



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
DRAFT March 2020 Status Report

DATE: May 12, 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 March 1, 2020 through March 31, 2020. 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

(March 1, 2020 through March 31, 2020)

- | | |
|---|--------------------------|
| 1. Hours of operation during the reporting period: | 714 hours (96.0%) |
| 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: | 1,084,567 gal. |
| 5. Was the system effluent flow below the SPDES limit of 1,023,000 gpd: | Yes, (see Graph 1) |
| 6. Mass of VOCs recovered during the reporting period: | 0.02 pound (see Graph 2) |
| 7. Cumulative mass of VOCs recovered since startup on 12/17/02: (calculations can be provided upon request) | 230.0 pounds |



PUMP AND TREAT SYSTEM STATUS SUMMARY

FRW-1, 2, 3 and 4 were shut off in February following injection of products in the Former Drum Storage Area (FDSA) in accordance with the 2019 FDSA In-situ Groundwater Remediation Work Plan. Monthly sampling of FRW-1, 2, 3 and 4 has discontinued and an approved post-injection monitoring program for the Site has been approved by the EPA. RW-2 continues to remain in operation.

On March 2, 2020, the leaks in the roof were repaired by a roof contractor. The remaining O&M activities for March 2020 are included in Table 1.

SUMMARY OF SAMPLING ACTIVITIES

March 2020 groundwater quality sampling was completed for the following wells:

- A monthly groundwater sample was collected from RW-2 on March 2, 2020.

Table 3 presents a summary of the quality results for water samples collected from downgradient recovery well RW-2. Graph 3 presents tetrachloroethylene (PCE) concentrations for samples collected from RW-2 for the last 24 months. Laboratory analytical reports for the water sample collected from the recovery well is 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 ten years.

A groundwater sample from RW-2 will continue to be collected and analyzed monthly.

FUTURE O&M ACTIVITIES

O&M activities scheduled for April 2020 include:

- Evaluation of the transfer pumps; and,
- normal bi-weekly/monthly O&M activities.

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\2020\Monthly Rpts\March\Draft Status Report.docx

TABLES

TABLE 1

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

**MAINTENANCE LOG
(March 1, 2020 through March 31, 2020)**

| Date | Time | System Changes/Modifications | Personnel |
|---------|---------|--|-----------|
| 3/2/20 | | Repaired leaks in the roof. | OCC, SP |
| | | No leaks observed from the EQ tank and the system is operating normally. | SP |
| 3/12/20 | 6:35 AM | Communication and Power Failure Alarms; system shut down | |
| | 9:37 AM | Reset the alarms and restarted the system with RW-2 operating. | JF |
| 3/19/20 | | 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 |
| | | Reduced flow setpoint for RW-2 pump from 23 gpm to 21 gpm because of iron accumulation. Well rehabilitation work is scheduled for May 2020. EQ tank continues to show no signs of leaking. | SP |
| 3/21/20 | 4:55 PM | System shut down due to COVID-19 concerns. | JF |
| 3/22/20 | 7:30 PM | System restarted. | JF |

Notes:

| | |
|-----|---|
| SP | Scott Philbrick, WSP USA |
| JF | Jamie Forrester, WSP USA |
| OCC | Outer County Construction (Roof Contractor) |

H:\NABIS\2020\Monthly Rpts\March\Table 1 Maintenance Record.docx

TABLE 2

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

Effluent Water Quality Results

| Date Sampled ^{2/} | pH ^{1/} | TDS ^{4/} (mg/l) | PCE (ug/l) | 1,1,1-TCA (ug/l) | TCE (ug/l) | 1,1-DCA (ug/l) | 1,1-DCE (ug/l) | cis-1,2-DCE (ug/l) | trans-1,2-DCE (ug/l) | Xylene (ug/l) | Toluene (ug/l) | Ethyl-benzene (ug/l) | Methylene Chloride (ug/l) | Freon 113 (ug/l) | Naphthalene (ug/l) | Chloroform (ug/l) | Total Iron (mg/l) | Dissolved Iron (mg/l) |
|----------------------------|------------------|--------------------------|------------|------------------|------------|----------------|----------------|--------------------|----------------------|---------------|----------------|----------------------|---------------------------|------------------|--------------------|-------------------|-------------------|-----------------------|
| SPDES Limits | 6.5 to 8.5 | --- | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | --- | 10 | 7 | --- | --- |
| 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 |
| 3-Oct-19 | 6.5 | 165 | 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 | 0.612 | ND<0.278 |
| 4-Nov-19 | 6.0 | 102 | 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 | 0.536 | ND<0.278 |
| 5-Dec-19 | 6.8 | 129 | 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 | NA | NA |
| 7-Jan-20 | 6.8 | 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 | NA | NA |
| 4-Feb-20 | 7.0 | 122 | 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 | NA | NA |
| 2-Mar-20 | 7.0 | 137 | 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 | NA | NA |

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 effluent pH was 7.0 on March 19, 2020. 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.

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 ^{1/} | 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 | 5 | 5 | 5 | 7 | NE | 5 | 5 | 5 | 5 | NE | NE | 5 | 5 |
| RW-2 | 1-Feb-19 | 0.380 | 0.36 | 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 | 0.27 | 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 |
| | 3-Oct-19 | ND<0.5 | 0.220 | 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-Nov-19 | 0.400 | 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-Dec-19 | 0.270 | 0.300 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<2 | ND<0.5 | ND<0.5 | ND<1 | ND<0.5 |
| | 7-Jan-20 | 0.250 | 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 |
| | 4-Feb-20 | 0.270 Q | 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-Mar-20 | 1.67 C | 0.250 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<2 | ND<0.5 | ND<0.5 | ND<1 | ND<0.5 |

PCE: Tetrachloroethylene

MTBE: Methyl-tertiary-butyl-ether

TCE: Trichloroethylene

NS: Not sampled

TCA: 1,1,1-Trichloroethane

ND: Not detected

<#: 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.

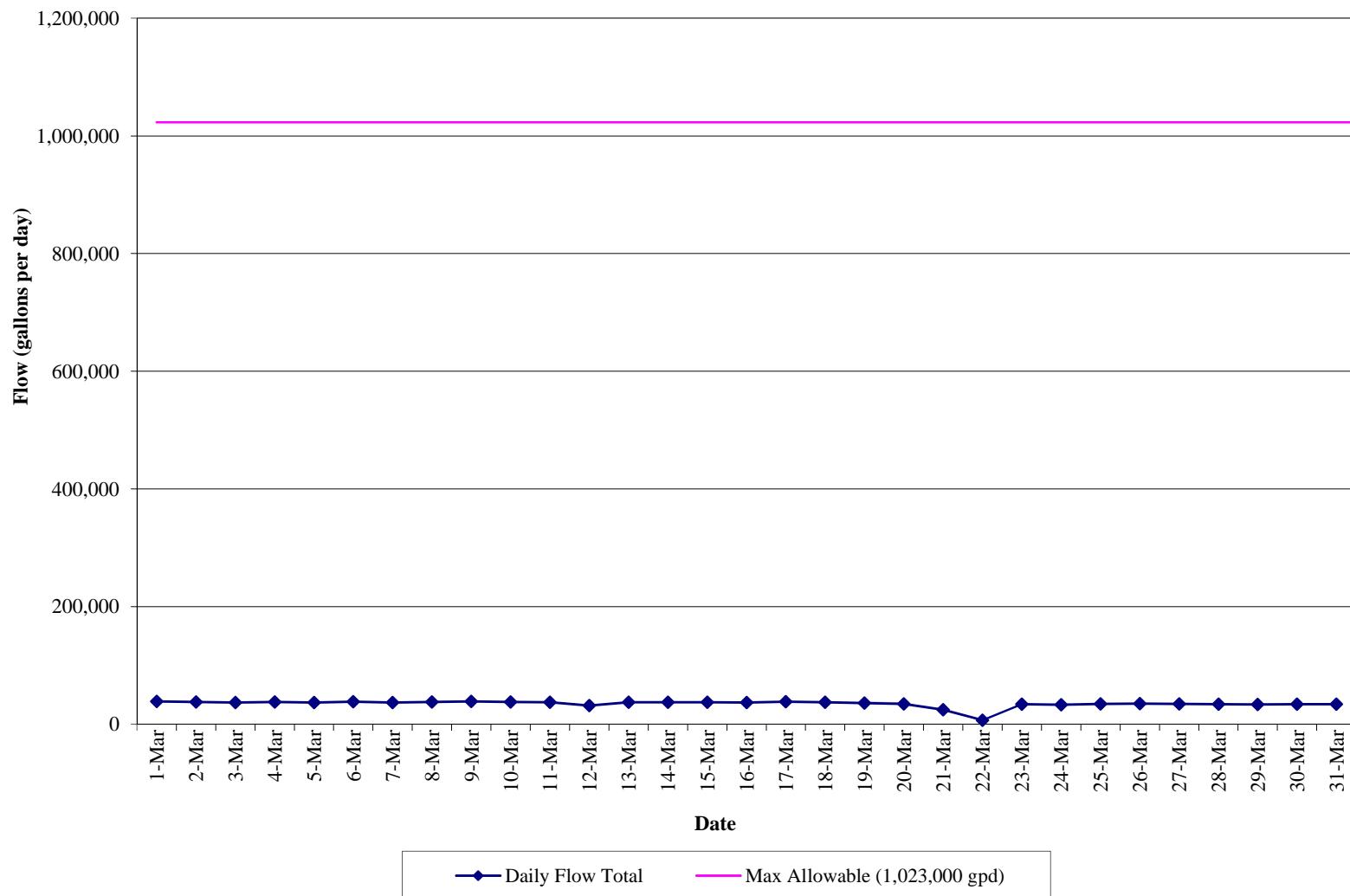
Bold values indicate an exceedance of the ARAR standard established for the site.

^{1/} In September 2016, the EPA granted approval to discontinue groundwater sampling at RW-1, RW-5, RW-7, RW-8 and RW-9.

GRAPHS

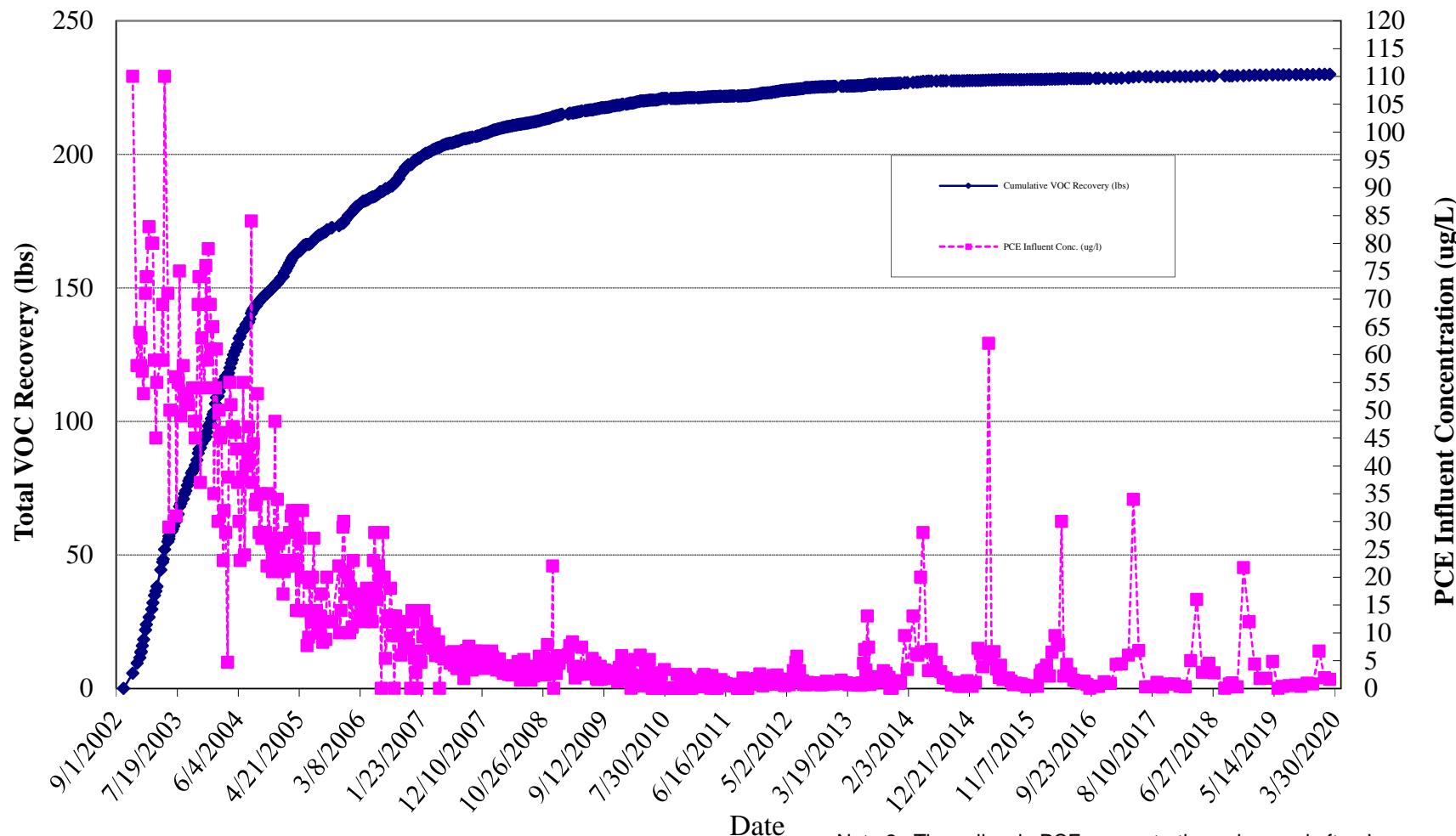
GRAPH 1
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

Effluent Flow Data
(March 1, 2020 to March 31, 2020)



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

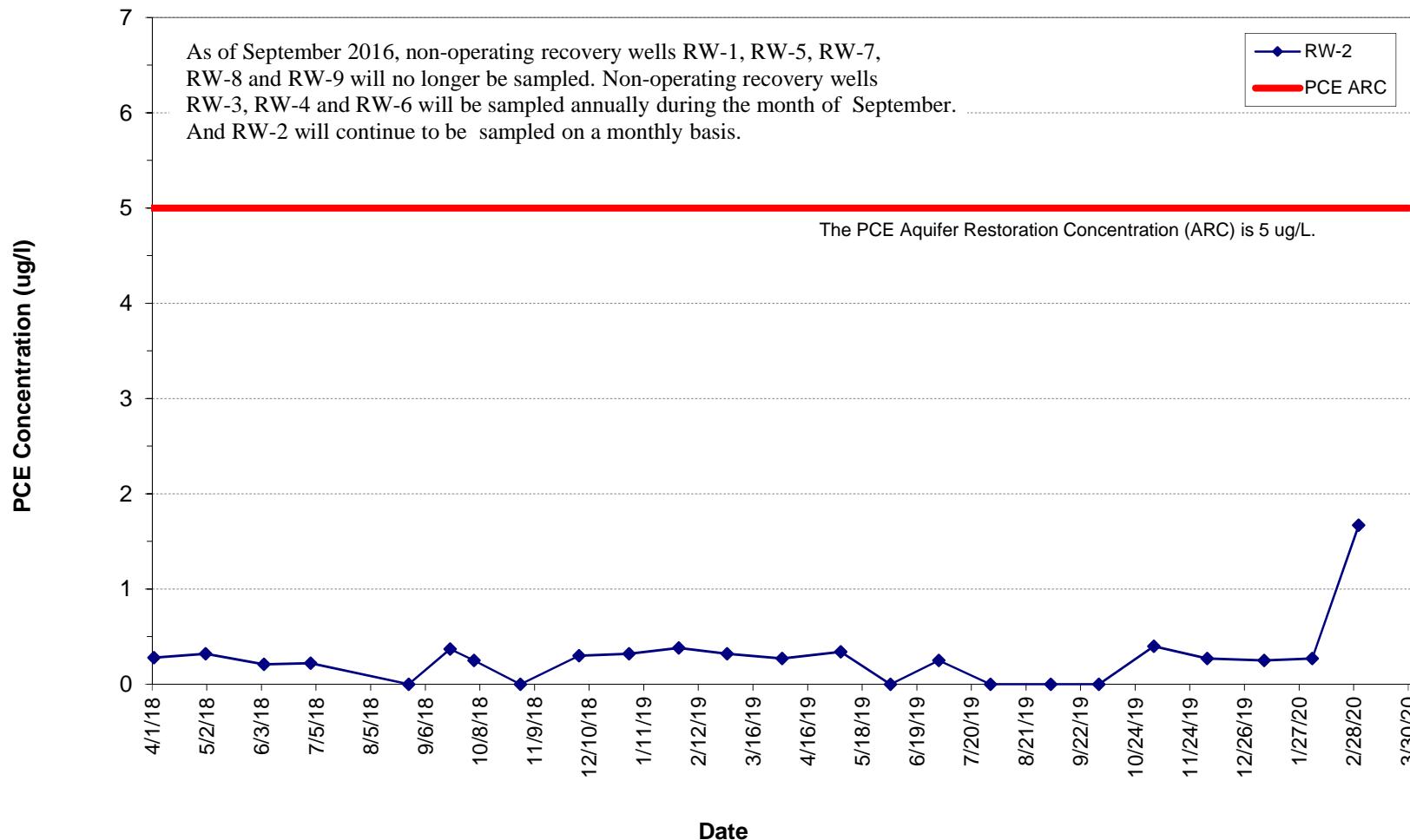


Note 1 : After September 22, 2008, the water recovered from the FP&T System is included in the results shown in this graph.

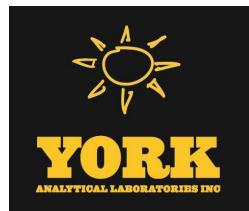
Note 2: The spikes in PCE concentrations observed after January 2014 coincide with well rehabilitation and annual maintenance events. During well rehabilitation and annual maintenance work, FSP&T system samples are collected when water from the FP&T system is not diluted with water extracted from RW-2.

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

FSP&T Recovery Well PCE Concentration



APPENDIX I
MARCH 2020 LABORATORY ANALYTICAL REPORT
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: 03/09/2020

Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20C0057

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371



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

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 03/09/2020
Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20C0057

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 March 02, 2020 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> |
|-----------------------|-------------------------|---------------|-----------------------|----------------------|
| 20C0057-01 | WQ030220:0825 NP2-6 | Water | 03/02/2020 | 03/02/2020 |
| 20C0057-02 | WQ030220:0830 NP2-10 | Water | 03/02/2020 | 03/02/2020 |

General Notes for York Project (SDG) No.: 20C0057

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: 03/09/2020





Sample Information

Client Sample ID: WQ030220:0825 NP2-6

York Sample ID: 20C0057-01

| <u>York Project (SDG) No.</u> | <u>Client Project ID</u> | <u>Matrix</u> | <u>Collection Date/Time</u> | <u>Date Received</u> |
|-------------------------------|---|---------------|-----------------------------|----------------------|
| 20C0057 | 31401451.000 Task 01.00 Rowe Industries | Water | March 2, 2020 8:25 am | 03/02/2020 |

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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 563-58-6 | 1,1-Dichloropropylene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 142-28-9 | 1,3-Dichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 594-20-7 | 2,2-Dichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |



Sample Information

Client Sample ID: WQ030220:0825 NP2-6

York Sample ID: 20C0057-01

York Project (SDG) No.

20C0057

Client Project ID

31401451.000 Task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

March 2, 2020 8:25 am

Date Received

03/02/2020

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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 591-78-6 | 2-Hexanone | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 106-43-4 | 4-Chlorotoluene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 67-64-1 | Acetone | ND | | ug/L | 1.00 | 2.00 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 71-43-2 | Benzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 108-86-1 | Bromobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 74-97-5 | Bromochloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 75-27-4 | Bromodichloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 75-25-2 | Bromoform | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 74-83-9 | Bromomethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 108-90-7 | Chlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 75-00-3 | Chloroethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 67-66-3 | Chloroform | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 74-87-3 | Chloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 124-48-1 | Dibromochloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 74-95-3 | Dibromomethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 100-41-4 | Ethyl Benzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 98-82-8 | Isopropylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |



Sample Information

Client Sample ID: WQ030220:0825 NP2-6

York Sample ID: 20C0057-01

| <u>York Project (SDG) No.</u> | <u>Client Project ID</u> | <u>Matrix</u> | <u>Collection Date/Time</u> | <u>Date Received</u> |
|-------------------------------|---|---------------|-----------------------------|----------------------|
| 20C0057 | 31401451.000 Task 01.00 Rowe Industries | Water | March 2, 2020 8:25 am | 03/02/2020 |

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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 75-09-2 | Methylene chloride | ND | | ug/L | 1.00 | 2.00 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 91-20-3 | Naphthalene | ND | | ug/L | 1.00 | 2.00 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 104-51-8 | n-Butylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 103-65-1 | n-Propylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 95-47-6 | o-Xylene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/L | 0.500 | 1.00 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 100-42-5 | Styrene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 127-18-4 | Tetrachloroethylene | 1.66 | CCV-E | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 108-88-3 | Toluene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 79-01-6 | Trichloroethylene | 0.220 | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 75-01-4 | Vinyl Chloride | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| 1330-20-7 | Xylenes, Total | ND | | ug/L | 0.600 | 1.50 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 03/06/2020 12:30 | 03/07/2020 06:28 | SS |
| Surrogate Recoveries | | | Result | Acceptance Range | | | | | | | |
| 17060-07-0 | Surrogate: SURL: 1,2-Dichloroethane-d4 | 97.7 % | | 69-130 | | | | | | | |
| 2037-26-5 | Surrogate: SURL: Toluene-d8 | 98.9 % | | 81-117 | | | | | | | |
| 460-00-4 | Surrogate: SURL: p-Bromofluorobenzene | 106 % | | 79-122 | | | | | | | |



Sample Information

Client Sample ID: WQ030220:0830 NP2-10

York Sample ID: 20C0057-02

| <u>York Project (SDG) No.</u> | <u>Client Project ID</u> | <u>Matrix</u> | <u>Collection Date/Time</u> | <u>Date Received</u> |
|-------------------------------|---|---------------|-----------------------------|----------------------|
| 20C0057 | 31401451.000 Task 01.00 Rowe Industries | Water | March 2, 2020 8:30 am | 03/02/2020 |

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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 563-58-6 | 1,1-Dichloropropylene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 142-28-9 | 1,3-Dichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 594-20-7 | 2,2-Dichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 95-49-8 | 2-Chlorotoluene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |



Sample Information

Client Sample ID: WQ030220:0830 NP2-10

York Sample ID: 20C0057-02

| <u>York Project (SDG) No.</u> | <u>Client Project ID</u> | <u>Matrix</u> | <u>Collection Date/Time</u> | <u>Date Received</u> |
|-------------------------------|---|---------------|-----------------------------|----------------------|
| 20C0057 | 31401451.000 Task 01.00 Rowe Industries | Water | March 2, 2020 8:30 am | 03/02/2020 |

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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 106-43-4 | 4-Chlorotoluene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 67-64-1 | Acetone | ND | | ug/L | 1.00 | 2.00 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 71-43-2 | Benzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 108-86-1 | Bromobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 74-97-5 | Bromochloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 75-27-4 | Bromodichloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 75-25-2 | Bromoform | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 74-83-9 | Bromomethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 108-90-7 | Chlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 75-00-3 | Chloroethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 67-66-3 | Chloroform | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 74-87-3 | Chloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 124-48-1 | Dibromochloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 74-95-3 | Dibromomethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 100-41-4 | Ethyl Benzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 98-82-8 | Isopropylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |



Sample Information

Client Sample ID: WQ030220:0830 NP2-10

York Sample ID: 20C0057-02

| <u>York Project (SDG) No.</u> | <u>Client Project ID</u> | <u>Matrix</u> | <u>Collection Date/Time</u> | <u>Date Received</u> |
|-------------------------------|---|---------------|-----------------------------|----------------------|
| 20C0057 | 31401451.000 Task 01.00 Rowe Industries | Water | March 2, 2020 8:30 am | 03/02/2020 |

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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 91-20-3 | Naphthalene | ND | | ug/L | 1.00 | 2.00 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 104-51-8 | n-Butylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 103-65-1 | n-Propylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 95-47-6 | o-Xylene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/L | 0.500 | 1.00 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 100-42-5 | Styrene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 127-18-4 | Tetrachloroethylene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 108-88-3 | Toluene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 79-01-6 | Trichloroethylene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 75-01-4 | Vinyl Chloride | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| 1330-20-7 | Xylenes, Total | ND | | ug/L | 0.600 | 1.50 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 03/06/2020 12:30 | 03/07/2020 06:57 | SS |
| Surrogate Recoveries | | Result | Acceptance Range | | | | | | | | |
| 17060-07-0 | Surrogate: SURR: 1,2-Dichloroethane-d4 | 96.6 % | 69-130 | | | | | | | | |
| 2037-26-5 | Surrogate: SURR: Toluene-d8 | 99.9 % | 81-117 | | | | | | | | |
| 460-00-4 | Surrogate: SURR: p-Bromoformobenzene | 108 % | 79-122 | | | | | | | | |

Total Dissolved Solids

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: WQ030220:0830 NP2-10

York Sample ID: 20C0057-02

York Project (SDG) No.

20C0057

Client Project ID

31401451.000 Task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

March 2, 2020 8:30 am

Date Received

03/02/2020

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 | 137 | | mg/L | 10.0 | 1 | SM 2540C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP | 03/04/2020 17:05 | 03/06/2020 21:35 | AA |



Analytical Batch Summary

Batch ID: BC00231

Preparation Method: % Solids Prep

Prepared By: AA

YORK Sample ID

Client Sample ID

Preparation Date

20C0057-02

WQ030220:0830 NP2-10

03/04/20

BC00231-BLK1

Blank

03/04/20

Batch ID: BC00345

Preparation Method: EPA 5030B

Prepared By: MAT

YORK Sample ID

Client Sample ID

Preparation Date

20C0057-01

WQ030220:0825 NP2-6

03/06/20

20C0057-02

WQ030220:0830 NP2-10

03/06/20

BC00345-BLK1

Blank

03/06/20

BC00345-BS1

LCS

03/06/20

BC00345-BS2

LCS

03/06/20

BC00345-BSD1

LCS Dup

03/06/20

BC00345-BSD2

LCS Dup

03/06/20



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 | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|------|

Batch BC00345 - EPA 5030B

Blank (BC00345-BLK1)

Prepared: 03/06/2020 Analyzed: 03/07/2020

| | | | | | | | | | | | |
|---|----|-------|------|--|--|--|--|--|--|--|--|
| 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 BC00345 - EPA 5030B | | | | | | | | | | | |
| Blank (BC00345-BLK1) | | | | | | | | | | | |
| 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> | 9.92 | | " | 10.0 | 99.2 | 69-130 | | | | | |
| <i>Surrogate: SURR: Toluene-d8</i> | 9.93 | | " | 10.0 | 99.3 | 81-117 | | | | | |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i> | 10.4 | | " | 10.0 | 104 | 79-122 | | | | | |
| LCS (BC00345-BS1) | | | | | | | | | | | |
| | | | | | | | | | | | Prepared & Analyzed: 03/06/2020 |
| 1,1,1,2-Tetrachloroethane | 11.4 | | ug/L | 10.0 | 114 | 82-126 | | | | | |
| 1,1,1-Trichloroethane | 10.6 | | " | 10.0 | 106 | 78-136 | | | | | |
| 1,1,2,2-Tetrachloroethane | 9.32 | | " | 10.0 | 93.2 | 76-129 | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 11.1 | | " | 10.0 | 111 | 54-165 | | | | | |
| 1,1,2-Trichloroethane | 9.70 | | " | 10.0 | 97.0 | 82-123 | | | | | |
| 1,1-Dichloroethane | 10.0 | | " | 10.0 | 100 | 82-129 | | | | | |
| 1,1-Dichloroethylene | 11.9 | | " | 10.0 | 119 | 68-138 | | | | | |
| 1,1-Dichloropropylene | 10.3 | | " | 10.0 | 103 | 83-133 | | | | | |
| 1,2,3-Trichlorobenzene | 9.49 | | " | 10.0 | 94.9 | 76-136 | | | | | |
| 1,2,3-Trichloropropane | 9.44 | | " | 10.0 | 94.4 | 77-128 | | | | | |
| 1,2,4-Trichlorobenzene | 9.50 | | " | 10.0 | 95.0 | 76-137 | | | | | |
| 1,2,4-Trimethylbenzene | 9.91 | | " | 10.0 | 99.1 | 82-132 | | | | | |
| 1,2-Dibromo-3-chloropropane | 8.68 | | " | 10.0 | 86.8 | 45-147 | | | | | |
| 1,2-Dibromoethane | 10.1 | | " | 10.0 | 101 | 83-124 | | | | | |
| 1,2-Dichlorobenzene | 9.48 | | " | 10.0 | 94.8 | 79-123 | | | | | |
| 1,2-Dichloroethane | 10.2 | | " | 10.0 | 102 | 73-132 | | | | | |
| 1,2-Dichloropropane | 9.96 | | " | 10.0 | 99.6 | 78-126 | | | | | |
| 1,3,5-Trimethylbenzene | 10.0 | | " | 10.0 | 100 | 80-131 | | | | | |
| 1,3-Dichlorobenzene | 9.34 | | " | 10.0 | 93.4 | 86-122 | | | | | |
| 1,3-Dichloropropane | 10.1 | | " | 10.0 | 101 | 81-125 | | | | | |
| 1,4-Dichlorobenzene | 10.9 | | " | 10.0 | 109 | 85-124 | | | | | |
| 2,2-Dichloropropane | 8.00 | | " | 10.0 | 80.0 | 56-150 | | | | | |
| 2-Chlorotoluene | 9.73 | | " | 10.0 | 97.3 | 79-130 | | | | | |
| 2-Hexanone | 9.69 | | " | 10.0 | 96.9 | 51-146 | | | | | |
| 4-Chlorotoluene | 9.70 | | " | 10.0 | 97.0 | 79-128 | | | | | |
| Acetone | 7.99 | | " | 10.0 | 79.9 | 14-150 | | | | | |
| Benzene | 10.6 | | " | 10.0 | 106 | 85-126 | | | | | |
| Bromobenzene | 9.70 | | " | 10.0 | 97.0 | 78-129 | | | | | |
| Bromo(chloromethane | 10.6 | | " | 10.0 | 106 | 77-128 | | | | | |
| Bromodichloromethane | 10.3 | | " | 10.0 | 103 | 79-128 | | | | | |



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 BC00345 - EPA 5030B | | | | | | | | | | | |
| LCS (BC00345-BS1) | | | | | | | | | | | |
| Prepared & Analyzed: 03/06/2020 | | | | | | | | | | | |
| Bromoform | 9.46 | | ug/L | 10.0 | 94.6 | 78-133 | | | | | |
| Bromomethane | 13.2 | | " | 10.0 | 132 | 43-168 | | | | | |
| Carbon tetrachloride | 10.3 | | " | 10.0 | 103 | 77-141 | | | | | |
| Chlorobenzene | 9.83 | | " | 10.0 | 98.3 | 88-120 | | | | | |
| Chloroethane | 15.1 | | " | 10.0 | 151 | 65-136 | High Bias | | | | |
| Chloroform | 10.5 | | " | 10.0 | 105 | 82-128 | | | | | |
| Chloromethane | 11.4 | | " | 10.0 | 114 | 43-155 | | | | | |
| cis-1,2-Dichloroethylene | 10.0 | | " | 10.0 | 100 | 83-129 | | | | | |
| cis-1,3-Dichloropropylene | 9.73 | | " | 10.0 | 97.3 | 80-131 | | | | | |
| Dibromochloromethane | 9.87 | | " | 10.0 | 98.7 | 80-130 | | | | | |
| Dibromomethane | 9.96 | | " | 10.0 | 99.6 | 72-134 | | | | | |
| Dichlorodifluoromethane | 12.8 | | " | 10.0 | 128 | 44-144 | | | | | |
| Ethyl Benzene | 10.2 | | " | 10.0 | 102 | 80-131 | | | | | |
| Hexachlorobutadiene | 9.32 | | " | 10.0 | 93.2 | 67-146 | | | | | |
| Isopropylbenzene | 9.78 | | " | 10.0 | 97.8 | 76-140 | | | | | |
| Methyl tert-butyl ether (MTBE) | 10.3 | | " | 10.0 | 103 | 76-135 | | | | | |
| Methylene chloride | 11.8 | | " | 10.0 | 118 | 55-137 | | | | | |
| Naphthalene | 9.53 | | " | 10.0 | 95.3 | 70-147 | | | | | |
| n-Butylbenzene | 10.2 | | " | 10.0 | 102 | 79-132 | | | | | |
| n-Propylbenzene | 9.90 | | " | 10.0 | 99.0 | 78-133 | | | | | |
| o-Xylene | 9.81 | | " | 10.0 | 98.1 | 78-130 | | | | | |
| p- & m- Xylenes | 21.1 | | " | 20.0 | 106 | 77-133 | | | | | |
| p-Isopropyltoluene | 9.86 | | " | 10.0 | 98.6 | 81-136 | | | | | |
| sec-Butylbenzene | 10.5 | | " | 10.0 | 105 | 79-137 | | | | | |
| Styrene | 10.7 | | " | 10.0 | 107 | 67-132 | | | | | |
| tert-Butylbenzene | 9.53 | | " | 10.0 | 95.3 | 77-138 | | | | | |
| Tetrachloroethylene | 8.47 | | " | 10.0 | 84.7 | 82-131 | | | | | |
| Toluene | 10.3 | | " | 10.0 | 103 | 80-127 | | | | | |
| trans-1,2-Dichloroethylene | 11.4 | | " | 10.0 | 114 | 80-132 | | | | | |
| trans-1,3-Dichloropropylene | 9.73 | | " | 10.0 | 97.3 | 78-131 | | | | | |
| Trichloroethylene | 10.4 | | " | 10.0 | 104 | 82-128 | | | | | |
| Trichlorofluoromethane | 12.6 | | " | 10.0 | 126 | 67-139 | | | | | |
| Vinyl Chloride | 13.9 | | " | 10.0 | 139 | 58-145 | | | | | |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 9.30 | | " | 10.0 | 93.0 | 69-130 | | | | | |
| <i>Surrogate: SURR: Toluene-d8</i> | 10.0 | | " | 10.0 | 100 | 81-117 | | | | | |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i> | 10.0 | | " | 10.0 | 100 | 79-122 | | | | | |



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BC00345 - EPA 5030B

| LCS (BC00345-BS2) | Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | | | | | | | | |
|---|---|--|------|------|--|------|--------|--|--|--|--|
| 1,1,1,2-Tetrachloroethane | 11.3 | | ug/L | 10.0 | | 113 | 82-126 | | | | |
| 1,1,1-Trichloroethane | 10.4 | | " | 10.0 | | 104 | 78-136 | | | | |
| 1,1,2,2-Tetrachloroethane | 9.24 | | " | 10.0 | | 92.4 | 76-129 | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 11.2 | | " | 10.0 | | 112 | 54-165 | | | | |
| 1,1,2-Trichloroethane | 9.94 | | " | 10.0 | | 99.4 | 82-123 | | | | |
| 1,1-Dichloroethane | 9.98 | | " | 10.0 | | 99.8 | 82-129 | | | | |
| 1,1-Dichloroethylene | 11.8 | | " | 10.0 | | 118 | 68-138 | | | | |
| 1,1-Dichloropropylene | 10.3 | | " | 10.0 | | 103 | 83-133 | | | | |
| 1,2,3-Trichlorobenzene | 9.01 | | " | 10.0 | | 90.1 | 76-136 | | | | |
| 1,2,3-Trichloropropane | 9.38 | | " | 10.0 | | 93.8 | 77-128 | | | | |
| 1,2,4-Trichlorobenzene | 8.85 | | " | 10.0 | | 88.5 | 76-137 | | | | |
| 1,2,4-Trimethylbenzene | 9.45 | | " | 10.0 | | 94.5 | 82-132 | | | | |
| 1,2-Dibromo-3-chloropropane | 8.66 | | " | 10.0 | | 86.6 | 45-147 | | | | |
| 1,2-Dibromoethane | 9.81 | | " | 10.0 | | 98.1 | 83-124 | | | | |
| 1,2-Dichlorobenzene | 9.15 | | " | 10.0 | | 91.5 | 79-123 | | | | |
| 1,2-Dichloroethane | 10.2 | | " | 10.0 | | 102 | 73-132 | | | | |
| 1,2-Dichloropropane | 9.91 | | " | 10.0 | | 99.1 | 78-126 | | | | |
| 1,3,5-Trimethylbenzene | 9.60 | | " | 10.0 | | 96.0 | 80-131 | | | | |
| 1,3-Dichlorobenzene | 8.93 | | " | 10.0 | | 89.3 | 86-122 | | | | |
| 1,3-Dichloropropane | 10.2 | | " | 10.0 | | 102 | 81-125 | | | | |
| 1,4-Dichlorobenzene | 10.6 | | " | 10.0 | | 106 | 85-124 | | | | |
| 2,2-Dichloropropane | 7.71 | | " | 10.0 | | 77.1 | 56-150 | | | | |
| 2-Chlorotoluene | 9.36 | | " | 10.0 | | 93.6 | 79-130 | | | | |
| 2-Hexanone | 9.91 | | " | 10.0 | | 99.1 | 51-146 | | | | |
| 4-Chlorotoluene | 9.43 | | " | 10.0 | | 94.3 | 79-128 | | | | |
| Acetone | 8.37 | | " | 10.0 | | 83.7 | 14-150 | | | | |
| Benzene | 10.8 | | " | 10.0 | | 108 | 85-126 | | | | |
| Bromobenzene | 9.51 | | " | 10.0 | | 95.1 | 78-129 | | | | |
| Bromochloromethane | 10.5 | | " | 10.0 | | 105 | 77-128 | | | | |
| Bromodichloromethane | 10.3 | | " | 10.0 | | 103 | 79-128 | | | | |
| Bromoform | 9.42 | | " | 10.0 | | 94.2 | 78-133 | | | | |
| Bromomethane | 12.3 | | " | 10.0 | | 123 | 43-168 | | | | |
| Carbon tetrachloride | 10.2 | | " | 10.0 | | 102 | 77-141 | | | | |
| Chlorobenzene | 9.78 | | " | 10.0 | | 97.8 | 88-120 | | | | |
| Chloroethane | 11.7 | | " | 10.0 | | 117 | 65-136 | | | | |
| Chloroform | 10.6 | | " | 10.0 | | 106 | 82-128 | | | | |
| Chloromethane | 11.6 | | " | 10.0 | | 116 | 43-155 | | | | |
| cis-1,2-Dichloroethylene | 10.2 | | " | 10.0 | | 102 | 83-129 | | | | |
| cis-1,3-Dichloropropylene | 9.60 | | " | 10.0 | | 96.0 | 80-131 | | | | |
| Dibromochloromethane | 10.0 | | " | 10.0 | | 100 | 80-130 | | | | |
| Dibromomethane | 9.51 | | " | 10.0 | | 95.1 | 72-134 | | | | |
| Dichlorodifluoromethane | 12.0 | | " | 10.0 | | 120 | 44-144 | | | | |
| Ethyl Benzene | 10.1 | | " | 10.0 | | 101 | 80-131 | | | | |
| Hexachlorobutadiene | 9.23 | | " | 10.0 | | 92.3 | 67-146 | | | | |
| Isopropylbenzene | 9.46 | | " | 10.0 | | 94.6 | 76-140 | | | | |
| Methyl tert-butyl ether (MTBE) | 10.3 | | " | 10.0 | | 103 | 76-135 | | | | |
| Methylene chloride | 12.0 | | " | 10.0 | | 120 | 55-137 | | | | |
| Naphthalene | 9.19 | | " | 10.0 | | 91.9 | 70-147 | | | | |
| n-Butylbenzene | 9.49 | | " | 10.0 | | 94.9 | 79-132 | | | | |
| n-Propylbenzene | 9.57 | | " | 10.0 | | 95.7 | 78-133 | | | | |



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 BC00345 - EPA 5030B

| LCS (BC00345-BS2) | | | | | | | Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | |
|---|------|--|------|------|------|--------|---|--|--|--|
| o-Xylene | 9.76 | | ug/L | 10.0 | 97.6 | 78-130 | | | | |
| p- & m- Xylenes | 20.6 | | " | 20.0 | 103 | 77-133 | | | | |
| p-Isopropyltoluene | 9.43 | | " | 10.0 | 94.3 | 81-136 | | | | |
| sec-Butylbenzene | 10.1 | | " | 10.0 | 101 | 79-137 | | | | |
| Styrene | 10.7 | | " | 10.0 | 107 | 67-132 | | | | |
| tert-Butylbenzene | 9.19 | | " | 10.0 | 91.9 | 77-138 | | | | |
| Tetrachloroethylene | 8.16 | | " | 10.0 | 81.6 | 82-131 | Low Bias | | | |
| Toluene | 10.3 | | " | 10.0 | 103 | 80-127 | | | | |
| trans-1,2-Dichloroethylene | 11.6 | | " | 10.0 | 116 | 80-132 | | | | |
| trans-1,3-Dichloropropylene | 9.73 | | " | 10.0 | 97.3 | 78-131 | | | | |
| Trichloroethylene | 10.1 | | " | 10.0 | 101 | 82-128 | | | | |
| Trichlorofluoromethane | 10.2 | | " | 10.0 | 102 | 67-139 | | | | |
| Vinyl Chloride | 10.3 | | " | 10.0 | 103 | 58-145 | | | | |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 9.31 | | " | 10.0 | 93.1 | 69-130 | | | | |
| <i>Surrogate: SURR: Toluene-d8</i> | 9.92 | | " | 10.0 | 99.2 | 81-117 | | | | |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i> | 9.74 | | " | 10.0 | 97.4 | 79-122 | | | | |

| LCS Dup (BC00345-BSD1) | | | | | | | Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | |
|---|------|--|------|------|------|--------|---|-------|----|--|
| 1,1,1,2-Tetrachloroethane | 11.2 | | ug/L | 10.0 | 112 | 82-126 | | 1.94 | 30 | |
| 1,1,1-Trichloroethane | 10.2 | | " | 10.0 | 102 | 78-136 | | 3.83 | 30 | |
| 1,1,2,2-Tetrachloroethane | 8.93 | | " | 10.0 | 89.3 | 76-129 | | 4.27 | 30 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 10.8 | | " | 10.0 | 108 | 54-165 | | 2.55 | 30 | |
| 1,1,2-Trichloroethane | 9.76 | | " | 10.0 | 97.6 | 82-123 | | 0.617 | 30 | |
| 1,1-Dichloroethane | 9.87 | | " | 10.0 | 98.7 | 82-129 | | 1.61 | 30 | |
| 1,1-Dichloroethylene | 11.5 | | " | 10.0 | 115 | 68-138 | | 3.59 | 30 | |
| 1,1-Dichloropropylene | 10.1 | | " | 10.0 | 101 | 83-133 | | 2.35 | 30 | |
| 1,2,3-Trichlorobenzene | 8.84 | | " | 10.0 | 88.4 | 76-136 | | 7.09 | 30 | |
| 1,2,3-Trichloropropane | 9.15 | | " | 10.0 | 91.5 | 77-128 | | 3.12 | 30 | |
| 1,2,4-Trichlorobenzene | 8.75 | | " | 10.0 | 87.5 | 76-137 | | 8.22 | 30 | |
| 1,2,4-Trimethylbenzene | 9.22 | | " | 10.0 | 92.2 | 82-132 | | 7.21 | 30 | |
| 1,2-Dibromo-3-chloropropane | 8.13 | | " | 10.0 | 81.3 | 45-147 | | 6.54 | 30 | |
| 1,2-Dibromoethane | 9.81 | | " | 10.0 | 98.1 | 83-124 | | 2.91 | 30 | |
| 1,2-Dichlorobenzene | 8.92 | | " | 10.0 | 89.2 | 79-123 | | 6.09 | 30 | |
| 1,2-Dichloroethane | 10.2 | | " | 10.0 | 102 | 73-132 | | 0.196 | 30 | |
| 1,2-Dichloropropane | 9.77 | | " | 10.0 | 97.7 | 78-126 | | 1.93 | 30 | |
| 1,3,5-Trimethylbenzene | 9.43 | | " | 10.0 | 94.3 | 80-131 | | 5.87 | 30 | |
| 1,3-Dichlorobenzene | 8.82 | | " | 10.0 | 88.2 | 86-122 | | 5.73 | 30 | |
| 1,3-Dichloropropane | 9.86 | | " | 10.0 | 98.6 | 81-125 | | 2.01 | 30 | |
| 1,4-Dichlorobenzene | 10.4 | | " | 10.0 | 104 | 85-124 | | 4.52 | 30 | |
| 2,2-Dichloropropane | 7.71 | | " | 10.0 | 77.1 | 56-150 | | 3.69 | 30 | |
| 2-Chlorotoluene | 9.06 | | " | 10.0 | 90.6 | 79-130 | | 7.13 | 30 | |
| 2-Hexanone | 9.65 | | " | 10.0 | 96.5 | 51-146 | | 0.414 | 30 | |
| 4-Chlorotoluene | 9.09 | | " | 10.0 | 90.9 | 79-128 | | 6.49 | 30 | |
| Acetone | 8.31 | | " | 10.0 | 83.1 | 14-150 | | 3.93 | 30 | |
| Benzene | 10.6 | | " | 10.0 | 106 | 85-126 | | 0.283 | 30 | |
| Bromobenzene | 9.17 | | " | 10.0 | 91.7 | 78-129 | | 5.62 | 30 | |
| Bromochloromethane | 10.5 | | " | 10.0 | 105 | 77-128 | | 0.853 | 30 | |
| Bromodichloromethane | 10.0 | | " | 10.0 | 100 | 79-128 | | 2.76 | 30 | |
| Bromoform | 9.55 | | " | 10.0 | 95.5 | 78-133 | | 0.947 | 30 | |
| Bromomethane | 11.9 | | " | 10.0 | 119 | 43-168 | | 10.6 | 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 BC00345 - EPA 5030B

| LCS Dup (BC00345-BSD1) | | | | | | | | Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | |
|---|------|---|------|------|------|--------|----------|---|-------|----|----------|
| Carbon tetrachloride | 9.93 | | ug/L | 10.0 | 99.3 | 77-141 | | | 3.56 | 30 | |
| Chlorobenzene | 9.42 | " | | 10.0 | 94.2 | 88-120 | | | 4.26 | 30 | |
| Chloroethane | 11.5 | " | | 10.0 | 115 | 65-136 | | | 27.1 | 30 | |
| Chloroform | 10.3 | " | | 10.0 | 103 | 82-128 | | | 1.15 | 30 | |
| Chloromethane | 11.3 | " | | 10.0 | 113 | 43-155 | | | 0.968 | 30 | |
| cis-1,2-Dichloroethylene | 9.97 | " | | 10.0 | 99.7 | 83-129 | | | 0.300 | 30 | |
| cis-1,3-Dichloropropylene | 9.42 | " | | 10.0 | 94.2 | 80-131 | | | 3.24 | 30 | |
| Dibromochloromethane | 9.75 | " | | 10.0 | 97.5 | 80-130 | | | 1.22 | 30 | |
| Dibromomethane | 9.29 | " | | 10.0 | 92.9 | 72-134 | | | 6.96 | 30 | |
| Dichlorodifluoromethane | 12.0 | " | | 10.0 | 120 | 44-144 | | | 7.10 | 30 | |
| Ethyl Benzene | 9.61 | " | | 10.0 | 96.1 | 80-131 | | | 6.05 | 30 | |
| Hexachlorobutadiene | 8.82 | " | | 10.0 | 88.2 | 67-146 | | | 5.51 | 30 | |
| Isopropylbenzene | 9.23 | " | | 10.0 | 92.3 | 76-140 | | | 5.79 | 30 | |
| Methyl tert-butyl ether (MTBE) | 10.4 | " | | 10.0 | 104 | 76-135 | | | 0.965 | 30 | |
| Methylene chloride | 11.6 | " | | 10.0 | 116 | 55-137 | | | 2.14 | 30 | |
| Naphthalene | 9.16 | " | | 10.0 | 91.6 | 70-147 | | | 3.96 | 30 | |
| n-Butylbenzene | 9.22 | " | | 10.0 | 92.2 | 79-132 | | | 10.1 | 30 | |
| n-Propylbenzene | 9.17 | " | | 10.0 | 91.7 | 78-133 | | | 7.66 | 30 | |
| o-Xylene | 9.37 | " | | 10.0 | 93.7 | 78-130 | | | 4.59 | 30 | |
| p- & m- Xylenes | 19.9 | " | | 20.0 | 99.4 | 77-133 | | | 6.05 | 30 | |
| p-Isopropyltoluene | 9.17 | " | | 10.0 | 91.7 | 81-136 | | | 7.25 | 30 | |
| sec-Butylbenzene | 9.86 | " | | 10.0 | 98.6 | 79-137 | | | 6.67 | 30 | |
| Styrene | 10.4 | " | | 10.0 | 104 | 67-132 | | | 2.65 | 30 | |
| tert-Butylbenzene | 8.90 | " | | 10.0 | 89.0 | 77-138 | | | 6.84 | 30 | |
| Tetrachloroethylene | 8.04 | " | | 10.0 | 80.4 | 82-131 | Low Bias | | 5.21 | 30 | |
| Toluene | 9.87 | " | | 10.0 | 98.7 | 80-127 | | | 4.55 | 30 | |
| trans-1,2-Dichloroethylene | 11.1 | " | | 10.0 | 111 | 80-132 | | | 2.50 | 30 | |
| trans-1,3-Dichloropropylene | 9.62 | " | | 10.0 | 96.2 | 78-131 | | | 1.14 | 30 | |
| Trichloroethylene | 9.89 | " | | 10.0 | 98.9 | 82-128 | | | 5.51 | 30 | |
| Trichlorofluoromethane | 10.1 | " | | 10.0 | 101 | 67-139 | | | 21.8 | 30 | |
| Vinyl Chloride | 10.3 | " | | 10.0 | 103 | 58-145 | | | 30.3 | 30 | Non-dir. |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 9.73 | " | | 10.0 | 97.3 | 69-130 | | | | | |
| <i>Surrogate: SURR: Toluene-d8</i> | 10.0 | " | | 10.0 | 100 | 81-117 | | | | | |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i> | 9.94 | " | | 10.0 | 99.4 | 79-122 | | | | | |



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BC00345 - EPA 5030B

| LCS Dup (BC00345-BSD2) | Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | | | | | | | |
|---|---|--|------|------|------|--------|--|--|--------|----|
| 1,1,1,2-Tetrachloroethane | 11.2 | | ug/L | 10.0 | 112 | 82-126 | | | 0.710 | 30 |
| 1,1,1-Trichloroethane | 10.3 | | " | 10.0 | 103 | 78-136 | | | 0.290 | 30 |
| 1,1,2,2-Tetrachloroethane | 9.50 | | " | 10.0 | 95.0 | 76-129 | | | 2.77 | 30 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 10.9 | | " | 10.0 | 109 | 54-165 | | | 1.99 | 30 |
| 1,1,2-Trichloroethane | 10.0 | | " | 10.0 | 100 | 82-123 | | | 0.702 | 30 |
| 1,1-Dichloroethane | 10.0 | | " | 10.0 | 100 | 82-129 | | | 0.200 | 30 |
| 1,1-Dichloroethylene | 11.6 | | " | 10.0 | 116 | 68-138 | | | 1.54 | 30 |
| 1,1-Dichloropropylene | 10.3 | | " | 10.0 | 103 | 83-133 | | | 0.388 | 30 |
| 1,2,3-Trichlorobenzene | 9.34 | | " | 10.0 | 93.4 | 76-136 | | | 3.60 | 30 |
| 1,2,3-Trichloropropane | 9.36 | | " | 10.0 | 93.6 | 77-128 | | | 0.213 | 30 |
| 1,2,4-Trichlorobenzene | 9.32 | | " | 10.0 | 93.2 | 76-137 | | | 5.17 | 30 |
| 1,2,4-Trimethylbenzene | 9.48 | | " | 10.0 | 94.8 | 82-132 | | | 0.317 | 30 |
| 1,2-Dibromo-3-chloropropane | 8.83 | | " | 10.0 | 88.3 | 45-147 | | | 1.94 | 30 |
| 1,2-Dibromoethane | 10.2 | | " | 10.0 | 102 | 83-124 | | | 4.19 | 30 |
| 1,2-Dichlorobenzene | 9.27 | | " | 10.0 | 92.7 | 79-123 | | | 1.30 | 30 |
| 1,2-Dichloroethane | 10.2 | | " | 10.0 | 102 | 73-132 | | | 0.196 | 30 |
| 1,2-Dichloropropane | 10.1 | | " | 10.0 | 101 | 78-126 | | | 2.29 | 30 |
| 1,3,5-Trimethylbenzene | 9.75 | | " | 10.0 | 97.5 | 80-131 | | | 1.55 | 30 |
| 1,3-Dichlorobenzene | 9.24 | | " | 10.0 | 92.4 | 86-122 | | | 3.41 | 30 |
| 1,3-Dichloropropane | 10.3 | | " | 10.0 | 103 | 81-125 | | | 0.780 | 30 |
| 1,4-Dichlorobenzene | 10.7 | | " | 10.0 | 107 | 85-124 | | | 1.31 | 30 |
| 2,2-Dichloropropane | 7.74 | | " | 10.0 | 77.4 | 56-150 | | | 0.388 | 30 |
| 2-Chlorotoluene | 9.41 | | " | 10.0 | 94.1 | 79-130 | | | 0.533 | 30 |
| 2-Hexanone | 10.1 | | " | 10.0 | 101 | 51-146 | | | 2.20 | 30 |
| 4-Chlorotoluene | 9.52 | | " | 10.0 | 95.2 | 79-128 | | | 0.950 | 30 |
| Acetone | 8.46 | | " | 10.0 | 84.6 | 14-150 | | | 1.07 | 30 |
| Benzene | 10.5 | | " | 10.0 | 105 | 85-126 | | | 2.81 | 30 |
| Bromobenzene | 9.53 | | " | 10.0 | 95.3 | 78-129 | | | 0.210 | 30 |
| Bromochloromethane | 10.7 | | " | 10.0 | 107 | 77-128 | | | 2.07 | 30 |
| Bromodichloromethane | 10.3 | | " | 10.0 | 103 | 79-128 | | | 0.0970 | 30 |
| Bromoform | 9.33 | | " | 10.0 | 93.3 | 78-133 | | | 0.960 | 30 |
| Bromomethane | 12.5 | | " | 10.0 | 125 | 43-168 | | | 1.77 | 30 |
| Carbon tetrachloride | 9.93 | | " | 10.0 | 99.3 | 77-141 | | | 2.39 | 30 |
| Chlorobenzene | 9.85 | | " | 10.0 | 98.5 | 88-120 | | | 0.713 | 30 |
| Chloroethane | 11.0 | | " | 10.0 | 110 | 65-136 | | | 5.91 | 30 |
| Chloroform | 10.5 | | " | 10.0 | 105 | 82-128 | | | 0.759 | 30 |
| Chloromethane | 11.4 | | " | 10.0 | 114 | 43-155 | | | 1.30 | 30 |
| cis-1,2-Dichloroethylene | 10.2 | | " | 10.0 | 102 | 83-129 | | | 0.687 | 30 |
| cis-1,3-Dichloropropylene | 9.79 | | " | 10.0 | 97.9 | 80-131 | | | 1.96 | 30 |
| Dibromochloromethane | 10.0 | | " | 10.0 | 100 | 80-130 | | | 0.300 | 30 |
| Dibromomethane | 9.84 | | " | 10.0 | 98.4 | 72-134 | | | 3.41 | 30 |
| Dichlorodifluoromethane | 11.9 | | " | 10.0 | 119 | 44-144 | | | 0.754 | 30 |
| Ethyl Benzene | 10.1 | | " | 10.0 | 101 | 80-131 | | | 0.494 | 30 |
| Hexachlorobutadiene | 9.01 | | " | 10.0 | 90.1 | 67-146 | | | 2.41 | 30 |
| Isopropylbenzene | 9.48 | | " | 10.0 | 94.8 | 76-140 | | | 0.211 | 30 |
| Methyl tert-butyl ether (MTBE) | 10.6 | | " | 10.0 | 106 | 76-135 | | | 2.68 | 30 |
| Methylene chloride | 11.7 | | " | 10.0 | 117 | 55-137 | | | 2.28 | 30 |
| Naphthalene | 9.33 | | " | 10.0 | 93.3 | 70-147 | | | 1.51 | 30 |
| n-Butylbenzene | 10.2 | | " | 10.0 | 102 | 79-132 | | | 7.51 | 30 |
| n-Propylbenzene | 9.59 | | " | 10.0 | 95.9 | 78-133 | | | 0.209 | 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 BC00345 - EPA 5030B | | | | | | | | | | | |
| LCS Dup (BC00345-BSD2) | | | | | | | | | | | |
| Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | | | | | | | | | |
| o-Xylene | | | | | | | | | | | |
| 9.76 ug/L 10.0 97.6 78-130 0.00 30 | | | | | | | | | | | |
| p- & m- Xylenes | | | | | | | | | | | |
| 20.5 " 20.0 102 77-133 0.681 30 | | | | | | | | | | | |
| p-Isopropyltoluene | | | | | | | | | | | |
| 9.56 " 10.0 95.6 81-136 1.37 30 | | | | | | | | | | | |
| sec-Butylbenzene | | | | | | | | | | | |
| 10.3 " 10.0 103 79-137 1.37 30 | | | | | | | | | | | |
| Styrene | | | | | | | | | | | |
| 10.6 " 10.0 106 67-132 0.659 30 | | | | | | | | | | | |
| tert-Butylbenzene | | | | | | | | | | | |
| 9.34 " 10.0 93.4 77-138 1.62 30 | | | | | | | | | | | |
| Tetrachloroethylene | | | | | | | | | | | |
| 8.18 " 10.0 81.8 82-131 Low Bias 0.245 30 | | | | | | | | | | | |
| Toluene | | | | | | | | | | | |
| 10.3 " 10.0 103 80-127 0.194 30 | | | | | | | | | | | |
| trans-1,2-Dichloroethylene | | | | | | | | | | | |
| 11.2 " 10.0 112 80-132 3.51 30 | | | | | | | | | | | |
| trans-1,3-Dichloropropylene | | | | | | | | | | | |
| 9.92 " 10.0 99.2 78-131 1.93 30 | | | | | | | | | | | |
| Trichloroethylene | | | | | | | | | | | |
| 9.98 " 10.0 99.8 82-128 1.10 30 | | | | | | | | | | | |
| Trichlorofluoromethane | | | | | | | | | | | |
| 9.42 " 10.0 94.2 67-139 7.85 30 | | | | | | | | | | | |
| Vinyl Chloride | | | | | | | | | | | |
| 9.63 " 10.0 96.3 58-145 7.01 30 | | | | | | | | | | | |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | | | | | | | | | | | |
| 9.12 " 10.0 91.2 69-130 | | | | | | | | | | | |
| <i>Surrogate: SURR: Toluene-d8</i> | | | | | | | | | | | |
| 9.96 " 10.0 99.6 81-117 | | | | | | | | | | | |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i> | | | | | | | | | | | |
| 9.98 " 10.0 99.8 79-122 | | | | | | | | | | | |



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 BC00231 - % Solids Prep

Blank (BC00231-BLK1)

Prepared: 03/04/2020 Analyzed: 03/06/2020

Total Dissolved Solids ND 10.0 mg/L



Volatile Analysis Sample Containers

| Lab ID | Client Sample ID | Volatile Sample Container |
|------------|----------------------|---|
| 20C0057-01 | WQ030220:0825 NP2-6 | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 20C0057-02 | WQ030220:0830 NP2-10 | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |



Sample and Data Qualifiers Relating to This Work Order

- QR-04 The RPD exceeded control limits for the LCS/LCSD QC.
- 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.
- CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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



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



York Analytical Laboratories, Inc.
120 Research Drive 132-02 89th Ave
Stratford, CT 06615 Queens, NY 11418
clientservices@yorklab.com
www.yorklab.com

Field Chain-of-Custody Record

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

YORK Project No.

200057

Page 1 of 1

APPENDIX II
MARCH 2020 LABORATORY ANALYTICAL REPORTS
FOR FSP&T RECOVERY WELL



Technical Report

prepared for:

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

Attention: Tunde Komuves-Sandor

Report Date: 03/09/2020

Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20C0056

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371



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

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 03/09/2020
Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20C0056

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 March 02, 2020 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> |
|-----------------------|-------------------------|---------------|-----------------------|----------------------|
| 20C0056-01 | WQ030220:0845 NP1-1-2 | Water | 03/02/2020 | 03/02/2020 |

General Notes for York Project (SDG) No.: 20C0056

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: 03/09/2020





Sample Information

Client Sample ID: WQ030220:0845 NP1-1-2

York Sample ID: 20C0056-01

| <u>York Project (SDG) No.</u> | <u>Client Project ID</u> | <u>Matrix</u> | <u>Collection Date/Time</u> | <u>Date Received</u> |
|-------------------------------|---|---------------|-----------------------------|----------------------|
| 20C0056 | 31401451.000 Task 01.00 Rowe Industries | Water | March 2, 2020 8:45 am | 03/02/2020 |

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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 563-58-6 | 1,1-Dichloropropylene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 142-28-9 | 1,3-Dichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 594-20-7 | 2,2-Dichloropropane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |



Sample Information

Client Sample ID: WQ030220:0845 NP1-1-2

York Sample ID: 20C0056-01

| <u>York Project (SDG) No.</u> | <u>Client Project ID</u> | <u>Matrix</u> | <u>Collection Date/Time</u> | <u>Date Received</u> |
|-------------------------------|---|---------------|-----------------------------|----------------------|
| 20C0056 | 31401451.000 Task 01.00 Rowe Industries | Water | March 2, 2020 8:45 am | 03/02/2020 |

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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 591-78-6 | 2-Hexanone | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 106-43-4 | 4-Chlorotoluene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 67-64-1 | Acetone | ND | | ug/L | 1.00 | 2.00 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 71-43-2 | Benzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 108-86-1 | Bromobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 74-97-5 | Bromochloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 75-27-4 | Bromodichloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 75-25-2 | Bromoform | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 74-83-9 | Bromomethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 108-90-7 | Chlorobenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 75-00-3 | Chloroethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 67-66-3 | Chloroform | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 74-87-3 | Chloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 124-48-1 | Dibromochloromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 74-95-3 | Dibromomethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 100-41-4 | Ethyl Benzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 98-82-8 | Isopropylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |



Sample Information

Client Sample ID: WQ030220:0845 NP1-1-2

York Sample ID: 20C0056-01

| <u>York Project (SDG) No.</u> | <u>Client Project ID</u> | <u>Matrix</u> | <u>Collection Date/Time</u> | <u>Date Received</u> |
|-------------------------------|---|---------------|-----------------------------|----------------------|
| 20C0056 | 31401451.000 Task 01.00 Rowe Industries | Water | March 2, 2020 8:45 am | 03/02/2020 |

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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 75-09-2 | Methylene chloride | ND | | ug/L | 1.00 | 2.00 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 91-20-3 | Naphthalene | ND | | ug/L | 1.00 | 2.00 | 1 | EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 104-51-8 | n-Butylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 103-65-1 | n-Propylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 95-47-6 | o-Xylene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/L | 0.500 | 1.00 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 100-42-5 | Styrene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 127-18-4 | Tetrachloroethylene | 1.67 | CCV-E | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 108-88-3 | Toluene | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 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 | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 79-01-6 | Trichloroethylene | 0.250 | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 75-01-4 | Vinyl Chloride | ND | | ug/L | 0.200 | 0.500 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| 1330-20-7 | Xylenes, Total | ND | | ug/L | 0.600 | 1.50 | 1 | EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 03/06/2020 12:30 | 03/07/2020 05:58 | SS |
| Surrogate Recoveries | | Result | Acceptance Range | | | | | | | | |
| 17060-07-0 | Surrogate: SURL: 1,2-Dichloroethane-d4 | 96.0 % | | | 69-130 | | | | | | |
| 2037-26-5 | Surrogate: SURL: Toluene-d8 | 99.8 % | | | 81-117 | | | | | | |
| 460-00-4 | Surrogate: SURL: p-Bromofluorobenzene | 105 % | | | 79-122 | | | | | | |



Analytical Batch Summary

Batch ID: BC00345

Preparation Method: EPA 5030B

Prepared By: MAT

| YORK Sample ID | Client Sample ID | Preparation Date |
|----------------|-----------------------|------------------|
| 20C0056-01 | WQ030220:0845 NP1-1-2 | 03/06/20 |
| BC00345-BLK1 | Blank | 03/06/20 |
| BC00345-BS1 | LCS | 03/06/20 |
| BC00345-BS2 | LCS | 03/06/20 |
| BC00345-BSD1 | LCS Dup | 03/06/20 |
| BC00345-BSD2 | LCS Dup | 03/06/20 |



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 | RPD Limit | Flag |
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|------|
|---------|--------|-----------------|-------|-------------|----------------|------|-------------|------|---------|-----------|------|

Batch BC00345 - EPA 5030B

Blank (BC00345-BLK1)

Prepared: 03/06/2020 Analyzed: 03/07/2020

| | | | | | | | | | | | |
|---|----|-------|------|--|--|--|--|--|--|--|--|
| 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 BC00345 - EPA 5030B

Blank (BC00345-BLK1)

Prepared: 03/06/2020 Analyzed: 03/07/2020

| | | | | | | | | | | | |
|---|------|-------|------|------|--|------|--|--------|--|--|--|
| 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> | 9.92 | | " | 10.0 | | 99.2 | | 69-130 | | | |
| <i>Surrogate: SURR: Toluene-d8</i> | 9.93 | | " | 10.0 | | 99.3 | | 81-117 | | | |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i> | 10.4 | | " | 10.0 | | 104 | | 79-122 | | | |

LCS (BC00345-BS1)

Prepared & Analyzed: 03/06/2020

| | | | | | |
|---|------|------|------|------|--------|
| 1,1,1,2-Tetrachloroethane | 11.4 | ug/L | 10.0 | 114 | 82-126 |
| 1,1,1-Trichloroethane | 10.6 | " | 10.0 | 106 | 78-136 |
| 1,1,2,2-Tetrachloroethane | 9.32 | " | 10.0 | 93.2 | 76-129 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 11.1 | " | 10.0 | 111 | 54-165 |
| 1,1,2-Trichloroethane | 9.70 | " | 10.0 | 97.0 | 82-123 |
| 1,1-Dichloroethane | 10.0 | " | 10.0 | 100 | 82-129 |
| 1,1-Dichloroethylene | 11.9 | " | 10.0 | 119 | 68-138 |
| 1,1-Dichloropropylene | 10.3 | " | 10.0 | 103 | 83-133 |
| 1,2,3-Trichlorobenzene | 9.49 | " | 10.0 | 94.9 | 76-136 |
| 1,2,3-Trichloropropane | 9.44 | " | 10.0 | 94.4 | 77-128 |
| 1,2,4-Trichlorobenzene | 9.50 | " | 10.0 | 95.0 | 76-137 |
| 1,2,4-Trimethylbenzene | 9.91 | " | 10.0 | 99.1 | 82-132 |
| 1,2-Dibromo-3-chloropropane | 8.68 | " | 10.0 | 86.8 | 45-147 |
| 1,2-Dibromoethane | 10.1 | " | 10.0 | 101 | 83-124 |
| 1,2-Dichlorobenzene | 9.48 | " | 10.0 | 94.8 | 79-123 |
| 1,2-Dichloroethane | 10.2 | " | 10.0 | 102 | 73-132 |
| 1,2-Dichloropropane | 9.96 | " | 10.0 | 99.6 | 78-126 |
| 1,3,5-Trimethylbenzene | 10.0 | " | 10.0 | 100 | 80-131 |
| 1,3-Dichlorobenzene | 9.34 | " | 10.0 | 93.4 | 86-122 |
| 1,3-Dichloropropane | 10.1 | " | 10.0 | 101 | 81-125 |
| 1,4-Dichlorobenzene | 10.9 | " | 10.0 | 109 | 85-124 |
| 2,2-Dichloropropane | 8.00 | " | 10.0 | 80.0 | 56-150 |
| 2-Chlorotoluene | 9.73 | " | 10.0 | 97.3 | 79-130 |
| 2-Hexanone | 9.69 | " | 10.0 | 96.9 | 51-146 |
| 4-Chlorotoluene | 9.70 | " | 10.0 | 97.0 | 79-128 |
| Acetone | 7.99 | " | 10.0 | 79.9 | 14-150 |
| Benzene | 10.6 | " | 10.0 | 106 | 85-126 |
| Bromobenzene | 9.70 | " | 10.0 | 97.0 | 78-129 |
| Bromo(chloromethane | 10.6 | " | 10.0 | 106 | 77-128 |
| Bromodichloromethane | 10.3 | " | 10.0 | 103 | 79-128 |



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 BC00345 - EPA 5030B | | | | | | | | | | | |
| LCS (BC00345-BS1) | | | | | | | | | | | |
| Prepared & Analyzed: 03/06/2020 | | | | | | | | | | | |
| Bromoform | 9.46 | | ug/L | 10.0 | 94.6 | 78-133 | | | | | |
| Bromomethane | 13.2 | | " | 10.0 | 132 | 43-168 | | | | | |
| Carbon tetrachloride | 10.3 | | " | 10.0 | 103 | 77-141 | | | | | |
| Chlorobenzene | 9.83 | | " | 10.0 | 98.3 | 88-120 | | | | | |
| Chloroethane | 15.1 | | " | 10.0 | 151 | 65-136 | High Bias | | | | |
| Chloroform | 10.5 | | " | 10.0 | 105 | 82-128 | | | | | |
| Chloromethane | 11.4 | | " | 10.0 | 114 | 43-155 | | | | | |
| cis-1,2-Dichloroethylene | 10.0 | | " | 10.0 | 100 | 83-129 | | | | | |
| cis-1,3-Dichloropropylene | 9.73 | | " | 10.0 | 97.3 | 80-131 | | | | | |
| Dibromochloromethane | 9.87 | | " | 10.0 | 98.7 | 80-130 | | | | | |
| Dibromomethane | 9.96 | | " | 10.0 | 99.6 | 72-134 | | | | | |
| Dichlorodifluoromethane | 12.8 | | " | 10.0 | 128 | 44-144 | | | | | |
| Ethyl Benzene | 10.2 | | " | 10.0 | 102 | 80-131 | | | | | |
| Hexachlorobutadiene | 9.32 | | " | 10.0 | 93.2 | 67-146 | | | | | |
| Isopropylbenzene | 9.78 | | " | 10.0 | 97.8 | 76-140 | | | | | |
| Methyl tert-butyl ether (MTBE) | 10.3 | | " | 10.0 | 103 | 76-135 | | | | | |
| Methylene chloride | 11.8 | | " | 10.0 | 118 | 55-137 | | | | | |
| Naphthalene | 9.53 | | " | 10.0 | 95.3 | 70-147 | | | | | |
| n-Butylbenzene | 10.2 | | " | 10.0 | 102 | 79-132 | | | | | |
| n-Propylbenzene | 9.90 | | " | 10.0 | 99.0 | 78-133 | | | | | |
| o-Xylene | 9.81 | | " | 10.0 | 98.1 | 78-130 | | | | | |
| p- & m- Xylenes | 21.1 | | " | 20.0 | 106 | 77-133 | | | | | |
| p-Isopropyltoluene | 9.86 | | " | 10.0 | 98.6 | 81-136 | | | | | |
| sec-Butylbenzene | 10.5 | | " | 10.0 | 105 | 79-137 | | | | | |
| Styrene | 10.7 | | " | 10.0 | 107 | 67-132 | | | | | |
| tert-Butylbenzene | 9.53 | | " | 10.0 | 95.3 | 77-138 | | | | | |
| Tetrachloroethylene | 8.47 | | " | 10.0 | 84.7 | 82-131 | | | | | |
| Toluene | 10.3 | | " | 10.0 | 103 | 80-127 | | | | | |
| trans-1,2-Dichloroethylene | 11.4 | | " | 10.0 | 114 | 80-132 | | | | | |
| trans-1,3-Dichloropropylene | 9.73 | | " | 10.0 | 97.3 | 78-131 | | | | | |
| Trichloroethylene | 10.4 | | " | 10.0 | 104 | 82-128 | | | | | |
| Trichlorofluoromethane | 12.6 | | " | 10.0 | 126 | 67-139 | | | | | |
| Vinyl Chloride | 13.9 | | " | 10.0 | 139 | 58-145 | | | | | |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 9.30 | | " | 10.0 | 93.0 | 69-130 | | | | | |
| <i>Surrogate: SURR: Toluene-d8</i> | 10.0 | | " | 10.0 | 100 | 81-117 | | | | | |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i> | 10.0 | | " | 10.0 | 100 | 79-122 | | | | | |



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BC00345 - EPA 5030B

| LCS (BC00345-BS2) | Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | | | | | | | | |
|---|---|--|------|------|--|------|--------|--|--|--|--|
| 1,1,1,2-Tetrachloroethane | 11.3 | | ug/L | 10.0 | | 113 | 82-126 | | | | |
| 1,1,1-Trichloroethane | 10.4 | | " | 10.0 | | 104 | 78-136 | | | | |
| 1,1,2,2-Tetrachloroethane | 9.24 | | " | 10.0 | | 92.4 | 76-129 | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 11.2 | | " | 10.0 | | 112 | 54-165 | | | | |
| 1,1,2-Trichloroethane | 9.94 | | " | 10.0 | | 99.4 | 82-123 | | | | |
| 1,1-Dichloroethane | 9.98 | | " | 10.0 | | 99.8 | 82-129 | | | | |
| 1,1-Dichloroethylene | 11.8 | | " | 10.0 | | 118 | 68-138 | | | | |
| 1,1-Dichloropropylene | 10.3 | | " | 10.0 | | 103 | 83-133 | | | | |
| 1,2,3-Trichlorobenzene | 9.01 | | " | 10.0 | | 90.1 | 76-136 | | | | |
| 1,2,3-Trichloropropane | 9.38 | | " | 10.0 | | 93.8 | 77-128 | | | | |
| 1,2,4-Trichlorobenzene | 8.85 | | " | 10.0 | | 88.5 | 76-137 | | | | |
| 1,2,4-Trimethylbenzene | 9.45 | | " | 10.0 | | 94.5 | 82-132 | | | | |
| 1,2-Dibromo-3-chloropropane | 8.66 | | " | 10.0 | | 86.6 | 45-147 | | | | |
| 1,2-Dibromoethane | 9.81 | | " | 10.0 | | 98.1 | 83-124 | | | | |
| 1,2-Dichlorobenzene | 9.15 | | " | 10.0 | | 91.5 | 79-123 | | | | |
| 1,2-Dichloroethane | 10.2 | | " | 10.0 | | 102 | 73-132 | | | | |
| 1,2-Dichloropropane | 9.91 | | " | 10.0 | | 99.1 | 78-126 | | | | |
| 1,3,5-Trimethylbenzene | 9.60 | | " | 10.0 | | 96.0 | 80-131 | | | | |
| 1,3-Dichlorobenzene | 8.93 | | " | 10.0 | | 89.3 | 86-122 | | | | |
| 1,3-Dichloropropane | 10.2 | | " | 10.0 | | 102 | 81-125 | | | | |
| 1,4-Dichlorobenzene | 10.6 | | " | 10.0 | | 106 | 85-124 | | | | |
| 2,2-Dichloropropane | 7.71 | | " | 10.0 | | 77.1 | 56-150 | | | | |
| 2-Chlorotoluene | 9.36 | | " | 10.0 | | 93.6 | 79-130 | | | | |
| 2-Hexanone | 9.91 | | " | 10.0 | | 99.1 | 51-146 | | | | |
| 4-Chlorotoluene | 9.43 | | " | 10.0 | | 94.3 | 79-128 | | | | |
| Acetone | 8.37 | | " | 10.0 | | 83.7 | 14-150 | | | | |
| Benzene | 10.8 | | " | 10.0 | | 108 | 85-126 | | | | |
| Bromobenzene | 9.51 | | " | 10.0 | | 95.1 | 78-129 | | | | |
| Bromochloromethane | 10.5 | | " | 10.0 | | 105 | 77-128 | | | | |
| Bromodichloromethane | 10.3 | | " | 10.0 | | 103 | 79-128 | | | | |
| Bromoform | 9.42 | | " | 10.0 | | 94.2 | 78-133 | | | | |
| Bromomethane | 12.3 | | " | 10.0 | | 123 | 43-168 | | | | |
| Carbon tetrachloride | 10.2 | | " | 10.0 | | 102 | 77-141 | | | | |
| Chlorobenzene | 9.78 | | " | 10.0 | | 97.8 | 88-120 | | | | |
| Chloroethane | 11.7 | | " | 10.0 | | 117 | 65-136 | | | | |
| Chloroform | 10.6 | | " | 10.0 | | 106 | 82-128 | | | | |
| Chloromethane | 11.6 | | " | 10.0 | | 116 | 43-155 | | | | |
| cis-1,2-Dichloroethylene | 10.2 | | " | 10.0 | | 102 | 83-129 | | | | |
| cis-1,3-Dichloropropylene | 9.60 | | " | 10.0 | | 96.0 | 80-131 | | | | |
| Dibromochloromethane | 10.0 | | " | 10.0 | | 100 | 80-130 | | | | |
| Dibromomethane | 9.51 | | " | 10.0 | | 95.1 | 72-134 | | | | |
| Dichlorodifluoromethane | 12.0 | | " | 10.0 | | 120 | 44-144 | | | | |
| Ethyl Benzene | 10.1 | | " | 10.0 | | 101 | 80-131 | | | | |
| Hexachlorobutadiene | 9.23 | | " | 10.0 | | 92.3 | 67-146 | | | | |
| Isopropylbenzene | 9.46 | | " | 10.0 | | 94.6 | 76-140 | | | | |
| Methyl tert-butyl ether (MTBE) | 10.3 | | " | 10.0 | | 103 | 76-135 | | | | |
| Methylene chloride | 12.0 | | " | 10.0 | | 120 | 55-137 | | | | |
| Naphthalene | 9.19 | | " | 10.0 | | 91.9 | 70-147 | | | | |
| n-Butylbenzene | 9.49 | | " | 10.0 | | 94.9 | 79-132 | | | | |
| n-Propylbenzene | 9.57 | | " | 10.0 | | 95.7 | 78-133 | | | | |



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 BC00345 - EPA 5030B

| LCS (BC00345-BS2) | | | | | | | Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | |
|---|------|--|------|------|------|--------|---|--|--|--|
| o-Xylene | 9.76 | | ug/L | 10.0 | 97.6 | 78-130 | | | | |
| p- & m- Xylenes | 20.6 | | " | 20.0 | 103 | 77-133 | | | | |
| p-Isopropyltoluene | 9.43 | | " | 10.0 | 94.3 | 81-136 | | | | |
| sec-Butylbenzene | 10.1 | | " | 10.0 | 101 | 79-137 | | | | |
| Styrene | 10.7 | | " | 10.0 | 107 | 67-132 | | | | |
| tert-Butylbenzene | 9.19 | | " | 10.0 | 91.9 | 77-138 | | | | |
| Tetrachloroethylene | 8.16 | | " | 10.0 | 81.6 | 82-131 | Low Bias | | | |
| Toluene | 10.3 | | " | 10.0 | 103 | 80-127 | | | | |
| trans-1,2-Dichloroethylene | 11.6 | | " | 10.0 | 116 | 80-132 | | | | |
| trans-1,3-Dichloropropylene | 9.73 | | " | 10.0 | 97.3 | 78-131 | | | | |
| Trichloroethylene | 10.1 | | " | 10.0 | 101 | 82-128 | | | | |
| Trichlorofluoromethane | 10.2 | | " | 10.0 | 102 | 67-139 | | | | |
| Vinyl Chloride | 10.3 | | " | 10.0 | 103 | 58-145 | | | | |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 9.31 | | " | 10.0 | 93.1 | 69-130 | | | | |
| <i>Surrogate: SURR: Toluene-d8</i> | 9.92 | | " | 10.0 | 99.2 | 81-117 | | | | |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i> | 9.74 | | " | 10.0 | 97.4 | 79-122 | | | | |

| LCS Dup (BC00345-BSD1) | | | | | | | Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | |
|---|------|--|------|------|------|--------|---|-------|----|--|
| 1,1,1,2-Tetrachloroethane | 11.2 | | ug/L | 10.0 | 112 | 82-126 | | 1.94 | 30 | |
| 1,1,1-Trichloroethane | 10.2 | | " | 10.0 | 102 | 78-136 | | 3.83 | 30 | |
| 1,1,2,2-Tetrachloroethane | 8.93 | | " | 10.0 | 89.3 | 76-129 | | 4.27 | 30 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 10.8 | | " | 10.0 | 108 | 54-165 | | 2.55 | 30 | |
| 1,1,2-Trichloroethane | 9.76 | | " | 10.0 | 97.6 | 82-123 | | 0.617 | 30 | |
| 1,1-Dichloroethane | 9.87 | | " | 10.0 | 98.7 | 82-129 | | 1.61 | 30 | |
| 1,1-Dichloroethylene | 11.5 | | " | 10.0 | 115 | 68-138 | | 3.59 | 30 | |
| 1,1-Dichloropropylene | 10.1 | | " | 10.0 | 101 | 83-133 | | 2.35 | 30 | |
| 1,2,3-Trichlorobenzene | 8.84 | | " | 10.0 | 88.4 | 76-136 | | 7.09 | 30 | |
| 1,2,3-Trichloropropane | 9.15 | | " | 10.0 | 91.5 | 77-128 | | 3.12 | 30 | |
| 1,2,4-Trichlorobenzene | 8.75 | | " | 10.0 | 87.5 | 76-137 | | 8.22 | 30 | |
| 1,2,4-Trimethylbenzene | 9.22 | | " | 10.0 | 92.2 | 82-132 | | 7.21 | 30 | |
| 1,2-Dibromo-3-chloropropane | 8.13 | | " | 10.0 | 81.3 | 45-147 | | 6.54 | 30 | |
| 1,2-Dibromoethane | 9.81 | | " | 10.0 | 98.1 | 83-124 | | 2.91 | 30 | |
| 1,2-Dichlorobenzene | 8.92 | | " | 10.0 | 89.2 | 79-123 | | 6.09 | 30 | |
| 1,2-Dichloroethane | 10.2 | | " | 10.0 | 102 | 73-132 | | 0.196 | 30 | |
| 1,2-Dichloropropane | 9.77 | | " | 10.0 | 97.7 | 78-126 | | 1.93 | 30 | |
| 1,3,5-Trimethylbenzene | 9.43 | | " | 10.0 | 94.3 | 80-131 | | 5.87 | 30 | |
| 1,3-Dichlorobenzene | 8.82 | | " | 10.0 | 88.2 | 86-122 | | 5.73 | 30 | |
| 1,3-Dichloropropane | 9.86 | | " | 10.0 | 98.6 | 81-125 | | 2.01 | 30 | |
| 1,4-Dichlorobenzene | 10.4 | | " | 10.0 | 104 | 85-124 | | 4.52 | 30 | |
| 2,2-Dichloropropane | 7.71 | | " | 10.0 | 77.1 | 56-150 | | 3.69 | 30 | |
| 2-Chlorotoluene | 9.06 | | " | 10.0 | 90.6 | 79-130 | | 7.13 | 30 | |
| 2-Hexanone | 9.65 | | " | 10.0 | 96.5 | 51-146 | | 0.414 | 30 | |
| 4-Chlorotoluene | 9.09 | | " | 10.0 | 90.9 | 79-128 | | 6.49 | 30 | |
| Acetone | 8.31 | | " | 10.0 | 83.1 | 14-150 | | 3.93 | 30 | |
| Benzene | 10.6 | | " | 10.0 | 106 | 85-126 | | 0.283 | 30 | |
| Bromobenzene | 9.17 | | " | 10.0 | 91.7 | 78-129 | | 5.62 | 30 | |
| Bromochloromethane | 10.5 | | " | 10.0 | 105 | 77-128 | | 0.853 | 30 | |
| Bromodichloromethane | 10.0 | | " | 10.0 | 100 | 79-128 | | 2.76 | 30 | |
| Bromoform | 9.55 | | " | 10.0 | 95.5 | 78-133 | | 0.947 | 30 | |
| Bromomethane | 11.9 | | " | 10.0 | 119 | 43-168 | | 10.6 | 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 BC00345 - EPA 5030B

| LCS Dup (BC00345-BSD1) | | | | | | | | Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | |
|---|------|---|------|------|------|--------|----------|---|-------|----|----------|
| Carbon tetrachloride | 9.93 | | ug/L | 10.0 | 99.3 | 77-141 | | | 3.56 | 30 | |
| Chlorobenzene | 9.42 | " | | 10.0 | 94.2 | 88-120 | | | 4.26 | 30 | |
| Chloroethane | 11.5 | " | | 10.0 | 115 | 65-136 | | | 27.1 | 30 | |
| Chloroform | 10.3 | " | | 10.0 | 103 | 82-128 | | | 1.15 | 30 | |
| Chloromethane | 11.3 | " | | 10.0 | 113 | 43-155 | | | 0.968 | 30 | |
| cis-1,2-Dichloroethylene | 9.97 | " | | 10.0 | 99.7 | 83-129 | | | 0.300 | 30 | |
| cis-1,3-Dichloropropylene | 9.42 | " | | 10.0 | 94.2 | 80-131 | | | 3.24 | 30 | |
| Dibromochloromethane | 9.75 | " | | 10.0 | 97.5 | 80-130 | | | 1.22 | 30 | |
| Dibromomethane | 9.29 | " | | 10.0 | 92.9 | 72-134 | | | 6.96 | 30 | |
| Dichlorodifluoromethane | 12.0 | " | | 10.0 | 120 | 44-144 | | | 7.10 | 30 | |
| Ethyl Benzene | 9.61 | " | | 10.0 | 96.1 | 80-131 | | | 6.05 | 30 | |
| Hexachlorobutadiene | 8.82 | " | | 10.0 | 88.2 | 67-146 | | | 5.51 | 30 | |
| Isopropylbenzene | 9.23 | " | | 10.0 | 92.3 | 76-140 | | | 5.79 | 30 | |
| Methyl tert-butyl ether (MTBE) | 10.4 | " | | 10.0 | 104 | 76-135 | | | 0.965 | 30 | |
| Methylene chloride | 11.6 | " | | 10.0 | 116 | 55-137 | | | 2.14 | 30 | |
| Naphthalene | 9.16 | " | | 10.0 | 91.6 | 70-147 | | | 3.96 | 30 | |
| n-Butylbenzene | 9.22 | " | | 10.0 | 92.2 | 79-132 | | | 10.1 | 30 | |
| n-Propylbenzene | 9.17 | " | | 10.0 | 91.7 | 78-133 | | | 7.66 | 30 | |
| o-Xylene | 9.37 | " | | 10.0 | 93.7 | 78-130 | | | 4.59 | 30 | |
| p- & m- Xylenes | 19.9 | " | | 20.0 | 99.4 | 77-133 | | | 6.05 | 30 | |
| p-Isopropyltoluene | 9.17 | " | | 10.0 | 91.7 | 81-136 | | | 7.25 | 30 | |
| sec-Butylbenzene | 9.86 | " | | 10.0 | 98.6 | 79-137 | | | 6.67 | 30 | |
| Styrene | 10.4 | " | | 10.0 | 104 | 67-132 | | | 2.65 | 30 | |
| tert-Butylbenzene | 8.90 | " | | 10.0 | 89.0 | 77-138 | | | 6.84 | 30 | |
| Tetrachloroethylene | 8.04 | " | | 10.0 | 80.4 | 82-131 | Low Bias | | 5.21 | 30 | |
| Toluene | 9.87 | " | | 10.0 | 98.7 | 80-127 | | | 4.55 | 30 | |
| trans-1,2-Dichloroethylene | 11.1 | " | | 10.0 | 111 | 80-132 | | | 2.50 | 30 | |
| trans-1,3-Dichloropropylene | 9.62 | " | | 10.0 | 96.2 | 78-131 | | | 1.14 | 30 | |
| Trichloroethylene | 9.89 | " | | 10.0 | 98.9 | 82-128 | | | 5.51 | 30 | |
| Trichlorofluoromethane | 10.1 | " | | 10.0 | 101 | 67-139 | | | 21.8 | 30 | |
| Vinyl Chloride | 10.3 | " | | 10.0 | 103 | 58-145 | | | 30.3 | 30 | Non-dir. |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 9.73 | " | | 10.0 | 97.3 | 69-130 | | | | | |
| <i>Surrogate: SURR: Toluene-d8</i> | 10.0 | " | | 10.0 | 100 | 81-117 | | | | | |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i> | 9.94 | " | | 10.0 | 99.4 | 79-122 | | | | | |



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BC00345 - EPA 5030B

| LCS Dup (BC00345-BSD2) | Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | | | | | | | |
|---|---|--|------|------|------|--------|--|--|--------|----|
| 1,1,1,2-Tetrachloroethane | 11.2 | | ug/L | 10.0 | 112 | 82-126 | | | 0.710 | 30 |
| 1,1,1-Trichloroethane | 10.3 | | " | 10.0 | 103 | 78-136 | | | 0.290 | 30 |
| 1,1,2,2-Tetrachloroethane | 9.50 | | " | 10.0 | 95.0 | 76-129 | | | 2.77 | 30 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 10.9 | | " | 10.0 | 109 | 54-165 | | | 1.99 | 30 |
| 1,1,2-Trichloroethane | 10.0 | | " | 10.0 | 100 | 82-123 | | | 0.702 | 30 |
| 1,1-Dichloroethane | 10.0 | | " | 10.0 | 100 | 82-129 | | | 0.200 | 30 |
| 1,1-Dichloroethylene | 11.6 | | " | 10.0 | 116 | 68-138 | | | 1.54 | 30 |
| 1,1-Dichloropropylene | 10.3 | | " | 10.0 | 103 | 83-133 | | | 0.388 | 30 |
| 1,2,3-Trichlorobenzene | 9.34 | | " | 10.0 | 93.4 | 76-136 | | | 3.60 | 30 |
| 1,2,3-Trichloropropane | 9.36 | | " | 10.0 | 93.6 | 77-128 | | | 0.213 | 30 |
| 1,2,4-Trichlorobenzene | 9.32 | | " | 10.0 | 93.2 | 76-137 | | | 5.17 | 30 |
| 1,2,4-Trimethylbenzene | 9.48 | | " | 10.0 | 94.8 | 82-132 | | | 0.317 | 30 |
| 1,2-Dibromo-3-chloropropane | 8.83 | | " | 10.0 | 88.3 | 45-147 | | | 1.94 | 30 |
| 1,2-Dibromoethane | 10.2 | | " | 10.0 | 102 | 83-124 | | | 4.19 | 30 |
| 1,2-Dichlorobenzene | 9.27 | | " | 10.0 | 92.7 | 79-123 | | | 1.30 | 30 |
| 1,2-Dichloroethane | 10.2 | | " | 10.0 | 102 | 73-132 | | | 0.196 | 30 |
| 1,2-Dichloropropane | 10.1 | | " | 10.0 | 101 | 78-126 | | | 2.29 | 30 |
| 1,3,5-Trimethylbenzene | 9.75 | | " | 10.0 | 97.5 | 80-131 | | | 1.55 | 30 |
| 1,3-Dichlorobenzene | 9.24 | | " | 10.0 | 92.4 | 86-122 | | | 3.41 | 30 |
| 1,3-Dichloropropane | 10.3 | | " | 10.0 | 103 | 81-125 | | | 0.780 | 30 |
| 1,4-Dichlorobenzene | 10.7 | | " | 10.0 | 107 | 85-124 | | | 1.31 | 30 |
| 2,2-Dichloropropane | 7.74 | | " | 10.0 | 77.4 | 56-150 | | | 0.388 | 30 |
| 2-Chlorotoluene | 9.41 | | " | 10.0 | 94.1 | 79-130 | | | 0.533 | 30 |
| 2-Hexanone | 10.1 | | " | 10.0 | 101 | 51-146 | | | 2.20 | 30 |
| 4-Chlorotoluene | 9.52 | | " | 10.0 | 95.2 | 79-128 | | | 0.950 | 30 |
| Acetone | 8.46 | | " | 10.0 | 84.6 | 14-150 | | | 1.07 | 30 |
| Benzene | 10.5 | | " | 10.0 | 105 | 85-126 | | | 2.81 | 30 |
| Bromobenzene | 9.53 | | " | 10.0 | 95.3 | 78-129 | | | 0.210 | 30 |
| Bromochloromethane | 10.7 | | " | 10.0 | 107 | 77-128 | | | 2.07 | 30 |
| Bromodichloromethane | 10.3 | | " | 10.0 | 103 | 79-128 | | | 0.0970 | 30 |
| Bromoform | 9.33 | | " | 10.0 | 93.3 | 78-133 | | | 0.960 | 30 |
| Bromomethane | 12.5 | | " | 10.0 | 125 | 43-168 | | | 1.77 | 30 |
| Carbon tetrachloride | 9.93 | | " | 10.0 | 99.3 | 77-141 | | | 2.39 | 30 |
| Chlorobenzene | 9.85 | | " | 10.0 | 98.5 | 88-120 | | | 0.713 | 30 |
| Chloroethane | 11.0 | | " | 10.0 | 110 | 65-136 | | | 5.91 | 30 |
| Chloroform | 10.5 | | " | 10.0 | 105 | 82-128 | | | 0.759 | 30 |
| Chloromethane | 11.4 | | " | 10.0 | 114 | 43-155 | | | 1.30 | 30 |
| cis-1,2-Dichloroethylene | 10.2 | | " | 10.0 | 102 | 83-129 | | | 0.687 | 30 |
| cis-1,3-Dichloropropylene | 9.79 | | " | 10.0 | 97.9 | 80-131 | | | 1.96 | 30 |
| Dibromochloromethane | 10.0 | | " | 10.0 | 100 | 80-130 | | | 0.300 | 30 |
| Dibromomethane | 9.84 | | " | 10.0 | 98.4 | 72-134 | | | 3.41 | 30 |
| Dichlorodifluoromethane | 11.9 | | " | 10.0 | 119 | 44-144 | | | 0.754 | 30 |
| Ethyl Benzene | 10.1 | | " | 10.0 | 101 | 80-131 | | | 0.494 | 30 |
| Hexachlorobutadiene | 9.01 | | " | 10.0 | 90.1 | 67-146 | | | 2.41 | 30 |
| Isopropylbenzene | 9.48 | | " | 10.0 | 94.8 | 76-140 | | | 0.211 | 30 |
| Methyl tert-butyl ether (MTBE) | 10.6 | | " | 10.0 | 106 | 76-135 | | | 2.68 | 30 |
| Methylene chloride | 11.7 | | " | 10.0 | 117 | 55-137 | | | 2.28 | 30 |
| Naphthalene | 9.33 | | " | 10.0 | 93.3 | 70-147 | | | 1.51 | 30 |
| n-Butylbenzene | 10.2 | | " | 10.0 | 102 | 79-132 | | | 7.51 | 30 |
| n-Propylbenzene | 9.59 | | " | 10.0 | 95.9 | 78-133 | | | 0.209 | 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 BC00345 - EPA 5030B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LCS Dup (BC00345-BSD2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prepared: 03/06/2020 Analyzed: 03/07/2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table><tbody><tr><td>o-Xylene</td><td>9.76</td><td></td><td>ug/L</td><td>10.0</td><td>97.6</td><td>78-130</td><td></td><td></td><td>0.00</td><td>30</td><td></td></tr><tr><td>p- & m- Xylenes</td><td>20.5</td><td></td><td>"</td><td>20.0</td><td>102</td><td>77-133</td><td></td><td></td><td>0.681</td><td>30</td><td></td></tr><tr><td>p-Isopropyltoluene</td><td>9.56</td><td></td><td>"</td><td>10.0</td><td>95.6</td><td>81-136</td><td></td><td></td><td>1.37</td><td>30</td><td></td></tr><tr><td>sec-Butylbenzene</td><td>10.3</td><td></td><td>"</td><td>10.0</td><td>103</td><td>79-137</td><td></td><td></td><td>1.37</td><td>30</td><td></td></tr><tr><td>Styrene</td><td>10.6</td><td></td><td>"</td><td>10.0</td><td>106</td><td>67-132</td><td></td><td></td><td>0.659</td><td>30</td><td></td></tr><tr><td>tert-Butylbenzene</td><td>9.34</td><td></td><td>"</td><td>10.0</td><td>93.4</td><td>77-138</td><td></td><td></td><td>1.62</td><td>30</td><td></td></tr><tr><td>Tetrachloroethylene</td><td>8.18</td><td></td><td>"</td><td>10.0</td><td>81.8</td><td>82-131</td><td>Low Bias</td><td></td><td>0.245</td><td>30</td><td></td></tr><tr><td>Toluene</td><td>10.3</td><td></td><td>"</td><td>10.0</td><td>103</td><td>80-127</td><td></td><td></td><td>0.194</td><td>30</td><td></td></tr><tr><td>trans-1,2-Dichloroethylene</td><td>11.2</td><td></td><td>"</td><td>10.0</td><td>112</td><td>80-132</td><td></td><td></td><td>3.51</td><td>30</td><td></td></tr><tr><td>trans-1,3-Dichloropropylene</td><td>9.92</td><td></td><td>"</td><td>10.0</td><td>99.2</td><td>78-131</td><td></td><td></td><td>1.93</td><td>30</td><td></td></tr><tr><td>Trichloroethylene</td><td>9.98</td><td></td><td>"</td><td>10.0</td><td>99.8</td><td>82-128</td><td></td><td></td><td>1.10</td><td>30</td><td></td></tr><tr><td>Trichlorofluoromethane</td><td>9.42</td><td></td><td>"</td><td>10.0</td><td>94.2</td><td>67-139</td><td></td><td></td><td>7.85</td><td>30</td><td></td></tr><tr><td>Vinyl Chloride</td><td>9.63</td><td></td><td>"</td><td>10.0</td><td>96.3</td><td>58-145</td><td></td><td></td><td>7.01</td><td>30</td><td></td></tr><tr><td><i>Surrogate: SURR: 1,2-Dichloroethane-d4</i></td><td>9.12</td><td></td><td>"</td><td>10.0</td><td>91.2</td><td>69-130</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td><i>Surrogate: SURR: Toluene-d8</i></td><td>9.96</td><td></td><td>"</td><td>10.0</td><td>99.6</td><td>81-117</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td><i>Surrogate: SURR: p-Bromofluorobenzene</i></td><td>9.98</td><td></td><td>"</td><td>10.0</td><td>99.8</td><td>79-122</td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table> | | | | | | | | | | | | o-Xylene | 9.76 | | ug/L | 10.0 | 97.6 | 78-130 | | | 0.00 | 30 | | p- & m- Xylenes | 20.5 | | " | 20.0 | 102 | 77-133 | | | 0.681 | 30 | | p-Isopropyltoluene | 9.56 | | " | 10.0 | 95.6 | 81-136 | | | 1.37 | 30 | | sec-Butylbenzene | 10.3 | | " | 10.0 | 103 | 79-137 | | | 1.37 | 30 | | Styrene | 10.6 | | " | 10.0 | 106 | 67-132 | | | 0.659 | 30 | | tert-Butylbenzene | 9.34 | | " | 10.0 | 93.4 | 77-138 | | | 1.62 | 30 | | Tetrachloroethylene | 8.18 | | " | 10.0 | 81.8 | 82-131 | Low Bias | | 0.245 | 30 | | Toluene | 10.3 | | " | 10.0 | 103 | 80-127 | | | 0.194 | 30 | | trans-1,2-Dichloroethylene | 11.2 | | " | 10.0 | 112 | 80-132 | | | 3.51 | 30 | | trans-1,3-Dichloropropylene | 9.92 | | " | 10.0 | 99.2 | 78-131 | | | 1.93 | 30 | | Trichloroethylene | 9.98 | | " | 10.0 | 99.8 | 82-128 | | | 1.10 | 30 | | Trichlorofluoromethane | 9.42 | | " | 10.0 | 94.2 | 67-139 | | | 7.85 | 30 | | Vinyl Chloride | 9.63 | | " | 10.0 | 96.3 | 58-145 | | | 7.01 | 30 | | <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 9.12 | | " | 10.0 | 91.2 | 69-130 | | | | | | <i>Surrogate: SURR: Toluene-d8</i> | 9.96 | | " | 10.0 | 99.6 | 81-117 | | | | | | <i>Surrogate: SURR: p-Bromofluorobenzene</i> | 9.98 | | " | 10.0 | 99.8 | 79-122 | | | | | |
| o-Xylene | 9.76 | | ug/L | 10.0 | 97.6 | 78-130 | | | 0.00 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p- & m- Xylenes | 20.5 | | " | 20.0 | 102 | 77-133 | | | 0.681 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| p-Isopropyltoluene | 9.56 | | " | 10.0 | 95.6 | 81-136 | | | 1.37 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| sec-Butylbenzene | 10.3 | | " | 10.0 | 103 | 79-137 | | | 1.37 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Styrene | 10.6 | | " | 10.0 | 106 | 67-132 | | | 0.659 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| tert-Butylbenzene | 9.34 | | " | 10.0 | 93.4 | 77-138 | | | 1.62 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethylene | 8.18 | | " | 10.0 | 81.8 | 82-131 | Low Bias | | 0.245 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toluene | 10.3 | | " | 10.0 | 103 | 80-127 | | | 0.194 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| trans-1,2-Dichloroethylene | 11.2 | | " | 10.0 | 112 | 80-132 | | | 3.51 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| trans-1,3-Dichloropropylene | 9.92 | | " | 10.0 | 99.2 | 78-131 | | | 1.93 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichloroethylene | 9.98 | | " | 10.0 | 99.8 | 82-128 | | | 1.10 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trichlorofluoromethane | 9.42 | | " | 10.0 | 94.2 | 67-139 | | | 7.85 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vinyl Chloride | 9.63 | | " | 10.0 | 96.3 | 58-145 | | | 7.01 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Surrogate: SURR: 1,2-Dichloroethane-d4</i> | 9.12 | | " | 10.0 | 91.2 | 69-130 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Surrogate: SURR: Toluene-d8</i> | 9.96 | | " | 10.0 | 99.6 | 81-117 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Surrogate: SURR: p-Bromofluorobenzene</i> | 9.98 | | " | 10.0 | 99.8 | 79-122 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Volatile Analysis Sample Containers

| Lab ID | Client Sample ID | Volatile Sample Container |
|------------|-----------------------|---|
| 20C0056-01 | WQ030220:0845 NP1-1-2 | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |



Sample and Data Qualifiers Relating to This Work Order

- QR-04 The RPD exceeded control limits for the LCS/LCSD QC.
- 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.

AO182 LO0438 AO959
20AO763 80915

60184
60195



York Analytical Laboratories, Inc.
120 Research Drive 132-02 89th Ave
Stratford, CT 06615 Queens, NY 11418
clientservices@yorklab.com
www.yorklab.com

Field Chain-of-Custody Record

YORK Project N

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