



February 19, 2020

Ms. Pamela Tames  
Superfund Remedial Project Manager  
U.S. Environmental Protection Agency, Region II  
NY/Caribbean Superfund Branch II  
Emergency & Remedial Response Division  
290 Broadway, 20th Floor  
New York, NY 10007-1688

RE:           **MARCH 2019 SEMI-ANNUAL  
GROUNDWATER QUALITY UPDATE**  
Rowe Industries Superfund Site  
Groundwater Recovery and Treatment System  
Sag Harbor, New York

Dear Ms. Tames:

WSP USA (WSP) (formerly LBG Hydrogeologic & Engineering Services, P.C. (LBGHES)) has completed the 2019 March groundwater quality monitoring event for select monitor and recovery wells at the Former Rowe Industries Superfund Site (the Site) in Sag Harbor, New York (Figures 1, 2 and 3). The purpose of the groundwater sampling is the long-term monitoring of groundwater quality at the Site. The following sections summarize a brief site history, groundwater sampling procedures, groundwater quality results, findings, conclusions and recommendations.

## SITE BACKGROUND

The site was historically used to manufacture various electrical components such as copper coils for toy slot cars. Degreasers used in the manufacturing process were disposed of in several drywells and were also stored in drums in the Former Drum Storage Area (FDSA) that eventually leaked to the ground surface. The contamination was detected in nearby drinking water wells during the mid-1980s, and the Suffolk County Department of Health investigation identified the source as the property occupied by Sag Harbor Industries (SHI). The subsequent remedial investigation identified the compounds of concern (COCs) as tetrachloroethylene (PCE), trichloroethylene (TCE) and 1,1,1-trichloroethane (TCA). A groundwater contaminant plume extended northwesterly from the FDSA for over ½-mile toward a brackish estuary named Ligonee Creek and Sag Harbor Cove.

Multiple remedial actions have been conducted at the Site including excavation, soil-vapor extraction/air sparge (SVE/AS), pump and treat and in-situ injection, resulting in the removal of over 700 lbs. of COCs from soil and groundwater.

**WSP USA**  
*Formerly*  
Leggette, Brashears & Graham  
4 Research Drive, Suite 204  
Shelton, CT 06484

T +1-203-929-8555

wsp.com



In 2000, a focused groundwater pump and treat system (FP&T) was installed to address the most impacted groundwater located on top of a shallow clay lens in the FDSA. The FP&T system includes four focus recovery wells, FRW-1 through 4; each capable of producing water at an approximate pumping rate of 1 to 6 gpm (gallons per minute). Between 2000 and 2002, a full-scale pump and treat (FSP&T) system was constructed with nine downgradient recovery wells (RW-1 thru 9), and piped to a two-story remediation building located on the SHI property. Operation of the FSP&T system commenced in December 2002. Computer modeling indicated that with continuous full operation, 99% of the plume would be removed in 11 years.

On July 13, 2005, the operation of RW-1 was discontinued with permission from the EPA after observing water-quality results below the laboratory reporting limits of 1 ug/l (micrograms per liter) for over two years. Subsequently, the RWs, with the exception of RW-2 which continues to operate today, were shut down after achieving water-quality results below Applicable or Relevant and Appropriate Requirements (ARAR) for over three consecutive years:

- RW-3 was shut down on May 21, 2012;
- RW-4 was shut down on January 1, 2014;
- RW-5 was shut down on May 23, 2012;
- RW-6 was shut down on January 1, 2014;
- RW-7 was shut down on January 1, 2014;
- RW-8 was shut down on April 30, 2012; and
- RW-9 was shut down on April 30, 2012.

In accordance with the approved Limited Shutdown Plan of May 29, 2012 (RW-3, 5, 8 and 9) and October 18, 2013 (RW-4, 6 and 7), each of the RWs that were shut down were monitored monthly for six months followed by quarterly monitoring for one year, and then followed by semi-annual monitoring for the remainder of the operation of the FSP&T system. Rebound of COC concentrations has not been observed at RW-1, RW-2, RW-3 or downgradient from these wells since the shutdown of the RWs. As of January 1, 2014, the groundwater extraction system had reduced the plume to a small area of the FDSA and removed over 229 lbs. of COCs from groundwater. Five recovery wells – FRW-1 thru 4 and RW-2 remain in operation.

Semi-annual groundwater quality samples are collected in March and September, and the annual groundwater quality samples are also collected in September of each year. The FRWs and RW-2 will continue to be monitored monthly for groundwater quality. The current well network and associated sampling frequency are presented in Table 1.



## SEMI-ANNUAL GROUNDWATER MONITORING ACTIVITIES

WSP completed semi-annual groundwater sampling on March 19, 2019, which included the collection of groundwater samples from select wells for laboratory analysis and the measurement of static and pumping groundwater elevations.

The March 2019 groundwater quality monitoring event included the collection of samples from 7 monitor wells, RW-2 and the 4 FRWs for a total of 12 wells.

### **Groundwater Level Measurements**

The depth-to-water (DTW) levels were measured with an electronic water-level indicator (e-tape); the measurements at each location being referenced to the top of casing (TOC). The groundwater elevations were calculated by subtracting the DTW measurements from the TOC elevations. The e-tape was decontaminated between use at each well using Alconox (a detergent) and deionized water (DI).

On March 1, 2019, as part of the groundwater sampling event, DTW levels were measured in select monitor and recovery wells during static conditions (with the recovery wells turned off) and these data were used to calculate the groundwater elevations (Table 2 and Figure 4).

A round of DTW levels were measured in select monitor and recovery wells during pumping conditions on March 19, 2019. These data were used to calculate groundwater elevations with RW-2 and FRW-1 thru 4 operating and to estimate the capture zones (Table 2 and Figure54).

### **Groundwater Sampling**

Water samples were collected from FRW-1, 2 and 4 and RW-2 via sample ports, which is the standard procedure during monthly groundwater quality sampling for these wells. All other groundwater samples, including FRW-3, which was inoperable at the time of the sampling event, were collected in accordance with the EPA Region 2 low-flow sampling technique guidelines.

Field parameters were monitored with a calibrated Horiba U52 meter and flow-thru cell for pH, conductivity, turbidity, dissolved oxygen (DO), temperature and oxidation reduction potential (ORP). Copies of the field sampling sheets are included in Appendix I. New tubing was used to collect the sample at each well and, due to the historical contaminants at the Site, spent tubing and personal protective equipment (PPE) were treated as hazardous waste, drummed, labeled and stored onsite for disposal at a later time. Groundwater samples were collected in laboratory-supplied vials, preserved with hydrochloric acid (HCl), stored in dedicated coolers with ice and then delivered to a NYS-certified laboratory using proper chain-of-custody (COC) procedures. The groundwater samples were analyzed for volatile organic compounds (VOCs) using EPA Method 8260. In addition, two monitor wells and 4 FRWs, were analyzed



for geochemical parameters consisting of ethene, ethane, methane, dissolved iron, nitrate, nitrite, sulfate and total organic carbon (TOC) via EPA methods 6010D, 300 and SM 5310C, as applicable.

### **Quality Assurance/Quality Control**

Groundwater samples were collected and submitted with the preservative needed and within the hold time limit under standard chain of custody procedures; with any noted exception provided in the comments for a specific laboratory report provided below. A summary of quality assurance/quality control (QA/QC) for the laboratory reports is provided below.

#### **Laboratory Report 19C0771**

The laboratory control sample (LCS) and LCS duplicate had a low bias for PCE. The low bias suggests that PCE may have a higher concentration than the reported value. The remaining QA/QC for this laboratory report did not reveal any other issues and should not impact the conclusions associated with this groundwater sampling event.

#### **Laboratory Report 19C0772**

For Quality Assurance/Quality Control (QA/QC) purposes, a blind duplicate sample labeled MW-A was collected from MW-98-05AR. The purpose of the blind duplicate sample is to evaluate the reproducibility of water quality data and to assess variability and accuracy of the laboratory methodology and operating procedures. The groundwater quality results between MW-98-05AR and MW-A were comparable for VOCs in both samples.

The laboratory control sample (LCS) and LCS duplicate had a low bias for PCE. The low bias suggests that PCE may have a higher concentration than the reported value. The remaining QA/QC for this laboratory report did not reveal any other issues and should not impact the conclusions associated with this groundwater sampling event.

Based on the evaluation of the results of the QA/QC analyses, the laboratory data are usable for their intended purpose.

### **Groundwater Level Measurements and Discussion**

The water-table elevation data from the sampling event collected during static and pumping conditions were evaluated and used to construct water-table elevation contour maps (Figures 4 and 5, respectively). As depicted by the contour maps, the interpreted groundwater flow direction at the Site is to the northwest towards Sag Harbor Cove; which is consistent with the flow direction determined during previous monitoring events. When compared to the September 2018 static groundwater elevations, the

March 2019 static groundwater elevations are approximately 0.5 feet and 3.5 feet higher. When compared to the April 2018 static groundwater elevations, the March 2019 static groundwater elevations were found to be approximately 0.5 feet to 1.5 feet higher, indicating a wetter winter and spring.

The groundwater contours were evaluated to assess the capture zones (Figure 5). The capture zone lines for the recovery wells are shown as dashed red lines. Figure 5 indicates that the operation of the FRW-1, 2, 3, and 4 wells continues to capture groundwater from the FDSA and the RW-2 capture zone continues to cover the FDSA.

### **Semi-Annual Groundwater Quality Results and Discussion**

In anticipation of upcoming remedial actions, geochemical parameters were analyzed for select wells on March 19 and June 4, 2019. The results of the analysis are provided in Table 3. Another round of geochemical parameters maybe collected prior to implementation of the upcoming remedial action.

PCE, TCA, TCE and 1,2 cis-dichloroethylene (DCE) concentrations are summarized on Tables 4, 5, 6 and 7, respectively. Laboratory analytical reports are provided in Appendix II.

PCE concentrations in the groundwater samples collected from within the FDSA and above the clay lens - MW98-01A, MW98-05AR, FRW-1, FRW-2, FRW-3 and FRW-4 - ranged from 1.02 to 38.8 ug/L. The PCE concentration measured at MW98-05B, within the FDSA and below the clay lens, was not detected above the laboratory reporting limit. PCE concentrations in wells downgradient of the FDSA, including MW98-04A, MW98-04B, MW-45A and MW-45B, were below ARARs. Figure 6 shows PCE concentrations in groundwater samples collected from the FDSA in March 2019.

Comparing the March 2019 PCE concentrations in the groundwater samples from the monitor wells and FRWs to the 2017 and 2018 events, the PCE concentrations below the clay lens and downgradient of the FDSA are consistent with previous semi-annual sampling event results, and the PCE concentrations at FRW-2, 3 and 4, MW98-01 and MW98-05-AR have been below 50 ug/L (with the exception of FRW-3 (120 ug/L) and MW98-05-AR (73 ug/L) in March 2018). Looking at the past few years of PCE results at FRW-1, there has generally been higher concentrations observed in the spring sampling event (110 ug/L in 2017 and 2018) compared to the fall sampling event (34 ug/L in 2017 and 20.2 ug/L in 2018); however, the March 2019 PCE concentration (13.8 ug/L) is much lower than previous spring sampling events.

TCE and DCE are daughter products of PCE. TCE and DCE concentrations during the March 2019 sampling event were below their respective ARARs. The continued detection of these compounds at low concentrations suggests that limited degradation of PCE is continuing in the FDSA. However, the degradation of the PCE has not been sufficient to reduce the concentrations below the ARAR.

TCA concentrations were not detected above ARARs in samples from any of the wells and, in most cases, the TCA concentrations were below laboratory reporting limits.

## CONCLUSIONS

The following conclusions are based on the results of the March 2019 groundwater quality sampling event.

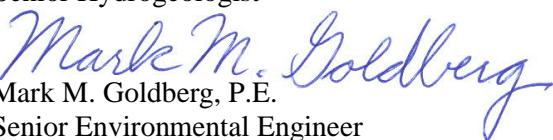
- The concentrations of COCs in the groundwater samples collected from wells located downgradient from the FDSA continue to be below ARARs; rebound of concentrations is not occurring on or downgradient of the Site.
- The concentrations of COCs in the groundwater below the clay lens in the FDSA continue to be below ARARs and generally non-detect, indicating that PCE is not present below the clay lens.
- The COC concentrations continue to persist above ARARs in the samples from wells in the FDSA above the clay lens. Concentrations were generally consistent with recent sampling events with the exception of FRW-1 where concentrations were lower than historic spring sampling results and comparable to the September 2018 results despite elevated groundwater levels. These generally low concentrations confirm that the remaining PCE is present in low-permeability features above the primary clay lens and enter groundwater through matrix diffusion transport.
- The continued detection of TCE and DCE suggests limited degradation of PCE is occurring in the FDSA. However, the degradation of the PCE has not been sufficient to reduce the concentrations below the ARAR.

If you have any questions or require additional information, please do not hesitate to contact Ms. Sandor or Mr. Goldberg directly at (475) 882-1711 or (475) 882-1708, respectively.

Kind regards,

WSP USA  


Tunde Komubes-Sandor, CPG, PG  
Senior Hydrogeologist

  
Mark M. Goldberg, P.E.  
Senior Environmental Engineer

TKS:nv

Enclosures

H:\NABIS\2019\Semi-Annual rpt\March 2019\Mar 2019 Semi-Annual report\_mm.docx



## TABLES

TABLE 1

**SUMMARY REPORT FOR SEPTEMBER 2018 GROUNDWATER SAMPLING  
FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPIKE  
SAG HARBOR, NEW YORK**

Approved Modifications to the Monitoring Program

		EPA Approved	
FSP&T System	Location	Water Level Measurements	VOC Analysis
RW-1	On SHI property in front of main buidling	semi-annual	discontinue
RW-2	On SHI property in front of the FSP&T remediation building	semi-annual	monthly
RW-3	On SHI property behind the FSP&T remediation builing	semi-annual	annual
RW-4	Sag Harbor Turnpike	semi-annual	annual
RW-5	Carroll Street	semi-annual	discontinue
RW-6	Carroll Street	semi-annual	annual
RW-7	Carroll Street	semi-annual	discontinue
RW-8	Brick Kiln Road	discontinue	discontinue
RW-9	Noyack Road	discontinue	discontinue
<b>Monitor Wells in FDSA</b>			
MW98-01A	FDSA, Hagerman property	--	--
MW98-05AR, 05BR	FDSA, Hagerman property	--	--
MW98-05A, 05B (wells decommissioned)	FDSA, Hagerman property	--	--
<b>Monitor Wells on SHI Property</b>			
MW-45A, 45B	FDSA, on SHI property along fence	--	--
MW98-04, 04B (04B is a new well)	FDSA, on SHI property in driveway on pavement	--	--
MW-58A, 58B (new well cluster)	On SHI property in southern driveway	--	--
MW-59A, 59B (new well cluster)	On SHI property , parking lot north side of building	--	--
MW-28A, 28B	On SHI property in back of main building	--	--
N-32, 32B	On SHI property, parking lot north side of building	--	--
MW-44A, 44B, 44C	On SHI property near RW-2	semi-annual	annual
MW-46A, 46B	On SHI property in woods	semi-annual	discontinue
MW-47A, 47B	On SHI property in woods	semi-annual	annual
MW-51A (well destroyed)	FDSA, on SHI property along fence	--	--
MW-52A (well destroyed)	FDSA, on SHI property along fence	semi-annual	annual
<b>Monitor Wells at Recharge Basins</b>			
MW-B1	Discharge Basin	semi-annual	annual
MW-B2	Discharge Basin	semi-annual	discontinue
MW-B3	Discharge Basin	semi-annual	discontinue
MW-B4	Discharge Basin	semi-annual	annual
<b>All Monitor Wells Downgradient of SHI Property</b>			
MW-42A, B, C (wells A & B have been destroyed)	Bay Burger (formerly Gingerbread House) parking lot,	semi-annual	annual
MW-43A, B, C	On Carroll Street near RW-6	semi-annual	annual
MW-49A, B, C	On Noyack road near RW-9	discontinue	discontinue
MW-50A, B, C	Morris Cove Road	discontinue	discontinue
MW-53	On Carroll Street between RW-5 and RW-6	semi-annual	annual
MW-54	On Carroll Street between RW-5 and RW-7	semi-annual	annual
MW-55	On Hildreth Road near corner of Brick Kiln Road	discontinue	discontinue
MW-56A, B, C	Brick Kiln Road between Carroll and Hildreth across from RW-8	discontinue	discontinue
MW-57A, B, C (A & B have been destroyed)	Brick Kiln Road south of Carroll Street, near shrubs usually under 6-inches of sand	discontinue	discontinue
<b>Department of Health Services (SCDHS) wells</b>			
N-1A, B	Noyack Road	--	--
N-2A, B	Noyack Road	--	--
N-9	Sag Harbor Turnpike at corner of Hildreth	--	--
N-16	Sag Harbor Turnpike near RW-4	--	--
N-17	Sag Harbor Turnpike near utility pole	--	--
N-37	Fabiano property front yard	--	--
N-38	Fabiano property side yard	--	--
N-39	Fabiano property back yard	--	--
<b>All Monitor Wells Upgradient of the FDSA</b>			
MW-48A, 48B	Lily Pond Road	--	--
<b>All Piezometers</b>		--	--

Notes:

NE = Not Established; N/A = Not Applicable

N/A

-- no comment by EPA interpreted as proposed change being approved by EPA

EPA did not comment on any down gradient SCDHS wells, as such, assume that the proposed discontinuation of monitoring has been approved

TABLE 2

**SUMMARY REPORT FOR SEPTEMBER 2018 SEMI-ANNUAL GROUNDWATER SAMPLING  
FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPIKE  
SAG HARBOR, NEW YORK**

**Summary of Groundwater Elevation Measurements for Monitor and Recovery Wells**

Well	4/12/18 Pumping DTW (ft btoc) <sup>1/</sup>	4/12/18 Pumping GW Elevation (ft msl) <sup>1/</sup>	4/18/18 Static DTW (ft btoc) <sup>1/</sup>	4/18/18 Static GW Elevation (ft msl) <sup>1/</sup>	9/17/18 Static DTW (ft btoc)	9/17/18 Static GW Elevation (ft msl)	10/5/18 Pumping DTW (ft btoc)	10/5/18 Pumping GW Elevation (ft msl)	3/1/19 Static DTW (ft btoc)	3/1/19 Static GW Elevation (ft msl)	3/19/19 Pumping DTW (ft btoc) <sup>2/</sup>	3/19/19 Pumping GW Elevation (ft msl) <sup>2/</sup>
MW-28A	17.11	8.79	17.00	8.90	18.81	7.09	18.56	7.34	15.77	10.13	15.75	10.15
MW-28B	17.02	8.97	16.91	9.08	18.71	7.28	18.46	7.53	15.70	10.29	15.68	10.31
MW-42B	NM	NM	16.30	6.90	16.12	7.08	NM	NM	13.90	9.30	NM	NM
MW-43A	NM	NM	17.70	5.11	18.41	4.40	NM	NM	16.92	5.89	NM	NM
MW-43B	NM	NM	17.66	5.31	18.66	4.31	NM	NM	17.30	5.67	NM	NM
MW-43C	NM	NM	17.36	5.70	18.69	4.37	NM	NM	17.30	5.76	NM	NM
MW-44A	21.72	7.72	20.85	8.59	NM, inaccessible		NM	NM	NM, inaccessible		NM, inaccessible	NM
MW-44B	21.88	7.66	20.96	8.58	22.70	6.84	22.63	6.91	19.82	9.72	19.90	9.64
MW-44C	21.93	7.83	21.14	8.62	22.87	6.89	22.80	6.96	19.98	9.78	19.96	9.80
MW-45A	18.92	8.52	18.57	8.87	20.40	7.04	20.16	7.28	17.25	10.19	17.20	10.24
MW-45B	18.99	8.64	18.40	9.23	20.23	7.40	20.08	7.55	17.09	10.54	17.02	10.61
MW-47A	6.15	8.83	6.20	8.78	8.01	6.97	7.93	7.05	NM, inaccessible		NM, inaccessible	NM
MW-47B	6.27	8.83	6.35	8.75	8.12	6.98	8.02	7.08	5.20	9.90	5.22	9.88
MW-48A	22.76	8.50	21.48	9.78	29.37	1.89	29.33	1.93	20.05	11.21	20.13	11.13
MW-48B	23.08	9.05	NM	NM	24.28	7.85	24.25	7.88	20.85	11.28	20.92	11.21
MW-53	NM	NM	19.95	4.24	19.62	4.57	NM	NM	18.08	6.11	NM	NM
MW-54	NM	NM	19.52	6.33	21.11	4.74	NM	NM	19.45	6.40	NM	NM
MW-58A	22.47	9.01	22.16	9.32	24.01	7.47	23.67	7.81	20.80	10.68	20.77	10.71
MW-58B	22.45	9.01	22.12	9.34	23.98	7.48	23.62	7.84	20.81	10.65	20.79	10.67
MW-59A	25.57	8.31	25.36	8.52	27.08	6.80	27.02	6.86	NM, inaccessible		23.96	9.92
MW-59B	25.59	8.25	25.32	8.52	27.10	6.74	27.00	6.84	NM, inaccessible		23.99	9.85
MW-98-01A	22.19	8.28	21.04	9.43	22.92	7.55	23.06	7.41	19.67	10.80	19.68	10.79
MW-98-04	19.63	8.37	18.67	9.33	20.53	7.47	20.33	7.67	17.35	10.65	17.31	10.69
MW-98-04B	19.58	8.36	18.60	9.34	20.43	7.51	20.27	7.67	17.30	10.64	17.20	10.74
MW-98-05AR	20.62	8.64	20.39	8.87	22.27	6.99	22.11	7.15	19.05	10.21	19.18	10.08
MW-98-05BR	19.67	10.09	19.96	9.80	21.82	7.94	21.74	8.02	18.65	11.11	18.57	11.19
FRW-1	24.72	6.28	21.60	9.40	23.50	7.50	25.00	6.00	20.30	10.70	20.36	10.64
FRW-2	19.81	5.74	20.19	5.36	22.08	3.47	23.01	2.54	18.86	6.69	15.72	9.83
FRW-3	22.78	6.58	20.00	9.36	21.87	7.49	22.52	6.84	18.65	10.71	18.75	10.61
FRW-4	24.22	4.51	19.51	9.22	21.32	7.41	21.86	6.87	18.11	10.62	19.56	9.17
RW-1	25.83	7.98	25.27	8.54	27.00	6.81	26.69	7.12	24.12	9.69	24.18	9.63
RW-2	25.91	0.19	17.16	8.94	19.20	6.90	25.16	0.94	16.50	9.60	16.73	9.37
RW-3	4.96	8.18	4.42	8.72	6.13	7.01	6.05	7.09	3.27	9.87	3.30	9.84
RW-4	NM	NM	12.20	6.81	NM, flooded		NM	NM	11.43	7.58	NM	NM
RW-5	NM	NM	18.90	6.43	20.17	5.16	NM	NM	18.25	7.08	NM	NM
RW-6	NM	NM	16.31	5.38	17.30	4.39	NM	NM	17.92	3.77	NM	NM
RW-7	NM	NM	13.42	4.93	14.28	4.07	NM	NM	13.16	5.19	NM	NM
MW-B1	28.44	6.56	28.00	7.00	29.83	5.17	29.79	5.21	27.32	7.68	27.26	7.74
MW-B2	30.01	7.65	30.05	7.61	Dry @ 25.2	Dry	Dry @ 25.2	Dry	29.14	8.52	28.98	8.68
MW-B3	25.16	6.46	24.49	7.13	31.78	-0.16	31.36	0.26	22.58	9.04	22.59	9.03
MW-B4	24.29	6.45	23.45	7.29	25.02	5.72	24.82	5.92	23.68	7.06	23.62	7.12
N-32	23.69	8.52	23.71	8.50	25.42	6.79	25.49	6.72	22.58	9.63	22.55	9.66
N-32B	23.75	8.51	23.71	8.55	25.42	6.84	25.49	6.77	22.58	9.68	22.57	9.69
N-37	21.56	10.01	NM	NM	24.83	6.74	24.81	6.76	22.16	9.41	22.19	9.38
N-38	22.39	9.10	NM	NM	NM	NM	25.67	5.82	22.25	9.24	22.30	9.19
N-39	20.07	7.22	NM	NM	NM	NM	23.49	3.80	17.80	9.49	17.83	9.46

<sup>1/</sup> The water level measurements for FRW-3 on March 13, 2017 and for MW98-05AR on March 27, 2017 are suspect and considered to be anomalous readings.

<sup>2/</sup> FRW-3 was inoperable due to a malfunctioning pump during the sampling event.

DTW Depth to Water

GW Groundwater

ft btoc Feet Below Top of Casing

TABLE 3

**FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPike  
SAG HARBOR, NEW YORK**

**UPDATED FDSA CHARACTERIZATION**

**Groundwater Geochemical Results - 2003-2019**

Well ID	Date Sampled	Geochemical parameters												
		Dissolved Oxygen (DO) mg/L	Oxidation Reduction Potential (ORP) (mV)	Total Iron (ug/L)	Dissolved Iron (ug/L)	Ferrous Iron (ug/L)	Sulfate as SO <sub>4</sub> (ug/L)	Sulfide (ug/L)	Nitrate as N (ug/L)	Nitrite as N (ug/L)	TOC	Methane (ug/L)	Ethane (ug/L)	Ethene (ug/L)
MW98-01A	9/15/2004	5.50	267	676	535	ND<25	10,500	ND<1	NA	NA	1,080	NA	NA	NA
	1/13/2005	0.00	149	266	45.7	ND<25	12,800	ND<1	NA	NA	1,130	NA	NA	NA
	6/19/2018	0.60	-87	2,980	3,050	1,500 <sup>1/</sup>	9,150	530	NA	NA	962 J	ND<2.20	ND<5.00	ND<5.00
	3/19/2019	NM	9	NA	2,800	NA	4,790	NA	1,330	ND<50	1,610	ND<10	ND<10	ND<10
MW98-04	8/17/2005	5.85	261	NA	NA	NA	NA	NA	NA	ND<1,000	NA	NA	NA	NA
	9/8/2005	6.88	225	159	ND<20	ND<25	14,200	ND<1,000	NA	NA	ND<1,000	NA	ND<3.00	ND<4.00
	12/8/2005	4.76	1	5,730	1,750	1,240	NA	NA	NA	Geo	5,700	ND<1.10	NA	NA
	6/19/2018	1.51	77	8,700	687	2,000 <sup>1/</sup>	12,200	ND<500	NA	NA	942 J	ND<2.20	ND<5.00	ND<5.00
MW98-05A	9/15/2004	1.51	155	404	99	ND<25	12,400	ND<1,000	NA	NA	1,660	4.9	ND<3.00	ND<4.00
	1/13/2005	NM	-81	28,000	26,400	12,800	6,300	ND<1,000	NA	NA	53,400	NA	NA	NA
MW-98-05AR	3/19/2019	NM	130	NA	ND<278	NA	12,800	12,800	2,730	ND<50	3,550	25	ND<10	ND<10
MW-98-05BR	6/19/2018	0.87	101	608	120 J	NA	16,000	ND<500	NA	NA	1,740	ND<2.20	ND<5.00	ND<5.00
FRW-1	3/14/2005	7.66	17	8,550	6,420	2,940	9,000	NA	NA	NA	11,000	NA	NA	NA
	5/17/2005	3.30	143	3,480	14,410	276	11,800	NA	NA	NA	3,300	NA	ND<3.00	ND<4.00
	6/16/2005	3.98	31	3,850	2,020	ND<25	11,600	NA	NA	NA	2,100	NA	ND<3.00	ND<4.00
	9/8/2005	7.46	-26	8,940	6,870	934	7,800	NA	NA	NA	5,380	NA	ND<3.00	ND<4.00
	12/8/2005	1.10	-23	28,140	157	49	NA	NA	NA	NA	1,800	NA	NA	NA
	8/21/2012	NA	NA	38,800	25	NA	69,300	NA	206	NA	8,940	NA	NA	NA
	9/4/2012	NA	NA	4,200	ND<10	NA	6,400	NA	210	NA	2,400	NA	NA	NA
	9/19/2012	1.62	-69	11,300	6,980	NA	6,000	NA	ND<500	NA	3,100	NA	NA	NA
	7/2/2018	NA	NA	NA	NA	NA	NA	NA	870	ND<500	NA	NA	NA	NA
	3/19/2019	NM	NA	NA	1,780	NA	14,500	NA	2,480	ND<50	2,550	37	ND<10	ND<10
	6/4/2019	6.44	139	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FRW-2	9/15/2004	6.35	-5	12,600	426	NA	5,100	NA	NA	NA	NA	NA	ND<3.00	ND<4.00
	1/13/2005	6.65	3	117,000	114,000	NA	4,700	NA	NA	NA	NA	NA	5.9	7.1
	3/14/2005	6.71	29	150,000	127,000	NA	3,500	NA	NA	NA	NA	NA	ND<3.00	ND<4.00
	5/17/2005	4.10	96	82,700	62,900	NA	7,500	NA	NA	NA	NA	NA	ND<3.00	ND<4.00
	6/16/2005	3.91	-72	72,900	53,700	NA	3,600	NA	NA	NA	NA	NA	ND<3.00	ND<4.00
	9/8/2005	0.43	-116	77,100	25,900	NA	4,900	NA	NA	NA	NA	NA	ND<3.00	ND<4.00
	12/8/2005	0.73	-10	39,600	16,600	NA	NA	NA	NA	NA	4,900	NA	NA	NA
	8/21/2012	NA	NA	26,300	ND<10	NA	3,550	NA	ND<500	NA	2,160	NA	NA	NA
	9/4/2012	NA	NA	16,500	ND<10	NA	2,740	NA	189	NA	1,560	NA	NA	NA
	9/19/2012	0.60	64	73,900	14	NA	3,460	NA	ND<500	NA	NA	NA	NA	NA
	7/2/2018	NA	NA	NA	NA	NA	NA	NA	82	ND<500	NA	NA	NA	NA
	3/19/2019	NA	NA	NA	1,460	NA	12,900	NA	1,090	ND<50	1,740	35	ND<10	ND<10
	6/4/2019	<0.1	39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 3

TABLE 3

**FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPike  
SAG HARBOR, NEW YORK**

**UPDATED FDSA CHARACTERIZATION**

**Groundwater Geochemical Results - 2003-2019**

Well ID	Date Sampled	Geochemical parameters												
		Dissolved Oxygen (DO) mg/L	Oxidation Reduction Potential (ORP) (mV)	Total Iron (ug/L)	Dissolved Iron (ug/L)	Ferrous Iron (ug/L)	Sulfate as SO <sub>4</sub> (ug/L)	Sulfide (ug/L)	Nitrate as N (ug/L)	Nitrite as N (ug/L)	TOC (ug/L)	Methane (ug/L)	Ethane (ug/L)	Ethene (ug/L)
FRW-3	9/15/2004	6.22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<3.00	ND<4.00
	3/14/2005	4.20	-66	149,000	74,900	NA	6,400	NA	NA	307,000	NA	NA	ND<3.00	ND<4.00
	5/17/2005	0.30	101	74,100	36,700	NA	15,900	NA	NA	68,000	NA	NA	ND<3.00	ND<4.00
	6/16/2005	2.64	-84	55,900	18,300	NA	10,900	NA	NA	39,000	NA	NA	ND<3.00	ND<4.00
	9/8/2005	1.20	-113	128,000	11,000	NA	2,800	NA	NA	144,000	NA	ND<3.00	ND<4.00	
	12/8/2005	0.37	-2	35,200	8,720	NA	NA	NA	NA	2,100	NA	NA	NA	NA
	8/21/2012	NA	NA	27,900	ND<10	NA	9,300	NA	ND<500	NA	5,060	NA	NA	NA
	9/4/2012	NA	NA	16,000	ND<10	NA	3,540	NA	210	NA	1,330	NA	NA	NA
	9/19/2012	0.36	-59	24,100	ND<10	NA	4,150	NA	ND<500	NA	1,480	NA	NA	NA
	7/2/2018	NA	NA	NA	NA	NA	NA	NA	1,020	ND<500	NA	NA	NA	NA
	3/19/2019	NM	49	NA	520	NA	12,000	NA	2,620	52.1	1,950	19	ND<10	ND<10
	6/4/2019	1.00	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FRW-4 <sup>2/</sup>	5/17/2005	0.70	124	20,300	5,190	1,900	11,400	ND<1,000	NA	NA	7,300	NA	ND<3.00	ND<4.00
	6/16/2005	2.51	-34	15,500	15,900	2,010	13,200	ND<1,000	NA	NA	9,000	NA	ND<3.00	ND<4.00
	8/17/2005	4.51	-22	NA	NA	NA	NA	NA	NA	3,800	NA	NA	NA	NA
	9/8/2005	0.28	7	15,700	7,530	884	11,200	ND<1,000	NA	NA	6,690	NA	ND<3.00	ND<4.00
	12/8/2005	0.39	10	10,500	696	629	NA	NA	NA	NA	2,100	NA	NA	NA
	3/19/2019	NA	NA	NA	1,390	NA	5,570	NA	423	ND<50	1,340	150	ND<10	ND<10
	6/4/2019	<0.1	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

NA Not Analyzed

ND Not Detected

NM Not Measured due to equipment malfunction

J Results are estimated because concentrations were detected above the method detection limit but below the reporting limit.

1 Ferrous Iron Samples were collected on June 20, 2018.

2 Geochemical parameters were not collected for FRW-4 in 2018.

TABLE 3

TABLE 4

**SUMMARY REPORT FOR MARCH 2019 SEMI-ANNUAL GROUNDWATER SAMPLING  
FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPIKE  
SAG HARBOR, NEW YORK**

**CURRENT AND HISTORIC CONCENTRATIONS OF PCE DETECTED IN GROUNDWATER FROM MONITOR AND RECOVERY WELLS, ug/l**

Monitor or Recovery Wells	Sample Dates																																					
	Mar-08	Sep-08	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Jun-12	Aug-12	Sep 4, 2012	Sep-12	Oct-12	Dec-12	Feb-13	Mar-13	Apr-13	June-13 (6-12-2013)	Jun-13	Jul-13	Sep-13	Nov-13	Mar-14	Jun-14	Sept-14	Dec-14	Mar-15	Jun-15	Sep-15	Feb-16	Mar-16	Sep-16	Mar-17	Sept-17	Mar-18	Sept-18	Mar-19
MW-B1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
MW-B2									ND	ND			ND		ND				ND		ND																	
MW-B3									ND	ND			ND		ND				ND		ND																	
MW-B4									ND	ND			ND		ND				ND		ND															ND	ND	
FRW-1	<b>600</b>	<b>6.5</b>	<b>120</b>	<b>15</b>	<b>160</b>	<b>180</b>	<b>68</b>	<b>37</b>	<b>37</b>	<b>52</b>	<b>48</b>	<b>130</b>	<b>130</b>	<b>23</b>	<b>110</b>	<b>1100</b>	<b>510</b>	<b>360</b>	<b>100</b>	<b>310</b>	<b>77</b>	<b>42</b>	<b>63</b>	<b>74</b>	<b>37</b>	<b>24</b>	<b>120</b>	<b>210</b>	<b>23</b>	<b>15</b>	<b>67</b>	<b>290</b>	<b>25</b>	<b>110</b>	<b>34</b>	<b>110</b>	<b>20.2</b>	<b>13.4</b>
FRW-2	<b>27</b>	<b>72</b>	<b>24</b>	<b>20</b>	<b>33</b>	<b>150</b>	<b>39</b>	<b>24</b>	<b>25</b>	<b>48</b>	<b>40</b>	<b>59</b>	<b>69</b>	<b>65</b>	<b>53</b>	<b>9.1</b>	<b>6.8</b>	<b>4.0</b>	<b>45</b>	<b>210</b>	<b>28</b>	<b>20</b>	<b>39</b>	<b>11</b>	<b>27</b>	<b>19</b>	<b>62</b>	<b>41</b>	<b>9.0</b>	<b>14</b>	<b>280</b>	<b>55</b>	<b>26</b>	<b>40</b>	<b>33</b>	<b>48</b>	<b>11.9</b>	<b>15.2</b>
FRW-3	<b>62</b>	<b>16</b>	<b>270</b>	<b>110</b>	<b>190</b>	<b>110</b>	<b>19</b>	<b>16</b>	<b>12</b>	<b>65</b>	<b>32</b>	<b>34</b>	<b>15</b>	<b>25</b>	<b>46</b>	<b>35</b>	<b>25</b>	<b>1.3</b>	<b>9.9</b>	<b>230</b>	<b>52</b>	<b>27</b>	<b>23</b>	<b>49</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>110</b>	<b>67</b>	<b>7.7</b>	<b>50</b>	<b>62</b>	<b>17</b>	<b>50</b>	<b>15</b>	<b>120</b>	<b>19.6</b>	<b>38.8</b>
FRW-4	2.3	<b>18</b>	<b>17</b>	<b>5.3</b>	<b>5.3</b>	ND	4.5	<b>22</b>	<b>22</b>	<b>21</b>	<b>14</b>	<b>13</b>	<b>6.1</b>	2.3	0.36 J	<b>15</b>	<b>62</b>	<b>82</b>	<b>25</b>	<b>12</b>	<b>27</b>	<b>19</b>	4.1	<b>7.5</b>	<b>21</b>	<b>28</b>	2.6	<b>34</b>	3.0	1.4	<b>5.0</b>	<b>15</b>	2.2	4.0	2.7	3.0	4.2	1.02
RW-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
RW-2	3.4	4.0	1.8	1.0	ND	0.91 J	0.96 J	0.81	0.57	0.53		0.52	0.66	1.3	1.1	0.93	0.74		0.68	0.93	2.0	1.4	0.94	0.26 J	ND	0.56	ND	0.39 J		0.40 J	0.38 J	ND	0.28 J	0.23 J	0.41 J	0.37 J		
RW-3	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	0.1 J		ND			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
RW-4	<b>6.5</b>	3.8	3.3	4.5	2.1	ND	0.82 J	1.1 J	1.4	0.13 J	0.90		0.95	0.75	0.96	1.5	0.83	1.1		0.62	0.93	1.4	0.88	0.36 J	2.0	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
RW-5	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
RW-6	<b>19</b>	<b>13</b>	<b>10</b>	<b>11</b>	<b>7.0</b>	4.3	1.9	3.6 J	3.2	3.1	2.6		2.8	2.3	2.4	1.3	1.9	2.0		2.1	1.7	1.9	1.6	0.22 J	0.24 J	0.27 J	ND	0.25 J	0.25 J	0.24 J	ND	ND	0.24 J					
RW-7	<b>11</b>	<b>5.4</b>	<b>5.5</b>	<b>9.5</b>	3.6	ND	1.8		2.2	1.0	ND		0.76	0.50	0.64	0.96	0.52	0.67		0.73	0.65	1.1	ND	ND	ND	0.87	0.2 J	ND	ND	ND	ND	ND	ND					
RW-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11 J	0.11 J		0.1 J	ND	0.13 J		ND		ND		ND		ND		ND		ND		ND		ND		ND					
RW-9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
MW-28A	ND	<b>21</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
MW-28B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
MW-42B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
MW-43A																																						
MW-43B	ND	ND	ND	ND	<b>12</b>	2.7	1.0	4.5 J	3.4			ND				0.62				0.48 J			0.39 J	0.34 J	0.29 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
MW-43C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND			ND			ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
MW-44A	ND	ND	ND	ND	1.1	0.66 J	ND	ND	ND	ND		0.11 J			0.26 J							1.3	ND		0.38 J		ND	ND	ND	ND	ND	ND	ND	NS				
MW-44B	ND	ND	ND	ND	3.1	ND	ND	ND	0.16 J			0.3 J																										

TABLE 4

**SUMMARY REPORT FOR MARCH 2019 SEMI-ANNUAL GROUNDWATER SAMPLING  
FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPIKE  
SAG HARBOR, NEW YORK**

**CURRENT AND HISTORIC CONCENTRATIONS OF PCE DETECTED IN GROUNDWATER FROM MONITOR AND RECOVERY WELLS, ug/l**

Monitor or Recovery Wells	Sample Dates																																				
	Mar-08	Sep-08	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Jun-12	Aug-12	Sep 4, 2012	Sep-12	Oct-12	Dec-12	Feb-13	Mar-13	Apr-13	June-13 (6-12-2013)	Jun-13	Jul-13	Sep-13	Nov-13	Mar-14	Jun-14	Sept-14	Dec-14	Mar-15	Jun-15	Sep-15	Feb-16	Mar-16	Sep-16	Mar-17	Sept-17	Mar-18	Sept-18
N-1A			ND		ND							ND				ND																					
N-1B		ND	ND	ND	ND	ND						ND				ND					ND		ND		ND		ND										
N-2A			ND		ND							ND				ND																					
N-2B		ND	ND	ND	ND	ND						ND				ND					ND		ND		ND		ND										
N-9					ND							ND																									
N-16	ND	ND	ND	ND	ND	ND	ND					ND				ND					ND		ND		ND		ND										
N-17		ND	ND	ND	ND	ND	ND					ND				ND																					
N-32		ND	ND	ND	ND	ND	ND					ND				ND					ND		ND		ND		ND		ND		ND		ND				
N-32B																																					
N-37	ND	ND	ND	ND	ND	ND	ND	ND				ND				ND				ND		ND		ND		ND		ND		ND		ND		ND			
N-38	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND				ND				ND		ND		ND		ND		ND		ND		ND		ND			
N-39	1.9	ND			ND				ND				ND		ND		ND		ND		ND		ND		ND		ND										

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

TABLE 5

**SUMMARY REPORT FOR MARCH 2019 SEMI-ANNUAL GROUNDWATER SAMPLING  
FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPIKE  
SAG HARBOR, NEW YORK**

**CURRENT AND HISTORIC CONCENTRATIONS OF TCA DETECTED IN GROUNDWATER FROM MONITOR WELLS AND RECOVERY WELL, ug/l**

Monitor or Recovery Well	Sample Dates																																						
	Mar-08	Sep-08	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Jun-12	Aug-12	Sep 4, 2012	Sep-12	Oct-12	Dec-12	Feb-13	Mar-13	Apr-13	June-13 (6-12-2013)	Jun-13	Jul-13	Sept-13	Nov-13	Mar-14	Jun-14	Sept-14	Dec-14	Mar-15	Jun-15	Sep-15	Feb-16	Mar-16	Sep-16	Mar-17	Sep-17	Mar-18	Sept-18	Mar-19	
MW-B1		ND		ND		ND		ND				ND								ND		ND		ND		ND		ND		ND		ND		ND		ND			
MW-B2								ND	ND			ND								ND		ND		ND															
MW-B3								ND	ND			ND								ND		ND		ND															
MW-B4								ND	ND			ND								ND		ND		ND															
FRW-1	13	ND	ND	ND	4.6	<b>5.7</b>	0.58 J	ND	0.24 J	1.0	3.1	4.8	<b>5.8</b>	3.5	3.9	<b>17</b>	<b>7.1</b>	4.4	1.8	3.5	0.5	0.58	1.3	0.37 J	<b>0.37 J</b>	ND	1.8	2.6	0.47	ND	0.28 J	2.6	0.20 J	0.82	0.22 J	1.0	ND	ND	
FRW-2	ND	1.1	ND	ND	ND	ND	ND	ND	0.13 J	0.37 J	0.43 J	0.51	ND	0.50	0.37 J	0.27 J	0.16 J	0.35	1.7	ND	0.47 J	0.20 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
FRW-3	1.3	ND	ND	ND	ND	1.8	ND	ND	ND	0.30 J	0.39 J	0.35 J	0.29 J	0.36 J	0.43 J	0.47 J	0.71	0.56	1.3	3.6	0.42 J	0.23 J	ND	0.50	ND	0.28 J	0.26 J	1.2 J	0.58	ND	0.23 J	ND	ND	ND	ND	0.65	ND	0.240	
FRW-4	ND	ND	ND	ND	ND	ND	ND	ND	0.14 J	0.16 J	0.21 J	0.21 J	ND	ND	0.72	2.4	2.7	0.99	0.22	0.69	0.34 J	ND	ND	ND	0.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
RW-1	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND								ND		ND		ND															
RW-2		2.4	1.9	ND	1.7	ND	ND	0.11 J	0.26 J	0.23 J		0.25 J	0.3 J	0.24 J	0.26 J	0.32 J	0.24 J			0.28 J	ND	ND	0.26 J	ND	ND	ND	ND	ND	0.22 J	0.32 J	ND	ND							
RW-3	0.8 J	ND	1.3	ND	ND	ND	ND	ND	0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
RW-4	3.0	6.0	ND	ND	4.2	1.9	ND	2.7 J	3.6	3.6	2.6		2.2	2.3	2.1	2.0	2.4	2.7		3.8	1.3	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-5	ND	2.6	2.0	ND	2.6	ND	ND	1.1 J	0.12 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
RW-6	6.1	6.5	6.5	4.1	4.2	2.8	0.93 J	2.7 J	2.7	2.0	1.6		1.5	1.1	1.0	0.45 J	0.58	0.56		0.63	0.50	0.89	0.78	0.79	1.3	1.1	0.76	ND	0.38	0.32 J	ND	ND							
RW-7	1.1	ND	ND	ND	0.77	0.67 J	ND	--	0.29 J	0.21 J	ND	0.21 J	0.14 J	0.18 J	0.34 J	0.17 J	0.16 J		0.20 J	ND	ND	0.21 J	0.25 J	ND	ND	0.46	0.40	1.0											
RW-8	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
RW-9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
MW-28A	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND	1.0	ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
MW-28B	ND	ND	ND	ND	ND	ND	ND	ND	ND			0.49 J	0.48 J	0.23 J					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
MW-42B		ND	ND	ND	ND	ND	ND	ND	ND			ND							ND																				
MW-43A			ND									<b>5.3</b>	<b>7.6</b>		<b>5.7</b>					0.54																			
MW-43B	ND	ND	ND	ND	3.8	0.69 J	ND	1.1	1.2			ND							1.2																				
MW-43C	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
MW-44A	41	ND	ND	ND	ND	ND	ND	ND	ND			ND							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS			
MW-44B	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
MW-44C		ND		ND		ND		ND				ND							ND																				
MW-45A	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
MW-45B	ND	ND	ND	ND																																			

TABLE 5

**SUMMARY REPORT FOR MARCH 2019 SEMI-ANNUAL GROUNDWATER SAMPLING  
FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPIKE  
SAG HARBOR, NEW YORK**

**CURRENT AND HISTORIC CONCENTRATIONS OF TCA DETECTED IN GROUNDWATER FROM MONITOR WELLS AND RECOVERY WELL, ug/l**

Monitor or Recovery Well	Sample Dates																																				
	Mar-08	Sep-08	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Jun-12	Aug-12	Sep 4, 2012	Sep-12	Oct-12	Dec-12	Feb-13	Mar-13	Apr-13	June-13 (6-12-2013)	Jun-13	Jul-13	Sept-13	Nov-13	Mar-14	Jun-14	Sept-14	Dec-14	Mar-15	Jun-15	Sep-15	Feb-16	Mar-16	Sep-16	Mar-17	Sept-17	Mar-18	Sept-18
N-1A			ND		ND							ND				ND																					
N-1B		ND		ND		ND		ND				ND			ND					ND		ND		ND		ND											
N-2A			ND		ND		ND					ND			ND																						
N-2B		ND		ND		ND		ND				ND			ND					ND		ND		ND		ND											
N-9				ND		ND						ND																									
N-16	2.8	ND	ND	ND	2.8	4.1	ND	ND	ND			ND			ND					ND	0.33 J	0.51		ND	0.26 J												
N-17		ND		ND		ND		ND				ND			ND																						
N-32			ND			ND			ND					ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND										
N-32B																										ND	ND	ND	ND	ND	ND	ND	ND				
N-37	ND	ND	ND	ND	ND		ND					ND			ND					ND		ND		ND		ND											
N-38	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND			ND					ND		ND		ND		ND											
N-39	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND			ND					ND		ND		ND		ND											

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

TABLE 6

**SUMMARY REPORT FOR MARCH 2019 SEMI-ANNUAL GROUNDWATER SAMPLING  
FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPIKE  
SAG HARBOR, NEW YORK**

**CURRENT AND HISTORIC CONCENTRATIONS OF TCE DETECTED IN GROUNDWATER FROM MONITOR WELLS AND RECOVERY WELLS, ug/l**

Monitor or Recovery Wells	Sample Dates																																												
	Mar-08	Sep-08	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Jun-12	Aug-12	Sep 4, 2012	Sep-12	Oct-12	Dec-12	Feb-13	Mar-13	Apr-13	Jun-13 (6-12-2013)	Jun-13	Jul-13	Sep-13	Nov-13	Mar-14	Jun-14	Sept-14	Dec-14	Mar-15	Jun-15	Sept-15	Feb-16	Mar-16	Sep-16	Mar-17	Sept-17	Mar-18	Sept-18	Mar-19							
MW-B1		ND		ND		ND		ND	ND				ND				ND		ND		ND		ND		ND		ND		ND		ND		ND		ND										
MW-B2													ND				ND			ND		ND		ND		ND		ND		ND		ND		ND											
MW-B3													ND				ND			ND		ND		ND		ND		ND		ND		ND		ND											
MW-B4													ND				ND			ND		ND		ND		ND		ND		ND		ND		ND											
FRW-1	110	ND	2.4	ND	1.2	3.1	ND	ND	1.0	3.7	15	38	39	10	29	25	48	42	3.1	4.8	6.2	4.1	4.4	2.1	6.3	1.5	3.4	1.3	0.89	0.54	5.3	3.8	0.81	3.9	0.93	2.7	1.25	0.770							
FRW-2	10	19	ND	ND	1.7	18	ND	1.4 J	1.8	0.83	8.5	9.8	13	11	13	1.7	1.2	1.4	2.7	9.8	3.1	2.2	6.0	1.9	0.86	2.8	2.1	2.6	ND	1.1	3.3	1.8	1.2	1.0	0.85	0.68	1.83	0.950							
FRW-3	23	6.6	10	12	3.2	2.6	1.5 J	1.1	2.5	8.2	6.6	4.6	8.8	10	7.7	7.8	0.31 J	6.9	18	10	3.1	3.6	8.0	7.9	5.6	2.5	13	3.2	2.5	4.1	7.1	1.4	5.7	1.7	7.9	2.99	1.03								
FRW-4	0.99J	ND	ND	ND	ND	4.5	ND	0.99 J	1.2	1.6	0.86	0.64	0.33 J	ND	0.13 J	1.9	8.8	11	7.5	2.1	4.9	2.7	1.6	1.7	1.7	1.2	0.36 J	2.1	ND	ND	0.68	1.1	0.48 J	0.60	0.42 J	ND	1.02	ND							
RW-1	ND	ND	ND	ND	ND	ND	ND	ND	ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		ND		ND									
RW-2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	0.21 J	0.21 J	0.25 J	0.34 J	0.66	0.71	0.54	0.45 J		0.51	0.54	1.0	0.79	0.63	0.24 J	ND	0.31 J	ND	ND	0.63	0.67	ND	0.47 J	0.32 J	0.67	0.26 J									
RW-3	2.2	ND	2.5	ND	1.4	0.63 J	ND	0.93 J	0.81	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
RW-4	0.57J	ND	0.18 J	0.13 J	0.11 J	0.15 J	0.11 J	0.14 J	0.25 J	ND	0.15 J	ND	ND	0.25 J	ND	0.69	ND	ND	ND	2.6	0.90	0.27 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
RW-5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
RW-6	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 J	0.13 J	0.11 J	0.13 J	0.12 J	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
RW-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
RW-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
RW-9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
MW-28A	ND	13	ND				ND	ND			0.34 J					2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND										
MW-28B	ND	ND	ND	ND	ND	ND	ND	ND	ND				ND	0.49 J	0.49 J		0.19 J					ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
MW-42B	ND	ND	ND	ND	ND	ND	ND	ND	ND				ND								ND																								
MW-43A													ND	0.16 J			0.22 J				ND																								
MW-43B	ND	ND	ND	ND	2.8	ND	ND	ND	ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
MW-43C	ND	ND	ND	ND	ND	ND	ND	ND	ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
MW-44A	ND	ND	ND	ND	ND	ND	ND	ND	ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NS		ND		ND	
MW-44B	ND	ND	ND	ND	ND	ND	ND	ND	ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
MW-44C	ND	ND	ND	ND	ND	ND	ND	ND	ND				ND				ND			ND	</td																								

TABLE 6

**SUMMARY REPORT FOR MARCH 2019 SEMI-ANNUAL GROUNDWATER SAMPLING  
FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPIKE  
SAG HARBOR, NEW YORK**

**CURRENT AND HISTORIC CONCENTRATIONS OF TCE DETECTED IN GROUNDWATER FROM MONITOR WELLS AND RECOVERY WELLS, ug/l**

Monitor or Recovery Wells	Sample Dates																																				
	Mar-08	Sep-08	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Jun-12	Aug-12	Sep 4, 2012	Sep-12	Oct-12	Dec-12	Feb-13	Mar-13	Apr-13	Jun-13 (6-12-2013)	Jun-13	Jul-13	Sep-13	Nov-13	Mar-14	Jun-14	Sept-14	Dec-14	Mar-15	Jun-15	Sept-15	Feb-16	Mar-16	Sep-16	Mar-17	Sept-17	Mar-18	Sept-18
N-1A					ND		ND						ND					ND																			
N-1B		ND		ND		ND		ND					ND					ND		ND		ND		ND													
N-2A				ND		ND		ND					ND					ND																			
N-2B		ND		ND		ND		ND					ND					ND		ND		ND		ND													
N-9						ND		ND					ND																								
N-16	ND	ND	ND	ND	ND	ND	ND	ND					ND					ND		ND		ND		ND													
N-17		ND		ND		ND		ND					ND					ND																			
N-32			ND	ND	ND	ND	ND	ND					ND					ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND					
N-32B																											ND	ND	ND	ND	ND	ND					
N-37	ND	ND	ND	ND	ND		ND						ND					ND		ND		ND		ND													
N-38	ND	ND	ND	ND	ND	ND	ND	ND	ND				ND					ND		ND		ND		ND													
N-39	ND	ND	ND	ND	ND	ND	ND	ND					ND					0.12 J					ND		0.49 J		0.47 J	0.77									

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

TABLE 7

**SUMMARY REPORT FOR MARCH 2019 SEMI-ANNUAL GROUNDWATER SAMPLING  
FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPIKE  
SAG HARBOR, NEW YORK**

**CURRENT AND HISTORIC CONCENTRATIONS OF cisDCE DETECTED IN GROUNDWATER FROM MONITOR AND RECOVERY WELLS, ug/L**

TABLE 7

TABLE 7

**SUMMARY REPORT FOR MARCH 2019 SEMI-ANNUAL GROUNDWATER SAMPLING  
FORMER ROWE INDUSTRIES SUPERFUND SITE  
1668 SAG HARBOR TURNPIKE  
SAG HARBOR, NEW YORK**

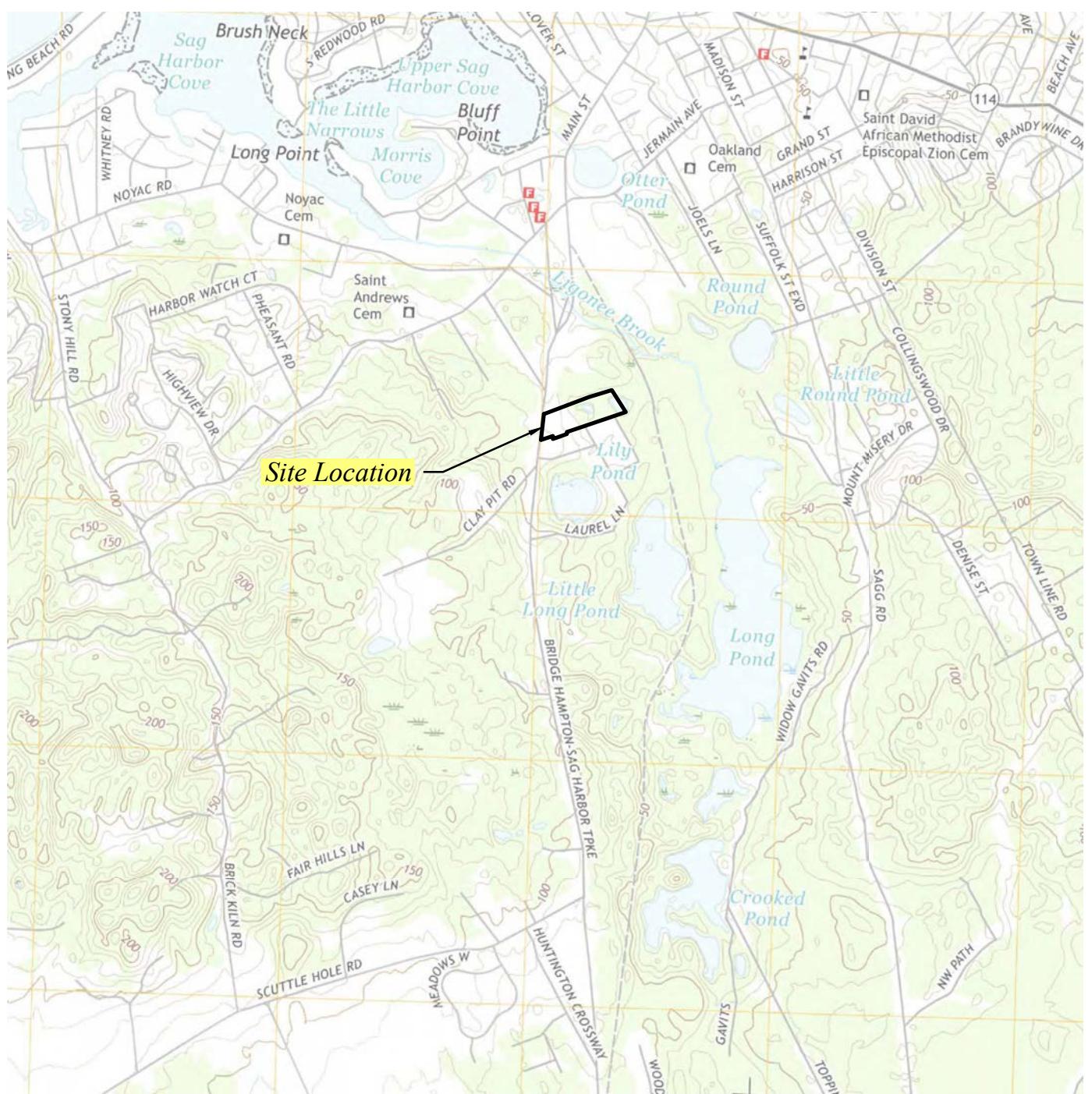
**CURRENT AND HISTORIC CONCENTRATIONS OF cisDCE DETECTED IN GROUNDWATER FROM MONITOR AND RECOVERY WELLS, ug/l**

Monitor or Recovery Wells	Sample Dates																																			
	Mar-08	Sep-08	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Jun-12	Aug-12	Sep 4, 2012	Sep-12	Oct-12	Dec-12	Feb-13	Mar-13	Apr-13	June-13 (6-12-2013)	Jun-13	Jul-13	Sep-13	Nov-13	Mar-14	Jun-14	Sept-14	Dec-14	Mar-15	Jun-15	Sept-15	Feb-16	Mar-16	Sep-16	Mar-17	Sept-17	Mar-18	Sept-18
MW-98-01A	ND	ND	ND	ND	ND	ND	ND	ND			ND	0.11 J	0.57				0.79		ND						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
MW-98-04	ND	3.2	ND	ND	ND	ND	ND	ND			ND				68	7.0		1.1	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
MW-98-04B																																				
MW-98-05A	59	63	3.8	9.8	41	4.8	1.0	0.4 J	ND	5.0	4.8	0.15 J	11	56	59	160			120		32	2.0		28	ND											
MW-98-05AR																																				
MW-98-05B	ND		ND	ND	ND	ND	ND	0.19 J			0.13 J		0.42 J	0.59	0.49 J			0.43 J	ND		ND			1.1	ND	ND										
MW-98-05BR																																				
N-1A		ND		ND		ND					ND																									
N-1B	ND	ND		ND		ND					ND								ND	ND		ND		ND												
N-2A	ND		ND		ND						ND				ND																					
N-2B	ND	ND		ND		ND					ND				ND				ND	ND		ND		ND												
N-9				ND		ND					ND																									
N-16	ND	ND	ND	ND	ND	ND	ND	ND			ND				ND			ND	ND		ND		ND		ND											
N-17	ND	ND	ND	ND	ND	ND	ND	ND			ND				ND			ND	ND		ND		ND		ND											
N-32		ND			ND				ND			ND	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
N-32B																																				
N-37	ND	ND	ND	ND	ND	ND	ND	ND			ND				ND			ND	ND		ND		ND		ND											
N-38	ND	ND	ND	ND	ND	ND	ND	ND			ND				ND			ND	ND		ND		ND		ND											
N-39	ND	ND	ND	ND	ND	ND	ND	ND			0.13 J				ND			ND	ND		ND		ND		ND											

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



## **FIGURES**



SOURCE: USGS TOPOGRAPHIC QUADRANGLE SAG HARBOR, NEW YORK (2016).



0 2000  
SCALE IN FEET

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

### SITE LOCATION MAP

DATE

REVISED

PREPARED BY:



WSP USA  
4 Research Drive  
Suite 204  
Shelton, Connecticut 06484  
(203) 929-8555

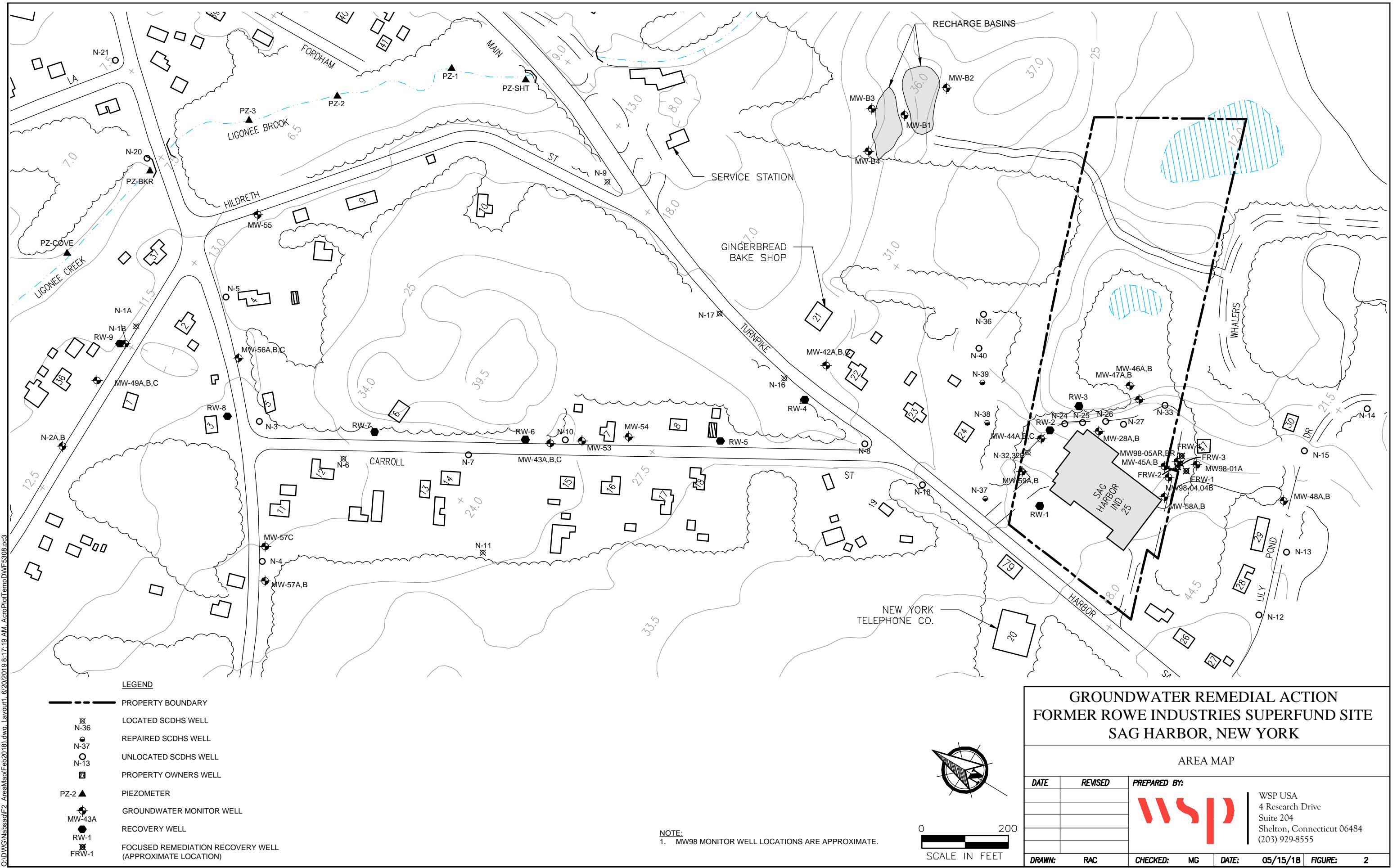
DRAWN: RAC

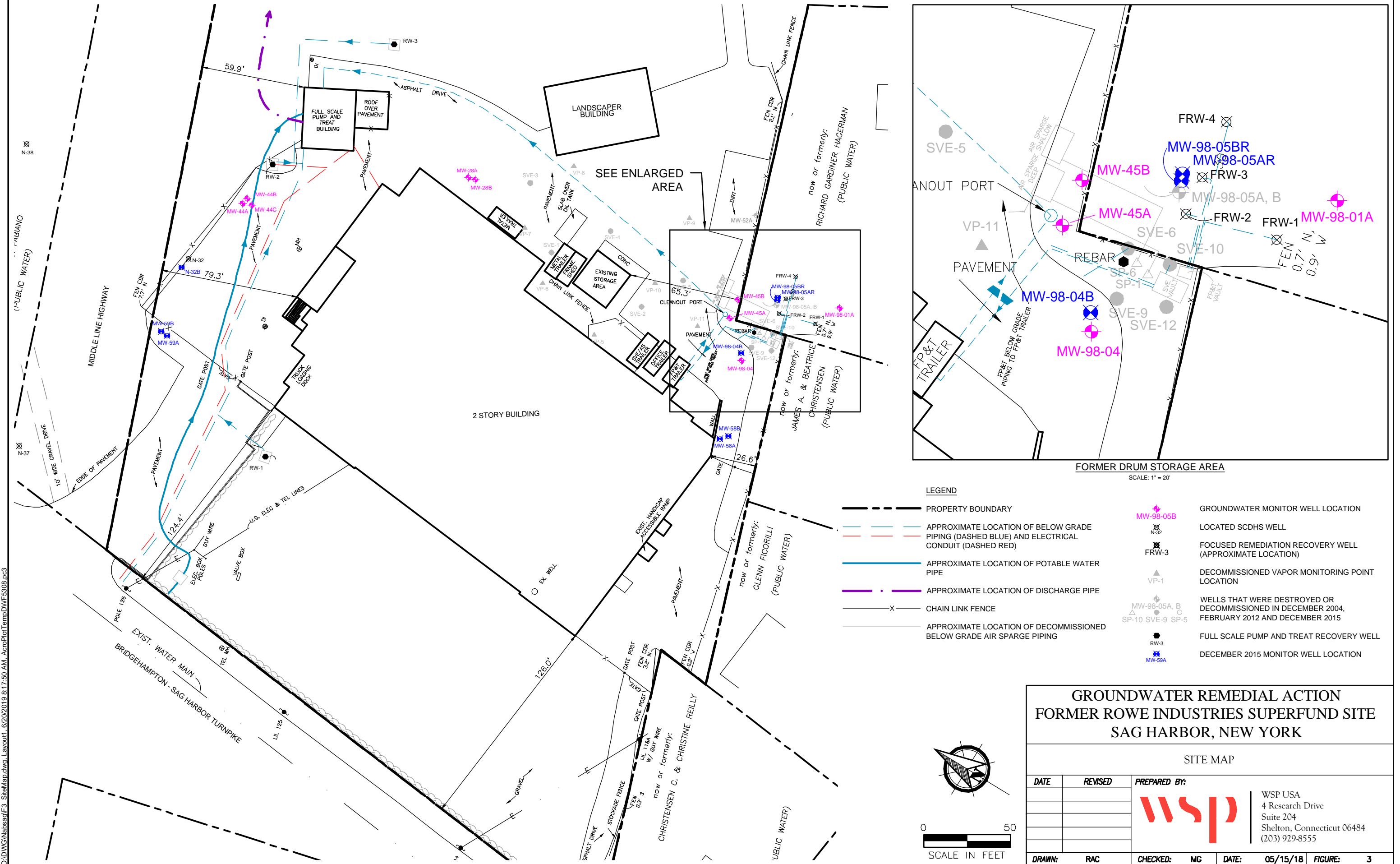
CHECKED: MG

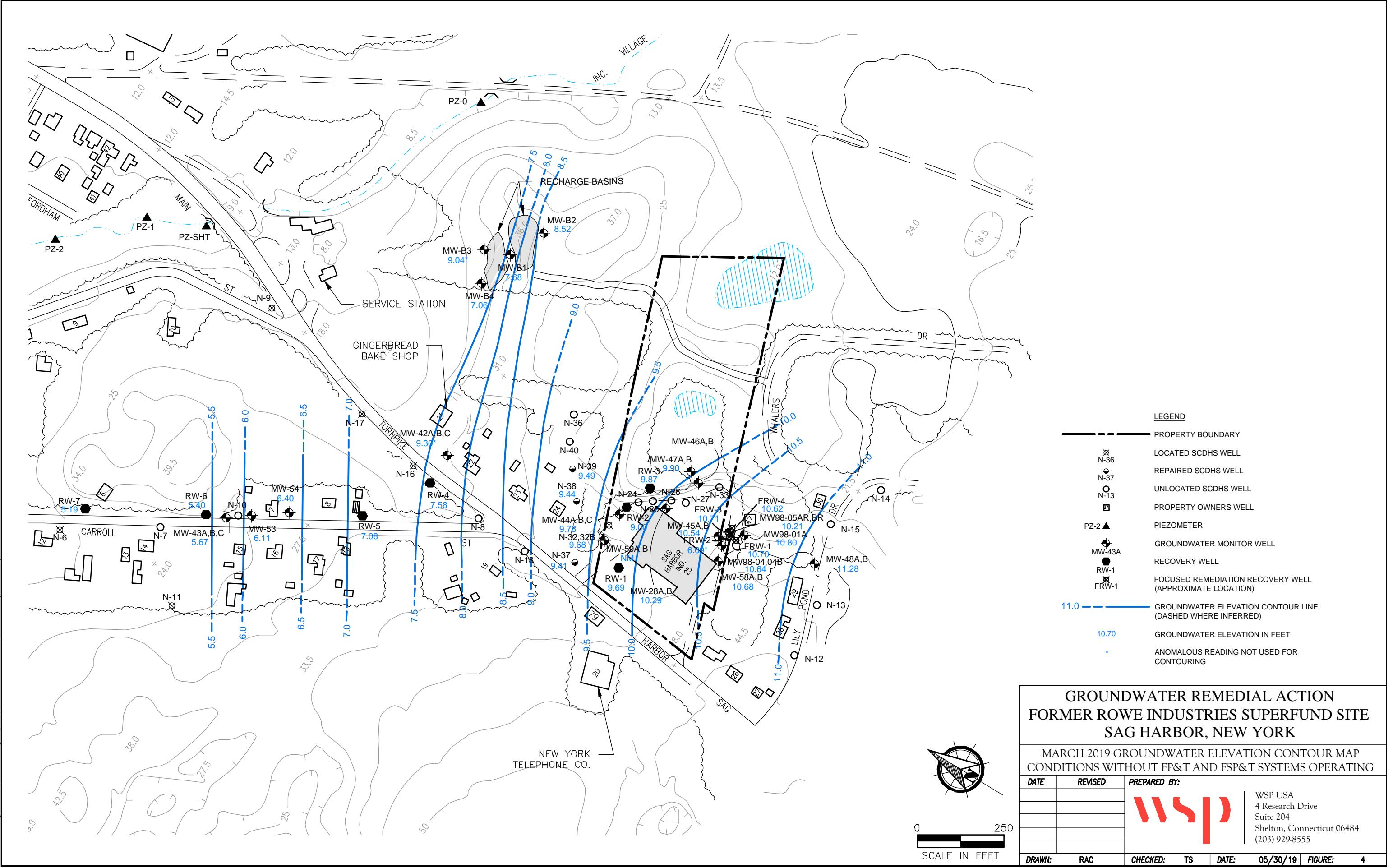
DATE:

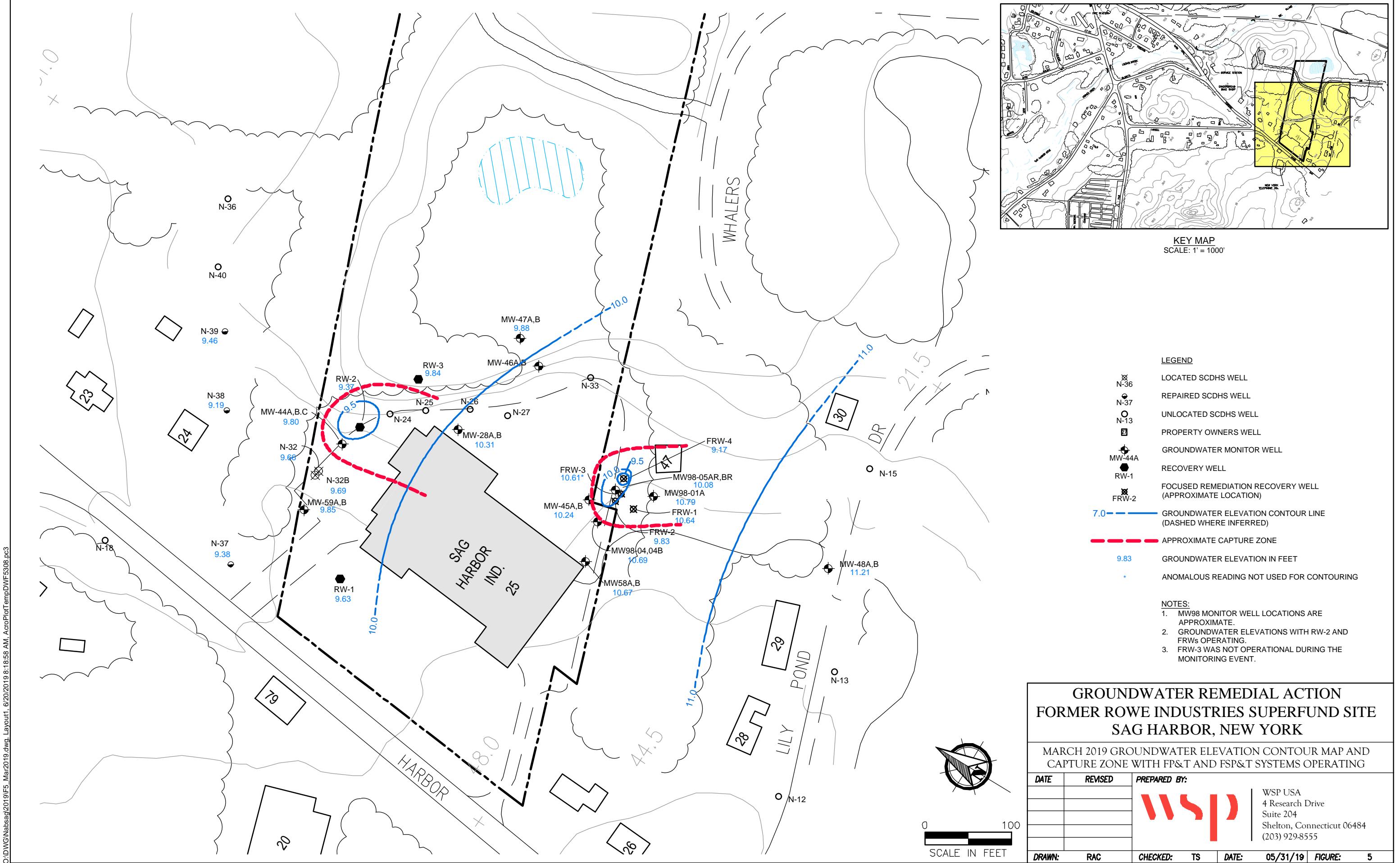
06/20/19

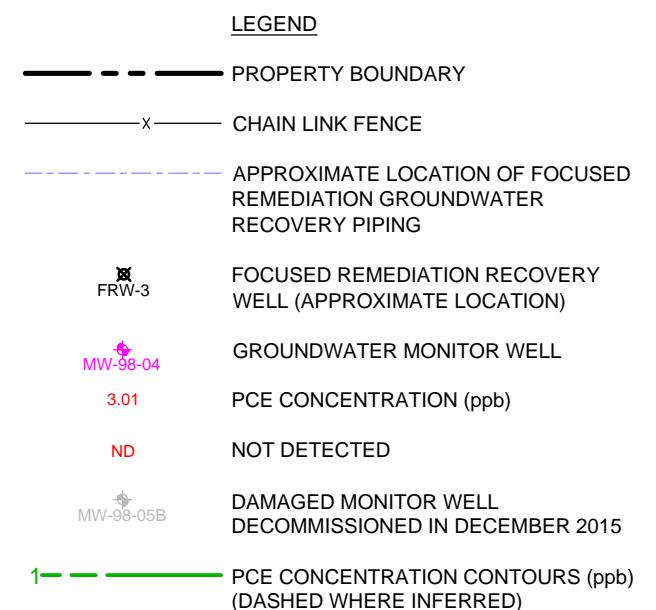
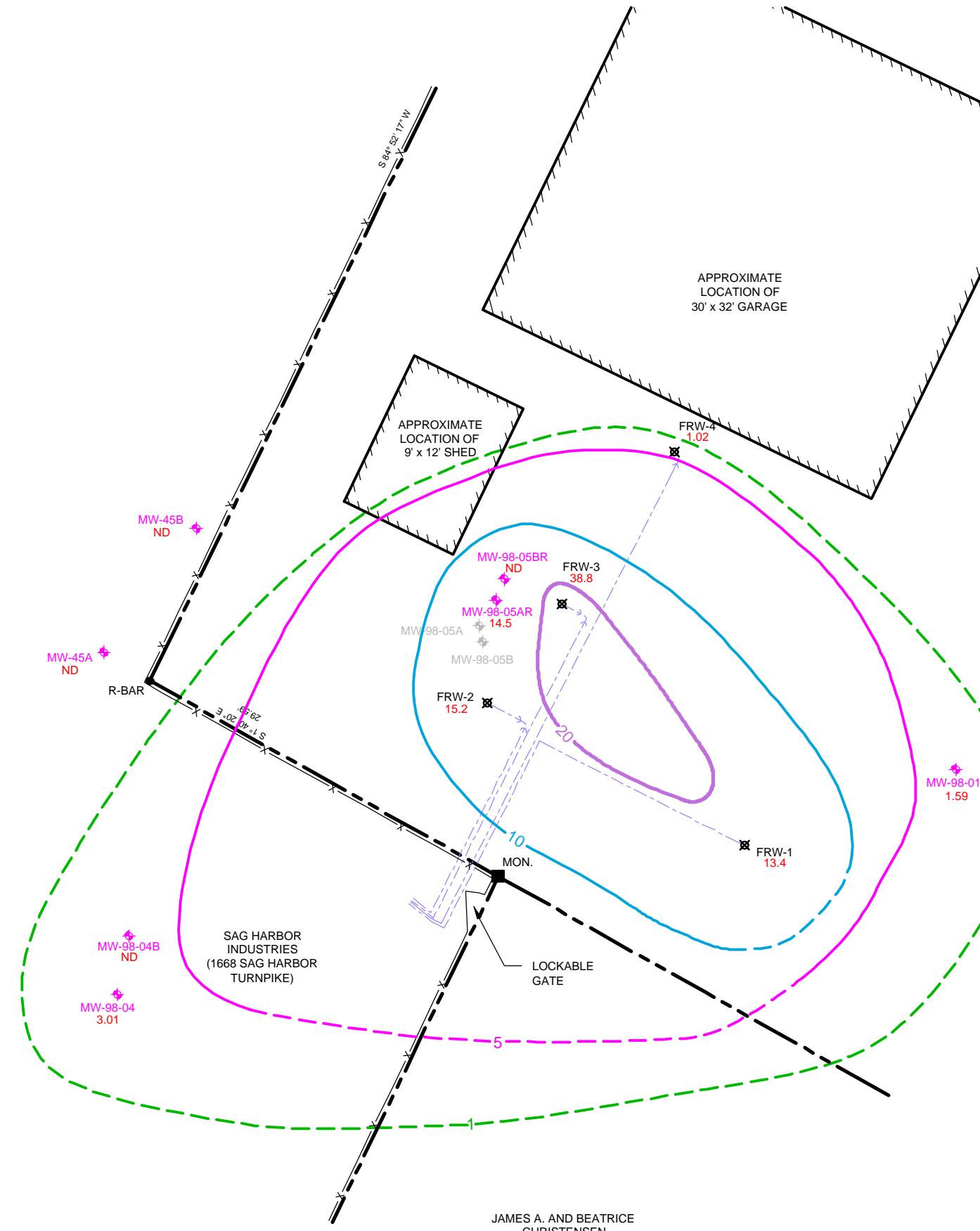
FIGURE: 1









**NOTES:**

- PCE CONCENTRATION CONTOURS WERE PLOTTED FROM GROUNDWATER SAMPLES COLLECTED AT WELLS THAT HAVE SHALLOW SCREEN INTERVALS THAT SPAN THE WATER TABLE. MONITOR WELLS MW98-04B, MW98-05B AND MW-45B ARE SCREENED DEEPER THAN THE OTHER MONITOR WELLS SHOWN ON THIS FIGURE AND DO NOT HAVE SCREENS THAT SPAN THE WATER TABLE; THEREFORE, PCE CONCENTRATIONS SHOWN AT THESE WELLS ARE NOT USED FOR CONTOURING.
- 'R' IN WELL DESIGNATION INDICATES REPLACEMENT WELL.

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

MARCH 2019 PCE PLUME MAP

DATE	REVISED	PREPARED BY:
		WSP USA 4 Research Drive Suite 204 Shelton, Connecticut 06484 (203) 929-8555
DRAWN:	RAC	CHECKED: TS
DATE:	05/31/19	FIGURE: 6



0  
10  
SCALE IN FEET



## **APPENDIX I**

### **Low-Flow Sampling Logs**



**WSP USA**

PAGE   1   OF   1

SAMPLE DATE: 3/19

3/19

8

## LOW-FLOW SAMPLING LOG

TOTAL # WELLS: 8

Client Name: Rowe Industries Sample Pump: Geopump (peristaltic)

Sample Pump: Geopump (peristaltic)

Project Location: Sag Harbor, NY      Tubing Type: LDPE - Silicone

Tubing Type: LDPE - Silicone

Sampler(s): PS Monitoring Equipment: Horiba

Monitoring Equipment: Horiba

Well I.D. MW-415A Screen Setting (ft btoc): 139 to 28-9

Screen Setting (ft btoc): 13.9 to 28.9

Well Diameter (inches): 12      Tubing Intake (ft btoc): ~24

Tubing Intake (ft btoc): ~24

Total Depth (ft btoc): ~ 18-19 Comments: Pump on at 14 38

Comments: Pump on at 14:38

Depth to Water (ft btoc): 17.25 Fall at 144)

Fall of 1941

Well Condition: Good

---

---

---

Time	Depth to Water	Evacuation Rate	Water Quality Monitoring Parameters
------	----------------	-----------------	-------------------------------------

## Water Quality Monitoring Parameters

Total Volume of Groundwater Purged (gal): ~1.5

			Stabilization of Parameters (stabilization achieved for three consecutive measurements)						
Time		Depth to Water (ft btoc)	Total Removed > Change in Storage (Y/N)?	pH	Conductivity (%)	Turbidity (%)	Dissolved oxygen (%)	Temperature (%)	ORP (mv)
FROM	TO								
1453	1456	+	Y	-0.04	+0.1%	<5	0.00	+10	+10
1456	1459	↓	↓	-0.03	+0	↓	↓	↓	+11
1453	1459	↓	↓	-0.07	+0.1%	↓	↓	↓	+11
Recommended Stabilization	≤ 0.3 ft. total	NA	+/- 0.1 unit	+/- .3%	<5 NTU or +/- 10%	+/- 10% if >0.5 mg/L	+/- 3%	+/- 10 mv	
Stabilization: (Yes/No)	Y	—	Y	Y	Y	Y	Y	Y	Y

Sample Time: 1500

ft btoc feet below top of casing NTU Nephelometric Turbidity Units °C degrees Celsius  
 ml/min milliliters per minute mg/l milligrams per liter mv millivolts  
 $\mu$ s/cm microseimemens per centimeter ms/cm milliseimemens per centimeter









## LOW-FLOW SAMPLING LOG

SAMPLE DATE: 3/19/19TOTAL # WELLS: 7

Client Name:	Rowe Industries	Sample Pump:	Geopump (peristaltic)
Project Location:	Sag Harbor, NY	Tubing Type:	LDPE - Silicone
Sampler(s):	<u>PS</u>	Monitoring Equipment:	Horiba
Well I.D.	<u>MU-18-01A</u>	Screen Setting (ft btoc):	to
Well Diameter (inches):	<u>2</u>	Tubing Intake (ft btoc):	<u>~24</u>
Total Depth (ft btoc):	<u>~27.0</u>	Comments:	Pump on at <u>10:36</u> <u>Fall air 1141</u>
Depth to Water (ft btoc):	<u>19.68</u>		

Time (hours)	Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Water Quality Monitoring Parameters					
			pH	Conductivity mS/cm	Turbidity (NTU)	Dissolved oxygen (mg/l)	Temperature (°C)	ORP (mv)
1041	19.68	150	5.80	0.251	67.1	0.00	10.10	176
1044	19.68	150	5.90	0.251	71.2	0.00	9.97	124
1047	19.68	150	5.95	0.249	65.6	0.00	9.92	104
1050	19.68	150	5.96	0.244	66.3	0.00	9.92	80
1053	19.68	150	5.98	0.237	58.0	0.00	9.90	43
1056	19.68	150	6.03	0.231	38.4	0.00	9.94	25
1059	19.68	150	5.93	0.226	39.7	0.00	9.85	19
1102	19.68	150	6.01	0.219	20.7	0.00	9.96	10
1105	19.68	150	5.97	0.214	130	0.00	9.78	9
1108	19.68	150	5.95	0.209	6.5	0.00	9.99	5
1111	19.68	150	5.98	0.207	0.0	0.00	9.97	9

Total Volume of Groundwater Purged (gal): ~15

			Stabilization of Parameters (stabilization achieved for three consecutive measurements)					
Time FROM	Depth to Water (ft btoc) TO	Total Removed > Change in Storage (Y/N)?	pH	Conductivity (%)	Turbidity (%)	Dissolved oxygen (%)	Temperature (%)	ORP (mv)
1105	1109	↑	+0.02	-2.3%	0.0	0.00	+0.1%	-4
1108	1111	↓	-0.01	-0.6%	↓	↓	-0.2%	+4
1105	1111	↓	+0.01	-2.9%	↓	↓	-0.1%	+0
Recommended Stabilization	≤ 0.3 ft. total	NA	+/- 0.1 unit	+/- .3%	<5 NTU or +/- 10%	+/- 10% if >0.5 mg/L	+/- 3%	+/- 10 mv
Stabilization: (Yes/No)	Y	-	Y	Y	Y	Y	Y	Y

Sample Time:	<u>1112</u>							
ft btoc	feet below top of casing	NTU	Nephelometric Turbidity Units	°C	degrees Celsius			
ml/min	milliliters per minute	mg/l	milligrams per liter	mv	millivolts			
µs/cm	microseimenes per centimeter	ms/cm	milliseimenes per centimeter					





WSP USA

PAGE 1 OF \_\_\_\_\_SAMPLE DATE: 3/19TOTAL # WELLS: 7

## LOW-FLOW SAMPLING LOG

Client Name: Rowe IndustriesSample Pump: Geopump (peristaltic)Project Location: Sag Harbor, NYTubing Type: LDPE - SiliconeSampler(s): Mw-98-05 BR, 1PSMonitoring Equipment: HoribaWell I.D. 2Screen Setting (ft btoc): 35 to 45Well Diameter (inches): 2Tubing Intake (ft btoc): ~40Total Depth (ft btoc): ~45Comments: Pump on at 1240Depth to Water (ft btoc): 18.57fall air 1243Well Condition: Good

Time (hours)	Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Water Quality Monitoring Parameters					
			pH	Conductivity mS/cm	Turbidity (NTU)	Dissolved oxygen (mg/l)	Temperature (°C)	ORP (mv)
1243	18.59	150	5.74	0.223	6.4	0.00	10.77	42
1246	18.59	150	5.73	0.222	5.4	0.00	11.15	23
1249	18.39	150	5.69	0.220	4.6	0.00	11.34	16
1252	18.39	150	5.57	0.220	3.6	0.00	11.30	15
1255	18.39	150	5.48	0.220	3.4	0.00	11.37	14
1258	18.39	150	5.41	0.215	2.8	0.00	11.43	14
1301	18.39	150	5.41	0.215	3.3	0.00	11.42	15
1304	18.39	150	5.41	0.215	3.3	0.00	11.43	14

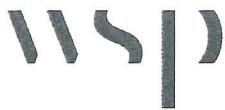
Total Volume of Groundwater Purged (gal): ~1.5

			Stabilization of Parameters (stabilization achieved for three consecutive measurements)					
Time FROM	Depth to Water (ft btoc) TO	Total Removed > Change in Storage (Y/N)?	pH	Conductivity (%)	Turbidity (%)	Dissolved oxygen (%)	Temperature (%)	ORP (mv)
1258	1301	to Y	+0	+0	↓S	0.00	-0.4%	11
1301	1304		↓	↓	↓	↓	+0.1%	-1
1258	1304	↓	↓	↓	↓	↓	+0	+0
Recommended Stabilization	≤ 0.3 ft. total	NA	+/- 0.1 unit	+/- .3%	<5 NTU or +/- 10%	+/- 10% if >0.5 mg/L	+/- 3%	+/- 10 mv
Stabilization: (Yes/No)	Y	—	N	Y	Y	Y	Y	Y

Sample Time: 1325

ft btoc	feet below top of casing	NTU	Nephelometric Turbidity Units	°C	degrees Celsius
ml/min	milliliters per minute	mg/l	milligrams per liter	mv	millivolts
μs/cm	microseimemens per centimeter	ms/cm	milliseimemens per centimeter		

gjgj



**WSP USA**

PAGE 1 OF 1

SAMPLE DATE: 3/19

3/19

8

## LOW-FLOW SAMPLING LOG

TOTAL # WELLS: 8

Client Name:	Rowe Industries	Sample Pump:	Geopump (peristaltic)
Project Location:	Sag Harbor, NY	Tubing Type:	LDPE - Silicone
Sampler(s):		Monitoring Equipment:	Horiba
Well I.D.	F2w-3	Screen Setting (ft btoc):	18.5 to 28.5
Well Diameter (inches):	4	Tubing Intake (ft btoc):	~23.5
Total Depth (ft btoc):	28.5	Comments:	Pump on at 1347 Full at 1330
Depth to Water (ft btoc):	18.75		

Total Volume of Groundwater Purged (gal): ~ 1.5

			Stabilization of Parameters (stabilization achieved for three consecutive measurements)						
Time		Depth to Water (ft btoc)	Total Removed > Change in Storage (Y/N)?	pH	Conductivity (%)	Turbidity (%)	Dissolved oxygen (%)	Temperature (%)	ORP (mv)
FROM	TO								
1402	1403	+2	Y	+0.02	+0.1%	<5	0.00	+0	+1
1403	1403	↓	↓	+0.01	+0.1%	↓	↓	↓	+1
1402	1403	↓	↓	+0.03	+0	↓	↓	↓	+2
Recommended Stabilization	≤ 0.3 ft. total	NA	+/- 0.1 unit	+/- .3%	<5 NTU or +/- 10%	+/- 10% if >0.5 mg/L	+/- 3%	+/- 10 mv	
Stabilization: (Yes/No)	Y	✓	Y	Y	Y	Y	Y	Y	Y

Sample Time: 1410

ft btoc      feet below top of casing      NTU      Nephelometric Turbidity Units      °C      degrees Celsius  
 ml/min      milliliters per minute      mg/l      milligrams per liter      mv      millivolts  
 $\mu$ s/cm      microseimemens per centimeter      ms/cm      milliseimemens per centimeter

**Full Scale Pump & Treat System, Monthly RW Sampling**

Name: Scott Philbrick

DATE: 6-4-19

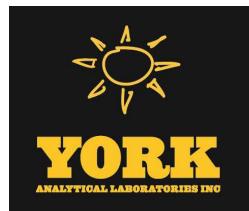
	Time	DTW (ft)	pH	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (deg C)	TDS (mg/L) <sup>g/L</sup>	ORP (mV)
RW-2				0.219	0.6		14.50	0.142	139
FRW-1	1.27	8.42	6.5	0.219	0.6	6.44	15.55	0.142	139
FRW-2	1.36	5.30	5.36 0.0	0.175	0.0	6.00	14.14	0.113	39
FRW-3	1.41	6.45	5.66 4.5	0.161	1.0	4.5	13.32	0.105	24
FRW-4	1.44	14.49	5.66	0.176	5.6	0.0	13.06	0.115	14

Field Measurements were obtained with a Horiba U-22 Water Quality Meter and an electronic interface probe.

- \* Do continuing to drop 1 mg/L every 30sec.
- \*\* Do start at 6.3 → droped to 0.0 in 2 min



**APPENDIX II**  
**Laboratory Analytical Results**



# Technical Report

prepared for:

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

4 Research Drive, Suite 204

Shelton CT, 06484

**Attention: Tunde Komuves-Sandor**

Report Date: 05/31/2019

**Client Project ID: 31401451.000 Rowe**

York Project (SDG) No.: 19C0771

Revision No. 2.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
(203) 325-1371



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

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

Report Date: 05/31/2019  
Client Project ID: 31401451.000 Rowe  
York Project (SDG) No.: 19C0771

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

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 20, 2019 and listed below. The project was identified as your project: **31401451.000 Rowe**.

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>
19C0771-01	WQ031919:1300 FRW-1	Water	03/19/2019	03/20/2019
19C0771-02	WQ031919:1305 FRW-2	Water	03/19/2019	03/20/2019
19C0771-03	WQ031919:1410 FRW-3	Water	03/19/2019	03/20/2019
19C0771-04	WQ031919:1315 FRW-4	Water	03/19/2019	03/20/2019

## **General Notes for York Project (SDG) No.: 19C0771**

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:** 05/31/2019





## Sample Information

Client Sample ID: WQ031919:1300 FRW-1

York Sample ID: 19C0771-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
19C0771	31401451.000 Rowe	Water	March 19, 2019 1:00 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 13:37	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS



## Sample Information

Client Sample ID: WQ031919:1300 FRW-1

York Sample ID: 19C0771-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0771	31401451.000 Rowe	Water	March 19, 2019 1:00 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
156-59-2	cis-1,2-Dichloroethylene	0.450		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS



## Sample Information

Client Sample ID: WQ031919:1300 FRW-1

York Sample ID: 19C0771-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0771	31401451.000 Rowe	Water	March 19, 2019 1:00 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
127-18-4	Tetrachloroethylene	13.4	ICV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
79-01-6	Trichloroethylene	0.770		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 13:37	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 13:37	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURL: 1,2-Dichloroethane-d4	106 %			70-130						
2037-26-5	Surrogate: SURL: Toluene-d8	108 %			70-130						
460-00-4	Surrogate: SURL: p-Bromofluorobenzene	119 %			70-130						



## Sample Information

Client Sample ID: WQ031919:1300 FRW-1

York Sample ID: 19C0771-01

York Project (SDG) No.  
19C0771

Client Project ID  
31401451.000 Rowe

Matrix  
Water

Collection Date/Time  
March 19, 2019 1:00 pm

Date Received  
03/20/2019

### Methane, Ethane & Ethylene

Sample Prepared by Method: Preparation for GC Analysis

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-82-8	* Methane	37		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 08:26	RB
74-84-0	* Ethane	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 08:26	RB
74-85-1	* Ethylene (Ethene)	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 08:26	RB

### Iron, Dissolved by EPA 6010

Sample Prepared by Method: EPA 3015A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	1.78		mg/L	0.278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/22/2019 13:27	03/25/2019 13:10	KML

### Nitrate as N

Sample Prepared by Method: EPA 300

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	2.48		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 10:52	03/20/2019 10:52	TJM

### Nitrite as N

Sample Prepared by Method: EPA 300

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-65-0	Nitrite as N	ND		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,PADEP	03/20/2019 10:52	03/20/2019 10:52	TJM

### Sulfate as SO4

Sample Prepared by Method: EPA 300

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	Sulfate	14.5		mg/L	1.00	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 10:52	03/20/2019 10:52	TJM

### Total Organic Carbon

Sample Prepared by Method: Analysis Preparation

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	2.55		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/21/2019 08:33	03/21/2019 16:08	AD



## Sample Information

Client Sample ID: WQ031919:1305 FRW-2

York Sample ID: 19C0771-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
19C0771	31401451.000 Rowe	Water	March 19, 2019 1:05 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 14:09	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS



## Sample Information

Client Sample ID: WQ031919:1305 FRW-2

York Sample ID: 19C0771-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
19C0771	31401451.000 Rowe	Water	March 19, 2019 1:05 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
156-59-2	cis-1,2-Dichloroethylene	1.54		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS



## Sample Information

Client Sample ID: WQ031919:1305 FRW-2

York Sample ID: 19C0771-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0771	31401451.000 Rowe	Water	March 19, 2019 1:05 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
127-18-4	Tetrachloroethylene	15.2	ICV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
79-01-6	Trichloroethylene	0.950		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:09	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 14:09	SS

#### Surrogate Recoveries

	<u>Result</u>	<u>Acceptance Range</u>
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	104 %
2037-26-5	Surrogate: SURR: Toluene-d8	106 %
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	119 %

### Methane, Ethane & Ethylene

#### Log-in Notes:

#### Sample Notes:



## Sample Information

Client Sample ID: WQ031919:1305 FRW-2

York Sample ID: 19C0771-02

York Project (SDG) No.  
19C0771

Client Project ID  
31401451.000 Rowe

Matrix  
Water

Collection Date/Time  
March 19, 2019 1:05 pm

Date Received  
03/20/2019

Sample Prepared by Method: Preparation for GC Analysis

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-82-8	* Methane	35		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 08:56	RB
74-84-0	* Ethane	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 08:56	RB
74-85-1	* Ethylene (Ethene)	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 08:56	RB

### Iron, Dissolved by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	1.46		mg/L	0.278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/22/2019 13:27	03/25/2019 13:13	KML

### Nitrate as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	1.09		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 11:17	03/20/2019 11:17	TJM

### Nitrite as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-65-0	Nitrite as N	ND		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,PADEP	03/20/2019 11:17	03/20/2019 11:17	TJM

### Sulfate as SO4

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	Sulfate	12.9		mg/L	1.00	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 11:17	03/20/2019 11:17	TJM

### Total Organic Carbon

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	1.74		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/21/2019 08:33	03/21/2019 16:08	AD



## Sample Information

Client Sample ID: WQ031919:1410 FRW-3

York Sample ID: 19C0771-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
19C0771	31401451.000 Rowe	Water	March 19, 2019 2:10 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL		Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
					LOD	MDL					
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
71-55-6	<b>1,1,1-Trichloroethane</b>	<b>0.240</b>		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 14:41	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS



## Sample Information

Client Sample ID: WQ031919:1410 FRW-3

York Sample ID: 19C0771-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
19C0771	31401451.000 Rowe	Water	March 19, 2019 2:10 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
156-59-2	cis-1,2-Dichloroethylene	3.93		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS



## Sample Information

Client Sample ID: WQ031919:1410 FRW-3

York Sample ID: 19C0771-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0771	31401451.000 Rowe	Water	March 19, 2019 2:10 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
127-18-4	Tetrachloroethylene	38.8	ICV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
79-01-6	Trichloroethylene	1.03		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 14:41	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 14:41	SS

#### Surrogate Recoveries

	<u>Result</u>	<u>Acceptance Range</u>
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %
2037-26-5	Surrogate: SURR: Toluene-d8	105 %
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	125 %

### Methane, Ethane & Ethylene

#### Log-in Notes:

#### Sample Notes:



## Sample Information

Client Sample ID: WQ031919:1410 FRW-3

York Sample ID: 19C0771-03

York Project (SDG) No.  
19C0771

Client Project ID  
31401451.000 Rowe

Matrix  
Water

Collection Date/Time  
March 19, 2019 2:10 pm

Date Received  
03/20/2019

Sample Prepared by Method: Preparation for GC Analysis

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-82-8	* Methane	19		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 09:19	RB
74-84-0	* Ethane	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 09:19	RB
74-85-1	* Ethylene (Ethene)	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 09:19	RB

### Iron, Dissolved by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	0.520		mg/L	0.278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/22/2019 13:27	03/25/2019 13:15	KML

### Nitrate as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	2.62		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 11:42	03/20/2019 11:42	TJM

### Nitrite as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-65-0	Nitrite as N	0.0521		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,PADEP	03/20/2019 11:42	03/20/2019 11:42	TJM

### Sulfate as SO4

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	Sulfate	12.0		mg/L	1.00	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 11:42	03/20/2019 11:42	TJM

### Total Organic Carbon

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	1.95		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/21/2019 08:33	03/21/2019 16:08	AD



## Sample Information

Client Sample ID: WQ031919:1315 FRW-4

York Sample ID: 19C0771-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0771	31401451.000 Rowe	Water	March 19, 2019 1:15 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 15:13	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS



## Sample Information

Client Sample ID: WQ031919:1315 FRW-4

York Sample ID: 19C0771-04

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
19C0771	31401451.000 Rowe	Water	March 19, 2019 1:15 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
156-59-2	cis-1,2-Dichloroethylene	0.490		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS



## Sample Information

Client Sample ID: WQ031919:1315 FRW-4

York Sample ID: 19C0771-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0771	31401451.000 Rowe	Water	March 19, 2019 1:15 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
127-18-4	Tetrachloroethylene	1.02	ICV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:13	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 15:13	SS

Surrogate Recoveries	Result	Acceptance Range
Surrogate: SURN: 1,2-Dichloroethane-d4	104 %	70-130
Surrogate: SURN: Toluene-d8	108 %	70-130
Surrogate: SURN: p-Bromofluorobenzene	121 %	70-130

### Methane, Ethane & Ethylene

#### Log-in Notes:

#### Sample Notes:



## Sample Information

Client Sample ID: WQ031919:1315 FRW-4

York Sample ID: 19C0771-04

York Project (SDG) No.  
19C0771

Client Project ID  
31401451.000 Rowe

Matrix  
Water

Collection Date/Time  
March 19, 2019 1:15 pm

Date Received  
03/20/2019

Sample Prepared by Method: Preparation for GC Analysis

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-82-8	* Methane	150		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 09:50	RB
74-84-0	* Ethane	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 09:50	RB
74-85-1	* Ethylene (Ethene)	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 09:50	RB

### Iron, Dissolved by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	2.39		mg/L	0.278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/22/2019 13:27	03/25/2019 13:18	KML

### Nitrate as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	0.423		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 12:07	03/20/2019 12:07	TJM

### Nitrite as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-65-0	Nitrite as N	ND		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,PADEP	03/20/2019 12:07	03/20/2019 12:07	TJM

### Sulfate as SO4

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	Sulfate	5.57		mg/L	1.00	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 12:07	03/20/2019 12:07	TJM

### Total Organic Carbon

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	1.34		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/21/2019 08:33	03/21/2019 16:08	AD



## Analytical Batch Summary

**Batch ID:** BC90998**Preparation Method:** EPA 300**Prepared By:** TJM

YORK Sample ID

Client Sample ID

Preparation Date

19C0771-01	WQ031919:1300 FRW-1	03/20/19
19C0771-02	WQ031919:1305 FRW-2	03/20/19
19C0771-03	WQ031919:1410 FRW-3	03/20/19
19C0771-04	WQ031919:1315 FRW-4	03/20/19
BC90998-BLK1	Blank	03/20/19
BC90998-BS1	LCS	03/20/19

**Batch ID:** BC91016**Preparation Method:** Analysis Preparation**Prepared By:** AD

YORK Sample ID

Client Sample ID

Preparation Date

19C0771-01	WQ031919:1300 FRW-1	03/21/19
19C0771-02	WQ031919:1305 FRW-2	03/21/19
19C0771-03	WQ031919:1410 FRW-3	03/21/19
19C0771-04	WQ031919:1315 FRW-4	03/21/19
BC91016-BLK1	Blank	03/21/19
BC91016-BS1	LCS	03/21/19

**Batch ID:** BC91137**Preparation Method:** EPA 3015A**Prepared By:** SY

YORK Sample ID

Client Sample ID

Preparation Date

19C0771-01	WQ031919:1300 FRW-1	03/22/19
19C0771-02	WQ031919:1305 FRW-2	03/22/19
19C0771-03	WQ031919:1410 FRW-3	03/22/19
19C0771-04	WQ031919:1315 FRW-4	03/22/19
BC91137-BLK1	Blank	03/22/19
BC91137-BS1	LCS	03/22/19

**Batch ID:** BC91165**Preparation Method:** Preparation for GC Analysis**Prepared By:** RQB

YORK Sample ID

Client Sample ID

Preparation Date

19C0771-01	WQ031919:1300 FRW-1	03/23/19
19C0771-02	WQ031919:1305 FRW-2	03/23/19
19C0771-03	WQ031919:1410 FRW-3	03/23/19
19C0771-04	WQ031919:1315 FRW-4	03/23/19
BC91165-BLK1	Blank	03/23/19
BC91165-DUP1	Duplicate	03/23/19

**Batch ID:** BC91190**Preparation Method:** EPA 5030B**Prepared By:** AB

YORK Sample ID

Client Sample ID

Preparation Date

19C0771-01	WQ031919:1300 FRW-1	03/25/19
19C0771-02	WQ031919:1305 FRW-2	03/25/19
19C0771-03	WQ031919:1410 FRW-3	03/25/19



19C0771-04	WQ031919:1315 FRW-4	03/25/19
BC91190-BLK1	Blank	03/25/19
BC91190-BS1	LCS	03/25/19
BC91190-BSD1	LCS Dup	03/25/19



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

York Analytical Laboratories, Inc.

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

### Batch BC91190 - EPA 5030B

#### Blank (BC91190-BLK1)

Prepared & Analyzed: 03/25/2019

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,1-Dichloropropylene	ND	0.500	"
1,2,3-Trichlorobenzene	0.250	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	%REC Limits	Flag	RPD RPD	RPD Limit	RPD Flag
---------	--------	-----------------	-------	-------------	----------------	-----------	-------------	------	---------	-----------	----------

### Batch BC91190 - EPA 5030B

Blank (BC91190-BLK1)						Prepared & Analyzed: 03/25/2019				
n-Propylbenzene	ND	0.500	ug/L							
o-Xylene	ND	0.500	"							
p- & m- Xylenes	ND	1.00	"							
p-Isopropyltoluene	ND	0.500	"							
sec-Butylbenzene	ND	0.500	"							
Styrene	ND	0.500	"							
tert-Butylbenzene	ND	0.500	"							
Tetrachloroethylene	ND	0.500	"							
Toluene	ND	0.500	"							
trans-1,2-Dichloroethylene	ND	0.500	"							
trans-1,3-Dichloropropylene	ND	0.500	"							
Trichloroethylene	ND	0.500	"							
Trichlorofluoromethane	ND	0.500	"							
Vinyl Chloride	ND	0.500	"							
Xylenes, Total	ND	1.50	"							
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	10.5		"	10.0		105	70-130			
<i>Surrogate: SURR: Toluene-d8</i>	10.8		"	10.0		108	70-130			
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	11.5		"	10.0		115	70-130			

LCS (BC91190-BS1)						Prepared & Analyzed: 03/25/2019			
1,1,1,2-Tetrachloroethane	10.1		ug/L	10.0		101	82-126		30
1,1,1-Trichloroethane	9.88		"	10.0		98.8	70-130		20
1,1,2,2-Tetrachloroethane	11.0		"	10.0		110	70-130		20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3		"	10.0		103	70-130		20
1,1,2-Trichloroethane	10.3		"	10.0		103	70-130		20
1,1-Dichloroethane	9.96		"	10.0		99.6	70-130		20
1,1-Dichloroethylene	10.4		"	10.0		104	70-130		20
1,1-Dichloropropylene	9.67		"	10.0		96.7	83-133		30
1,2,3-Trichlorobenzene	10.0		"	10.0		100	70-130		20
1,2,3-Trichloropropane	9.81		"	10.0		98.1	77-128		30
1,2,4-Trichlorobenzene	9.10		"	10.0		91.0	70-130		20
1,2,4-Trimethylbenzene	9.60		"	10.0		96.0	82-132		20
1,2-Dibromo-3-chloropropane	11.6		"	10.0		116	40-160		20
1,2-Dibromoethane	9.55		"	10.0		95.5	70-130		20
1,2-Dichlorobenzene	9.46		"	10.0		94.6	70-130		20
1,2-Dichloroethane	10.2		"	10.0		102	70-130		20
1,2-Dichloropropane	10.4		"	10.0		104	70-130		20
1,3,5-Trimethylbenzene	9.56		"	10.0		95.6	80-131		30
1,3-Dichlorobenzene	9.00		"	10.0		90.0	70-130		20
1,3-Dichloropropane	10.5		"	10.0		105	81-125		30
1,4-Dichlorobenzene	9.08		"	10.0		90.8	70-130		20
2,2-Dichloropropane	10.4		"	10.0		104	56-150		30
2-Chlorotoluene	10.5		"	10.0		105	79-130		30
2-Hexanone	9.51		"	10.0		95.1	40-160		20
4-Chlorotoluene	10.4		"	10.0		104	79-128		30
Acetone	6.01		"	10.0		60.1	40-160		20
Benzene	9.78		"	10.0		97.8	70-130		20
Bromobenzene	10.4		"	10.0		104	78-129		30
Bromo(chloromethane	10.2		"	10.0		102	70-130		20
Bromodichloromethane	10.5		"	10.0		105	70-130		20



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

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD RPD	RPD Limit	RPD Flag
<b>Batch BC91190 - EPA 5030B</b>											
<b>LCS (BC91190-BS1)</b>											
Prepared & Analyzed: 03/25/2019											
Bromoform	9.95		ug/L	10.0	99.5	70-130				20	
Bromomethane	8.87		"	10.0	88.7	40-160				20	
Carbon tetrachloride	9.63		"	10.0	96.3	70-130				20	
Chlorobenzene	10.4		"	10.0	104	70-130				20	
Chloroethane	10.3		"	10.0	103	40-160				20	
Chloroform	9.73		"	10.0	97.3	70-130				20	
Chloromethane	10.4		"	10.0	104	40-160				20	
cis-1,2-Dichloroethylene	9.75		"	10.0	97.5	70-130				20	
cis-1,3-Dichloropropylene	10.6		"	10.0	106	70-130				20	
Dibromochloromethane	10.1		"	10.0	101	70-130				20	
Dibromomethane	10.2		"	10.0	102	72-134				30	
Dichlorodifluoromethane	11.2		"	10.0	112	40-160				20	
Ethyl Benzene	10.5		"	10.0	105	70-130				20	
Hexachlorobutadiene	9.68		"	10.0	96.8	67-146				30	
Isopropylbenzene	9.45		"	10.0	94.5	70-130				20	
Methyl tert-butyl ether (MTBE)	9.88		"	10.0	98.8	70-130				20	
Methylene chloride	10.1		"	10.0	101	70-130				20	
Naphthalene	9.47		"	10.0	94.7	70-147				30	
n-Butylbenzene	9.40		"	10.0	94.0	79-132				30	
n-Propylbenzene	10.3		"	10.0	103	78-133				30	
o-Xylene	10.7		"	10.0	107	70-130				20	
p- & m- Xylenes	21.9		"	20.0	109	70-130				20	
p-Isopropyltoluene	9.50		"	10.0	95.0	81-136				30	
sec-Butylbenzene	9.84		"	10.0	98.4	79-137				30	
Styrene	9.76		"	10.0	97.6	70-130				20	
tert-Butylbenzene	9.35		"	10.0	93.5	77-138				30	
Tetrachloroethylene	6.37		"	10.0	63.7	70-130	Low Bias			20	
Toluene	10.8		"	10.0	108	70-130				20	
trans-1,2-Dichloroethylene	9.89		"	10.0	98.9	70-130				20	
trans-1,3-Dichloropropylene	10.6		"	10.0	106	70-130				20	
Trichloroethylene	10.4		"	10.0	104	70-130				20	
Trichlorofluoromethane	10.3		"	10.0	103	40-160				20	
Vinyl Chloride	10.7		"	10.0	107	70-130				20	
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	10.2		"	10.0	102	70-130					
<i>Surrogate: SURR: Toluene-d8</i>	10.8		"	10.0	108	70-130					
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	11.1		"	10.0	111	70-130					



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

**York Analytical Laboratories, Inc.**

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

### Batch BC91190 - EPA 5030B

LCS Dup (BC91190-BSD1)	Prepared & Analyzed: 03/25/2019									
1,1,1,2-Tetrachloroethane	9.75		ug/L	10.0	97.5	82-126			3.43	30
1,1,1-Trichloroethane	9.22		"	10.0	92.2	70-130			6.91	20
1,1,2,2-Tetrachloroethane	10.5		"	10.0	105	70-130			3.91	20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.83		"	10.0	98.3	70-130			5.06	20
1,1,2-Trichloroethane	9.70		"	10.0	97.0	70-130			5.81	20
1,1-Dichloroethane	9.52		"	10.0	95.2	70-130			4.52	20
1,1-Dichloroethylene	9.55		"	10.0	95.5	70-130			8.04	20
1,1-Dichloropropylene	9.04		"	10.0	90.4	83-133			6.73	30
1,2,3-Trichlorobenzene	9.02		"	10.0	90.2	70-130			10.5	20
1,2,3-Trichloropropane	9.49		"	10.0	94.9	77-128			3.32	30
1,2,4-Trichlorobenzene	8.93		"	10.0	89.3	70-130			1.89	20
1,2,4-Trimethylbenzene	9.44		"	10.0	94.4	82-132			1.68	20
1,2-Dibromo-3-chloropropane	10.8		"	10.0	108	40-160			7.13	20
1,2-Dibromoethane	9.67		"	10.0	96.7	70-130			1.25	20
1,2-Dichlorobenzene	9.15		"	10.0	91.5	70-130			3.33	20
1,2-Dichloroethane	9.72		"	10.0	97.2	70-130			4.92	20
1,2-Dichloropropane	9.96		"	10.0	99.6	70-130			4.13	20
1,3,5-Trimethylbenzene	9.34		"	10.0	93.4	80-131			2.33	30
1,3-Dichlorobenzene	8.71		"	10.0	87.1	70-130			3.27	20
1,3-Dichloropropane	10.2		"	10.0	102	81-125			2.60	30
1,4-Dichlorobenzene	8.93		"	10.0	89.3	70-130			1.67	20
2,2-Dichloropropane	9.68		"	10.0	96.8	56-150			7.46	30
2-Chlorotoluene	10.2		"	10.0	102	79-130			2.32	30
2-Hexanone	9.08		"	10.0	90.8	40-160			4.63	20
4-Chlorotoluene	10.2		"	10.0	102	79-128			2.23	30
Acetone	5.46		"	10.0	54.6	40-160			9.59	20
Benzene	9.19		"	10.0	91.9	70-130			6.22	20
Bromobenzene	10.4		"	10.0	104	78-129			0.0960	30
Bromochloromethane	9.51		"	10.0	95.1	70-130			6.51	20
Bromodichloromethane	10.3		"	10.0	103	70-130			1.44	20
Bromoform	10.0		"	10.0	100	70-130			0.900	20
Bromomethane	8.23		"	10.0	82.3	40-160			7.49	20
Carbon tetrachloride	9.12		"	10.0	91.2	70-130			5.44	20
Chlorobenzene	10.0		"	10.0	100	70-130			3.44	20
Chloroethane	9.36		"	10.0	93.6	40-160			9.37	20
Chloroform	9.22		"	10.0	92.2	70-130			5.38	20
Chloromethane	10.1		"	10.0	101	40-160			3.31	20
cis-1,2-Dichloroethylene	9.31		"	10.0	93.1	70-130			4.62	20
cis-1,3-Dichloropropylene	10.4		"	10.0	104	70-130			2.48	20
Dibromochloromethane	9.57		"	10.0	95.7	70-130			5.49	20
Dibromomethane	10.3		"	10.0	103	72-134			0.876	30
Dichlorodifluoromethane	10.4		"	10.0	104	40-160			7.35	20
Ethyl Benzene	10.3		"	10.0	103	70-130			1.73	20
Hexachlorobutadiene	9.35		"	10.0	93.5	67-146			3.47	30
Isopropylbenzene	9.19		"	10.0	91.9	70-130			2.79	20
Methyl tert-butyl ether (MTBE)	9.34		"	10.0	93.4	70-130			5.62	20
Methylene chloride	9.50		"	10.0	95.0	70-130			6.02	20
Naphthalene	9.05		"	10.0	90.5	70-147			4.54	30
n-Butylbenzene	9.83		"	10.0	98.3	79-132			4.47	30
n-Propylbenzene	9.98		"	10.0	99.8	78-133			2.96	30



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

York Analytical Laboratories, Inc.

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

### Batch BC91190 - EPA 5030B

LCS Dup (BC91190-BSD1)	Prepared & Analyzed: 03/25/2019										
o-Xylene	10.2		ug/L	10.0	102	70-130		4.49	20		
p- & m- Xylenes	21.0		"	20.0	105	70-130		4.25	20		
p-Isopropyltoluene	9.40		"	10.0	94.0	81-136		1.06	30		
sec-Butylbenzene	9.61		"	10.0	96.1	79-137		2.37	30		
Styrene	9.51		"	10.0	95.1	70-130		2.59	20		
tert-Butylbenzene	9.13		"	10.0	91.3	77-138		2.38	30		
Tetrachloroethylene	6.45		"	10.0	64.5	70-130	Low Bias	1.25	20		
Toluene	10.2		"	10.0	102	70-130		5.69	20		
trans-1,2-Dichloroethylene	9.17		"	10.0	91.7	70-130		7.56	20		
trans-1,3-Dichloropropylene	10.4		"	10.0	104	70-130		1.90	20		
Trichloroethylene	10.1		"	10.0	101	70-130		3.22	20		
Trichlorofluoromethane	9.61		"	10.0	96.1	40-160		6.64	20		
Vinyl Chloride	10.0		"	10.0	100	70-130		6.47	20		
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	9.66		"	10.0	96.6	70-130					
<i>Surrogate: SURR: Toluene-d8</i>	10.9		"	10.0	109	70-130					
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	11.0		"	10.0	110	70-130					



## Gas Chromatography/Flame Ionization Detector - Quality Control Data

York Analytical Laboratories, Inc.

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

### Batch BC91165 - Preparation for GC Analysis

#### Blank (BC91165-BLK1)

Prepared: 03/23/2019 Analyzed: 03/25/2019

Methane	ND	10	ug/L								
Ethane	ND	10	"								
Ethylene (Ethene)	ND	10	"								

#### Duplicate (BC91165-DUP1)

\*Source sample: 19C0771-01 (WQ031919:1300 FRW-1)

Prepared: 03/23/2019 Analyzed: 03/25/2019

Methane	38	10	ug/L	37					2.64	35	
Ethane	ND	10	"	ND						35	
Ethylene (Ethene)	ND	10	"	ND						35	



## Metals by ICP - Quality Control Data

### York Analytical Laboratories, Inc.

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

#### **Batch BC91137 - EPA 3015A**

##### **Blank (BC91137-BLK1)**

Prepared: 03/22/2019 Analyzed: 03/25/2019

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

##### **LCS (BC91137-BS1)**

Prepared: 03/22/2019 Analyzed: 03/25/2019

Iron - Dissolved	1.13	0.278	mg/L	1.11	102	80-120
------------------	------	-------	------	------	-----	--------

**Anions by Ion Chromatography - Quality Control Data****York Analytical Laboratories, Inc.**

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

**Batch BC90998 - EPA 300****Blank (BC90998-BLK1)**

Prepared &amp; Analyzed: 03/20/2019

Nitrate as N	ND	0.0500	mg/L
Nitrite as N	ND	0.0500	"
Sulfate	ND	1.00	"

**LCS (BC90998-BS1)**

Prepared &amp; Analyzed: 03/20/2019

Nitrate as N	10.4	0.0500	mg/L	10.0	104	90-110
Nitrite as N	10.2	0.0500	"	10.0	102	90-110
Sulfate	10.5	1.00	"	10.0	105	85-115



## Wet Chemistry Parameters - Quality Control Data

### York Analytical Laboratories, Inc.

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

#### Batch BC91016 - Analysis Preparation

##### Blank (BC91016-BLK1)

Prepared & Analyzed: 03/21/2019

Total Organic Carbon (TOC) ND 1.00 mg/L

##### LCS (BC91016-BS1)

Prepared & Analyzed: 03/21/2019

Total Organic Carbon (TOC) 78.5 1.00 mg/L 76.4 103 79.5-125.1



### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19C0771-01	WQ031919:1300 FRW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19C0771-02	WQ031919:1305 FRW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19C0771-03	WQ031919:1410 FRW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19C0771-04	WQ031919:1315 FRW-4	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.

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

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

### Definitions and Other Explanations

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

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

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

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

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

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

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

NR Not reported

RPD Relative Percent Difference

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

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

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

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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



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

---

Revision Description:      used QA template



York Analytical Laboratories, Inc.  
120 Research Drive  
Stratford, CT 06615  
Queens, NY 11418  
clientservices@yorklab.com

**YORK**  
ANALYTICAL LABORATORIES INC.

www.yorklab.com

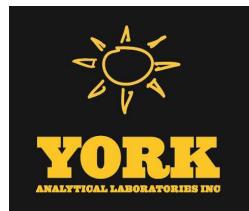
## Field Chain-of-Custody Record

YORK Project No.  
**19C0771**

Page 1 of 1

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

YOUR Information		Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: <b>WSP</b>	Company: 4 River One Sq 704 Sewanee Ct 06484	Address: Phone: 203-929-8555	Address: Name: <i>Same</i> Phone: <i>71 NCE</i>	31401451.000	RUSH - Next Day
Contact: <i>Trude Sudar</i>	Contact: <i>Trude Sudar</i>	E-mail: <i>Tsudar@wsp.com</i>	YOUR Project Name Rowe	YOUR PO#:	RUSH - Two Day
					RUSH - Three Day
					RUSH - Four Day
					Standard (5-7 Day) <i>✓</i>
Matrix Codes		Samples From	Report / EDD Type (circle selections)	YORK Reg. Comp.	
S - soil / solid GW - groundwater DW - drinking water WW - wastewater O - Oil ; Other		New York New Jersey Connecticut Pennsylvania Other	Summary Report QA Report NY ASP A Package NY ASP B Package	Standard Excel EDD EQuIS (Standard) NYSDEC EQuIS NJDEP SRP HazSite Other: NJDKOP	Compared to the following Regulation(s); (please fill in)
Sample Matrix		Date/Time Sampled	Analysis Requested	Container Description	
Sample Identification	Sample Matrix	Date/Time Sampled	VOCs + Fossi: 113 Silica, Fluoride, Potassium, dissolved Tion, TIC, Nitrate + Nitrite	2x 250cc, <i>Er Vos</i>	
: W <del>G</del> 03/19/19: 1300 FRW-1	GW	3/19 1300			
W <del>G</del> 03/19/19: 1305 FRW-2		↓ 1305			
W <del>G</del> 03/19/19: 1400 FRW-3		↓ 1410			
W <del>G</del> 03/19/19: 1345 FRW-4		↓ 1315			
Comments: <i>Nitrate field filtered</i>					
Preservation: (check all that apply)					
HCl <input type="checkbox"/> MeOH <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> ZnAc <input type="checkbox"/> Ascorbic Acid <input type="checkbox"/> Other: _____					
Samples Relinquished by / Company		Date/Time	Special Instruction		
<i>Mar WSP</i>		3/20/19 851	Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>		
Samples Received by / Company		Date/Time	Date/Time		
Samples Relinquished by / Company		Date/Time	Date/Time		
Samples Received by / Company		Date/Time	Temp. Received at Lab <i>3.0</i>		
			Degrees C <i>0.52</i>		



# Technical Report

prepared for:

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

4 Research Drive, Suite 204

Shelton CT, 06484

**Attention: Tunde Komuves-Sandor**

Report Date: 05/31/2019

**Client Project ID: 31401451.000 Rowe**

York Project (SDG) No.: 19C0772

Revision No. 2.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE

[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615

(203) 325-1371



132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

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

Report Date: 05/31/2019  
Client Project ID: 31401451.000 Rowe  
York Project (SDG) No.: 19C0772

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

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 20, 2019 and listed below. The project was identified as your project: **31401451.000 Rowe**.

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>
19C0772-01	MW-98-01A	Water	03/19/2019	03/20/2019
19C0772-02	MW-98-04	Water	03/19/2019	03/20/2019
19C0772-03	MW-98-04B	Water	03/19/2019	03/20/2019
19C0772-04	MW-98-05AR	Water	03/19/2019	03/20/2019
19C0772-05	MW-98-05BR	Water	03/19/2019	03/20/2019
19C0772-06	MW-45A	Water	03/19/2019	03/20/2019
19C0772-07	MW-45B	Water	03/19/2019	03/20/2019
19C0772-08	MW-A	Water	03/19/2019	03/20/2019

## **General Notes for York Project (SDG) No.: 19C0772**

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:** 05/31/2019





## Sample Information

**Client Sample ID:** MW-98-01A

**York Sample ID:** 19C0772-01

York Project (SDG) No.  
19C0772

Client Project ID  
31401451.000 Rowe

Matrix  
Water

Collection Date/Time  
March 19, 2019 11:12 am

Date Received  
03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 15:44	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS



## Sample Information

Client Sample ID: MW-98-01A

York Sample ID: 19C0772-01

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 11:12 am

Date Received

03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS



## Sample Information

Client Sample ID: MW-98-01A

York Sample ID: 19C0772-01

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 11:12 am

Date Received

03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>1.59</b>	ICV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 15:44	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 15:44	SS

#### **Surrogate Recoveries**

#### **Result**

#### **Acceptance Range**

17060-07-0	Surrogate: SURN: 1,2-Dichloroethane-d4	110 %	70-130
2037-26-5	Surrogate: SURN: Toluene-d8	107 %	70-130
460-00-4	Surrogate: SURN: p-Bromofluorobenzene	116 %	70-130

### Methane, Ethane & Ethylene

#### Log-in Notes:

#### Sample Notes:



## Sample Information

Client Sample ID: MW-98-01A

York Sample ID: 19C0772-01

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 11:12 am

Date Received

03/20/2019

Sample Prepared by Method: Preparation for GC Analysis

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-82-8	* Methane	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 10:09	RB
74-84-0	* Ethane	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 10:09	RB
74-85-1	* Ethylene (Ethene)	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 10:09	RB

### Iron, Dissolved by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	2.80		mg/L	0.278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/22/2019 13:27	03/25/2019 13:25	KML

### Nitrate as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	1.33		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 12:32	03/20/2019 12:32	TJM

### Nitrite as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-65-0	Nitrite as N	ND		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,PADEP	03/20/2019 12:32	03/20/2019 12:32	TJM

### Sulfate as SO<sub>4</sub>

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	Sulfate	4.79		mg/L	1.00	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 12:32	03/20/2019 12:32	TJM

### Total Organic Carbon

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	1.61		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/21/2019 08:33	03/21/2019 16:08	AD



## Sample Information

Client Sample ID: MW-98-04

York Sample ID: 19C0772-02

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 4:33 pm

Date Received

03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 16:16	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS



## Sample Information

Client Sample ID: MW-98-04

York Sample ID: 19C0772-02

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 4:33 pm

Date Received

03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS



## Sample Information

Client Sample ID: MW-98-04

York Sample ID: 19C0772-02

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 4:33 pm

Date Received

03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
127-18-4	Tetrachloroethylene	3.01	ICV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:16	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 16:16	SS

#### **Surrogate Recoveries**

	<b>Result</b>	<b>Acceptance Range</b>
17060-07-0	Surrogate: Surr: 1,2-Dichloroethane-d4	108 %
2037-26-5	Surrogate: Surr: Toluene-d8	107 %
460-00-4	Surrogate: Surr: p-Bromofluorobenzene	118 %



## Sample Information

**Client Sample ID:** MW-98-04B

**York Sample ID:** 19C0772-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0772	31401451.000 Rowe	Water	March 19, 2019 4:07 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 16:48	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS



## Sample Information

**Client Sample ID:** MW-98-04B

**York Sample ID:** 19C0772-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0772	31401451.000 Rowe	Water	March 19, 2019 4:07 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS



## Sample Information

**Client Sample ID:** MW-98-04B

**York Sample ID:** 19C0772-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0772	31401451.000 Rowe	Water	March 19, 2019 4:07 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 16:48	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 16:48	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	104 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	108 %	70-130								
460-00-4	Surrogate: SURR: p-Bromoanisole	119 %	70-130								



## Sample Information

Client Sample ID: MW-98-05AR

York Sample ID: 19C0772-04

York Project (SDG) No.  
19C0772

Client Project ID  
31401451.000 Rowe

Matrix  
Water

Collection Date/Time  
March 19, 2019 12:03 pm

Date Received  
03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 17:19	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS



## Sample Information

**Client Sample ID:** MW-98-05AR

**York Sample ID:** 19C0772-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0772	31401451.000 Rowe	Water	March 19, 2019 12:03 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS



## Sample Information

Client Sample ID: MW-98-05AR

York Sample ID: 19C0772-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0772	31401451.000 Rowe	Water	March 19, 2019 12:03 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
127-18-4	Tetrachloroethylene	14.5	ICV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
79-01-6	Trichloroethylene	0.220		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:19	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 17:19	SS

#### Surrogate Recoveries

	<u>Result</u>	<u>Acceptance Range</u>
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	106 %
2037-26-5	Surrogate: SURR: Toluene-d8	104 %
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	116 %

### Methane, Ethane & Ethylene

#### Log-in Notes:

#### Sample Notes:



## Sample Information

Client Sample ID: MW-98-05AR

York Sample ID: 19C0772-04

York Project (SDG) No.  
19C0772

Client Project ID  
31401451.000 Rowe

Matrix  
Water

Collection Date/Time  
March 19, 2019 12:03 pm

Date Received  
03/20/2019

Sample Prepared by Method: Preparation for GC Analysis

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-82-8	* Methane	25		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 10:21	RB
74-84-0	* Ethane	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 10:21	RB
74-85-1	* Ethylene (Ethene)	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 10:21	RB

### Iron, Dissolved by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	ND		mg/L	0.278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/22/2019 13:27	03/25/2019 13:27	KML

### Nitrate as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	2.73		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 12:57	03/20/2019 12:57	TJM

### Nitrite as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-65-0	Nitrite as N	ND		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,PADEP	03/20/2019 12:57	03/20/2019 12:57	TJM

### Sulfate as SO4

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	Sulfate	12.8		mg/L	1.00	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 12:57	03/20/2019 12:57	TJM

### Total Organic Carbon

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	3.55		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/21/2019 08:33	03/21/2019 16:08	AD



## Sample Information

Client Sample ID: MW-98-05BR

York Sample ID: 19C0772-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0772	31401451.000 Rowe	Water	March 19, 2019 1:05 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 17:51	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS



## Sample Information

Client Sample ID: MW-98-05BR

York Sample ID: 19C0772-05

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
19C0772	31401451.000 Rowe	Water	March 19, 2019 1:05 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS



## Sample Information

**Client Sample ID:** MW-98-05BR

**York Sample ID:** 19C0772-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0772	31401451.000 Rowe	Water	March 19, 2019 1:05 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 17:51	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 17:51	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	107 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	107 %	70-130								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	118 %	70-130								



## Sample Information

Client Sample ID: MW-45A

York Sample ID: 19C0772-06

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
19C0772	31401451.000 Rowe	Water	March 19, 2019 3:00 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 18:23	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS



## Sample Information

Client Sample ID: MW-45A

York Sample ID: 19C0772-06

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 3:00 pm

Date Received

03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS



## Sample Information

Client Sample ID: MW-45A

York Sample ID: 19C0772-06

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 3:00 pm

Date Received

03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:23	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 18:23	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	112 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	108 %	70-130								
460-00-4	Surrogate: SURR: p-Bromoanisole	119 %	70-130								



## Sample Information

**Client Sample ID:** MW-45B

**York Sample ID:** 19C0772-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0772	31401451.000 Rowe	Water	March 19, 2019 3:31 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 18:54	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS



## Sample Information

Client Sample ID: MW-45B

York Sample ID: 19C0772-07

York Project (SDG) No.  
19C0772

Client Project ID  
31401451.000 Rowe

Matrix  
Water

Collection Date/Time  
March 19, 2019 3:31 pm

Date Received  
03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS



## Sample Information

**Client Sample ID:** MW-45B

**York Sample ID:** 19C0772-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19C0772	31401451.000 Rowe	Water	March 19, 2019 3:31 pm	03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 18:54	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 18:54	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	110 %	70-130								
2037-26-5	Surrogate: SURR: Toluene-d8	107 %	70-130								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	119 %	70-130								



## Sample Information

Client Sample ID: MW-A

York Sample ID: 19C0772-08

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 12:03 pm

Date Received

03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 19:26	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS



## Sample Information

Client Sample ID: MW-A

York Sample ID: 19C0772-08

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 12:03 pm

Date Received

03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS



## Sample Information

Client Sample ID: MW-A

York Sample ID: 19C0772-08

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 12:03 pm

Date Received

03/20/2019

### Volatile Organics, 8260 List - Low Level

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
91-20-3	Naphthalene	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
127-18-4	Tetrachloroethylene	14.5	ICV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
79-01-6	Trichloroethylene	0.210		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/25/2019 07:30	03/25/2019 19:26	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/25/2019 07:30	03/25/2019 19:26	SS

#### Surrogate Recoveries

#### Result

#### Acceptance Range

17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %	70-130
2037-26-5	Surrogate: SURR: Toluene-d8	107 %	70-130
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	116 %	70-130

### Methane, Ethane & Ethylene

#### Log-in Notes:

#### Sample Notes:



## Sample Information

Client Sample ID: MW-A

York Sample ID: 19C0772-08

York Project (SDG) No.

19C0772

Client Project ID

31401451.000 Rowe

Matrix

Water

Collection Date/Time

March 19, 2019 12:03 pm

Date Received

03/20/2019

Sample Prepared by Method: Preparation for GC Analysis

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-82-8	* Methane	28		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 10:31	RB
74-84-0	* Ethane	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 10:31	RB
74-85-1	* Ethylene (Ethene)	ND		ug/L	10	1	GC/Headspace Certifications:	03/23/2019 09:34	03/25/2019 10:31	RB

### Iron, Dissolved by EPA 6010

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	ND		mg/L	0.278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/22/2019 13:27	03/25/2019 13:30	KML

### Nitrate as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	2.83		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 13:21	03/20/2019 13:21	TJM

### Nitrite as N

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-65-0	Nitrite as N	ND		mg/L	0.0500	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,PADEP	03/20/2019 13:21	03/20/2019 13:21	TJM

### Sulfate as SO4

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	Sulfate	12.8		mg/L	1.00	1	EPA 300.0 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/20/2019 13:21	03/20/2019 13:21	TJM

### Total Organic Carbon

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	3.32		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	03/21/2019 08:33	03/21/2019 16:08	AD



## Analytical Batch Summary

**Batch ID:** BC90998**Preparation Method:** EPA 300**Prepared By:** TJM

YORK Sample ID	Client Sample ID	Preparation Date
19C0772-01	MW-98-01A	03/20/19
19C0772-04	MW-98-05AR	03/20/19
19C0772-08	MW-A	03/20/19
BC90998-BLK1	Blank	03/20/19
BC90998-BS1	LCS	03/20/19

**Batch ID:** BC91016**Preparation Method:** Analysis Preparation**Prepared By:** AD

YORK Sample ID	Client Sample ID	Preparation Date
19C0772-01	MW-98-01A	03/21/19
19C0772-04	MW-98-05AR	03/21/19
19C0772-08	MW-A	03/21/19
BC91016-BLK1	Blank	03/21/19
BC91016-BS1	LCS	03/21/19

**Batch ID:** BC91137**Preparation Method:** EPA 3015A**Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
19C0772-01	MW-98-01A	03/22/19
19C0772-04	MW-98-05AR	03/22/19
19C0772-08	MW-A	03/22/19
BC91137-BLK1	Blank	03/22/19
BC91137-BS1	LCS	03/22/19

**Batch ID:** BC91165**Preparation Method:** Preparation for GC Analysis**Prepared By:** RQB

YORK Sample ID	Client Sample ID	Preparation Date
19C0772-01	MW-98-01A	03/23/19
19C0772-04	MW-98-05AR	03/23/19
19C0772-08	MW-A	03/23/19
BC91165-BLK1	Blank	03/23/19

**Batch ID:** BC91190**Preparation Method:** EPA 5030B**Prepared By:** AB

YORK Sample ID	Client Sample ID	Preparation Date
19C0772-01	MW-98-01A	03/25/19
19C0772-02	MW-98-04	03/25/19
19C0772-03	MW-98-04B	03/25/19
19C0772-04	MW-98-05AR	03/25/19
19C0772-05	MW-98-05BR	03/25/19
19C0772-06	MW-45A	03/25/19
19C0772-07	MW-45B	03/25/19
19C0772-08	MW-A	03/25/19



BC91190-BLK1	Blank	03/25/19
BC91190-BS1	LCS	03/25/19
BC91190-BSD1	LCS Dup	03/25/19



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

York Analytical Laboratories, Inc.

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

### Batch BC91190 - EPA 5030B

#### Blank (BC91190-BLK1)

Prepared & Analyzed: 03/25/2019

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,1-Dichloropropylene	ND	0.500	"
1,2,3-Trichlorobenzene	0.250	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 BC91190 - EPA 5030B

##### Blank (BC91190-BLK1)

Prepared & Analyzed: 03/25/2019

n-Propylbenzene	ND	0.500	ug/L								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	10.5		"	10.0		105	70-130				
<i>Surrogate: SURR: Toluene-d8</i>	10.8		"	10.0		108	70-130				
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	11.5		"	10.0		115	70-130				

##### LCS (BC91190-BS1)

Prepared & Analyzed: 03/25/2019

1,1,1,2-Tetrachloroethane	10.1	ug/L	10.0	101	82-126		30				
1,1,1-Trichloroethane	9.88	"	10.0	98.8	70-130		20				
1,1,2,2-Tetrachloroethane	11.0	"	10.0	110	70-130		20				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3	"	10.0	103	70-130		20				
1,1,2-Trichloroethane	10.3	"	10.0	103	70-130		20				
1,1-Dichloroethane	9.96	"	10.0	99.6	70-130		20				
1,1-Dichloroethylene	10.4	"	10.0	104	70-130		20				
1,1-Dichloropropylene	9.67	"	10.0	96.7	83-133		30				
1,2,3-Trichlorobenzene	10.0	"	10.0	100	70-130		20				
1,2,3-Trichloropropane	9.81	"	10.0	98.1	77-128		30				
1,2,4-Trichlorobenzene	9.10	"	10.0	91.0	70-130		20				
1,2,4-Trimethylbenzene	9.60	"	10.0	96.0	82-132		20				
1,2-Dibromo-3-chloropropane	11.6	"	10.0	116	40-160		20				
1,2-Dibromoethane	9.55	"	10.0	95.5	70-130		20				
1,2-Dichlorobenzene	9.46	"	10.0	94.6	70-130		20				
1,2-Dichloroethane	10.2	"	10.0	102	70-130		20				
1,2-Dichloropropane	10.4	"	10.0	104	70-130		20				
1,3,5-Trimethylbenzene	9.56	"	10.0	95.6	80-131		30				
1,3-Dichlorobenzene	9.00	"	10.0	90.0	70-130		20				
1,3-Dichloropropane	10.5	"	10.0	105	81-125		30				
1,4-Dichlorobenzene	9.08	"	10.0	90.8	70-130		20				
2,2-Dichloropropane	10.4	"	10.0	104	56-150		30				
2-Chlorotoluene	10.5	"	10.0	105	79-130		30				
2-Hexanone	9.51	"	10.0	95.1	40-160		20				
4-Chlorotoluene	10.4	"	10.0	104	79-128		30				
Acetone	6.01	"	10.0	60.1	40-160		20				
Benzene	9.78	"	10.0	97.8	70-130		20				
Bromobenzene	10.4	"	10.0	104	78-129		30				
Bromo(chloromethane	10.2	"	10.0	102	70-130		20				
Bromodichloromethane	10.5	"	10.0	105	70-130		20				



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

**York Analytical Laboratories, Inc.**

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

### **Batch BC91190 - EPA 5030B**

LCS (BC91190-BS1)							Prepared & Analyzed: 03/25/2019				
Bromoform	9.95		ug/L	10.0	99.5	70-130				20	
Bromomethane	8.87		"	10.0	88.7	40-160				20	
Carbon tetrachloride	9.63		"	10.0	96.3	70-130				20	
Chlorobenzene	10.4		"	10.0	104	70-130				20	
Chloroethane	10.3		"	10.0	103	40-160				20	
Chloroform	9.73		"	10.0	97.3	70-130				20	
Chloromethane	10.4		"	10.0	104	40-160				20	
cis-1,2-Dichloroethylene	9.75		"	10.0	97.5	70-130				20	
cis-1,3-Dichloropropylene	10.6		"	10.0	106	70-130				20	
Dibromochloromethane	10.1		"	10.0	101	70-130				20	
Dibromomethane	10.2		"	10.0	102	72-134				30	
Dichlorodifluoromethane	11.2		"	10.0	112	40-160				20	
Ethyl Benzene	10.5		"	10.0	105	70-130				20	
Hexachlorobutadiene	9.68		"	10.0	96.8	67-146				30	
Isopropylbenzene	9.45		"	10.0	94.5	70-130				20	
Methyl tert-butyl ether (MTBE)	9.88		"	10.0	98.8	70-130				20	
Methylene chloride	10.1		"	10.0	101	70-130				20	
Naphthalene	9.47		"	10.0	94.7	70-147				30	
n-Butylbenzene	9.40		"	10.0	94.0	79-132				30	
n-Propylbenzene	10.3		"	10.0	103	78-133				30	
o-Xylene	10.7		"	10.0	107	70-130				20	
p- & m- Xylenes	21.9		"	20.0	109	70-130				20	
p-Isopropyltoluene	9.50		"	10.0	95.0	81-136				30	
sec-Butylbenzene	9.84		"	10.0	98.4	79-137				30	
Styrene	9.76		"	10.0	97.6	70-130				20	
tert-Butylbenzene	9.35		"	10.0	93.5	77-138				30	
Tetrachloroethylene	6.37		"	10.0	63.7	70-130	Low Bias			20	
Toluene	10.8		"	10.0	108	70-130				20	
trans-1,2-Dichloroethylene	9.89		"	10.0	98.9	70-130				20	
trans-1,3-Dichloropropylene	10.6		"	10.0	106	70-130				20	
Trichloroethylene	10.4		"	10.0	104	70-130				20	
Trichlorofluoromethane	10.3		"	10.0	103	40-160				20	
Vinyl Chloride	10.7		"	10.0	107	70-130				20	
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	10.2		"	10.0	102	70-130					
<i>Surrogate: SURR: Toluene-d8</i>	10.8		"	10.0	108	70-130					
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	11.1		"	10.0	111	70-130					



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

**York Analytical Laboratories, Inc.**

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

### Batch BC91190 - EPA 5030B

LCS Dup (BC91190-BSD1)	Prepared & Analyzed: 03/25/2019									
1,1,1,2-Tetrachloroethane	9.75		ug/L	10.0	97.5	82-126			3.43	30
1,1,1-Trichloroethane	9.22		"	10.0	92.2	70-130			6.91	20
1,1,2,2-Tetrachloroethane	10.5		"	10.0	105	70-130			3.91	20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.83		"	10.0	98.3	70-130			5.06	20
1,1,2-Trichloroethane	9.70		"	10.0	97.0	70-130			5.81	20
1,1-Dichloroethane	9.52		"	10.0	95.2	70-130			4.52	20
1,1-Dichloroethylene	9.55		"	10.0	95.5	70-130			8.04	20
1,1-Dichloropropylene	9.04		"	10.0	90.4	83-133			6.73	30
1,2,3-Trichlorobenzene	9.02		"	10.0	90.2	70-130			10.5	20
1,2,3-Trichloropropane	9.49		"	10.0	94.9	77-128			3.32	30
1,2,4-Trichlorobenzene	8.93		"	10.0	89.3	70-130			1.89	20
1,2,4-Trimethylbenzene	9.44		"	10.0	94.4	82-132			1.68	20
1,2-Dibromo-3-chloropropane	10.8		"	10.0	108	40-160			7.13	20
1,2-Dibromoethane	9.67		"	10.0	96.7	70-130			1.25	20
1,2-Dichlorobenzene	9.15		"	10.0	91.5	70-130			3.33	20
1,2-Dichloroethane	9.72		"	10.0	97.2	70-130			4.92	20
1,2-Dichloropropane	9.96		"	10.0	99.6	70-130			4.13	20
1,3,5-Trimethylbenzene	9.34		"	10.0	93.4	80-131			2.33	30
1,3-Dichlorobenzene	8.71		"	10.0	87.1	70-130			3.27	20
1,3-Dichloropropane	10.2		"	10.0	102	81-125			2.60	30
1,4-Dichlorobenzene	8.93		"	10.0	89.3	70-130			1.67	20
2,2-Dichloropropane	9.68		"	10.0	96.8	56-150			7.46	30
2-Chlorotoluene	10.2		"	10.0	102	79-130			2.32	30
2-Hexanone	9.08		"	10.0	90.8	40-160			4.63	20
4-Chlorotoluene	10.2		"	10.0	102	79-128			2.23	30
Acetone	5.46		"	10.0	54.6	40-160			9.59	20
Benzene	9.19		"	10.0	91.9	70-130			6.22	20
Bromobenzene	10.4		"	10.0	104	78-129			0.0960	30
Bromochloromethane	9.51		"	10.0	95.1	70-130			6.51	20
Bromodichloromethane	10.3		"	10.0	103	70-130			1.44	20
Bromoform	10.0		"	10.0	100	70-130			0.900	20
Bromomethane	8.23		"	10.0	82.3	40-160			7.49	20
Carbon tetrachloride	9.12		"	10.0	91.2	70-130			5.44	20
Chlorobenzene	10.0		"	10.0	100	70-130			3.44	20
Chloroethane	9.36		"	10.0	93.6	40-160			9.37	20
Chloroform	9.22		"	10.0	92.2	70-130			5.38	20
Chloromethane	10.1		"	10.0	101	40-160			3.31	20
cis-1,2-Dichloroethylene	9.31		"	10.0	93.1	70-130			4.62	20
cis-1,3-Dichloropropylene	10.4		"	10.0	104	70-130			2.48	20
Dibromochloromethane	9.57		"	10.0	95.7	70-130			5.49	20
Dibromomethane	10.3		"	10.0	103	72-134			0.876	30
Dichlorodifluoromethane	10.4		"	10.0	104	40-160			7.35	20
Ethyl Benzene	10.3		"	10.0	103	70-130			1.73	20
Hexachlorobutadiene	9.35		"	10.0	93.5	67-146			3.47	30
Isopropylbenzene	9.19		"	10.0	91.9	70-130			2.79	20
Methyl tert-butyl ether (MTBE)	9.34		"	10.0	93.4	70-130			5.62	20
Methylene chloride	9.50		"	10.0	95.0	70-130			6.02	20
Naphthalene	9.05		"	10.0	90.5	70-147			4.54	30
n-Butylbenzene	9.83		"	10.0	98.3	79-132			4.47	30
n-Propylbenzene	9.98		"	10.0	99.8	78-133			2.96	30



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

York Analytical Laboratories, Inc.

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

### Batch BC91190 - EPA 5030B

LCS Dup (BC91190-BSD1)	Prepared & Analyzed: 03/25/2019										
o-Xylene	10.2		ug/L	10.0	102	70-130		4.49	20		
p- & m- Xylenes	21.0		"	20.0	105	70-130		4.25	20		
p-Isopropyltoluene	9.40		"	10.0	94.0	81-136		1.06	30		
sec-Butylbenzene	9.61		"	10.0	96.1	79-137		2.37	30		
Styrene	9.51		"	10.0	95.1	70-130		2.59	20		
tert-Butylbenzene	9.13		"	10.0	91.3	77-138		2.38	30		
Tetrachloroethylene	6.45		"	10.0	64.5	70-130	Low Bias	1.25	20		
Toluene	10.2		"	10.0	102	70-130		5.69	20		
trans-1,2-Dichloroethylene	9.17		"	10.0	91.7	70-130		7.56	20		
trans-1,3-Dichloropropylene	10.4		"	10.0	104	70-130		1.90	20		
Trichloroethylene	10.1		"	10.0	101	70-130		3.22	20		
Trichlorofluoromethane	9.61		"	10.0	96.1	40-160		6.64	20		
Vinyl Chloride	10.0		"	10.0	100	70-130		6.47	20		
<i>Surrogate: SURR: 1,2-Dichloroethane-d4</i>	9.66		"	10.0	96.6	70-130					
<i>Surrogate: SURR: Toluene-d8</i>	10.9		"	10.0	109	70-130					
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	11.0		"	10.0	110	70-130					



## Gas Chromatography/Flame Ionization Detector - 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 BC91165 - Preparation for GC Analysis

#### Blank (BC91165-BLK1)

Prepared: 03/23/2019 Analyzed: 03/25/2019

Methane	ND	10	ug/L
Ethane	ND	10	"
Ethylene (Ethene)	ND	10	"



## Metals by ICP - Quality Control Data

### York Analytical Laboratories, Inc.

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

#### **Batch BC91137 - EPA 3015A**

##### **Blank (BC91137-BLK1)**

Prepared: 03/22/2019 Analyzed: 03/25/2019

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

##### **LCS (BC91137-BS1)**

Prepared: 03/22/2019 Analyzed: 03/25/2019

Iron - Dissolved	1.13	0.278	mg/L	1.11	102	80-120
------------------	------	-------	------	------	-----	--------

**Anions by Ion Chromatography - Quality Control Data****York Analytical Laboratories, Inc.**

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

**Batch BC90998 - EPA 300****Blank (BC90998-BLK1)**

Prepared &amp; Analyzed: 03/20/2019

Nitrate as N	ND	0.0500	mg/L
Nitrite as N	ND	0.0500	"
Sulfate	ND	1.00	"

**LCS (BC90998-BS1)**

Prepared &amp; Analyzed: 03/20/2019

Nitrate as N	10.4	0.0500	mg/L	10.0	104	90-110
Nitrite as N	10.2	0.0500	"	10.0	102	90-110
Sulfate	10.5	1.00	"	10.0	105	85-115



## Wet Chemistry Parameters - 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 BC91016 - Analysis Preparation

##### Blank (BC91016-BLK1)

Prepared & Analyzed: 03/21/2019

Total Organic Carbon (TOC) ND 1.00 mg/L

##### LCS (BC91016-BS1)

Prepared & Analyzed: 03/21/2019

Total Organic Carbon (TOC) 78.5 1.00 mg/L 76.4 103 79.5-125.1



### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19C0772-01	MW-98-01A	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19C0772-02	MW-98-04	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19C0772-03	MW-98-04B	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19C0772-04	MW-98-05AR	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19C0772-05	MW-98-05BR	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19C0772-06	MW-45A	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19C0772-07	MW-45B	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19C0772-08	MW-A	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.

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

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

### Definitions and Other Explanations

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

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

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

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

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

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

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

NR Not reported

RPD Relative Percent Difference

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

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

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

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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



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

---

Revision Description: QA template



York Analytical Laboratories, Inc.  
120 Research Drive  
Stratford, CT 06615  
clientservices@yorklab.com  
www.yorklab.com

**YORK**  
ANALYTICAL LABORATORIES INC.

# Field Chain-of-Custody Record

YORK Project No.  
**9C0772**

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

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

YOUR Information		Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: <b>WSP</b>	Company: Address: <b>4 River Ave Ste 244 Stamford, CT 06904</b>	Company: Address: <b>WSP</b>	Phone: <b>263-929-8555</b>	YOUR Project Name <b>Rare</b>	RUSH - Next Day RUSH - Two Day RUSH - Three Day RUSH - Four Day Standard 5-7 Day <b>X</b>
Contact: <b>Tunde Sardar</b>	Contact: <b>Tunde Sardar</b>	Contact: <b>Tunde Sardar</b>	E-mail: <b>TSardar@WSP.COM</b>	E-mail: <b>TSardar@WSP.COM</b>	YOUR PO#:
<p>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.</p> <p><i>[Signature]</i></p> <p><b>Print Spots</b></p> <p>Samples Collected by: (print your name above and sign below)</p> <p><i>[Signature]</i></p>					
Matrix Codes		Samples From	Report / EDD Type (circle selections)		YORK Reg. Comp.
S - soil / solid	New York <input checked="" type="checkbox"/>	Summary Report	CT RCP	Standard Excel EDD	Compared to the following Regulation(s): (please fill in)
GW - groundwater	New Jersey <input checked="" type="checkbox"/>	QA Report	CT TRCP DQA/DUE	EQulS (Standard)	
DW - drinking water	Connecticut <input checked="" type="checkbox"/>	NY ASP A Package	NJDEP Reduced	NYSDEC EQulS	
WW - wastewater	Pennsylvania <input checked="" type="checkbox"/>	NY ASP B Package	Deliverables	NJDEP SRP HazSite	
O - Oil	Other <input checked="" type="checkbox"/>	NJDQQP	Other:	Other:	
Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description	
MW-98-01A	<i>LW</i>	3/19/19 11:2	VOCs + Trace 113, <i>Addend package</i> *	<i>7x Black, 6x Vials</i>	
MW-98-04		1633		<i>3x Vials</i>	
MW-98-04B		1607		<i>3x Vials</i>	
MW-98-05AR		1203		<i>2x Black, 6x Vials</i>	
MW-98-05B2		1305		<i>3x Vials</i>	
MW-98-454		1500		<i>1x Vial</i>	
MW-453		1531		<i>1x Vial</i>	
MW-A		1203		<i>7x Black, 6x Vials</i>	
<p><b>Comments:</b> * Addend packages available: Silica, Ethene/Ethene, Dissolved Iron, TOC, Nitrate + Nitrite, Nine Axis bytes field flow</p>					
Samples Relinquished by / Company		Date/Time	Preservation: (check all that apply)		
Samples Received by / Company	Date/Time	Samples Received by / Company	HCl <input type="checkbox"/> MeOH <input type="checkbox"/> HNO3 <input type="checkbox"/> NaOH <input type="checkbox"/> ZnAc <input type="checkbox"/>	Ascorbic Acid <input type="checkbox"/> Other: _____	Special Instruction Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>
Samples Relinquished by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Received by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received at Lab	Temp. Received at Lab
					Degrees C