



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 April 2020 Status Report

DATE: August 19, 2020

WSP USA (WSP) commenced operation of the Full-Scale Pump and Treat (FSP&T) groundwater remediation system at the above-referenced site on December 17, 2002. Starting in September 2008, the groundwater recovered by the Focus Pump and Treat (FP&T) system was routed to the FSP&T system for treatment. As of 2014, the FSP&T system only treats water extracted from RW-2; 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. In February 2020, the FP&T system, which consists of four focused recover wells (FRW-1, FRW-2, FRW-3 and FRW-4), was turned off with EPA approval to conduct in-situ injection to treat contaminants in the former drum storage area (FDSA). This status report presents a summary of performance, operation and maintenance for the FSP&T system and monitoring activities for the site from April 1, 2020 through April 30, 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

(April 1, 2020 through April 30, 2020)

- | | |
|---|--------------------------------------|
| 1. Hours of operation during the reporting period: | 720 hours (100%) |
| 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: | 1,010,089 gal. |
| 5. Was the system effluent flow below the SPDES limit of 1,023,000 gpd: | Yes, (see Graph 1) |
| 6. Mass of VOCs recovered during the reporting period: | <0.01 pound (see Graph 2) |
| 7. Cumulative mass of VOCs recovered since startup on 12/17/02:
(calculations can be provided upon request) | 230.0 pounds |
| 8. Effluent VOC vapor concentration for the reporting period: | 0.14 mg/m ³ (see Table 4) |
| 9. Was the effluent VOC vapor emission rate below 0.022 lbs./hr.:
(calculations can be provided upon request) | yes (0.00170 lbs./hr.) |



PUMP AND TREAT SYSTEM STATUS SUMMARY

The treatment system and RW-2 operated throughout the period. 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.

In addition to the standard operations activities, on April 16, 2020, the treatment system transfer pumps were inspected. Deficiencies identified during the inspection did not interrupt operation of the treatment system and will be addressed in early May. The results of the inspection and remaining O&M activities for April 2020 are included in Table 1.

SUMMARY OF SAMPLING ACTIVITIES

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

- A monthly groundwater sample was collected from RW-2 on April 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. The laboratory analytical report 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 May 2020 include:

- Repair transfer pumps TP1A and TP1B; 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\April\Draft Status Report - Apr 2020.docx

TABLES

TABLE 1

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

**MAINTENANCE LOG
(April 1, 2020 through April 30, 2020)**

Date	Time	System Changes/Modifications	Personnel
4/2/20		System running normally upon arrival. Noticed unusual vibration from transfer pump 1A (TP1A). Contacted pump contractor to evaluate the transfer pumps on 4/16/20.	SP
		The unit heater above the personnel entrance stopped working. Will schedule a contractor to evaluate this issue. The contractor indicates they will evaluate in June because of COVID-19 concerns.	SP
4/14/20	8:25 AM	Power Failure Alarm; however, the system remained operational.	
4/16/20	9:30 AM	Reset the alarm, rebooted the computer and restarted the system.	SP
		Changed the multi-bag filter bags (400 um) in Banks 1 and 2, seven of eight housings used. Banks 1 and 2 left open. Bank 3 closed. Left System running normally.	SP
		Evaluation of pumps revealed the couplings on TP1A and TP1B need to be replaced. TP1A is in worse condition than TP1B and D&D indicates not to run TP1A until it is repaired. Switched operation to transfer pump TP1B. A slight weep of oil was detected from TP2A but D&D indicates that this is not a concern right now. They did not recommend any follow-up work for TP2A at this time. TP2B has no issues at this time. The coupling replacement work for TP1A and TP1B is scheduled for May 7, 2020.	SP, D&D

Notes:

SP
D&D

Scott Philbrick, WSP USA
D&D Electric (Pump Contractor)

T

H:\NABIS\2020\Monthly Rpts\April\Table 1 Maintenance Record Apr 2020.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	---	---
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
2-Apr-20	7.0	161	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

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

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 April 16, 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.

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	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<0.5	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<0.5	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<0.5	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<0.5	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<0.5	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<0.5	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<0.5	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<0.5	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<0.5	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<0.5	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<0.5	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<0.5	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Apr-20	0.230	0.230 Q	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<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.

TABLE 4

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

Carbon Unit System Air Quality Results																	
Precarbon	Sample Name	Date	Time	Parameters (mg/m ³)													TOTAL VOCs
				PCE	TCE	TCA	DCA	cis-DCE	trans-DCE	Toluene	m&p-Xylenes	o-Xylene	CF	MC	EB	Freon 113	
AQ011519:1300NP4-1	1/15/2019	13:00	0.0260	0.0110	0.0016	ND	0.0096	ND	0.0015	ND	ND	0.0019	0.0027	ND	0.0012	0.08	
AQ041619:1300NP4-1	4/16/2019	13:00	0.0056	0.0047	0.0011	ND	0.0010	ND	ND	ND	ND	0.0047	0.0008	ND	ND	0.03	
AQ071919:1055NP4-1	7/19/2019	10:55	0.0290	0.0074	ND	ND	0.0006	ND	0.0079	0.0050	0.0017	0.0017	0.0420	0.0019	ND	0.17	
AQ101519:0812NP4-1	10/15/2019	8:12	ND	ND	ND	ND	ND	ND	0.0390	0.0041	0.0014	ND	ND	0.0013	ND	0.09	
AQ012120NP4-1	1/21/2020	0.0290	0.0036	0.0085	ND	0.0022	ND	ND	0.0009	ND	ND	0.0015	0.0011	ND	ND	1.09	
AQ041620:930NP4-1	4/16/2020	9:30	ND	ND	ND	ND	ND	ND	0.0006	ND	ND	ND	ND	ND	ND	0.04	

Postcarbon																	
Postcarbon	Sample Name	Date	Time	Parameters (mg/m ³)													TOTAL VOCs
				PCE	TCE	TCA	DCA	cis-DCE	trans-DCE	Toluene	m&p-Xylenes	o-Xylene	CF	MC	EB	Freon 113	
AQ011519:1305NP4-3	1/15/2019	13:05	ND	ND	0.0008	ND	0.0015	ND	0.0009	0.0016	ND	ND	0.0100	ND	ND	0.02	
AQ041619:1305:NP4-3	4/16/2019	13:05	0.0031	ND	0.0009	ND	0.0030	ND	0.0210	0.0120	0.0047	0.0011	0.0045	0.0035	ND	0.10	
AQ071919:1100NP4-3	7/19/2019	11:00	ND	ND	ND	ND	0.0011	ND	0.0032	0.0013	0.0006	ND	0.0037	ND	ND	0.05	
AQ101519:0814NP4-3	10/15/2019	8:14	ND	ND	0.0013	ND	0.0029	ND	0.0420	0.0120	0.0040	0.0009	0.0036	0.0040	0.0013	0.13	
AQ012120NP4-3	1/21/2020	ND	ND	ND	ND	ND	0.0012	ND	ND	ND	ND	ND	0.0027	ND	ND	0.07	
AQ041620:940NP4-3	4/16/2020	9:40	0.0021	0.00024	ND	ND	0.0014	ND	0.0050	0.0035	0.0009	ND	ND	0.0011	ND	0.14	

PCE: Tetrachloroethylene

DCA: 1,1-Dichloroethane

MC: Methylene Chloride

TCE: Trichloroethene

cis-DCE: cis-1,2-Dichloroethene

EB: Ethylbenzene

TCA: 1,1,1-Trichloroethane

trans-DCE: trans-1,2-Dichloroethylene

DCE: 1,1-Dichloroethylene

CF: Chloroform

Notes: NA - Not Applicable.

NS - Not Sampled

ND - Not Detected

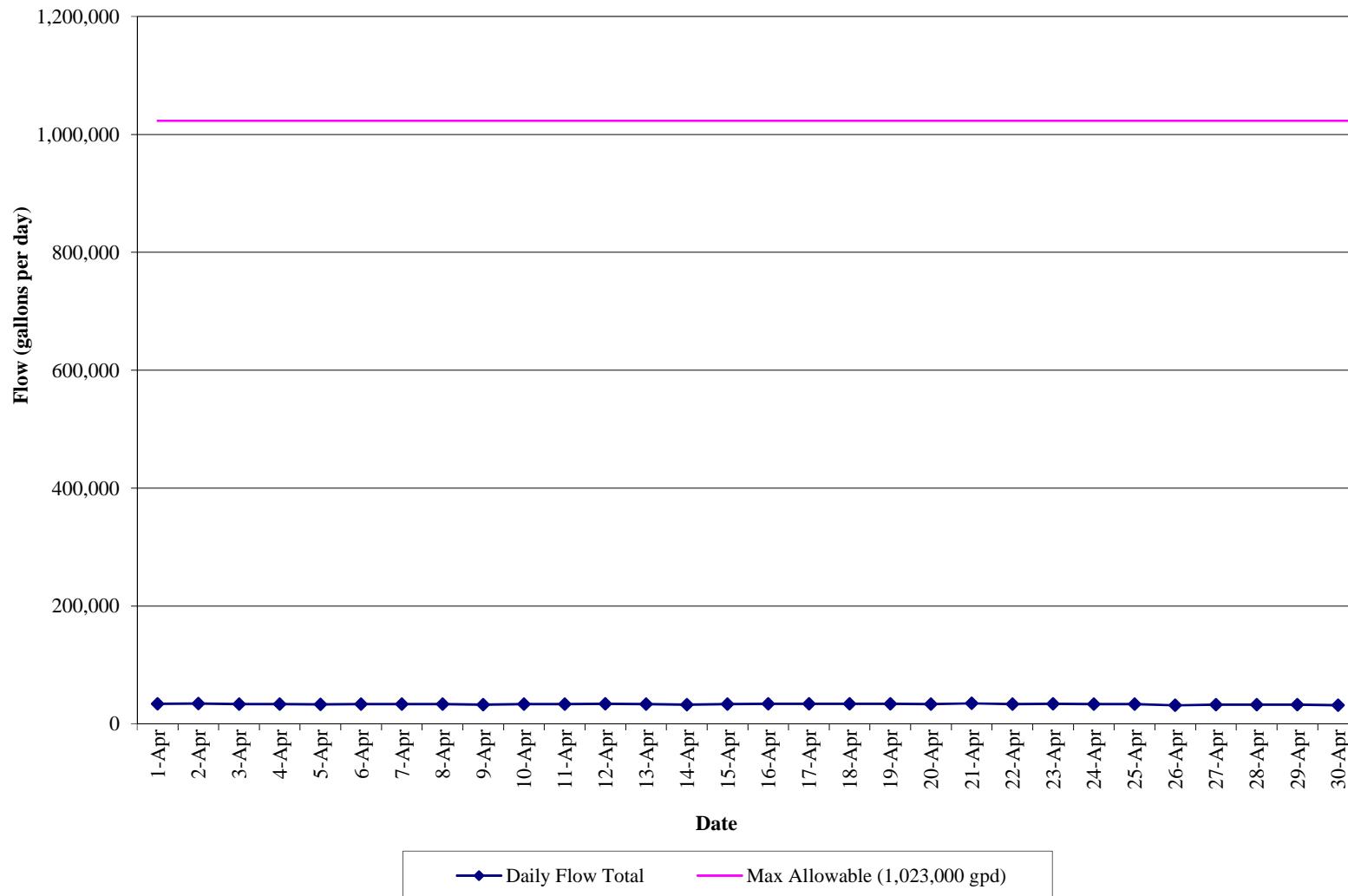
B - Method blank contamination, the associated method blank contains the target analyte at a reportable level.

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

GRAPHS

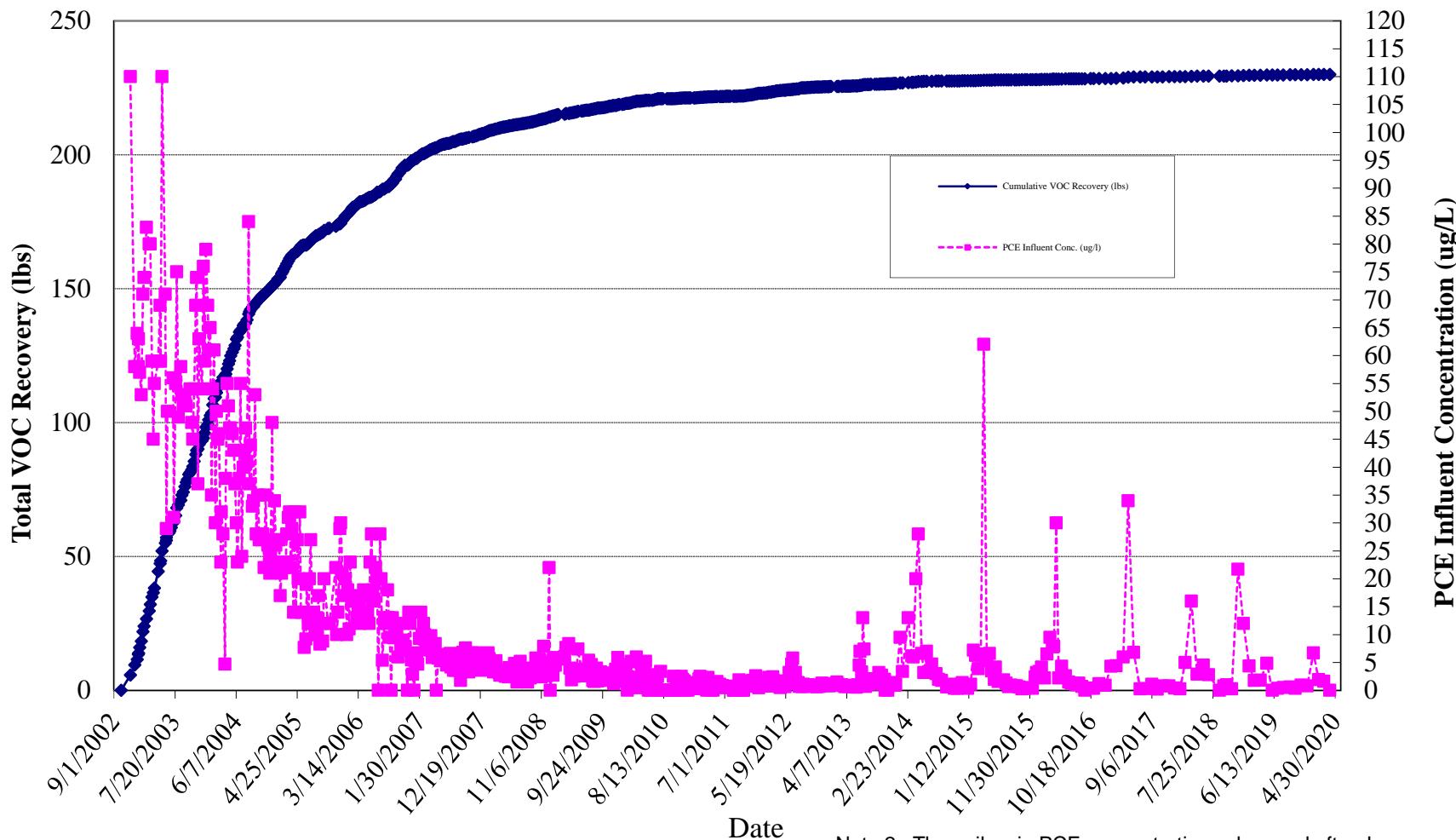
GRAPH 1
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

Effluent Flow Data
(April 1, 2020 to April 30, 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

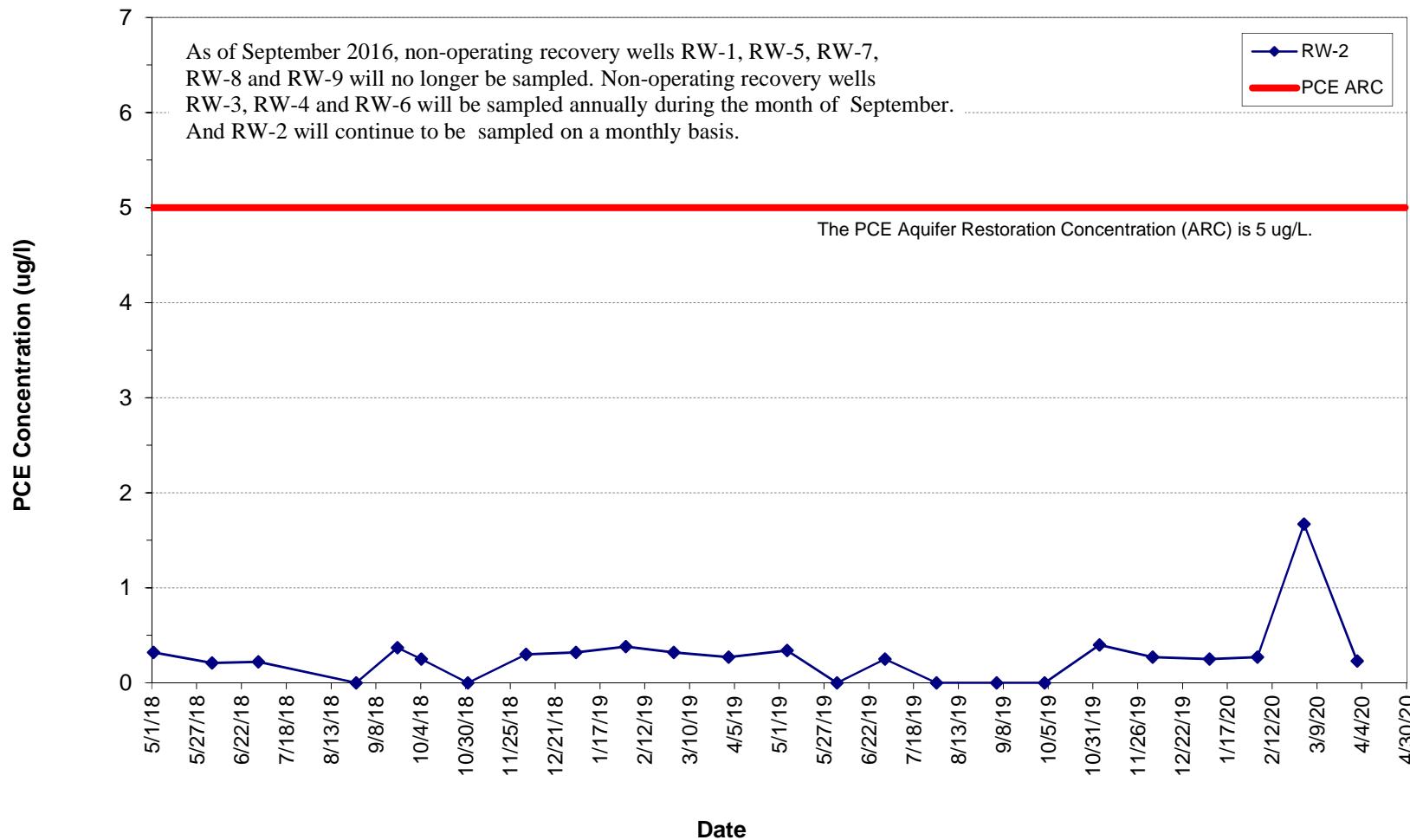


Note 1 : After September 22, 2008, the water recovered from the FP&T System is included in the results shown in this graph.

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
APRIL 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: 04/09/2020

Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20D0107

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: 04/09/2020
Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20D0107

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 April 03, 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>
20D0107-01	WQ040220:1015 NP2-10	Water	04/02/2020	04/03/2020
20D0107-02	WQ040220:1020 NP2-6	Water	04/02/2020	04/03/2020

General Notes for York Project (SDG) No.: 20D0107

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: 04/09/2020





Sample Information

Client Sample ID: WQ040220:1015 NP2-10

York Sample ID: 20D0107-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20D0107	31401451.000 Task 01.00 Rowe Industries	Water	April 2, 2020 10:15 am	04/03/2020

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	04/08/2020 10:36	04/08/2020 18:59	TMP
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	04/08/2020 10:36	04/08/2020 18:59	TMP
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	04/08/2020 10:36	04/08/2020 18:59	TMP
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	04/08/2020 10:36	04/08/2020 18:59	TMP
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	04/08/2020 10:36	04/08/2020 18:59	TMP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	04/08/2020 10:36	04/08/2020 18:59	TMP
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
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	04/08/2020 10:36	04/08/2020 18:59	TMP
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	04/08/2020 10:36	04/08/2020 18:59	TMP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
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	04/08/2020 10:36	04/08/2020 18:59	TMP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP



Sample Information

Client Sample ID: WQ040220:1015 NP2-10

York Sample ID: 20D0107-01

York Project (SDG) No.

20D0107

Client Project ID

31401451.000 Task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

April 2, 2020 10:15 am

Date Received

04/03/2020

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	04/08/2020 10:36	04/08/2020 18:59	TMP
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
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	04/08/2020 10:36	04/08/2020 18:59	TMP
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	04/08/2020 10:36	04/08/2020 18:59	TMP
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP



Sample Information

Client Sample ID: WQ040220:1015 NP2-10

York Sample ID: 20D0107-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0107	31401451.000 Task 01.00 Rowe Industries	Water	April 2, 2020 10:15 am	04/03/2020

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	04/08/2020 10:36	04/08/2020 18:59	TMP
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
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	04/08/2020 10:36	04/08/2020 18:59	TMP
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	04/08/2020 10:36	04/08/2020 18:59	TMP
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:59	TMP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	04/08/2020 10:36	04/08/2020 18:59	TMP

Surrogate Recoveries

	<u>Result</u>	<u>Acceptance Range</u>
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	97.1 %
2037-26-5	Surrogate: SURR: Toluene-d8	94.5 %
460-00-4	Surrogate: SURR: p-Bromoformobenzene	88.5 %

Total Dissolved Solids

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: WQ040220:1015 NP2-10

York Sample ID: 20D0107-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20D0107	31401451.000 Task 01.00 Rowe Industries	Water	April 2, 2020 10:15 am	04/03/2020

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	161		mg/L	10.0	1	SM 2540C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	04/06/2020 18:13	04/06/2020 18:13	AA

Sample Information

Client Sample ID: WQ040220:1020 NP2-6

York Sample ID: 20D0107-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20D0107	31401451.000 Task 01.00 Rowe Industries	Water	April 2, 2020 10:20 am	04/03/2020

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
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	04/08/2020 10:36	04/08/2020 19:26	TMP
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	04/08/2020 10:36	04/08/2020 19:26	TMP
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	04/08/2020 10:36	04/08/2020 19:26	TMP
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	04/08/2020 10:36	04/08/2020 19:26	TMP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	04/08/2020 10:36	04/08/2020 19:26	TMP
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
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	04/08/2020 10:36	04/08/2020 19:26	TMP
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	04/08/2020 10:36	04/08/2020 19:26	TMP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP



Sample Information

Client Sample ID: WQ040220:1020 NP2-6

York Sample ID: 20D0107-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20D0107	31401451.000 Task 01.00 Rowe Industries	Water	April 2, 2020 10:20 am	04/03/2020

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
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
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	04/08/2020 10:36	04/08/2020 19:26	TMP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
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	04/08/2020 10:36	04/08/2020 19:26	TMP



Sample Information

Client Sample ID: WQ040220:1020 NP2-6

York Sample ID: 20D0107-02

York Project (SDG) No.

20D0107

Client Project ID

31401451.000 Task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

April 2, 2020 10:20 am

Date Received

04/03/2020

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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	04/08/2020 10:36	04/08/2020 19:26	TMP
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
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	04/08/2020 10:36	04/08/2020 19:26	TMP
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
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	04/08/2020 10:36	04/08/2020 19:26	TMP
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	04/08/2020 10:36	04/08/2020 19:26	TMP
79-01-6	Trichloroethylene	0.200	QL-02	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP



Sample Information

Client Sample ID: WQ040220:1020 NP2-6

York Sample ID: 20D0107-02

York Project (SDG) No.

20D0107

Client Project ID

31401451.000 Task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

April 2, 2020 10:20 am

Date Received

04/03/2020

Volatile Organics, 8260 List - Low Level

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 19:26	TMP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	04/08/2020 10:36	04/08/2020 19:26	TMP
Surrogate Recoveries											
17060-07-0	<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	95.5 %			69-130						
2037-26-5	<i>Surrogate: SURR: Toluene-d8</i>	94.9 %			81-117						
460-00-4	<i>Surrogate: SURR: p-Bromofluorobenzene</i>	89.2 %			79-122						



Analytical Batch Summary

Batch ID: BD00079

Preparation Method: EPA 5030B

Prepared By: TMP

YORK Sample ID	Client Sample ID	Preparation Date
20D0107-01	WQ040220:1015 NP2-10	04/08/20
20D0107-02	WQ040220:1020 NP2-6	04/08/20
BD00079-BLK1	Blank	04/08/20
BD00079-BS1	LCS	04/08/20
BD00079-BSD1	LCS Dup	04/08/20

Batch ID: BD00261

Preparation Method: % Solids Prep

Prepared By: AA

YORK Sample ID	Client Sample ID	Preparation Date
20D0107-01	WQ040220:1015 NP2-10	04/06/20
BD00261-BLK1	Blank	04/06/20



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 Limit	Flag
---------	--------	-----------------	-------	-------------	----------------	------	-------------	------	-----	-----------	------

Batch BD00079 - EPA 5030B

Blank (BD00079-BLK1)

Prepared & Analyzed: 04/08/2020

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 BD00079 - EPA 5030B											
Blank (BD00079-BLK1)											
Prepared & Analyzed: 04/08/2020											
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>	8.87		"	10.0		88.7	69-130				
<i>Surrogate: SURR: Toluene-d8</i>	9.48		"	10.0		94.8	81-117				
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	9.34		"	10.0		93.4	79-122				
LCS (BD00079-BS1)											
Prepared & Analyzed: 04/08/2020											
1,1,1,2-Tetrachloroethane	9.25		ug/L	10.0		92.5	82-126				
1,1,1-Trichloroethane	9.64		"	10.0		96.4	78-136				
1,1,2,2-Tetrachloroethane	8.42		"	10.0		84.2	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.7		"	10.0		107	54-165				
1,1,2-Trichloroethane	8.52		"	10.0		85.2	82-123				
1,1-Dichloroethane	9.35		"	10.0		93.5	82-129				
1,1-Dichloroethylene	9.53		"	10.0		95.3	68-138				
1,1-Dichloropropylene	9.87		"	10.0		98.7	83-133				
1,2,3-Trichlorobenzene	8.96		"	10.0		89.6	76-136				
1,2,3-Trichloropropane	9.02		"	10.0		90.2	77-128				
1,2,4-Trichlorobenzene	8.94		"	10.0		89.4	76-137				
1,2,4-Trimethylbenzene	9.08		"	10.0		90.8	82-132				
1,2-Dibromo-3-chloropropane	7.85		"	10.0		78.5	45-147				
1,2-Dibromoethane	8.48		"	10.0		84.8	83-124				
1,2-Dichlorobenzene	9.13		"	10.0		91.3	79-123				
1,2-Dichloroethane	8.55		"	10.0		85.5	73-132				
1,2-Dichloropropane	8.33		"	10.0		83.3	78-126				
1,3,5-Trimethylbenzene	9.08		"	10.0		90.8	80-131				
1,3-Dichlorobenzene	8.86		"	10.0		88.6	86-122				
1,3-Dichloropropane	8.58		"	10.0		85.8	81-125				
1,4-Dichlorobenzene	9.15		"	10.0		91.5	85-124				
2,2-Dichloropropane	9.69		"	10.0		96.9	56-150				
2-Chlorotoluene	8.73		"	10.0		87.3	79-130				
2-Hexanone	7.25		"	10.0		72.5	51-146				
4-Chlorotoluene	8.64		"	10.0		86.4	79-128				
Acetone	8.24		"	10.0		82.4	14-150				
Benzene	10.2		"	10.0		102	85-126				
Bromobenzene	8.50		"	10.0		85.0	78-129				
Bromo(chloromethane	8.87		"	10.0		88.7	77-128				
Bromodichloromethane	8.25		"	10.0		82.5	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 BD00079 - EPA 5030B											
LCS (BD00079-BS1)											
Prepared & Analyzed: 04/08/2020											
Bromoform	9.04		ug/L	10.0	90.4	78-133					
Bromomethane	2.14		"	10.0	21.4	43-168	Low Bias				
Carbon tetrachloride	9.48		"	10.0	94.8	77-141					
Chlorobenzene	9.11		"	10.0	91.1	88-120					
Chloroethane	10.4		"	10.0	104	65-136					
Chloroform	9.57		"	10.0	95.7	82-128					
Chloromethane	6.14		"	10.0	61.4	43-155					
cis-1,2-Dichloroethylene	9.28		"	10.0	92.8	83-129					
cis-1,3-Dichloropropylene	8.44		"	10.0	84.4	80-131					
Dibromochloromethane	8.72		"	10.0	87.2	80-130					
Dibromomethane	8.43		"	10.0	84.3	72-134					
Dichlorodifluoromethane	10.9		"	10.0	109	44-144					
Ethyl Benzene	9.25		"	10.0	92.5	80-131					
Hexachlorobutadiene	9.55		"	10.0	95.5	67-146					
Isopropylbenzene	9.00		"	10.0	90.0	76-140					
Methyl tert-butyl ether (MTBE)	9.32		"	10.0	93.2	76-135					
Methylene chloride	9.62		"	10.0	96.2	55-137					
Naphthalene	7.63		"	10.0	76.3	70-147					
n-Butylbenzene	8.94		"	10.0	89.4	79-132					
n-Propylbenzene	9.11		"	10.0	91.1	78-133					
o-Xylene	8.89		"	10.0	88.9	78-130					
p- & m- Xylenes	18.6		"	20.0	92.8	77-133					
p-Isopropyltoluene	9.37		"	10.0	93.7	81-136					
sec-Butylbenzene	9.54		"	10.0	95.4	79-137					
Styrene	9.42		"	10.0	94.2	67-132					
tert-Butylbenzene	7.82		"	10.0	78.2	77-138					
Tetrachloroethylene	9.17		"	10.0	91.7	82-131					
Toluene	9.02		"	10.0	90.2	80-127					
trans-1,2-Dichloroethylene	9.80		"	10.0	98.0	80-132					
trans-1,3-Dichloropropylene	8.21		"	10.0	82.1	78-131					
Trichloroethylene	8.79		"	10.0	87.9	82-128					
Trichlorofluoromethane	11.0		"	10.0	110	67-139					
Vinyl Chloride	9.63		"	10.0	96.3	58-145					
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	8.80		"	10.0	88.0	69-130					
<i>Surrogate: SURR: Toluene-d8</i>	9.64		"	10.0	96.4	81-117					
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	9.61		"	10.0	96.1	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 BD00079 - EPA 5030B

LCS Dup (BD00079-BSD1)	Prepared & Analyzed: 04/08/2020									
1,1,1,2-Tetrachloroethane	8.85		ug/L	10.0	88.5	82-126			4.42	30
1,1,1-Trichloroethane	9.07		"	10.0	90.7	78-136			6.09	30
1,1,2,2-Tetrachloroethane	8.10		"	10.0	81.0	76-129			3.87	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.99		"	10.0	99.9	54-165			6.58	30
1,1,2-Trichloroethane	8.41		"	10.0	84.1	82-123			1.30	30
1,1-Dichloroethane	9.01		"	10.0	90.1	82-129			3.70	30
1,1-Dichloroethylene	9.16		"	10.0	91.6	68-138			3.96	30
1,1-Dichloropropylene	9.11		"	10.0	91.1	83-133			8.01	30
1,2,3-Trichlorobenzene	9.00		"	10.0	90.0	76-136			0.445	30
1,2,3-Trichloropropane	8.74		"	10.0	87.4	77-128			3.15	30
1,2,4-Trichlorobenzene	8.79		"	10.0	87.9	76-137			1.69	30
1,2,4-Trimethylbenzene	8.47		"	10.0	84.7	82-132			6.95	30
1,2-Dibromo-3-chloropropane	7.71		"	10.0	77.1	45-147			1.80	30
1,2-Dibromoethane	8.50		"	10.0	85.0	83-124			0.236	30
1,2-Dichlorobenzene	8.82		"	10.0	88.2	79-123			3.45	30
1,2-Dichloroethane	8.44		"	10.0	84.4	73-132			1.29	30
1,2-Dichloropropane	7.98		"	10.0	79.8	78-126			4.29	30
1,3,5-Trimethylbenzene	8.42		"	10.0	84.2	80-131			7.54	30
1,3-Dichlorobenzene	8.48		"	10.0	84.8	86-122	Low Bias		4.38	30
1,3-Dichloropropane	8.40		"	10.0	84.0	81-125			2.12	30
1,4-Dichlorobenzene	8.58		"	10.0	85.8	85-124			6.43	30
2,2-Dichloropropane	9.04		"	10.0	90.4	56-150			6.94	30
2-Chlorotoluene	7.89		"	10.0	78.9	79-130	Low Bias		10.1	30
2-Hexanone	7.14		"	10.0	71.4	51-146			1.53	30
4-Chlorotoluene	7.97		"	10.0	79.7	79-128			8.07	30
Acetone	8.37		"	10.0	83.7	14-150			1.57	30
Benzene	9.74		"	10.0	97.4	85-126			4.91	30
Bromobenzene	7.88		"	10.0	78.8	78-129			7.57	30
Bromochloromethane	8.34		"	10.0	83.4	77-128			6.16	30
Bromodichloromethane	8.18		"	10.0	81.8	79-128			0.852	30
Bromoform	8.91		"	10.0	89.1	78-133			1.45	30
Bromomethane	1.94		"	10.0	19.4	43-168	Low Bias		9.80	30
Carbon tetrachloride	9.01		"	10.0	90.1	77-141			5.08	30
Chlorobenzene	8.85		"	10.0	88.5	88-120			2.90	30
Chloroethane	8.01		"	10.0	80.1	65-136			25.5	30
Chloroform	9.19		"	10.0	91.9	82-128			4.05	30
Chloromethane	4.02		"	10.0	40.2	43-155	Low Bias		41.7	30
cis-1,2-Dichloroethylene	8.76		"	10.0	87.6	83-129			5.76	30
cis-1,3-Dichloropropylene	8.38		"	10.0	83.8	80-131			0.713	30
Dibromochloromethane	8.77		"	10.0	87.7	80-130			0.572	30
Dibromomethane	8.43		"	10.0	84.3	72-134			0.00	30
Dichlorodifluoromethane	9.71		"	10.0	97.1	44-144			11.4	30
Ethyl Benzene	8.82		"	10.0	88.2	80-131			4.76	30
Hexachlorobutadiene	8.86		"	10.0	88.6	67-146			7.50	30
Isopropylbenzene	8.15		"	10.0	81.5	76-140			9.91	30
Methyl tert-butyl ether (MTBE)	9.39		"	10.0	93.9	76-135			0.748	30
Methylene chloride	9.08		"	10.0	90.8	55-137			5.78	30
Naphthalene	7.80		"	10.0	78.0	70-147			2.20	30
n-Butylbenzene	8.25		"	10.0	82.5	79-132			8.03	30
n-Propylbenzene	8.38		"	10.0	83.8	78-133			8.35	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 BD00079 - EPA 5030B											
LCS Dup (BD00079-BSD1)											
Prepared & Analyzed: 04/08/2020											
o-Xylene	8.60		ug/L	10.0	86.0	78-130			3.32	30	
p- & m- Xylenes	17.8		"	20.0	88.8	77-133			4.41	30	
p-Isopropyltoluene	8.70		"	10.0	87.0	81-136			7.42	30	
sec-Butylbenzene	8.86		"	10.0	88.6	79-137			7.39	30	
Styrene	9.22		"	10.0	92.2	67-132			2.15	30	
tert-Butylbenzene	7.17		"	10.0	71.7	77-138	Low Bias		8.67	30	
Tetrachloroethylene	8.52		"	10.0	85.2	82-131			7.35	30	
Toluene	8.74		"	10.0	87.4	80-127			3.15	30	
trans-1,2-Dichloroethylene	9.28		"	10.0	92.8	80-132			5.45	30	
trans-1,3-Dichloropropylene	7.99		"	10.0	79.9	78-131			2.72	30	
Trichloroethylene	8.16		"	10.0	81.6	82-128	Low Bias		7.43	30	
Trichlorofluoromethane	10.1		"	10.0	101	67-139			8.70	30	
Vinyl Chloride	7.51		"	10.0	75.1	58-145			24.7	30	
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	9.25		"	10.0	92.5	69-130					
<i>Surrogate: SURR: Toluene-d8</i>	9.54		"	10.0	95.4	81-117					
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	9.45		"	10.0	94.5	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 BD00261 - % Solids Prep

Blank (BD00261-BLK1)

Prepared & Analyzed: 04/06/2020

Total Dissolved Solids ND 10.0 mg/L



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
20D0107-01	WQ040220:1015 NP2-10	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
20D0107-02	WQ040220:1020 NP2-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

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

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.

 <p>York Analytical Laboratories, Inc. 120 Research Drive 132-02 89th Ave Stratford, CT 06615 Queens, NY 11418 clientservices@yorklab.com www.yorklab.com</p>		<h2 style="text-align: center;">Field Chain-of-Custody Record</h2> <p>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.</p>				YORK Project No. 2000107			
						Page 1 of 1			
YOUR Information Company: WSP USA Report To: Same Address: 4 Research Drive, Suite 204 Company: WSP USA Accounting Phone: 203-929-8555 Address: Shelton, CT 06484 Contact: Tunde Komubes-Sandor Phone: E-mail: tunde.sandor@wsp.com E-mail:		Invoice To: Company: WSP USA Accounting Address: Phone: Contact: E-mail:				YOUR Project Number 31401451.000 Task 01.00			
						Turn-Around Time RUSH - Next Day RUSH - Two Day RUSH - Three Day RUSH - Four Day Standard (5-7 Day) X			
						YOUR Project Name Rowe Industries			
						YOUR PO#: 31401451.000 Task 01.00			
<small>Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.</small> <i>Scott Philbrick</i> Samples Collected by: (print your name above and sign below) <i>Scott Philbrick</i>		Matrix Codes S - soil / solid <input checked="" type="checkbox"/> SW - groundwater DW - drinking water WW - wastewater O - Oil Other		Samples From New York X New Jersey Connecticut Pennsylvania Other		Report / EDD Type (circle selections) <input checked="" type="radio"/> Summary Report CT RCP Standard Excel EDD <input checked="" type="radio"/> QA Report CT RCP DQA/DUE EQuIS (Standard) NY ASP A Package <input checked="" type="radio"/> NY ASP B Package NJDEP Reduced Deliverables NYSDEC EQuIS NJDEP SRP HazSite NJDKQP Other		YORK Reg. Comp. Compared to the following Regulation(s): (please fill in)	
Sample Identification WQ040220:1015 NP2-K6 WQ040220:1020 NP2-K10 3/4.7.20		Sample Matrix GW GW		Date/Time Sampled 4.2.20 10:15 4.2.20 10:20		Analysis Requested VOCs 8260 full list + freon 113 VOCs 8260 full list + freon 113: TDS		Container Description 3 HCl VOA 3 HCl VOA: 1 plastic	
Comments: <i>14.7.20</i>						Preservation: (check all that apply) HCl <input checked="" type="checkbox"/> MeOH <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ZnAc <input type="checkbox"/> Ascorbic Acid <input type="checkbox"/> Other: <i>cool</i>		Special Instruction Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>	
Samples Relinquished by / Company <i>Scott Philbrick WSP</i>		Date/Time 4.2.20 14:00		Samples Received by / Company <i>WSP</i>		Date/Time 4.2.20 14:00		Samples Relinquished by / Company <i>WSP</i>	
Samples Received by / Company 		Date/Time 		Samples Received by / Company <i>WSP</i>		Date/Time 		Samples Received by / Company <i>WSP</i>	
Samples Relinquished by / Company 		Date/Time 		Samples Received by / Company 		Date/Time 		Samples Received in LAB by <i>7 gal 4/3/2020 1325</i>	
								Date/Time 1.3 Degrees C	

APPENDIX II
APRIL 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: 04/09/2020

Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20D0105

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: 04/09/2020
Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20D0105

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 April 03, 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>
20D0105-01	WQ040220:1025 NP1-1-2	Water	04/02/2020	04/03/2020

General Notes for York Project (SDG) No.: 20D0105

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: 04/09/2020





Sample Information

Client Sample ID: WQ040220:1025 NP1-1-2

York Sample ID: 20D0105-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0105	31401451.000 Task 01.00 Rowe Industries	Water	April 2, 2020 10:25 am	04/03/2020

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	04/08/2020 10:36	04/08/2020 18:33	TMP
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	04/08/2020 10:36	04/08/2020 18:33	TMP
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	04/08/2020 10:36	04/08/2020 18:33	TMP
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	04/08/2020 10:36	04/08/2020 18:33	TMP
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	04/08/2020 10:36	04/08/2020 18:33	TMP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	04/08/2020 10:36	04/08/2020 18:33	TMP
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
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	04/08/2020 10:36	04/08/2020 18:33	TMP
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	04/08/2020 10:36	04/08/2020 18:33	TMP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
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	04/08/2020 10:36	04/08/2020 18:33	TMP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP



Sample Information

Client Sample ID: WQ040220:1025 NP1-1-2

York Sample ID: 20D0105-01

York Project (SDG) No.

20D0105

Client Project ID

31401451.000 Task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

April 2, 2020 10:25 am

Date Received

04/03/2020

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	04/08/2020 10:36	04/08/2020 18:33	TMP
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
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	04/08/2020 10:36	04/08/2020 18:33	TMP
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	04/08/2020 10:36	04/08/2020 18:33	TMP
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP



Sample Information

Client Sample ID: WQ040220:1025 NP1-1-2

York Sample ID: 20D0105-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0105	31401451.000 Task 01.00 Rowe Industries	Water	April 2, 2020 10:25 am	04/03/2020

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	04/08/2020 10:36	04/08/2020 18:33	TMP
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
91-20-3	Naphthalene	1.33	CCV-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
127-18-4	Tetrachloroethylene	0.230		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
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	04/08/2020 10:36	04/08/2020 18:33	TMP
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	04/08/2020 10:36	04/08/2020 18:33	TMP
79-01-6	Trichloroethylene	0.230	QL-02	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	04/08/2020 10:36	04/08/2020 18:33	TMP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	04/08/2020 10:36	04/08/2020 18:33	TMP

Surrogate Recoveries	Result	Acceptance Range
17060-07-0 Surrogate: SURR: 1,2-Dichloroethane-d4	89.2 %	69-130
2037-26-5 Surrogate: SURR: Toluene-d8	94.4 %	81-117
460-00-4 Surrogate: SURR: p-Bromofluorobenzene	92.3 %	79-122



Analytical Batch Summary

Batch ID: BD00079

Preparation Method: EPA 5030B

Prepared By: TMP

YORK Sample ID	Client Sample ID	Preparation Date
20D0105-01	WQ040220:1025 NP1-1-2	04/08/20
BD00079-BLK1	Blank	04/08/20
BD00079-BS1	LCS	04/08/20
BD00079-BSD1	LCS Dup	04/08/20



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 BD00079 - EPA 5030B

Blank (BD00079-BLK1)

Prepared & Analyzed: 04/08/2020

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 BD00079 - EPA 5030B											
Blank (BD00079-BLK1)											
Prepared & Analyzed: 04/08/2020											
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>	8.87		"	10.0		88.7	69-130				
<i>Surrogate: SURR: Toluene-d8</i>	9.48		"	10.0		94.8	81-117				
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	9.34		"	10.0		93.4	79-122				
LCS (BD00079-BS1)											
Prepared & Analyzed: 04/08/2020											
1,1,1,2-Tetrachloroethane	9.25		ug/L	10.0		92.5	82-126				
1,1,1-Trichloroethane	9.64		"	10.0		96.4	78-136				
1,1,2,2-Tetrachloroethane	8.42		"	10.0		84.2	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.7		"	10.0		107	54-165				
1,1,2-Trichloroethane	8.52		"	10.0		85.2	82-123				
1,1-Dichloroethane	9.35		"	10.0		93.5	82-129				
1,1-Dichloroethylene	9.53		"	10.0		95.3	68-138				
1,1-Dichloropropylene	9.87		"	10.0		98.7	83-133				
1,2,3-Trichlorobenzene	8.96		"	10.0		89.6	76-136				
1,2,3-Trichloropropane	9.02		"	10.0		90.2	77-128				
1,2,4-Trichlorobenzene	8.94		"	10.0		89.4	76-137				
1,2,4-Trimethylbenzene	9.08		"	10.0		90.8	82-132				
1,2-Dibromo-3-chloropropane	7.85		"	10.0		78.5	45-147				
1,2-Dibromoethane	8.48		"	10.0		84.8	83-124				
1,2-Dichlorobenzene	9.13		"	10.0		91.3	79-123				
1,2-Dichloroethane	8.55		"	10.0		85.5	73-132				
1,2-Dichloropropane	8.33		"	10.0		83.3	78-126				
1,3,5-Trimethylbenzene	9.08		"	10.0		90.8	80-131				
1,3-Dichlorobenzene	8.86		"	10.0		88.6	86-122				
1,3-Dichloropropane	8.58		"	10.0		85.8	81-125				
1,4-Dichlorobenzene	9.15		"	10.0		91.5	85-124				
2,2-Dichloropropane	9.69		"	10.0		96.9	56-150				
2-Chlorotoluene	8.73		"	10.0		87.3	79-130				
2-Hexanone	7.25		"	10.0		72.5	51-146				
4-Chlorotoluene	8.64		"	10.0		86.4	79-128				
Acetone	8.24		"	10.0		82.4	14-150				
Benzene	10.2		"	10.0		102	85-126				
Bromobenzene	8.50		"	10.0		85.0	78-129				
Bromo(chloromethane	8.87		"	10.0		88.7	77-128				
Bromodichloromethane	8.25		"	10.0		82.5	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 BD00079 - EPA 5030B											
LCS (BD00079-BS1)											
Prepared & Analyzed: 04/08/2020											
Bromoform	9.04		ug/L	10.0	90.4	78-133					
Bromomethane	2.14		"	10.0	21.4	43-168	Low Bias				
Carbon tetrachloride	9.48		"	10.0	94.8	77-141					
Chlorobenzene	9.11		"	10.0	91.1	88-120					
Chloroethane	10.4		"	10.0	104	65-136					
Chloroform	9.57		"	10.0	95.7	82-128					
Chloromethane	6.14		"	10.0	61.4	43-155					
cis-1,2-Dichloroethylene	9.28		"	10.0	92.8	83-129					
cis-1,3-Dichloropropylene	8.44		"	10.0	84.4	80-131					
Dibromochloromethane	8.72		"	10.0	87.2	80-130					
Dibromomethane	8.43		"	10.0	84.3	72-134					
Dichlorodifluoromethane	10.9		"	10.0	109	44-144					
Ethyl Benzene	9.25		"	10.0	92.5	80-131					
Hexachlorobutadiene	9.55		"	10.0	95.5	67-146					
Isopropylbenzene	9.00		"	10.0	90.0	76-140					
Methyl tert-butyl ether (MTBE)	9.32		"	10.0	93.2	76-135					
Methylene chloride	9.62		"	10.0	96.2	55-137					
Naphthalene	7.63		"	10.0	76.3	70-147					
n-Butylbenzene	8.94		"	10.0	89.4	79-132					
n-Propylbenzene	9.11		"	10.0	91.1	78-133					
o-Xylene	8.89		"	10.0	88.9	78-130					
p- & m- Xylenes	18.6		"	20.0	92.8	77-133					
p-Isopropyltoluene	9.37		"	10.0	93.7	81-136					
sec-Butylbenzene	9.54		"	10.0	95.4	79-137					
Styrene	9.42		"	10.0	94.2	67-132					
tert-Butylbenzene	7.82		"	10.0	78.2	77-138					
Tetrachloroethylene	9.17		"	10.0	91.7	82-131					
Toluene	9.02		"	10.0	90.2	80-127					
trans-1,2-Dichloroethylene	9.80		"	10.0	98.0	80-132					
trans-1,3-Dichloropropylene	8.21		"	10.0	82.1	78-131					
Trichloroethylene	8.79		"	10.0	87.9	82-128					
Trichlorofluoromethane	11.0		"	10.0	110	67-139					
Vinyl Chloride	9.63		"	10.0	96.3	58-145					
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	8.80		"	10.0	88.0	69-130					
<i>Surrogate: SURR: Toluene-d8</i>	9.64		"	10.0	96.4	81-117					
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	9.61		"	10.0	96.1	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 BD00079 - EPA 5030B

LCS Dup (BD00079-BSD1)	Prepared & Analyzed: 04/08/2020									
1,1,1,2-Tetrachloroethane	8.85		ug/L	10.0	88.5	82-126			4.42	30
1,1,1-Trichloroethane	9.07		"	10.0	90.7	78-136			6.09	30
1,1,2,2-Tetrachloroethane	8.10		"	10.0	81.0	76-129			3.87	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.99		"	10.0	99.9	54-165			6.58	30
1,1,2-Trichloroethane	8.41		"	10.0	84.1	82-123			1.30	30
1,1-Dichloroethane	9.01		"	10.0	90.1	82-129			3.70	30
1,1-Dichloroethylene	9.16		"	10.0	91.6	68-138			3.96	30
1,1-Dichloropropylene	9.11		"	10.0	91.1	83-133			8.01	30
1,2,3-Trichlorobenzene	9.00		"	10.0	90.0	76-136			0.445	30
1,2,3-Trichloropropane	8.74		"	10.0	87.4	77-128			3.15	30
1,2,4-Trichlorobenzene	8.79		"	10.0	87.9	76-137			1.69	30
1,2,4-Trimethylbenzene	8.47		"	10.0	84.7	82-132			6.95	30
1,2-Dibromo-3-chloropropane	7.71		"	10.0	77.1	45-147			1.80	30
1,2-Dibromoethane	8.50		"	10.0	85.0	83-124			0.236	30
1,2-Dichlorobenzene	8.82		"	10.0	88.2	79-123			3.45	30
1,2-Dichloroethane	8.44		"	10.0	84.4	73-132			1.29	30
1,2-Dichloropropane	7.98		"	10.0	79.8	78-126			4.29	30
1,3,5-Trimethylbenzene	8.42		"	10.0	84.2	80-131			7.54	30
1,3-Dichlorobenzene	8.48		"	10.0	84.8	86-122	Low Bias		4.38	30
1,3-Dichloropropane	8.40		"	10.0	84.0	81-125			2.12	30
1,4-Dichlorobenzene	8.58		"	10.0	85.8	85-124			6.43	30
2,2-Dichloropropane	9.04		"	10.0	90.4	56-150			6.94	30
2-Chlorotoluene	7.89		"	10.0	78.9	79-130	Low Bias		10.1	30
2-Hexanone	7.14		"	10.0	71.4	51-146			1.53	30
4-Chlorotoluene	7.97		"	10.0	79.7	79-128			8.07	30
Acetone	8.37		"	10.0	83.7	14-150			1.57	30
Benzene	9.74		"	10.0	97.4	85-126			4.91	30
Bromobenzene	7.88		"	10.0	78.8	78-129			7.57	30
Bromochloromethane	8.34		"	10.0	83.4	77-128			6.16	30
Bromodichloromethane	8.18		"	10.0	81.8	79-128			0.852	30
Bromoform	8.91		"	10.0	89.1	78-133			1.45	30
Bromomethane	1.94		"	10.0	19.4	43-168	Low Bias		9.80	30
Carbon tetrachloride	9.01		"	10.0	90.1	77-141			5.08	30
Chlorobenzene	8.85		"	10.0	88.5	88-120			2.90	30
Chloroethane	8.01		"	10.0	80.1	65-136			25.5	30
Chloroform	9.19		"	10.0	91.9	82-128			4.05	30
Chloromethane	4.02		"	10.0	40.2	43-155	Low Bias		41.7	30
cis-1,2-Dichloroethylene	8.76		"	10.0	87.6	83-129			5.76	30
cis-1,3-Dichloropropylene	8.38		"	10.0	83.8	80-131			0.713	30
Dibromochloromethane	8.77		"	10.0	87.7	80-130			0.572	30
Dibromomethane	8.43		"	10.0	84.3	72-134			0.00	30
Dichlorodifluoromethane	9.71		"	10.0	97.1	44-144			11.4	30
Ethyl Benzene	8.82		"	10.0	88.2	80-131			4.76	30
Hexachlorobutadiene	8.86		"	10.0	88.6	67-146			7.50	30
Isopropylbenzene	8.15		"	10.0	81.5	76-140			9.91	30
Methyl tert-butyl ether (MTBE)	9.39		"	10.0	93.9	76-135			0.748	30
Methylene chloride	9.08		"	10.0	90.8	55-137			5.78	30
Naphthalene	7.80		"	10.0	78.0	70-147			2.20	30
n-Butylbenzene	8.25		"	10.0	82.5	79-132			8.03	30
n-Propylbenzene	8.38		"	10.0	83.8	78-133			8.35	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 BD00079 - EPA 5030B											
LCS Dup (BD00079-BSD1)											
Prepared & Analyzed: 04/08/2020											
o-Xylene	8.60		ug/L	10.0	86.0	78-130			3.32	30	
p- & m- Xylenes	17.8		"	20.0	88.8	77-133			4.41	30	
p-Isopropyltoluene	8.70		"	10.0	87.0	81-136			7.42	30	
sec-Butylbenzene	8.86		"	10.0	88.6	79-137			7.39	30	
Styrene	9.22		"	10.0	92.2	67-132			2.15	30	
tert-Butylbenzene	7.17		"	10.0	71.7	77-138	Low Bias		8.67	30	
Tetrachloroethylene	8.52		"	10.0	85.2	82-131			7.35	30	
Toluene	8.74		"	10.0	87.4	80-127			3.15	30	
trans-1,2-Dichloroethylene	9.28		"	10.0	92.8	80-132			5.45	30	
trans-1,3-Dichloropropylene	7.99		"	10.0	79.9	78-131			2.72	30	
Trichloroethylene	8.16		"	10.0	81.6	82-128	Low Bias		7.43	30	
Trichlorofluoromethane	10.1		"	10.0	101	67-139			8.70	30	
Vinyl Chloride	7.51		"	10.0	75.1	58-145			24.7	30	
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	9.25		"	10.0	92.5	69-130					
<i>Surrogate: SURR: Toluene-d8</i>	9.54		"	10.0	95.4	81-117					
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	9.45		"	10.0	94.5	79-122					



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
20D0105-01	WQ040220:1025 NP1-1-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

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

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

YORK Project No.

20D0105

Page 1 of 1

APPENDIX III
APRIL 2020 LABORATORY ANALYTICAL REPORT
FOR AIR SAMPLES



Technical Report

prepared for:

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

Attention: Tunde Komuves-Sandor

Report Date: 04/24/2020

Client Project ID: 31401451.000 Task 01.00 Rowe Industries

York Project (SDG) No.: 20D0480

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: 04/24/2020
Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20D0480

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 April 17, 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>
20D0480-01	NP4-1	Vapor Extraction	04/16/2020	04/17/2020
20D0480-02	NP4-3	Vapor Extraction	04/16/2020	04/17/2020

General Notes for York Project (SDG) No.: 20D0480

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: 04/24/2020





Sample Information

Client Sample ID: NP4-1

York Sample ID: 20D0480-01

York Project (SDG) No.

20D0480

Client Project ID

31401451.000 Task 01.00 Rowe Industries

Matrix

Vapor Extraction

Collection Date/Time

April 16, 2020 9:30 am

Date Received

04/17/2020

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes: TO-VAC

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.1	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.85	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.2	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.85	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.63	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.16	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.77	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.2	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.94	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.63	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.72	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.1	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.77	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	1.0	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.94	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.72	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.94	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	1.1	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
78-93-3	2-Butanone	3.2		ug/m³	0.46	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	1.3	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ



Sample Information

Client Sample ID: NP4-1

York Sample ID: 20D0480-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20D0480	31401451.000 Task 01.00 Rowe Industries	Vapor Extraction	April 16, 2020 9:30 am	04/17/2020

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes: TO-VAC

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	2.4	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.64	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
67-64-1	Acetone	14		ug/m³	0.74	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.34	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
71-43-2	Benzene	ND		ug/m³	0.50	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.81	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	1.0	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
75-25-2	Bromoform	ND		ug/m³	1.6	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.61	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.49	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
56-23-5	Carbon tetrachloride	0.49		ug/m³	0.25	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.72	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.41	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
67-66-3	Chloroform	ND		ug/m³	0.76	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
74-87-3	Chloromethane	1.0		ug/m³	0.32	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.16	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.71	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.54	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	1.3	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
75-71-8	Dichlorodifluoromethane	2.6		ug/m³	0.77	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	1.1	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.68	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.7	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ



Sample Information

Client Sample ID: NP4-1

York Sample ID: 20D0480-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0480	31401451.000 Task 01.00 Rowe Industries	Vapor Extraction	April 16, 2020 9:30 am	04/17/2020

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes: TO-VAC

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-63-0	Isopropanol	6.7		ug/m³	0.77	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
80-62-6	Methyl Methacrylate	6.2		ug/m³	0.64	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.56	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
75-09-2	Methylene chloride	ND		ug/m³	1.1	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
142-82-5	n-Heptane	ND		ug/m³	0.64	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
110-54-3	n-Hexane	ND		ug/m³	0.55	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.68	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.4	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.77	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
115-07-1	* Propylene	ND		ug/m³	0.27	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
100-42-5	Styrene	ND		ug/m³	0.67	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	1.1	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.92	1.565	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 16:41	LLJ
108-88-3	Toluene	0.59		ug/m³	0.59	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.62	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.71	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.21	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.4		ug/m³	0.88	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.55	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.68	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.20	1.565	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 16:41	LLJ
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURN: <i>p</i> -Bromo- fluorobenzene	101 %			70-130					



Sample Information

Client Sample ID: NP4-3

York Sample ID: 20D0480-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20D0480	31401451.000 Task 01.00 Rowe Industries	Vapor Extraction	April 16, 2020 9:40 am	04/17/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.0	1.484	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 17:34	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.81	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.0	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.1	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.81	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.60	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.15	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.1	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.73	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.1	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.89	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.60	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.69	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.0	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.73	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.98	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.89	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.69	1.484	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 17:34	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.89	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	1.1	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
78-93-3	2-Butanone	2.2		ug/m³	0.44	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	1.2	1.484	EPA TO-15 Certifications:	04/22/2020 16:00	04/23/2020 17:34	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	2.3	1.484	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/22/2020 16:00	04/23/2020 17:34	LLJ



Sample Information

Client Sample ID: NP4-3

York Sample ID: 20D0480-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0480	31401451.000 Task 01.00 Rowe Industries	Vapor Extraction	April 16, 2020 9:40 am	04/17/2020

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	0.79		ug/m³	0.61	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
67-64-1	Acetone	29		ug/m³	0.71	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.32	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
71-43-2	Benzene	0.62		ug/m³	0.47	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.77	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	0.99	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	1.5	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.58	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	0.46	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
56-23-5	Carbon tetrachloride	0.75		ug/m³	0.23	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.68	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.39	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
67-66-3	Chloroform	ND		ug/m³	0.72	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
74-87-3	Chloromethane	1.5		ug/m³	0.31	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	1.4		ug/m³	0.15	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.67	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
110-82-7	Cyclohexane	ND		ug/m³	0.51	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	1.3	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-71-8	Dichlorodifluoromethane	3.0		ug/m³	0.73	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
141-78-6	* Ethyl acetate	2.4		ug/m³	1.1	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:					
100-41-4	Ethyl Benzene	1.1		ug/m³	0.64	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.6	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
67-63-0	Isopropanol	60		ug/m³	0.73	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			



Sample Information

Client Sample ID: NP4-3

York Sample ID: 20D0480-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20D0480	31401451.000 Task 01.00 Rowe Industries	Vapor Extraction	April 16, 2020 9:40 am	04/17/2020

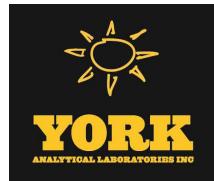
Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	26		ug/m³	0.61	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.54	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-09-2	Methylene chloride	ND		ug/m³	1.0	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
142-82-5	n-Heptane	ND		ug/m³	0.61	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
110-54-3	n-Hexane	1.0		ug/m³	0.52	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
95-47-6	o-Xylene	0.90		ug/m³	0.64	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
179601-23-1	p- & m- Xylenes	3.5		ug/m³	1.3	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.73	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:					
115-07-1	* Propylene	ND		ug/m³	0.26	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:					
100-42-5	Styrene	0.95		ug/m³	0.63	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
127-18-4	Tetrachloroethylene	2.1		ug/m³	1.0	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.88	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:					
108-88-3	Toluene	5.0		ug/m³	0.56	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.59	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.67	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
79-01-6	Trichloroethylene	0.24		ug/m³	0.20	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-69-4	Trichlorofluoromethane (Freon 11)	1.8		ug/m³	0.83	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.52	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.65	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.19	1.484	EPA TO-15	04/22/2020 16:00	04/23/2020 17:34	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURR: <i>p-Bromofluorobenzene</i>	106 %	70-130							



Analytical Batch Summary

Batch ID: BD00924

Preparation Method: EPA TO15 PREP

Prepared By: AS

YORK Sample ID	Client Sample ID	Preparation Date
20D0480-01	NP4-1	04/22/20
20D0480-02	NP4-3	04/22/20
BD00924-BLK1	Blank	04/22/20
BD00924-BS1	LCS	04/22/20



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

York Analytical Laboratories, Inc.

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

Batch BD00924 - EPA TO15 PREP

Blank (BD00924-BLK1)

Prepared & Analyzed: 04/22/2020

1,1,1,2-Tetrachloroethane	ND	0.69	ug/m³								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.099	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								
Carbon disulfide	ND	0.31	"								
Carbon tetrachloride	ND	0.16	"								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.099	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	ND	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								



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

York Analytical Laboratories, Inc.

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

Batch BD00924 - EPA TO15 PREP

Blank (BD00924-BLK1)

n-Heptane	ND	0.41	ug/m³								
n-Hexane	ND	0.35	"								
o-Xylene	ND	0.43	"								
p- & m- Xylenes	ND	0.87	"								
p-Ethyltoluene	ND	0.49	"								
Propylene	ND	0.17	"								
Styrene	ND	0.43	"								
Tetrachloroethylene	ND	0.68	"								
Tetrahydrofuran	ND	0.59	"								
Toluene	ND	0.38	"								
trans-1,2-Dichloroethylene	ND	0.40	"								
trans-1,3-Dichloropropylene	ND	0.45	"								
Trichloroethylene	ND	0.13	"								
Trichlorofluoromethane (Freon 11)	ND	0.56	"								
Vinyl acetate	ND	0.35	"								
Vinyl bromide	ND	0.44	"								
Vinyl Chloride	ND	0.13	"								
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	9.06		ppbv	10.0		90.6	70-130				

LCS (BD00924-BS1)

											Prepared & Analyzed: 04/22/2020
1,1,1,2-Tetrachloroethane	9.97		ppbv	10.0		99.7	70-130				
1,1,1-Trichloroethane	10.3		"	10.0		103	70-130				
1,1,2,2-Tetrachloroethane	10.1		"	10.0		101	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.4		"	10.0		104	70-130				
1,1,2-Trichloroethane	10.1		"	10.0		101	70-130				
1,1-Dichloroethane	10.3		"	10.0		103	70-130				
1,1-Dichloroethylene	10.4		"	10.0		104	70-130				
1,2,4-Trichlorobenzene	7.56		"	10.0		75.6	70-130				
1,2,4-Trimethylbenzene	10.3		"	10.0		103	70-130				
1,2-Dibromoethane	10.2		"	10.0		102	70-130				
1,2-Dichlorobenzene	10.9		"	10.0		109	70-130				
1,2-Dichloroethane	10.3		"	10.0		103	70-130				
1,2-Dichloropropane	9.79		"	10.0		97.9	70-130				
1,2-Dichlorotetrafluoroethane	9.98		"	10.0		99.8	70-130				
1,3,5-Trimethylbenzene	9.99		"	10.0		99.9	70-130				
1,3-Butadiene	9.37		"	10.0		93.7	70-130				
1,3-Dichlorobenzene	11.0		"	10.0		110	70-130				
1,3-Dichloropropane	9.80		"	10.0		98.0	70-130				
1,4-Dichlorobenzene	11.2		"	10.0		112	70-130				
1,4-Dioxane	9.75		"	10.0		97.5	70-130				
2-Butanone	10.2		"	10.0		102	70-130				
2-Hexanone	10.4		"	10.0		104	70-130				
3-Chloropropene	10.1		"	10.0		101	70-130				
4-Methyl-2-pentanone	10.2		"	10.0		102	70-130				
Acetone	9.56		"	10.0		95.6	70-130				
Acrylonitrile	10.6		"	10.0		106	70-130				
Benzene	10.0		"	10.0		100	70-130				
Benzyl chloride	8.82		"	10.0		88.2	70-130				
Bromodichloromethane	10.0		"	10.0		100	70-130				
Bromoform	10.6		"	10.0		106	70-130				



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD00924 - EPA TO15 PREP											
LCS (BD00924-BS1)											
Prepared & Analyzed: 04/22/2020											
Bromomethane	10.1		ppbv	10.0		101	70-130				
Carbon disulfide	10.6		"	10.0		106	70-130				
Carbon tetrachloride	10.8		"	10.0		108	70-130				
Chlorobenzene	9.87		"	10.0		98.7	70-130				
Chloroethane	10.6		"	10.0		106	70-130				
Chloroform	10.3		"	10.0		103	70-130				
Chloromethane	7.96		"	10.0		79.6	70-130				
cis-1,2-Dichloroethylene	10.4		"	10.0		104	70-130				
cis-1,3-Dichloropropylene	10.4		"	10.0		104	70-130				
Cyclohexane	10.5		"	10.0		105	70-130				
Dibromochloromethane	10.4		"	10.0		104	70-130				
Dichlorodifluoromethane	11.6		"	10.0		116	70-130				
Ethyl acetate	12.4		"	10.0		124	70-130				
Ethyl Benzene	9.38		"	10.0		93.8	70-130				
Hexachlorobutadiene	10.7		"	10.0		107	70-130				
Isopropanol	10.0		"	10.0		100	70-130				
Methyl Methacrylate	9.76		"	10.0		97.6	70-130				
Methyl tert-butyl ether (MTBE)	10.1		"	10.0		101	70-130				
Methylene chloride	9.26		"	10.0		92.6	70-130				
n-Heptane	10.2		"	10.0		102	70-130				
n-Hexane	10.5		"	10.0		105	70-130				
o-Xylene	9.62		"	10.0		96.2	70-130				
p- & m- Xylenes	19.7		"	20.0		98.4	70-130				
p-Ethyltoluene	10.4		"	10.0		104	70-130				
Propylene	9.72		"	10.0		97.2	70-130				
Styrene	10.4		"	10.0		104	70-130				
Tetrachloroethylene	7.50		"	10.0		75.0	70-130				
Tetrahydrofuran	10.4		"	10.0		104	70-130				
Toluene	9.53		"	10.0		95.3	70-130				
trans-1,2-Dichloroethylene	10.8		"	10.0		108	70-130				
trans-1,3-Dichloropropylene	10.3		"	10.0		103	70-130				
Trichloroethylene	10.2		"	10.0		102	70-130				
Trichlorofluoromethane (Freon 11)	10.0		"	10.0		100	70-130				
Vinyl acetate	8.43		"	10.0		84.3	70-130				
Vinyl bromide	10.1		"	10.0		101	70-130				
Vinyl Chloride	7.54		"	10.0		75.4	70-130				
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	9.90		"	10.0		99.0	70-130				





Sample and Data Qualifiers Relating to This Work Order

TO-VAC The final vacuum in the canister was less than -2 inches Hg vacuum. The time integrated sampling may be affected and not reflect proper sampling over the time period. The data user should take note.

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 Queens
Stratford, CT 06615 NY 11418

YORK
SMALLER & LARGER AIR CONDITIONERS

clientservices@yorklab.com
www.yorklab.com

Field Chain-of-Custody Record - AIR

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.
Signature binds you to YORK's Standard Terms & Conditions.

YORK Project No.
20D0480
20D0469

Your Page 1 of 1