



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 May 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 (FDSCA). This status report presents a summary of performance, operation and maintenance for the FSP&T system and monitoring activities for the site from May 1, 2020 through May 31, 2020. The report includes a summary of system performance parameters, system operation parameters, and analytical results for groundwater, system effluent samples and air quality results.

SUMMARY OF SYSTEM PERFORMANCE AND OPERATION

(May 1, 2020 through May 31, 2020)

- | | |
|---|---------------------------|
| 1. Hours of operation during the reporting period: | 617 hours (83%) |
| 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: | 773,298 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 |



PUMP AND TREAT SYSTEM STATUS SUMMARY

On May 7, 2020, the couplings in transfer pumps TP1A and TP1B were replaced. Both pumps were tested and are operating normally. On May 18, 2020, a water bubble was observed on the ceiling above the control panel and electrical equipment. The water bubble was caused by a leak in the roof. The roof contractor repaired the leak on May 21, 2020. The remaining O&M activities for May 2020 are included in Table 1.

SUMMARY OF SAMPLING ACTIVITIES

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

- A monthly groundwater sample was collected from RW-2 on May 7, 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 10 years.

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

FUTURE O&M ACTIVITIES

O&M activities scheduled for June 2020 include:

- RW-2 well rehabilitation;
- annual system cleaning; 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\May\Draft Status Report - May 2020.docx

TABLES

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

MAINTENANCE LOG
(May 1, 2020 through May 31, 2020)

Date	Time	System Changes/Modifications	Personnel
5/7/20		System operating normally upon arrival. The target flow rate for RW-2 was reduced from 21 gpm to 18 gpm because of iron buildup.	SP
		Replaced couplings in transfer pumps TP1A and TP1B. Added oil to the reservoirs for transfer pumps TP2A and TP2B.	SP, D&D
5/15/20	11:34 AM	Booster Blower Failure Alarm, system shuts down.	
5/18/20	8:38 AM	The drive for the booster blower was reset, the alarm was cleared, and the system was restarted without issue.	SP
		Observed water bubble on the ceiling from a leak on the roof. The water bubble was hanging over the high voltage electrical equipment and control panel. Contacted a roofing contractor to evaluate and repair the leak.	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
5/21/20		Repaired the leak in the roof and removed the water bubble from the ceiling.	JF, OCC
5/29/20	3:25 PM	Air stripper blower low pressure alarm; system shuts down.	

Notes:

SP	Scott Philbrick, WSP USA
JF	Jamie Forrester, WSP USA
D&D	D&D Electric (pump contractor)
OCC	Outer County Construction Corporation (roof contractor)

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	---	---
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
7-May-20	7.0	299	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 May 18, 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-Dichloro-ethane (ug/L)	cis-1,2-Dichloro-ethene (ug/L)	1,1-Dichloro-ethene (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	6-May-19	0.340	0.270	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	4-Jun-19	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Jul-19	0.250	0.210	ND<0.5	0.210	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	1-Aug-19	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Sep-19	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	3-Oct-19	ND<0.5	0.220	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	4-Nov-19	0.400	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	5-Dec-19	0.270	0.300	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	7-Jan-20	0.250	0.380	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	4-Feb-20	0.270 Q	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	2-Mar-20	1.67 C	0.250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	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<2	ND<0.5	ND<0.5	ND<1	ND<0.5
	7-May-20	0.240	ND<0.5	ND<0.5	0.210	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<1	ND<0.5

PCE: Tetrachloroethylene

MTBE: Methyl-tertiary-butyl-ether

TCE: Trichloroethylene

NS: Not sampled

TCA: 1,1,1-Trichloroethane

ND: Not detected

<#: Less than method detection limit

ug/L: Micrograms per liter

-: Not analyzed

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

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

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

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

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

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

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

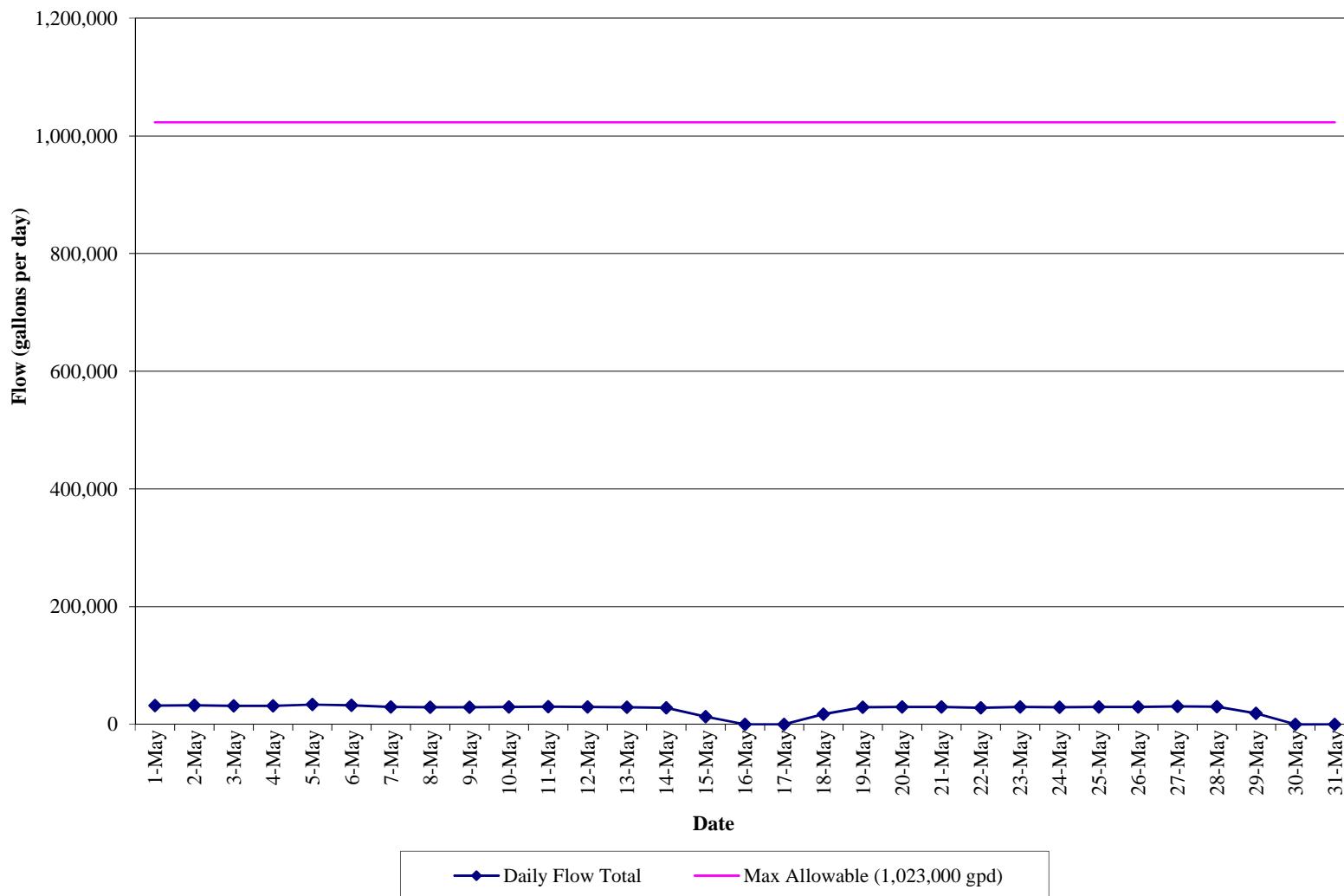
Bold values indicate an exceedance of the ARAR standard established for the site.

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

GRAPHS

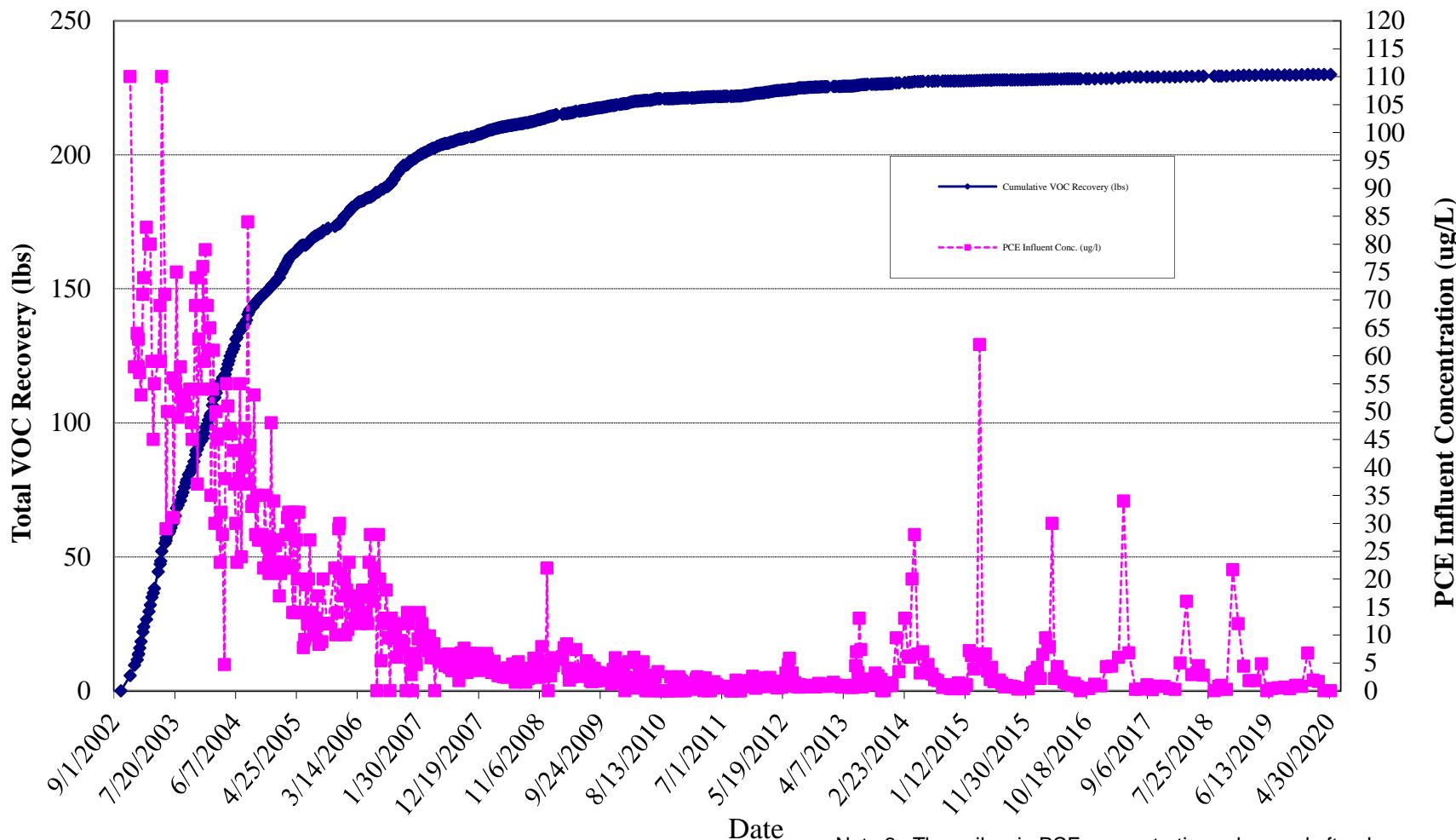
GRAPH 1
GROUNDWATER REMEDIAL ACTION
ROWE INDUSTRIES SUPERFUND SITE
SAG HARBOR, NEW YORK

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



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

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

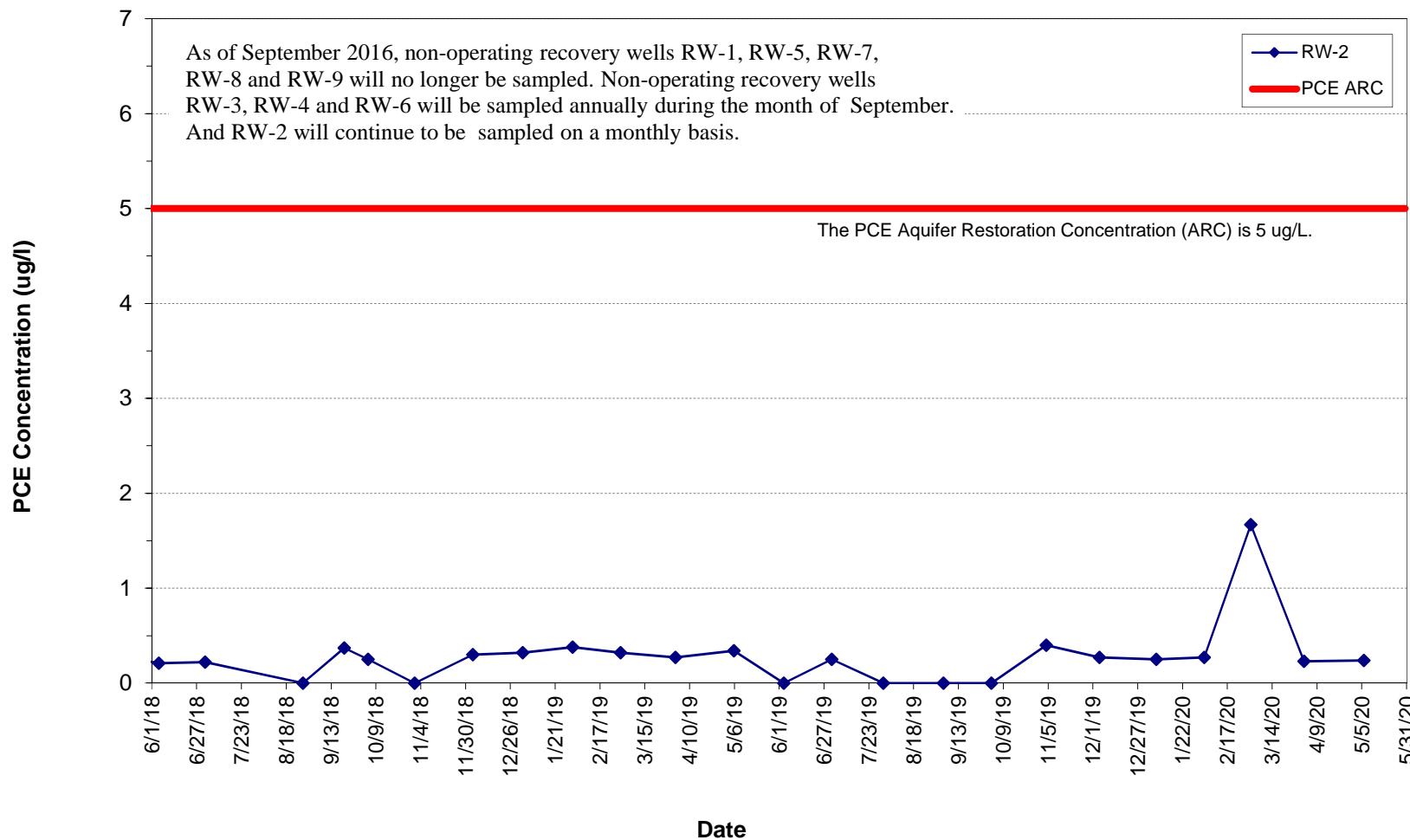


Note 1 : After September 22, 2008, the water recovered from the FP&T System is included in the results shown in this graph.

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

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

FSP&T Recovery Well PCE Concentration



APPENDIX I
MAY 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: 05/14/2020

Client Project ID: 31401451.000 Task 01.00 Rowe Industries

York Project (SDG) No.: 20E0223

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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■ 132-02 89th AVENUE
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RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 05/14/2020
Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20E0223

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 May 08, 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>
20E0223-01	WQ050720:1025 NP2-6	Water	05/07/2020	05/08/2020
20E0223-02	WQ050720:1030 NP2-10	Water	05/07/2020	05/08/2020

General Notes for York Project (SDG) No.: 20E0223

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: 05/14/2020





Sample Information

Client Sample ID: WQ050720:1025 NP2-6

York Sample ID: 20E0223-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20E0223	31401451.000 Task 01.00 Rowe Industries	Water	May 7, 2020 10:25 am	05/08/2020

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	05/11/2020 09:30	05/11/2020 13:27	RB
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	05/11/2020 09:30	05/11/2020 13:27	RB
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	05/11/2020 09:30	05/11/2020 13:27	RB
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	05/11/2020 09:30	05/11/2020 13:27	RB
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	05/11/2020 09:30	05/11/2020 13:27	RB
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	05/11/2020 09:30	05/11/2020 13:27	RB
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
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	05/11/2020 09:30	05/11/2020 13:27	RB
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	05/11/2020 09:30	05/11/2020 13:27	RB
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
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	05/11/2020 09:30	05/11/2020 13:27	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB



Sample Information

Client Sample ID: WQ050720:1025 NP2-6

York Sample ID: 20E0223-01

York Project (SDG) No.

20E0223

Client Project ID

31401451.000 Task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

May 7, 2020 10:25 am

Date Received

05/08/2020

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	05/11/2020 09:30	05/11/2020 13:27	RB
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
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	05/11/2020 09:30	05/11/2020 13:27	RB
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	05/11/2020 09:30	05/11/2020 13:27	RB
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB



Sample Information

Client Sample ID: WQ050720:1025 NP2-6

York Sample ID: 20E0223-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20E0223	31401451.000 Task 01.00 Rowe Industries	Water	May 7, 2020 10:25 am	05/08/2020

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	05/11/2020 09:30	05/11/2020 13:27	RB
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
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	05/11/2020 09:30	05/11/2020 13:27	RB
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	05/11/2020 09:30	05/11/2020 13:27	RB
79-01-6	Trichloroethylene	0.200		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:27	RB
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	05/11/2020 09:30	05/11/2020 13:27	RB
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURN: 1,2-Dichloroethane-d4	92.4 %	69-130								
2037-26-5	Surrogate: SURN: Toluene-d8	92.5 %	81-117								
460-00-4	Surrogate: SURN: p-Bromofluorobenzene	107 %	79-122								



Sample Information

Client Sample ID: WQ050720:1030 NP2-10

York Sample ID: 20E0223-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20E0223	31401451.000 Task 01.00 Rowe Industries	Water	May 7, 2020 10:30 am	05/08/2020

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	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	05/11/2020 09:30	05/11/2020 13:56	RB
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB



Sample Information

Client Sample ID: WQ050720:1030 NP2-10

York Sample ID: 20E0223-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20E0223	31401451.000 Task 01.00 Rowe Industries	Water	May 7, 2020 10:30 am	05/08/2020

Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB



Sample Information

Client Sample ID: WQ050720:1030 NP2-10

York Sample ID: 20E0223-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20E0223	31401451.000 Task 01.00 Rowe Industries	Water	May 7, 2020 10:30 am	05/08/2020

Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB
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	05/11/2020 09:30	05/11/2020 13:56	RB
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 13:56	RB
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	05/11/2020 09:30	05/11/2020 13:56	RB
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	92.9 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	93.2 %	81-117								
460-00-4	Surrogate: SURR: p-Bromoformobenzene	111 %	79-122								

Total Dissolved Solids

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: WQ050720:1030 NP2-10

York Sample ID: 20E0223-02

York Project (SDG) No.

20E0223

Client Project ID

31401451.000 Task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

May 7, 2020 10:30 am

Date Received

05/08/2020

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	299		mg/L	10.0	1	SM 2540C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/13/2020 15:34	05/14/2020 18:30	AA



Analytical Batch Summary

Batch ID: BE00379

Preparation Method: EPA 5030B

Prepared By: CLS2

YORK Sample ID	Client Sample ID	Preparation Date
20E0223-01	WQ050720:1025 NP2-6	05/11/20
20E0223-02	WQ050720:1030 NP2-10	05/11/20
BE00379-BLK1	Blank	05/11/20
BE00379-BS1	LCS	05/11/20
BE00379-BSD1	LCS Dup	05/11/20

Batch ID: BE00542

Preparation Method: % Solids Prep

Prepared By: AA

YORK Sample ID	Client Sample ID	Preparation Date
20E0223-02	WQ050720:1030 NP2-10	05/13/20
BE00542-BLK1	Blank	05/13/20
BE00542-DUP1	Duplicate	05/13/20



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
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Batch BE00379 - EPA 5030B

Blank (BE00379-BLK1)

Prepared & Analyzed: 05/11/2020

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
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Batch BE00379 - EPA 5030B

Blank (BE00379-BLK1)

Prepared & Analyzed: 05/11/2020

n-Propylbenzene	ND	0.500	ug/L								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	9.04		"	10.0		90.4		69-130			
<i>Surrogate: SURR: Toluene-d8</i>	9.44		"	10.0		94.4		81-117			
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	10.7		"	10.0		107		79-122			

LCS (BE00379-BS1)

Prepared & Analyzed: 05/11/2020

1,1,1,2-Tetrachloroethane	10.5	ug/L	10.0	105	82-126
1,1,1-Trichloroethane	12.7	"	10.0	127	78-136
1,1,2,2-Tetrachloroethane	9.72	"	10.0	97.2	76-129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	14.5	"	10.0	145	54-165
1,1,2-Trichloroethane	10.3	"	10.0	103	82-123
1,1-Dichloroethane	11.2	"	10.0	112	82-129
1,1-Dichloroethylene	12.6	"	10.0	126	68-138
1,1-Dichloropropylene	11.9	"	10.0	119	83-133
1,2,3-Trichlorobenzene	10.2	"	10.0	102	76-136
1,2,3-Trichloropropane	10.2	"	10.0	102	77-128
1,2,4-Trichlorobenzene	10.0	"	10.0	100	76-137
1,2,4-Trimethylbenzene	10.3	"	10.0	103	82-132
1,2-Dibromo-3-chloropropane	9.62	"	10.0	96.2	45-147
1,2-Dibromoethane	10.8	"	10.0	108	83-124
1,2-Dichlorobenzene	9.98	"	10.0	99.8	79-123
1,2-Dichloroethane	10.9	"	10.0	109	73-132
1,2-Dichloropropane	9.73	"	10.0	97.3	78-126
1,3,5-Trimethylbenzene	10.6	"	10.0	106	80-131
1,3-Dichlorobenzene	10.0	"	10.0	100	86-122
1,3-Dichloropropane	9.99	"	10.0	99.9	81-125
1,4-Dichlorobenzene	9.85	"	10.0	98.5	85-124
2,2-Dichloropropane	12.6	"	10.0	126	56-150
2-Chlorotoluene	9.85	"	10.0	98.5	79-130
2-Hexanone	9.66	"	10.0	96.6	51-146
4-Chlorotoluene	9.83	"	10.0	98.3	79-128
Acetone	9.87	"	10.0	98.7	14-150
Benzene	12.2	"	10.0	122	85-126
Bromobenzene	9.63	"	10.0	96.3	78-129
Bromo(chloromethane	11.1	"	10.0	111	77-128
Bromodichloromethane	10.2	"	10.0	102	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
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Batch BE00379 - EPA 5030B

LCS (BE00379-BS1)							Prepared & Analyzed: 05/11/2020				
Bromoform	10.0		ug/L	10.0	100	78-133					
Bromomethane	10.5		"	10.0	105	43-168					
Carbon tetrachloride	12.3		"	10.0	123	77-141					
Chlorobenzene	10.3		"	10.0	103	88-120					
Chloroethane	10.1		"	10.0	101	65-136					
Chloroform	11.8		"	10.0	118	82-128					
Chloromethane	11.1		"	10.0	111	43-155					
cis-1,2-Dichloroethylene	11.6		"	10.0	116	83-129					
cis-1,3-Dichloropropylene	10.3		"	10.0	103	80-131					
Dibromochloromethane	10.9		"	10.0	109	80-130					
Dibromomethane	10.2		"	10.0	102	72-134					
Dichlorodifluoromethane	15.3		"	10.0	153	44-144	High Bias				
Ethyl Benzene	10.3		"	10.0	103	80-131					
Hexachlorobutadiene	10.4		"	10.0	104	67-146					
Isopropylbenzene	10.2		"	10.0	102	76-140					
Methyl tert-butyl ether (MTBE)	12.2		"	10.0	122	76-135					
Methylene chloride	11.6		"	10.0	116	55-137					
Naphthalene	10.8		"	10.0	108	70-147					
n-Butylbenzene	9.28		"	10.0	92.8	79-132					
n-Propylbenzene	9.99		"	10.0	99.9	78-133					
o-Xylene	9.98		"	10.0	99.8	78-130					
p- & m- Xylenes	20.5		"	20.0	102	77-133					
p-Isopropyltoluene	10.6		"	10.0	106	81-136					
sec-Butylbenzene	10.9		"	10.0	109	79-137					
Styrene	10.3		"	10.0	103	67-132					
tert-Butylbenzene	10.2		"	10.0	102	77-138					
Tetrachloroethylene	9.19		"	10.0	91.9	82-131					
Toluene	10.5		"	10.0	105	80-127					
trans-1,2-Dichloroethylene	12.4		"	10.0	124	80-132					
trans-1,3-Dichloropropylene	9.83		"	10.0	98.3	78-131					
Trichloroethylene	10.8		"	10.0	108	82-128					
Trichlorofluoromethane	10.2		"	10.0	102	67-139					
Vinyl Chloride	10.3		"	10.0	103	58-145					
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	9.11		"	10.0	91.1	69-130					
<i>Surrogate: SURR: Toluene-d8</i>	9.18		"	10.0	91.8	81-117					
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	10.2		"	10.0	102	79-122					



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BE00379 - EPA 5030B

LCS Dup (BE00379-BSD1)	Prepared & Analyzed: 05/11/2020									
1,1,1,2-Tetrachloroethane	10.0		ug/L	10.0	100	82-126			4.39	30
1,1,1-Trichloroethane	12.2		"	10.0	122	78-136			4.01	30
1,1,2,2-Tetrachloroethane	9.39		"	10.0	93.9	76-129			3.45	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	14.4		"	10.0	144	54-165			1.25	30
1,1,2-Trichloroethane	10.0		"	10.0	100	82-123			2.84	30
1,1-Dichloroethane	11.0		"	10.0	110	82-129			1.79	30
1,1-Dichloroethylene	12.4		"	10.0	124	68-138			1.36	30
1,1-Dichloropropylene	11.6		"	10.0	116	83-133			2.30	30
1,2,3-Trichlorobenzene	10.1		"	10.0	101	76-136			1.48	30
1,2,3-Trichloropropane	9.99		"	10.0	99.9	77-128			2.47	30
1,2,4-Trichlorobenzene	10.2		"	10.0	102	76-137			1.58	30
1,2,4-Trimethylbenzene	9.91		"	10.0	99.1	82-132			3.47	30
1,2-Dibromo-3-chloropropane	9.81		"	10.0	98.1	45-147			1.96	30
1,2-Dibromoethane	10.7		"	10.0	107	83-124			0.835	30
1,2-Dichlorobenzene	9.67		"	10.0	96.7	79-123			3.16	30
1,2-Dichloroethane	10.8		"	10.0	108	73-132			1.57	30
1,2-Dichloropropane	9.47		"	10.0	94.7	78-126			2.71	30
1,3,5-Trimethylbenzene	10.1		"	10.0	101	80-131			5.03	30
1,3-Dichlorobenzene	9.69		"	10.0	96.9	86-122			3.45	30
1,3-Dichloropropane	9.83		"	10.0	98.3	81-125			1.61	30
1,4-Dichlorobenzene	9.40		"	10.0	94.0	85-124			4.68	30
2,2-Dichloropropane	12.1		"	10.0	121	56-150			4.22	30
2-Chlorotoluene	9.45		"	10.0	94.5	79-130			4.15	30
2-Hexanone	9.60		"	10.0	96.0	51-146			0.623	30
4-Chlorotoluene	9.54		"	10.0	95.4	79-128			2.99	30
Acetone	9.66		"	10.0	96.6	14-150			2.15	30
Benzene	12.1		"	10.0	121	85-126			0.329	30
Bromobenzene	9.38		"	10.0	93.8	78-129			2.63	30
Bromochloromethane	11.1		"	10.0	111	77-128			0.00	30
Bromodichloromethane	9.96		"	10.0	99.6	79-128			2.48	30
Bromoform	10.1		"	10.0	101	78-133			0.498	30
Bromomethane	10.6		"	10.0	106	43-168			1.24	30
Carbon tetrachloride	11.9		"	10.0	119	77-141			3.06	30
Chlorobenzene	10.1		"	10.0	101	88-120			1.77	30
Chloroethane	9.91		"	10.0	99.1	65-136			1.90	30
Chloroform	11.7		"	10.0	117	82-128			0.426	30
Chloromethane	11.1		"	10.0	111	43-155			0.180	30
cis-1,2-Dichloroethylene	11.4		"	10.0	114	83-129			1.48	30
cis-1,3-Dichloropropylene	10.1		"	10.0	101	80-131			2.65	30
Dibromochloromethane	10.7		"	10.0	107	80-130			1.66	30
Dibromomethane	10.0		"	10.0	100	72-134			1.78	30
Dichlorodifluoromethane	14.9		"	10.0	149	44-144	High Bias		2.84	30
Ethyl Benzene	9.99		"	10.0	99.9	80-131			3.06	30
Hexachlorobutadiene	9.97		"	10.0	99.7	67-146			4.32	30
Isopropylbenzene	9.79		"	10.0	97.9	76-140			3.91	30
Methyl tert-butyl ether (MTBE)	12.1		"	10.0	121	76-135			0.329	30
Methylene chloride	11.5		"	10.0	115	55-137			1.04	30
Naphthalene	10.8		"	10.0	108	70-147			0.0930	30
n-Butylbenzene	8.90		"	10.0	89.0	79-132			4.18	30
n-Propylbenzene	9.49		"	10.0	94.9	78-133			5.13	30



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BE00379 - EPA 5030B

LCS Dup (BE00379-BSD1)	Prepared & Analyzed: 05/11/2020										
o-Xylene	9.82		ug/L	10.0	98.2	78-130		1.62	30		
p- & m- Xylenes	20.0		"	20.0	99.9	77-133		2.57	30		
p-Isopropyltoluene	10.2		"	10.0	102	81-136		3.36	30		
sec-Butylbenzene	10.5		"	10.0	105	79-137		4.30	30		
Styrene	10.2		"	10.0	102	67-132		1.66	30		
tert-Butylbenzene	9.89		"	10.0	98.9	77-138		2.99	30		
Tetrachloroethylene	8.98		"	10.0	89.8	82-131		2.31	30		
Toluene	10.2		"	10.0	102	80-127		2.32	30		
trans-1,2-Dichloroethylene	12.2		"	10.0	122	80-132		1.30	30		
trans-1,3-Dichloropropylene	9.58		"	10.0	95.8	78-131		2.58	30		
Trichloroethylene	10.4		"	10.0	104	82-128		4.16	30		
Trichlorofluoromethane	9.89		"	10.0	98.9	67-139		2.59	30		
Vinyl Chloride	9.87		"	10.0	98.7	58-145		4.55	30		
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	9.08		"	10.0	90.8	69-130					
<i>Surrogate: SURR: Toluene-d8</i>	9.06		"	10.0	90.6	81-117					
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	10.1		"	10.0	101	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
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Batch BE00542 - % Solids Prep

Blank (BE00542-BLK1)

Prepared: 05/13/2020 Analyzed: 05/14/2020

Total Dissolved Solids ND 10.0 mg/L

Duplicate (BE00542-DUP1)

*Source sample: 20E0223-02 (WQ050720:1030 NP2-10)

Prepared: 05/13/2020 Analyzed: 05/14/2020

Total Dissolved Solids 300 10.0 mg/L 299

0.334 15



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
20E0223-01	WQ050720:1025 NP2-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
20E0223-02	WQ050720:1030 NP2-10	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

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

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

Definitions and Other Explanations

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

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

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

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

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

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

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

NR Not reported

RPD Relative Percent Difference

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

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

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

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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



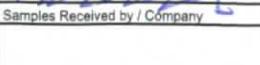
For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic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



York Analytical Laboratories, Inc.
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Field Chain-of-Custody Record

YORK Project No.
20E0223

YOUR Information		Report To:		Invoice To:		YOUR Project Number		Turn-Around Time
Company: WSP USA	Company: Same	Address: 4 Research Drive, Suite 204 Shelton, CT 06484	Address:	Address: WSP USA Accounting		31401451.000 Task 01.00	RUSH - Next Day	
Phone: 203-929-8555	Phone:					YOUR Project Name	RUSH - Two Day	
Contact: Tunde Komubes-Sandor	Contact:					Rowe Industries	RUSH - Three Day	
E-mail: tunde.sandor@wsp.com	E-mail:					YOUR PO#: 31401451.000 Task 01.00	RUSH - Four Day	
							Standard (5-7 Day)	
<i>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.</i>							X	
 Samples Collected by: (print your name above and sign below) 		Matrix Codes S - soil / solid GW - groundwater DW - drinking water WW - wastewater O - Oil Other		Samples From New York New Jersey Connecticut Pennsylvania Other	Report / EDD Type (circle selections) <input checked="" type="checkbox"/> Summary Report <input type="checkbox"/> QA Report <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package CT RCP CT RCP DQA/DUE NJDEP Reduced Deliverables NJDKQP Standard Excel EDD EQuIS (Standard) NYSDEC EQUIS NJDEP SRP HazSite Other:		YORK Reg. Comp. Compared to the following Regulation(s): (please fill in)	
Sample Identification WQ050720: 1025 NP2-6 WQ050720: 1030 NP2-10		Sample Matrix GW GW	Date/Time Sampled 5-7-20 10:25 5-7-20 10:30	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:				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  WSP		Date/Time 5-8-20 11:25	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time		
Samples Received by / Company 		Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time		
Samples Relinquished by / Company 		Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time		
					<i>TQaQ 5/8/2020 1125</i>	Temp. Received at Lab 4.7		
						Degrees C		

APPENDIX II
MAY 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: 05/12/2020

Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20E0221

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
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STRATFORD, CT 06615
(203) 325-1371

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

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 05/12/2020
Client Project ID: 31401451.000 Task 01.00 Rowe Industries
York Project (SDG) No.: 20E0221

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 May 08, 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>
20E0221-01	WQ050720:1015 NP1-1-2	Water	05/07/2020	05/08/2020

General Notes for York Project (SDG) No.: 20E0221

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: 05/12/2020





Sample Information

Client Sample ID: WQ050720:1015 NP1-1-2

York Sample ID: 20E0221-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20E0221	31401451.000 Task 01.00 Rowe Industries	Water	May 7, 2020 10:15 am	05/08/2020

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	05/11/2020 09:30	05/11/2020 12:57	RB
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	05/11/2020 09:30	05/11/2020 12:57	RB
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	05/11/2020 09:30	05/11/2020 12:57	RB
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	05/11/2020 09:30	05/11/2020 12:57	RB
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	05/11/2020 09:30	05/11/2020 12:57	RB
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	05/11/2020 09:30	05/11/2020 12:57	RB
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
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	05/11/2020 09:30	05/11/2020 12:57	RB
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	05/11/2020 09:30	05/11/2020 12:57	RB
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
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	05/11/2020 09:30	05/11/2020 12:57	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB



Sample Information

Client Sample ID: WQ050720:1015 NP1-1-2

York Sample ID: 20E0221-01

York Project (SDG) No.

20E0221

Client Project ID

31401451.000 Task 01.00 Rowe Industries

Matrix

Water

Collection Date/Time

May 7, 2020 10:15 am

Date Received

05/08/2020

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	05/11/2020 09:30	05/11/2020 12:57	RB
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
67-66-3	Chloroform	0.210		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
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	05/11/2020 09:30	05/11/2020 12:57	RB
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	05/11/2020 09:30	05/11/2020 12:57	RB
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB



Sample Information

Client Sample ID: WQ050720:1015 NP1-1-2

York Sample ID: 20E0221-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20E0221	31401451.000 Task 01.00 Rowe Industries	Water	May 7, 2020 10:15 am	05/08/2020

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	05/11/2020 09:30	05/11/2020 12:57	RB
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
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	05/11/2020 09:30	05/11/2020 12:57	RB
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	05/11/2020 09:30	05/11/2020 12:57	RB
79-01-6	Trichloroethylene	0.240		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	05/11/2020 09:30	05/11/2020 12:57	RB
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	05/11/2020 09:30	05/11/2020 12:57	RB
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURN: 1,2-Dichloroethane-d4	92.6 %	69-130								
2037-26-5	Surrogate: SURN: Toluene-d8	92.2 %	81-117								
460-00-4	Surrogate: SURN: p-Bromofluorobenzene	110 %	79-122								



Analytical Batch Summary

Batch ID: BE00379

Preparation Method: EPA 5030B

Prepared By: CLS2

YORK Sample ID	Client Sample ID	Preparation Date
20E0221-01	WQ050720:1015 NP1-1-2	05/11/20
BE00379-BLK1	Blank	05/11/20
BE00379-BS1	LCS	05/11/20
BE00379-BSD1	LCS Dup	05/11/20



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
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Batch BE00379 - EPA 5030B

Blank (BE00379-BLK1)

Prepared & Analyzed: 05/11/2020

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 BE00379 - EPA 5030B											
Blank (BE00379-BLK1)											
Prepared & Analyzed: 05/11/2020											
n-Propylbenzene	ND	0.500	ug/L								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	9.04		"	10.0		90.4	69-130				
<i>Surrogate: SURR: Toluene-d8</i>	9.44		"	10.0		94.4	81-117				
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	10.7		"	10.0		107	79-122				
LCS (BE00379-BS1)											
Prepared & Analyzed: 05/11/2020											
1,1,1,2-Tetrachloroethane	10.5		ug/L	10.0		105	82-126				
1,1,1-Trichloroethane	12.7		"	10.0		127	78-136				
1,1,2,2-Tetrachloroethane	9.72		"	10.0		97.2	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	14.5		"	10.0		145	54-165				
1,1,2-Trichloroethane	10.3		"	10.0		103	82-123				
1,1-Dichloroethane	11.2		"	10.0		112	82-129				
1,1-Dichloroethylene	12.6		"	10.0		126	68-138				
1,1-Dichloropropylene	11.9		"	10.0		119	83-133				
1,2,3-Trichlorobenzene	10.2		"	10.0		102	76-136				
1,2,3-Trichloropropane	10.2		"	10.0		102	77-128				
1,2,4-Trichlorobenzene	10.0		"	10.0		100	76-137				
1,2,4-Trimethylbenzene	10.3		"	10.0		103	82-132				
1,2-Dibromo-3-chloropropane	9.62		"	10.0		96.2	45-147				
1,2-Dibromoethane	10.8		"	10.0		108	83-124				
1,2-Dichlorobenzene	9.98		"	10.0		99.8	79-123				
1,2-Dichloroethane	10.9		"	10.0		109	73-132				
1,2-Dichloropropane	9.73		"	10.0		97.3	78-126				
1,3,5-Trimethylbenzene	10.6		"	10.0		106	80-131				
1,3-Dichlorobenzene	10.0		"	10.0		100	86-122				
1,3-Dichloropropane	9.99		"	10.0		99.9	81-125				
1,4-Dichlorobenzene	9.85		"	10.0		98.5	85-124				
2,2-Dichloropropane	12.6		"	10.0		126	56-150				
2-Chlorotoluene	9.85		"	10.0		98.5	79-130				
2-Hexanone	9.66		"	10.0		96.6	51-146				
4-Chlorotoluene	9.83		"	10.0		98.3	79-128				
Acetone	9.87		"	10.0		98.7	14-150				
Benzene	12.2		"	10.0		122	85-126				
Bromobenzene	9.63		"	10.0		96.3	78-129				
Bromo(chloromethane	11.1		"	10.0		111	77-128				
Bromodichloromethane	10.2		"	10.0		102	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
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Batch BE00379 - EPA 5030B

LCS (BE00379-BS1)	Prepared & Analyzed: 05/11/2020						
Bromoform	10.0		ug/L	10.0	100	78-133	
Bromomethane	10.5		"	10.0	105	43-168	
Carbon tetrachloride	12.3		"	10.0	123	77-141	
Chlorobenzene	10.3		"	10.0	103	88-120	
Chloroethane	10.1		"	10.0	101	65-136	
Chloroform	11.8		"	10.0	118	82-128	
Chloromethane	11.1		"	10.0	111	43-155	
cis-1,2-Dichloroethylene	11.6		"	10.0	116	83-129	
cis-1,3-Dichloropropylene	10.3		"	10.0	103	80-131	
Dibromochloromethane	10.9		"	10.0	109	80-130	
Dibromomethane	10.2		"	10.0	102	72-134	
Dichlorodifluoromethane	15.3		"	10.0	153	44-144	High Bias
Ethyl Benzene	10.3		"	10.0	103	80-131	
Hexachlorobutadiene	10.4		"	10.0	104	67-146	
Isopropylbenzene	10.2		"	10.0	102	76-140	
Methyl tert-butyl ether (MTBE)	12.2		"	10.0	122	76-135	
Methylene chloride	11.6		"	10.0	116	55-137	
Naphthalene	10.8		"	10.0	108	70-147	
n-Butylbenzene	9.28		"	10.0	92.8	79-132	
n-Propylbenzene	9.99		"	10.0	99.9	78-133	
o-Xylene	9.98		"	10.0	99.8	78-130	
p- & m- Xylenes	20.5		"	20.0	102	77-133	
p-Isopropyltoluene	10.6		"	10.0	106	81-136	
sec-Butylbenzene	10.9		"	10.0	109	79-137	
Styrene	10.3		"	10.0	103	67-132	
tert-Butylbenzene	10.2		"	10.0	102	77-138	
Tetrachloroethylene	9.19		"	10.0	91.9	82-131	
Toluene	10.5		"	10.0	105	80-127	
trans-1,2-Dichloroethylene	12.4		"	10.0	124	80-132	
trans-1,3-Dichloropropylene	9.83		"	10.0	98.3	78-131	
Trichloroethylene	10.8		"	10.0	108	82-128	
Trichlorofluoromethane	10.2		"	10.0	102	67-139	
Vinyl Chloride	10.3		"	10.0	103	58-145	
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	9.11		"	10.0	91.1	69-130	
<i>Surrogate: SURR: Toluene-d8</i>	9.18		"	10.0	91.8	81-117	
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	10.2		"	10.0	102	79-122	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BE00379 - EPA 5030B

LCS Dup (BE00379-BSD1)	Prepared & Analyzed: 05/11/2020									
1,1,1,2-Tetrachloroethane	10.0		ug/L	10.0	100	82-126			4.39	30
1,1,1-Trichloroethane	12.2		"	10.0	122	78-136			4.01	30
1,1,2,2-Tetrachloroethane	9.39		"	10.0	93.9	76-129			3.45	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	14.4		"	10.0	144	54-165			1.25	30
1,1,2-Trichloroethane	10.0		"	10.0	100	82-123			2.84	30
1,1-Dichloroethane	11.0		"	10.0	110	82-129			1.79	30
1,1-Dichloroethylene	12.4		"	10.0	124	68-138			1.36	30
1,1-Dichloropropylene	11.6		"	10.0	116	83-133			2.30	30
1,2,3-Trichlorobenzene	10.1		"	10.0	101	76-136			1.48	30
1,2,3-Trichloropropane	9.99		"	10.0	99.9	77-128			2.47	30
1,2,4-Trichlorobenzene	10.2		"	10.0	102	76-137			1.58	30
1,2,4-Trimethylbenzene	9.91		"	10.0	99.1	82-132			3.47	30
1,2-Dibromo-3-chloropropane	9.81		"	10.0	98.1	45-147			1.96	30
1,2-Dibromoethane	10.7		"	10.0	107	83-124			0.835	30
1,2-Dichlorobenzene	9.67		"	10.0	96.7	79-123			3.16	30
1,2-Dichloroethane	10.8		"	10.0	108	73-132			1.57	30
1,2-Dichloropropane	9.47		"	10.0	94.7	78-126			2.71	30
1,3,5-Trimethylbenzene	10.1		"	10.0	101	80-131			5.03	30
1,3-Dichlorobenzene	9.69		"	10.0	96.9	86-122			3.45	30
1,3-Dichloropropane	9.83		"	10.0	98.3	81-125			1.61	30
1,4-Dichlorobenzene	9.40		"	10.0	94.0	85-124			4.68	30
2,2-Dichloropropane	12.1		"	10.0	121	56-150			4.22	30
2-Chlorotoluene	9.45		"	10.0	94.5	79-130			4.15	30
2-Hexanone	9.60		"	10.0	96.0	51-146			0.623	30
4-Chlorotoluene	9.54		"	10.0	95.4	79-128			2.99	30
Acetone	9.66		"	10.0	96.6	14-150			2.15	30
Benzene	12.1		"	10.0	121	85-126			0.329	30
Bromobenzene	9.38		"	10.0	93.8	78-129			2.63	30
Bromochloromethane	11.1		"	10.0	111	77-128			0.00	30
Bromodichloromethane	9.96		"	10.0	99.6	79-128			2.48	30
Bromoform	10.1		"	10.0	101	78-133			0.498	30
Bromomethane	10.6		"	10.0	106	43-168			1.24	30
Carbon tetrachloride	11.9		"	10.0	119	77-141			3.06	30
Chlorobenzene	10.1		"	10.0	101	88-120			1.77	30
Chloroethane	9.91		"	10.0	99.1	65-136			1.90	30
Chloroform	11.7		"	10.0	117	82-128			0.426	30
Chloromethane	11.1		"	10.0	111	43-155			0.180	30
cis-1,2-Dichloroethylene	11.4		"	10.0	114	83-129			1.48	30
cis-1,3-Dichloropropylene	10.1		"	10.0	101	80-131			2.65	30
Dibromochloromethane	10.7		"	10.0	107	80-130			1.66	30
Dibromomethane	10.0		"	10.0	100	72-134			1.78	30
Dichlorodifluoromethane	14.9		"	10.0	149	44-144	High Bias		2.84	30
Ethyl Benzene	9.99		"	10.0	99.9	80-131			3.06	30
Hexachlorobutadiene	9.97		"	10.0	99.7	67-146			4.32	30
Isopropylbenzene	9.79		"	10.0	97.9	76-140			3.91	30
Methyl tert-butyl ether (MTBE)	12.1		"	10.0	121	76-135			0.329	30
Methylene chloride	11.5		"	10.0	115	55-137			1.04	30
Naphthalene	10.8		"	10.0	108	70-147			0.0930	30
n-Butylbenzene	8.90		"	10.0	89.0	79-132			4.18	30
n-Propylbenzene	9.49		"	10.0	94.9	78-133			5.13	30



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BE00379 - EPA 5030B

LCS Dup (BE00379-BSD1)	Prepared & Analyzed: 05/11/2020										
o-Xylene	9.82		ug/L	10.0	98.2	78-130		1.62	30		
p- & m- Xylenes	20.0		"	20.0	99.9	77-133		2.57	30		
p-Isopropyltoluene	10.2		"	10.0	102	81-136		3.36	30		
sec-Butylbenzene	10.5		"	10.0	105	79-137		4.30	30		
Styrene	10.2		"	10.0	102	67-132		1.66	30		
tert-Butylbenzene	9.89		"	10.0	98.9	77-138		2.99	30		
Tetrachloroethylene	8.98		"	10.0	89.8	82-131		2.31	30		
Toluene	10.2		"	10.0	102	80-127		2.32	30		
trans-1,2-Dichloroethylene	12.2		"	10.0	122	80-132		1.30	30		
trans-1,3-Dichloropropylene	9.58		"	10.0	95.8	78-131		2.58	30		
Trichloroethylene	10.4		"	10.0	104	82-128		4.16	30		
Trichlorofluoromethane	9.89		"	10.0	98.9	67-139		2.59	30		
Vinyl Chloride	9.87		"	10.0	98.7	58-145		4.55	30		
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	9.08		"	10.0	90.8	69-130					
<i>Surrogate: SURR: Toluene-d8</i>	9.06		"	10.0	90.6	81-117					
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	10.1		"	10.0	101	79-122					



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
20E0221-01	WQ050720:1015 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.



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Field Chain-of-Custody Record

YORK Project N

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