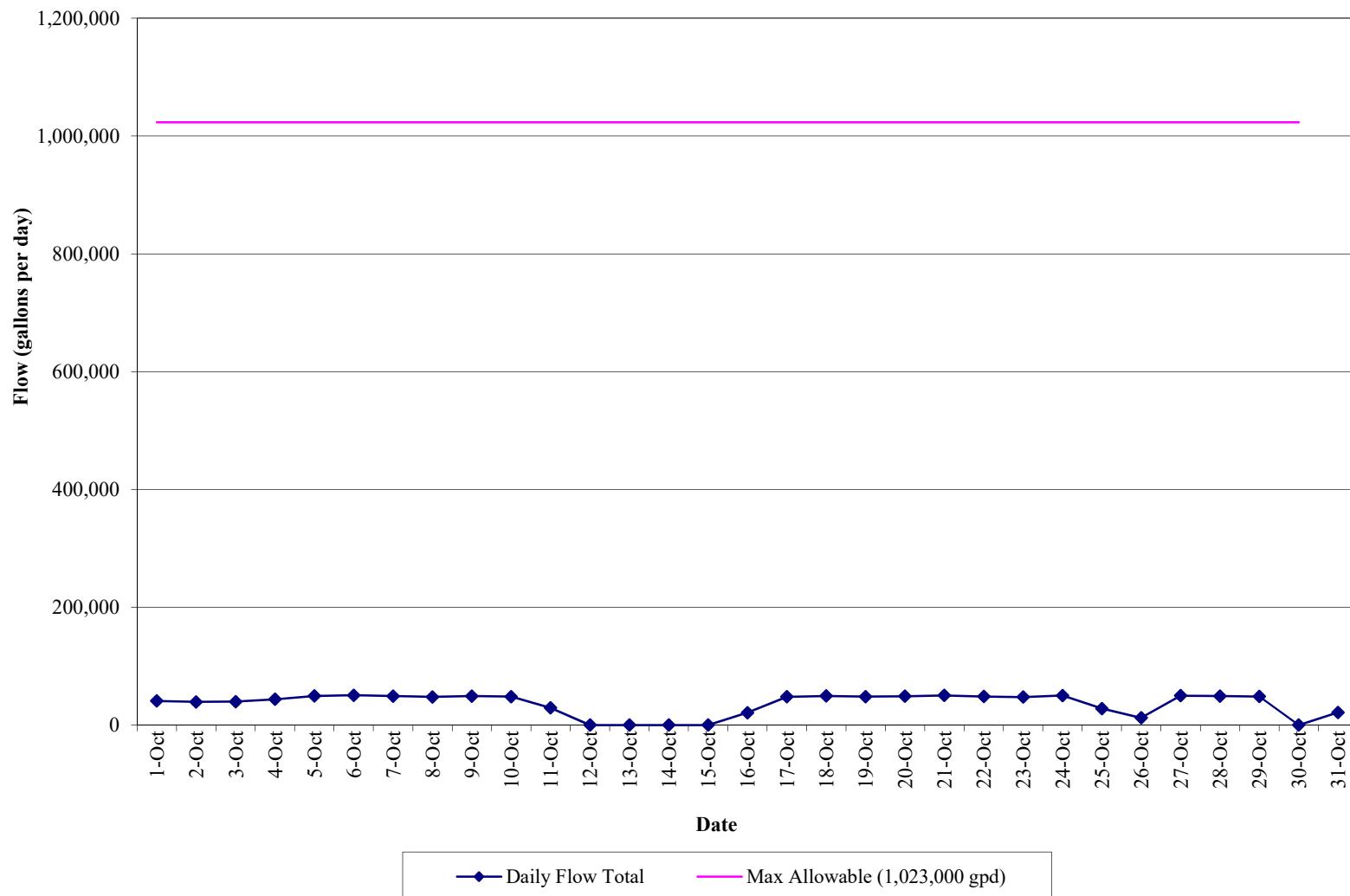
<sup>2/</sup> While none of the primary constituents of concern were detected in the effluent air sample as indicated in the table above, low concentrations of acetone and carbon disulfide were detected.

<sup>3/</sup> Sample was inadvertently misslabeled as NP4-2 and is listed as such in the laboratory report and on the Chain of Custody. However, the air sample was collected from the NP4-3 sample port.

## **GRAPHS**

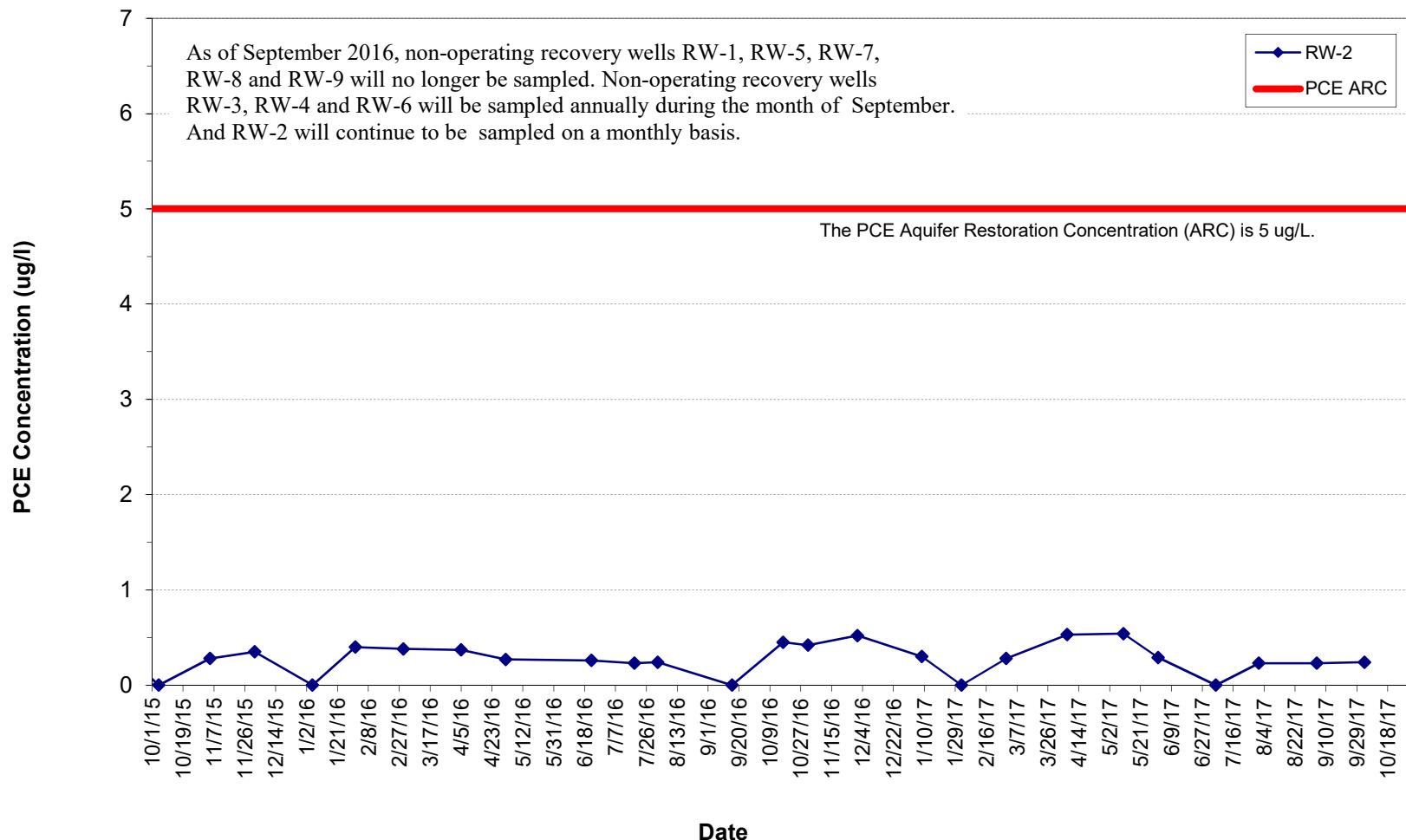
**GRAPH 1**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**

**Effluent Flow Data**  
**(October 1, 2017 to October 31, 2017)**



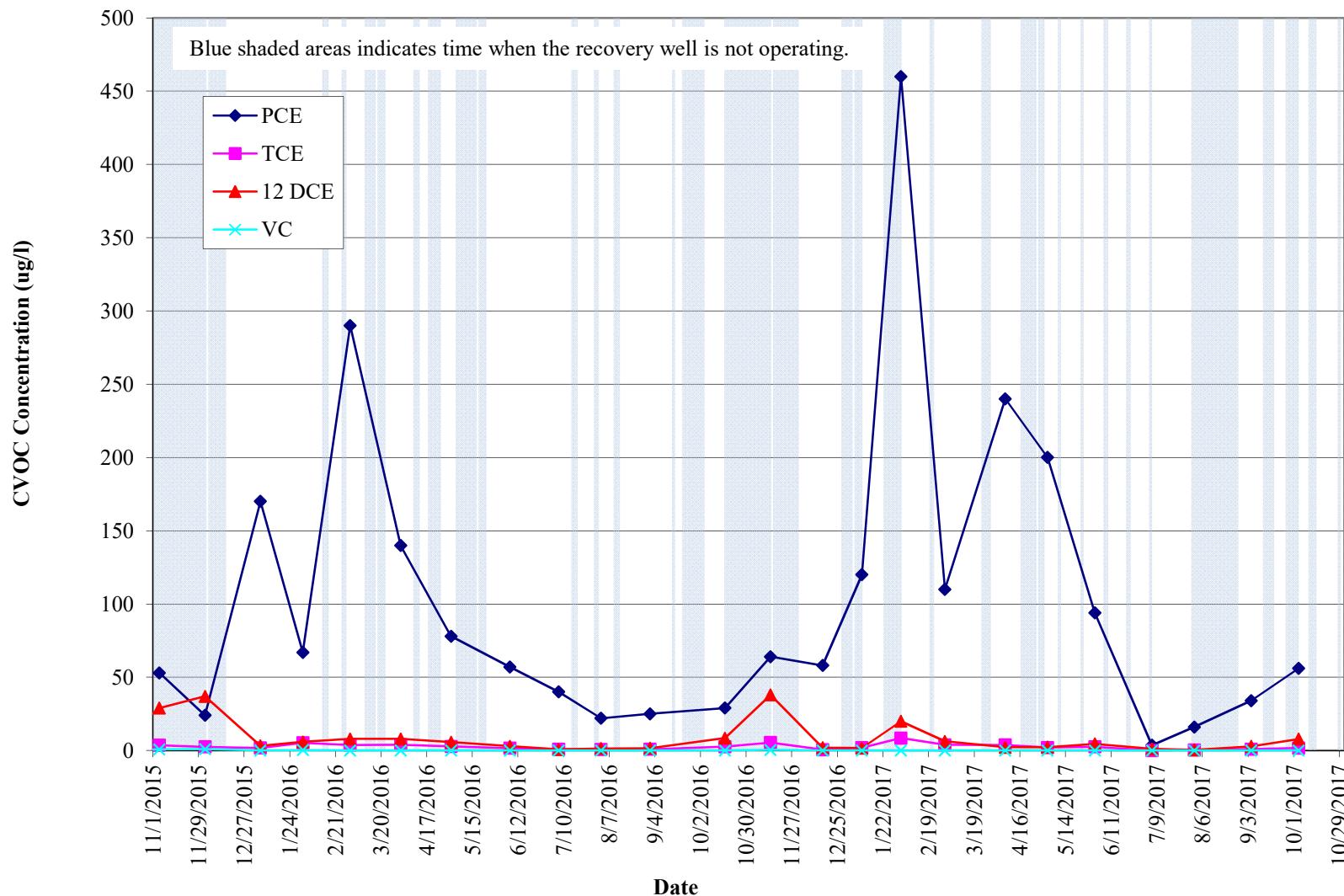
**GRAPH 2**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**

**FSP&T Recovery Well PCE Concentration**

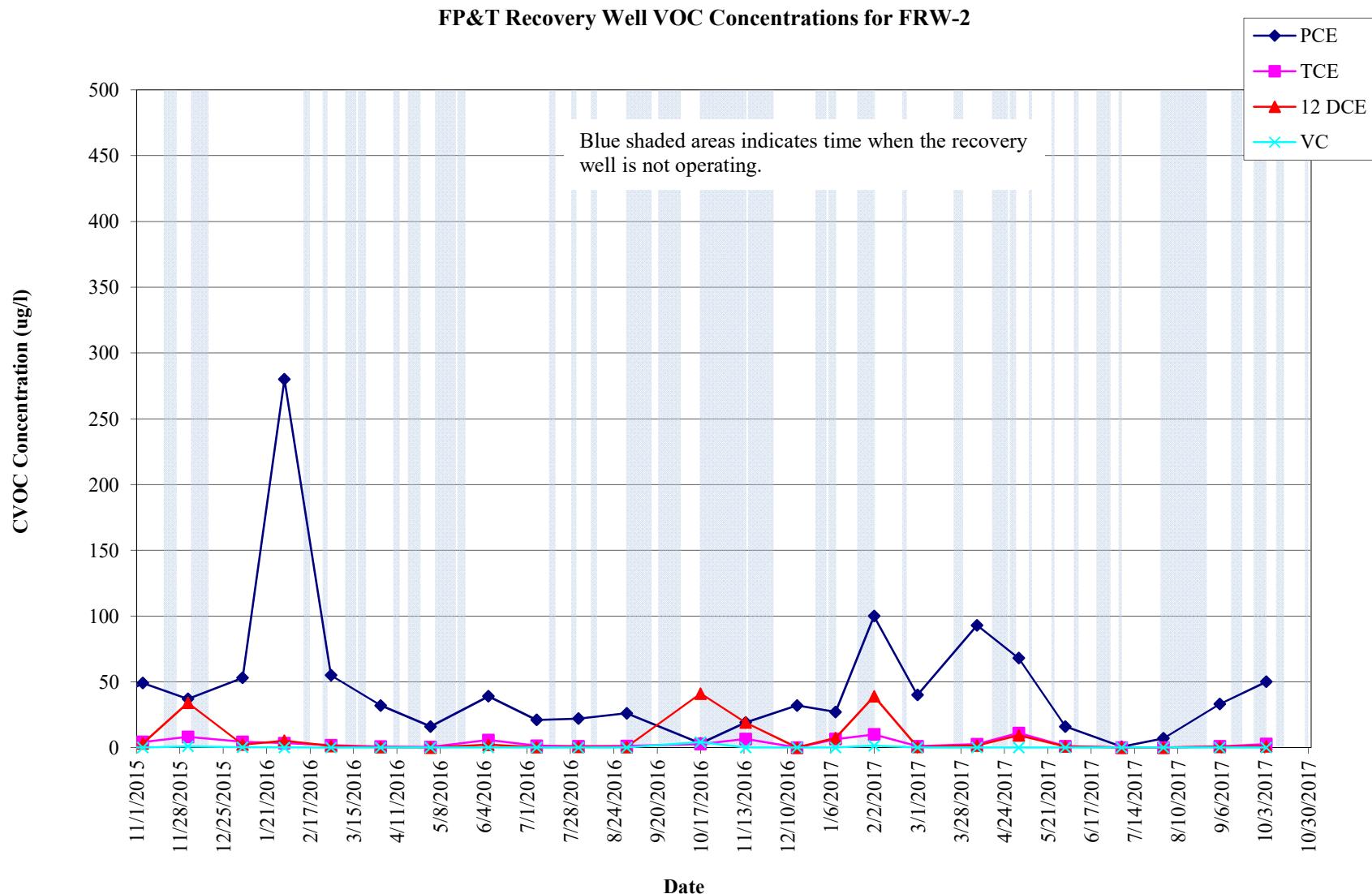


**GRAPH 3**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**

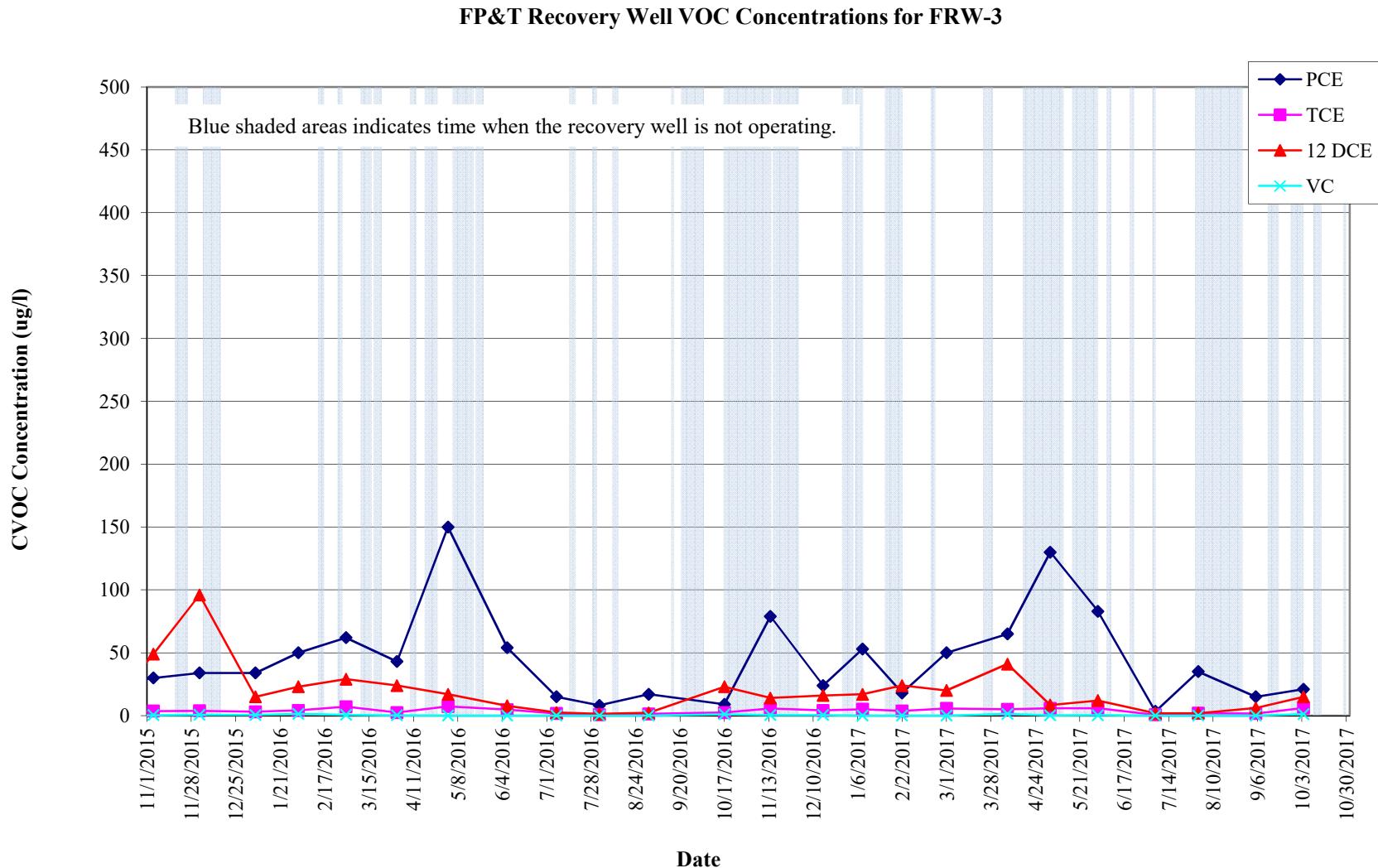
**FP&T Recovery Well VOC Concentrations for FRW-1**



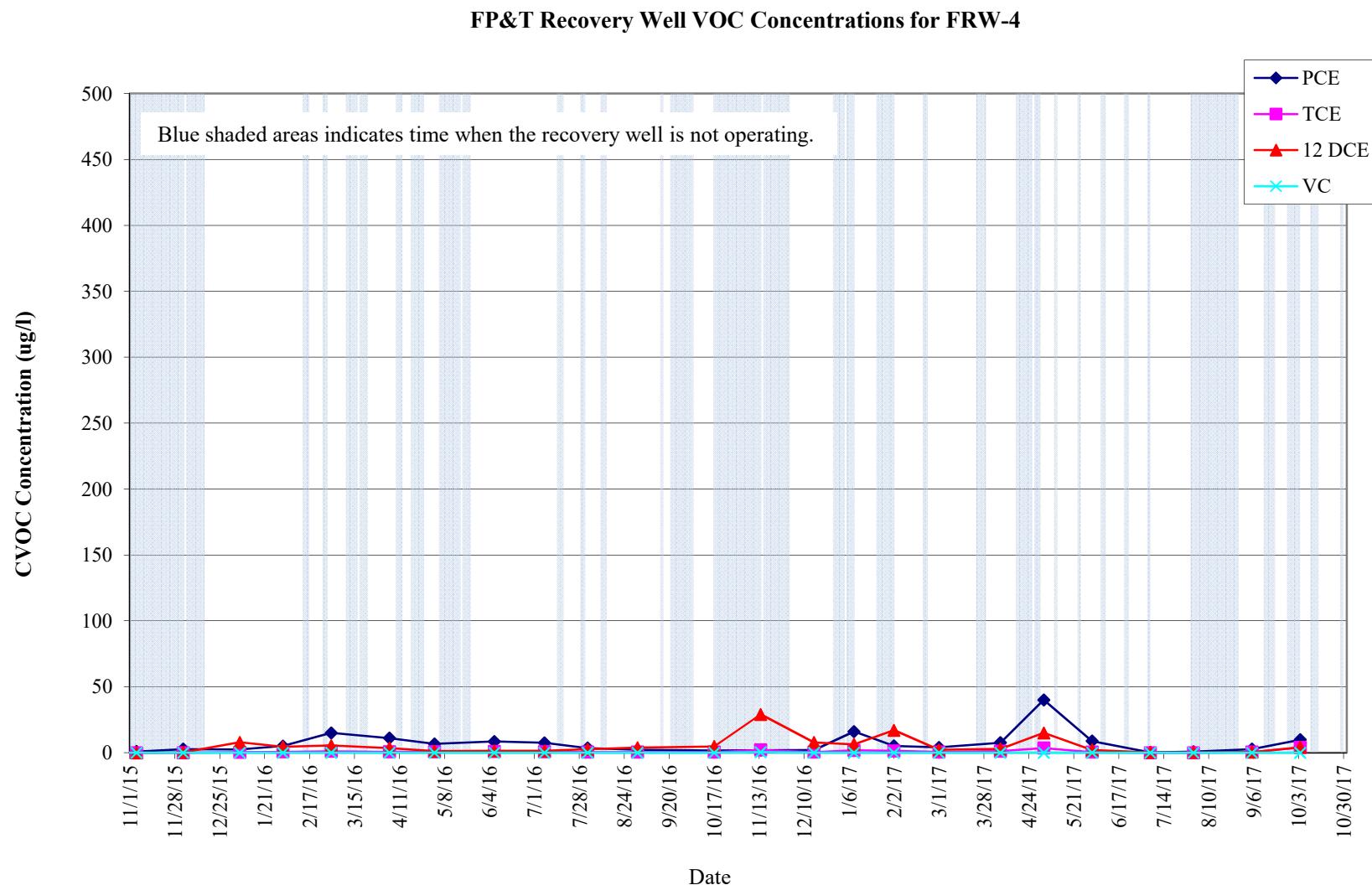
**GRAPH 4**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**



**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**



**APPENDIX I**  
**OCTOBER 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: 10/16/2017

**Client Project ID: Rowe Industries**  
York Project (SDG) No.: 17J0173

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
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FAX (203) 357-0166

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

Report Date: 10/16/2017  
Client Project ID: Rowe Industries  
York Project (SDG) No.: 17J0173

**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 October 05, 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>
17J0173-01	WQ1004945NP2-10	Water	10/04/2017	10/05/2017
17J0175-01	WQ1004950NP2-6	Water	10/04/2017	10/05/2017

## **General Notes for York Project (SDG) No.: 17J0173**

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:** 10/16/2017





## Sample Information

Client Sample ID: WQ1004945NP2-10

York Sample ID:

17J0173-01

York Project (SDG) No.

17J0173

Client Project ID

Rowe Industries

Matrix

Water

Collection Date/Time

October 4, 2017 9:45 am

Date Received

10/05/2017

### 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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:38	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-	10/10/2017 14:59	10/11/2017 02:38	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-	10/10/2017 14:59	10/11/2017 02:38	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-	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:38	SS



## Sample Information

Client Sample ID: WQ1004945NP2-10

York Sample ID:

17J0173-01

York Project (SDG) No.

17J0173

Client Project ID

Rowe Industries

Matrix

Water

Collection Date/Time

October 4, 2017 9:45 am

Date Received

10/05/2017

### 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	10/10/2017 14:59	10/11/2017 02:38	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:38	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:38	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:38	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:38	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:38	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS



## Sample Information

Client Sample ID: WQ1004945NP2-10

York Sample ID:

17J0173-01

York Project (SDG) No.

17J0173

Client Project ID

Rowe Industries

Matrix

Water

Collection Date/Time

October 4, 2017 9:45 am

Date Received

10/05/2017

### 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	10/10/2017 14:59	10/11/2017 02:38	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:38	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 14:59	10/11/2017 02:38	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 14:59	10/11/2017 02:38	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	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	10/10/2017 14:59	10/11/2017 02:38	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:38	SS

#### Surrogate Recoveries

#### Result

#### Acceptance Range

17060-07-0	Surrogate: 1,2-Dichloroethane-d4	102 %	69-130
2037-26-5	Surrogate: Toluene-d8	98.8 %	81-117
460-00-4	Surrogate: p-Bromofluorobenzene	98.4 %	79-122

### Iron by EPA 200.7

#### Log-in Notes:

#### Sample Notes:



## Sample Information

Client Sample ID: WQ1004945NP2-10

York Sample ID: 17J0173-01

York Project (SDG) No.  
17J0173

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
October 4, 2017 9:45 am

Date Received  
10/05/2017

Sample Prepared by Method: EPA 200.7

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	2.24	B	mg/L	0.0222	1	EPA 200.7 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/13/2017 10:28	10/13/2017 20:36	KML

### Iron, Dissolved by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	0.0361		mg/L	0.0222	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/13/2017 12:23	10/13/2017 21:53	KML

### Total Dissolved Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Dissolved Solids	162		mg/L	10.0	1	SM 2540C Certifications: NELAC-NY10854-CT,CTDOH,NJDEP,PADEP	10/10/2017 03:32	10/10/2017 03:32	AA

## Sample Information

Client Sample ID: WQ1004950NP2-6

York Sample ID: 17J0175-01

York Project (SDG) No.  
17J0175

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
October 4, 2017 9:50 am

Date Received  
10/05/2017

### Volatile Organics, 8260 List - Low Level

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	SS



## Sample Information

**Client Sample ID:** WQ1004950NP2-6

**York Sample ID:** 17J0175-01

**York Project (SDG) No.**  
17J0175

**Client Project ID**  
Rowe Industries

**Matrix**  
Water

**Collection Date/Time**  
October 4, 2017 9:50 am

**Date Received**  
10/05/2017

### 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
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 03:10	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-	10/10/2017 14:59	10/11/2017 03:10	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-	10/10/2017 14:59	10/11/2017 03:10	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-	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 03:10	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 03:10	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 03:10	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS



## Sample Information

**Client Sample ID:** WQ1004950NP2-6

**York Sample ID:** 17J0175-01

**York Project (SDG) No.**  
17J0175

**Client Project ID**  
Rowe Industries

**Matrix**  
Water

**Collection Date/Time**  
October 4, 2017 9:50 am

**Date Received**  
10/05/2017

### 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
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 03:10	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 03:10	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 03:10	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 03:10	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 14:59	10/11/2017 03:10	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 14:59	10/11/2017 03:10	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS



## Sample Information

Client Sample ID: WQ1004950NP2-6

York Sample ID:

17J0175-01

York Project (SDG) No.  
17J0175

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
October 4, 2017 9:50 am

Date Received  
10/05/2017

### 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
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>0.22</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	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	10/10/2017 14:59	10/11/2017 03:10	SS
79-01-6	<b>Trichloroethylene</b>	<b>0.33</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 03:10	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %	69-130								
2037-26-5	Surrogate: Toluene-d8	99.7 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	96.1 %	79-122								



## Analytical Batch Summary

**Batch ID:** BJ70422

**Preparation Method:** % Solids Prep

**Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
17J0173-01	WQ1004945NP2-10	10/10/17
BJ70422-BLK1	Blank	10/10/17

**Batch ID:** BJ70480

**Preparation Method:** EPA 5030B

**Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
17J0173-01	WQ1004945NP2-10	10/10/17
17J0175-01	WQ1004950NP2-6	10/10/17
BJ70480-BLK1	Blank	10/10/17
BJ70480-BS1	LCS	10/10/17
BJ70480-BSD1	LCS Dup	10/10/17

**Batch ID:** BJ70709

**Preparation Method:** EPA 200.7

**Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
17J0173-01	WQ1004945NP2-10	10/13/17
BJ70709-BLK1	Blank	10/13/17
BJ70709-SRM1	Reference	10/13/17

**Batch ID:** BJ70721

**Preparation Method:** EPA 3015A

**Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
17J0173-01	WQ1004945NP2-10	10/13/17
BJ70721-BLK1	Blank	10/13/17
BJ70721-SRM1	Reference	10/13/17



## 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 BJ70480 - EPA 5030B

#### Blank (BJ70480-BLK1)

Prepared: 10/10/2017 Analyzed: 10/11/2017

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
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### Batch BJ70480 - EPA 5030B

#### Blank (BJ70480-BLK1)

Prepared: 10/10/2017 Analyzed: 10/11/2017

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>	9.96		"	10.0		99.6	69-130				
<i>Surrogate: Toluene-d8</i>	10.0		"	10.0		100	81-117				
<i>Surrogate: p-Bromofluorobenzene</i>	10.2		"	10.0		102	79-122				

#### LCS (BJ70480-BS1)

Prepared & Analyzed: 10/10/2017

1,1,1,2-Tetrachloroethane	9.89	ug/L	10.0	98.9	82-126						
1,1,1-Trichloroethane	8.89	"	10.0	88.9	78-136						
1,1,2,2-Tetrachloroethane	11.2	"	10.0	112	76-129						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.1	"	10.0	101	54-165						
1,1,2-Trichloroethane	10.4	"	10.0	104	82-123						
1,1-Dichloroethane	8.76	"	10.0	87.6	82-129						
1,1-Dichloroethylene	4.35	"	10.0	43.5	68-138	Low Bias					
1,1-Dichloropropylene	9.16	"	10.0	91.6	83-133						
1,2,3-Trichlorobenzene	6.86	"	10.0	68.6	76-136	Low Bias					
1,2,3-Trichloropropane	11.3	"	10.0	113	77-128						
1,2,4-Trichlorobenzene	6.97	"	10.0	69.7	76-137	Low Bias					
1,2,4-Trimethylbenzene	9.98	"	10.0	99.8	82-132						
1,2-Dibromo-3-chloropropane	10.2	"	10.0	102	45-147						
1,2-Dibromoethane	10.8	"	10.0	108	83-124						
1,2-Dichlorobenzene	9.91	"	10.0	99.1	79-123						
1,2-Dichloroethane	8.98	"	10.0	89.8	73-132						
1,2-Dichloropropane	9.58	"	10.0	95.8	78-126						
1,3,5-Trimethylbenzene	10.4	"	10.0	104	80-131						
1,3-Dichlorobenzene	9.97	"	10.0	99.7	86-122						
1,3-Dichloropropane	10.4	"	10.0	104	81-125						
1,4-Dichlorobenzene	10.0	"	10.0	100	85-124						
2,2-Dichloropropane	7.17	"	10.0	71.7	56-150						
2-Chlorotoluene	10.0	"	10.0	100	79-130						
2-Hexanone	10.3	"	10.0	103	51-146						
4-Chlorotoluene	10.1	"	10.0	101	79-128						
Acetone	11.2	"	10.0	112	14-150						
Benzene	9.44	"	10.0	94.4	85-126						
Bromobenzene	10.2	"	10.0	102	78-129						
Bromochloromethane	8.85	"	10.0	88.5	77-128						
Bromodichloromethane	9.54	"	10.0	95.4	79-128						
Bromoform	11.0	"	10.0	110	78-133						
Bromomethane	0.750	"	10.0	7.50	43-168	Low Bias					



## 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
<b>Batch BJ70480 - EPA 5030B</b>											
<b>LCS (BJ70480-BS1)</b>											
Prepared & Analyzed: 10/10/2017											
Carbon tetrachloride	8.96		ug/L	10.0	89.6	77-141					
Chlorobenzene	9.80		"	10.0	98.0	88-120					
Chloroethane	8.31		"	10.0	83.1	65-136					
Chloroform	8.93		"	10.0	89.3	82-128					
Chloromethane	5.68		"	10.0	56.8	43-155					
cis-1,2-Dichloroethylene	8.49		"	10.0	84.9	83-129					
cis-1,3-Dichloropropylene	9.94		"	10.0	99.4	80-131					
Dibromochloromethane	10.5		"	10.0	105	80-130					
Dibromomethane	10.2		"	10.0	102	72-134					
Dichlorodifluoromethane	10.5		"	10.0	105	44-144					
Ethyl Benzene	9.84		"	10.0	98.4	80-131					
Hexachlorobutadiene	4.35		"	10.0	43.5	67-146	Low Bias				
Isopropylbenzene	10.6		"	10.0	106	76-140					
Methyl tert-butyl ether (MTBE)	10.2		"	10.0	102	76-135					
Methylene chloride	8.25		"	10.0	82.5	55-137					
Naphthalene	8.73		"	10.0	87.3	70-147					
n-Butylbenzene	9.00		"	10.0	90.0	79-132					
n-Propylbenzene	10.2		"	10.0	102	78-133					
o-Xylene	9.72		"	10.0	97.2	78-130					
p- & m- Xylenes	20.0		"	20.0	99.9	77-133					
p-Isopropyltoluene	9.71		"	10.0	97.1	81-136					
sec-Butylbenzene	10.0		"	10.0	100	79-137					
Styrene	9.94		"	10.0	99.4	67-132					
tert-Butylbenzene	10.2		"	10.0	102	77-138					
Tetrachloroethylene	11.2		"	10.0	112	82-131					
Toluene	9.66		"	10.0	96.6	80-127					
trans-1,2-Dichloroethylene	8.67		"	10.0	86.7	80-132					
trans-1,3-Dichloropropylene	9.97		"	10.0	99.7	78-131					
Trichloroethylene	9.38		"	10.0	93.8	82-128					
Trichlorofluoromethane	8.70		"	10.0	87.0	67-139					
Vinyl Chloride	8.16		"	10.0	81.6	58-145					
<i>Surrogate: 1,2-Dichloroethane-d4</i>	9.73		"	10.0	97.3	69-130					
<i>Surrogate: Toluene-d8</i>	10.1		"	10.0	101	81-117					
<i>Surrogate: p-Bromofluorobenzene</i>	10.2		"	10.0	102	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 BJ70480 - EPA 5030B

LCS Dup (BJ70480-BSD1)	Prepared: 10/10/2017 Analyzed: 10/11/2017									
1,1,1,2-Tetrachloroethane	10.0		ug/L	10.0	100	82-126			1.60	30
1,1,1-Trichloroethane	9.00		"	10.0	90.0	78-136			1.23	30
1,1,2,2-Tetrachloroethane	11.0		"	10.0	110	76-129			2.16	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.1		"	10.0	101	54-165			0.693	30
1,1,2-Trichloroethane	10.6		"	10.0	106	82-123			1.52	30
1,1-Dichloroethane	8.84		"	10.0	88.4	82-129			0.909	30
1,1-Dichloroethylene	4.39		"	10.0	43.9	68-138	Low Bias		0.915	30
1,1-Dichloropropylene	9.27		"	10.0	92.7	83-133			1.19	30
1,2,3-Trichlorobenzene	7.08		"	10.0	70.8	76-136	Low Bias		3.16	30
1,2,3-Trichloropropane	11.2		"	10.0	112	77-128			0.800	30
1,2,4-Trichlorobenzene	7.07		"	10.0	70.7	76-137	Low Bias		1.42	30
1,2,4-Trimethylbenzene	9.70		"	10.0	97.0	82-132			2.85	30
1,2-Dibromo-3-chloropropane	10.6		"	10.0	106	45-147			3.84	30
1,2-Dibromoethane	10.9		"	10.0	109	83-124			1.29	30
1,2-Dichlorobenzene	9.79		"	10.0	97.9	79-123			1.22	30
1,2-Dichloroethane	9.17		"	10.0	91.7	73-132			2.09	30
1,2-Dichloropropane	9.53		"	10.0	95.3	78-126			0.523	30
1,3,5-Trimethylbenzene	10.1		"	10.0	101	80-131			2.74	30
1,3-Dichlorobenzene	9.79		"	10.0	97.9	86-122			1.82	30
1,3-Dichloropropane	10.4		"	10.0	104	81-125			0.576	30
1,4-Dichlorobenzene	9.98		"	10.0	99.8	85-124			0.400	30
2,2-Dichloropropane	7.09		"	10.0	70.9	56-150			1.12	30
2-Chlorotoluene	9.83		"	10.0	98.3	79-130			2.21	30
2-Hexanone	10.4		"	10.0	104	51-146			1.55	30
4-Chlorotoluene	9.92		"	10.0	99.2	79-128			1.60	30
Acetone	11.2		"	10.0	112	14-150			0.00	30
Benzene	9.51		"	10.0	95.1	85-126			0.739	30
Bromobenzene	9.99		"	10.0	99.9	78-129			1.88	30
Bromochloromethane	8.97		"	10.0	89.7	77-128			1.35	30
Bromodichloromethane	9.59		"	10.0	95.9	79-128			0.523	30
Bromoform	11.3		"	10.0	113	78-133			2.33	30
Bromomethane	1.00		"	10.0	10.0	43-168	Low Bias		28.6	30
Carbon tetrachloride	9.13		"	10.0	91.3	77-141			1.88	30
Chlorobenzene	9.72		"	10.0	97.2	88-120			0.820	30
Chloroethane	8.04		"	10.0	80.4	65-136			3.30	30
Chloroform	9.07		"	10.0	90.7	82-128			1.56	30
Chloromethane	5.82		"	10.0	58.2	43-155			2.43	30
cis-1,2-Dichloroethylene	8.55		"	10.0	85.5	83-129			0.704	30
cis-1,3-Dichloropropylene	9.91		"	10.0	99.1	80-131			0.302	30
Dibromochloromethane	10.5		"	10.0	105	80-130			0.476	30
Dibromomethane	10.3		"	10.0	103	72-134			1.27	30
Dichlorodifluoromethane	10.7		"	10.0	107	44-144			1.79	30
Ethyl Benzene	9.80		"	10.0	98.0	80-131			0.407	30
Hexachlorobutadiene	4.47		"	10.0	44.7	67-146	Low Bias		2.72	30
Isopropylbenzene	10.3		"	10.0	103	76-140			2.50	30
Methyl tert-butyl ether (MTBE)	10.5		"	10.0	105	76-135			2.80	30
Methylene chloride	8.41		"	10.0	84.1	55-137			1.92	30
Naphthalene	8.71		"	10.0	87.1	70-147			0.229	30
n-Butylbenzene	8.84		"	10.0	88.4	79-132			1.79	30
n-Propylbenzene	10.0		"	10.0	100	78-133			1.88	30
o-Xylene	9.76		"	10.0	97.6	78-130			0.411	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 BJ70480 - EPA 5030B

#### LCS Dup (BJ70480-BSD1)

		Prepared: 10/10/2017 Analyzed: 10/11/2017								
p- & m- Xylenes	19.9		ug/L	20.0	99.7	77-133		0.200	30	
p-Isopropyltoluene	9.47		"	10.0	94.7	81-136		2.50	30	
sec-Butylbenzene	9.83		"	10.0	98.3	79-137		2.11	30	
Styrene	9.92		"	10.0	99.2	67-132		0.201	30	
tert-Butylbenzene	9.94		"	10.0	99.4	77-138		2.78	30	
Tetrachloroethylene	11.9		"	10.0	119	82-131		5.64	30	
Toluene	9.62		"	10.0	96.2	80-127		0.415	30	
trans-1,2-Dichloroethylene	8.77		"	10.0	87.7	80-132		1.15	30	
trans-1,3-Dichloropropylene	10.2		"	10.0	102	78-131		1.79	30	
Trichloroethylene	9.32		"	10.0	93.2	82-128		0.642	30	
Trichlorofluoromethane	8.88		"	10.0	88.8	67-139		2.05	30	
Vinyl Chloride	8.24		"	10.0	82.4	58-145		0.976	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	9.93		"	10.0	99.3	69-130				
<i>Surrogate: Toluene-d8</i>	10.1		"	10.0	101	81-117				
<i>Surrogate: p-Bromofluorobenzene</i>	10.1		"	10.0	101	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 BJ70709 - EPA 200.7**

**Blank (BJ70709-BLK1)**

Prepared & Analyzed: 10/13/2017

Iron	0.0387	0.0222	mg/L
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**Reference (BJ70709-SRM1)**

Prepared & Analyzed: 10/13/2017

Iron	1.11	ug/mL	1.40	79.3	84.9-115	Low Bias
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**Batch BJ70721 - EPA 3015A**

**Blank (BJ70721-BLK1)**

Prepared & Analyzed: 10/13/2017

Iron - Dissolved	ND	0.0222	mg/L
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**Reference (BJ70721-SRM1)**

Prepared & Analyzed: 10/13/2017

Iron - Dissolved	1.42	ug/mL	1.40	101	84.9-115
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### 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 BJ70422 - % Solids Prep

##### Blank (BJ70422-BLK1)

Prepared & Analyzed: 10/10/2017

Total Dissolved Solids ND 10.0 mg/L



### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
17J0173-01	WQ1004945NP2-10	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17J0175-01	WQ1004950NP2-6	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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**APPENDIX II**  
**OCTOBER 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: 10/11/2017

**Client Project ID: NABSAG-Rowe Industries**  
York Project (SDG) No.: 17J0167

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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

Report Date: 10/11/2017  
Client Project ID: NABSAG-Rowe Industries  
York Project (SDG) No.: 17J0167

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

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on October 05, 2017 and listed below. The project was identified as your project: **NABSAG-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>
17J0167-01	WQ1004171115NP1-1-2	Water	10/04/2017	10/05/2017

## General Notes for York Project (SDG) No.: 17J0167

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: 10/11/2017





## Sample Information

Client Sample ID: WQ1004171115NP1-1-2

York Sample ID: 17J0167-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
17J0167	NABSAG-Rowe Industries	Water	October 4, 2017 11:15 am	10/05/2017

### 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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:06	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-	10/10/2017 14:59	10/11/2017 02:06	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-	10/10/2017 14:59	10/11/2017 02:06	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-	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:06	SS



## Sample Information

Client Sample ID: WQ1004171115NP1-1-2

York Sample ID: 17J0167-01

York Project (SDG) No.  
17J0167

Client Project ID  
NABSAG-Rowe Industries

Matrix  
Water

Collection Date/Time  
October 4, 2017 11:15 am

Date Received  
10/05/2017

### 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	10/10/2017 14:59	10/11/2017 02:06	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:06	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:06	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:06	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:06	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:06	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS



## Sample Information

Client Sample ID: **WQ1004171115NP1-1-2**

York Sample ID: **17J0167-01**

York Project (SDG) No.  
17J0167

Client Project ID  
NABSAG-Rowe Industries

Matrix  
Water

Collection Date/Time  
October 4, 2017 11:15 am

Date Received  
10/05/2017

### 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	10/10/2017 14:59	10/11/2017 02:06	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 14:59	10/11/2017 02:06	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 14:59	10/11/2017 02:06	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 14:59	10/11/2017 02:06	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>0.24</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	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	10/10/2017 14:59	10/11/2017 02:06	SS
79-01-6	<b>Trichloroethylene</b>	<b>0.34</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 14:59	10/11/2017 02:06	SS

#### **Surrogate Recoveries**

	<b>Result</b>	<b>Acceptance Range</b>
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	101 %
2037-26-5	Surrogate: Toluene-d8	99.9 %
460-00-4	Surrogate: p-Bromofluorobenzene	94.9 %



## Analytical Batch Summary

**Batch ID:** BJ70480

**Preparation Method:** EPA 5030B

**Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
17J0167-01	WQ1004171115NP1-1-2	10/10/17
BJ70480-BLK1	Blank	10/10/17
BJ70480-BS1	LCS	10/10/17
BJ70480-BSD1	LCS Dup	10/10/17



## 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 BJ70480 - EPA 5030B

#### Blank (BJ70480-BLK1)

Prepared: 10/10/2017 Analyzed: 10/11/2017

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 BJ70480 - EPA 5030B</b>											
<b>Blank (BJ70480-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>	9.96		"	10.0		99.6	69-130				
<i>Surrogate: Toluene-d8</i>	10.0		"	10.0		100	81-117				
<i>Surrogate: p-Bromofluorobenzene</i>	10.2		"	10.0		102	79-122				
<b>LCS (BJ70480-BS1)</b>											
1,1,1,2-Tetrachloroethane	9.89		ug/L	10.0		98.9	82-126				
1,1,1-Trichloroethane	8.89		"	10.0		88.9	78-136				
1,1,2,2-Tetrachloroethane	11.2		"	10.0		112	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.1		"	10.0		101	54-165				
1,1,2-Trichloroethane	10.4		"	10.0		104	82-123				
1,1-Dichloroethane	8.76		"	10.0		87.6	82-129				
1,1-Dichloroethylene	4.35		"	10.0		43.5	68-138	Low Bias			
1,1-Dichloropropylene	9.16		"	10.0		91.6	83-133				
1,2,3-Trichlorobenzene	6.86		"	10.0		68.6	76-136	Low Bias			
1,2,3-Trichloropropane	11.3		"	10.0		113	77-128				
1,2,4-Trichlorobenzene	6.97		"	10.0		69.7	76-137	Low Bias			
1,2,4-Trimethylbenzene	9.98		"	10.0		99.8	82-132				
1,2-Dibromo-3-chloropropane	10.2		"	10.0		102	45-147				
1,2-Dibromoethane	10.8		"	10.0		108	83-124				
1,2-Dichlorobenzene	9.91		"	10.0		99.1	79-123				
1,2-Dichloroethane	8.98		"	10.0		89.8	73-132				
1,2-Dichloropropane	9.58		"	10.0		95.8	78-126				
1,3,5-Trimethylbenzene	10.4		"	10.0		104	80-131				
1,3-Dichlorobenzene	9.97		"	10.0		99.7	86-122				
1,3-Dichloropropane	10.4		"	10.0		104	81-125				
1,4-Dichlorobenzene	10.0		"	10.0		100	85-124				
2,2-Dichloropropane	7.17		"	10.0		71.7	56-150				
2-Chlorotoluene	10.0		"	10.0		100	79-130				
2-Hexanone	10.3		"	10.0		103	51-146				
4-Chlorotoluene	10.1		"	10.0		101	79-128				
Acetone	11.2		"	10.0		112	14-150				
Benzene	9.44		"	10.0		94.4	85-126				
Bromobenzene	10.2		"	10.0		102	78-129				
Bromochloromethane	8.85		"	10.0		88.5	77-128				
Bromodichloromethane	9.54		"	10.0		95.4	79-128				
Bromoform	11.0		"	10.0		110	78-133				
Bromomethane	0.750		"	10.0		7.50	43-168	Low Bias			



## 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 BJ70480 - EPA 5030B</b>											
<b>LCS (BJ70480-BS1)</b>											
Carbon tetrachloride	8.96		ug/L	10.0	89.6	77-141					
Chlorobenzene	9.80		"	10.0	98.0	88-120					
Chloroethane	8.31		"	10.0	83.1	65-136					
Chloroform	8.93		"	10.0	89.3	82-128					
Chloromethane	5.68		"	10.0	56.8	43-155					
cis-1,2-Dichloroethylene	8.49		"	10.0	84.9	83-129					
cis-1,3-Dichloropropylene	9.94		"	10.0	99.4	80-131					
Dibromochloromethane	10.5		"	10.0	105	80-130					
Dibromomethane	10.2		"	10.0	102	72-134					
Dichlorodifluoromethane	10.5		"	10.0	105	44-144					
Ethyl Benzene	9.84		"	10.0	98.4	80-131					
Hexachlorobutadiene	4.35		"	10.0	43.5	67-146	Low Bias				
Isopropylbenzene	10.6		"	10.0	106	76-140					
Methyl tert-butyl ether (MTBE)	10.2		"	10.0	102	76-135					
Methylene chloride	8.25		"	10.0	82.5	55-137					
Naphthalene	8.73		"	10.0	87.3	70-147					
n-Butylbenzene	9.00		"	10.0	90.0	79-132					
n-Propylbenzene	10.2		"	10.0	102	78-133					
o-Xylene	9.72		"	10.0	97.2	78-130					
p- & m- Xylenes	20.0		"	20.0	99.9	77-133					
p-Isopropyltoluene	9.71		"	10.0	97.1	81-136					
sec-Butylbenzene	10.0		"	10.0	100	79-137					
Styrene	9.94		"	10.0	99.4	67-132					
tert-Butylbenzene	10.2		"	10.0	102	77-138					
Tetrachloroethylene	11.2		"	10.0	112	82-131					
Toluene	9.66		"	10.0	96.6	80-127					
trans-1,2-Dichloroethylene	8.67		"	10.0	86.7	80-132					
trans-1,3-Dichloropropylene	9.97		"	10.0	99.7	78-131					
Trichloroethylene	9.38		"	10.0	93.8	82-128					
Trichlorofluoromethane	8.70		"	10.0	87.0	67-139					
Vinyl Chloride	8.16		"	10.0	81.6	58-145					
<i>Surrogate: 1,2-Dichloroethane-d4</i>	9.73		"	10.0	97.3	69-130					
<i>Surrogate: Toluene-d8</i>	10.1		"	10.0	101	81-117					
<i>Surrogate: p-Bromofluorobenzene</i>	10.2		"	10.0	102	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 BJ70480 - EPA 5030B

LCS Dup (BJ70480-BSD1)	Prepared: 10/10/2017 Analyzed: 10/11/2017									
1,1,1,2-Tetrachloroethane	10.0		ug/L	10.0	100	82-126			1.60	30
1,1,1-Trichloroethane	9.00		"	10.0	90.0	78-136			1.23	30
1,1,2,2-Tetrachloroethane	11.0		"	10.0	110	76-129			2.16	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.1		"	10.0	101	54-165			0.693	30
1,1,2-Trichloroethane	10.6		"	10.0	106	82-123			1.52	30
1,1-Dichloroethane	8.84		"	10.0	88.4	82-129			0.909	30
1,1-Dichloroethylene	4.39		"	10.0	43.9	68-138	Low Bias		0.915	30
1,1-Dichloropropylene	9.27		"	10.0	92.7	83-133			1.19	30
1,2,3-Trichlorobenzene	7.08		"	10.0	70.8	76-136	Low Bias		3.16	30
1,2,3-Trichloropropane	11.2		"	10.0	112	77-128			0.800	30
1,2,4-Trichlorobenzene	7.07		"	10.0	70.7	76-137	Low Bias		1.42	30
1,2,4-Trimethylbenzene	9.70		"	10.0	97.0	82-132			2.85	30
1,2-Dibromo-3-chloropropane	10.6		"	10.0	106	45-147			3.84	30
1,2-Dibromoethane	10.9		"	10.0	109	83-124			1.29	30
1,2-Dichlorobenzene	9.79		"	10.0	97.9	79-123			1.22	30
1,2-Dichloroethane	9.17		"	10.0	91.7	73-132			2.09	30
1,2-Dichloropropane	9.53		"	10.0	95.3	78-126			0.523	30
1,3,5-Trimethylbenzene	10.1		"	10.0	101	80-131			2.74	30
1,3-Dichlorobenzene	9.79		"	10.0	97.9	86-122			1.82	30
1,3-Dichloropropane	10.4		"	10.0	104	81-125			0.576	30
1,4-Dichlorobenzene	9.98		"	10.0	99.8	85-124			0.400	30
2,2-Dichloropropane	7.09		"	10.0	70.9	56-150			1.12	30
2-Chlorotoluene	9.83		"	10.0	98.3	79-130			2.21	30
2-Hexanone	10.4		"	10.0	104	51-146			1.55	30
4-Chlorotoluene	9.92		"	10.0	99.2	79-128			1.60	30
Acetone	11.2		"	10.0	112	14-150			0.00	30
Benzene	9.51		"	10.0	95.1	85-126			0.739	30
Bromobenzene	9.99		"	10.0	99.9	78-129			1.88	30
Bromochloromethane	8.97		"	10.0	89.7	77-128			1.35	30
Bromodichloromethane	9.59		"	10.0	95.9	79-128			0.523	30
Bromoform	11.3		"	10.0	113	78-133			2.33	30
Bromomethane	1.00		"	10.0	10.0	43-168	Low Bias		28.6	30
Carbon tetrachloride	9.13		"	10.0	91.3	77-141			1.88	30
Chlorobenzene	9.72		"	10.0	97.2	88-120			0.820	30
Chloroethane	8.04		"	10.0	80.4	65-136			3.30	30
Chloroform	9.07		"	10.0	90.7	82-128			1.56	30
Chloromethane	5.82		"	10.0	58.2	43-155			2.43	30
cis-1,2-Dichloroethylene	8.55		"	10.0	85.5	83-129			0.704	30
cis-1,3-Dichloropropylene	9.91		"	10.0	99.1	80-131			0.302	30
Dibromochloromethane	10.5		"	10.0	105	80-130			0.476	30
Dibromomethane	10.3		"	10.0	103	72-134			1.27	30
Dichlorodifluoromethane	10.7		"	10.0	107	44-144			1.79	30
Ethyl Benzene	9.80		"	10.0	98.0	80-131			0.407	30
Hexachlorobutadiene	4.47		"	10.0	44.7	67-146	Low Bias		2.72	30
Isopropylbenzene	10.3		"	10.0	103	76-140			2.50	30
Methyl tert-butyl ether (MTBE)	10.5		"	10.0	105	76-135			2.80	30
Methylene chloride	8.41		"	10.0	84.1	55-137			1.92	30
Naphthalene	8.71		"	10.0	87.1	70-147			0.229	30
n-Butylbenzene	8.84		"	10.0	88.4	79-132			1.79	30
n-Propylbenzene	10.0		"	10.0	100	78-133			1.88	30
o-Xylene	9.76		"	10.0	97.6	78-130			0.411	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 BJ70480 - EPA 5030B

#### LCS Dup (BJ70480-BSD1)

		Prepared: 10/10/2017 Analyzed: 10/11/2017								
p- & m- Xylenes	19.9		ug/L	20.0	99.7	77-133		0.200	30	
p-Isopropyltoluene	9.47	"		10.0	94.7	81-136		2.50	30	
sec-Butylbenzene	9.83	"		10.0	98.3	79-137		2.11	30	
Styrene	9.92	"		10.0	99.2	67-132		0.201	30	
tert-Butylbenzene	9.94	"		10.0	99.4	77-138		2.78	30	
Tetrachloroethylene	11.9	"		10.0	119	82-131		5.64	30	
Toluene	9.62	"		10.0	96.2	80-127		0.415	30	
trans-1,2-Dichloroethylene	8.77	"		10.0	87.7	80-132		1.15	30	
trans-1,3-Dichloropropylene	10.2	"		10.0	102	78-131		1.79	30	
Trichloroethylene	9.32	"		10.0	93.2	82-128		0.642	30	
Trichlorofluoromethane	8.88	"		10.0	88.8	67-139		2.05	30	
Vinyl Chloride	8.24	"		10.0	82.4	58-145		0.976	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	9.93	"		10.0	99.3	69-130				
<i>Surrogate: Toluene-d8</i>	10.1	"		10.0	101	81-117				
<i>Surrogate: p-Bromofluorobenzene</i>	10.1	"		10.0	101	79-122				



### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
17J0167-01	WQ1004171115NP1-1-2	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.



York Analytical Laboratories, Inc.  
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Stratford, CT 06615  
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www.yorklab.com

# Field Chain-of-Custody Record

YORK Project No.  
**17SC167**

Page **1** of **1**

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

YOUR Information		Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: <b>LBG</b>	Company: <b>Some</b>	Company: <b>State</b>	Address: <b>14 Research Dr. Ste 204</b>	YOUR Project Name <b>Rove Industries</b>	RUSH - Next Day RUSH - Two Day RUSH - Three Day RUSH - Four Day Standard (5-7 Day) <b>X</b>
Address: <b>Shelton CT 06484</b>	Phone: <b>203 - 929 - 8555</b>	Contact: <b>Toride Sandor</b>	E-mail: <b>Toride.Sandor@LBGCT.com</b>	YOUR PO#: <b>HABSA6</b>	

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

**Scott Philbrick**

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

## Sample Identification

Sample Matrix  
**GW**

Date/Time Sampled  
**10-9-17 11:15**

Matrix Codes  
S - soil / solid  
GW - groundwater  
DW - drinking water  
WW - wastewater  
O - Oil  
Other

Report / EDD Type (circle selections)  
**Summary Report PDF**  
**QA Report PDF**  
NY ASP A Package  
NY ASP B Package  
**Single Excel PDF**

Analysis Requested  
**103 VOC S260 Full List (EPA SWS346-S260E) plus fix**

Container Description  
**3 VDA**

## Comments:

Samples Relinquished by / Company		Date/Time	Samples Received by / Company	Preservation: (check all that apply)				Special Instruction
<b>Scott Philbrick LBG</b>	<b>10-4-17 6:58pm</b>	<b>10-4-17 6:58pm</b>	<b>LBG Fridge</b>	<input checked="" type="checkbox"/> HCl	<input type="checkbox"/> MeOH	<input type="checkbox"/> HNO3	<input type="checkbox"/> H <sub>2</sub> SO4	<input type="checkbox"/> NaOH
<b>Ascorbic Acid</b>	<b>Other:</b>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ZnAc
<b>Date/Time</b>	<b>Date/Time</b>	<b>Date/Time</b>	<b>Date/Time</b>	<b>Date/Time</b>	<b>Date/Time</b>	<b>Date/Time</b>	<b>Date/Time</b>	<b>Date/Time</b>



# Technical Report

prepared for:

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

Report Date: 10/11/2017

**Client Project ID: Rowe Industries**  
York Project (SDG) No.: 17J0171

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: 10/11/2017  
Client Project ID: Rowe Industries  
York Project (SDG) No.: 17J0171

**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 October 05, 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>
17J0171-01	WQ1004171217FRW-1	Water	10/04/2017	10/05/2017
17J0171-02	WQ1004171217FRW-2	Water	10/04/2017	10/05/2017
17J0171-03	WQ1004171217FRW-3	Water	10/04/2017	10/05/2017
17J0171-04	WQ1004171217FRW-4	Water	10/04/2017	10/05/2017

## **General Notes for York Project (SDG) No.: 17J0171**

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:** 10/11/2017





## Sample Information

Client Sample ID: WQ1004171217FRW-1

York Sample ID:

17J0171-01

York Project (SDG) No.

17J0171

Client Project ID

Rowe Industries

Matrix

Water

Collection Date/Time

October 4, 2017 12:17 pm

Date Received

10/05/2017

### 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	10/10/2017 05:29	10/10/2017 05:29	AS-
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	10/10/2017 05:29	10/10/2017 05:29	AS-
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	10/10/2017 05:29	10/10/2017 05:29	AS-
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	10/10/2017 05:29	10/10/2017 05:29	AS-
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	10/10/2017 05:29	10/10/2017 05:29	AS-
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-
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	10/10/2017 05:29	10/10/2017 05:29	AS-
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	10/10/2017 05:29	10/10/2017 05:29	AS-
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
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	10/10/2017 05:29	10/10/2017 05:29	AS-
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-



## Sample Information

Client Sample ID: WQ1004171217FRW-1

York Sample ID:

17J0171-01

York Project (SDG) No.

17J0171

Client Project ID

Rowe Industries

Matrix

Water

Collection Date/Time

October 4, 2017 12:17 pm

Date Received

10/05/2017

### 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	10/10/2017 05:29	10/10/2017 05:29	AS-
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
156-59-2	cis-1,2-Dichloroethylene	7.8		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
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	10/10/2017 05:29	10/10/2017 05:29	AS-
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-



## Sample Information

Client Sample ID: **WQ1004171217FRW-1**

York Sample ID:

**17J0171-01**

York Project (SDG) No.

17J0171

Client Project ID

Rowe Industries

Matrix

Water

Collection Date/Time

October 4, 2017 12:17 pm

Date Received

10/05/2017

### **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	10/10/2017 05:29	10/10/2017 05:29	AS-
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 05:29	10/10/2017 05:29	AS-
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 05:29	10/10/2017 05:29	AS-
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 05:29	10/10/2017 05:29	AS-
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
127-18-4	<b>Tetrachloroethylene</b>	<b>56</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
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	10/10/2017 05:29	10/10/2017 05:29	AS-
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	10/10/2017 05:29	10/10/2017 05:29	AS-
79-01-6	<b>Trichloroethylene</b>	<b>1.7</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 05:29	10/10/2017 05:29	AS-

#### **Surrogate Recoveries**

	<b>Result</b>	<b>Acceptance Range</b>
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %
2037-26-5	Surrogate: Toluene-d8	109 %
460-00-4	Surrogate: p-Bromofluorobenzene	113 %



## Sample Information

Client Sample ID: WQ1004171217FRW-2

York Sample ID:

17J0171-02

York Project (SDG) No.

17J0171

Client Project ID

Rowe Industries

Matrix

Water

Collection Date/Time

October 4, 2017 12:15 pm

Date Received

10/05/2017

### 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	10/10/2017 06:21	10/10/2017 06:21	AS-
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	10/10/2017 06:21	10/10/2017 06:21	AS-
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	10/10/2017 06:21	10/10/2017 06:21	AS-
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	10/10/2017 06:21	10/10/2017 06:21	AS-
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	10/10/2017 06:21	10/10/2017 06:21	AS-
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
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	10/10/2017 06:21	10/10/2017 06:21	AS-
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	10/10/2017 06:21	10/10/2017 06:21	AS-
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
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	10/10/2017 06:21	10/10/2017 06:21	AS-
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-



## Sample Information

Client Sample ID: WQ1004171217FRW-2

York Sample ID:

17J0171-02

York Project (SDG) No.

17J0171

Client Project ID

Rowe Industries

Matrix

Water

Collection Date/Time

October 4, 2017 12:15 pm

Date Received

10/05/2017

### 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	10/10/2017 06:21	10/10/2017 06:21	AS-
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
67-64-1	Acetone	5.0		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
156-59-2	cis-1,2-Dichloroethylene	0.91		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
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	10/10/2017 06:21	10/10/2017 06:21	AS-
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
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	10/10/2017 06:21	10/10/2017 06:21	AS-



## Sample Information

Client Sample ID: WQ1004171217FRW-2

York Sample ID:

17J0171-02

York Project (SDG) No.

17J0171

Client Project ID

Rowe Industries

Matrix

Water

Collection Date/Time

October 4, 2017 12:15 pm

Date Received

10/05/2017

### 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	10/10/2017 06:21	10/10/2017 06:21	AS-
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 06:21	10/10/2017 06:21	AS-
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 06:21	10/10/2017 06:21	AS-
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 06:21	10/10/2017 06:21	AS-
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
127-18-4	Tetrachloroethylene	50		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
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	10/10/2017 06:21	10/10/2017 06:21	AS-
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	10/10/2017 06:21	10/10/2017 06:21	AS-
79-01-6	Trichloroethylene	2.7		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 06:21	10/10/2017 06:21	AS-

#### Surrogate Recoveries      Result      Acceptance Range

17060-07-0	Surrogate: 1,2-Dichloroethane-d4	98.2 %	69-130
2037-26-5	Surrogate: Toluene-d8	109 %	81-117
460-00-4	Surrogate: p-Bromofluorobenzene	112 %	79-122



## Sample Information

Client Sample ID: WQ1004171217FRW-3

York Sample ID:

17J0171-03

York Project (SDG) No.

17J0171

Client Project ID

Rowe Industries

Matrix

Water

Collection Date/Time

October 4, 2017 12:25 pm

Date Received

10/05/2017

### 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	10/10/2017 07:13	10/10/2017 07:13	AS-
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	10/10/2017 07:13	10/10/2017 07:13	AS-
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	10/10/2017 07:13	10/10/2017 07:13	AS-
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	10/10/2017 07:13	10/10/2017 07:13	AS-
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	10/10/2017 07:13	10/10/2017 07:13	AS-
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
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	10/10/2017 07:13	10/10/2017 07:13	AS-
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	10/10/2017 07:13	10/10/2017 07:13	AS-
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
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	10/10/2017 07:13	10/10/2017 07:13	AS-
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-



## Sample Information

Client Sample ID: WQ1004171217FRW-3

York Sample ID:

17J0171-03

York Project (SDG) No.

17J0171

Client Project ID

Rowe Industries

Matrix

Water

Collection Date/Time

October 4, 2017 12:25 pm

Date Received

10/05/2017

### 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	10/10/2017 07:13	10/10/2017 07:13	AS-
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
67-64-1	<b>Acetone</b>	<b>2.7</b>		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>15</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
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	10/10/2017 07:13	10/10/2017 07:13	AS-
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
98-82-8	<b>Isopropylbenzene</b>	<b>0.48</b>	CCV-A, J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
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	10/10/2017 07:13	10/10/2017 07:13	AS-



## Sample Information

Client Sample ID: **WQ1004171217FRW-3**

York Sample ID: **17J0171-03**

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
17J0171	Rowe Industries	Water	October 4, 2017 12:25 pm	10/05/2017

### 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	10/10/2017 07:13	10/10/2017 07:13	AS-
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 07:13	10/10/2017 07:13	AS-
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
103-65-1	<b>n-Propylbenzene</b>	<b>0.40</b>	J	CCV-A, ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 07:13	10/10/2017 07:13	AS-
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 07:13	10/10/2017 07:13	AS-
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
127-18-4	<b>Tetrachloroethylene</b>	<b>21</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
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	10/10/2017 07:13	10/10/2017 07:13	AS-
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	10/10/2017 07:13	10/10/2017 07:13	AS-
79-01-6	<b>Trichloroethylene</b>	<b>6.0</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
75-01-4	<b>Vinyl Chloride</b>	<b>1.2</b>	CCV-A	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 07:13	10/10/2017 07:13	AS-

Surrogate Recoveries	Result	Acceptance Range
Surrogate: 1,2-Dichloroethane-d4	98.8 %	69-130
Surrogate: Toluene-d8	109 %	81-117
Surrogate: p-Bromoiodobenzene	118 %	79-122



## Sample Information

Client Sample ID: WQ1004171217FRW-4

York Sample ID:

17J0171-04

York Project (SDG) No.  
17J0171

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
October 4, 2017 12:20 pm

Date Received  
10/05/2017

### 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	10/10/2017 08:05	10/10/2017 08:05	AS-
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	10/10/2017 08:05	10/10/2017 08:05	AS-
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	10/10/2017 08:05	10/10/2017 08:05	AS-
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	10/10/2017 08:05	10/10/2017 08:05	AS-
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	10/10/2017 08:05	10/10/2017 08:05	AS-
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
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	10/10/2017 08:05	10/10/2017 08:05	AS-
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	10/10/2017 08:05	10/10/2017 08:05	AS-
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
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	10/10/2017 08:05	10/10/2017 08:05	AS-
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-



## Sample Information

Client Sample ID: WQ1004171217FRW-4

York Sample ID:

17J0171-04

York Project (SDG) No.  
17J0171

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
October 4, 2017 12:20 pm

Date Received  
10/05/2017

### 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	10/10/2017 08:05	10/10/2017 08:05	AS-
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
156-59-2	cis-1,2-Dichloroethylene	4.1		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
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	10/10/2017 08:05	10/10/2017 08:05	AS-
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
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	10/10/2017 08:05	10/10/2017 08:05	AS-



## Sample Information

Client Sample ID: WQ1004171217FRW-4

York Sample ID: 17J0171-04

York Project (SDG) No.  
17J0171

Client Project ID  
Rowe Industries

Matrix  
Water

Collection Date/Time  
October 4, 2017 12:20 pm

Date Received  
10/05/2017

### 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	10/10/2017 08:05	10/10/2017 08:05	AS-
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	10/10/2017 08:05	10/10/2017 08:05	AS-
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 08:05	10/10/2017 08:05	AS-
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/10/2017 08:05	10/10/2017 08:05	AS-
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
127-18-4	Tetrachloroethylene	9.8		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
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	10/10/2017 08:05	10/10/2017 08:05	AS-
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	10/10/2017 08:05	10/10/2017 08:05	AS-
79-01-6	Trichloroethylene	3.9		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/10/2017 08:05	10/10/2017 08:05	AS-

#### Surrogate Recoveries      Result      Acceptance Range

17060-07-0	Surrogate: 1,2-Dichloroethane-d4	102 %	69-130
2037-26-5	Surrogate: Toluene-d8	108 %	81-117
460-00-4	Surrogate: p-Bromofluorobenzene	116 %	79-122



## Analytical Batch Summary

**Batch ID:** BJ70351

**Preparation Method:** EPA 5030B

**Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
17J0171-01	WQ1004171217FRW-1	10/10/17
17J0171-02	WQ1004171217FRW-2	10/10/17
17J0171-03	WQ1004171217FRW-3	10/10/17
17J0171-04	WQ1004171217FRW-4	10/10/17
BJ70351-BLK1	Blank	10/09/17
BJ70351-BS1	LCS	10/09/17
BJ70351-BSD1	LCS Dup	10/09/17



## 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 BJ70351 - EPA 5030B

#### Blank (BJ70351-BLK1)

Prepared & Analyzed: 10/09/2017

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
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### Batch BJ70351 - EPA 5030B

#### Blank (BJ70351-BLK1)

											Prepared & Analyzed: 10/09/2017
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>	10.1		"	10.0		101	69-130				
<i>Surrogate: Toluene-d8</i>	10.9		"	10.0		109	81-117				
<i>Surrogate: p-Bromofluorobenzene</i>	11.6		"	10.0		116	79-122				

#### LCS (BJ70351-BS1)

											Prepared & Analyzed: 10/09/2017
1,1,1,2-Tetrachloroethane	9.11		ug/L	10.0		91.1	82-126				
1,1,1-Trichloroethane	7.58		"	10.0		75.8	78-136	Low Bias			
1,1,2,2-Tetrachloroethane	11.0		"	10.0		110	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	7.25		"	10.0		72.5	54-165				
1,1,2-Trichloroethane	9.54		"	10.0		95.4	82-123				
1,1-Dichloroethane	7.83		"	10.0		78.3	82-129	Low Bias			
1,1-Dichloroethylene	7.34		"	10.0		73.4	68-138				
1,1-Dichloropropylene	7.44		"	10.0		74.4	83-133	Low Bias			
1,2,3-Trichlorobenzene	9.86		"	10.0		98.6	76-136				
1,2,3-Trichloropropane	10.6		"	10.0		106	77-128				
1,2,4-Trichlorobenzene	9.86		"	10.0		98.6	76-137				
1,2,4-Trimethylbenzene	11.1		"	10.0		111	82-132				
1,2-Dibromo-3-chloropropane	9.44		"	10.0		94.4	45-147				
1,2-Dibromoethane	9.15		"	10.0		91.5	83-124				
1,2-Dichlorobenzene	10.5		"	10.0		105	79-123				
1,2-Dichloroethane	7.68		"	10.0		76.8	73-132				
1,2-Dichloropropane	9.36		"	10.0		93.6	78-126				
1,3,5-Trimethylbenzene	11.2		"	10.0		112	80-131				
1,3-Dichlorobenzene	10.4		"	10.0		104	86-122				
1,3-Dichloropropane	9.62		"	10.0		96.2	81-125				
1,4-Dichlorobenzene	10.6		"	10.0		106	85-124				
2,2-Dichloropropane	7.12		"	10.0		71.2	56-150				
2-Chlorotoluene	11.0		"	10.0		110	79-130				
2-Hexanone	9.51		"	10.0		95.1	51-146				
4-Chlorotoluene	11.1		"	10.0		111	79-128				
Acetone	8.53		"	10.0		85.3	14-150				
Benzene	7.89		"	10.0		78.9	85-126	Low Bias			
Bromobenzene	11.0		"	10.0		110	78-129				
Bromochloromethane	8.00		"	10.0		80.0	77-128				
Bromodichloromethane	8.90		"	10.0		89.0	79-128				
Bromoform	8.01		"	10.0		80.1	78-133				
Bromomethane	1.23		"	10.0		12.3	43-168	Low Bias			



## 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 BJ70351 - EPA 5030B

#### LCS (BJ70351-BS1)

Prepared & Analyzed: 10/09/2017

Carbon tetrachloride	7.16		ug/L	10.0	71.6	77-141	Low Bias
Chlorobenzene	9.60		"	10.0	96.0	88-120	
Chloroethane	7.41		"	10.0	74.1	65-136	
Chloroform	7.74		"	10.0	77.4	82-128	Low Bias
Chloromethane	5.42		"	10.0	54.2	43-155	
cis-1,2-Dichloroethylene	7.74		"	10.0	77.4	83-129	Low Bias
cis-1,3-Dichloropropylene	8.93		"	10.0	89.3	80-131	
Dibromochloromethane	8.75		"	10.0	87.5	80-130	
Dibromomethane	8.95		"	10.0	89.5	72-134	
Dichlorodifluoromethane	4.98		"	10.0	49.8	44-144	
Ethyl Benzene	9.97		"	10.0	99.7	80-131	
Hexachlorobutadiene	8.46		"	10.0	84.6	67-146	
Isopropylbenzene	11.4		"	10.0	114	76-140	
Methyl tert-butyl ether (MTBE)	7.76		"	10.0	77.6	76-135	
Methylene chloride	7.71		"	10.0	77.1	55-137	
Naphthalene	10.1		"	10.0	101	70-147	
n-Butylbenzene	10.6		"	10.0	106	79-132	
n-Propylbenzene	11.5		"	10.0	115	78-133	
o-Xylene	9.66		"	10.0	96.6	78-130	
p- & m- Xylenes	20.6		"	20.0	103	77-133	
p-Isopropyltoluene	11.0		"	10.0	110	81-136	
sec-Butylbenzene	11.1		"	10.0	111	79-137	
Styrene	9.36		"	10.0	93.6	67-132	
tert-Butylbenzene	11.1		"	10.0	111	77-138	
Tetrachloroethylene	9.45		"	10.0	94.5	82-131	
Toluene	9.63		"	10.0	96.3	80-127	
trans-1,2-Dichloroethylene	7.48		"	10.0	74.8	80-132	Low Bias
trans-1,3-Dichloropropylene	8.77		"	10.0	87.7	78-131	
Trichloroethylene	9.14		"	10.0	91.4	82-128	
Trichlorofluoromethane	7.08		"	10.0	70.8	67-139	
Vinyl Chloride	6.13		"	10.0	61.3	58-145	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	9.85		"	10.0	98.5	69-130	
<i>Surrogate: Toluene-d8</i>	11.0		"	10.0	110	81-117	
<i>Surrogate: p-Bromofluorobenzene</i>	11.1		"	10.0	111	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 BJ70351 - EPA 5030B

LCS Dup (BJ70351-BSD1)	Prepared & Analyzed: 10/09/2017									
1,1,1,2-Tetrachloroethane	9.41		ug/L	10.0	94.1	82-126			3.24	30
1,1,1-Trichloroethane	7.67		"	10.0	76.7	78-136	Low Bias		1.18	30
1,1,2,2-Tetrachloroethane	11.3		"	10.0	113	76-129			2.60	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	7.36		"	10.0	73.6	54-165			1.51	30
1,1,2-Trichloroethane	9.88		"	10.0	98.8	82-123			3.50	30
1,1-Dichloroethane	8.03		"	10.0	80.3	82-129	Low Bias		2.52	30
1,1-Dichloroethylene	7.48		"	10.0	74.8	68-138			1.89	30
1,1-Dichloropropylene	7.53		"	10.0	75.3	83-133	Low Bias		1.20	30
1,2,3-Trichlorobenzene	10.7		"	10.0	107	76-136			8.45	30
1,2,3-Trichloropropane	11.2		"	10.0	112	77-128			5.95	30
1,2,4-Trichlorobenzene	10.4		"	10.0	104	76-137			5.52	30
1,2,4-Trimethylbenzene	11.1		"	10.0	111	82-132			0.0900	30
1,2-Dibromo-3-chloropropane	10.2		"	10.0	102	45-147			7.25	30
1,2-Dibromoethane	9.66		"	10.0	96.6	83-124			5.42	30
1,2-Dichlorobenzene	10.6		"	10.0	106	79-123			1.33	30
1,2-Dichloroethane	8.16		"	10.0	81.6	73-132			6.06	30
1,2-Dichloropropane	9.49		"	10.0	94.9	78-126			1.38	30
1,3,5-Trimethylbenzene	11.2		"	10.0	112	80-131			0.535	30
1,3-Dichlorobenzene	10.6		"	10.0	106	86-122			2.09	30
1,3-Dichloropropane	10.0		"	10.0	100	81-125			3.97	30
1,4-Dichlorobenzene	10.8		"	10.0	108	85-124			1.96	30
2,2-Dichloropropane	7.28		"	10.0	72.8	56-150			2.22	30
2-Chlorotoluene	11.1		"	10.0	111	79-130			0.817	30
2-Hexanone	10.3		"	10.0	103	51-146			8.07	30
4-Chlorotoluene	11.2		"	10.0	112	79-128			0.449	30
Acetone	10.3		"	10.0	103	14-150			18.8	30
Benzene	8.04		"	10.0	80.4	85-126	Low Bias		1.88	30
Bromobenzene	11.2		"	10.0	112	78-129			2.34	30
Bromochloromethane	8.12		"	10.0	81.2	77-128			1.49	30
Bromodichloromethane	9.13		"	10.0	91.3	79-128			2.55	30
Bromoform	8.44		"	10.0	84.4	78-133			5.23	30
Bromomethane	1.52		"	10.0	15.2	43-168	Low Bias		21.1	30
Carbon tetrachloride	7.28		"	10.0	72.8	77-141	Low Bias		1.66	30
Chlorobenzene	9.94		"	10.0	99.4	88-120			3.48	30
Chloroethane	7.72		"	10.0	77.2	65-136			4.10	30
Chloroform	7.99		"	10.0	79.9	82-128	Low Bias		3.18	30
Chloromethane	5.52		"	10.0	55.2	43-155			1.83	30
cis-1,2-Dichloroethylene	7.86		"	10.0	78.6	83-129	Low Bias		1.54	30
cis-1,3-Dichloropropylene	9.23		"	10.0	92.3	80-131			3.30	30
Dibromochloromethane	9.03		"	10.0	90.3	80-130			3.15	30
Dibromomethane	9.22		"	10.0	92.2	72-134			2.97	30
Dichlorodifluoromethane	5.10		"	10.0	51.0	44-144			2.38	30
Ethyl Benzene	10.1		"	10.0	101	80-131			1.49	30
Hexachlorobutadiene	8.62		"	10.0	86.2	67-146			1.87	30
Isopropylbenzene	11.5		"	10.0	115	76-140			0.786	30
Methyl tert-butyl ether (MTBE)	8.17		"	10.0	81.7	76-135			5.15	30
Methylene chloride	7.90		"	10.0	79.0	55-137			2.43	30
Naphthalene	11.0		"	10.0	110	70-147			8.46	30
n-Butylbenzene	10.6		"	10.0	106	79-132			0.849	30
n-Propylbenzene	11.5		"	10.0	115	78-133			0.261	30
o-Xylene	9.86		"	10.0	98.6	78-130			2.05	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 BJ70351 - EPA 5030B

LCS Dup (BJ70351-BSD1)	Prepared & Analyzed: 10/09/2017										
p- & m- Xylenes	20.9		ug/L	20.0	105	77-133		1.74	30		
p-Isopropyltoluene	11.0		"	10.0	110	81-136		0.455	30		
sec-Butylbenzene	11.2		"	10.0	112	79-137		0.537	30		
Styrene	9.75		"	10.0	97.5	67-132		4.08	30		
tert-Butylbenzene	11.2		"	10.0	112	77-138		1.08	30		
Tetrachloroethylene	9.98		"	10.0	99.8	82-131		5.46	30		
Toluene	9.79		"	10.0	97.9	80-127		1.65	30		
trans-1,2-Dichloroethylene	7.50		"	10.0	75.0	80-132	Low Bias	0.267	30		
trans-1,3-Dichloropropylene	9.06		"	10.0	90.6	78-131		3.25	30		
Trichloroethylene	9.49		"	10.0	94.9	82-128		3.76	30		
Trichlorofluoromethane	7.25		"	10.0	72.5	67-139		2.37	30		
Vinyl Chloride	6.39		"	10.0	63.9	58-145		4.15	30		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	10.0		"	10.0	100	69-130					
<i>Surrogate: Toluene-d8</i>	10.9		"	10.0	109	81-117					
<i>Surrogate: p-Bromofluorobenzene</i>	11.0		"	10.0	110	79-122					



### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
17J0171-01	WQ1004171217FRW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17J0171-02	WQ1004171217FRW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17J0171-03	WQ1004171217FRW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17J0171-04	WQ1004171217FRW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



## Sample and Data Qualifiers Relating to This Work Order

QL-03 This LCS analyte recovered outside of acceptance limits. The LCS contains approximately 70 compounds, a limited number of which may be outside acceptance windows.

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-A The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>30% Difference for average Rf). This applies to dectected analytes only.

### 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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**APPENDIX III**  
**OCTOBER 2017 LABORATORY ANALYTICAL REPORTS**  
**FOR AIR SAMPLES**



# Technical Report

prepared for:

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

Report Date: 10/12/2017

**Client Project ID: Rowe Industries**  
York Project (SDG) No.: 17J0161

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: 10/12/2017  
Client Project ID: Rowe Industries  
York Project (SDG) No.: 17J0161

**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 October 05, 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>
17J0161-01	AQ100417945NP4-1	Vapor Extraction	10/04/2017	10/05/2017
17J0161-02	AQ100417945NP4-3	Vapor Extraction	10/04/2017	10/05/2017

## **General Notes for York Project (SDG) No.: 17J0161**

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:** 10/12/2017





## Sample Information

Client Sample ID: AQ100417945NP4-1

York Sample ID:

17J0161-01

York Project (SDG) No.

17J0161

Client Project ID

Rowe Industries

Matrix

Vapor Extraction

Collection Date/Time

October 4, 2017 3:00 pm

Date Received

10/05/2017

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 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
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	9.4	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	7.5	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	9.4	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	10	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	7.5	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	5.5	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	5.4	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	10	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	6.7	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	11	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	8.2	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	5.5	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	6.3	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	9.6	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	6.7	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	9.1	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	8.2	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	6.3	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	8.2	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	9.9	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
78-93-3	2-Butanone	ND		ug/m³	4.0	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	11	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS



## Sample Information

Client Sample ID: AQ100417945NP4-1

York Sample ID:

17J0161-01

York Project (SDG) No.

17J0161

Client Project ID

Rowe Industries

Matrix

Vapor Extraction

Collection Date/Time

October 4, 2017 3:00 pm

Date Received

10/05/2017

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	21	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	5.6	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
67-64-1	Acetone	ND		ug/m³	6.5	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
107-13-1	Acrylonitrile	ND		ug/m³	3.0	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
71-43-2	Benzene	ND		ug/m³	4.4	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
100-44-7	Benzyl chloride	ND		ug/m³	7.1	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	9.2	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
75-25-2	Bromoform	ND		ug/m³	14	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
74-83-9	Bromomethane	ND		ug/m³	5.3	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
75-15-0	Carbon disulfide	ND		ug/m³	4.3	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
56-23-5	Carbon tetrachloride	ND		ug/m³	2.2	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
108-90-7	Chlorobenzene	ND		ug/m³	6.3	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
75-00-3	Chloroethane	ND		ug/m³	3.6	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
67-66-3	Chloroform	ND		ug/m³	6.7	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
74-87-3	<b>Chloromethane</b>	<b>2.8</b>		ug/m³	2.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	5.4	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	6.2	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
110-82-7	Cyclohexane	ND		ug/m³	4.7	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	12	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/m³	6.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	9.9	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
100-41-4	Ethyl Benzene	ND		ug/m³	5.9	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	15	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS



## Sample Information

Client Sample ID: AQ100417945NP4-1

York Sample ID:

**17J0161-01**

York Project (SDG) No.

17J0161

Client Project ID

Rowe Industries

Matrix

Vapor Extraction

Collection Date/Time

October 4, 2017 3:00 pm

Date Received

10/05/2017

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 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
67-63-0	Isopropanol	ND		ug/m³	6.7	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
80-62-6	Methyl Methacrylate	ND		ug/m³	5.6	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	4.9	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
75-09-2	Methylene chloride	ND		ug/m³	9.5	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
142-82-5	n-Heptane	ND		ug/m³	5.6	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
110-54-3	n-Hexane	ND		ug/m³	4.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
95-47-6	o-Xylene	ND		ug/m³	5.9	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
179601-23-1	p- & m- Xylenes	ND		ug/m³	12	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
622-96-8	* p-Ethyltoluene	ND		ug/m³	6.7	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
115-07-1	* Propylene	ND		ug/m³	2.4	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
100-42-5	Styrene	ND		ug/m³	5.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
127-18-4	<b>Tetrachloroethylene</b>	<b>3.7</b>	CCV-A	ug/m³	2.3	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
109-99-9	* Tetrahydrofuran	ND		ug/m³	8.1	13.67	EPA TO-15 Certifications:	10/06/2017 15:01	10/06/2017 15:01	LDS
108-88-3	Toluene	ND		ug/m³	5.2	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	5.4	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	6.2	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
79-01-6	Trichloroethylene	ND		ug/m³	1.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	7.7	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
108-05-4	Vinyl acetate	ND		ug/m³	4.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
593-60-2	Vinyl bromide	ND		ug/m³	6.0	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
75-01-4	Vinyl Chloride	ND		ug/m³	3.5	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 15:01	10/06/2017 15:01	LDS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: p-Bromofluorobenzene	108 %	70-130							



## Sample Information

Client Sample ID: AQ100417945NP4-3

York Sample ID:

17J0161-02

York Project (SDG) No.

17J0161

Client Project ID

Rowe Industries

Matrix

Vapor Extraction

Collection Date/Time

October 4, 2017 3:00 pm

Date Received

10/05/2017

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	9.4	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	7.5	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	9.4	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	10	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	7.5	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	5.5	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	5.4	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	10	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	6.7	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	11	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	8.2	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	5.5	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	6.3	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	9.6	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	6.7	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	9.1	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	8.2	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	6.3	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	8.2	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	9.9	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
78-93-3	2-Butanone	ND		ug/m³	4.0	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	11	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
107-05-1	3-Chloropropene	ND		ug/m³	21	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
							NELAC-NY12058,NJDEP-Queens			



## Sample Information

Client Sample ID: AQ100417945NP4-3

York Sample ID:

17J0161-02

York Project (SDG) No.  
17J0161

Client Project ID  
Rowe Industries

Matrix  
Vapor Extraction

Collection Date/Time  
October 4, 2017 3:00 pm

Date Received  
10/05/2017

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	5.6	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
67-64-1	Acetone	ND		ug/m³	6.5	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
107-13-1	Acrylonitrile	ND		ug/m³	3.0	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
71-43-2	Benzene	ND		ug/m³	4.4	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
100-44-7	Benzyl chloride	ND		ug/m³	7.1	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	9.2	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
75-25-2	Bromoform	ND		ug/m³	14	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
74-83-9	Bromomethane	ND		ug/m³	5.3	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
75-15-0	Carbon disulfide	ND		ug/m³	4.3	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
56-23-5	Carbon tetrachloride	ND		ug/m³	2.2	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
108-90-7	Chlorobenzene	ND		ug/m³	6.3	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
75-00-3	Chloroethane	ND		ug/m³	3.6	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
67-66-3	Chloroform	ND		ug/m³	6.7	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
74-87-3	<b>Chloromethane</b>	<b>2.8</b>		ug/m³	2.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	5.4	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	6.2	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
110-82-7	Cyclohexane	ND		ug/m³	4.7	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	12	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/m³	6.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	9.9	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
100-41-4	Ethyl Benzene	ND		ug/m³	5.9	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	15	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
67-63-0	Isopropanol	ND		ug/m³	6.7	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS



## Sample Information

Client Sample ID: AQ100417945NP4-3

York Sample ID:

17J0161-02

York Project (SDG) No.

17J0161

Client Project ID

Rowe Industries

Matrix

Vapor Extraction

Collection Date/Time

October 4, 2017 3:00 pm

Date Received

10/05/2017

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 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
80-62-6	Methyl Methacrylate	ND		ug/m³	5.6	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	4.9	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
75-09-2	Methylene chloride	ND		ug/m³	9.5	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
142-82-5	n-Heptane	ND		ug/m³	5.6	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
110-54-3	n-Hexane	ND		ug/m³	4.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
95-47-6	o-Xylene	ND		ug/m³	5.9	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
179601-23-1	p- & m- Xylenes	ND		ug/m³	12	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
622-96-8	* p-Ethyltoluene	ND		ug/m³	6.7	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
115-07-1	* Propylene	ND		ug/m³	2.4	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
100-42-5	Styrene	ND		ug/m³	5.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
127-18-4	Tetrachloroethylene	2.8	CCV-A	ug/m³	2.3	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
109-99-9	* Tetrahydrofuran	ND		ug/m³	8.1	13.67	EPA TO-15 Certifications:	10/06/2017 16:01	10/06/2017 16:01	LDS
108-88-3	Toluene	ND		ug/m³	5.2	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	5.4	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	6.2	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
79-01-6	Trichloroethylene	ND		ug/m³	1.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	7.7	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
108-05-4	Vinyl acetate	ND		ug/m³	4.8	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
593-60-2	Vinyl bromide	ND		ug/m³	6.0	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
75-01-4	Vinyl Chloride	ND		ug/m³	3.5	13.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	10/06/2017 16:01	10/06/2017 16:01	LDS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: p-Bromofluorobenzene	111 %	70-130							



## Analytical Batch Summary

**Batch ID:** BJ70457

**Preparation Method:** EPA TO15 PREP

**Prepared By:** LDS

YORK Sample ID	Client Sample ID	Preparation Date
17J0161-01	AQ100417945NP4-1	10/06/17
17J0161-02	AQ100417945NP4-3	10/06/17
BJ70457-BLK1	Blank	10/06/17
BJ70457-BS1	LCS	10/06/17
BJ70457-DUP1	Duplicate	10/06/17



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BJ70457 - EPA TO15 PREP

#### Blank (BJ70457-BLK1)

Prepared & Analyzed: 10/06/2017

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



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BJ70457 - EPA TO15 PREP</b>											
<b>Blank (BJ70457-BLK1)</b>									Prepared & Analyzed: 10/06/2017		
n-Hexane	ND	0.35	ug/m³								
o-Xylene	ND	0.43	"								
p- & m- Xylenes	ND	0.87	"								
p-Ethyltoluene	ND	0.49	"								
Propylene	ND	0.17	"								
Styrene	ND	0.43	"								
Tetrachloroethylene	ND	0.17	"								
Tetrahydrofuran	ND	0.59	"								
Toluene	ND	0.38	"								
trans-1,2-Dichloroethylene	ND	0.40	"								
trans-1,3-Dichloropropylene	ND	0.45	"								
Trichloroethylene	ND	0.13	"								
Trichlorofluoromethane (Freon 11)	ND	0.56	"								
Vinyl acetate	ND	0.35	"								
Vinyl bromide	ND	0.44	"								
Vinyl Chloride	ND	0.26	"								
Surrogate: p-Bromofluorobenzene	8.79		ppbv	10.0		87.9	70-130				
<b>LCS (BJ70457-BS1)</b>									Prepared & Analyzed: 10/06/2017		
1,1,1,2-Tetrachloroethane	8.97		ppbv	10.0		89.7	70-130				
1,1,1-Trichloroethane	9.60		"	10.0		96.0	70-130				
1,1,2,2-Tetrachloroethane	9.19		"	10.0		91.9	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.2		"	10.0		102	70-130				
1,1,2-Trichloroethane	8.58		"	10.0		85.8	70-130				
1,1-Dichloroethane	9.19		"	10.0		91.9	70-130				
1,1-Dichloroethylene	9.13		"	10.0		91.3	70-130				
1,2,4-Trichlorobenzene	8.68		"	10.0		86.8	70-130				
1,2,4-Trimethylbenzene	8.88		"	10.0		88.8	70-130				
1,2-Dibromoethane	8.81		"	10.0		88.1	70-130				
1,2-Dichlorobenzene	8.95		"	10.0		89.5	70-130				
1,2-Dichloroethane	8.98		"	10.0		89.8	70-130				
1,2-Dichloropropane	8.19		"	10.0		81.9	70-130				
1,2-Dichlorotetrafluoroethane	11.9		"	10.0		119	70-130				
1,3,5-Trimethylbenzene	8.83		"	10.0		88.3	70-130				
1,3-Butadiene	10.6		"	10.0		106	70-130				
1,3-Dichlorobenzene	8.68		"	10.0		86.8	70-130				
1,3-Dichloropropane	8.35		"	10.0		83.5	70-130				
1,4-Dichlorobenzene	8.53		"	10.0		85.3	70-130				
1,4-Dioxane	7.57		"	10.0		75.7	70-130				
2-Butanone	8.39		"	10.0		83.9	70-130				
2-Hexanone	7.22		"	10.0		72.2	70-130				
3-Chloropropene	9.05		"	10.0		90.5	70-130				
4-Methyl-2-pentanone	7.87		"	10.0		78.7	70-130				
Acetone	7.53		"	10.0		75.3	70-130				
Acrylonitrile	9.81		"	10.0		98.1	70-130				
Benzene	9.15		"	10.0		91.5	70-130				
Benzyl chloride	9.01		"	10.0		90.1	70-130				
Bromodichloromethane	8.59		"	10.0		85.9	70-130				
Bromoform	9.47		"	10.0		94.7	70-130				
Bromomethane	10.1		"	10.0		101	70-130				
Carbon disulfide	10.3		"	10.0		103	70-130				



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BJ70457 - EPA TO15 PREP</b>											
<b>LCS (BJ70457-BS1)</b>											
Carbon tetrachloride	9.80		ppbv	10.0	98.0	70-130					
Chlorobenzene	8.88		"	10.0	88.8	70-130					
Chloroethane	10.2		"	10.0	102	70-130					
Chloroform	9.55		"	10.0	95.5	70-130					
Chloromethane	10.9		"	10.0	109	70-130					
cis-1,2-Dichloroethylene	9.93		"	10.0	99.3	70-130					
cis-1,3-Dichloropropylene	9.55		"	10.0	95.5	70-130					
Cyclohexane	9.08		"	10.0	90.8	70-130					
Dibromochloromethane	8.77		"	10.0	87.7	70-130					
Dichlorodifluoromethane	11.6		"	10.0	116	70-130					
Ethyl acetate	9.26		"	10.0	92.6	70-130					
Ethyl Benzene	8.80		"	10.0	88.0	70-130					
Hexachlorobutadiene	9.22		"	10.0	92.2	70-130					
Isopropanol	9.03		"	10.0	90.3	70-130					
Methyl Methacrylate	8.62		"	10.0	86.2	70-130					
Methyl tert-butyl ether (MTBE)	8.85		"	10.0	88.5	70-130					
Methylene chloride	9.16		"	10.0	91.6	70-130					
n-Heptane	8.73		"	10.0	87.3	70-130					
n-Hexane	9.34		"	10.0	93.4	70-130					
o-Xylene	8.88		"	10.0	88.8	70-130					
p- & m- Xylenes	17.4		"	20.0	86.9	70-130					
p-Ethyltoluene	9.43		"	10.0	94.3	70-130					
Propylene	6.38		"	10.0	63.8	70-130			Low Bias		
Styrene	9.01		"	10.0	90.1	70-130					
Tetrachloroethylene	6.89		"	10.0	68.9	70-130			Low Bias		
Tetrahydrofuran	8.53		"	10.0	85.3	70-130					
Toluene	8.45		"	10.0	84.5	70-130					
trans-1,2-Dichloroethylene	9.58		"	10.0	95.8	70-130					
trans-1,3-Dichloropropylene	9.45		"	10.0	94.5	70-130					
Trichloroethylene	8.83		"	10.0	88.3	70-130					
Trichlorofluoromethane (Freon 11)	10.2		"	10.0	102	70-130					
Vinyl acetate	11.3		"	10.0	113	70-130					
Vinyl bromide	11.0		"	10.0	110	70-130					
Vinyl Chloride	10.7		"	10.0	107	70-130					
<i>Surrogate: p-Bromofluorobenzene</i>	9.53		"	10.0	95.3	70-130					



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

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BJ70457 - EPA TO15 PREP

Duplicate (BJ70457-DUP1)	*Source sample: 17J0161-02 (AQ100417945NP4-3)						Prepared & Analyzed: 10/06/2017				
1,1,1,2-Tetrachloroethane	ND	9.4	ug/m <sup>3</sup>		ND					25	
1,1,1-Trichloroethane	ND	7.5	"		ND					25	
1,1,2,2-Tetrachloroethane	ND	9.4	"		ND					25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	"		ND					25	
1,1,2-Trichloroethane	ND	7.5	"		ND					25	
1,1-Dichloroethane	ND	5.5	"		ND					25	
1,1-Dichloroethylene	ND	5.4	"		ND					25	
1,2,4-Trichlorobenzene	ND	10	"		ND					25	
1,2,4-Trimethylbenzene	ND	6.7	"		ND					25	
1,2-Dibromoethane	ND	11	"		ND					25	
1,2-Dichlorobenzene	ND	8.2	"		ND					25	
1,2-Dichloroethane	ND	5.5	"		ND					25	
1,2-Dichloropropane	ND	6.3	"		ND					25	
1,2-Dichlorotetrafluoroethane	ND	9.6	"		ND					25	
1,3,5-Trimethylbenzene	ND	6.7	"		ND					25	
1,3-Butadiene	ND	9.1	"		ND					25	
1,3-Dichlorobenzene	ND	8.2	"		ND					25	
1,3-Dichloropropane	ND	6.3	"		ND					25	
1,4-Dichlorobenzene	ND	8.2	"		ND					25	
1,4-Dioxane	ND	9.9	"		ND					25	
2-Butanone	ND	4.0	"		ND					25	
2-Hexanone	ND	11	"		ND					25	
3-Chloropropene	ND	21	"		ND					25	
4-Methyl-2-pentanone	ND	5.6	"		ND					25	
Acetone	ND	6.5	"		ND					25	
Acrylonitrile	ND	3.0	"		ND					25	
Benzene	ND	4.4	"		ND					25	
Benzyl chloride	ND	7.1	"		ND					25	
Bromodichloromethane	ND	9.2	"		ND					25	
Bromoform	ND	14	"		ND					25	
Bromomethane	ND	5.3	"		ND					25	
Carbon disulfide	ND	4.3	"		ND					25	
Carbon tetrachloride	ND	2.2	"		ND					25	
Chlorobenzene	ND	6.3	"		ND					25	
Chloroethane	ND	3.6	"		ND					25	
Chloroform	ND	6.7	"		ND					25	
Chloromethane	3.1	2.8	"		2.8				9.52	25	
cis-1,2-Dichloroethylene	ND	5.4	"		ND					25	
cis-1,3-Dichloropropylene	ND	6.2	"		ND					25	
Cyclohexane	ND	4.7	"		ND					25	
Dibromochloromethane	ND	12	"		ND					25	
Dichlorodifluoromethane	ND	6.8	"		ND					25	
Ethyl acetate	ND	9.9	"		ND					25	
Ethyl Benzene	ND	5.9	"		ND					25	
Hexachlorobutadiene	ND	15	"		ND					25	
Isopropanol	ND	6.7	"		ND					25	
Methyl Methacrylate	ND	5.6	"		ND					25	
Methyl tert-butyl ether (MTBE)	ND	4.9	"		ND					25	
Methylene chloride	ND	9.5	"		ND					25	
n-Heptane	ND	5.6	"		ND					25	
n-Hexane	ND	4.8	"		ND					25	



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD RPD	RPD Limit	RPD Flag
<b>Batch BJ70457 - EPA TO15 PREP</b>											
<b>Duplicate (BJ70457-DUP1)</b>	*Source sample: 17J0161-02 (AQ100417945NP4-3)									Prepared & Analyzed: 10/06/2017	
o-Xylene	ND	5.9	ug/m³		ND					25	
p- & m- Xylenes	ND	12	"		ND					25	
p-Ethyltoluene	ND	6.7	"		ND					25	
Propylene	ND	2.4	"		ND					25	
Styrene	ND	5.8	"		ND					25	
Tetrachloroethylene	2.8	2.3	"		2.8				0.00	25	
Tetrahydrofuran	ND	8.1	"		ND					25	
Toluene	ND	5.2	"		ND					25	
trans-1,2-Dichloroethylene	ND	5.4	"		ND					25	
trans-1,3-Dichloropropylene	ND	6.2	"		ND					25	
Trichloroethylene	ND	1.8	"		ND					25	
Trichlorofluoromethane (Freon 11)	ND	7.7	"		ND					25	
Vinyl acetate	ND	4.8	"		ND					25	
Vinyl bromide	ND	6.0	"		ND					25	
Vinyl Chloride	ND	3.5	"		ND					25	
Surrogate: p-Bromofluorobenzene	10.7		ppbv		10.0			107		70-130	





## Sample and Data Qualifiers Relating to This Work Order

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

CCV-A The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>30% Difference for average Rf). This applies to dectected analytes only.

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

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

New York Project No. 110161

YOUR Information

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### *Comments*

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