

August 22, 2019

Mr. Todd M. Caffoe, P.E.  
Project Manager  
New York State Department of Environmental Conservation  
6274 East Avon-Lima Road  
Avon, New York 14414

**VIA EMAIL: ToddCaffoe@dec.ny.gov**

Re: Former Brainerd Manufacturing Site #V00519-8  
115 North Washington Street, East Rochester, NY  
Summary of July 2019 Groundwater Monitoring

Dear Mr. Caffoe:

On behalf of Despatch Industries Inc., Benchmark Environmental Engineering & Science, PLLC (Benchmark) herein provides a summary of the groundwater monitoring performed in accordance with the May 29, 2019 letter transmitting post-injection groundwater monitoring results to the Department.

#### **SAMPLING EVENT**

On July 23, 2019, Benchmark collected groundwater samples from former source area wells MW-4, MW-5, MW-6 and pumping well PW-1R as well as downgradient off-site wells MW-9 and MW-12. Upgradient off-site well MW-2 could not be located due to additional gravel placed; therefore, Benchmark returned on July 30 to locate the well with a metal detector and collect a groundwater sample. Water level elevations were measured on July 23 before sampling in order to prepare an isopotential map showing groundwater flow direction. The groundwater samples were sent to Eurofins TestAmerica for analysis of Target Compound List (TCL) volatile organic compounds (VOCs).

#### **GROUNDWATER MONITORING RESULTS**

Table 1 provides a comparison of historic, pre-injection, and post-injection groundwater analytical results to the New York State Department of Environmental Conservation (NYSDEC) Class GA groundwater quality standards and guidance values (GWQS/GVs). As indicated on Table 1, tetrachloroethene (PCE) and trichloroethene (TCE) were either not detected or reported at concentrations below GWQSs at former source area well MW-6 and downgradient on-site well MW-5 during the July 2019 sampling event. The data show significant concentration reductions in downgradient wells MW-9 and MW-12. The cVOC concentration decreased by 91% in well MW-9 since it was last sampled in 2016, and by 85%

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in well MW-12 since it was last sampled in 2008. As expected, acetone and MEK are no longer detected in well MW-5.

Table 2 presents the groundwater elevations used to prepare the isopotential map. Figure 1 shows groundwater flowing in a northwest direction, which is consistent with past monitoring events.

### NEXT STEPS

The second semi-annual groundwater monitoring event is scheduled for November 2019. If these groundwater concentrations confirm success of the corrective actions, we will request NYSDEC approval to terminate groundwater monitoring in accordance with Section 2.2.2.1 of the 2013 Site Management Plan (SMP). If the Department concurs that groundwater monitoring can be terminated, we will then submit a decommissioning plan for the Interim Remedial Measures (IRM) pump and treat and gPRO groundwater treatment systems and associated pumping and injection wells.

Following these decommissioning activities, Benchmark will update the December 2013 Final Engineering Report and SMP and submit these documents to NYSDEC and the document repository.

Please contact us if you have any questions or require additional information.

Sincerely,  
Benchmark Environmental Engineering & Science, PLLC



Thomas H. Forbes, P.E.  
Principal Engineer

cc: Bernette Schilling (NYSDEC Region 8)  
Justin Deming (NYSDOH)  
Steven Berninger (NYSDOH)  
Alan Shaffer (Despatch)  
Wade Lippman

File: 0040-002-400

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## TABLES

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**TABLE 1**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**Former Brainerd Manufacturing Facility**  
**East Rochester, New York**

Parameter <sup>1</sup>	GWQS/GV <sup>3</sup>	MW-1							MW-2		MW-3					MW-4									
		08/18/06	01/31/12	09/25/13	12/04/13	6/4/14	6/4/15	6/28/16	Historic	Current	08/18/06	07/30/19	08/21/06	6/4/14	6/4/15	6/28/16	08/22/06	01/30/12	09/25/13	12/04/13	6/4/2014	6/4/2015	6/28/2016	Historic	Current
<b>TCL Volatile Organic Compounds (ug/L)</b>																									
Acetone	50	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	4.5 J	ND	
Bromodichloromethane	5	ND	ND	ND	ND	0.75	11	ND	ND	ND	ND	1.4	1.4	1.2	ND	2.8	2.3	1.3	1.1	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	ND	0.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	23	ND	0.91 J	1.2	ND	7	6.3	4.7	0.86 J	11	15	12	6.5	1.2	1.3	3.2			
Dibromochloromethane	5	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	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
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	NR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND
Tetrachloroethene	5	3.1 J	53	83	150	70	65	ND	8.2	11	ND	2	3.5	2.6	87	11	28	13	22	16	17	27			
Trichloroethene	5	0.78 J	19	15	65	17	30	0.91 J	6.3	2	11	2.5	3.2	3.1	240	90	46	33	37	16	16	42			
Trichlorofluoromethane	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
1,1 Dichloroethene	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
cis-1,2-Dichlorethane	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
trans-1,2-Dichloroethene	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
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	2.6 J	ND	ND	ND						
1,1,2-Trichloroethane	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
1,1 Dichloroethane	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
Total Site COCs (cVOCs) <sup>4</sup>	NA	3.9	72	98	215	87	95	0.9	15	13	11	4.5	6.7	5.7	327	101	74	46	59	32	33	69			

**Notes:**

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. MS/MSD collected at PW-1.
3. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
4. Sum of chlorinated VOCs means adding the concentrations of tetrachloroethene, trichloroethene, cis & trans-1,2-dichloroethene, and 1,1-dichloroethene.
5. Sampling occurred following 1/11/2019 injection of PlumeStop directly into well MW-6 and redevelopment on 2/8/19.

**Definitions:**

- J = Estimated value; result is less than the sample quantitation limit but greater than zero.  
 ND = parameter not detected above laboratory detection limit.  
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 N\* = Indicates the spike or duplicate analysis is not within the quality control limits  
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**BOLD** = Analytical result exceeds individual GWQS/GV; or potentially exceeds if the MDL is above the GWQS/GV.



**TABLE 1**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**Former Brainerd Manufacturing Facility**  
**East Rochester, New York**

Parameter <sup>1</sup>	GWQS/GV <sup>3</sup>	MW-5													
		Historic Groundwater Sampling Events								Pre-Injection	Post-Injection				
		08/22/06	01/30/12	03/05/13	06/26/13	9/25/13	12/04/13	06/04/14	06/04/15		07/10/17	11/30/17	02/27/18	06/04/18	07/23/19
<b>TCL Volatile Organic Compounds (ug/L)</b>															
Acetone	50	ND	ND	ND	ND	ND	3.4 J	3.3 J	ND	ND	7.3 J	200	200	63 J	ND
Bromodichloromethane	5	ND	ND	0.51 J	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	71 J	320	45 J	
Carbon Disulfide	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	
Chloroform	7	1.4 J	1.3	18	ND	ND	ND	ND	ND	0.98 J	ND	ND	ND	ND	
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methyl Acetate	NR	ND	ND	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	
Toluene	5	ND	ND	ND	ND	ND	0.51 J	0.71 J	ND	ND	ND	ND < 5.1	ND < 5.1	ND < 5.1	
<b>Tetrachloroethene</b>	<b>5</b>	<b>1,600</b>	<b>2,800</b>	<b>590</b>	<b>400</b>	<b>150</b>	<b>110</b>	<b>50</b>	<b>40</b>	<b>530 D</b>	<b>14</b>	ND	ND	ND	
Trichloroethene	5	1,400	1,500	260	240	59	52	23	20	330 D	8.5	ND	ND	ND	
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1 Dichloroethene	5	0.56 J	0.67 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-Dichloroethene	5	0.80 J	0.95 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND < 9.0	ND < 9.0	ND < 9.0	
1,1,1-Trichloroethane	5	11	6.3 J	1.3	ND	ND	ND	ND	ND	1.5	ND	ND < 8.2	ND < 8.2	ND < 8.2	
1,1,2-Trichloroethane	1	1.5 J	ND	ND	ND	ND	ND	ND	ND	0.57 J	ND	ND < 2.3	ND < 2.3	ND < 2.3	
1,1 Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Total Site COCs (cVOCs) <sup>4</sup>	NA	3,000	4,302	850	640	209	162	73	60	860	23	0	0	0	

**Notes:**

- Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- MS/MSD collected at PW-1.
- NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
- Sum of chlorinated VOCs means adding the concentrations of tetrachloroethene, trichloroethene, cis & trans-1,2-dichlorethane, and 1,1-dichloroethene.
- Sampling occurred following 1/11/2019 injection of PlumeStop directly into well MW-6 and redevelopment on 2/8/19.

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**Former Brainerd Manufacturing Facility**  
**East Rochester, New York**

Parameter <sup>1</sup>	GWQS/GV <sup>3</sup>	MW-6																MW-7	MW-8			
		Historic Groundwater Sampling Events										Pre-Injection		Post-Injection								
		08/22/06	01/30/12	Blind Dup 1-30-12	03/05/13	06/26/13	09/25/13	12/04/13	06/04/14	Blind Dup 6-4-14	06/04/15	06/28/16	07/10/17	11/30/17	02/27/18	06/04/18	08/08/18	10/29/18	2/22/19 <sup>5</sup>	07/23/19	8/21/06	8/21/06
<b>TCL Volatile Organic Compounds (ug/L)</b>																						
Acetone	50	ND	ND	ND	ND	ND	ND	5.0 J	ND	ND	ND	ND	ND	ND < 150	49	12 J	ND	ND	ND	ND	ND	
Bromodichloromethane	5	ND	4.4	4.6	0.47 J	ND	ND	ND	ND	ND	ND	ND	ND	ND < 20	ND	ND	ND	ND	ND	ND	ND	
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Butanone (MEK)	50	ND < 120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND < 66	8.7 J	ND	ND	ND	ND	ND	ND	
Carbon Disulfide	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroform	7	ND	14	14	2	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND < 17	ND	ND	ND	ND	ND	ND	ND	
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND < 16	ND	ND	ND	ND	ND	ND	ND	
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	87	70	ND	ND	ND	ND < 22	ND	ND	3.8 J	3.8 J	3.4 J	ND	ND	
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methyl Acetate	NR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Toluene	5	3.2 J	0.95 J	1	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND < 26	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethene	5	3,100	1,700	1,700	410	1,600	1,300	1,600	1,500	1,500	570	1,200	390	90	3.5 J	120	290	170	ND < 1.4	0.45 J	ND	13
Trichloroethene	5	1,500	660	650	95	520	450	570	560	520	130	340	110	51	4.9	88	130	140	ND < 1.8	0.66 J	6.0	20
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND < 44	ND	ND	ND	ND	ND	ND	ND	
1,1 Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND < 15	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-Dichlorethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND < 41	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND < 45	ND	ND	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane	5	16 J	4	3.8	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND < 41	ND	ND	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND < 12	ND	ND	ND	ND	ND	ND	ND	
1,1 Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND < 19	ND	ND	ND	ND	ND	ND	ND	
Total Site COCs (cVOCs) <sup>4</sup>	NA	4,600	2,360	2,350	505	2,120	1,750	2,170	2,060	2,020	700	1,540	500	141	8.4	208	420	310	0	1.1	6.0	33

**Notes:**

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2. MS/MSD collected at PW-1.
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4. Sum of chlorinated VOCs means adding the concentrations of tetrachloroethene, trichloroethene, cis & trans-1,2-dichloroethene, and 1,1-dichloroethene.
5. Sampling occurred following 1/11/2019 injection of PlumeStop directly into well MW-6 and redevelopment on 2/8/19.

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**BOLD** = Analytical result exceeds individual GWQS/GV; or potentially exceeds if the MDL is above the GWQS/GV.



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**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**Former Brainerd Manufacturing Facility**  
**East Rochester, New York**

Parameter <sup>1</sup>	GWQS/GV <sup>3</sup>	MW-9										MW-10	MW-11	MW-12			
		Historic								Current	Historic			Current	Current		
		8/21/06	Blind Dup 8-21-06	9/12/07	1/31/12	6/26/13	9/25/13	12/4/13	6/4/14	6/4/15	6/28/16			7/23/19	8/21/06	03/10/08	03/10/08
<b>TCL Volatile Organic Compounds (ug/L)</b>																	
Acetone	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1 J	4.8 J	ND	
Bromodichloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99	0.82 J	ND	
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Carbon Disulfide	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	0.94 J	ND	
Chloroform	7	2 J	2.1 J	0.9 J	ND	ND	ND	0.82 J	ND	ND	ND	ND	ND	1.7	1.6	ND	
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	90	ND	ND	ND	ND	NA	ND	ND	
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	
Methyl Acetate	NR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	
<b>Tetrachloroethene</b>	<b>5</b>	<b>3,100</b>	<b>2,800</b>	<b>2,600</b>	<b>390</b>	<b>870</b>	<b>900</b>	<b>1,000</b>	<b>1,300</b>	<b>920</b>	<b>300</b>	<b>33</b>	<b>17</b>	<b>ND</b>	<b>300 D</b>	<b>71</b>	
Trichloroethene	5	2,700	2,500	1,900	230	400	590	780	810	570	100	4.7	15	ND	270 D	14	
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	
1,1 Dichloroethene	5	3.5 J	3.9 J	1.3	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-Dichlorethane	5	3.2 J	3.2 J	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.66 J	ND	
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	
1,1,1-Trichloroethane	5	34	36	12	1.6	ND	ND	4.6	ND	ND	ND	ND	0.60 J	ND	2.0	ND	
1,1,2-Trichloroethane	1	3.8 J	3.7 J	1.9	0.5 J	ND	ND	0.74 J	ND	ND	ND	ND	ND	ND	ND	ND	
1,1 Dichloroethane	5	0.62 J	0.57 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Total Site COCs (cVOCs) <sup>4</sup>	NA	5,800	5,300	4,503	620	1,270	1,490	1,780	2,110	1,490	400	38	32	0	571	85	

**Notes:**

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- MS/MSD collected at PW-1.
- NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
- Sum of chlorinated VOCs means adding the concentrations of tetrachloroethene, trichloroethene, cis & trans-1,2-dichlorethane, and 1,1-dichloroethene.
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**Former Brainerd Manufacturing Facility**  
**East Rochester, New York**

Parameter <sup>1</sup>	GWQS/GV <sup>3</sup>	PW-1 <sup>2</sup>	PW-1R										PW-2				OW-1	OW-2
			Historic Groundwater Sampling Events					Pre-Injection	Post-Injection									
		8/22/06	1/30/12	6/4/14	6/4/15	6/28/16	07/10/17	11/30/17	02/27/18	06/04/18	07/23/19	1/30/12	6/4/14	6/4/15	6/28/16	8-22-06	8-22-06	
<b>TCL Volatile Organic Compounds (ug/L)</b>																		
Acetone	50	ND	ND	ND	13	6.9 J	ND	30 J	6.0 J	8.2 J	ND	8.1 J	0.46 J	12 J	8.7 J	ND	ND	
Bromodichloromethane	5	ND	ND	1.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47	ND	ND	ND	
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND	160	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Carbon Disulfide	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroform	7	0.55 J	1.1	1.3 J	0.72 J	ND	ND	ND	0.44 J	ND	ND	2.3	2.2	1.3	0.96 J	0.58 J	ND	
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methylene chloride	5	ND	ND	12	ND	ND	ND	2.4 J	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.43 J	0.23 J	ND	ND	ND	
Methyl Acetate	NR	ND	ND	3.5 J	2 J	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	
Toluene	5	1.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	0.52	0.55 J	ND	ND	
<b>Tetrachloroethene</b>	<b>5</b>	<b>780</b>	<b>360</b>	<b>92</b>	<b>160</b>	<b>120</b>	<b>100</b>	ND	0.74 J	2.9	<b>6.7</b>	1.3	<b>20</b>	<b>18</b>	<b>11</b>	<b>570</b>	0.82 J	
<b>Trichloroethene</b>	<b>5</b>	<b>540</b>	<b>220</b>	<b>75</b>	<b>94</b>	<b>71</b>	<b>70</b>	ND	4.7	<b>13</b>	<b>18</b>	3.3	<b>25</b>	<b>16</b>	<b>12</b>	<b>470</b>	<b>320</b>	
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
<b>1,1 Dichloroethene</b>	<b>5</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	
<b>cis-1,2-Dichlorethane</b>	<b>5</b>	1.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	0.86 J	ND	ND	0.65 J	
<b>trans-1,2-Dichloroethene</b>	<b>5</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	
1,1,1-Trichloroethane	5	3.6 J	0.96 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane	1	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1 Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
<b>Total Site COCs (cVOCs)<sup>4</sup></b>	<b>NA</b>	<b>1,320</b>	<b>580</b>	<b>167</b>	<b>254</b>	<b>191</b>	<b>170</b>	<b>0</b>	<b>5.4</b>	<b>16</b>	<b>27</b>	<b>4.6</b>	<b>46</b>	<b>34</b>	<b>23</b>	<b>1,040</b>	<b>321</b>	

**Notes:**

- Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- MS/MSD collected at PW-1.
- NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
- Sum of chlorinated VOCs means adding the concentrations of tetrachloroethene, trichloroethene, cis & trans-1,2-dichlorethane, and 1,1-dichloroethene.
- Sampling occurred following 1/11/2019 injection of PlumeStop directly into well MW-6 and redevelopment on 2/8/19.

**Definitions:**

- J = Estimated value; result is less than the sample quantitation limit but greater than zero.  
 ND = parameter not detected above laboratory detection limit.  
 NR = parameter not regulated by 6NYCRR TOGS 1.1.1 Part 703  
 NA = not available; parameter not included on tabulated summary provided by NYSDEC.  
 N\* = Indicates the spike or duplicate analysis is not within the quality control limits  
 "--" = Not analyzed

**BOLD** = Analytical result exceeds individual GWQS/GV; or potentially exceeds if the MDL is above the GWQS/GV.



**TABLE 2**  
**GROUNDWATER ELEVATIONS**  
**Former Brainerd Manufacturing Facility**  
**East Rochester, New York**

Location	Installation Date	Well Diameter (inches)	TOR Elevation <sup>1</sup> (feet)	23-Jul-19	
				DTW-GWL (fbTOR)	Groundwater Elevation (feet)
<b>ON-SITE MONITORING WELLS:</b>					
MW-1	April 2001	2.0	416.72	20.48	396.24
MW-2	April 2001	2.0	418.40	NM	NA
MW-3	April 2001	2.0	413.28	17.23	396.05
MW-4	August 2001	2.0	416.64	21.90	394.74
MW-5	August 2001	2.0	416.46	22.00	394.46
MW-6	07/18/06	2.0	416.92	21.45	395.47
<b>OFF-SITE MONITORING WELLS:</b>					
MW-7	07/20/06	2.0	414.35	NM	NA
MW-9	07/19/06	2.0	414.10	19.80	394.30
MW-10	07/18/06	2.0	411.47	17.90	393.57
MW-11	03/05/08	2.0	415.65	24.00	391.65
MW-12	03/05/08	2.0	415.18	24.00	391.18

**Notes:**

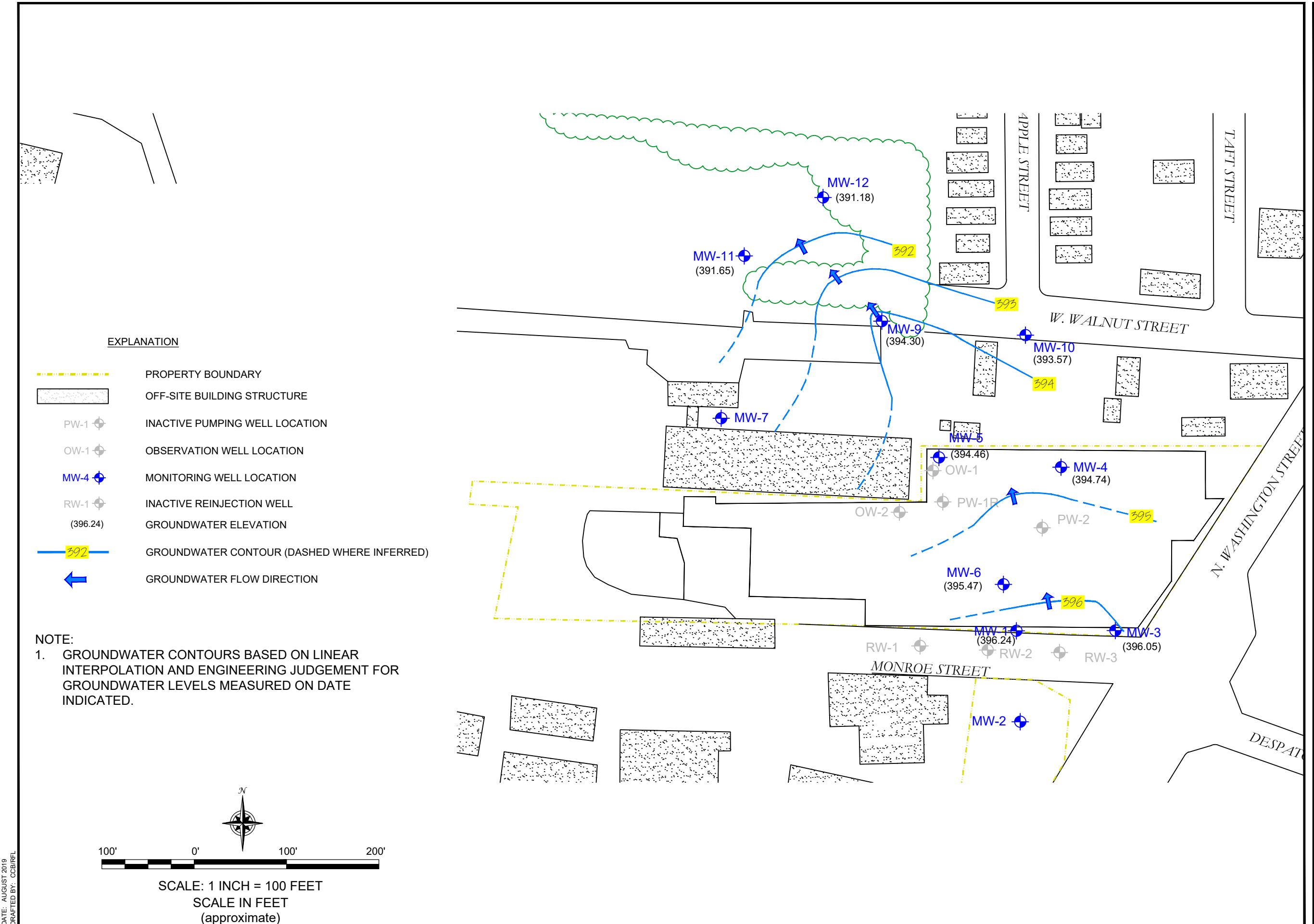
1. Top of riser elevation referenced to North American Vertical Datum 1988 (NAVD 88)

**Definitions:**

fbTOR = feet below top of riser

NM = Not measured as well was inaccessible.

## FIGURE



## GROUNDWATER ISOPOTENTIAL MAP JULY 2019

AUGUST 2019 SUMMARY

FORMER BRAINERD MANUFACTURING FACILITY  
EAST ROCHESTER, NEW YORK  
NYSDEC SITE NO. V00519-8

PREPARED FOR  
DESPATCH INDUSTRIES, INC.**FIGURE 1**

**BENCHMARK**  
ENVIRONMENTAL  
ENGINEERING &  
SCIENCE, PLLC

2558 HAMBURG TURNPIKE  
SUITE 300  
BUFFALO, NY 14218  
(716) 856-0569

JOB NO.: 0040-002-400

---

## ATTACHMENT 1

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**GW FIELD FORMS AND ANALYTICAL DATA PACKAGES**

Project Name: Pegpatch  
Location: East Rochester NY

Project No.:

Date: 7/23/19

Field Team: NAS

<b>Well No.</b> MW-5			Diameter (inches): <u>2"</u>			Sample Date / Time: <u>7/23/19</u>			
Product Depth (fbTOR):			Water Column (ft): <u>5.20</u>			DTW when sampled:			
DTW (static) (fbTOR): <u>22.0</u>			One Well Volume (gal): <u>.84</u>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>27.20</u>			Total Volume Purged (gal):			Purge Method: <u>TOT FLOW</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
11:30	0 Initial	0	7.05	16.1	2430	0R	1.2	-410	Black No odor
11:45	1	1	7.04	16.1	2455	0R	1.34	-416	" "
12:00	2 <u>22.10</u>	2	7.0	13.7	2511	0R	1.70	-147	" "
	3 <u>22.20</u>	3	7.0	14	2459	0R	1.35	-415	" "
	4								
	5								
	6								
	7								
	8								
	9								
	10								
<b>Sample Information:</b>									
12:00	S1 <u>22.20</u>	3	7.0	14.5	2485	0R	1.74	-142	Clean brown
	S2								

<b>Well No.</b> MW-4			Diameter (inches): <u>2"</u>			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft): <u>5.8</u>			DTW when sampled:			
DTW (static) (fbTOR): <u>21.90</u>			One Well Volume (gal): <u>.94</u>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>27.20</u>			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
12:25	0 Initial	0	7.40	16.2	1571	13.9	2.34	-35	Clear no odor
12:45	1 <u>22.90</u>	1	7.43	15.6	1453	1056	2.15	-6	" "
13:00	2 <u>22.85</u>	2	7.43	15.0	11801	90.1	1278	14	" "
13:15	3 <u>22.80</u>	3							
	4								
	5								
	6								
	7								
	8								
	9								
	10								
<b>Sample Information:</b>									
12:30	S1 <u>23.60</u>	3	7.41	15.0	1140	133	2.10	36	Clear no
	S2								

**REMARKS:** M5/M10 MW-4

Note: All water level measurements are in feet, distance from top of riser.

Stabilization Criteria	
Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Project Name: *Despatch*  
Location: *East Rochester NY*

Project No.:

Date: *7/23/14*  
Field Team: *NAS*

<b>Well No.</b> <i>MW-6</i>		Diameter (inches): <i>2"</i>			Sample Date / Time: <i>7/23/14 14:30</i>					
Product Depth (fbTOR): <i>21.95</i>		Water Column (ft): <i>9.45</i>			DTW when sampled: <i>23</i>					
DTW (static) (fbTOR): <i>21.95</i>		One Well Volume (gal): <i>1,55</i>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
Total Depth (fbTOR): <i>31.10</i>		Total Volume Purged (gal): <i>4.5</i>			Purge Method: <i>Bottle</i>					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (µS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
<i>13:45</i>	0 Initial	<i>0</i>	<i>6.89</i>	<i>15.4</i>	<i>5167</i>	<i>67.4</i>	<i>1.34</i>	<i>-34</i>	<i>bloody red</i>	
<i>14:00</i>	<i>21.95</i>	<i>1.5</i>	<i>6.40</i>	<i>15.0</i>	<i>5183</i>	<i>496</i>	<i>1.85</i>	<i>-75</i>	<i>11</i>	
<i>14:15</i>	<i>22.50</i>	<i>3</i>	<i>6.89</i>	<i>14.95</i>	<i>5173</i>	<i>364</i>	<i>1.53</i>	<i>-118</i>		
<i>14:30</i>	<i>23.0</i>	<i>4.5</i>	<i>6.89</i>	<i>14.7</i>	<i>5165</i>	<i>135</i>	<i>2.10</i>	<i>-150</i>		
4										
5										
6										
7										
8										
9										
10										
<b>Sample Information:</b>										
<i>14:30</i>	<i>S1</i>	<i>23.0</i>	<i>4.5</i>	<i>6.89</i>	<i>15.2</i>	<i>5159</i>	<i>239</i>	<i>2.45</i>	<i>-124</i>	<i>blue rosin</i>
	<i>S2</i>									

*BLW  
JLP*

<b>Well No.</b> <i>MW-9</i>		Diameter (inches): <i>2"</i>			Sample Date / Time: <i>7/23/14 15:30</i>					
Product Depth (fbTOR): <i>19.80</i>		Water Column (ft): <i>12.90</i>			DTW when sampled: <i>20.80</i>					
DTW (static) (fbTOR): <i>19.80</i>		One Well Volume (gal): <i>2.1</i>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
Total Depth (fbTOR): <i>32.70</i>		Total Volume Purged (gal): <i>6</i>			Purge Method: <i>Bottle</i>					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (µS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
<i>14:45</i>	0 Initial	<i>0</i>	<i>7.49</i>	<i>14.0</i>	<i>5642</i>	<i>11.6</i>	<i>2.65</i>	<i>23</i>	<i>clear rosin</i>	
<i>15:00</i>	<i>19.95</i>	<i>2</i>	<i>7.93</i>	<i>13.0</i>	<i>5101</i>	<i>21</i>	<i>2.84</i>	<i>21</i>		
<i>15:15</i>	<i>20.00</i>	<i>4</i>	<i>7.47</i>	<i>13.1</i>	<i>5624</i>	<i>518</i>	<i>3.24</i>	<i>28</i>		
<i>15:30</i>	<i>20.10</i>	<i>6</i>	<i>7.46</i>	<i>13.5</i>	<i>5815</i>	<i>041</i>	<i>2.90</i>	<i>33</i>		
4										
5										
6										
7										
8										
9										
10										
<b>Sample Information:</b>										
<i>15:30</i>	<i>S1</i>	<i>20.80</i>	<i>6</i>	<i>7.49</i>	<i>13.4</i>	<i>5959</i>	<i>94.5</i>	<i>2.95</i>	<i>34</i>	<i>clear rosin</i>
	<i>S2</i>									

**REMARKS:** *PW-1R PH 7.23 Temp 15.7 SC 4336*  
*ORP -14 102 µTU*

Groundwater Field Form.xls  
GWFF - BM

Volume Calculation	
Parameter	Criteria
Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Note: All water level measurements are in feet, distance from top of riser.

**Stabilization Criteria**

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

*24.0 MW-11*

**PREPARED BY:**

*17.23 MW-3 17.90 MW-10*

Project Name: *DesPatch*  
Location: *Rochester, NY*

Project No.:

Date: *7/23/14*  
Field Team: *NYS*

<b>Well No.</b> <i>MIV-1n</i>			Diameter (inches): <i>2"</i>			Sample Date / Time: <i>7/23/14 16:30</i>			
Product Depth (fbTOR):			Water Column (ft): <i>3</i>			DTW when sampled: <i>24.10</i>			
DTW (static) (fbTOR): <i>24.0</i>			One Well Volume (gal): <i>48</i>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <i>27.0</i>			Total Volume Purged (gal): <i>1.5</i>			Purge Method: <i>Boiler</i>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
<i>15:45</i>	0	<i>0</i>	<i>7.50</i>	<i>16.4</i>	<i>668</i>	<i>152</i>	<i>3.25</i>	<i>30</i>	<i>Clear w/o odor</i>
<i>16:00</i>	<i>20.9</i>	<i>.9</i>	<i>7.43</i>	<i>13.9</i>	<i>667</i>	<i>89</i>	<i>3.70</i>	<i>41</i>	<i>/</i>
<i>16:15</i>	<i>24.6</i>	<i>1</i>	<i>7.42</i>	<i>13.5</i>	<i>661</i>	<i>237</i>	<i>3.65</i>	<i>45</i>	
<i>16:30</i>	<i>24.10</i>	<i>1.5</i>	<i>7.40</i>	<i>13.2</i>	<i>660</i>	<i>234</i>	<i>3.79</i>	<i>47</i>	
4									
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
S1	<i>24.10</i>	<i>1.5</i>	<i>7.40</i>	<i>13.2</i>	<i>660</i>	<i>234</i>	<i>3.79</i>	<i>47</i>	<i>Clear w/o odor</i>
S2									

<b>Well No.</b>			Diameter (inches):			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input type="checkbox"/> Purge & Sample			
Total Depth (fbTOR):			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
S1									
S2									

**REMARKS:**

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation	
Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

## GROUNDWATER FIELD FORM

ENGINEERING &  
SCIENCE, PLLCProject Name: *DesPatch*  
Location: *Rochester, NY*Date: *7/30/14*  
Field Team: *NAS*Project No.: 

Well No. <i>MW-2</i>			Diameter (inches): <i>21</i>	Sample Date / Time: <i>7/30/14</i>						
Product Depth (ftTOR): <i>12.35</i>			Water Column (ft): <i>11.65</i>	DTW when sampled: <i>22.74</i>						
DTW (static) (ftTOR): <i>22.35</i>			One Well Volume (gal): <i>189</i>	Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample						
Total Depth (ftTOR): <i>34</i>			Total Volume Purged (gal): <i>6</i>	Purge Method: <i>Baile</i>						
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
0 Initial	0	0	7.20	16.6	1614	-	1.93	126	Clear w/	
1	22.55	2	7.48	13.8	1754	-	3.85	113	Clear w/	
2	22.70	4	7.49	13.7	1663	-	5.10	109	Clear w/	
3	22.74	6	7.47	16.4	1664	-	5.50	101	Clear	
4										
5										
6										
7										
8										
9										
10										
<b>Sample Information:</b>										
10:00	S1	22.75	6	7.47	134	1633	-	6.10	104	Clear w/
	S2									

Well No.			Diameter (inches):			Sample Date / Time:					
Product Depth (ftTOR):			Water Column (ft):			DTW when sampled:					
DTW (static) (ftTOR):			One Well Volume (gal):			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input type="checkbox"/> Purge & Sample					
Total Depth (ftTOR):			Total Volume Purged (gal):			Purge Method:					
Time	Water Level (ftTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor		
0 Initial	0	0									
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
<b>Sample Information:</b>											
S1											
S2											

REMARKS: *\*Turbidity meter not working*

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation	
Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV



# Environment Testing TestAmerica

1

2

3

4

5

6

7

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10

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## ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo  
10 Hazelwood Drive  
Amherst, NY 14228-2298  
Tel: (716)691-2600

Laboratory Job ID: 480-156744-1

Client Project/Site: Benchmark - Despatch site

For:

Benchmark Env. Eng. & Science, PLLC  
2558 Hamburg Turnpike  
Suite 300  
Lackawanna, New York 14218

Attn: Ms. Lori E. Riker

Authorized for release by:

8/1/2019 12:21:41 PM

Brian Fischer, Manager of Project Management  
(716)504-9835  
[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

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The  
Expert

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

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	ISTD response or retention time outside acceptable limits
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

### Job ID: 480-156744-1

Laboratory: Eurofins TestAmerica, Buffalo

#### Narrative

Job Narrative  
480-156744-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 7/25/2019 10:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

#### GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-483899 recovered above the upper control limit for Methyl ethyl ketone (MEK) and Acetone. The samples associated with this CCV were non-detect above the Reporting Limit (RL) for the affected analytes; therefore, the data have been reported. The following samples are impacted: PW-1R (480-156744-4) and TRIP BANK (480-156744-8).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-483899 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was not detected above the reporting limit (RL) in the associated samples; therefore, the data have been reported. The following samples are impacted: PW-1R (480-156744-4) and TRIP BANK (480-156744-8).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-484067 recovered above the upper control limit for 2-Butanone and Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-4 (480-156744-1), MW-5 (480-156744-2), MW-9 (480-156744-5) and MW-12 (480-156744-6).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-484067 recovered outside control limits for the following analytes: Acetone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: MW-4 (480-156744-1), MW-5 (480-156744-2), MW-9 (480-156744-5) and MW-12 (480-156744-6).

Method(s) 8260C: Internal standard (ISTD) response for the following sample was outside control limits: MW-6 (480-156744-3). The sample was re-extracted and/or re-analyzed with concurring results, and the reanalysis has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## **Client Sample ID: MW-4**

**Lab Sample ID: 480-156744-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.2		1.0	0.34	ug/L	1		8260C	Total/NA
Tetrachloroethene	27		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	42		1.0	0.46	ug/L	1		8260C	Total/NA

## **Client Sample ID: MW-5**

**Lab Sample ID: 480-156744-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.50	J	1.0	0.19	ug/L	1		8260C	Total/NA

## **Client Sample ID: MW-6**

**Lab Sample ID: 480-156744-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.45	J	1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	0.66	J	1.0	0.46	ug/L	1		8260C	Total/NA

## **Client Sample ID: PW-1R**

**Lab Sample ID: 480-156744-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.5		1.0	0.81	ug/L	1		8260C	Total/NA
Tetrachloroethene	6.7		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	18		1.0	0.46	ug/L	1		8260C	Total/NA

## **Client Sample ID: MW-9**

**Lab Sample ID: 480-156744-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	33		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	4.7		1.0	0.46	ug/L	1		8260C	Total/NA

## **Client Sample ID: MW-12**

**Lab Sample ID: 480-156744-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	71		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	14		1.0	0.46	ug/L	1		8260C	Total/NA

## **Client Sample ID: BLIND DUP**

**Lab Sample ID: 480-156744-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.62	J	1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	0.58	J	1.0	0.46	ug/L	1		8260C	Total/NA

## **Client Sample ID: TRIP BANK**

**Lab Sample ID: 480-156744-8**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

**Client Sample ID: MW-4**

**Lab Sample ID: 480-156744-1**

Date Collected: 07/23/19 13:30

Matrix: Water

Date Received: 07/25/19 10:35

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/27/19 01:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 01:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 01:23	1
1,1,2-Trichloroethane	ND	F2	1.0	0.23	ug/L			07/27/19 01:23	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 01:23	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 01:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 01:23	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 01:23	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 01:23	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 01:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 01:23	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 01:23	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 01:23	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 01:23	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 01:23	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 01:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 01:23	1
Acetone	ND	*	10	3.0	ug/L			07/27/19 01:23	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 01:23	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 01:23	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 01:23	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 01:23	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 01:23	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 01:23	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 01:23	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 01:23	1
<b>Chloroform</b>	<b>3.2</b>		1.0	0.34	ug/L			07/27/19 01:23	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 01:23	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 01:23	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 01:23	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 01:23	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 01:23	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 01:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 01:23	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 01:23	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 01:23	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 01:23	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 01:23	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 01:23	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 01:23	1
<b>Tetrachloroethene</b>	<b>27</b>		1.0	0.36	ug/L			07/27/19 01:23	1
Toluene	ND	F2	1.0	0.51	ug/L			07/27/19 01:23	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 01:23	1
trans-1,3-Dichloropropene	ND	F2	1.0	0.37	ug/L			07/27/19 01:23	1
<b>Trichloroethene</b>	<b>42</b>		1.0	0.46	ug/L			07/27/19 01:23	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 01:23	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 01:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 01:23	1

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Client Sample ID: MW-4

Date Collected: 07/23/19 13:30

Date Received: 07/25/19 10:35

## Lab Sample ID: 480-156744-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/27/19 01:23	1
4-Bromofluorobenzene (Surr)	98		73 - 120		07/27/19 01:23	1
Dibromofluoromethane (Surr)	98		75 - 123		07/27/19 01:23	1
Toluene-d8 (Surr)	106		80 - 120		07/27/19 01:23	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Client Sample ID: MW-5

Date Collected: 07/23/19 12:00

Date Received: 07/25/19 10:35

## Lab Sample ID: 480-156744-2

Matrix: Water

### Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/27/19 01:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 01:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 01:46	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 01:46	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 01:46	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 01:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 01:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 01:46	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 01:46	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 01:46	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 01:46	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 01:46	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 01:46	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 01:46	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 01:46	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 01:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 01:46	1
Acetone	ND *		10	3.0	ug/L			07/27/19 01:46	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 01:46	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 01:46	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 01:46	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 01:46	1
<b>Carbon disulfide</b>	<b>0.50 J</b>		1.0	0.19	ug/L			07/27/19 01:46	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 01:46	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 01:46	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 01:46	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 01:46	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 01:46	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 01:46	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 01:46	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 01:46	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 01:46	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 01:46	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 01:46	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 01:46	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 01:46	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 01:46	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 01:46	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 01:46	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 01:46	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/27/19 01:46	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 01:46	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 01:46	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 01:46	1
Trichloroethene	ND		1.0	0.46	ug/L			07/27/19 01:46	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 01:46	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 01:46	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 01:46	1

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Client Sample ID: MW-5

Date Collected: 07/23/19 12:00

Date Received: 07/25/19 10:35

## Lab Sample ID: 480-156744-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/27/19 01:46	1
4-Bromofluorobenzene (Surr)	91		73 - 120		07/27/19 01:46	1
Dibromofluoromethane (Surr)	98		75 - 123		07/27/19 01:46	1
Toluene-d8 (Surr)	103		80 - 120		07/27/19 01:46	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

**Client Sample ID: MW-6**

**Lab Sample ID: 480-156744-3**

**Matrix: Water**

Date Collected: 07/23/19 14:30

Date Received: 07/25/19 10:35

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/27/19 14:52	1
1,1,2,2-Tetrachloroethane	ND *		1.0	0.21	ug/L			07/27/19 14:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 14:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 14:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 14:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 14:52	1
1,2,4-Trichlorobenzene	ND *		1.0	0.41	ug/L			07/27/19 14:52	1
1,2-Dibromo-3-Chloropropane	ND *		1.0	0.39	ug/L			07/27/19 14:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 14:52	1
1,2-Dichlorobenzene	ND *		1.0	0.79	ug/L			07/27/19 14:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 14:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 14:52	1
1,3-Dichlorobenzene	ND *		1.0	0.78	ug/L			07/27/19 14:52	1
1,4-Dichlorobenzene	ND *		1.0	0.84	ug/L			07/27/19 14:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 14:52	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 14:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 14:52	1
Acetone	ND		10	3.0	ug/L			07/27/19 14:52	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 14:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 14:52	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 14:52	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 14:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 14:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 14:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 14:52	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 14:52	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 14:52	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 14:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 14:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 14:52	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 14:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 14:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 14:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 14:52	1
Isopropylbenzene	ND *		1.0	0.79	ug/L			07/27/19 14:52	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 14:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 14:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 14:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 14:52	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 14:52	1
<b>Tetrachloroethene</b>	<b>0.45 J</b>		1.0	0.36	ug/L			07/27/19 14:52	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 14:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 14:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 14:52	1
<b>Trichloroethene</b>	<b>0.66 J</b>		1.0	0.46	ug/L			07/27/19 14:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 14:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 14:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 14:52	1

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Client Sample ID: MW-6

Date Collected: 07/23/19 14:30

Date Received: 07/25/19 10:35

## Lab Sample ID: 480-156744-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		77 - 120		07/27/19 14:52	1
4-Bromofluorobenzene (Surr)	84		73 - 120		07/27/19 14:52	1
Dibromofluoromethane (Surr)	111		75 - 123		07/27/19 14:52	1
Toluene-d8 (Surr)	108		80 - 120		07/27/19 14:52	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

**Client Sample ID: PW-1R**  
**Date Collected: 07/23/19 13:45**  
**Date Received: 07/25/19 10:35**

**Lab Sample ID: 480-156744-4**  
**Matrix: Water**

## Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/26/19 13:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/26/19 13:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/26/19 13:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/26/19 13:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/26/19 13:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/26/19 13:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/26/19 13:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/26/19 13:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/26/19 13:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/26/19 13:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/26/19 13:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/26/19 13:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/26/19 13:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/26/19 13:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/26/19 13:52	1
2-Hexanone	ND		5.0	1.2	ug/L			07/26/19 13:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/26/19 13:52	1
Acetone	ND *		10	3.0	ug/L			07/26/19 13:52	1
Benzene	ND		1.0	0.41	ug/L			07/26/19 13:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/26/19 13:52	1
Bromoform	ND		1.0	0.26	ug/L			07/26/19 13:52	1
Bromomethane	ND		1.0	0.69	ug/L			07/26/19 13:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/26/19 13:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/26/19 13:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/26/19 13:52	1
Chloroethane	ND		1.0	0.32	ug/L			07/26/19 13:52	1
Chloroform	ND		1.0	0.34	ug/L			07/26/19 13:52	1
Chloromethane	ND		1.0	0.35	ug/L			07/26/19 13:52	1
<b>cis-1,2-Dichloroethene</b>	<b>2.5</b>		1.0	0.81	ug/L			07/26/19 13:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/26/19 13:52	1
Cyclohexane	ND		1.0	0.18	ug/L			07/26/19 13:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/26/19 13:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/26/19 13:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/26/19 13:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/26/19 13:52	1
Methyl acetate	ND		2.5	1.3	ug/L			07/26/19 13:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/26/19 13:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/26/19 13:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/26/19 13:52	1
Styrene	ND		1.0	0.73	ug/L			07/26/19 13:52	1
<b>Tetrachloroethene</b>	<b>6.7</b>		1.0	0.36	ug/L			07/26/19 13:52	1
Toluene	ND		1.0	0.51	ug/L			07/26/19 13:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/26/19 13:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/26/19 13:52	1
<b>Trichloroethene</b>	<b>18</b>		1.0	0.46	ug/L			07/26/19 13:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/26/19 13:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/26/19 13:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/26/19 13:52	1

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

**Client Sample ID: PW-1R**  
**Date Collected: 07/23/19 13:45**  
**Date Received: 07/25/19 10:35**

**Lab Sample ID: 480-156744-4**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/26/19 13:52	1
4-Bromofluorobenzene (Surr)	96		73 - 120		07/26/19 13:52	1
Dibromofluoromethane (Surr)	98		75 - 123		07/26/19 13:52	1
Toluene-d8 (Surr)	103		80 - 120		07/26/19 13:52	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Client Sample ID: MW-9

Date Collected: 07/23/19 15:30

Date Received: 07/25/19 10:35

## Lab Sample ID: 480-156744-5

Matrix: Water

### Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/27/19 02:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 02:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 02:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 02:32	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 02:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 02:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 02:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 02:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 02:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 02:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 02:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 02:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 02:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 02:32	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 02:32	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 02:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 02:32	1
Acetone	ND *		10	3.0	ug/L			07/27/19 02:32	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 02:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 02:32	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 02:32	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 02:32	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 02:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 02:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 02:32	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 02:32	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 02:32	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 02:32	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 02:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 02:32	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 02:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 02:32	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 02:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 02:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 02:32	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 02:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 02:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 02:32	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 02:32	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 02:32	1
<b>Tetrachloroethene</b>	<b>33</b>		1.0	0.36	ug/L			07/27/19 02:32	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 02:32	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 02:32	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 02:32	1
<b>Trichloroethene</b>	<b>4.7</b>		1.0	0.46	ug/L			07/27/19 02:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 02:32	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 02:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 02:32	1

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Client Sample ID: MW-9

Date Collected: 07/23/19 15:30

Date Received: 07/25/19 10:35

## Lab Sample ID: 480-156744-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		07/27/19 02:32	1
4-Bromofluorobenzene (Surr)	91		73 - 120		07/27/19 02:32	1
Dibromofluoromethane (Surr)	101		75 - 123		07/27/19 02:32	1
Toluene-d8 (Surr)	103		80 - 120		07/27/19 02:32	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

**Client Sample ID: MW-12**  
**Date Collected: 07/23/19 16:30**  
**Date Received: 07/25/19 10:35**

**Lab Sample ID: 480-156744-6**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/27/19 02:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 02:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 02:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 02:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 02:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 02:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 02:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 02:55	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 02:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 02:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 02:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 02:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 02:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 02:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 02:55	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 02:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 02:55	1
Acetone	ND *		10	3.0	ug/L			07/27/19 02:55	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 02:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 02:55	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 02:55	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 02:55	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 02:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 02:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 02:55	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 02:55	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 02:55	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 02:55	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 02:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 02:55	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 02:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 02:55	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 02:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 02:55	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 02:55	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 02:55	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 02:55	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 02:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 02:55	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 02:55	1
<b>Tetrachloroethene</b>	<b>71</b>		1.0	0.36	ug/L			07/27/19 02:55	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 02:55	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 02:55	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 02:55	1
<b>Trichloroethene</b>	<b>14</b>		1.0	0.46	ug/L			07/27/19 02:55	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 02:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 02:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 02:55	1

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

**Client Sample ID: MW-12**

Date Collected: 07/23/19 16:30

Date Received: 07/25/19 10:35

**Lab Sample ID: 480-156744-6**

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/27/19 02:55	1
4-Bromofluorobenzene (Surr)	94		73 - 120		07/27/19 02:55	1
Dibromofluoromethane (Surr)	97		75 - 123		07/27/19 02:55	1
Toluene-d8 (Surr)	101		80 - 120		07/27/19 02:55	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

**Client Sample ID: BLIND DUP**  
**Date Collected: 07/23/19 14:35**  
**Date Received: 07/25/19 10:35**

**Lab Sample ID: 480-156744-7**  
**Matrix: Water**

## Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/27/19 15:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 15:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 15:16	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 15:16	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 15:16	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 15:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 15:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 15:16	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 15:16	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 15:16	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 15:16	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 15:16	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 15:16	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 15:16	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 15:16	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 15:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 15:16	1
Acetone	ND		10	3.0	ug/L			07/27/19 15:16	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 15:16	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 15:16	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 15:16	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 15:16	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 15:16	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 15:16	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 15:16	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 15:16	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 15:16	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 15:16	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 15:16	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 15:16	1
Cyclohexane	ND		1.0	0.18	ug/L			07/27/19 15:16	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/27/19 15:16	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/27/19 15:16	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/27/19 15:16	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/27/19 15:16	1
Methyl acetate	ND		2.5	1.3	ug/L			07/27/19 15:16	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/27/19 15:16	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/27/19 15:16	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/27/19 15:16	1
Styrene	ND		1.0	0.73	ug/L			07/27/19 15:16	1
<b>Tetrachloroethene</b>	<b>0.62</b>	<b>J</b>	1.0	0.36	ug/L			07/27/19 15:16	1
Toluene	ND		1.0	0.51	ug/L			07/27/19 15:16	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/27/19 15:16	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/27/19 15:16	1
<b>Trichloroethene</b>	<b>0.58</b>	<b>J</b>	1.0	0.46	ug/L			07/27/19 15:16	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/27/19 15:16	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/27/19 15:16	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/27/19 15:16	1

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Client Sample ID: BLIND DUP

Date Collected: 07/23/19 14:35

Date Received: 07/25/19 10:35

## Lab Sample ID: 480-156744-7

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		07/27/19 15:16	1
4-Bromofluorobenzene (Surr)	84		73 - 120		07/27/19 15:16	1
Dibromofluoromethane (Surr)	107		75 - 123		07/27/19 15:16	1
Toluene-d8 (Surr)	110		80 - 120		07/27/19 15:16	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Client Sample ID: TRIP BANK

Date Collected: 07/23/19 16:45  
 Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-8

Matrix: Water

### Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/26/19 14:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/26/19 14:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/26/19 14:15	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/26/19 14:15	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/26/19 14:15	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/26/19 14:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/26/19 14:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/26/19 14:15	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/26/19 14:15	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/26/19 14:15	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/26/19 14:15	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/26/19 14:15	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/26/19 14:15	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/26/19 14:15	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/26/19 14:15	1
2-Hexanone	ND		5.0	1.2	ug/L			07/26/19 14:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/26/19 14:15	1
Acetone	ND *		10	3.0	ug/L			07/26/19 14:15	1
Benzene	ND		1.0	0.41	ug/L			07/26/19 14:15	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/26/19 14:15	1
Bromoform	ND		1.0	0.26	ug/L			07/26/19 14:15	1
Bromomethane	ND		1.0	0.69	ug/L			07/26/19 14:15	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/26/19 14:15	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/26/19 14:15	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/26/19 14:15	1
Chloroethane	ND		1.0	0.32	ug/L			07/26/19 14:15	1
Chloroform	ND		1.0	0.34	ug/L			07/26/19 14:15	1
Chloromethane	ND		1.0	0.35	ug/L			07/26/19 14:15	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/26/19 14:15	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/26/19 14:15	1
Cyclohexane	ND		1.0	0.18	ug/L			07/26/19 14:15	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/26/19 14:15	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/26/19 14:15	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/26/19 14:15	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/26/19 14:15	1
Methyl acetate	ND		2.5	1.3	ug/L			07/26/19 14:15	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/26/19 14:15	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/26/19 14:15	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/26/19 14:15	1
Styrene	ND		1.0	0.73	ug/L			07/26/19 14:15	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/26/19 14:15	1
Toluene	ND		1.0	0.51	ug/L			07/26/19 14:15	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/26/19 14:15	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/26/19 14:15	1
Trichloroethene	ND		1.0	0.46	ug/L			07/26/19 14:15	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/26/19 14:15	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/26/19 14:15	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/26/19 14:15	1

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Client Sample ID: TRIP BANK

Date Collected: 07/23/19 16:45

Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		07/26/19 14:15	1
4-Bromofluorobenzene (Surr)	95		73 - 120		07/26/19 14:15	1
Dibromofluoromethane (Surr)	99		75 - 123		07/26/19 14:15	1
Toluene-d8 (Surr)	101		80 - 120		07/26/19 14:15	1

## Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-156744-1	MW-4	103	98	98	106
480-156744-1 MS	MW-4	100	97	98	102
480-156744-1 MSD	MW-4	103	96	100	106
480-156744-2	MW-5	103	91	98	103
480-156744-3	MW-6	111	84	111	108
480-156744-4	PW-1R	103	96	98	103
480-156744-5	MW-9	104	91	101	103
480-156744-6	MW-12	103	94	97	101
480-156744-7	BLIND DUP	108	84	107	110
480-156744-8	TRIP BANK	107	95	99	101
LCS 480-483899/5	Lab Control Sample	102	95	95	103
LCS 480-484067/5	Lab Control Sample	102	96	96	104
LCS 480-484093/5	Lab Control Sample	100	101	102	98
MB 480-483899/7	Method Blank	101	94	95	101
MB 480-484067/7	Method Blank	104	96	97	103
MB 480-484093/7	Method Blank	102	100	101	97

#### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-483899/7**

**Matrix: Water**

**Analysis Batch: 483899**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/26/19 12:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/26/19 12:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/26/19 12:05	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/26/19 12:05	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/26/19 12:05	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/26/19 12:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/26/19 12:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/26/19 12:05	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/26/19 12:05	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/26/19 12:05	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/26/19 12:05	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/26/19 12:05	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/26/19 12:05	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/26/19 12:05	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/26/19 12:05	1
2-Hexanone	ND		5.0	1.2	ug/L			07/26/19 12:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/26/19 12:05	1
Acetone	ND		10	3.0	ug/L			07/26/19 12:05	1
Benzene	ND		1.0	0.41	ug/L			07/26/19 12:05	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/26/19 12:05	1
Bromoform	ND		1.0	0.26	ug/L			07/26/19 12:05	1
Bromomethane	ND		1.0	0.69	ug/L			07/26/19 12:05	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/26/19 12:05	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/26/19 12:05	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/26/19 12:05	1
Chloroethane	ND		1.0	0.32	ug/L			07/26/19 12:05	1
Chloroform	ND		1.0	0.34	ug/L			07/26/19 12:05	1
Chloromethane	ND		1.0	0.35	ug/L			07/26/19 12:05	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/26/19 12:05	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/26/19 12:05	1
Cyclohexane	ND		1.0	0.18	ug/L			07/26/19 12:05	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/26/19 12:05	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/26/19 12:05	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/26/19 12:05	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/26/19 12:05	1
Methyl acetate	ND		2.5	1.3	ug/L			07/26/19 12:05	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/26/19 12:05	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/26/19 12:05	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/26/19 12:05	1
Styrene	ND		1.0	0.73	ug/L			07/26/19 12:05	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/26/19 12:05	1
Toluene	ND		1.0	0.51	ug/L			07/26/19 12:05	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/26/19 12:05	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/26/19 12:05	1
Trichloroethene	ND		1.0	0.46	ug/L			07/26/19 12:05	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/26/19 12:05	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/26/19 12:05	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/26/19 12:05	1

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-483899/7**

**Matrix: Water**

**Analysis Batch: 483899**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
1,2-Dichloroethane-d4 (Surr)	101		77 - 120				07/26/19 12:05	1
4-Bromofluorobenzene (Surr)	94		73 - 120				07/26/19 12:05	1
Dibromofluoromethane (Surr)	95		75 - 123				07/26/19 12:05	1
Toluene-d8 (Surr)	101		80 - 120				07/26/19 12:05	1

**Lab Sample ID: LCS 480-483899/5**

**Matrix: Water**

**Analysis Batch: 483899**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
1,1,1-Trichloroethane	25.0	22.2		ug/L		89	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	26.2		ug/L		105	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.8		ug/L		95	61 - 148	
ne								
1,1,2-Trichloroethane	25.0	25.3		ug/L		101	76 - 122	
1,1-Dichloroethane	25.0	23.6		ug/L		94	77 - 120	
1,1-Dichloroethene	25.0	21.8		ug/L		87	66 - 127	
1,2,4-Trichlorobenzene	25.0	21.8		ug/L		87	79 - 122	
1,2-Dibromo-3-Chloropropane	25.0	23.3		ug/L		93	56 - 134	
1,2-Dibromoethane	25.0	24.3		ug/L		97	77 - 120	
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	80 - 124	
1,2-Dichloroethane	25.0	22.8		ug/L		91	75 - 120	
1,2-Dichloropropane	25.0	25.7		ug/L		103	76 - 120	
1,3-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 120	
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	80 - 120	
2-Butanone (MEK)	125	159		ug/L		127	57 - 140	
2-Hexanone	125	138		ug/L		110	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	137		ug/L		110	71 - 125	
Acetone	125	194 *		ug/L		155	56 - 142	
Benzene	25.0	24.2		ug/L		97	71 - 124	
Bromodichloromethane	25.0	23.8		ug/L		95	80 - 122	
Bromoform	25.0	25.7		ug/L		103	61 - 132	
Bromomethane	25.0	23.1		ug/L		92	55 - 144	
Carbon disulfide	25.0	20.9		ug/L		84	59 - 134	
Carbon tetrachloride	25.0	23.6		ug/L		94	72 - 134	
Chlorobenzene	25.0	24.3		ug/L		97	80 - 120	
Chloroethane	25.0	24.8		ug/L		99	69 - 136	
Chloroform	25.0	21.6		ug/L		86	73 - 127	
Chloromethane	25.0	23.2		ug/L		93	68 - 124	
cis-1,2-Dichloroethene	25.0	22.5		ug/L		90	74 - 124	
cis-1,3-Dichloropropene	25.0	25.1		ug/L		100	74 - 124	
Cyclohexane	25.0	24.8		ug/L		99	59 - 135	
Dibromochloromethane	25.0	24.8		ug/L		99	75 - 125	
Dichlorodifluoromethane	25.0	21.3		ug/L		85	59 - 135	
Ethylbenzene	25.0	23.8		ug/L		95	77 - 123	
Isopropylbenzene	25.0	25.5		ug/L		102	77 - 122	
Methyl acetate	50.0	57.7		ug/L		115	74 - 133	
Methyl tert-butyl ether	25.0	23.6		ug/L		94	77 - 120	
Methylcyclohexane	25.0	23.8		ug/L		95	68 - 134	

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 480-483899/5**

**Matrix: Water**

**Analysis Batch: 483899**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
	Added	Result	Qualifier				Limits	
Methylene Chloride	25.0	23.5		ug/L		94	75 - 124	
Styrene	25.0	23.3		ug/L		93	80 - 120	
Tetrachloroethene	25.0	23.1		ug/L		92	74 - 122	
Toluene	25.0	23.8		ug/L		95	80 - 122	
trans-1,2-Dichloroethene	25.0	22.8		ug/L		91	73 - 127	
trans-1,3-Dichloropropene	25.0	25.9		ug/L		104	80 - 120	
Trichloroethene	25.0	23.4		ug/L		94	74 - 123	
Trichlorofluoromethane	25.0	23.9		ug/L		96	62 - 150	
Vinyl chloride	25.0	23.8		ug/L		95	65 - 133	
<b>Surrogate</b>		<b>LCS</b>	<b>LCS</b>					
		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				
1,2-Dichloroethane-d4 (Surr)	102			77 - 120				
4-Bromofluorobenzene (Surr)	95			73 - 120				
Dibromofluoromethane (Surr)	95			75 - 123				
Toluene-d8 (Surr)	103			80 - 120				

**Lab Sample ID: MB 480-484067/7**

**Matrix: Water**

**Analysis Batch: 484067**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/27/19 00:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 00:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 00:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 00:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 00:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 00:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 00:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 00:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 00:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 00:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 00:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 00:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 00:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 00:47	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 00:47	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 00:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 00:47	1
Acetone	ND		10	3.0	ug/L			07/27/19 00:47	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 00:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 00:47	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 00:47	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 00:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 00:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 00:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 00:47	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 00:47	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 00:47	1

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-484067/7**

**Matrix: Water**

**Analysis Batch: 484067**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifer									
Chloromethane	ND				1.0	0.35	ug/L			07/27/19 00:47	1
cis-1,2-Dichloroethene	ND				1.0	0.81	ug/L			07/27/19 00:47	1
cis-1,3-Dichloropropene	ND				1.0	0.36	ug/L			07/27/19 00:47	1
Cyclohexane	ND				1.0	0.18	ug/L			07/27/19 00:47	1
Dibromochloromethane	ND				1.0	0.32	ug/L			07/27/19 00:47	1
Dichlorodifluoromethane	ND				1.0	0.68	ug/L			07/27/19 00:47	1
Ethylbenzene	ND				1.0	0.74	ug/L			07/27/19 00:47	1
Isopropylbenzene	ND				1.0	0.79	ug/L			07/27/19 00:47	1
Methyl acetate	ND				2.5	1.3	ug/L			07/27/19 00:47	1
Methyl tert-butyl ether	ND				1.0	0.16	ug/L			07/27/19 00:47	1
Methylcyclohexane	ND				1.0	0.16	ug/L			07/27/19 00:47	1
Methylene Chloride	ND				1.0	0.44	ug/L			07/27/19 00:47	1
Styrene	ND				1.0	0.73	ug/L			07/27/19 00:47	1
Tetrachloroethene	ND				1.0	0.36	ug/L			07/27/19 00:47	1
Toluene	ND				1.0	0.51	ug/L			07/27/19 00:47	1
trans-1,2-Dichloroethene	ND				1.0	0.90	ug/L			07/27/19 00:47	1
trans-1,3-Dichloropropene	ND				1.0	0.37	ug/L			07/27/19 00:47	1
Trichloroethene	ND				1.0	0.46	ug/L			07/27/19 00:47	1
Trichlorofluoromethane	ND				1.0	0.88	ug/L			07/27/19 00:47	1
Vinyl chloride	ND				1.0	0.90	ug/L			07/27/19 00:47	1
Xylenes, Total	ND				2.0	0.66	ug/L			07/27/19 00:47	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifer						
1,2-Dichloroethane-d4 (Surr)	104		77 - 120				07/27/19 00:47	1
4-Bromofluorobenzene (Surr)	96		73 - 120				07/27/19 00:47	1
Dibromofluoromethane (Surr)	97		75 - 123				07/27/19 00:47	1
Toluene-d8 (Surr)	103		80 - 120				07/27/19 00:47	1

**Lab Sample ID: LCS 480-484067/5**

**Matrix: Water**

**Analysis Batch: 484067**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	
	Added	Result	Qualifer							
1,1,1-Trichloroethane	25.0	25.3				ug/L		101	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	25.8				ug/L		103	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.3				ug/L		109	61 - 148	
ne										
1,1,2-Trichloroethane	25.0	26.5				ug/L		106	76 - 122	
1,1-Dichloroethane	25.0	26.0				ug/L		104	77 - 120	
1,1-Dichloroethene	25.0	24.7				ug/L		99	66 - 127	
1,2,4-Trichlorobenzene	25.0	21.5				ug/L		86	79 - 122	
1,2-Dibromo-3-Chloropropane	25.0	24.0				ug/L		96	56 - 134	
1,2-Dibromoethane	25.0	25.3				ug/L		101	77 - 120	
1,2-Dichlorobenzene	25.0	24.1				ug/L		96	80 - 124	
1,2-Dichloroethane	25.0	24.7				ug/L		99	75 - 120	
1,2-Dichloropropane	25.0	26.8				ug/L		107	76 - 120	
1,3-Dichlorobenzene	25.0	25.8				ug/L		103	77 - 120	
1,4-Dichlorobenzene	25.0	25.4				ug/L		101	80 - 120	
2-Butanone (MEK)	125	165				ug/L		132	57 - 140	

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 480-484067/5**

**Matrix: Water**

**Analysis Batch: 484067**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2-Hexanone	125	142		ug/L		114	65 - 127
4-Methyl-2-pentanone (MIBK)	125	140		ug/L		112	71 - 125
Acetone	125	206	*	ug/L		165	56 - 142
Benzene	25.0	26.7		ug/L		107	71 - 124
Bromodichloromethane	25.0	25.1		ug/L		100	80 - 122
Bromoform	25.0	27.1		ug/L		108	61 - 132
Bromomethane	25.0	25.0		ug/L		100	55 - 144
Carbon disulfide	25.0	24.1		ug/L		96	59 - 134
Carbon tetrachloride	25.0	26.7		ug/L		107	72 - 134
Chlorobenzene	25.0	26.1		ug/L		104	80 - 120
Chloroethane	25.0	27.5		ug/L		110	69 - 136
Chloroform	25.0	23.2		ug/L		93	73 - 127
Chloromethane	25.0	25.0		ug/L		100	68 - 124
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	74 - 124
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	74 - 124
Cyclohexane	25.0	27.6		ug/L		110	59 - 135
Dibromochloromethane	25.0	26.4		ug/L		106	75 - 125
Dichlorodifluoromethane	25.0	22.7		ug/L		91	59 - 135
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
Isopropylbenzene	25.0	26.9		ug/L		108	77 - 122
Methyl acetate	50.0	58.4		ug/L		117	74 - 133
Methyl tert-butyl ether	25.0	24.8		ug/L		99	77 - 120
Methylcyclohexane	25.0	26.6		ug/L		106	68 - 134
Methylene Chloride	25.0	25.6		ug/L		102	75 - 124
Styrene	25.0	25.2		ug/L		101	80 - 120
Tetrachloroethene	25.0	25.8		ug/L		103	74 - 122
Toluene	25.0	26.1		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	25.4		ug/L		101	73 - 127
trans-1,3-Dichloropropene	25.0	26.6		ug/L		106	80 - 120
Trichloroethene	25.0	25.9		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	25.7		ug/L		103	62 - 150
Vinyl chloride	25.0	26.8		ug/L		107	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	96		73 - 120
Dibromofluoromethane (Surr)	96		75 - 123
Toluene-d8 (Surr)	104		80 - 120

**Lab Sample ID: 480-156744-1 MS**

**Matrix: Water**

**Analysis Batch: 484067**

**Client Sample ID: MW-4**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	ND		25.0	25.1		ug/L		101	73 - 126
1,1,2,2-Tetrachloroethane	ND		25.0	23.9		ug/L		96	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	24.9		ug/L		99	61 - 148
1,1,2-Trichloroethane	ND F2		25.0	23.9		ug/L		95	76 - 122

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 480-156744-1 MS**

**Matrix: Water**

**Analysis Batch: 484067**

**Client Sample ID: MW-4**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
1,1-Dichloroethane	ND		25.0	24.9		ug/L		100	77 - 120
1,1-Dichloroethene	ND		25.0	24.4		ug/L		98	66 - 127
1,2,4-Trichlorobenzene	ND		25.0	20.1		ug/L		80	79 - 122
1,2-Dibromo-3-Chloropropane	ND		25.0	22.4		ug/L		89	56 - 134
1,2-Dibromoethane	ND		25.0	22.5		ug/L		90	77 - 120
1,2-Dichlorobenzene	ND		25.0	22.7		ug/L		91	80 - 124
1,2-Dichloroethane	ND		25.0	22.9		ug/L		92	75 - 120
1,2-Dichloropropane	ND		25.0	25.1		ug/L		100	76 - 120
1,3-Dichlorobenzene	ND		25.0	23.5		ug/L		94	77 - 120
1,4-Dichlorobenzene	ND		25.0	23.5		ug/L		94	78 - 124
2-Butanone (MEK)	ND		125	136		ug/L		109	57 - 140
2-Hexanone	ND		125	123		ug/L		98	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		125	124		ug/L		100	71 - 125
Acetone	ND *		125	145		ug/L		116	56 - 142
Benzene	ND		25.0	25.5		ug/L		102	71 - 124
Bromodichloromethane	ND		25.0	24.5		ug/L		98	80 - 122
Bromoform	ND		25.0	24.5		ug/L		98	61 - 132
Bromomethane	ND		25.0	24.5		ug/L		98	55 - 144
Carbon disulfide	ND		25.0	22.7		ug/L		91	59 - 134
Carbon tetrachloride	ND		25.0	26.5		ug/L		106	72 - 134
Chlorobenzene	ND		25.0	23.7		ug/L		95	80 - 120
Chloroethane	ND		25.0	26.9		ug/L		107	69 - 136
Chloroform	3.2		25.0	24.9		ug/L		87	73 - 127
Chloromethane	ND		25.0	25.0		ug/L		100	68 - 124
cis-1,2-Dichloroethene	ND		25.0	23.3		ug/L		93	74 - 124
cis-1,3-Dichloropropene	ND		25.0	23.5		ug/L		94	74 - 124
Cyclohexane	ND		25.0	26.6		ug/L		106	59 - 135
Dibromochloromethane	ND		25.0	23.8		ug/L		95	75 - 125
Dichlorodifluoromethane	ND		25.0	21.6		ug/L		86	59 - 135
Ethylbenzene	ND		25.0	24.3		ug/L		97	77 - 123
Isopropylbenzene	ND		25.0	25.4		ug/L		102	77 - 122
Methyl acetate	ND		50.0	50.0		ug/L		100	74 - 133
Methyl tert-butyl ether	ND		25.0	22.3		ug/L		89	77 - 120
Methylcyclohexane	ND		25.0	24.1		ug/L		97	68 - 134
Methylene Chloride	ND		25.0	24.2		ug/L		97	75 - 124
Styrene	ND		25.0	23.0		ug/L		92	80 - 120
Tetrachloroethene	27		25.0	49.2		ug/L		89	74 - 122
Toluene	ND F2		25.0	24.2		ug/L		97	80 - 122
trans-1,2-Dichloroethene	ND		25.0	25.0		ug/L		100	73 - 127
trans-1,3-Dichloropropene	ND F2		25.0	23.2		ug/L		93	80 - 120
Trichloroethene	42		25.0	64.5		ug/L		91	74 - 123
Trichlorofluoromethane	ND		25.0	25.4		ug/L		102	62 - 150
Vinyl chloride	ND		25.0	27.2		ug/L		109	65 - 133
<b>Surrogate</b>		<b>MS</b>	<b>MS</b>						
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
1,2-Dichloroethane-d4 (Surr)		100		77 - 120					
4-Bromofluorobenzene (Surr)		97		73 - 120					
Dibromofluoromethane (Surr)		98		75 - 123					

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 480-156744-1 MS**

**Matrix: Water**

**Analysis Batch: 484067**

**Client Sample ID: MW-4**  
**Prep Type: Total/NA**

Surrogate	MS	MS	%Recovery	Qualifier	Limits
Toluene-d8 (Surrogate)			102		80 - 120

**Lab Sample ID: 480-156744-1 MSD**

**Matrix: Water**

**Analysis Batch: 484067**

**Client Sample ID: MW-4**  
**Prep Type: Total/NA**

Analyte	Result	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier	Added	Result	Qualifier						
1,1,1-Trichloroethane	ND			25.0	28.8		ug/L		115	73 - 126	14	15
1,1,2,2-Tetrachloroethane	ND			25.0	27.6		ug/L		110	76 - 120	14	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND			25.0	28.9		ug/L		116	61 - 148	15	20
1,1,2-Trichloroethane	ND	F2		25.0	29.0	F2	ug/L		116	76 - 122	19	15
1,1-Dichloroethane	ND			25.0	29.0		ug/L		116	77 - 120	15	20
1,1-Dichloroethene	ND			25.0	28.5		ug/L		114	66 - 127	15	16
1,2,4-Trichlorobenzene	ND			25.0	21.7		ug/L		87	79 - 122	8	20
1,2-Dibromo-3-Chloropropane	ND			25.0	25.2		ug/L		101	56 - 134	12	15
1,2-Dibromoethane	ND			25.0	26.2		ug/L		105	77 - 120	15	15
1,2-Dichlorobenzene	ND			25.0	25.6		ug/L		102	80 - 124	12	20
1,2-Dichloroethane	ND			25.0	26.4		ug/L		105	75 - 120	14	20
1,2-Dichloropropane	ND			25.0	29.0		ug/L		116	76 - 120	14	20
1,3-Dichlorobenzene	ND			25.0	27.4		ug/L		109	77 - 120	15	20
1,4-Dichlorobenzene	ND			25.0	26.9		ug/L		108	78 - 124	13	20
2-Butanone (MEK)	ND			125	154		ug/L		123	57 - 140	12	20
2-Hexanone	ND			125	138		ug/L		110	65 - 127	11	15
4-Methyl-2-pentanone (MIBK)	ND			125	141		ug/L		113	71 - 125	12	35
Acetone	ND *			125	156		ug/L		125	56 - 142	8	15
Benzene	ND			25.0	29.2		ug/L		117	71 - 124	13	13
Bromodichloromethane	ND			25.0	27.4		ug/L		110	80 - 122	11	15
Bromoform	ND			25.0	26.9		ug/L		108	61 - 132	9	15
Bromomethane	ND			25.0	27.5		ug/L		110	55 - 144	11	15
Carbon disulfide	ND			25.0	26.0		ug/L		104	59 - 134	14	15
Carbon tetrachloride	ND			25.0	30.4		ug/L		122	72 - 134	14	15
Chlorobenzene	ND			25.0	27.7		ug/L		111	80 - 120	15	25
Chloroethane	ND			25.0	30.9		ug/L		124	69 - 136	14	15
Chloroform	3.2			25.0	27.8		ug/L		98	73 - 127	11	20
Chloromethane	ND			25.0	28.1		ug/L		112	68 - 124	12	15
cis-1,2-Dichloroethene	ND			25.0	26.8		ug/L		107	74 - 124	14	15
cis-1,3-Dichloropropene	ND			25.0	27.4		ug/L		110	74 - 124	15	15
Cyclohexane	ND			25.0	29.7		ug/L		119	59 - 135	11	20
Dibromochloromethane	ND			25.0	26.7		ug/L		107	75 - 125	12	15
Dichlorodifluoromethane	ND			25.0	24.4		ug/L		97	59 - 135	12	20
Ethylbenzene	ND			25.0	27.9		ug/L		112	77 - 123	14	15
Isopropylbenzene	ND			25.0	29.8		ug/L		119	77 - 122	16	20
Methyl acetate	ND			50.0	57.5		ug/L		115	74 - 133	14	20
Methyl tert-butyl ether	ND			25.0	25.6		ug/L		102	77 - 120	14	37
Methylcyclohexane	ND			25.0	27.7		ug/L		111	68 - 134	14	20
Methylene Chloride	ND			25.0	27.4		ug/L		110	75 - 124	12	15
Styrene	ND			25.0	26.6		ug/L		106	80 - 120	15	20
Tetrachloroethene	27			25.0	52.7		ug/L		102	74 - 122	7	20

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 480-156744-1 MSD**

**Matrix: Water**

**Analysis Batch: 484067**

**Client Sample ID: MW-4**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Toluene	ND	F2	25.0	28.4	F2	ug/L		113	80 - 122	16	15
trans-1,2-Dichloroethene	ND		25.0	29.2		ug/L		117	73 - 127	15	20
trans-1,3-Dichloropropene	ND	F2	25.0	27.6	F2	ug/L		110	80 - 120	17	15
Trichloroethene	42		25.0	66.8		ug/L		100	74 - 123	3	16
Trichlorofluoromethane	ND		25.0	29.5		ug/L		118	62 - 150	15	20
Vinyl chloride	ND		25.0	30.7		ug/L		123	65 - 133	12	15
<hr/>											
Surrogate	MSD		MSD		Limits	D	%Rec	%Rec.	RPD	RPD Limit	
	%Recovery		Qualifier								
1,2-Dichloroethane-d4 (Surr)	103		77 - 120								
4-Bromofluorobenzene (Surr)	96		73 - 120								
Dibromofluoromethane (Surr)	100		75 - 123								
Toluene-d8 (Surr)	106		80 - 120								

**Lab Sample ID: MB 480-484093/7**

**Matrix: Water**

**Analysis Batch: 484093**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/27/19 11:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/27/19 11:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/27/19 11:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/27/19 11:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/27/19 11:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/27/19 11:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/27/19 11:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/27/19 11:03	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/27/19 11:03	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/27/19 11:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/27/19 11:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/27/19 11:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/27/19 11:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/27/19 11:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/27/19 11:03	1
2-Hexanone	ND		5.0	1.2	ug/L			07/27/19 11:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/27/19 11:03	1
Acetone	ND		10	3.0	ug/L			07/27/19 11:03	1
Benzene	ND		1.0	0.41	ug/L			07/27/19 11:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/27/19 11:03	1
Bromoform	ND		1.0	0.26	ug/L			07/27/19 11:03	1
Bromomethane	ND		1.0	0.69	ug/L			07/27/19 11:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/27/19 11:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/27/19 11:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/27/19 11:03	1
Chloroethane	ND		1.0	0.32	ug/L			07/27/19 11:03	1
Chloroform	ND		1.0	0.34	ug/L			07/27/19 11:03	1
Chloromethane	ND		1.0	0.35	ug/L			07/27/19 11:03	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/27/19 11:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/27/19 11:03	1

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID:** MB 480-484093/7

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

**Matrix:** Water

**Analysis Batch:** 484093

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND				1.0	0.18	ug/L			07/27/19 11:03	1
Dibromochloromethane	ND				1.0	0.32	ug/L			07/27/19 11:03	1
Dichlorodifluoromethane	ND				1.0	0.68	ug/L			07/27/19 11:03	1
Ethylbenzene	ND				1.0	0.74	ug/L			07/27/19 11:03	1
Isopropylbenzene	ND				1.0	0.79	ug/L			07/27/19 11:03	1
Methyl acetate	ND				2.5	1.3	ug/L			07/27/19 11:03	1
Methyl tert-butyl ether	ND				1.0	0.16	ug/L			07/27/19 11:03	1
Methylcyclohexane	ND				1.0	0.16	ug/L			07/27/19 11:03	1
Methylene Chloride	ND				1.0	0.44	ug/L			07/27/19 11:03	1
Styrene	ND				1.0	0.73	ug/L			07/27/19 11:03	1
Tetrachloroethene	ND				1.0	0.36	ug/L			07/27/19 11:03	1
Toluene	ND				1.0	0.51	ug/L			07/27/19 11:03	1
trans-1,2-Dichloroethene	ND				1.0	0.90	ug/L			07/27/19 11:03	1
trans-1,3-Dichloropropene	ND				1.0	0.37	ug/L			07/27/19 11:03	1
Trichloroethene	ND				1.0	0.46	ug/L			07/27/19 11:03	1
Trichlorofluoromethane	ND				1.0	0.88	ug/L			07/27/19 11:03	1
Vinyl chloride	ND				1.0	0.90	ug/L			07/27/19 11:03	1
Xylenes, Total	ND				2.0	0.66	ug/L			07/27/19 11:03	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		102		77 - 120			1
4-Bromofluorobenzene (Surr)	100		100		73 - 120			1
Dibromofluoromethane (Surr)	101		101		75 - 123			1
Toluene-d8 (Surr)	97		97		80 - 120			1

**Lab Sample ID:** LCS 480-484093/5

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

**Matrix:** Water

**Analysis Batch:** 484093

Analyte	Spike Added	LCs	LCs	Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
1,1,1-Trichloroethane	25.0	27.1		ug/L		108	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L		104	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.8		ug/L		107	61 - 148	
ne								
1,1,2-Trichloroethane	25.0	26.7		ug/L		107	76 - 122	
1,1-Dichloroethane	25.0	25.6		ug/L		102	77 - 120	
1,1-Dichloroethene	25.0	26.7		ug/L		107	66 - 127	
1,2,4-Trichlorobenzene	25.0	26.5		ug/L		106	79 - 122	
1,2-Dibromo-3-Chloropropane	25.0	25.3		ug/L		101	56 - 134	
1,2-Dibromoethane	25.0	26.5		ug/L		106	77 - 120	
1,2-Dichlorobenzene	25.0	26.8		ug/L		107	80 - 124	
1,2-Dichloroethane	25.0	25.7		ug/L		103	75 - 120	
1,2-Dichloropropane	25.0	26.4		ug/L		105	76 - 120	
1,3-Dichlorobenzene	25.0	26.4		ug/L		106	77 - 120	
1,4-Dichlorobenzene	25.0	26.8		ug/L		107	80 - 120	
2-Butanone (MEK)	125	128		ug/L		103	57 - 140	
2-Hexanone	125	129		ug/L		103	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	71 - 125	
Acetone	125	134		ug/L		107	56 - 142	

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 480-484093/5**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 484093**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
Benzene	25.0	25.4		ug/L	101	71 - 124	
Bromodichloromethane	25.0	25.1		ug/L	100	80 - 122	
Bromoform	25.0	23.1		ug/L	92	61 - 132	
Bromomethane	25.0	25.0		ug/L	100	55 - 144	
Carbon disulfide	25.0	24.9		ug/L	100	59 - 134	
Carbon tetrachloride	25.0	27.5		ug/L	110	72 - 134	
Chlorobenzene	25.0	26.0		ug/L	104	80 - 120	
Chloroethane	25.0	25.7		ug/L	103	69 - 136	
Chloroform	25.0	25.1		ug/L	100	73 - 127	
Chloromethane	25.0	25.4		ug/L	102	68 - 124	
cis-1,2-Dichloroethene	25.0	25.1		ug/L	100	74 - 124	
cis-1,3-Dichloropropene	25.0	26.6		ug/L	106	74 - 124	
Cyclohexane	25.0	24.5		ug/L	98	59 - 135	
Dibromochloromethane	25.0	26.2		ug/L	105	75 - 125	
Dichlorodifluoromethane	25.0	27.6		ug/L	110	59 - 135	
Ethylbenzene	25.0	26.0		ug/L	104	77 - 123	
Isopropylbenzene	25.0	26.4		ug/L	106	77 - 122	
Methyl acetate	50.0	48.4		ug/L	97	74 - 133	
Methyl tert-butyl ether	25.0	25.0		ug/L	100	77 - 120	
Methylcyclohexane	25.0	25.7		ug/L	103	68 - 134	
Methylene Chloride	25.0	25.1		ug/L	101	75 - 124	
Styrene	25.0	27.0		ug/L	108	80 - 120	
Tetrachloroethene	25.0	27.0		ug/L	108	74 - 122	
Toluene	25.0	25.7		ug/L	103	80 - 122	
trans-1,2-Dichloroethene	25.0	25.1		ug/L	100	73 - 127	
trans-1,3-Dichloropropene	25.0	25.0		ug/L	100	80 - 120	
Trichloroethene	25.0	25.9		ug/L	104	74 - 123	
Trichlorofluoromethane	25.0	27.3		ug/L	109	62 - 150	
Vinyl chloride	25.0	26.5		ug/L	106	65 - 133	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		77 - 120
4-Bromofluorobenzene (Surr)	101		73 - 120
Dibromofluoromethane (Surr)	102		75 - 123
Toluene-d8 (Surr)	98		80 - 120

# QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

## GC/MS VOA

### Analysis Batch: 483899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156744-4	PW-1R	Total/NA	Water	8260C	
480-156744-8	TRIP BANK	Total/NA	Water	8260C	
MB 480-483899/7	Method Blank	Total/NA	Water	8260C	
LCS 480-483899/5	Lab Control Sample	Total/NA	Water	8260C	

### Analysis Batch: 484067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156744-1	MW-4	Total/NA	Water	8260C	
480-156744-2	MW-5	Total/NA	Water	8260C	
480-156744-5	MW-9	Total/NA	Water	8260C	
480-156744-6	MW-12	Total/NA	Water	8260C	
MB 480-484067/7	Method Blank	Total/NA	Water	8260C	
LCS 480-484067/5	Lab Control Sample	Total/NA	Water	8260C	
480-156744-1 MS	MW-4	Total/NA	Water	8260C	
480-156744-1 MSD	MW-4	Total/NA	Water	8260C	

### Analysis Batch: 484093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156744-3	MW-6	Total/NA	Water	8260C	
480-156744-7	BLIND DUP	Total/NA	Water	8260C	
MB 480-484093/7	Method Blank	Total/NA	Water	8260C	
LCS 480-484093/5	Lab Control Sample	Total/NA	Water	8260C	

## Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

### **Client Sample ID: MW-4**

Date Collected: 07/23/19 13:30  
 Date Received: 07/25/19 10:35

**Lab Sample ID: 480-156744-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484067	07/27/19 01:23	OMI	TAL BUF

### **Client Sample ID: MW-5**

Date Collected: 07/23/19 12:00  
 Date Received: 07/25/19 10:35

**Lab Sample ID: 480-156744-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484067	07/27/19 01:46	OMI	TAL BUF

### **Client Sample ID: MW-6**

Date Collected: 07/23/19 14:30  
 Date Received: 07/25/19 10:35

**Lab Sample ID: 480-156744-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484093	07/27/19 14:52	OMI	TAL BUF

### **Client Sample ID: PW-1R**

Date Collected: 07/23/19 13:45  
 Date Received: 07/25/19 10:35

**Lab Sample ID: 480-156744-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	483899	07/26/19 13:52	AEM	TAL BUF

### **Client Sample ID: MW-9**

Date Collected: 07/23/19 15:30  
 Date Received: 07/25/19 10:35

**Lab Sample ID: 480-156744-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484067	07/27/19 02:32	OMI	TAL BUF

### **Client Sample ID: MW-12**

Date Collected: 07/23/19 16:30  
 Date Received: 07/25/19 10:35

**Lab Sample ID: 480-156744-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484067	07/27/19 02:55	OMI	TAL BUF

### **Client Sample ID: BLIND DUP**

Date Collected: 07/23/19 14:35  
 Date Received: 07/25/19 10:35

**Lab Sample ID: 480-156744-7**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	484093	07/27/19 15:16	OMI	TAL BUF

Eurofins TestAmerica, Buffalo

## Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

### Client Sample ID: TRIP BANK

Date Collected: 07/23/19 16:45

Date Received: 07/25/19 10:35

Lab Sample ID: 480-156744-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	483899	07/26/19 14:15	AEM	TAL BUF

#### Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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## Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC

Job ID: 480-156744-1

Project/Site: Benchmark - Despatch site

### Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-20

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## Method Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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## Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156744-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-156744-1	MW-4	Water	07/23/19 13:30	07/25/19 10:35	
480-156744-2	MW-5	Water	07/23/19 12:00	07/25/19 10:35	
480-156744-3	MW-6	Water	07/23/19 14:30	07/25/19 10:35	
480-156744-4	PW-1R	Water	07/23/19 13:45	07/25/19 10:35	
480-156744-5	MW-9	Water	07/23/19 15:30	07/25/19 10:35	
480-156744-6	MW-12	Water	07/23/19 16:30	07/25/19 10:35	
480-156744-7	BLIND DUP	Water	07/23/19 14:35	07/25/19 10:35	
480-156744-8	TRIP BANK	Water	07/23/19 16:45	07/25/19 10:35	

TestAmerica Buffalo  
10 Hazelwood Drive

Anhert, NY 14226

## Chain of Custody Record

10 Hazelwood Drive  
Edmonton, Alberta T6B 2L7

240189

10 Hazelwood Drive

1/2019

## Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-156744-1

**Login Number:** 156744

**List Source:** Eurofins TestAmerica, Buffalo

**List Number:** 1

**Creator:** Stopa, Erik S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	BMTK
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	



# Environment Testing TestAmerica



## ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo  
10 Hazelwood Drive  
Amherst, NY 14228-2298  
Tel: (716)691-2600

Laboratory Job ID: 480-156999-1

Client Project/Site: Benchmark - Despatch site

For:

Benchmark Env. Eng. & Science, PLLC  
2558 Hamburg Turnpike  
Suite 300  
Lackawanna, New York 14218

Attn: Ms. Lori E. Riker

Authorized for release by:

8/7/2019 3:02:29 PM

Joe Giacomazza, Project Management Assistant II  
[joe.giacomazza@testamericainc.com](mailto:joe.giacomazza@testamericainc.com)

Designee for

Brian Fischer, Manager of Project Management  
(716)504-9835  
[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

LINKS

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

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	1
%	Listed under the "D" column to designate that the result is reported on a dry weight basis	2
%R	Percent Recovery	3
CFL	Contains Free Liquid	4
CNF	Contains No Free Liquid	5
DER	Duplicate Error Ratio (normalized absolute difference)	6
Dil Fac	Dilution Factor	7
DL	Detection Limit (DoD/DOE)	8
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	9
DLC	Decision Level Concentration (Radiochemistry)	10
EDL	Estimated Detection Limit (Dioxin)	11
LOD	Limit of Detection (DoD/DOE)	12
LOQ	Limit of Quantitation (DoD/DOE)	13
MDA	Minimum Detectable Activity (Radiochemistry)	14
MDC	Minimum Detectable Concentration (Radiochemistry)	15
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
PQL	Practical Quantitation Limit	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	

## Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

### Job ID: 480-156999-1

Laboratory: Eurofins TestAmerica, Buffalo

#### Narrative

Job Narrative  
480-156999-1

#### Comments

No additional comments.

#### Receipt

The sample was received on 7/31/2019 12:15 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5° C.

#### GC/MS VOA

Method(s) 8260C: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-2 (480-156999-1). The sample was analyzed within 7 days per EPA recommendation.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

**Client Sample ID: MW-2**

**Lab Sample ID: 480-156999-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.2		1.0	0.34	ug/L	1		8260C	Total/NA
Tetrachloroethene	11		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	2.0		1.0	0.46	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

## Client Sample ID: MW-2

Date Collected: 07/30/19 10:00

Date Received: 07/31/19 12:15

## Lab Sample ID: 480-156999-1

Matrix: Water

### Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/01/19 23:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/01/19 23:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/01/19 23:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/01/19 23:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/01/19 23:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/01/19 23:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/01/19 23:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/01/19 23:51	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/01/19 23:51	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/01/19 23:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/01/19 23:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/01/19 23:51	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/01/19 23:51	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/01/19 23:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/01/19 23:51	1
2-Hexanone	ND		5.0	1.2	ug/L			08/01/19 23:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/01/19 23:51	1
Acetone	ND		10	3.0	ug/L			08/01/19 23:51	1
Benzene	ND		1.0	0.41	ug/L			08/01/19 23:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/01/19 23:51	1
Bromoform	ND		1.0	0.26	ug/L			08/01/19 23:51	1
Bromomethane	ND		1.0	0.69	ug/L			08/01/19 23:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/01/19 23:51	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/01/19 23:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/01/19 23:51	1
Chloroethane	ND		1.0	0.32	ug/L			08/01/19 23:51	1
<b>Chloroform</b>	<b>1.2</b>		1.0	0.34	ug/L			08/01/19 23:51	1
Chloromethane	ND		1.0	0.35	ug/L			08/01/19 23:51	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/01/19 23:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/01/19 23:51	1
Cyclohexane	ND		1.0	0.18	ug/L			08/01/19 23:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/01/19 23:51	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/01/19 23:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/01/19 23:51	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/01/19 23:51	1
Methyl acetate	ND		2.5	1.3	ug/L			08/01/19 23:51	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/01/19 23:51	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/01/19 23:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/01/19 23:51	1
Styrene	ND		1.0	0.73	ug/L			08/01/19 23:51	1
<b>Tetrachloroethene</b>	<b>11</b>		1.0	0.36	ug/L			08/01/19 23:51	1
Toluene	ND		1.0	0.51	ug/L			08/01/19 23:51	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/01/19 23:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/01/19 23:51	1
<b>Trichloroethene</b>	<b>2.0</b>		1.0	0.46	ug/L			08/01/19 23:51	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/01/19 23:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/01/19 23:51	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/01/19 23:51	1

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

## Client Sample ID: MW-2

Date Collected: 07/30/19 10:00  
Date Received: 07/31/19 12:15

## Lab Sample ID: 480-156999-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		08/01/19 23:51	1
4-Bromofluorobenzene (Surr)	106		73 - 120		08/01/19 23:51	1
Dibromofluoromethane (Surr)	103		75 - 123		08/01/19 23:51	1
Toluene-d8 (Surr)	97		80 - 120		08/01/19 23:51	1

## Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-156999-1	MW-2	99	106	103	97
LCS 480-485038/5	Lab Control Sample	96	101	101	97
MB 480-485038/8	Method Blank	98	100	101	96

#### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-485038/8**

**Matrix: Water**

**Analysis Batch: 485038**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L		08/01/19 21:39		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L		08/01/19 21:39		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L		08/01/19 21:39		1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L		08/01/19 21:39		1
1,1-Dichloroethane	ND		1.0	0.38	ug/L		08/01/19 21:39		1
1,1-Dichloroethene	ND		1.0	0.29	ug/L		08/01/19 21:39		1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L		08/01/19 21:39		1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L		08/01/19 21:39		1
1,2-Dibromoethane	ND		1.0	0.73	ug/L		08/01/19 21:39		1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L		08/01/19 21:39		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		08/01/19 21:39		1
1,2-Dichloropropane	ND		1.0	0.72	ug/L		08/01/19 21:39		1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L		08/01/19 21:39		1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L		08/01/19 21:39		1
2-Butanone (MEK)	ND		10	1.3	ug/L		08/01/19 21:39		1
2-Hexanone	ND		5.0	1.2	ug/L		08/01/19 21:39		1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L		08/01/19 21:39		1
Acetone	ND		10	3.0	ug/L		08/01/19 21:39		1
Benzene	ND		1.0	0.41	ug/L		08/01/19 21:39		1
Bromodichloromethane	ND		1.0	0.39	ug/L		08/01/19 21:39		1
Bromoform	ND		1.0	0.26	ug/L		08/01/19 21:39		1
Bromomethane	ND		1.0	0.69	ug/L		08/01/19 21:39		1
Carbon disulfide	ND		1.0	0.19	ug/L		08/01/19 21:39		1
Carbon tetrachloride	ND		1.0	0.27	ug/L		08/01/19 21:39		1
Chlorobenzene	ND		1.0	0.75	ug/L		08/01/19 21:39		1
Chloroethane	ND		1.0	0.32	ug/L		08/01/19 21:39		1
Chloroform	ND		1.0	0.34	ug/L		08/01/19 21:39		1
Chloromethane	ND		1.0	0.35	ug/L		08/01/19 21:39		1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L		08/01/19 21:39		1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L		08/01/19 21:39		1
Cyclohexane	ND		1.0	0.18	ug/L		08/01/19 21:39		1
Dibromochloromethane	ND		1.0	0.32	ug/L		08/01/19 21:39		1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L		08/01/19 21:39		1
Ethylbenzene	ND		1.0	0.74	ug/L		08/01/19 21:39		1
Isopropylbenzene	ND		1.0	0.79	ug/L		08/01/19 21:39		1
Methyl acetate	ND		2.5	1.3	ug/L		08/01/19 21:39		1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L		08/01/19 21:39		1
Methylcyclohexane	ND		1.0	0.16	ug/L		08/01/19 21:39		1
Methylene Chloride	ND		1.0	0.44	ug/L		08/01/19 21:39		1
Styrene	ND		1.0	0.73	ug/L		08/01/19 21:39		1
Tetrachloroethene	ND		1.0	0.36	ug/L		08/01/19 21:39		1
Toluene	ND		1.0	0.51	ug/L		08/01/19 21:39		1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L		08/01/19 21:39		1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L		08/01/19 21:39		1
Trichloroethene	ND		1.0	0.46	ug/L		08/01/19 21:39		1
Trichlorofluoromethane	ND		1.0	0.88	ug/L		08/01/19 21:39		1
Vinyl chloride	ND		1.0	0.90	ug/L		08/01/19 21:39		1
Xylenes, Total	ND		2.0	0.66	ug/L		08/01/19 21:39		1

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-485038/8**

**Matrix: Water**

**Analysis Batch: 485038**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
1,2-Dichloroethane-d4 (Surr)	98		77 - 120			08/01/19 21:39		1
4-Bromofluorobenzene (Surr)	100		73 - 120			08/01/19 21:39		1
Dibromofluoromethane (Surr)	101		75 - 123			08/01/19 21:39		1
Toluene-d8 (Surr)	96		80 - 120			08/01/19 21:39		1

**Lab Sample ID: LCS 480-485038/5**

**Matrix: Water**

**Analysis Batch: 485038**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LC S	LC S	Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	24.7		ug/L		99	76 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.3		ug/L		117	61 - 148	
1,1,2-Trichloroethane	25.0	24.9		ug/L		99	76 - 122	
1,1-Dichloroethane	25.0	25.3		ug/L		101	77 - 120	
1,1-Dichloroethene	25.0	28.1		ug/L		112	66 - 127	
1,2,4-Trichlorobenzene	25.0	25.5		ug/L		102	79 - 122	
1,2-Dibromo-3-Chloropropane	25.0	23.9		ug/L		96	56 - 134	
1,2-Dibromoethane	25.0	25.2		ug/L		101	77 - 120	
1,2-Dichlorobenzene	25.0	25.6		ug/L		103	80 - 124	
1,2-Dichloroethane	25.0	24.0		ug/L		96	75 - 120	
1,2-Dichloropropane	25.0	25.7		ug/L		103	76 - 120	
1,3-Dichlorobenzene	25.0	25.9		ug/L		104	77 - 120	
1,4-Dichlorobenzene	25.0	25.9		ug/L		103	80 - 120	
2-Butanone (MEK)	125	114		ug/L		91	57 - 140	
2-Hexanone	125	123		ug/L		98	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	117		ug/L		93	71 - 125	
Acetone	125	118		ug/L		94	56 - 142	
Benzene	25.0	25.5		ug/L		102	71 - 124	
Bromodichloromethane	25.0	23.6		ug/L		95	80 - 122	
Bromoform	25.0	19.9		ug/L		80	61 - 132	
Bromomethane	25.0	24.3		ug/L		97	55 - 144	
Carbon disulfide	25.0	26.8		ug/L		107	59 - 134	
Carbon tetrachloride	25.0	26.1		ug/L		104	72 - 134	
Chlorobenzene	25.0	25.3		ug/L		101	80 - 120	
Chloroethane	25.0	25.1		ug/L		101	69 - 136	
Chloroform	25.0	24.6		ug/L		98	73 - 127	
Chloromethane	25.0	25.8		ug/L		103	68 - 124	
cis-1,2-Dichloroethene	25.0	26.2		ug/L		105	74 - 124	
cis-1,3-Dichloropropene	25.0	23.7		ug/L		95	74 - 124	
Cyclohexane	25.0	27.6		ug/L		110	59 - 135	
Dibromochloromethane	25.0	23.3		ug/L		93	75 - 125	
Dichlorodifluoromethane	25.0	29.3		ug/L		117	59 - 135	
Ethylbenzene	25.0	25.7		ug/L		103	77 - 123	
Isopropylbenzene	25.0	26.4		ug/L		106	77 - 122	
Methyl acetate	50.0	45.1		ug/L		90	74 - 133	
Methyl tert-butyl ether	25.0	24.1		ug/L		97	77 - 120	
Methylcyclohexane	25.0	28.6		ug/L		114	68 - 134	

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID:** LCS 480-485038/5

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

**Matrix:** Water

**Analysis Batch:** 485038

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Methylene Chloride	25.0	26.2		ug/L		105	75 - 124	
Styrene	25.0	26.1		ug/L		105	80 - 120	
Tetrachloroethene	25.0	26.8		ug/L		107	74 - 122	
Toluene	25.0	25.0		ug/L		100	80 - 122	
trans-1,2-Dichloroethene	25.0	25.1		ug/L		101	73 - 127	
trans-1,3-Dichloropropene	25.0	21.5		ug/L		86	80 - 120	
Trichloroethene	25.0	26.0		ug/L		104	74 - 123	
Trichlorofluoromethane	25.0	28.5		ug/L		114	62 - 150	
Vinyl chloride	25.0	27.7		ug/L		111	65 - 133	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		77 - 120
4-Bromofluorobenzene (Surr)	101		73 - 120
Dibromofluoromethane (Surr)	101		75 - 123
Toluene-d8 (Surr)	97		80 - 120

## QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

### GC/MS VOA

Analysis Batch: 485038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156999-1	MW-2	Total/NA	Water	8260C	
MB 480-485038/8	Method Blank	Total/NA	Water	8260C	
LCS 480-485038/5	Lab Control Sample	Total/NA	Water	8260C	

## Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

### Client Sample ID: MW-2

Date Collected: 07/30/19 10:00

Date Received: 07/31/19 12:15

Lab Sample ID: 480-156999-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	485038	08/01/19 23:51	RJF	TAL BUF

#### Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

## Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC

Job ID: 480-156999-1

Project/Site: Benchmark - Despatch site

### Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-20

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Eurofins TestAmerica, Buffalo

## Method Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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## Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - Despatch site

Job ID: 480-156999-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-156999-1	MW-2	Water	07/30/19 10:00	07/31/19 12:15	

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## Chain of Custody Record

Anherst, WV 14228  
Phone: 716.691.2600 Fax: 716.691.7991

THE LEADER IN ENVIRONMENTAL TESTING  
TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Client Contact		Project Manager:		Site Contact:	Date:	COC No:
Company Name:	Bethany E&I	Tel/Fax:	716-743-3437	Lab Contact:	<u>Brian Fischer</u>	Carrier:
Address: 255 S Hamby TnC		Analysis Turnaround Time				
City/State/Zip: Bethany, Wv, 14216		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS				
Phone: 716-733-3437		<input type="checkbox"/> TAT if different from Below _____				
Fax:		<input type="checkbox"/> 2 weeks				
Project Name: Sketch		<input type="checkbox"/> 1 week				
Site: 115 North Main St		<input type="checkbox"/> 2 days				
PO # 80046-607-900		<input type="checkbox"/> 1 day				
Sample Identification		Sample Date	Sample Time	Sample Type (G=Comp, G=Grab)	Matrix	# of Cont.
MW-2		7/24/14	10:00	G	Ag 3	X
Regulatory Program:		<input type="checkbox"/> DW	<input type="checkbox"/> NPDES	<input type="checkbox"/> RCRA	<input type="checkbox"/> Other:	
Perform MS / MSD (Y / N)						
Filtered Sample (Y / N)						
Sample Specific Notes:						
480-156999 Chain of Custody						
Preservation Used: 1= Ice; 2= HCl; 3= H <sub>2</sub> SO <sub>4</sub> ; 4= HNO <sub>3</sub> ; 5= NaOH; 6= Other		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown				
Comments:		<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments:		<u>At B Higher epis</u>				
Custody Seals Intact:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	Custody Seal No.:	Cooler Temp. (°C):	Obs'd.:
Relinquished by:		<u>J</u>		Company: <u>TestAmerica</u>	Date/Time: <u>7/24/14 12:15</u>	Corr'd.: _____
Relinquished by:		<u>J</u>		Company: <u>TestAmerica</u>	Date/Time: <u>7/31/14 12:15</u>	Therm ID No.: <u>A1</u>
Relinquished by:		<u>J</u>		Company: <u>TestAmerica</u>	Date/Time: <u>7/31/14 12:15</u>	Date/Time: <u>7/31/14 12:15</u>
Relinquished by:		<u>J</u>		Company: <u>TestAmerica</u>	Date/Time: <u>7/31/14 12:15</u>	Date/Time: <u>7/31/14 12:15</u>

## Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-156999-1

**Login Number: 156999**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Harper, Marcus D**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	BM
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	