



## PROJECT STATUS MEMORANDUM

**TO:** Pamela Tames, USEPA

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

**SUBJECT:** Rowe Industries Superfund Site  
NYS Site ID No. 152106  
Groundwater Recovery and Treatment System  
September 2019 Status Report

**DATE:** February 19, 2020

WSP USA (WSP) commenced operation of the Full-Scale Pump and Treat (FSP&T) groundwater remediation system at the above-referenced site on December 17, 2002. Starting in September 2008, the groundwater recovered by the Focus Pump and Treat (FP&T) system was routed to the FSP&T system for treatment. As of 2014, the FSP&T system only treats water extracted from RW-2 and FRW-1, 2, 3 and 4; the other FSP&T recovery wells (RW-1, 3, 4, 5, 6, 7, 8, and 9) have been shut down with USEPA approval after achieving remediation standards. This status report presents a summary of performance, operation and maintenance for both systems and monitoring activities for the site from September 1, 2019 through September 30, 2019. The report includes a summary of system performance parameters, system operation parameters, and analytical results for groundwater, system effluent samples, and air quality results.

### SUMMARY OF SYSTEM PERFORMANCE AND OPERATION

*(September 1, 2019 through September 30, 2019)*

1. Hours of operation during the reporting period: 625 hours (86.9%)
2. Alarm conditions during the reporting period: See Table 1
3. Were the State Pollutant Discharge Elimination System (SPDES) volatile organic compounds (VOC) discharge permit criteria achieved: Yes, (see Table 2)
4. Total volume of water pumped during the reporting period: 1,284,490 gal.
5. Was the system effluent flow below the SPDES limit of 1,023,000 gpd: Yes, (see Graph 1)
6. Mass of VOCs recovered during the reporting period: 0.01 pound (see Graph 2)
7. Cumulative mass of VOCs recovered since startup on 12/17/02: 229.8 pounds  
(calculations can be provided upon request)



## PUMP AND TREAT SYSTEM STATUS SUMMARY

The following table summarizes recovery well parameters for the operating recovery wells.

| Well                | Volume pumped<br>(gal) | Total VOC<br>Concentration (ug/L) |
|---------------------|------------------------|-----------------------------------|
| RW-2 <sup>1/</sup>  | 1,012,626              | <0.5                              |
| FRW-1 <sup>2/</sup> | 29                     | 23.4                              |
| FRW-2 <sup>2</sup>  | 4,407                  | 2.2                               |
| FRW-3 <sup>2/</sup> | 24,884                 | 8.6                               |
| FRW-4 <sup>2/</sup> | 60,730                 | 0.8                               |

<sup>1/</sup>The above table summarizes the parameters for RW-2 from September 1 to September 30, 2019.

<sup>2/</sup>The above table summarizes the parameters for the FRWs from September 5, 2019 to October 3, 2019.

In September, continued troubleshooting FRW-1. The lead time for obtaining a new relay and loading the program was longer than expected; therefore, the installation date for the programmable relay is scheduled for October. On September 19<sup>th</sup>, the pump in FRW-2 stopped operating in auto and hand mode. Initial troubleshooting consisted of removing the pump and trying to clean the intake; however, this action was not successful at restoring FRW-2 pump operation. FRW-2 pump will be replaced in October.

## SUMMARY OF SAMPLING ACTIVITIES

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

- Monthly groundwater samples were collected from RW-2, FRW-1, FRW-2, FRW-3 and FRW-4 on September 5, 2019; and
- Semi-annual/annual groundwater quality samples were collected from recovery and monitor wells RW-3, RW-4, RW-6, MW98-01A, 04, 04B, 05AR, 05BR, 45A, 45B, 28A, 28B, 44A, 44B, 44C, 47A, 47B, 58A, 58B, 59A, 59B, 42B, 43A, 43B, 43C, 53, 54, B1, B4, N-32 and N-32B. The collection of the semi-annual/annual groundwater quality samples was completed on September 23, 24 and 25, 2019. The semi-annual/annual groundwater quality sampling results will be summarized and reported under a separate cover. The next semi-annual groundwater quality sampling event is currently scheduled for March 2020.

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

The PCE, trichloroethylene (TCE), cis-1,2-dichloroethylene (cis-DCE), vinyl chloride (VC) and trichloroethane (TCA) concentrations in the groundwater sample collected from RW-2 were below the respective Applicable or Relevant and Appropriate Requirements (ARARs); concentrations at RW-2 have been below the ARARs for over eight years.



PCE concentrations in FRW-1 and 3 remain above the ARAR in September. The PCE concentration in the groundwater samples collected at FRW-2 and 4 were below the ARAR in September. The TCE, cis-DCE, TCA and VC concentrations in the groundwater samples collected at FRW-1, 2, 3 and 4 were below their respective ARARs in September.

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

## FUTURE O&M ACTIVITIES

O&M activities scheduled for October 2019 include:

- Troubleshooting the operation of the pump in FRW-1;
- Replace the pump in FRW-2; and
- normal bi-weekly/monthly O&M activities.

MMG:nv

Attachments

cc: Brian Shuttleworth - Kraft Heinz Foods Company (as successor to Kraft Foods Group, Inc.) -.pdf  
Kevin Kyrias-Gann, Ramboll -.pdf  
Rebecca Spellissy, Ramboll -.pdf  
Payson Long, NYSDEC-.pdf  
Chief-Operation Maintenance and Support Section, NYSDEC-.pdf  
Anthony Leung, RWM, R-1, NYSDEC-.pdf  
Sundy Schermeyer, Town of Southampton, Town Clerk-.pdf  
Mark Sergott, NYSDOH-.pdf  
H:\NABIS\2019\Monthly Reports\September>Status Report - Sept 2019.docx

## **TABLES**

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

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

| Date    | Time | System Changes/Modifications   | Personnel  |
|---------|------|--|------------|
| 9/5/19  |      | FSP&T system is operating normally. Cleaned FRW flow meter paddle wheels for FRW-2, 3 and 4. FRW-2, 3 and 4 operating normally. FRW-1 not operational; troubleshooting continues. FRW-1 remains off awaiting purchase and installation of new relay.   | TS         |
| 9/19/19 |      | FSP&T system operating normally; switched lead pump from TP-1B to TP1A; switched lead pump from TP-2B to TP-2A. Turned FSP&T and FP&T systems off at the end of the day to allow groundwater to recharge for static depth-to-water readings on 9/23.   | SP         |
|         |      | Changed the multi-bag filter bags (400 um) in Banks 1 and 2, seven of eight housings used. Banks 1 and 2 left open. Bank 3 closed. Left System running normally.   | SP         |
|         |      | Cleaned FRW-1, 2, 3 and 4 flow meter paddle wheels.  | SP         |
|         |      | FRW-2 is not operating in hand or auto mode. Pulled pump to inspect and clean the intake but this did not correct the problem. Leave FRW-2 off suspecting a burned-out pump. Schedule the installation of a replacement pump for FRW-2 when the electrician installs the programmable relay. | SP         |
| 9/23/19 |      | Begin semi-annual/annual groundwater sampling event.   | PS, DS, TS |
|         |      | Resume operation of FSP&T and FP&T systems following the completion of the static depth-to-water round. RW-2, FRW-3 and FRW-4 are operating.   | TS         |
| 9/24/19 |      | Continue semi-annual/annual groundwater sampling.  | PS, DS     |
| 9/25/19 |      | Complete semi-annual/annual groundwater sampling.  | PS, DS     |

Notes:

TS

Tunde Sandor, WSP USA

SP

Scott Philbrick, WSP USA

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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 <sup>4/</sup> (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                 | ---               | ---                   |
| 21-Sep-18                  | 6.8              | 155                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<1.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 7.48              | 0.0369                |
| 5-Oct-18                   | 6.9              | 145                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<1.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 1.66              | ND<0.278              |
| 1-Nov-18                   | 6.8              | 193                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<0.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 0.838             | ND<0.278              |
| 5-Dec-18                   | 6.9              | 100                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<0.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 0.845             | ND<0.278              |
| 3-Jan-19                   | 6.9              | 85                       | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<0.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 1.32              | ND<0.278              |
| 1-Feb-19                   | 6.9              | 126                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<0.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 0.641             | ND<0.278              |
| 1-Mar-19                   | 6.9              | 142                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<0.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 6.31              | ND<0.278              |
| 2-Apr-19                   | 6.9              | 153                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<0.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 1.27              | ND<0.278              |
| 6-May-19                   | 6.9              | 175                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<0.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 0.374             | ND<0.278              |
| 4-Jun-19                   | 6.0              | 139                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<0.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 0.620             | ND<0.278              |
| 2-Jul-19                   | 6.0              | 145                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<0.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | 1.82 C,Q,B         | ND<0.5            | 0.766             | ND<0.278              |
| 1-Aug-19                   | 6.8              | 168                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<0.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 1.30              | 1.24                  |
| 5-Sep-19                   | 6.8              | 172                      | ND<0.5     | ND<0.5           | ND<0.5     | ND<0.5         | ND<0.5         | ND<0.5             | ND<0.5               | ND<0.5        | ND<0.5         | ND<0.5               | ND<2                      | ND<0.5           | ND<0.5             | ND<0.5            | 0.291             | ND<0.278              |

SPDES: State Pollutant Discharge Elimination System

mg/l: Milligrams per liter

ug/l: Micrograms per liter

---: Not established

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

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

ND: Not detected NA: Not Analyzed

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

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

Notes:

- Based on the SPDES criteria from an NYSDEC letter dated on May 6, 2016, the allowable pH range for the Rowe Site is between 6.5 and 8.5. The pH of the effluent sample collected on June 18, 2019 was 6.0. Historic pH measurements from recovery wells indicate that natural background pH concentrations are less than 6.5.
- "Effluent" samples were collected from sample port labeled NP2-10 unless otherwise noted.
- Starting in October 2016, FSP&T system samples are collected monthly instead of once every two weeks. The pH of the effluent water is measured two times per month in accordance with the SPDES requirements.
- The laboratory mistakenly forgot to analyze the system effluent sample collected on August 28, 2018 for total dissolved solids (TDS).

NM: Not Measured

TDS: Total dissolved solids

PCE: Tetrachloroethylene

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

TCE: Trichloroethene

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

TABLE 3

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

**Recovery Well Water Quality Results**

| Recovery Well <sup>1/</sup> | Date Sampled | PCE (ug/L) | TCE (ug/L) | TCA (ug/L) | Chloroform (ug/L) | MTBE (ug/L) | 1,1-Dichloroethane (ug/L) | cis-1,2-Dichloroethene (ug/L) | 1,1-Dichloroethene (ug/L) | Methylene Chloride (ug/L) | Toluene (ug/L) | Benzene (ug/L) | m,p-Xylene (ug/L) | o-Xylene (ug/L) |
|-----------------------------|--------------|------------|------------|------------|-------------------|-------------|---------------------------|-------------------------------|---------------------------|---------------------------|----------------|----------------|-------------------|-----------------|
|                             | ARAR's       | <b>5</b>   | <b>5</b>   | <b>5</b>   | <b>7</b>          | <b>NE</b>   | <b>5</b>                  | <b>5</b>                      | <b>5</b>                  | <b>5</b>                  | <b>NE</b>      | <b>NE</b>      | <b>5</b>          | <b>5</b>        |
| RW-2                        | 3-Jan-18     | 0.28 J     | 0.70       | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 1-Feb-18     | 0.33 J     | 0.59       | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 1-Mar-18     | 0.41 J     | 0.67       | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 2-Apr-18     | 0.28 J     | 0.36 J     | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 2-May-18     | 0.32 J     | 0.22 J     | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 5-Jun-18     | 0.21 J     | ND<0.5     | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 2-Jul-18     | 0.22 J     | ND<0.5     | ND<0.5     | 0.28 J            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 28-Aug-18    | ND<0.5     | ND<0.5     | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 21-Sep-18    | 0.370      | 0.260      | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 5-Oct-18     | 0.250      | ND<0.5     | ND<0.5     | 0.370             | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 1-Nov-18     | ND<0.5     | ND<0.5     | ND<0.5     | 0.290             | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 5-Dec-18     | 0.300 C,S  | 0.380      | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 3-Jan-19     | 0.320      | 0.310      | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 1-Feb-19     | 0.380      | 0.360 Q    | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 1-Mar-19     | 0.320      | 0.200      | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 2-Apr-19     | 0.270 Q    | 0.320      | ND<0.5     | 0.280             | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | 0.220          | ND<0.5         | ND<1              | ND<0.5          |
|                             | 6-May-19     | 0.340      | 0.270      | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 4-Jun-19     | ND<0.5     | ND<0.5     | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 2-Jul-19     | 0.250      | 0.210      | ND<0.5     | 0.210             | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 1-Aug-19     | ND<0.5     | ND<0.5     | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |
|                             | 5-Sep-19     | ND<0.5     | ND<0.5     | ND<0.5     | ND<0.5            | ND<0.5      | ND<0.5                    | ND<0.5                        | ND<0.5                    | ND<2                      | ND<0.5         | ND<0.5         | ND<1              | ND<0.5          |

PCE: Tetrachloroethylene

TCE: Trichloroethylene

TCA: 1,1,1-Trichloroethane

NS: Not sampled

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.

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

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

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

ARAR's are chemical specific aquifer restoration goals for ground water at the Former Rowe Industries Superfund Site.

NE indicates that the ARAR goal was not established for this compound by the EPA.

Bold values indicate an 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**

| <b>FRW-1</b>  |          |        |          |                 |          |        |                 |         |                 |           |
|---|----------|--------|----------|-----------------|----------|--------|-----------------|---------|-----------------|-----------|
| Date  | PCE      | TCE    | cis12DCE | VC              | TCA      | 11DCA  | 124TCB          | Toluene | Bromomethane    | Acetone   |
| ARARs   | 5        | 5      | 5        | 2 <sup>1/</sup> | 5        | 5      | 5 <sup>1/</sup> | 5       | 5 <sup>1/</sup> | NE        |
| 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      |
| <b>The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017</b> |          |        |          |                 |          |        |                 |         |                 |           |
| 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      |
| <b>The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017</b>   |          |        |          |                 |          |        |                 |         |                 |           |
| 1-Nov-17  | 72       | 1.3    | 1.7      | ND<0.5          | 0.37 C,J | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| <b>The FRWs were off from November 12 to December 5, 2017</b>                             |          |        |          |                 |          |        |                 |         |                 |           |
| 5-Dec-17  | 55       | 1.5    | 3.4      | ND<0.5          | 0.4 J    | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| <b>FRW-1 was off from December 6 to 12 and December 24, 2017 to February 9, 2018</b>      |          |        |          |                 |          |        |                 |         |                 |           |
| 1-Feb-18  | 63       | 7.4    | 28       | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| 1-Mar-18  | 110      | 2.7    | 1.8      | ND<0.5          | 1.0      | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| <b>The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018</b>          |          |        |          |                 |          |        |                 |         |                 |           |
| 2-Apr-18  | 83       | 0.31 J | ND<0.5   | ND<0.5          | 0.25 J   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | 1.2 C,S,J |
| <b>The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018</b>       |          |        |          |                 |          |        |                 |         |                 |           |
| 2-May-18  | 97       | 0.86   | 0.46 J   | ND<0.5          | 0.75     | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| <b>The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018</b>              |          |        |          |                 |          |        |                 |         |                 |           |
| 20-Jun-18   | 25       | 0.76   | 0.68     | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| 2-Jul-18  | 22       | 0.66   | 0.60     | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| <b>The FRWs were off from July 2 to September 21, 2018</b>                                |          |        |          |                 |          |        |                 |         |                 |           |
| 28-Aug-18 <sup>3/4</sup>  | 7.26     | 4.16   | 9.05 C   | 0.220           | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | 11.1 I    |
| 21-Sep-18   | 20.2     | 1.25   | 2.43     | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| 5-Oct-18  | 1.19     | ND<0.5 | 0.280    | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| <b>The FRWs were off from October 27 to October 29, 2018</b>                              |          |        |          |                 |          |        |                 |         |                 |           |
| 1-Nov-18  | 5.12     | 0.780  | 3.30     | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| 5-Dec-18  | 43.0 C,S | 1.06   | 0.74     | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| 3-Jan-19  | 18.8     | 0.450  | 0.290    | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| <b>The FRWs were off from January 5 to January 15, 2019</b>                               |          |        |          |                 |          |        |                 |         |                 |           |
| 1-Feb-19  | 61.2     | 0.550  | ND<0.5   | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| <b>The FRWs were off from February 18 to March 1, 2019</b>                                |          |        |          |                 |          |        |                 |         |                 |           |
| 19-Mar-19   | 13.4 I   | 0.770  | 0.450    | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| 2-Apr-19  | 48.9     | 1.28   | 2.16     | 0.260           | 0.230    | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| <b>The FRWs were off from May 1, 2019 to May 3, 2019</b>                                  |          |        |          |                 |          |        |                 |         |                 |           |
| 6-May-19  | 32.2     | 0.24   | 0.250    | ND<0.5          | ND<0.5   | ND<0.5 | 0.470           | 0.210   | ND<0.5          | ND<2      |
| 4-Jun-19  | 11.3 C   | ND<0.5 | ND<0.5   | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| <b>FRW-1 was off from June 18, 2019 to September 30, 2019</b>                             |          |        |          |                 |          |        |                 |         |                 |           |
| 2-Jul-19  | 26.4     | ND<0.5 | ND<0.5   | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| 1-Aug-19  | 9.39 Q   | ND<0.5 | ND<0.5   | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | ND<2      |
| 5-Sep-19  | 21.3     | 0.360  | 0.390    | ND<0.5          | ND<0.5   | ND<0.5 | ND<0.5          | ND<0.5  | ND<0.5          | 1.30 C    |

1. NYSDEC ambient water quality standards for these compounds are presented because site-specific ARARs for these compounds were not established.
2. The FP&T system was not operating because of a malfunctioning transfer pump. The FRWs were turned on manually to collect a groundwater sample.
3. Tetrahydrofuran, a common industrial solvent for polyvinyl chloride (PVC) and a component in varnishes, and a popular solvent used in laboratories was detected in the groundwater sample at 278 ug/L. However it was not detected in the laboratory blank or the laboratory duplicates. This is not a compound typically detected in groundwater samples from the site. Turned wells on only long enough to collect sample.
4. Other non-target COCs (tert-butyl alcohol, 2-butanone and/or acetone) were detected in the August 28, 2018 sample. For the case of acetone, this is a common laboratory artifact. The detections of the remaining non-target COCs is most likely attributed to collecting the sample that remained in close contact with PVC pipes for an extended time (i.e. from July 2 to August 28, 2018). Other than acetone, non-target COCs were not detected to any significant degree in the groundwater sample collected on September 21, 2018.

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

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

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

S = SCAL-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration (average RF>20%).

I = ICV-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).

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

ND: Not detected

ARARs -

Comments:

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

PCE: Tetrachloroethylene

cis12DCE: cis-1,2-Dichloroethene

TCA: 1,1,1-Trichloroethane

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-Sep-17  | 33       | 0.85   | 0.59     | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017  |          |        |          |                 |        |         |            |         |
| 4-Oct-17  | 50       | 2.7    | 0.91     | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | 5.0     |
| The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017    |          |        |          |                 |        |         |            |         |
| 1-Nov-17  | 45       | 0.76   | ND<0.5   | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017          |          |        |          |                 |        |         |            |         |
| 5-Dec-17  | 38       | 3.4    | 1.6      | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| The FRWs were off from December 24, 2017 to February 9, 2018                        |          |        |          |                 |        |         |            |         |
| 1-Feb-18  | 37       | 3.2    | 1.4      | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | 2.8     |
| 1-Mar-18  | 48       | 0.68   | ND<0.5   | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018           |          |        |          |                 |        |         |            |         |
| 2-Apr-18  | 140      | 1.2    | 0.36 J   | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018        |          |        |          |                 |        |         |            |         |
| 2-May-18  | 29       | 0.92   | 0.29 J   | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | 4.6     |
| The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018               |          |        |          |                 |        |         |            |         |
| 20-Jun-18   | 3.8      | 1.4    | 0.44 J   | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| 2-Jul-18  | 3.8      | ND<0.5 | ND<0.5   | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| The FRWs were off from July 2 to September 21, 2018                                 |          |        |          |                 |        |         |            |         |
| 28-Aug-18 <sup>3/4</sup>  | ND<0.5   | 0.300  | 29.0 C   | 2.48            | ND<0.5 | 0.510   | ND<0.5     | ND<2    |
| 21-Sep-18   | 11.9     | 1.83   | 14.5     | 0.730           | ND<0.5 | ND<0.5  | ND<0.5     | 2.06    |
| 5-Oct-18  | 1.86     | ND<0.5 | ND<0.5   | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| The FRWs were off from October 27 to October 29, 2018                               |          |        |          |                 |        |         |            |         |
| 1-Nov-18  | 3.20     | 0.610  | 0.950    | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| 5-Dec-18  | 19.1 C,S | 0.590  | ND<0.5   | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | 1.00 C  |
| 3-Jan-19  | 13.8     | 0.670  | 1.69     | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| The FRWs were off from January 5 to January 15, 2019                                |          |        |          |                 |        |         |            |         |
| 1-Feb-19  | 16.2     | 0.980  | 1.00     | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| The FRWs were off from February 18 to March 1, 2019                                 |          |        |          |                 |        |         |            |         |
| 19-Mar-19   | 15.2 I   | 0.950  | 1.54     | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| 2-Apr-19  | 13.8 Q   | 0.470  | 0.990    | ND<0.5          | ND<0.5 | 0.280   | ND<0.5     | ND<2    |
| The FRWs were off from May 1, 2019 to May 3, 2019                                   |          |        |          |                 |        |         |            |         |
| 6-May-19  | 3.46     | ND<0.5 | ND<0.5   | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| 4-Jun-19  | 3.75 C   | 0.980  | 1.46     | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| 2-Jul-19  | 4.11     | 0.290  | ND<0.5   | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| 1-Aug-19  | 1.58 Q   | ND<0.5 | 0.800 C  | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| 5-Sep-19  | 2.18     | ND<0.5 | ND<0.5   | ND<0.5          | ND<0.5 | ND<0.5  | ND<0.5     | ND<2    |
| FRW-2 was not operating from approximately September 10, 2019 to September 30, 2019 |          |        |          |                 |        |         |            |         |

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

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

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

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

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

S = SCAL-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration (average RP>20%).

I = ICV-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).

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

ND: Not detected

Comments:

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

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

TCE: Trichloroethene  
VC: Vinyl chloride

TABLE 6

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

**Recovery Well FRW-3 VOC Concentrations, micrograms per liter**

| FRW-3  |         |       |          |                |        |        |                |                |                |         |            |           |
|--|---------|-------|----------|----------------|--------|--------|----------------|----------------|----------------|---------|------------|-----------|
| Date   | PCE     | TCE   | cis12DCE | VC             | 11DCA  | TCA    | 135TMB         | IPB            | NPB            | Toluene | 2-Hexanone | Acetone   |
| ARARs  | 5       | 5     | 5        | 2 <sup>U</sup> | 5      | 5      | 5 <sup>U</sup> | 5 <sup>U</sup> | 5 <sup>U</sup> | 5       | NE         | NE        |
| 5-Sep-17   | 15      | 1.7   | 6.1      | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | ND<2      |
| The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017 |         |       |          |                |        |        |                |                |                |         |            |           |
| 4-Oct-17   | 21      | 6.0   | 15       | 1.2 C          | ND<0.5 | ND<0.5 | ND<0.5         | 0.48 C,J       | 0.40 C,J       | ND<0.5  | ND<0.5     | 2.7       |
| The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017   |         |       |          |                |        |        |                |                |                |         |            |           |
| 1-Nov-17   | 17      | 1.2   | 3.4      | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | 0.33 J         | 0.30 J         | ND<0.5  | ND<0.5     | ND<2      |
| The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017         |         |       |          |                |        |        |                |                |                |         |            |           |
| 5-Dec-17   | 37      | 1.8   | 2.3      | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | 0.37 J         | 0.33 J         | ND<0.5  | ND<0.5     | ND<2      |
| The FRWs were off from December 24, 2017 to February 9, 2018                       |         |       |          |                |        |        |                |                |                |         |            |           |
| 1-Feb-18   | 22      | 2.0   | 3.3      | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | 0.32 J         | ND<0.5         | ND<0.5  | ND<0.5     | ND<2      |
| 1-Mar-18   | 120     | 7.9   | 18       | ND<0.5         | 0.26 J | 0.65   | ND<0.5         | 0.49 J         | 0.34 J         | ND<0.5  | ND<0.5     | ND<2      |
| The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018          |         |       |          |                |        |        |                |                |                |         |            |           |
| 2-Apr-18   | 170     | 4.5   | 7.9      | 0.25 C,J       | ND<0.5 | 0.71   | ND<0.5         | 0.20 J         | ND<0.5         | ND<0.5  | ND<0.5     | 1.2 C,S,J |
| The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018       |         |       |          |                |        |        |                |                |                |         |            |           |
| 2-May-18   | 140     | 9.4   | 11       | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | 3.2       |
| The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018              |         |       |          |                |        |        |                |                |                |         |            |           |
| 20-Jun-18  | 39      | 6.8   | 4.3      | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | 1.5 J     |
| 2-Jul-18   | 49      | 1.4   | 1.4      | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | ND<2      |
| The FRWs were off from July 2 to September 21, 2018                                |         |       |          |                |        |        |                |                |                |         |            |           |
| 28-Aug-18 <sup>3/</sup>  | 6.16    | 0.990 | 20.3 C   | 0.840          | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | 6.77 I    |
| 21-Sep-18  | 19.6    | 2.99  | 19.8     | 2.04           | ND<0.5 | ND<0.5 | ND<0.5         | 0.220 J        | 0.300 J        | ND<0.5  | ND<0.5     | 1.53      |
| 5-Oct-18   | 0.730   | 0.530 | 4.31     | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | ND<2      |
| The FRWs were off from October 27 to October 29, 2018                              |         |       |          |                |        |        |                |                |                |         |            |           |
| 1-Nov-18   | 2.89    | 0.810 | 3.37     | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | ND<2      |
| 5-Dec-18   | 109 C,S | 6.83  | 6.98     | ND<0.5         | ND<0.5 | 0.570  | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | 1.97 C    |
| 3-Jan-19   | 89.4    | 2.41  | 7.30     | ND<0.5         | ND<0.5 | 0.420  | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | ND<2      |
| The FRWs were off from January 5 to January 15, 2019                               |         |       |          |                |        |        |                |                |                |         |            |           |
| 1-Feb-19   | 76.4    | 1.41  | 3.69     | ND<0.5         | ND<0.5 | 0.330  | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | ND<2      |
| FRW-3 was off from February 18 to April 30, 2019                                   |         |       |          |                |        |        |                |                |                |         |            |           |
| 19-Mar-19 <sup>4/</sup>  | 38.8 I  | 1.03  | 3.93     | ND<0.5         | ND<0.5 | 0.240  | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | ND<2      |
| 29-Apr-19 <sup>4/</sup>  | 20.2 I  | 0.550 | 1.17     | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | 3.24      |
| The FRWs were off from May 1, 2019 to May 3, 2019                                  |         |       |          |                |        |        |                |                |                |         |            |           |
| 6-May-19   | 44.4    | 1.20  | 2.82     | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | 0.200          | 0.500          | ND<0.5  | ND<0.5     | ND<2      |
| 4-Jun-19   | 32.7 C  | 0.940 | 1.55     | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | ND<2      |
| 2-Jul-19   | 19.4    | 0.900 | 2.81     | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | ND<2      |
| 1-Aug-19   | 10.7 Q  | 0.620 | 3.38 C   | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | 2.35    | ND<0.5     | ND<2      |
| 5-Sep-19   | 6.57    | 0.360 | 1.64     | ND<0.5         | ND<0.5 | ND<0.5 | ND<0.5         | ND<0.5         | ND<0.5         | ND<0.5  | ND<0.5     | ND<2      |

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

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

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

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

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

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

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

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

S = SCAL-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration (average RF>20%).

I = ICV-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).

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

ND: Not detected

Comments:

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

PCE: Tetrachloroethylene

TCE: Trichloroethene

cis12DCE: cis-1,2-Dichloroethene

VC: Vinyl Chloride

11DCA: 1,1-Dichloroethane

TCA: 1,1,1-Trichloroethane

135TMB: 1,3,5-Trimethylbenzene

IPB: Isopropylbenzene

NPB: n-Propylbenzene

TABLE 7

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

Recovery Well FRW-4 VOC Concentrations, micrograms per liter

| <b>FRW-4</b>   |          |        |          |                |        |          |
|--|----------|--------|----------|----------------|--------|----------|
| Date   | PCE      | TCE    | cis12DCE | VC             | TCA    | Acetone  |
| ARARs  | 5        | 5      | 5        | 2 <sup>U</sup> | 5      | NE       |
| 5-Sep-17   | 2.7      | 0.42 J | 0.51     | ND<0.5         | ND<0.5 | ND<2     |
| The FRWs were off from September 13 to 19 and from September 27 to October 4, 2017 |          |        |          |                |        |          |
| 4-Oct-17   | 9.8      | 3.9    | 4.1      | ND<0.5         | ND<0.5 | ND<2     |
| The FRWs were off from October 11 to October 16, 2017 and October 29 to 31, 2017   |          |        |          |                |        |          |
| 1-Nov-17   | 3.0      | 0.32 J | 0.78     | ND<0.5         | ND<0.5 | ND<2     |
| The FRWs were off from November 12 to 16, 2017 and November 26 to 27, 2017         |          |        |          |                |        |          |
| 5-Dec-17   | 5.1      | ND<0.5 | 1.0      | ND<0.5         | ND<0.5 | ND<2     |
| The FRWs were off from December 24, 2017 to February 9, 2018                       |          |        |          |                |        |          |
| 1-Feb-18   | 21       | 2.5    | 7.0      | ND<0.5         | 0.27 J | 2.5 S    |
| 1-Mar-18   | 3.0      | ND<0.5 | 0.47 J   | ND<0.5         | ND<0.5 | ND<2     |
| The FRWs were off between March 15 and 26, 2018 and March 27 and 29, 2018          |          |        |          |                |        |          |
| 2-Apr-18   | 3.2      | 0.32 J | 1.0      | ND<0.5         | ND<0.5 | ND<2     |
| The FRWs were off between April 17 and 23, 2018 and April 26 and May 2, 2018       |          |        |          |                |        |          |
| 2-May-18   | 19       | ND<0.5 | 1.1      | ND<0.5         | ND<0.5 | ND<2     |
| The FRWs were off from May 20 to June 5, 2018 and June 18 to 20, 2018              |          |        |          |                |        |          |
| 20-Jun-18  | 1.4      | 0.22 J | ND<0.5   | ND<0.5         | ND<0.5 | 1.5 J    |
| 2-Jul-18   | 1.7      | ND<0.5 | ND<0.5   | ND<0.5         | ND<0.5 | ND<2     |
| The FRWs were off from July 2 to September 21, 2018                                |          |        |          |                |        |          |
| 28-Aug-18 <sup>3/4</sup>   | ND<0.5   | 0.450  | 4.95 C   | ND<0.5         | ND<0.5 | 10.3 I   |
| 21-Sep-18  | 4.21     | 1.02   | 1.38     | ND<0.5         | ND<0.5 | ND<2     |
| 5-Oct-18   | 0.260    | ND<0.5 | 0.630    | ND<0.5         | ND<0.5 | 1.23 C,S |
| The FRWs were off from October 27 to October 29, 2018                              |          |        |          |                |        |          |
| 1-Nov-18   | 0.870    | 0.280  | 1.49     | ND<0.5         | ND<0.5 | ND<2     |
| 5-Dec-18   | 2.36 C,S | 0.45   | 0.650    | ND<0.5         | ND<0.5 | ND<2     |
| 3-Jan-19   | 1.28     | ND<0.5 | 0.960    | ND<0.5         | ND<0.5 | ND<2     |
| The FRWs were off from January 5 to January 15, 2019                               |          |        |          |                |        |          |
| 1-Feb-19   | 1.22     | ND<0.5 | 0.200    | ND<0.5         | ND<0.5 | ND<2     |
| The FRWs were off from February 18 to March 1, 2019                                |          |        |          |                |        |          |
| 19-Mar-19  | 1.02 I   | ND<0.5 | 0.490    | ND<0.5         | ND<0.5 | ND<2     |
| 2-Apr-19   | 1.38 Q   | ND<0.5 | 2.05     | ND<0.5         | ND<0.5 | ND<2     |
| The FRWs were off from May 1, 2019 to May 3, 2019                                  |          |        |          |                |        |          |
| 6-May-19   | 0.800    | ND<0.5 | 0.230    | ND<0.5         | ND<0.5 | ND<2     |
| 4-Jun-19   | 0.620 C  | ND<0.5 | 1.01     | ND<0.5         | ND<0.5 | ND<2     |
| 2-Jul-19   | 0.480    | ND<0.5 | ND<0.5   | ND<0.5         | ND<0.5 | ND<2     |
| 1-Aug-19   | 0.450 Q  | ND<0.5 | 0.210 C  | ND<0.5         | ND<0.5 | ND<2     |
| 5-Sep-19   | 0.820    | ND<0.5 | ND<0.5   | ND<0.5         | ND<0.5 | ND<2     |

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

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

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

3. Tetrahydrofuran, a common industrial solvent for polyvinyl chloride (PVC) and a component in varnishes, and a popular solvent used in laboratories was detected in the groundwater sample at 308 ug/L. However it was not detected in the laboratory blank or the laboratory duplicates. This is not a compound typically detected in groundwater samples from the site.

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

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

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

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

S = SCAL-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration (average RF>20%).

I = ICV-E: The value reported is estimated. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).

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

ND: Not detected

Comments:

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

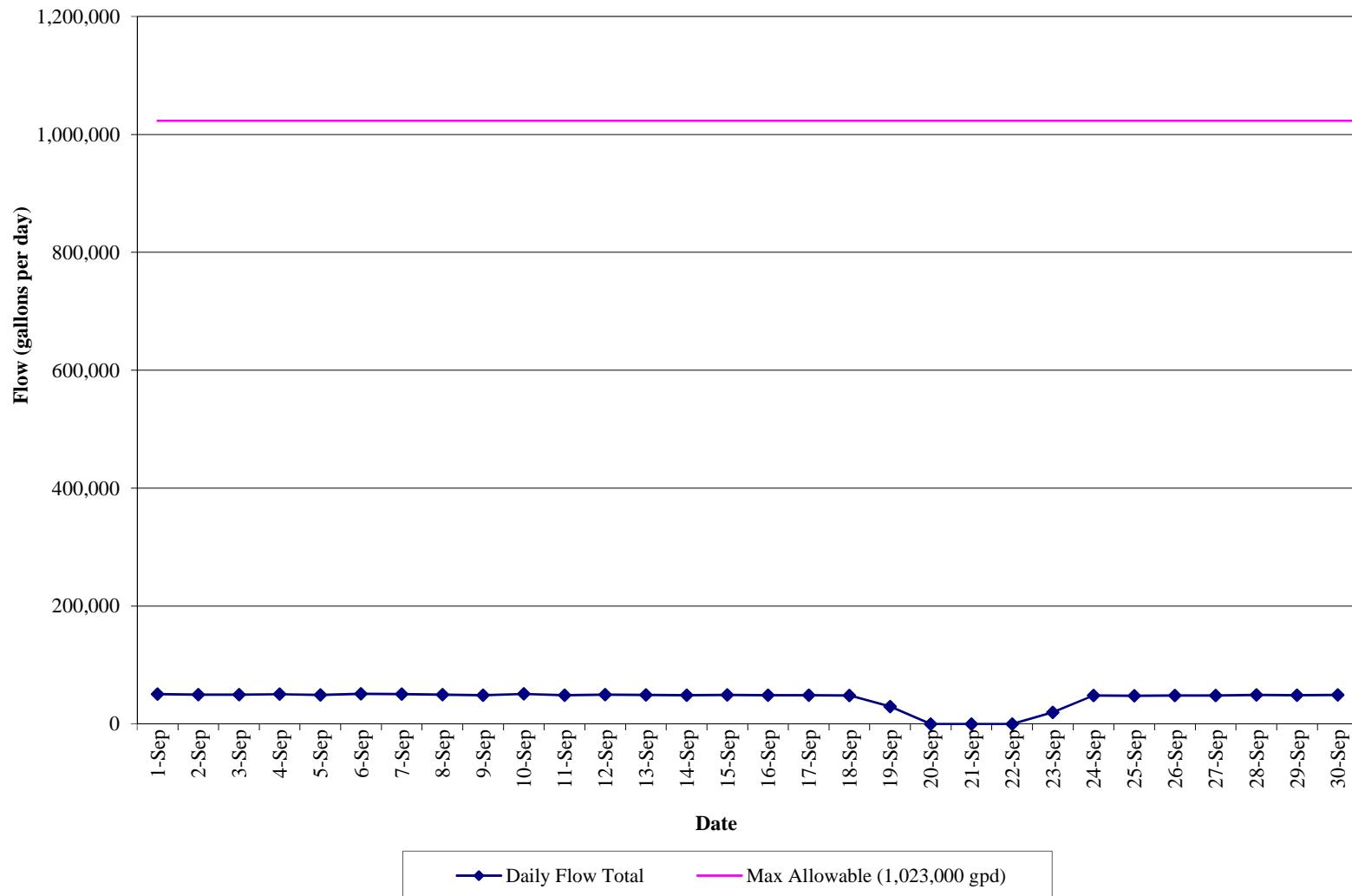
PCE: Tetrachloroethylene  
cis12DCE: cis-1,2-Dichloroethene  
TCA: 1,1,1-Trichloroethane

TCE: Trichloroethene  
VC: Vinyl Chloride

## **GRAPHS**

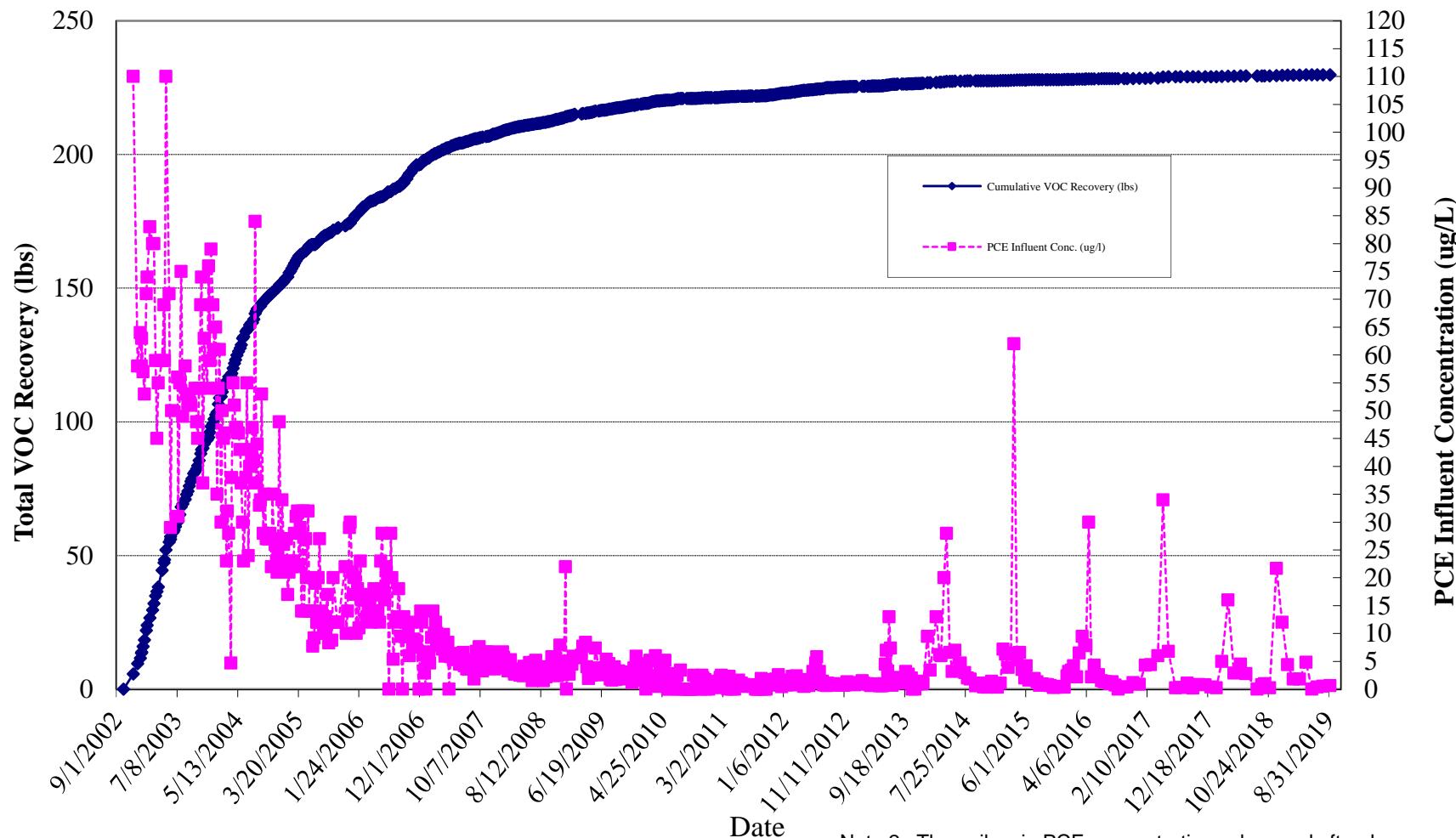
**GRAPH 1**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**

**Effluent Flow Data**  
**(September 1, 2019 to September 30, 2019)**



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

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

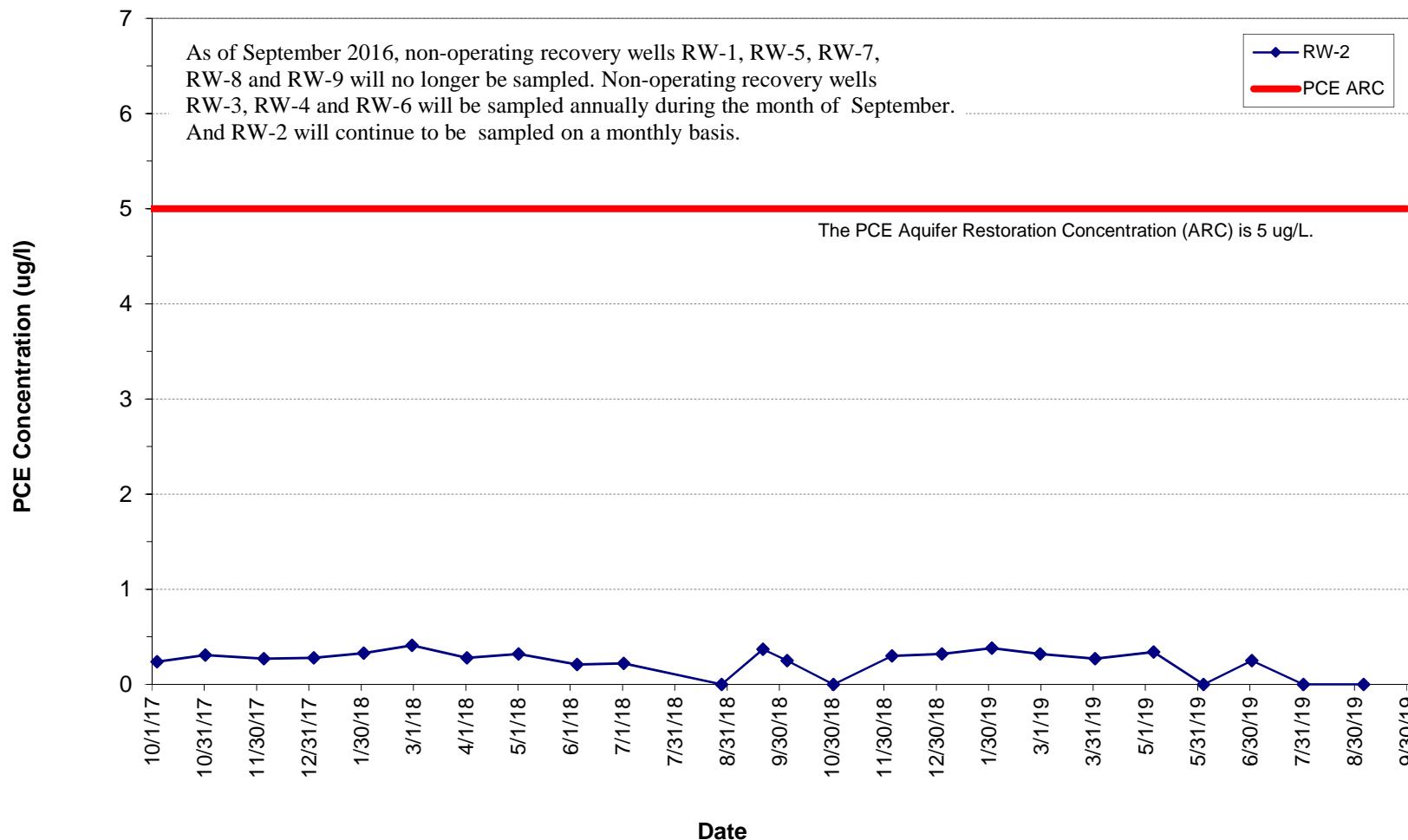


Note 1 : After September 22, 2008, the water recovered from the FP&T System is included in the results shown in this graph.

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

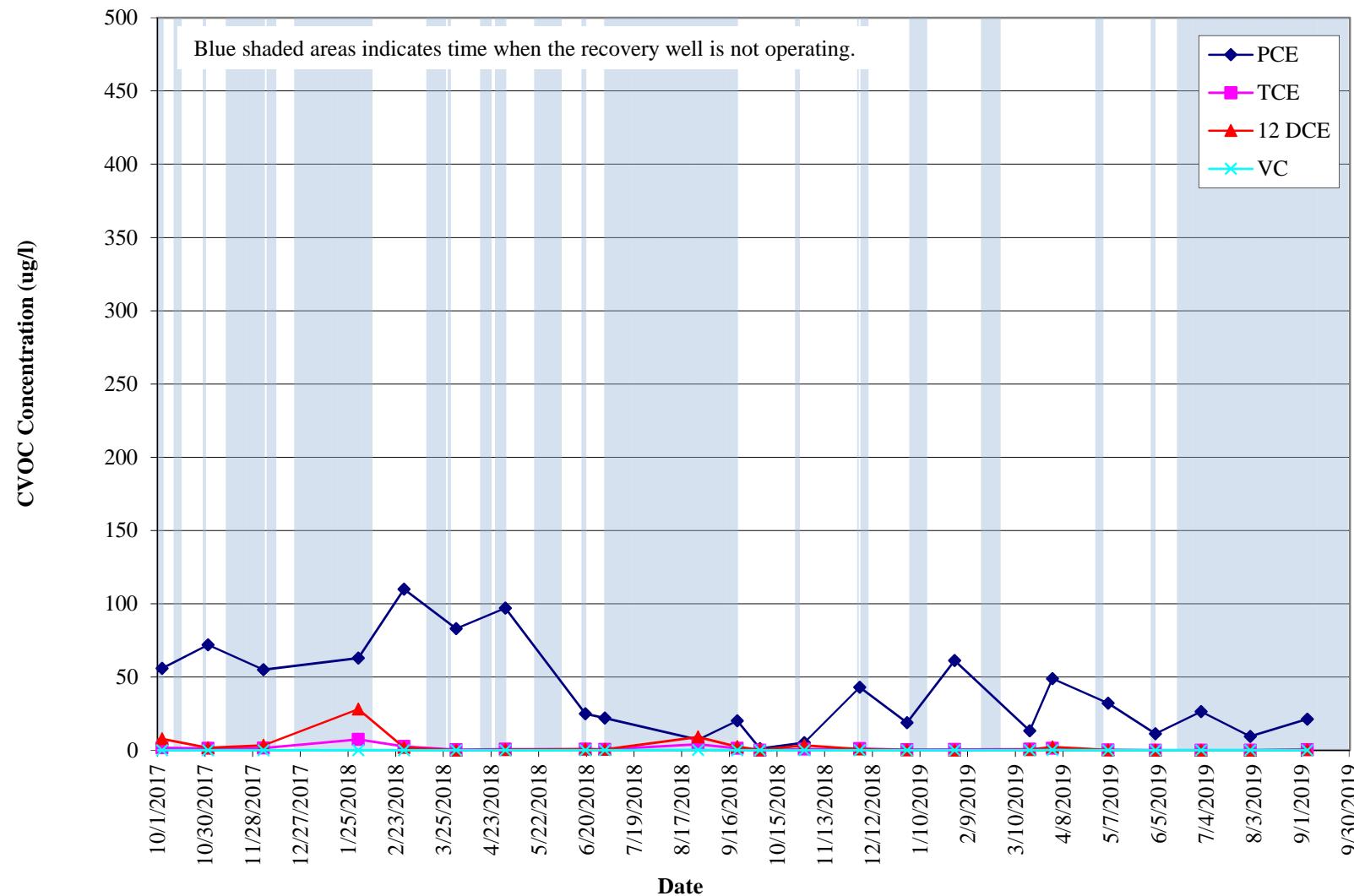
**GRAPH 3**  
GROUNDWATER REMEDIAL ACTION  
ROWE INDUSTRIES SUPERFUND SITE  
SAG HARBOR, NEW YORK

**FSP&T Recovery Well PCE Concentration**



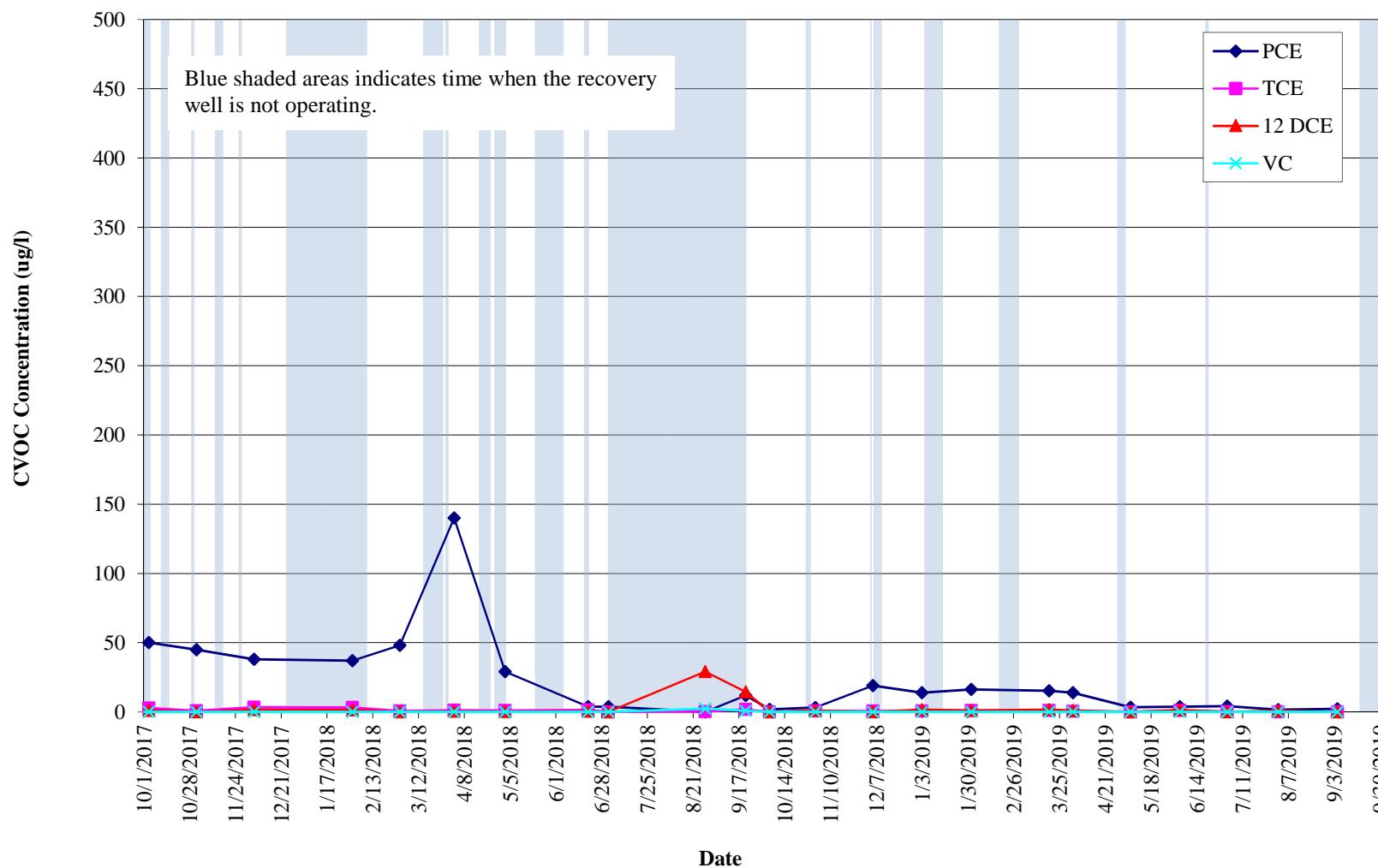
**GRAPH 4**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**

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



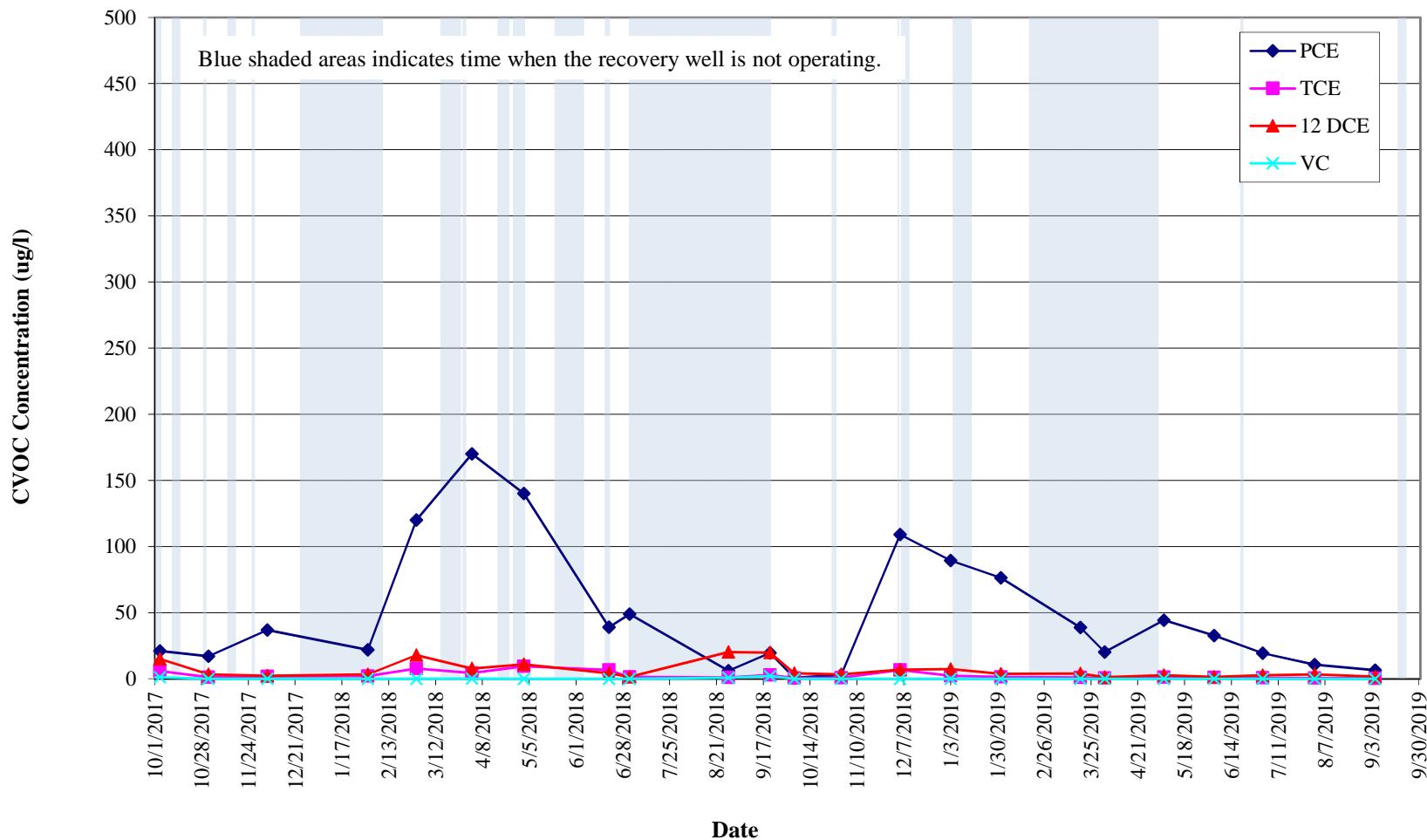
**GRAPH 5**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**

**FP&T Recovery Well VOC Concentrations for FRW-2**



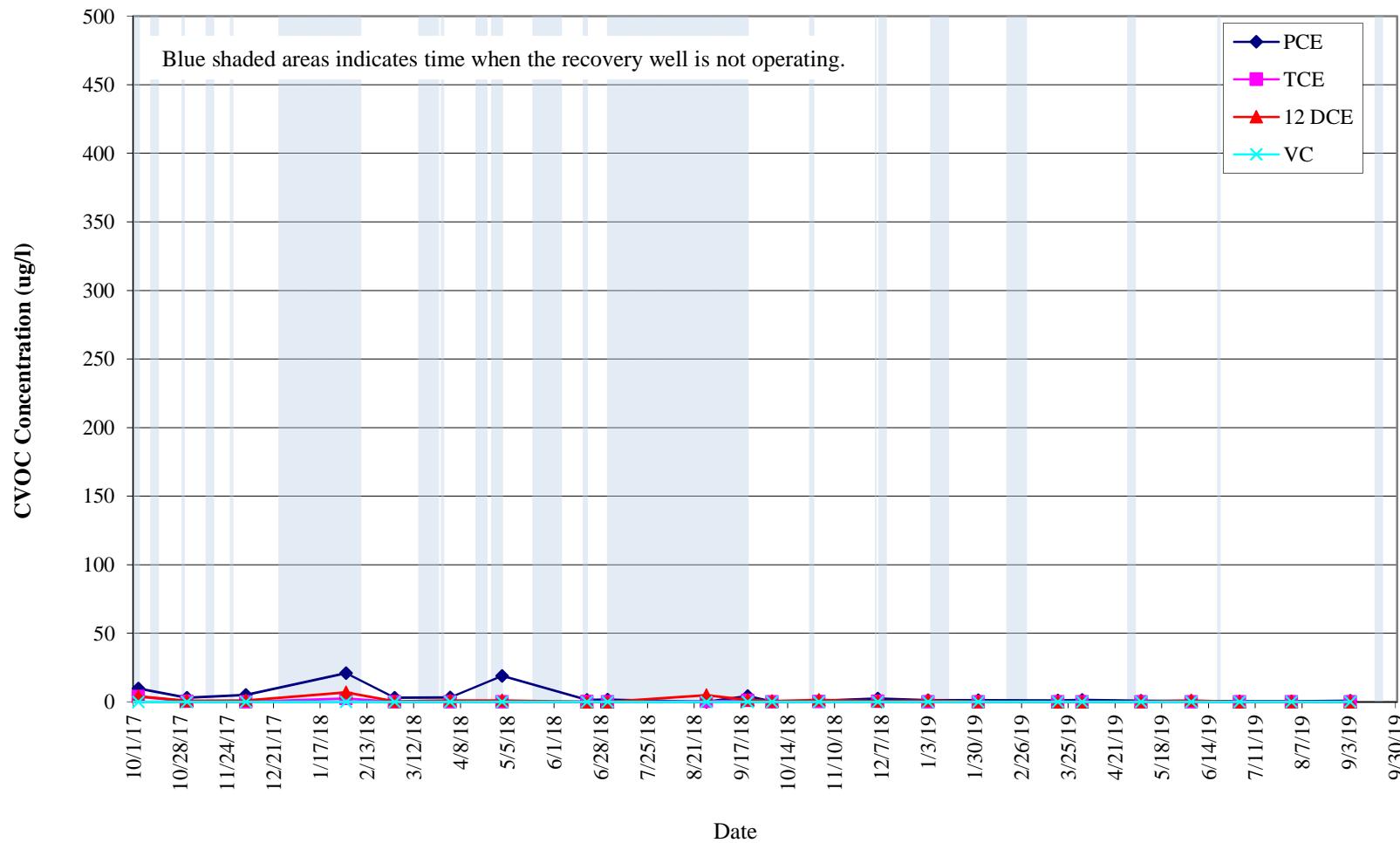
**GRAPH 6**  
**GROUNDWATER REMEDIAL ACTION**  
**ROWE INDUSTRIES SUPERFUND SITE**  
**SAG HARBOR, NEW YORK**

**FP&T Recovery Well VOC Concentrations for FRW-3**



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

**FP&T Recovery Well VOC Concentrations for FRW-4**



**APPENDIX I**  
**SEPTEMBER 2019 LABORATORY ANALYTICAL REPORTS**  
**FOR FSP&T SYSTEM**



# Technical Report

prepared for:

**WSP USA, Inc. (Shelton)**

4 Research Drive, Suite 204

Shelton CT, 06484

**Attention: Tunde Komuves-Sandor**

Report Date: 09/12/2019

**Client Project ID: 3140145.000 task 01.00 Rowe Industries**

York Project (SDG) No.: 19I0239

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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[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)

Report Date: 09/12/2019  
Client Project ID: 3140145.000 task 01.00 Rowe Industries  
York Project (SDG) No.: 19I0239

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

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on September 06, 2019 and listed below. The project was identified as your project: **3140145.000 task 01.00 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> |
|-----------------------|-------------------------|---------------|-----------------------|----------------------|
| 19I0239-01            | WQ090519: 1300 NP2-6    | Water         | 09/05/2019            | 09/06/2019           |
| 19I0239-02            | WQ090519: 1305 NP2-10   | Water         | 09/05/2019            | 09/06/2019           |

## **General Notes for York Project (SDG) No.: 19I0239**

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:** 09/12/2019





## Sample Information

**Client Sample ID:** WQ090519: 1300 NP2-6

**York Sample ID:**

**19I0239-01**

York Project (SDG) No.

19I0239

Client Project ID

3140145.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 1:00 pm

Date Received

09/06/2019

### 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  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 71-55-6  | 1,1,1-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 79-34-5  | 1,1,2,2-Tetrachloroethane                         | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 76-13-1  | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 79-00-5  | 1,1,2-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 75-34-3  | 1,1-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 75-35-4  | 1,1-Dichloroethylene                              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 563-58-6 | 1,1-Dichloropropylene                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP             | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 87-61-6  | 1,2,3-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 96-18-4  | 1,2,3-Trichloropropane                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 120-82-1 | 1,2,4-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 95-63-6  | 1,2,4-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 96-12-8  | 1,2-Dibromo-3-chloropropane                       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 106-93-4 | 1,2-Dibromoethane                                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 95-50-1  | 1,2-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 107-06-2 | 1,2-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 78-87-5  | 1,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 108-67-8 | 1,3,5-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 541-73-1 | 1,3-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 142-28-9 | 1,3-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 106-46-7 | 1,4-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 594-20-7 | 2,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |



## Sample Information

Client Sample ID: WQ090519: 1300 NP2-6

York Sample ID:

19I0239-01

York Project (SDG) No.

19I0239

Client Project ID

3140145.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 1:00 pm

Date Received

09/06/2019

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 591-78-6   | 2-Hexanone                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 106-43-4   | 4-Chlorotoluene           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 67-64-1    | Acetone                   | ND     |      | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 71-43-2    | Benzene                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 108-86-1   | Bromobenzene              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 74-97-5    | Bromochloromethane        | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 75-27-4    | Bromodichloromethane      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 75-25-2    | Bromoform                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 74-83-9    | Bromomethane              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 56-23-5    | Carbon tetrachloride      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 108-90-7   | Chlorobenzene             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 75-00-3    | Chloroethane              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 67-66-3    | Chloroform                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 74-87-3    | Chloromethane             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 156-59-2   | cis-1,2-Dichloroethylene  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 124-48-1   | Dibromochloromethane      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 74-95-3    | Dibromomethane            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 75-71-8    | Dichlorodifluoromethane   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 100-41-4   | Ethyl Benzene             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 87-68-3    | Hexachlorobutadiene       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 98-82-8    | Isopropylbenzene          | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |



## Sample Information

Client Sample ID: WQ090519: 1300 NP2-6

York Sample ID:

19I0239-01

York Project (SDG) No.

19I0239

Client Project ID

3140145.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 1:00 pm

Date Received

09/06/2019

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 75-09-2                     | Methylene chloride                     | ND            |                         | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 91-20-3                     | Naphthalene                            | ND            |                         | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 104-51-8                    | n-Butylbenzene                         | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 103-65-1                    | n-Propylbenzene                        | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 95-47-6                     | o-Xylene                               | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 179601-23-1                 | p- & m- Xylenes                        | ND            |                         | ug/L  | 0.500               | 1.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 99-87-6                     | p-Isopropyltoluene                     | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 135-98-8                    | sec-Butylbenzene                       | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 100-42-5                    | Styrene                                | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 98-06-6                     | tert-Butylbenzene                      | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 127-18-4                    | <b>Tetrachloroethylene</b>             | <b>0.630</b>  |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 108-88-3                    | Toluene                                | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 156-60-5                    | trans-1,2-Dichloroethylene             | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 10061-02-6                  | trans-1,3-Dichloropropylene            | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 79-01-6                     | Trichloroethylene                      | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 75-69-4                     | Trichlorofluoromethane                 | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 75-01-4                     | Vinyl Chloride                         | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| 1330-20-7                   | Xylenes, Total                         | ND            |                         | ug/L  | 0.600               | 1.50  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP       | 09/10/2019 07:08   | 09/10/2019 12:20   | LLJ     |
| <b>Surrogate Recoveries</b> |  | <b>Result</b> | <b>Acceptance Range</b> |       |                     |       |          |   |                    |                    |         |
| 17060-07-0                  | Surrogate: SURN: 1,2-Dichloroethane-d4 | 105 %         | 70-130                  |       |                     |       |          |   |                    |                    |         |
| 2037-26-5                   | Surrogate: SURN: Toluene-d8            | 104 %         | 70-130                  |       |                     |       |          |   |                    |                    |         |
| 460-00-4                    | Surrogate: SURN: p-Bromofluorobenzene  | 100 %         | 70-130                  |       |                     |       |          |   |                    |                    |         |



## Sample Information

Client Sample ID: WQ090519: 1305 NP2-10

York Sample ID:

19I0239-02

York Project (SDG) No.

19I0239

Client Project ID

3140145.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 1:05 pm

Date Received

09/06/2019

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 71-55-6  | 1,1,1-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 79-34-5  | 1,1,2,2-Tetrachloroethane                         | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 76-13-1  | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 79-00-5  | 1,1,2-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 75-34-3  | 1,1-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 75-35-4  | 1,1-Dichloroethylene                              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 563-58-6 | 1,1-Dichloropropylene                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP             | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 87-61-6  | 1,2,3-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 96-18-4  | 1,2,3-Trichloropropane                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 120-82-1 | 1,2,4-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 95-63-6  | 1,2,4-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 96-12-8  | 1,2-Dibromo-3-chloropropane                       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 106-93-4 | 1,2-Dibromoethane                                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 95-50-1  | 1,2-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 107-06-2 | 1,2-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 78-87-5  | 1,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 108-67-8 | 1,3,5-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 541-73-1 | 1,3-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 142-28-9 | 1,3-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 106-46-7 | 1,4-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 594-20-7 | 2,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 95-49-8  | 2-Chlorotoluene                                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |



## Sample Information

Client Sample ID: WQ090519: 1305 NP2-10

York Sample ID:

19I0239-02

York Project (SDG) No.

19I0239

Client Project ID

3140145.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 1:05 pm

Date Received

09/06/2019

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 106-43-4   | 4-Chlorotoluene                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 67-64-1    | Acetone                        | ND     |      | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 71-43-2    | Benzene                        | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 108-86-1   | Bromobenzene                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 74-97-5    | Bromochloromethane             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 75-27-4    | Bromodichloromethane           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 75-25-2    | Bromoform                      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 74-83-9    | Bromomethane                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 56-23-5    | Carbon tetrachloride           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 108-90-7   | Chlorobenzene                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 75-00-3    | Chloroethane                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 67-66-3    | Chloroform                     | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 74-87-3    | Chloromethane                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 156-59-2   | cis-1,2-Dichloroethylene       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 10061-01-5 | cis-1,3-Dichloropropylene      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 124-48-1   | Dibromochloromethane           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 74-95-3    | Dibromomethane                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 75-71-8    | Dichlorodifluoromethane        | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 100-41-4   | Ethyl Benzene                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 87-68-3    | Hexachlorobutadiene            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 98-82-8    | Isopropylbenzene               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 1634-04-4  | Methyl tert-butyl ether (MTBE) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |



## Sample Information

Client Sample ID: WQ090519: 1305 NP2-10

York Sample ID:

19I0239-02

York Project (SDG) No.

19I0239

Client Project ID

3140145.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 1:05 pm

Date Received

09/06/2019

### 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  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 91-20-3                     | Naphthalene                            | ND            |                         | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 104-51-8                    | n-Butylbenzene                         | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 103-65-1                    | n-Propylbenzene                        | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 95-47-6                     | o-Xylene                               | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 179601-23-1                 | p- & m- Xylenes                        | ND            |                         | ug/L  | 0.500               | 1.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 99-87-6                     | p-Isopropyltoluene                     | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 135-98-8                    | sec-Butylbenzene                       | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 100-42-5                    | Styrene                                | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 98-06-6                     | tert-Butylbenzene                      | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 127-18-4                    | Tetrachloroethylene                    | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 108-88-3                    | Toluene                                | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 156-60-5                    | trans-1,2-Dichloroethylene             | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 10061-02-6                  | trans-1,3-Dichloropropylene            | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 79-01-6                     | Trichloroethylene                      | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 75-69-4                     | Trichlorofluoromethane                 | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 75-01-4                     | Vinyl Chloride                         | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| 1330-20-7                   | Xylenes, Total                         | ND            |                         | ug/L  | 0.600               | 1.50  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP       | 09/10/2019 07:08   | 09/10/2019 12:48   | LLJ     |
| <b>Surrogate Recoveries</b> |  | <b>Result</b> | <b>Acceptance Range</b> |       |                     |       |          |   |                    |                    |         |
| 17060-07-0                  | Surrogate: SURR: 1,2-Dichloroethane-d4 | 109 %         | 70-130                  |       |                     |       |          |   |                    |                    |         |
| 2037-26-5                   | Surrogate: SURR: Toluene-d8            | 104 %         | 70-130                  |       |                     |       |          |   |                    |                    |         |
| 460-00-4                    | Surrogate: SURR: p-Bromofluorobenzene  | 97.0 %        | 70-130                  |       |                     |       |          |   |                    |                    |         |

### Iron by EPA 200.7

#### Log-in Notes:

#### Sample Notes:



## Sample Information

Client Sample ID: WQ090519: 1305 NP2-10

York Sample ID:

19I0239-02

York Project (SDG) No.

19I0239

Client Project ID

3140145.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 1:05 pm

Date Received

09/06/2019

Sample Prepared by Method: EPA 200.7

| CAS No.   | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method   | Date/Time Prepared | Date/Time Analyzed | Analyst |
|-----------|-----------|--------|------|-------|-----------------|----------|--|--------------------|--------------------|---------|
| 7439-89-6 | Iron      | 0.291  |      | mg/L  | 0.278           | 1        | EPA 200.7<br>Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP | 09/10/2019 12:50   | 09/10/2019 15:30   | KML     |

### Iron, Dissolved by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3015A

| CAS No.   | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method   | Date/Time Prepared | Date/Time Analyzed | Analyst |
|-----------|-----------|--------|------|-------|-----------------|----------|--|--------------------|--------------------|---------|
| 7439-89-6 | Iron      | ND     |      | mg/L  | 0.278           | 1        | EPA 6010D<br>Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP | 09/09/2019 10:24   | 09/10/2019 17:55   | 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 | 172    |      | mg/L  | 10.0            | 1        | SM 2540C<br>Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP | 09/10/2019 18:43   | 09/10/2019 23:16   | AD      |



## Analytical Batch Summary

**Batch ID:** BI90337

**Preparation Method:** EPA 5030B

**Prepared By:** TMP

| YORK Sample ID | Client Sample ID      | Preparation Date |
|----------------|-----------------------|------------------|
| 19I0239-01     | WQ090519: 1300 NP2-6  | 09/10/19         |
| 19I0239-02     | WQ090519: 1305 NP2-10 | 09/10/19         |
| BI90337-BLK1   | Blank                 | 09/10/19         |
| BI90337-BS1    | LCS                   | 09/10/19         |
| BI90337-BSD1   | LCS Dup               | 09/10/19         |

**Batch ID:** BI90344

**Preparation Method:** EPA 3015A

**Prepared By:** SY

| YORK Sample ID | Client Sample ID      | Preparation Date |
|----------------|-----------------------|------------------|
| 19I0239-02     | WQ090519: 1305 NP2-10 | 09/09/19         |
| BI90344-BLK1   | Blank                 | 09/09/19         |
| BI90344-BS1    | LCS                   | 09/09/19         |

**Batch ID:** BI90448

**Preparation Method:** EPA 200.7

**Prepared By:** SY

| YORK Sample ID | Client Sample ID      | Preparation Date |
|----------------|-----------------------|------------------|
| 19I0239-02     | WQ090519: 1305 NP2-10 | 09/10/19         |
| BI90448-BLK1   | Blank                 | 09/10/19         |
| BI90448-BS1    | LCS                   | 09/10/19         |

**Batch ID:** BI90478

**Preparation Method:** % Solids Prep

**Prepared By:** AA

| YORK Sample ID | Client Sample ID      | Preparation Date |
|----------------|-----------------------|------------------|
| 19I0239-02     | WQ090519: 1305 NP2-10 | 09/10/19         |
| BI90478-BLK1   | Blank                 | 09/10/19         |



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

York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD RPD | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|------|

### Batch BI90337 - EPA 5030B

#### Blank (BI90337-BLK1)

Prepared & Analyzed: 09/10/2019

|   |    |       |      |  |  |  |  |  |  |  |  |
|---|----|-------|------|--|--|--|--|--|--|--|--|
| 1,1,1,2-Tetrachloroethane                         | ND | 0.500 | ug/L |  |  |  |  |  |  |  |  |
| 1,1,1-Trichloroethane                             | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,1,2,2-Tetrachloroethane                         | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,1,2-Trichloroethane                             | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,1-Dichloroethane                                | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,1-Dichloroethylene                              | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,1-Dichloropropylene                             | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,2,3-Trichlorobenzene                            | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,2,3-Trichloropropane                            | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,2,4-Trichlorobenzene                            | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,2,4-Trimethylbenzene                            | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,2-Dibromo-3-chloropropane                       | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,2-Dibromoethane                                 | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,2-Dichlorobenzene                               | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,2-Dichloroethane                                | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,2-Dichloropropane                               | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,3,5-Trimethylbenzene                            | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,3-Dichlorobenzene                               | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,3-Dichloropropane                               | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 1,4-Dichlorobenzene                               | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 2,2-Dichloropropane                               | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 2-Chlorotoluene                                   | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 2-Hexanone  | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| 4-Chlorotoluene                                   | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Acetone   | ND | 2.00  | "    |  |  |  |  |  |  |  |  |
| Benzene   | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Bromobenzene                                      | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Bromochloromethane                                | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Bromodichloromethane                              | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Bromoform   | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Bromomethane                                      | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Carbon tetrachloride                              | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Chlorobenzene                                     | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Chloroethane                                      | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Chloroform  | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Chloromethane                                     | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| cis-1,2-Dichloroethylene                          | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| cis-1,3-Dichloropropylene                         | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Dibromochloromethane                              | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Dibromomethane                                    | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Dichlorodifluoromethane                           | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Ethyl Benzene                                     | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Hexachlorobutadiene                               | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Isopropylbenzene                                  | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Methyl tert-butyl ether (MTBE)                    | ND | 0.500 | "    |  |  |  |  |  |  |  |  |
| Methylene chloride                                | ND | 2.00  | "    |  |  |  |  |  |  |  |  |
| Naphthalene                                       | ND | 2.00  | "    |  |  |  |  |  |  |  |  |
| n-Butylbenzene                                    | ND | 0.500 | "    |  |  |  |  |  |  |  |  |



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

### York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|

#### Batch BI90337 - EPA 5030B

##### Blank (BI90337-BLK1)

Prepared & Analyzed: 09/10/2019

|   |      |       |      |      |  |     |        |  |  |  |  |
|---|------|-------|------|------|--|-----|--------|--|--|--|--|
| n-Propylbenzene                               | ND   | 0.500 | ug/L |      |  |     |        |  |  |  |  |
| o-Xylene                                      | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| p- & m- Xylenes                               | ND   | 1.00  | "    |      |  |     |        |  |  |  |  |
| p-Isopropyltoluene                            | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| sec-Butylbenzene                              | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Styrene                                       | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| tert-Butylbenzene                             | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Tetrachloroethylene                           | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Toluene                                       | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| trans-1,2-Dichloroethylene                    | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| trans-1,3-Dichloropropylene                   | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Trichloroethylene                             | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Trichlorofluoromethane                        | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Vinyl Chloride                                | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Xylenes, Total                                | ND   | 1.50  | "    |      |  |     |        |  |  |  |  |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 10.2 |       | "    | 10.0 |  | 102 | 70-130 |  |  |  |  |
| <i>Surrogate: SURR: Toluene-d8</i>            | 10.7 |       | "    | 10.0 |  | 107 | 70-130 |  |  |  |  |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i>  | 10.5 |       | "    | 10.0 |  | 105 | 70-130 |  |  |  |  |

##### LCS (BI90337-BS1)

Prepared & Analyzed: 09/10/2019

|   |      |      |      |      |        |           |    |
|---|------|------|------|------|--------|-----------|----|
| 1,1,1,2-Tetrachloroethane                         | 11.3 | ug/L | 10.0 | 113  | 82-126 |           | 30 |
| 1,1,1-Trichloroethane                             | 9.52 | "    | 10.0 | 95.2 | 70-130 |           | 20 |
| 1,1,2,2-Tetrachloroethane                         | 12.3 | "    | 10.0 | 123  | 70-130 |           | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 10.2 | "    | 10.0 | 102  | 70-130 |           | 20 |
| 1,1,2-Trichloroethane                             | 10.6 | "    | 10.0 | 106  | 70-130 |           | 20 |
| 1,1-Dichloroethane                                | 10.6 | "    | 10.0 | 106  | 70-130 |           | 20 |
| 1,1-Dichloroethylene                              | 10.0 | "    | 10.0 | 100  | 70-130 |           | 20 |
| 1,1-Dichloropropylene                             | 9.86 | "    | 10.0 | 98.6 | 83-133 |           | 30 |
| 1,2,3-Trichlorobenzene                            | 14.6 | "    | 10.0 | 146  | 70-130 | High Bias | 20 |
| 1,2,3-Trichloropropane                            | 11.5 | "    | 10.0 | 115  | 77-128 |           | 30 |
| 1,2,4-Trichlorobenzene                            | 13.6 | "    | 10.0 | 136  | 70-130 | High Bias | 20 |
| 1,2,4-Trimethylbenzene                            | 11.5 | "    | 10.0 | 115  | 82-132 |           | 20 |
| 1,2-Dibromo-3-chloropropane                       | 12.0 | "    | 10.0 | 120  | 40-160 |           | 20 |
| 1,2-Dibromoethane                                 | 11.1 | "    | 10.0 | 111  | 70-130 |           | 20 |
| 1,2-Dichlorobenzene                               | 11.6 | "    | 10.0 | 116  | 70-130 |           | 20 |
| 1,2-Dichloroethane                                | 10.4 | "    | 10.0 | 104  | 70-130 |           | 20 |
| 1,2-Dichloropropane                               | 10.4 | "    | 10.0 | 104  | 70-130 |           | 20 |
| 1,3,5-Trimethylbenzene                            | 11.6 | "    | 10.0 | 116  | 80-131 |           | 30 |
| 1,3-Dichlorobenzene                               | 11.3 | "    | 10.0 | 113  | 70-130 |           | 20 |
| 1,3-Dichloropropane                               | 11.1 | "    | 10.0 | 111  | 81-125 |           | 30 |
| 1,4-Dichlorobenzene                               | 11.3 | "    | 10.0 | 113  | 70-130 |           | 20 |
| 2,2-Dichloropropane                               | 10.2 | "    | 10.0 | 102  | 56-150 |           | 30 |
| 2-Chlorotoluene                                   | 11.3 | "    | 10.0 | 113  | 79-130 |           | 30 |
| 2-Hexanone  | 12.9 | "    | 10.0 | 129  | 40-160 |           | 20 |
| 4-Chlorotoluene                                   | 11.4 | "    | 10.0 | 114  | 79-128 |           | 30 |
| Acetone   | 8.52 | "    | 10.0 | 85.2 | 40-160 |           | 20 |
| Benzene   | 9.81 | "    | 10.0 | 98.1 | 70-130 |           | 20 |
| Bromobenzene                                      | 11.5 | "    | 10.0 | 115  | 78-129 |           | 30 |
| Bromo(chloromethane                               | 10.6 | "    | 10.0 | 106  | 70-130 |           | 20 |
| Bromodichloromethane                              | 10.7 | "    | 10.0 | 107  | 70-130 |           | 20 |



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

**York Analytical Laboratories, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|

### **Batch BI90337 - EPA 5030B**

| LCS (BI90337-BS1)                             |      |  |      |      |      |        |           |  |  |    | Prepared & Analyzed: 09/10/2019 |
|---|------|--|------|------|------|--------|-----------|--|--|----|---------------------------------|
| Bromoform                                     | 11.6 |  | ug/L | 10.0 | 116  | 70-130 |           |  |  | 20 |                                 |
| Bromomethane                                  | 9.42 |  | "    | 10.0 | 94.2 | 40-160 |           |  |  | 20 |                                 |
| Carbon tetrachloride                          | 10.4 |  | "    | 10.0 | 104  | 70-130 |           |  |  | 20 |                                 |
| Chlorobenzene                                 | 10.7 |  | "    | 10.0 | 107  | 70-130 |           |  |  | 20 |                                 |
| Chloroethane                                  | 10.8 |  | "    | 10.0 | 108  | 40-160 |           |  |  | 20 |                                 |
| Chloroform                                    | 9.70 |  | "    | 10.0 | 97.0 | 70-130 |           |  |  | 20 |                                 |
| Chloromethane                                 | 10.4 |  | "    | 10.0 | 104  | 40-160 |           |  |  | 20 |                                 |
| cis-1,2-Dichloroethylene                      | 10.1 |  | "    | 10.0 | 101  | 70-130 |           |  |  | 20 |                                 |
| cis-1,3-Dichloropropylene                     | 10.4 |  | "    | 10.0 | 104  | 70-130 |           |  |  | 20 |                                 |
| Dibromochloromethane                          | 11.2 |  | "    | 10.0 | 112  | 70-130 |           |  |  | 20 |                                 |
| Dibromomethane                                | 10.6 |  | "    | 10.0 | 106  | 72-134 |           |  |  | 30 |                                 |
| Dichlorodifluoromethane                       | 9.82 |  | "    | 10.0 | 98.2 | 40-160 |           |  |  | 20 |                                 |
| Ethyl Benzene                                 | 11.2 |  | "    | 10.0 | 112  | 70-130 |           |  |  | 20 |                                 |
| Hexachlorobutadiene                           | 11.8 |  | "    | 10.0 | 118  | 67-146 |           |  |  | 30 |                                 |
| Isopropylbenzene                              | 11.1 |  | "    | 10.0 | 111  | 70-130 |           |  |  | 20 |                                 |
| Methyl tert-butyl ether (MTBE)                | 10.4 |  | "    | 10.0 | 104  | 70-130 |           |  |  | 20 |                                 |
| Methylene chloride                            | 9.55 |  | "    | 10.0 | 95.5 | 70-130 |           |  |  | 20 |                                 |
| Naphthalene                                   | 15.2 |  | "    | 10.0 | 152  | 70-147 | High Bias |  |  | 30 |                                 |
| n-Butylbenzene                                | 12.2 |  | "    | 10.0 | 122  | 79-132 |           |  |  | 30 |                                 |
| n-Propylbenzene                               | 11.5 |  | "    | 10.0 | 115  | 78-133 |           |  |  | 30 |                                 |
| o-Xylene                                      | 11.0 |  | "    | 10.0 | 110  | 70-130 |           |  |  | 20 |                                 |
| p- & m- Xylenes                               | 22.9 |  | "    | 20.0 | 115  | 70-130 |           |  |  | 20 |                                 |
| p-Isopropyltoluene                            | 11.7 |  | "    | 10.0 | 117  | 81-136 |           |  |  | 30 |                                 |
| sec-Butylbenzene                              | 12.3 |  | "    | 10.0 | 123  | 79-137 |           |  |  | 30 |                                 |
| Styrene                                       | 11.0 |  | "    | 10.0 | 110  | 70-130 |           |  |  | 20 |                                 |
| tert-Butylbenzene                             | 11.4 |  | "    | 10.0 | 114  | 77-138 |           |  |  | 30 |                                 |
| Tetrachloroethylene                           | 9.48 |  | "    | 10.0 | 94.8 | 70-130 |           |  |  | 20 |                                 |
| Toluene                                       | 10.6 |  | "    | 10.0 | 106  | 70-130 |           |  |  | 20 |                                 |
| trans-1,2-Dichloroethylene                    | 10.1 |  | "    | 10.0 | 101  | 70-130 |           |  |  | 20 |                                 |
| trans-1,3-Dichloropropylene                   | 10.7 |  | "    | 10.0 | 107  | 70-130 |           |  |  | 20 |                                 |
| Trichloroethylene                             | 10.7 |  | "    | 10.0 | 107  | 70-130 |           |  |  | 20 |                                 |
| Trichlorofluoromethane                        | 10.6 |  | "    | 10.0 | 106  | 40-160 |           |  |  | 20 |                                 |
| Vinyl Chloride                                | 8.83 |  | "    | 10.0 | 88.3 | 70-130 |           |  |  | 20 |                                 |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 9.97 |  | "    | 10.0 | 99.7 | 70-130 |           |  |  |    |                                 |
| <i>Surrogate: SURR: Toluene-d8</i>            | 10.6 |  | "    | 10.0 | 106  | 70-130 |           |  |  |    |                                 |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i>  | 10.2 |  | "    | 10.0 | 102  | 70-130 |           |  |  |    |                                 |



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

**York Analytical Laboratories, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|

### Batch BI90337 - EPA 5030B

| LCS Dup (BI90337-BSD1)                            | Prepared & Analyzed: 09/10/2019 |  |      |      |      |        |           |  |       |    |          |
|---|---------------------------------|--|------|------|------|--------|-----------|--|-------|----|----------|
| 1,1,1,2-Tetrachloroethane                         | 10.5                            |  | ug/L | 10.0 | 105  | 82-126 |           |  | 6.99  | 30 |          |
| 1,1,1-Trichloroethane                             | 9.09                            |  | "    | 10.0 | 90.9 | 70-130 |           |  | 4.62  | 20 |          |
| 1,1,2,2-Tetrachloroethane                         | 11.4                            |  | "    | 10.0 | 114  | 70-130 |           |  | 7.94  | 20 |          |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 9.64                            |  | "    | 10.0 | 96.4 | 70-130 |           |  | 5.35  | 20 |          |
| 1,1,2-Trichloroethane                             | 10.8                            |  | "    | 10.0 | 108  | 70-130 |           |  | 1.68  | 20 |          |
| 1,1-Dichloroethane                                | 10.2                            |  | "    | 10.0 | 102  | 70-130 |           |  | 3.85  | 20 |          |
| 1,1-Dichloroethylene                              | 9.27                            |  | "    | 10.0 | 92.7 | 70-130 |           |  | 7.78  | 20 |          |
| 1,1-Dichloropropylene                             | 9.34                            |  | "    | 10.0 | 93.4 | 83-133 |           |  | 5.42  | 30 |          |
| 1,2,3-Trichlorobenzene                            | 15.9                            |  | "    | 10.0 | 159  | 70-130 | High Bias |  | 8.72  | 20 |          |
| 1,2,3-Trichloropropane                            | 11.1                            |  | "    | 10.0 | 111  | 77-128 |           |  | 2.92  | 30 |          |
| 1,2,4-Trichlorobenzene                            | 13.6                            |  | "    | 10.0 | 136  | 70-130 | High Bias |  | 0.147 | 20 |          |
| 1,2,4-Trimethylbenzene                            | 9.57                            |  | "    | 10.0 | 95.7 | 82-132 |           |  | 18.3  | 20 |          |
| 1,2-Dibromo-3-chloropropane                       | 12.4                            |  | "    | 10.0 | 124  | 40-160 |           |  | 3.76  | 20 |          |
| 1,2-Dibromoethane                                 | 11.4                            |  | "    | 10.0 | 114  | 70-130 |           |  | 1.96  | 20 |          |
| 1,2-Dichlorobenzene                               | 10.3                            |  | "    | 10.0 | 103  | 70-130 |           |  | 11.3  | 20 |          |
| 1,2-Dichloroethane                                | 10.5                            |  | "    | 10.0 | 105  | 70-130 |           |  | 1.05  | 20 |          |
| 1,2-Dichloropropane                               | 10.1                            |  | "    | 10.0 | 101  | 70-130 |           |  | 3.03  | 20 |          |
| 1,3,5-Trimethylbenzene                            | 9.56                            |  | "    | 10.0 | 95.6 | 80-131 |           |  | 19.5  | 30 |          |
| 1,3-Dichlorobenzene                               | 9.55                            |  | "    | 10.0 | 95.5 | 70-130 |           |  | 16.5  | 20 |          |
| 1,3-Dichloropropane                               | 11.2                            |  | "    | 10.0 | 112  | 81-125 |           |  | 1.43  | 30 |          |
| 1,4-Dichlorobenzene                               | 9.74                            |  | "    | 10.0 | 97.4 | 70-130 |           |  | 15.0  | 20 |          |
| 2,2-Dichloropropane                               | 9.52                            |  | "    | 10.0 | 95.2 | 56-150 |           |  | 6.70  | 30 |          |
| 2-Chlorotoluene                                   | 9.23                            |  | "    | 10.0 | 92.3 | 79-130 |           |  | 19.8  | 30 |          |
| 2-Hexanone  | 14.0                            |  | "    | 10.0 | 140  | 40-160 |           |  | 8.63  | 20 |          |
| 4-Chlorotoluene                                   | 9.32                            |  | "    | 10.0 | 93.2 | 79-128 |           |  | 20.5  | 30 |          |
| Acetone   | 9.44                            |  | "    | 10.0 | 94.4 | 40-160 |           |  | 10.2  | 20 |          |
| Benzene   | 9.39                            |  | "    | 10.0 | 93.9 | 70-130 |           |  | 4.38  | 20 |          |
| Bromobenzene                                      | 9.94                            |  | "    | 10.0 | 99.4 | 78-129 |           |  | 14.6  | 30 |          |
| Bromochloromethane                                | 9.95                            |  | "    | 10.0 | 99.5 | 70-130 |           |  | 6.61  | 20 |          |
| Bromodichloromethane                              | 10.2                            |  | "    | 10.0 | 102  | 70-130 |           |  | 4.30  | 20 |          |
| Bromoform   | 11.7                            |  | "    | 10.0 | 117  | 70-130 |           |  | 0.602 | 20 |          |
| Bromomethane                                      | 7.34                            |  | "    | 10.0 | 73.4 | 40-160 |           |  | 24.8  | 20 | Non-dir. |
| Carbon tetrachloride                              | 9.85                            |  | "    | 10.0 | 98.5 | 70-130 |           |  | 5.14  | 20 |          |
| Chlorobenzene                                     | 9.90                            |  | "    | 10.0 | 99.0 | 70-130 |           |  | 8.05  | 20 |          |
| Chloroethane                                      | 9.11                            |  | "    | 10.0 | 91.1 | 40-160 |           |  | 16.6  | 20 |          |
| Chloroform  | 9.36                            |  | "    | 10.0 | 93.6 | 70-130 |           |  | 3.57  | 20 |          |
| Chloromethane                                     | 8.22                            |  | "    | 10.0 | 82.2 | 40-160 |           |  | 23.6  | 20 | Non-dir. |
| cis-1,2-Dichloroethylene                          | 9.53                            |  | "    | 10.0 | 95.3 | 70-130 |           |  | 6.01  | 20 |          |
| cis-1,3-Dichloropropylene                         | 10.3                            |  | "    | 10.0 | 103  | 70-130 |           |  | 0.482 | 20 |          |
| Dibromochloromethane                              | 11.1                            |  | "    | 10.0 | 111  | 70-130 |           |  | 0.538 | 20 |          |
| Dibromomethane                                    | 10.6                            |  | "    | 10.0 | 106  | 72-134 |           |  | 0.376 | 30 |          |
| Dichlorodifluoromethane                           | 9.93                            |  | "    | 10.0 | 99.3 | 40-160 |           |  | 1.11  | 20 |          |
| Ethyl Benzene                                     | 10.2                            |  | "    | 10.0 | 102  | 70-130 |           |  | 10.3  | 20 |          |
| Hexachlorobutadiene                               | 11.9                            |  | "    | 10.0 | 119  | 67-146 |           |  | 1.60  | 30 |          |
| Isopropylbenzene                                  | 9.13                            |  | "    | 10.0 | 91.3 | 70-130 |           |  | 19.8  | 20 |          |
| Methyl tert-butyl ether (MTBE)                    | 11.0                            |  | "    | 10.0 | 110  | 70-130 |           |  | 5.89  | 20 |          |
| Methylene chloride                                | 9.27                            |  | "    | 10.0 | 92.7 | 70-130 |           |  | 2.98  | 20 |          |
| Naphthalene                                       | 15.8                            |  | "    | 10.0 | 158  | 70-147 | High Bias |  | 4.33  | 30 |          |
| n-Butylbenzene                                    | 11.0                            |  | "    | 10.0 | 110  | 79-132 |           |  | 10.0  | 30 |          |
| n-Propylbenzene                                   | 9.44                            |  | "    | 10.0 | 94.4 | 78-133 |           |  | 19.9  | 30 |          |



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

York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|

### Batch BI90337 - EPA 5030B

| LCS Dup (BI90337-BSD1)                 | Prepared & Analyzed: 09/10/2019 |  |      |      |      |        |      |    |
|--|---------------------------------|--|------|------|------|--------|------|----|
| o-Xylene                               | 10.1                            |  | ug/L | 10.0 | 101  | 70-130 | 8.82 | 20 |
| p- & m- Xylenes                        | 21.0                            |  | "    | 20.0 | 105  | 70-130 | 8.59 | 20 |
| p-Isopropyltoluene                     | 9.87                            |  | "    | 10.0 | 98.7 | 81-136 | 17.1 | 30 |
| sec-Butylbenzene                       | 10.2                            |  | "    | 10.0 | 102  | 79-137 | 18.3 | 30 |
| Styrene                                | 10.3                            |  | "    | 10.0 | 103  | 70-130 | 6.83 | 20 |
| tert-Butylbenzene                      | 9.47                            |  | "    | 10.0 | 94.7 | 77-138 | 18.1 | 30 |
| Tetrachloroethylene                    | 8.75                            |  | "    | 10.0 | 87.5 | 70-130 | 8.01 | 20 |
| Toluene                                | 9.73                            |  | "    | 10.0 | 97.3 | 70-130 | 8.37 | 20 |
| trans-1,2-Dichloroethylene             | 9.65                            |  | "    | 10.0 | 96.5 | 70-130 | 4.95 | 20 |
| trans-1,3-Dichloropropylene            | 10.9                            |  | "    | 10.0 | 109  | 70-130 | 1.57 | 20 |
| Trichloroethylene                      | 9.67                            |  | "    | 10.0 | 96.7 | 70-130 | 10.0 | 20 |
| Trichlorofluoromethane                 | 9.39                            |  | "    | 10.0 | 93.9 | 40-160 | 12.3 | 20 |
| Vinyl Chloride                         | 7.66                            |  | "    | 10.0 | 76.6 | 70-130 | 14.2 | 20 |
| Surrogate: SURR: 1,2-Dichloroethane-d4 | 11.4                            |  | "    | 10.0 | 114  | 70-130 |      |    |
| Surrogate: SURR: Toluene-d8            | 10.7                            |  | "    | 10.0 | 107  | 70-130 |      |    |
| Surrogate: SURR: p-Bromofluorobenzene  | 9.46                            |  | "    | 10.0 | 94.6 | 70-130 |      |    |



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

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD RPD | RPD Limit | RPD Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|----------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|----------|

**Batch BI90344 - EPA 3015A**

**Blank (BI90344-BLK1)**

Prepared & Analyzed: 09/09/2019

|                  |    |       |      |
|------------------|----|-------|------|
| Iron - Dissolved | ND | 0.278 | mg/L |
|------------------|----|-------|------|

**LCS (BI90344-BS1)**

Prepared & Analyzed: 09/09/2019

|                  |       |       |      |      |        |
|------------------|-------|-------|------|------|--------|
| Iron - Dissolved | 0.977 | ug/mL | 1.00 | 97.7 | 80-120 |
|------------------|-------|-------|------|------|--------|

**Batch BI90448 - EPA 200.7**

**Blank (BI90448-BLK1)**

Prepared & Analyzed: 09/10/2019

|      |    |       |      |
|------|----|-------|------|
| Iron | ND | 0.278 | mg/L |
|------|----|-------|------|

**LCS (BI90448-BS1)**

Prepared & Analyzed: 09/10/2019

|      |      |       |      |     |        |
|------|------|-------|------|-----|--------|
| Iron | 1.09 | ug/mL | 1.00 | 109 | 85-115 |
|------|------|-------|------|-----|--------|



### 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 |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|----------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|----------|

#### Batch BI90478 - % Solids Prep

##### **Blank (BI90478-BLK1)**

Prepared & Analyzed: 09/10/2019

Total Dissolved Solids ND 10.0 mg/L



### Volatile Analysis Sample Containers

| Lab ID     | Client Sample ID      | Volatile Sample Container                     |
|------------|-----------------------|---|
| 19I0239-01 | WQ090519: 1300 NP2-6  | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 19I0239-02 | WQ090519: 1305 NP2-10 | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |



## Sample and Data Qualifiers Relating to This Work Order

- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- QL-02 This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
- CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

### 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.

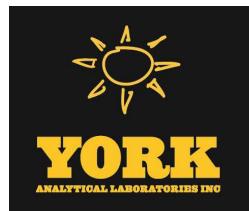


For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic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

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



# Technical Report

prepared for:

**WSP USA, Inc. (Shelton)**  
4 Research Drive, Suite 204  
Shelton CT, 06484

**Attention: Tunde Komuves-Sandor**

Report Date: 09/10/2019

**Client Project ID: 31401451.000 task 01.00 Rowe Industries**

York Project (SDG) No.: 19I0240

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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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: 09/10/2019  
Client Project ID: 31401451.000 task 01.00 Rowe Industries  
York Project (SDG) No.: 19I0240

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

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on September 06, 2019 and listed below. The project was identified as your project: **31401451.000 task 01.00 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> |
|-----------------------|-------------------------|---------------|-----------------------|----------------------|
| 19I0240-01            | WQ090519: 1115 FRW-1    | Water         | 09/05/2019            | 09/06/2019           |
| 19I0240-02            | WQ090519: 1120 FRW-2    | Water         | 09/05/2019            | 09/06/2019           |
| 19I0240-03            | WQ090519: 1125 FRW-3    | Water         | 09/05/2019            | 09/06/2019           |
| 19I0240-04            | WQ090519: 1130 FRW-4    | Water         | 09/05/2019            | 09/06/2019           |
| 19I0240-05            | WQ090519: 1145 NP1-1-2  | Water         | 09/05/2019            | 09/06/2019           |

## **General Notes for York Project (SDG) No.: 19I0240**

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:** 09/10/2019





## Sample Information

**Client Sample ID:** WQ090519: 1115 FRW-1

**York Sample ID:**

**19I0240-01**

| <u>York Project (SDG) No.</u> | <u>Client Project ID</u>                | <u>Matrix</u> | <u>Collection Date/Time</u> | <u>Date Received</u> |
|-------------------------------|---|---------------|-----------------------------|----------------------|
| 19I0240                       | 31401451.000 task 01.00 Rowe Industries | Water         | September 5, 2019 11:15 am  | 09/06/2019           |

### 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  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 71-55-6  | 1,1,1-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 79-34-5  | 1,1,2,2-Tetrachloroethane                         | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 76-13-1  | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 79-00-5  | 1,1,2-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 75-34-3  | 1,1-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 75-35-4  | 1,1-Dichloroethylene                              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 563-58-6 | 1,1-Dichloropropylene                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP             | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 87-61-6  | 1,2,3-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 96-18-4  | 1,2,3-Trichloropropane                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 120-82-1 | 1,2,4-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 95-63-6  | 1,2,4-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 96-12-8  | 1,2-Dibromo-3-chloropropane                       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 106-93-4 | 1,2-Dibromoethane                                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 95-50-1  | 1,2-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 107-06-2 | 1,2-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 78-87-5  | 1,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 108-67-8 | 1,3,5-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 541-73-1 | 1,3-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 142-28-9 | 1,3-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 106-46-7 | 1,4-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 594-20-7 | 2,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |



## Sample Information

Client Sample ID: WQ090519: 1115 FRW-1

York Sample ID:

19I0240-01

York Project (SDG) No.

19I0240

Client Project ID

31401451.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 11:15 am

Date Received

09/06/2019

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 591-78-6   | 2-Hexanone                | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 106-43-4   | 4-Chlorotoluene           | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 67-64-1    | Acetone                   | <b>1.30</b>  | CCV-E | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 71-43-2    | Benzene                   | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 108-86-1   | Bromobenzene              | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 74-97-5    | Bromochloromethane        | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 75-27-4    | Bromodichloromethane      | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 75-25-2    | Bromoform                 | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 74-83-9    | Bromomethane              | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 56-23-5    | Carbon tetrachloride      | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 108-90-7   | Chlorobenzene             | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 75-00-3    | Chloroethane              | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 67-66-3    | Chloroform                | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 74-87-3    | Chloromethane             | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 156-59-2   | cis-1,2-Dichloroethylene  | <b>0.390</b> |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 124-48-1   | Dibromochloromethane      | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 74-95-3    | Dibromomethane            | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 75-71-8    | Dichlorodifluoromethane   | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 100-41-4   | Ethyl Benzene             | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 87-68-3    | Hexachlorobutadiene       | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |
| 98-82-8    | Isopropylbenzene          | ND           |       | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |



## Sample Information

Client Sample ID: WQ090519: 1115 FRW-1

York Sample ID:

19I0240-01

York Project (SDG) No.

19I0240

Client Project ID

31401451.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 11:15 am

Date Received

09/06/2019

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 75-09-2                     | Methylene chloride                     | ND            |                         | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 91-20-3                     | Naphthalene                            | ND            |                         | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 104-51-8                    | n-Butylbenzene                         | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 103-65-1                    | n-Propylbenzene                        | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 95-47-6                     | o-Xylene                               | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 179601-23-1                 | p- & m- Xylenes                        | ND            |                         | ug/L  | 0.500               | 1.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 99-87-6                     | p-Isopropyltoluene                     | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 135-98-8                    | sec-Butylbenzene                       | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 100-42-5                    | Styrene                                | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 98-06-6                     | tert-Butylbenzene                      | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 127-18-4                    | Tetrachloroethylene                    | 21.3          |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 108-88-3                    | Toluene                                | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 156-60-5                    | trans-1,2-Dichloroethylene             | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 10061-02-6                  | trans-1,3-Dichloropropylene            | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 79-01-6                     | Trichloroethylene                      | 0.360         |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 75-69-4                     | Trichlorofluoromethane                 | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 75-01-4                     | Vinyl Chloride                         | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| 1330-20-7                   | Xylenes, Total                         | ND            |                         | ug/L  | 0.600               | 1.50  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP       | 09/10/2019 07:08   | 09/10/2019 13:15   | LLJ     |  |  |
| <b>Surrogate Recoveries</b> |  | <b>Result</b> | <b>Acceptance Range</b> |       |                     |       |          |   |                    |                    |         |  |  |
| 17060-07-0                  | Surrogate: SURR: 1,2-Dichloroethane-d4 | 103 %         |                         |       | 70-130              |       |          |   |                    |                    |         |  |  |
| 2037-26-5                   | Surrogate: SURR: Toluene-d8            | 105 %         |                         |       | 70-130              |       |          |   |                    |                    |         |  |  |
| 460-00-4                    | Surrogate: SURR: p-Bromofluorobenzene  | 101 %         |                         |       | 70-130              |       |          |   |                    |                    |         |  |  |



## Sample Information

Client Sample ID: WQ090519: 1120 FRW-2

York Sample ID:

19I0240-02

York Project (SDG) No.

19I0240

Client Project ID

31401451.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 11:20 am

Date Received

09/06/2019

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 71-55-6  | 1,1,1-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 79-34-5  | 1,1,2,2-Tetrachloroethane                         | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 76-13-1  | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 79-00-5  | 1,1,2-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 75-34-3  | 1,1-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 75-35-4  | 1,1-Dichloroethylene                              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 563-58-6 | 1,1-Dichloropropylene                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP             | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 87-61-6  | 1,2,3-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 96-18-4  | 1,2,3-Trichloropropane                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 120-82-1 | 1,2,4-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 95-63-6  | 1,2,4-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 96-12-8  | 1,2-Dibromo-3-chloropropane                       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 106-93-4 | 1,2-Dibromoethane                                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 95-50-1  | 1,2-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 107-06-2 | 1,2-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 78-87-5  | 1,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 108-67-8 | 1,3,5-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 541-73-1 | 1,3-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 142-28-9 | 1,3-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 106-46-7 | 1,4-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 594-20-7 | 2,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 95-49-8  | 2-Chlorotoluene                                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |



## Sample Information

Client Sample ID: WQ090519: 1120 FRW-2

York Sample ID:

19I0240-02

York Project (SDG) No.

19I0240

Client Project ID

31401451.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 11:20 am

Date Received

09/06/2019

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 106-43-4   | 4-Chlorotoluene                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 67-64-1    | Acetone                        | ND     |      | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 71-43-2    | Benzene                        | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 108-86-1   | Bromobenzene                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 74-97-5    | Bromochloromethane             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 75-27-4    | Bromodichloromethane           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 75-25-2    | Bromoform                      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 74-83-9    | Bromomethane                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 56-23-5    | Carbon tetrachloride           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 108-90-7   | Chlorobenzene                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 75-00-3    | Chloroethane                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 67-66-3    | Chloroform                     | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 74-87-3    | Chloromethane                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 156-59-2   | cis-1,2-Dichloroethylene       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 10061-01-5 | cis-1,3-Dichloropropylene      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 124-48-1   | Dibromochloromethane           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 74-95-3    | Dibromomethane                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 75-71-8    | Dichlorodifluoromethane        | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 100-41-4   | Ethyl Benzene                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 87-68-3    | Hexachlorobutadiene            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 98-82-8    | Isopropylbenzene               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 1634-04-4  | Methyl tert-butyl ether (MTBE) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |



## Sample Information

Client Sample ID: **WQ090519: 1120 FRW-2**

York Sample ID:

**19I0240-02**

York Project (SDG) No.

19I0240

Client Project ID

31401451.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 11:20 am

Date Received

09/06/2019

### 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  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 91-20-3     | Naphthalene                 | ND          |      | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 104-51-8    | n-Butylbenzene              | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 103-65-1    | n-Propylbenzene             | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 95-47-6     | o-Xylene                    | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 179601-23-1 | p- & m- Xylenes             | ND          |      | ug/L  | 0.500               | 1.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 99-87-6     | p-Isopropyltoluene          | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 135-98-8    | sec-Butylbenzene            | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 100-42-5    | Styrene                     | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 98-06-6     | tert-Butylbenzene           | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 127-18-4    | Tetrachloroethylene         | <b>2.18</b> |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 108-88-3    | Toluene                     | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 156-60-5    | trans-1,2-Dichloroethylene  | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 10061-02-6  | trans-1,3-Dichloropropylene | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 79-01-6     | Trichloroethylene           | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 75-69-4     | Trichlorofluoromethane      | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 75-01-4     | Vinyl Chloride              | ND          |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |
| 1330-20-7   | Xylenes, Total              | ND          |      | ug/L  | 0.600               | 1.50  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP       | 09/10/2019 07:08   | 09/10/2019 13:42   | LLJ     |

#### **Surrogate Recoveries**

|            | <b>Result</b>                          | <b>Acceptance Range</b> |
|------------|--|-------------------------|
| 17060-07-0 | Surrogate: Surr: 1,2-Dichloroethane-d4 | 110 %                   |
| 2037-26-5  | Surrogate: Surr: Toluene-d8            | 104 %                   |
| 460-00-4   | Surrogate: Surr: p-Bromofluorobenzene  | 99.7 %                  |



## Sample Information

Client Sample ID: WQ090519: 1125 FRW-3

York Sample ID:

19I0240-03

York Project (SDG) No.

19I0240

Client Project ID

31401451.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 11:25 am

Date Received

09/06/2019

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 71-55-6  | 1,1,1-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 79-34-5  | 1,1,2,2-Tetrachloroethane                         | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 76-13-1  | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 79-00-5  | 1,1,2-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 75-34-3  | 1,1-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 75-35-4  | 1,1-Dichloroethylene                              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 563-58-6 | 1,1-Dichloropropylene                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP             | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 87-61-6  | 1,2,3-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 96-18-4  | 1,2,3-Trichloropropane                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 120-82-1 | 1,2,4-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 95-63-6  | 1,2,4-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 96-12-8  | 1,2-Dibromo-3-chloropropane                       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 106-93-4 | 1,2-Dibromoethane                                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 95-50-1  | 1,2-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 107-06-2 | 1,2-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 78-87-5  | 1,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 108-67-8 | 1,3,5-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 541-73-1 | 1,3-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 142-28-9 | 1,3-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 106-46-7 | 1,4-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 594-20-7 | 2,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 95-49-8  | 2-Chlorotoluene                                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |



## Sample Information

Client Sample ID: WQ090519: 1125 FRW-3

York Sample ID:

19I0240-03

York Project (SDG) No.

19I0240

Client Project ID

31401451.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 11:25 am

Date Received

09/06/2019

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 106-43-4   | 4-Chlorotoluene                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 67-64-1    | Acetone                        | ND     |      | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 71-43-2    | Benzene                        | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 108-86-1   | Bromobenzene                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 74-97-5    | Bromochloromethane             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 75-27-4    | Bromodichloromethane           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 75-25-2    | Bromoform                      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 74-83-9    | Bromomethane                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 56-23-5    | Carbon tetrachloride           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 108-90-7   | Chlorobenzene                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 75-00-3    | Chloroethane                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 67-66-3    | Chloroform                     | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 74-87-3    | Chloromethane                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 156-59-2   | cis-1,2-Dichloroethylene       | 1.64   |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 10061-01-5 | cis-1,3-Dichloropropylene      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 124-48-1   | Dibromochloromethane           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 74-95-3    | Dibromomethane                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 75-71-8    | Dichlorodifluoromethane        | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 100-41-4   | Ethyl Benzene                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 87-68-3    | Hexachlorobutadiene            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 98-82-8    | Isopropylbenzene               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 1634-04-4  | Methyl tert-butyl ether (MTBE) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |



## Sample Information

Client Sample ID: WQ090519: 1125 FRW-3

York Sample ID:

19I0240-03

York Project (SDG) No.

19I0240

Client Project ID

31401451.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 11:25 am

Date Received

09/06/2019

### 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  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 91-20-3     | Naphthalene                 | ND     |      | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 104-51-8    | n-Butylbenzene              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 103-65-1    | n-Propylbenzene             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 95-47-6     | o-Xylene                    | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 179601-23-1 | p- & m- Xylenes             | ND     |      | ug/L  | 0.500               | 1.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 99-87-6     | p-Isopropyltoluene          | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 135-98-8    | sec-Butylbenzene            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 100-42-5    | Styrene                     | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 98-06-6     | tert-Butylbenzene           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 127-18-4    | Tetrachloroethylene         | 6.57   |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 108-88-3    | Toluene                     | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 156-60-5    | trans-1,2-Dichloroethylene  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 10061-02-6  | trans-1,3-Dichloropropylene | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 79-01-6     | Trichloroethylene           | 0.360  |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 75-69-4     | Trichlorofluoromethane      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 75-01-4     | Vinyl Chloride              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |
| 1330-20-7   | Xylenes, Total              | ND     |      | ug/L  | 0.600               | 1.50  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP       | 09/10/2019 07:08   | 09/10/2019 14:10   | LLJ     |

#### Surrogate Recoveries

#### Result

#### Acceptance Range

|            |  |       |        |
|------------|--|-------|--------|
| 17060-07-0 | Surrogate: SURR: 1,2-Dichloroethane-d4 | 104 % | 70-130 |
| 2037-26-5  | Surrogate: SURR: Toluene-d8            | 105 % | 70-130 |
| 460-00-4   | Surrogate: SURR: p-Bromofluorobenzene  | 106 % | 70-130 |



## Sample Information

Client Sample ID: WQ090519: 1130 FRW-4

York Sample ID:

19I0240-04

| York Project (SDG) No. | Client Project ID                       | Matrix | Collection Date/Time       | Date Received |
|------------------------|---|--------|----------------------------|---------------|
| 19I0240                | 31401451.000 task 01.00 Rowe Industries | Water  | September 5, 2019 11:30 am | 09/06/2019    |

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 71-55-6  | 1,1,1-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 79-34-5  | 1,1,2,2-Tetrachloroethane                         | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 76-13-1  | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 79-00-5  | 1,1,2-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 75-34-3  | 1,1-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 75-35-4  | 1,1-Dichloroethylene                              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 563-58-6 | 1,1-Dichloropropylene                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP             | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 87-61-6  | 1,2,3-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 96-18-4  | 1,2,3-Trichloropropane                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 120-82-1 | 1,2,4-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 95-63-6  | 1,2,4-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 96-12-8  | 1,2-Dibromo-3-chloropropane                       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 106-93-4 | 1,2-Dibromoethane                                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 95-50-1  | 1,2-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 107-06-2 | 1,2-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 78-87-5  | 1,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 108-67-8 | 1,3,5-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 541-73-1 | 1,3-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 142-28-9 | 1,3-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 106-46-7 | 1,4-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 594-20-7 | 2,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 95-49-8  | 2-Chlorotoluene                                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |



## Sample Information

Client Sample ID: **WQ090519: 1130 FRW-4**

York Sample ID:

**19I0240-04**

| <u>York Project (SDG) No.</u> | <u>Client Project ID</u>                | <u>Matrix</u> | <u>Collection Date/Time</u> | <u>Date Received</u> |
|-------------------------------|---|---------------|-----------------------------|----------------------|
| 19I0240                       | 31401451.000 task 01.00 Rowe Industries | Water         | September 5, 2019 11:30 am  | 09/06/2019           |

### 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  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 106-43-4   | 4-Chlorotoluene                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 67-64-1    | Acetone                        | ND     |      | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 71-43-2    | Benzene                        | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 108-86-1   | Bromobenzene                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 74-97-5    | Bromochloromethane             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 75-27-4    | Bromodichloromethane           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 75-25-2    | Bromoform                      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 74-83-9    | Bromomethane                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 56-23-5    | Carbon tetrachloride           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 108-90-7   | Chlorobenzene                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 75-00-3    | Chloroethane                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 67-66-3    | Chloroform                     | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 74-87-3    | Chloromethane                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 156-59-2   | cis-1,2-Dichloroethylene       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 10061-01-5 | cis-1,3-Dichloropropylene      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 124-48-1   | Dibromochloromethane           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 74-95-3    | Dibromomethane                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 75-71-8    | Dichlorodifluoromethane        | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 100-41-4   | Ethyl Benzene                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 87-68-3    | Hexachlorobutadiene            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 98-82-8    | Isopropylbenzene               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 1634-04-4  | Methyl tert-butyl ether (MTBE) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |



## Sample Information

Client Sample ID: **WQ090519: 1130 FRW-4**

York Sample ID:

**19I0240-04**

York Project (SDG) No.

19I0240

Client Project ID

31401451.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 11:30 am

Date Received

09/06/2019

### 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  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 91-20-3     | Naphthalene                 | ND           |      | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 104-51-8    | n-Butylbenzene              | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 103-65-1    | n-Propylbenzene             | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 95-47-6     | o-Xylene                    | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 179601-23-1 | p- & m- Xylenes             | ND           |      | ug/L  | 0.500               | 1.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 99-87-6     | p-Isopropyltoluene          | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 135-98-8    | sec-Butylbenzene            | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 100-42-5    | Styrene                     | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 98-06-6     | tert-Butylbenzene           | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 127-18-4    | Tetrachloroethylene         | <b>0.820</b> |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 108-88-3    | Toluene                     | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 156-60-5    | trans-1,2-Dichloroethylene  | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 10061-02-6  | trans-1,3-Dichloropropylene | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 79-01-6     | Trichloroethylene           | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 75-69-4     | Trichlorofluoromethane      | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 75-01-4     | Vinyl Chloride              | ND           |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |
| 1330-20-7   | Xylenes, Total              | ND           |      | ug/L  | 0.600               | 1.50  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP       | 09/10/2019 07:08   | 09/10/2019 14:38   | LLJ     |

#### **Surrogate Recoveries**

|            | <b>Result</b>                          | <b>Acceptance Range</b> |
|------------|--|-------------------------|
| 17060-07-0 | Surrogate: Surr: 1,2-Dichloroethane-d4 | 109 %                   |
| 2037-26-5  | Surrogate: Surr: Toluene-d8            | 103 %                   |
| 460-00-4   | Surrogate: Surr: p-Bromofluorobenzene  | 104 %                   |



## Sample Information

Client Sample ID: WQ090519: 1145 NP1-1-2

York Sample ID:

19I0240-05

| York Project (SDG) No. | Client Project ID                       | Matrix | Collection Date/Time       | Date Received |
|------------------------|---|--------|----------------------------|---------------|
| 19I0240                | 31401451.000 task 01.00 Rowe Industries | Water  | September 5, 2019 11:45 am | 09/06/2019    |

### 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  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 71-55-6  | 1,1,1-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 79-34-5  | 1,1,2,2-Tetrachloroethane                         | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 76-13-1  | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 79-00-5  | 1,1,2-Trichloroethane                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 75-34-3  | 1,1-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 75-35-4  | 1,1-Dichloroethylene                              | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 563-58-6 | 1,1-Dichloropropylene                             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP             | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 87-61-6  | 1,2,3-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 96-18-4  | 1,2,3-Trichloropropane                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 120-82-1 | 1,2,4-Trichlorobenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 95-63-6  | 1,2,4-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 96-12-8  | 1,2-Dibromo-3-chloropropane                       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 106-93-4 | 1,2-Dibromoethane                                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 95-50-1  | 1,2-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 107-06-2 | 1,2-Dichloroethane                                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 78-87-5  | 1,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 108-67-8 | 1,3,5-Trimethylbenzene                            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 541-73-1 | 1,3-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 142-28-9 | 1,3-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 106-46-7 | 1,4-Dichlorobenzene                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 594-20-7 | 2,2-Dichloropropane                               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 95-49-8  | 2-Chlorotoluene                                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |



## Sample Information

Client Sample ID: **WQ090519: 1145 NP1-1-2**

York Sample ID:

**19I0240-05**

| <u>York Project (SDG) No.</u> | <u>Client Project ID</u>                | <u>Matrix</u> | <u>Collection Date/Time</u> | <u>Date Received</u> |
|-------------------------------|---|---------------|-----------------------------|----------------------|
| 19I0240                       | 31401451.000 task 01.00 Rowe Industries | Water         | September 5, 2019 11:45 am  | 09/06/2019           |

### 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  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 106-43-4   | 4-Chlorotoluene                | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 67-64-1    | Acetone                        | ND     |      | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 71-43-2    | Benzene                        | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 108-86-1   | Bromobenzene                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 74-97-5    | Bromochloromethane             | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 75-27-4    | Bromodichloromethane           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 75-25-2    | Bromoform                      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 74-83-9    | Bromomethane                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 56-23-5    | Carbon tetrachloride           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 108-90-7   | Chlorobenzene                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 75-00-3    | Chloroethane                   | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 67-66-3    | Chloroform                     | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 74-87-3    | Chloromethane                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 156-59-2   | cis-1,2-Dichloroethylene       | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 10061-01-5 | cis-1,3-Dichloropropylene      | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 124-48-1   | Dibromochloromethane           | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 74-95-3    | Dibromomethane                 | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 75-71-8    | Dichlorodifluoromethane        | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 100-41-4   | Ethyl Benzene                  | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 87-68-3    | Hexachlorobutadiene            | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 98-82-8    | Isopropylbenzene               | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 1634-04-4  | Methyl tert-butyl ether (MTBE) | ND     |      | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |



## Sample Information

Client Sample ID: **WQ090519: 1145 NP1-1-2**

York Sample ID:

**19I0240-05**

York Project (SDG) No.

19I0240

Client Project ID

31401451.000 task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

September 5, 2019 11:45 am

Date Received

09/06/2019

### 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  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 91-20-3                     | Naphthalene                            | ND            |                         | ug/L  | 1.00                | 2.00  | 1        | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 104-51-8                    | n-Butylbenzene                         | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 103-65-1                    | n-Propylbenzene                        | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 95-47-6                     | o-Xylene                               | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 179601-23-1                 | p- & m- Xylenes                        | ND            |                         | ug/L  | 0.500               | 1.00  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 99-87-6                     | p-Isopropyltoluene                     | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 135-98-8                    | sec-Butylbenzene                       | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 100-42-5                    | Styrene                                | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 98-06-6                     | tert-Butylbenzene                      | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 127-18-4                    | Tetrachloroethylene                    | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 108-88-3                    | Toluene                                | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 156-60-5                    | trans-1,2-Dichloroethylene             | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 10061-02-6                  | trans-1,3-Dichloropropylene            | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 79-01-6                     | Trichloroethylene                      | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 75-69-4                     | Trichlorofluoromethane                 | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 75-01-4                     | Vinyl Chloride                         | ND            |                         | ug/L  | 0.200               | 0.500 | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| 1330-20-7                   | Xylenes, Total                         | ND            |                         | ug/L  | 0.600               | 1.50  | 1        | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP       | 09/10/2019 07:08   | 09/10/2019 15:05   | LLJ     |
| <b>Surrogate Recoveries</b> |  | <b>Result</b> | <b>Acceptance Range</b> |       |                     |       |          |   |                    |                    |         |
| 17060-07-0                  | Surrogate: SURR: 1,2-Dichloroethane-d4 | 109 %         | 70-130                  |       |                     |       |          |   |                    |                    |         |
| 2037-26-5                   | Surrogate: SURR: Toluene-d8            | 104 %         | 70-130                  |       |                     |       |          |   |                    |                    |         |
| 460-00-4                    | Surrogate: SURR: p-Bromoanisole        | 100 %         | 70-130                  |       |                     |       |          |   |                    |                    |         |



## Analytical Batch Summary

**Batch ID:** BI90337

**Preparation Method:** EPA 5030B

**Prepared By:** TMP

| YORK Sample ID | Client Sample ID       | Preparation Date |
|----------------|------------------------|------------------|
| 19I0240-01     | WQ090519: 1115 FRW-1   | 09/10/19         |
| 19I0240-02     | WQ090519: 1120 FRW-2   | 09/10/19         |
| 19I0240-03     | WQ090519: 1125 FRW-3   | 09/10/19         |
| 19I0240-04     | WQ090519: 1130 FRW-4   | 09/10/19         |
| 19I0240-05     | WQ090519: 1145 NP1-1-2 | 09/10/19         |
| BI90337-BLK1   | Blank                  | 09/10/19         |
| BI90337-BS1    | LCS                    | 09/10/19         |
| BI90337-BSD1   | LCS Dup                | 09/10/19         |



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

York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD RPD | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|------|

### Batch BI90337 - EPA 5030B

#### Blank (BI90337-BLK1)

Prepared & Analyzed: 09/10/2019

|   |    |       |      |
|---|----|-------|------|
| 1,1,1,2-Tetrachloroethane                         | ND | 0.500 | ug/L |
| 1,1,1-Trichloroethane                             | ND | 0.500 | "    |
| 1,1,2,2-Tetrachloroethane                         | ND | 0.500 | "    |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 0.500 | "    |
| 1,1,2-Trichloroethane                             | ND | 0.500 | "    |
| 1,1-Dichloroethane                                | ND | 0.500 | "    |
| 1,1-Dichloroethylene                              | ND | 0.500 | "    |
| 1,1-Dichloropropylene                             | ND | 0.500 | "    |
| 1,2,3-Trichlorobenzene                            | ND | 0.500 | "    |
| 1,2,3-Trichloropropane                            | ND | 0.500 | "    |
| 1,2,4-Trichlorobenzene                            | ND | 0.500 | "    |
| 1,2,4-Trimethylbenzene                            | ND | 0.500 | "    |
| 1,2-Dibromo-3-chloropropane                       | ND | 0.500 | "    |
| 1,2-Dibromoethane                                 | ND | 0.500 | "    |
| 1,2-Dichlorobenzene                               | ND | 0.500 | "    |
| 1,2-Dichloroethane                                | ND | 0.500 | "    |
| 1,2-Dichloropropane                               | ND | 0.500 | "    |
| 1,3,5-Trimethylbenzene                            | ND | 0.500 | "    |
| 1,3-Dichlorobenzene                               | ND | 0.500 | "    |
| 1,3-Dichloropropane                               | ND | 0.500 | "    |
| 1,4-Dichlorobenzene                               | ND | 0.500 | "    |
| 2,2-Dichloropropane                               | ND | 0.500 | "    |
| 2-Chlorotoluene                                   | ND | 0.500 | "    |
| 2-Hexanone  | ND | 0.500 | "    |
| 4-Chlorotoluene                                   | ND | 0.500 | "    |
| Acetone   | ND | 2.00  | "    |
| Benzene   | ND | 0.500 | "    |
| Bromobenzene                                      | ND | 0.500 | "    |
| Bromochloromethane                                | ND | 0.500 | "    |
| Bromodichloromethane                              | ND | 0.500 | "    |
| Bromoform   | ND | 0.500 | "    |
| Bromomethane                                      | ND | 0.500 | "    |
| Carbon tetrachloride                              | ND | 0.500 | "    |
| Chlorobenzene                                     | ND | 0.500 | "    |
| Chloroethane                                      | ND | 0.500 | "    |
| Chloroform  | ND | 0.500 | "    |
| Chloromethane                                     | ND | 0.500 | "    |
| cis-1,2-Dichloroethylene                          | ND | 0.500 | "    |
| cis-1,3-Dichloropropylene                         | ND | 0.500 | "    |
| Dibromochloromethane                              | ND | 0.500 | "    |
| Dibromomethane                                    | ND | 0.500 | "    |
| Dichlorodifluoromethane                           | ND | 0.500 | "    |
| Ethyl Benzene                                     | ND | 0.500 | "    |
| Hexachlorobutadiene                               | ND | 0.500 | "    |
| Isopropylbenzene                                  | ND | 0.500 | "    |
| Methyl tert-butyl ether (MTBE)                    | ND | 0.500 | "    |
| Methylene chloride                                | ND | 2.00  | "    |
| Naphthalene                                       | ND | 2.00  | "    |
| n-Butylbenzene                                    | ND | 0.500 | "    |



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

**York Analytical Laboratories, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|

### Batch BI90337 - EPA 5030B

#### Blank (BI90337-BLK1)

Prepared & Analyzed: 09/10/2019

|   |      |       |      |      |  |     |        |  |  |  |  |
|---|------|-------|------|------|--|-----|--------|--|--|--|--|
| n-Propylbenzene                               | ND   | 0.500 | ug/L |      |  |     |        |  |  |  |  |
| o-Xylene                                      | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| p- & m- Xylenes                               | ND   | 1.00  | "    |      |  |     |        |  |  |  |  |
| p-Isopropyltoluene                            | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| sec-Butylbenzene                              | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Styrene                                       | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| tert-Butylbenzene                             | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Tetrachloroethylene                           | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Toluene                                       | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| trans-1,2-Dichloroethylene                    | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| trans-1,3-Dichloropropylene                   | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Trichloroethylene                             | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Trichlorofluoromethane                        | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Vinyl Chloride                                | ND   | 0.500 | "    |      |  |     |        |  |  |  |  |
| Xylenes, Total                                | ND   | 1.50  | "    |      |  |     |        |  |  |  |  |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 10.2 |       | "    | 10.0 |  | 102 | 70-130 |  |  |  |  |
| <i>Surrogate: SURR: Toluene-d8</i>            | 10.7 |       | "    | 10.0 |  | 107 | 70-130 |  |  |  |  |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i>  | 10.5 |       | "    | 10.0 |  | 105 | 70-130 |  |  |  |  |

#### LCS (BI90337-BS1)

Prepared & Analyzed: 09/10/2019

|   |      |      |      |      |        |           |    |
|---|------|------|------|------|--------|-----------|----|
| 1,1,1,2-Tetrachloroethane                         | 11.3 | ug/L | 10.0 | 113  | 82-126 |           | 30 |
| 1,1,1-Trichloroethane                             | 9.52 | "    | 10.0 | 95.2 | 70-130 |           | 20 |
| 1,1,2,2-Tetrachloroethane                         | 12.3 | "    | 10.0 | 123  | 70-130 |           | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 10.2 | "    | 10.0 | 102  | 70-130 |           | 20 |
| 1,1,2-Trichloroethane                             | 10.6 | "    | 10.0 | 106  | 70-130 |           | 20 |
| 1,1-Dichloroethane                                | 10.6 | "    | 10.0 | 106  | 70-130 |           | 20 |
| 1,1-Dichloroethylene                              | 10.0 | "    | 10.0 | 100  | 70-130 |           | 20 |
| 1,1-Dichloropropylene                             | 9.86 | "    | 10.0 | 98.6 | 83-133 |           | 30 |
| 1,2,3-Trichlorobenzene                            | 14.6 | "    | 10.0 | 146  | 70-130 | High Bias | 20 |
| 1,2,3-Trichloropropane                            | 11.5 | "    | 10.0 | 115  | 77-128 |           | 30 |
| 1,2,4-Trichlorobenzene                            | 13.6 | "    | 10.0 | 136  | 70-130 | High Bias | 20 |
| 1,2,4-Trimethylbenzene                            | 11.5 | "    | 10.0 | 115  | 82-132 |           | 20 |
| 1,2-Dibromo-3-chloropropane                       | 12.0 | "    | 10.0 | 120  | 40-160 |           | 20 |
| 1,2-Dibromoethane                                 | 11.1 | "    | 10.0 | 111  | 70-130 |           | 20 |
| 1,2-Dichlorobenzene                               | 11.6 | "    | 10.0 | 116  | 70-130 |           | 20 |
| 1,2-Dichloroethane                                | 10.4 | "    | 10.0 | 104  | 70-130 |           | 20 |
| 1,2-Dichloropropane                               | 10.4 | "    | 10.0 | 104  | 70-130 |           | 20 |
| 1,3,5-Trimethylbenzene                            | 11.6 | "    | 10.0 | 116  | 80-131 |           | 30 |
| 1,3-Dichlorobenzene                               | 11.3 | "    | 10.0 | 113  | 70-130 |           | 20 |
| 1,3-Dichloropropane                               | 11.1 | "    | 10.0 | 111  | 81-125 |           | 30 |
| 1,4-Dichlorobenzene                               | 11.3 | "    | 10.0 | 113  | 70-130 |           | 20 |
| 2,2-Dichloropropane                               | 10.2 | "    | 10.0 | 102  | 56-150 |           | 30 |
| 2-Chlorotoluene                                   | 11.3 | "    | 10.0 | 113  | 79-130 |           | 30 |
| 2-Hexanone  | 12.9 | "    | 10.0 | 129  | 40-160 |           | 20 |
| 4-Chlorotoluene                                   | 11.4 | "    | 10.0 | 114  | 79-128 |           | 30 |
| Acetone   | 8.52 | "    | 10.0 | 85.2 | 40-160 |           | 20 |
| Benzene   | 9.81 | "    | 10.0 | 98.1 | 70-130 |           | 20 |
| Bromobenzene                                      | 11.5 | "    | 10.0 | 115  | 78-129 |           | 30 |
| Bromo(chloromethane                               | 10.6 | "    | 10.0 | 106  | 70-130 |           | 20 |
| Bromodichloromethane                              | 10.7 | "    | 10.0 | 107  | 70-130 |           | 20 |



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

**York Analytical Laboratories, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|

### **Batch BI90337 - EPA 5030B**

| LCS (BI90337-BS1)                             |      |  |      |      |      |        |           |  |  |    | Prepared & Analyzed: 09/10/2019 |
|---|------|--|------|------|------|--------|-----------|--|--|----|---------------------------------|
| Bromoform                                     | 11.6 |  | ug/L | 10.0 | 116  | 70-130 |           |  |  | 20 |                                 |
| Bromomethane                                  | 9.42 |  | "    | 10.0 | 94.2 | 40-160 |           |  |  | 20 |                                 |
| Carbon tetrachloride                          | 10.4 |  | "    | 10.0 | 104  | 70-130 |           |  |  | 20 |                                 |
| Chlorobenzene                                 | 10.7 |  | "    | 10.0 | 107  | 70-130 |           |  |  | 20 |                                 |
| Chloroethane                                  | 10.8 |  | "    | 10.0 | 108  | 40-160 |           |  |  | 20 |                                 |
| Chloroform                                    | 9.70 |  | "    | 10.0 | 97.0 | 70-130 |           |  |  | 20 |                                 |
| Chloromethane                                 | 10.4 |  | "    | 10.0 | 104  | 40-160 |           |  |  | 20 |                                 |
| cis-1,2-Dichloroethylene                      | 10.1 |  | "    | 10.0 | 101  | 70-130 |           |  |  | 20 |                                 |
| cis-1,3-Dichloropropylene                     | 10.4 |  | "    | 10.0 | 104  | 70-130 |           |  |  | 20 |                                 |
| Dibromochloromethane                          | 11.2 |  | "    | 10.0 | 112  | 70-130 |           |  |  | 20 |                                 |
| Dibromomethane                                | 10.6 |  | "    | 10.0 | 106  | 72-134 |           |  |  | 30 |                                 |
| Dichlorodifluoromethane                       | 9.82 |  | "    | 10.0 | 98.2 | 40-160 |           |  |  | 20 |                                 |
| Ethyl Benzene                                 | 11.2 |  | "    | 10.0 | 112  | 70-130 |           |  |  | 20 |                                 |
| Hexachlorobutadiene                           | 11.8 |  | "    | 10.0 | 118  | 67-146 |           |  |  | 30 |                                 |
| Isopropylbenzene                              | 11.1 |  | "    | 10.0 | 111  | 70-130 |           |  |  | 20 |                                 |
| Methyl tert-butyl ether (MTBE)                | 10.4 |  | "    | 10.0 | 104  | 70-130 |           |  |  | 20 |                                 |
| Methylene chloride                            | 9.55 |  | "    | 10.0 | 95.5 | 70-130 |           |  |  | 20 |                                 |
| Naphthalene                                   | 15.2 |  | "    | 10.0 | 152  | 70-147 | High Bias |  |  | 30 |                                 |
| n-Butylbenzene                                | 12.2 |  | "    | 10.0 | 122  | 79-132 |           |  |  | 30 |                                 |
| n-Propylbenzene                               | 11.5 |  | "    | 10.0 | 115  | 78-133 |           |  |  | 30 |                                 |
| o-Xylene                                      | 11.0 |  | "    | 10.0 | 110  | 70-130 |           |  |  | 20 |                                 |
| p- & m- Xylenes                               | 22.9 |  | "    | 20.0 | 115  | 70-130 |           |  |  | 20 |                                 |
| p-Isopropyltoluene                            | 11.7 |  | "    | 10.0 | 117  | 81-136 |           |  |  | 30 |                                 |
| sec-Butylbenzene                              | 12.3 |  | "    | 10.0 | 123  | 79-137 |           |  |  | 30 |                                 |
| Styrene                                       | 11.0 |  | "    | 10.0 | 110  | 70-130 |           |  |  | 20 |                                 |
| tert-Butylbenzene                             | 11.4 |  | "    | 10.0 | 114  | 77-138 |           |  |  | 30 |                                 |
| Tetrachloroethylene                           | 9.48 |  | "    | 10.0 | 94.8 | 70-130 |           |  |  | 20 |                                 |
| Toluene                                       | 10.6 |  | "    | 10.0 | 106  | 70-130 |           |  |  | 20 |                                 |
| trans-1,2-Dichloroethylene                    | 10.1 |  | "    | 10.0 | 101  | 70-130 |           |  |  | 20 |                                 |
| trans-1,3-Dichloropropylene                   | 10.7 |  | "    | 10.0 | 107  | 70-130 |           |  |  | 20 |                                 |
| Trichloroethylene                             | 10.7 |  | "    | 10.0 | 107  | 70-130 |           |  |  | 20 |                                 |
| Trichlorofluoromethane                        | 10.6 |  | "    | 10.0 | 106  | 40-160 |           |  |  | 20 |                                 |
| Vinyl Chloride                                | 8.83 |  | "    | 10.0 | 88.3 | 70-130 |           |  |  | 20 |                                 |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 9.97 |  | "    | 10.0 | 99.7 | 70-130 |           |  |  |    |                                 |
| <i>Surrogate: SURR: Toluene-d8</i>            | 10.6 |  | "    | 10.0 | 106  | 70-130 |           |  |  |    |                                 |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i>  | 10.2 |  | "    | 10.0 | 102  | 70-130 |           |  |  |    |                                 |



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

**York Analytical Laboratories, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|

### Batch BI90337 - EPA 5030B

| LCS Dup (BI90337-BSD1)                            | Prepared & Analyzed: 09/10/2019 |  |      |      |      |        |           |  |       |    |          |
|---|---------------------------------|--|------|------|------|--------|-----------|--|-------|----|----------|
| 1,1,1,2-Tetrachloroethane                         | 10.5                            |  | ug/L | 10.0 | 105  | 82-126 |           |  | 6.99  | 30 |          |
| 1,1,1-Trichloroethane                             | 9.09                            |  | "    | 10.0 | 90.9 | 70-130 |           |  | 4.62  | 20 |          |
| 1,1,2,2-Tetrachloroethane                         | 11.4                            |  | "    | 10.0 | 114  | 70-130 |           |  | 7.94  | 20 |          |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 9.64                            |  | "    | 10.0 | 96.4 | 70-130 |           |  | 5.35  | 20 |          |
| 1,1,2-Trichloroethane                             | 10.8                            |  | "    | 10.0 | 108  | 70-130 |           |  | 1.68  | 20 |          |
| 1,1-Dichloroethane                                | 10.2                            |  | "    | 10.0 | 102  | 70-130 |           |  | 3.85  | 20 |          |
| 1,1-Dichloroethylene                              | 9.27                            |  | "    | 10.0 | 92.7 | 70-130 |           |  | 7.78  | 20 |          |
| 1,1-Dichloropropylene                             | 9.34                            |  | "    | 10.0 | 93.4 | 83-133 |           |  | 5.42  | 30 |          |
| 1,2,3-Trichlorobenzene                            | 15.9                            |  | "    | 10.0 | 159  | 70-130 | High Bias |  | 8.72  | 20 |          |
| 1,2,3-Trichloropropane                            | 11.1                            |  | "    | 10.0 | 111  | 77-128 |           |  | 2.92  | 30 |          |
| 1,2,4-Trichlorobenzene                            | 13.6                            |  | "    | 10.0 | 136  | 70-130 | High Bias |  | 0.147 | 20 |          |
| 1,2,4-Trimethylbenzene                            | 9.57                            |  | "    | 10.0 | 95.7 | 82-132 |           |  | 18.3  | 20 |          |
| 1,2-Dibromo-3-chloropropane                       | 12.4                            |  | "    | 10.0 | 124  | 40-160 |           |  | 3.76  | 20 |          |
| 1,2-Dibromoethane                                 | 11.4                            |  | "    | 10.0 | 114  | 70-130 |           |  | 1.96  | 20 |          |
| 1,2-Dichlorobenzene                               | 10.3                            |  | "    | 10.0 | 103  | 70-130 |           |  | 11.3  | 20 |          |
| 1,2-Dichloroethane                                | 10.5                            |  | "    | 10.0 | 105  | 70-130 |           |  | 1.05  | 20 |          |
| 1,2-Dichloropropane                               | 10.1                            |  | "    | 10.0 | 101  | 70-130 |           |  | 3.03  | 20 |          |
| 1,3,5-Trimethylbenzene                            | 9.56                            |  | "    | 10.0 | 95.6 | 80-131 |           |  | 19.5  | 30 |          |
| 1,3-Dichlorobenzene                               | 9.55                            |  | "    | 10.0 | 95.5 | 70-130 |           |  | 16.5  | 20 |          |
| 1,3-Dichloropropane                               | 11.2                            |  | "    | 10.0 | 112  | 81-125 |           |  | 1.43  | 30 |          |
| 1,4-Dichlorobenzene                               | 9.74                            |  | "    | 10.0 | 97.4 | 70-130 |           |  | 15.0  | 20 |          |
| 2,2-Dichloropropane                               | 9.52                            |  | "    | 10.0 | 95.2 | 56-150 |           |  | 6.70  | 30 |          |
| 2-Chlorotoluene                                   | 9.23                            |  | "    | 10.0 | 92.3 | 79-130 |           |  | 19.8  | 30 |          |
| 2-Hexanone  | 14.0                            |  | "    | 10.0 | 140  | 40-160 |           |  | 8.63  | 20 |          |
| 4-Chlorotoluene                                   | 9.32                            |  | "    | 10.0 | 93.2 | 79-128 |           |  | 20.5  | 30 |          |
| Acetone   | 9.44                            |  | "    | 10.0 | 94.4 | 40-160 |           |  | 10.2  | 20 |          |
| Benzene   | 9.39                            |  | "    | 10.0 | 93.9 | 70-130 |           |  | 4.38  | 20 |          |
| Bromobenzene                                      | 9.94                            |  | "    | 10.0 | 99.4 | 78-129 |           |  | 14.6  | 30 |          |
| Bromochloromethane                                | 9.95                            |  | "    | 10.0 | 99.5 | 70-130 |           |  | 6.61  | 20 |          |
| Bromodichloromethane                              | 10.2                            |  | "    | 10.0 | 102  | 70-130 |           |  | 4.30  | 20 |          |
| Bromoform   | 11.7                            |  | "    | 10.0 | 117  | 70-130 |           |  | 0.602 | 20 |          |
| Bromomethane                                      | 7.34                            |  | "    | 10.0 | 73.4 | 40-160 |           |  | 24.8  | 20 | Non-dir. |
| Carbon tetrachloride                              | 9.85                            |  | "    | 10.0 | 98.5 | 70-130 |           |  | 5.14  | 20 |          |
| Chlorobenzene                                     | 9.90                            |  | "    | 10.0 | 99.0 | 70-130 |           |  | 8.05  | 20 |          |
| Chloroethane                                      | 9.11                            |  | "    | 10.0 | 91.1 | 40-160 |           |  | 16.6  | 20 |          |
| Chloroform  | 9.36                            |  | "    | 10.0 | 93.6 | 70-130 |           |  | 3.57  | 20 |          |
| Chloromethane                                     | 8.22                            |  | "    | 10.0 | 82.2 | 40-160 |           |  | 23.6  | 20 | Non-dir. |
| cis-1,2-Dichloroethylene                          | 9.53                            |  | "    | 10.0 | 95.3 | 70-130 |           |  | 6.01  | 20 |          |
| cis-1,3-Dichloropropylene                         | 10.3                            |  | "    | 10.0 | 103  | 70-130 |           |  | 0.482 | 20 |          |
| Dibromochloromethane                              | 11.1                            |  | "    | 10.0 | 111  | 70-130 |           |  | 0.538 | 20 |          |
| Dibromomethane                                    | 10.6                            |  | "    | 10.0 | 106  | 72-134 |           |  | 0.376 | 30 |          |
| Dichlorodifluoromethane                           | 9.93                            |  | "    | 10.0 | 99.3 | 40-160 |           |  | 1.11  | 20 |          |
| Ethyl Benzene                                     | 10.2                            |  | "    | 10.0 | 102  | 70-130 |           |  | 10.3  | 20 |          |
| Hexachlorobutadiene                               | 11.9                            |  | "    | 10.0 | 119  | 67-146 |           |  | 1.60  | 30 |          |
| Isopropylbenzene                                  | 9.13                            |  | "    | 10.0 | 91.3 | 70-130 |           |  | 19.8  | 20 |          |
| Methyl tert-butyl ether (MTBE)                    | 11.0                            |  | "    | 10.0 | 110  | 70-130 |           |  | 5.89  | 20 |          |
| Methylene chloride                                | 9.27                            |  | "    | 10.0 | 92.7 | 70-130 |           |  | 2.98  | 20 |          |
| Naphthalene                                       | 15.8                            |  | "    | 10.0 | 158  | 70-147 | High Bias |  | 4.33  | 30 |          |
| n-Butylbenzene                                    | 11.0                            |  | "    | 10.0 | 110  | 79-132 |           |  | 10.0  | 30 |          |
| n-Propylbenzene                                   | 9.44                            |  | "    | 10.0 | 94.4 | 78-133 |           |  | 19.9  | 30 |          |



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

York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|-----|-----------|------|

### Batch BI90337 - EPA 5030B

| LCS Dup (BI90337-BSD1)                 | Prepared & Analyzed: 09/10/2019 |  |      |      |      |        |      |    |
|--|---------------------------------|--|------|------|------|--------|------|----|
| o-Xylene                               | 10.1                            |  | ug/L | 10.0 | 101  | 70-130 | 8.82 | 20 |
| p- & m- Xylenes                        | 21.0                            |  | "    | 20.0 | 105  | 70-130 | 8.59 | 20 |
| p-Isopropyltoluene                     | 9.87                            |  | "    | 10.0 | 98.7 | 81-136 | 17.1 | 30 |
| sec-Butylbenzene                       | 10.2                            |  | "    | 10.0 | 102  | 79-137 | 18.3 | 30 |
| Styrene                                | 10.3                            |  | "    | 10.0 | 103  | 70-130 | 6.83 | 20 |
| tert-Butylbenzene                      | 9.47                            |  | "    | 10.0 | 94.7 | 77-138 | 18.1 | 30 |
| Tetrachloroethylene                    | 8.75                            |  | "    | 10.0 | 87.5 | 70-130 | 8.01 | 20 |
| Toluene                                | 9.73                            |  | "    | 10.0 | 97.3 | 70-130 | 8.37 | 20 |
| trans-1,2-Dichloroethylene             | 9.65                            |  | "    | 10.0 | 96.5 | 70-130 | 4.95 | 20 |
| trans-1,3-Dichloropropylene            | 10.9                            |  | "    | 10.0 | 109  | 70-130 | 1.57 | 20 |
| Trichloroethylene                      | 9.67                            |  | "    | 10.0 | 96.7 | 70-130 | 10.0 | 20 |
| Trichlorofluoromethane                 | 9.39                            |  | "    | 10.0 | 93.9 | 40-160 | 12.3 | 20 |
| Vinyl Chloride                         | 7.66                            |  | "    | 10.0 | 76.6 | 70-130 | 14.2 | 20 |
| Surrogate: SURR: 1,2-Dichloroethane-d4 | 11.4                            |  | "    | 10.0 | 114  | 70-130 |      |    |
| Surrogate: SURR: Toluene-d8            | 10.7                            |  | "    | 10.0 | 107  | 70-130 |      |    |
| Surrogate: SURR: p-Bromofluorobenzene  | 9.46                            |  | "    | 10.0 | 94.6 | 70-130 |      |    |



### Volatile Analysis Sample Containers

| Lab ID     | Client Sample ID       | Volatile Sample Container                     |
|------------|------------------------|---|
| 19I0240-01 | WQ090519: 1115 FRW-1   | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 19I0240-02 | WQ090519: 1120 FRW-2   | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 19I0240-03 | WQ090519: 1125 FRW-3   | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 19I0240-04 | WQ090519: 1130 FRW-4   | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 19I0240-05 | WQ090519: 1145 NP1-1-2 | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |



## Sample and Data Qualifiers Relating to This Work Order

- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- QL-02 This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
- CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

### 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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