

July 19, 2021

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 Semi-Annual Groundwater Monitoring

Dear Mr. Caffoe:

The New York State Department of Environmental Conservation (NYSDEC) April 7, 2020 letter required continued annual monitoring of wells MW-5, MW-6, and MW-12. In subsequent emails, NYSDEC agreed to evaluating the need for continued monitoring after three semi-annual groundwater monitoring events. On behalf of Despatch Industries Inc., Benchmark Civil/Environmental Engineering & Geology, PLLC (Benchmark) is herein providing a summary of the third semi-annual groundwater monitoring event performed at the Site on June 2, 2021.

SAMPLING EVENT

On June 2, 2021, Benchmark collected groundwater samples from former on-site source area wells MW-5 and MW-6 as well as downgradient off-site well MW-12. Water level elevations were measured before sampling to prepare the isopotential map showing groundwater flow direction (see Figure 1). The groundwater samples were sent to Eurofins/TestAmerica for analysis of Target Compound List (TCL) volatile organic compounds (VOCs).

GROUNDWATER MONITORING RESULTS

Attachment 1 includes the field sampling forms and analytical data. Table 1 provides a comparison of historic, pre-injection, and post-injection groundwater analytical results to NYSDEC Class GA groundwater quality standards and guidance values (GWQS/GVs). Figure 1 shows groundwater flowing in a northwest direction, which is consistent with past monitoring events.

As indicated in Table 1, tetrachloroethene (PCE) was not detected in well MW-5 and was detected at a concentration well below its GWQS (5 ug/L) in well MW-6. The PCE concentrations in well MW-12 (32 ug/L) decreased slightly from December 2020 (36 ug/L)

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and is consistent with the June 2020 concentration (31 ug/L). Trichloroethene (TCE) was not detected in well MW-5 and was detected at a concentration well below its GWQS (5 ug/L) in MW-6. TCE was detected in well MW-12 at a concentration (9 ug/L) slightly above its GWQS. Benchmark uploaded the June 2021 groundwater data to EQuIS on June 14, 2021; NYSDEC approved the submission on July 13, 2021.

RECOMMENDATIONS

Based on the absence of PCE and TCE in source area well MW-5 and de-minimis concentrations in source area well MW-6, the low concentrations in downgradient off-site well MW-12, and the absence of any indications of source area rebound, Benchmark requests permission to terminate the groundwater monitoring program and grout the wells in place per NYSDEC CP-43 guidance. Benchmark would provide details on the well decommissioning in the annual Periodic Review Report (PRR) due March 1, 2022.

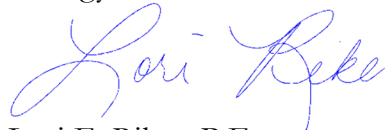
Please contact us if you have any questions or require additional information.

Sincerely,

Benchmark Civil/Environmental Engineering & Geology, PLLC



Thomas H. Forbes, P.E.
President



Lori E. Riker, P.E.
Sr. Project Manager

cc: Bernette Schilling (NYSDEC Region 8)
Justin Deming (NYSDOH)
Steven Berninger (NYSDOH)
Alan Shaffer (Despatch)
Amy Shaffer (Despatch)
Wade Lippman
File: 0040-002-400

TABLE



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

Parameter ¹	GWQS/GV ²	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	06/28/16		07/10/17	11/30/17	02/27/18	06/04/18	07/23/19	11/25/19	12/11/19	06/11/20	12/01/20
TCL Volatile Organic Compounds (ug/L)																				
Acetone	50	ND	ND	ND	ND	ND	3.4 J	3.3 J	ND	ND	7.3 J	200	200	63 J	ND	ND	6.8 J	6.9 J	ND	ND
Bromodichloromethane	5	ND	ND	0.51 J	ND	ND	ND	ND	ND	0.54 J	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	ND	ND	ND	ND	ND	ND
Carbon Disulfide	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.25 J
Chloroform	7	1.4 J	1.3	18	ND	ND	ND	ND	ND	0.98 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	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
Methyl Acetate	NR	ND	ND	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	1,600	2,800	590	400	150	110	50	40	530 D	14	ND	ND	ND	ND	45	ND	0.41 J	ND	ND
Trichloroethene	5	1,400	1,500	260	240	59	52	23	20	330 D	8.5	ND	ND	ND	ND	44	ND	0.56 J	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND
cis-1,2-Dichlorethene	5	0.80 J	0.95 J	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 < 9.0	ND < 9.0	ND < 9.0	ND	ND	ND	ND	ND	ND
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	ND	ND	ND	ND	ND	ND
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	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
Total Site COCs (cVOCs) ³	--	3,000	4,302	850	640	209	162	73	60	860	23	0	0	0	0	89	0	1	0	0

- 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. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
 3. Sum of chlorinated VOCs means adding the concentrations of tetrachloroethene, trichloroethene, cis & trans-1,2-dichlorethene, and 1,1-dichloroethene.
 4. 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

"--" = Not analyzed

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 ¹	GWQS/GV ²	MW-6																						
		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 ⁴	07/23/19	11/25/19	06/11/20	12/01/20
TCL Volatile Organic Compounds (ug/L)																								
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	5.4 J	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	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	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
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	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	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	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	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	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	0.43 J	0.97 J	0.39 J
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	ND	ND	0.8 J	0.56 J
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND < 44	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 < 15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichlorethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND < 41	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 < 45	ND	ND	ND	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	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	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	ND	ND	ND
Total Site COCs (cVOCs) ³	--	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	0	0.43	1.8	0.95

- 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.
 - 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-dichlorethene, 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:

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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 ¹	GWQS/GV ²	MW-12					
		Historic	Current				
		03/10/08	7/23/19	11/25/19	6/11/20	12/1/20	6/2/21
TCL Volatile Organic Compounds (ug/L)							
Acetone	50	4.8 J	ND	ND	5.1	ND	ND
Bromodichloromethane	5	0.82 J	ND	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND
Carbon Disulfide	60	0.94 J	ND	ND	ND	ND	ND
Chloroform	7	1.6	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND
Methylene chloride	5	ND	ND	ND	ND	ND	ND
Methyl Acetate	NR	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	300 D	71	68	31	36	32
Trichloroethene	5	270 D	14	12	4.2	5.3	9.0
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND
1,1 Dichloroethene	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichlorethene	5	0.66 J	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	NA	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	2.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND
1,1 Dichloroethane	5	ND	ND	ND	ND	ND	ND
Total Site COCs (cVOCs) ³	--	571	85	80	35	41	41

- 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. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
 3. Sum of chlorinated VOCs means adding the concentrations of tetrachloroethene, trichloroethene, cis & trans-1,2-dichlorethene, and 1,1-dichloroethene.
 4. 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.

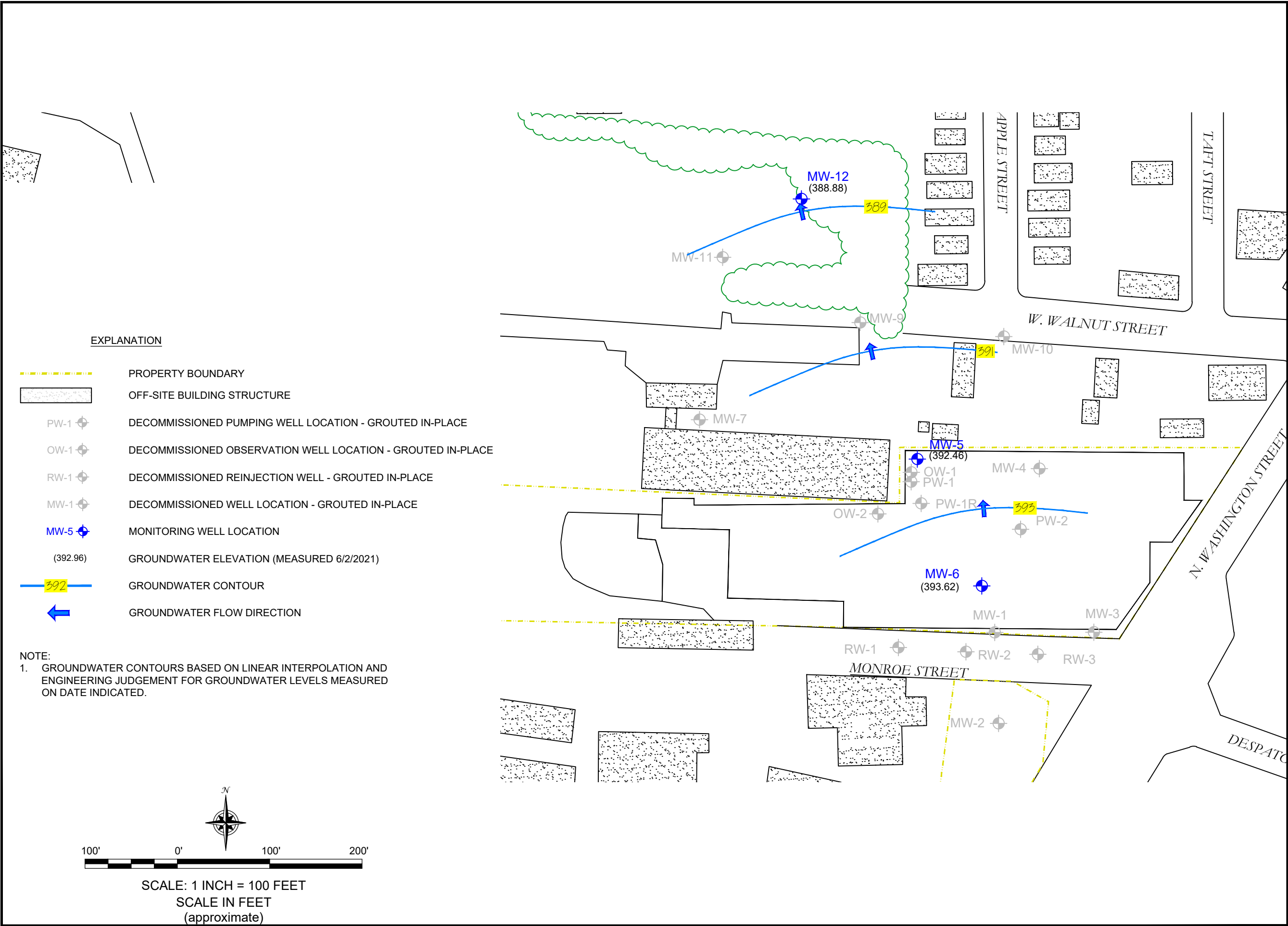
ND = parameter not detected above laboratory detection limit.

NR = parameter not regulated by 6NYCRR TOGS 1.1.1 Part 703

"--" = Not analyzed

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

FIGURE



2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218,
(716) 856-0599

JOB NO.: 0040-002-400

SITE PLAN

JUNE 2021

FORMER BRAINERD MANUFACTURING FACILITY

EAST ROCHESTER, NEW YORK

NYSDEC SITE NO. V00519-8

PREPARED FOR

DESPATCH INDUSTRIES, INC.

FIGURE 1

ATTACHMENT 1

GW FIELD FORMS AND ANALYTICAL DATA PACKAGE

Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Purge Method:	Purpose: ☐ Development ☐ Sample ☐ Purge & Sample
0	Initial						

Location: Despatch

Project No.:

Date: 6/2/21

Field Team: NAS

Well No. <u>MW-6</u>			Diameter (inches): <u>2"</u>			Sample Date / Time: <u>6/2/21</u>			
Product Depth (fbTOR):			Water Column (ft): <u>10.7</u>			DTW when sampled:			
DTW (static) (fbTOR): <u>23.30</u>			One Well Volume (gal): <u>1.74</u>			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): <u>34.00</u>			Total Volume Purged (gal): <u>5</u>			Purge Method: <u>Bailer</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
9:00	0 Initial	0	6.72	18.2	4495	98.3	1.83	167	Clear No odor
9:15	23.40	21.75	6.93	18.3	4495	89	0.80	89	Slight pinkish
9:30	23.50	23.25	6.98	18.3	4476	153	1.34	96	
9:45	23.70	25	6.96	17.4	4438	217	1.48	81	Slight pinkish
4									
5									
6									
7									
8									
9									
10									

Sample Information:									
10:00	S1	23.70	5	7.00	21.15	4428	138	2.02	129
	S2								

Well No. <u>MW-5</u>			Diameter (inches): <u>2"</u>			Sample Date / Time: <u>6/2/21</u>			
Product Depth (fbTOR):			Water Column (ft): <u>5.35</u>			DTW when sampled:			
DTW (static) (fbTOR): <u>29.0</u>			One Well Volume (gal): <u>0.87</u>			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): <u>29.35</u>			Total Volume Purged (gal):			Purge Method: <u>Bailer</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
10:15	0 Initial		7.22	17.8	3318	33.2	0.72	120	Clear No odor
10:30	1 25.8	1.85	7.26	17.9	2442	87.6	.40	-73	Slight odor
10:45	2 26.0	2.15	7.24	17.8	2873	154	1.15	-104	Black, sulfur
11:00	3 25.8	2.5	7.22	17.9	2901	111	1.18	-116	Slight sulfur
4									
5									
6									
7									
8									
9									
10									

Sample Information:									
	S1								
	S2								

REMARKS:

Note: All 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

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

PREPARED BY:

Well No. MW-12			Diameter (inches): 2"			Sample Date / Time: 6/2/21			
Product Depth (fbTOR):			Water Column (ft): .6			DTW when sampled:			
DTW (static) (fbTOR): 26.3			One Well Volume (gal): N/A			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 26.9			Total Volume Purged (gal):			Purge Method: Bailer			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
12:00	0 Initial	0	8.07	18.2	570.5	GR	4.87	29	grassy in hole
12:15	1								
12:30	2								
12:45	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
12:00	S1								
	S2								

Well No.			Diameter (inches):			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: ☐ Development ☐ Sample ☐ 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								
Sample Information:									
	S1								
	S2								

REMARKS: **MINIMAL water @ MW-12**
Grass in well, apparently clogged

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

Volume Calculation		Stabilization Criteria	
Diam.	Vol. (g/ft)	Parameter	Criteria
1"	0.041	pH	± 0.1 unit
2"	0.163	SC	± 3%
4"	0.653	Turbidity	± 10%
6"	1.469	DO	± 0.3 mg/L
		ORP	± 10 mV

PREPARED BY:

ANALYTICAL REPORT

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

Laboratory Job ID: 480-185638-1

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:

6/10/2021 10:33:41 AM

Rebecca Jones, Project Management Assistant I

Rebecca.Jones@Eurofinset.com

Designee for

Brian Fischer, Manager of Project Management
(716)504-9835

Brian.Fischer@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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: 480-185638-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 480-185638-1

Job ID: 480-185638-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative 480-185638-1

Comments

No additional comments.

Receipt

The samples were received on 6/4/2021 11:15 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA

Method 8260C: The laboratory control sample (LCS) for analytical batch 480-584359 recovered outside control limits for the following analytes: trans-1,3-Dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: MW-5 (480-185638-1), MW-6 (480-185638-2) and MW-12 (480-185638-3).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-584359 recovered above the upper control limit for trans-1,3-Dichloropropene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-5 (480-185638-1), MW-6 (480-185638-2) and MW-12 (480-185638-3).

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: 480-185638-1

Client Sample ID: MW-5

Lab Sample ID: 480-185638-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.25	J	1.0	0.19	ug/L	1		8260C	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 480-185638-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.39	J	1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	0.56	J	1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 480-185638-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	32		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	9.0		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: 480-185638-1

Client Sample ID: MW-5

Lab Sample ID: 480-185638-1

Date Collected: 06/02/21 11:15

Matrix: Water

Date Received: 06/04/21 11:15

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			06/08/21 11:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/08/21 11:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/08/21 11:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/08/21 11:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/08/21 11:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/08/21 11:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/08/21 11:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/08/21 11:55	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/08/21 11:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/08/21 11:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/08/21 11:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/08/21 11:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/08/21 11:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/08/21 11:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/08/21 11:55	1
2-Hexanone	ND		5.0	1.2	ug/L			06/08/21 11:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/08/21 11:55	1
Acetone	ND		10	3.0	ug/L			06/08/21 11:55	1
Benzene	ND		1.0	0.41	ug/L			06/08/21 11:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/08/21 11:55	1
Bromoform	ND		1.0	0.26	ug/L			06/08/21 11:55	1
Bromomethane	ND		1.0	0.69	ug/L			06/08/21 11:55	1
Carbon disulfide	0.25	J	1.0	0.19	ug/L			06/08/21 11:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/08/21 11:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/08/21 11:55	1
Chloroethane	ND		1.0	0.32	ug/L			06/08/21 11:55	1
Chloroform	ND		1.0	0.34	ug/L			06/08/21 11:55	1
Chloromethane	ND		1.0	0.35	ug/L			06/08/21 11:55	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/08/21 11:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/08/21 11:55	1
Cyclohexane	ND		1.0	0.18	ug/L			06/08/21 11:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/08/21 11:55	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/08/21 11:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/08/21 11:55	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/08/21 11:55	1
Methyl acetate	ND		2.5	1.3	ug/L			06/08/21 11:55	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/08/21 11:55	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/08/21 11:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/08/21 11:55	1
Styrene	ND		1.0	0.73	ug/L			06/08/21 11:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/08/21 11:55	1
Toluene	ND		1.0	0.51	ug/L			06/08/21 11:55	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/08/21 11:55	1
trans-1,3-Dichloropropene	ND	*+	1.0	0.37	ug/L			06/08/21 11:55	1
Trichloroethene	ND		1.0	0.46	ug/L			06/08/21 11:55	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/08/21 11:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/08/21 11:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/08/21 11:55	1

Eurofins TestAmerica, Buffalo

Client Sample Results

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

Job ID: 480-185638-1

Client Sample ID: MW-5

Lab Sample ID: 480-185638-1

Date Collected: 06/02/21 11:15

Matrix: Water

Date Received: 06/04/21 11:15

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		77 - 120		06/08/21 11:55	1
4-Bromofluorobenzene (Surr)	85		73 - 120		06/08/21 11:55	1
Dibromofluoromethane (Surr)	86		75 - 123		06/08/21 11:55	1
Toluene-d8 (Surr)	98		80 - 120		06/08/21 11:55	1

Client Sample Results

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

Job ID: 480-185638-1

Client Sample ID: MW-6

Lab Sample ID: 480-185638-2

Date Collected: 06/02/21 10:00

Matrix: Water

Date Received: 06/04/21 11:15

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			06/08/21 12:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/08/21 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/08/21 12:17	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/08/21 12:17	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/08/21 12:17	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/08/21 12:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/08/21 12:17	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/08/21 12:17	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/08/21 12:17	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/08/21 12:17	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/08/21 12:17	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/08/21 12:17	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/08/21 12:17	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/08/21 12:17	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/08/21 12:17	1
2-Hexanone	ND		5.0	1.2	ug/L			06/08/21 12:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/08/21 12:17	1
Acetone	ND		10	3.0	ug/L			06/08/21 12:17	1
Benzene	ND		1.0	0.41	ug/L			06/08/21 12:17	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/08/21 12:17	1
Bromoform	ND		1.0	0.26	ug/L			06/08/21 12:17	1
Bromomethane	ND		1.0	0.69	ug/L			06/08/21 12:17	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/08/21 12:17	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/08/21 12:17	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/08/21 12:17	1
Chloroethane	ND		1.0	0.32	ug/L			06/08/21 12:17	1
Chloroform	ND		1.0	0.34	ug/L			06/08/21 12:17	1
Chloromethane	ND		1.0	0.35	ug/L			06/08/21 12:17	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/08/21 12:17	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/08/21 12:17	1
Cyclohexane	ND		1.0	0.18	ug/L			06/08/21 12:17	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/08/21 12:17	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/08/21 12:17	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/08/21 12:17	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/08/21 12:17	1
Methyl acetate	ND		2.5	1.3	ug/L			06/08/21 12:17	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/08/21 12:17	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/08/21 12:17	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/08/21 12:17	1
Styrene	ND		1.0	0.73	ug/L			06/08/21 12:17	1
Tetrachloroethene	0.39 J		1.0	0.36	ug/L			06/08/21 12:17	1
Toluene	ND		1.0	0.51	ug/L			06/08/21 12:17	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/08/21 12:17	1
trans-1,3-Dichloropropene	ND	*+	1.0	0.37	ug/L			06/08/21 12:17	1
Trichloroethene	0.56 J		1.0	0.46	ug/L			06/08/21 12:17	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/08/21 12:17	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/08/21 12:17	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/08/21 12:17	1

Eurofins TestAmerica, Buffalo

Client Sample Results

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

Job ID: 480-185638-1

Client Sample ID: MW-6

Lab Sample ID: 480-185638-2

Date Collected: 06/02/21 10:00

Matrix: Water

Date Received: 06/04/21 11:15

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	93		77 - 120		06/08/21 12:17	1
4-Bromofluorobenzene (Surr)	86		73 - 120		06/08/21 12:17	1
Dibromofluoromethane (Surr)	88		75 - 123		06/08/21 12:17	1
Toluene-d8 (Surr)	97		80 - 120		06/08/21 12:17	1

Client Sample Results

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

Job ID: 480-185638-1

Client Sample ID: MW-12

Lab Sample ID: 480-185638-3

Date Collected: 06/02/21 13:00

Matrix: Water

Date Received: 06/04/21 11:15

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			06/08/21 12:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/08/21 12:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/08/21 12:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/08/21 12:39	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/08/21 12:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/08/21 12:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/08/21 12:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/08/21 12:39	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/08/21 12:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/08/21 12:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/08/21 12:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/08/21 12:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/08/21 12:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/08/21 12:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/08/21 12:39	1
2-Hexanone	ND		5.0	1.2	ug/L			06/08/21 12:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/08/21 12:39	1
Acetone	ND		10	3.0	ug/L			06/08/21 12:39	1
Benzene	ND		1.0	0.41	ug/L			06/08/21 12:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/08/21 12:39	1
Bromoform	ND		1.0	0.26	ug/L			06/08/21 12:39	1
Bromomethane	ND		1.0	0.69	ug/L			06/08/21 12:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/08/21 12:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/08/21 12:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/08/21 12:39	1
Chloroethane	ND		1.0	0.32	ug/L			06/08/21 12:39	1
Chloroform	ND		1.0	0.34	ug/L			06/08/21 12:39	1
Chloromethane	ND		1.0	0.35	ug/L			06/08/21 12:39	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/08/21 12:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/08/21 12:39	1
Cyclohexane	ND		1.0	0.18	ug/L			06/08/21 12:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/08/21 12:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/08/21 12:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/08/21 12:39	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/08/21 12:39	1
Methyl acetate	ND		2.5	1.3	ug/L			06/08/21 12:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/08/21 12:39	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/08/21 12:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/08/21 12:39	1
Styrene	ND		1.0	0.73	ug/L			06/08/21 12:39	1
Tetrachloroethene	32		1.0	0.36	ug/L			06/08/21 12:39	1
Toluene	ND		1.0	0.51	ug/L			06/08/21 12:39	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/08/21 12:39	1
trans-1,3-Dichloropropene	ND	*+	1.0	0.37	ug/L			06/08/21 12:39	1
Trichloroethene	9.0		1.0	0.46	ug/L			06/08/21 12:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/08/21 12:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/08/21 12:39	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/08/21 12:39	1

Eurofins TestAmerica, Buffalo

Client Sample Results

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

Job ID: 480-185638-1

Client Sample ID: MW-12

Lab Sample ID: 480-185638-3

Date Collected: 06/02/21 13:00

Matrix: Water

Date Received: 06/04/21 11:15

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		77 - 120		06/08/21 12:39	1
4-Bromofluorobenzene (Surr)	87		73 - 120		06/08/21 12:39	1
Dibromofluoromethane (Surr)	89		75 - 123		06/08/21 12:39	1
Toluene-d8 (Surr)	95		80 - 120		06/08/21 12:39	1

Surrogate Summary

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

Job ID: 480-185638-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-185638-1	MW-5	94	85	86	98
480-185638-2	MW-6	93	86	88	97
480-185638-3	MW-12	95	87	89	95
LCS 480-584359/5	Lab Control Sample	92	94	86	101
MB 480-584359/7	Method Blank	89	92	82	93

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: 480-185638-1

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

Lab Sample ID: MB 480-584359/7

Matrix: Water

Analysis Batch: 584359

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			06/08/21 11:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/08/21 11:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/08/21 11:07	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/08/21 11:07	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/08/21 11:07	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/08/21 11:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/08/21 11:07	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/08/21 11:07	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/08/21 11:07	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/08/21 11:07	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/08/21 11:07	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/08/21 11:07	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/08/21 11:07	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/08/21 11:07	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/08/21 11:07	1
2-Hexanone	ND		5.0	1.2	ug/L			06/08/21 11:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/08/21 11:07	1
Acetone	ND		10	3.0	ug/L			06/08/21 11:07	1
Benzene	ND		1.0	0.41	ug/L			06/08/21 11:07	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/08/21 11:07	1
Bromoform	ND		1.0	0.26	ug/L			06/08/21 11:07	1
Bromomethane	ND		1.0	0.69	ug/L			06/08/21 11:07	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/08/21 11:07	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/08/21 11:07	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/08/21 11:07	1
Chloroethane	ND		1.0	0.32	ug/L			06/08/21 11:07	1
Chloroform	ND		1.0	0.34	ug/L			06/08/21 11:07	1
Chloromethane	ND		1.0	0.35	ug/L			06/08/21 11:07	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/08/21 11:07	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/08/21 11:07	1
Cyclohexane	ND		1.0	0.18	ug/L			06/08/21 11:07	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/08/21 11:07	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/08/21 11:07	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/08/21 11:07	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/08/21 11:07	1
Methyl acetate	ND		2.5	1.3	ug/L			06/08/21 11:07	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/08/21 11:07	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/08/21 11:07	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/08/21 11:07	1
Styrene	ND		1.0	0.73	ug/L			06/08/21 11:07	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/08/21 11:07	1
Toluene	ND		1.0	0.51	ug/L			06/08/21 11:07	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/08/21 11:07	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/08/21 11:07	1
Trichloroethene	ND		1.0	0.46	ug/L			06/08/21 11:07	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/08/21 11:07	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/08/21 11:07	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/08/21 11:07	1

Eurofins TestAmerica, Buffalo

QC Sample Results

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

Job ID: 480-185638-1

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

Lab Sample ID: MB 480-584359/7

Matrix: Water

Analysis Batch: 584359

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		77 - 120		06/08/21 11:07	1
4-Bromofluorobenzene (Surr)	92		73 - 120		06/08/21 11:07	1
Dibromofluoromethane (Surr)	82		75 - 123		06/08/21 11:07	1
Toluene-d8 (Surr)	93		80 - 120		06/08/21 11:07	1

Lab Sample ID: LCS 480-584359/5

Matrix: Water

Analysis Batch: 584359

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	23.7		ug/L		95	73 - 126
1,1,1,2,2-Tetrachloroethane	25.0	25.4		ug/L		102	76 - 120
1,1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.5		ug/L		98	61 - 148
1,1,2-Trichloroethane	25.0	26.8		ug/L		107	76 - 122
1,1-Dichloroethane	25.0	24.0		ug/L		96	77 - 120
1,1-Dichloroethene	25.0	24.5		ug/L		98	66 - 127
1,2,4-Trichlorobenzene	25.0	22.9		ug/L		92	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	19.9		ug/L		80	56 - 134
1,2-Dibromoethane	25.0	24.8		ug/L		99	77 - 120
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	22.9		ug/L		91	75 - 120
1,2-Dichloropropane	25.0	26.6		ug/L		107	76 - 120
1,3-Dichlorobenzene	25.0	26.1		ug/L		104	77 - 120
1,4-Dichlorobenzene	25.0	25.6		ug/L		103	80 - 120
2-Butanone (MEK)	125	103		ug/L		83	57 - 140
2-Hexanone	125	133		ug/L		106	65 - 127
4-Methyl-2-pentanone (MIBK)	125	119		ug/L		95	71 - 125
Acetone	125	85.2		ug/L		68	56 - 142
Benzene	25.0	24.7		ug/L		99	71 - 124
Bromodichloromethane	25.0	26.9		ug/L		108	80 - 122
Bromoform	25.0	25.0		ug/L		100	61 - 132
Bromomethane	25.0	28.8		ug/L		115	55 - 144
Carbon disulfide	25.0	26.7		ug/L		107	59 - 134
Carbon tetrachloride	25.0	23.4		ug/L		94	72 - 134
Chlorobenzene	25.0	25.6		ug/L		102	80 - 120
Chloroethane	25.0	26.0		ug/L		104	69 - 136
Chloroform	25.0	23.2		ug/L		93	73 - 127
Chloromethane	25.0	24.6		ug/L		98	68 - 124
cis-1,2-Dichloroethene	25.0	23.9		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	28.6		ug/L		115	74 - 124
Cyclohexane	25.0	24.9		ug/L		100	59 - 135
Dibromochloromethane	25.0	27.5		ug/L		110	75 - 125
Dichlorodifluoromethane	25.0	25.9		ug/L		103	59 - 135
Ethylbenzene	25.0	26.2		ug/L		105	77 - 123
Isopropylbenzene	25.0	27.3		ug/L		109	77 - 122
Methyl acetate	50.0	37.1		ug/L		74	74 - 133
Methyl tert-butyl ether	25.0	21.6		ug/L		86	77 - 120
Methylcyclohexane	25.0	25.3		ug/L		101	68 - 134

Eurofins TestAmerica, Buffalo

QC Sample Results

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

Job ID: 480-185638-1

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

Lab Sample ID: LCS 480-584359/5

Matrix: Water

Analysis Batch: 584359

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	23.8		ug/L		95	75 - 124
Styrene	25.0	27.7		ug/L		111	80 - 120
Tetrachloroethene	25.0	25.5		ug/L		102	74 - 122
Toluene	25.0	27.3		ug/L		109	80 - 122
trans-1,2-Dichloroethene	25.0	23.1		ug/L		92	73 - 127
trans-1,3-Dichloropropene	25.0	30.9	*+	ug/L		124	80 - 120
Trichloroethene	25.0	26.6		ug/L		106	74 - 123
Trichlorofluoromethane	25.0	27.3		ug/L		109	62 - 150
Vinyl chloride	25.0	26.2		ug/L		105	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		77 - 120
4-Bromofluorobenzene (Surr)	94		73 - 120
Dibromofluoromethane (Surr)	86		75 - 123
Toluene-d8 (Surr)	101		80 - 120

QC Association Summary

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

Job ID: 480-185638-1

GC/MS VOA

Analysis Batch: 584359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-185638-1	MW-5	Total/NA	Water	8260C	
480-185638-2	MW-6	Total/NA	Water	8260C	
480-185638-3	MW-12	Total/NA	Water	8260C	
MB 480-584359/7	Method Blank	Total/NA	Water	8260C	
LCS 480-584359/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

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

Job ID: 480-185638-1

Client Sample ID: MW-5

Lab Sample ID: 480-185638-1

Date Collected: 06/02/21 11:15

Matrix: Water

Date Received: 06/04/21 11:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	584359	06/08/21 11:55	CRL	TAL BUF

Client Sample ID: MW-6

Lab Sample ID: 480-185638-2

Date Collected: 06/02/21 10:00

Matrix: Water

Date Received: 06/04/21 11:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	584359	06/08/21 12:17	CRL	TAL BUF

Client Sample ID: MW-12

Lab Sample ID: 480-185638-3

Date Collected: 06/02/21 13:00

Matrix: Water

Date Received: 06/04/21 11:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	584359	06/08/21 12:39	CRL	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
Project/Site: Benchmark - Despatch site

Job ID: 480-185638-1

Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-01-22

1

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Method Summary

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

Job ID: 480-185638-1

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

Sample Summary

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

Job ID: 480-185638-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-185638-1	MW-5	Water	06/02/21 11:15	06/04/21 11:15	
480-185638-2	MW-6	Water	06/02/21 10:00	06/04/21 11:15	
480-185638-3	MW-12	Water	06/02/21 13:00	06/04/21 11:15	

Chain of Custody Record

Client Information Client Contact: <u>NICK SPAIN</u> Company: <u>BENCHMARK EES</u> Address: <u>2558 Hemlock Trce</u> City: <u>Buffalo</u> State/Zip: <u>Ny 14213</u> Phone: <u>716-713-3937</u> Email: <u>LRiker@BMA-716.com</u> Project Name: <u>Despatch</u> Site: <u>Despatch</u>		Sampler: <u>NICK SPAIN</u> Lab PM: <u>BRION FULMER</u> Phone: <u>716-713-3427</u> E-Mail:	Carrier Tracking Note(s): State of Origin: Job #: Accreditations Required (See note):	COC No: Page: Job #: Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify) Other:		
Due Date Requested: <u>Standard</u> TAT Requested (days): PO# <u>B0040-002-400</u> WO #: Project #: SSOW#:		Analysis Requested Total Number of Containers:				
Sample Identification <u>MW-5</u> <u>MW-6</u> <u>MW-12</u>		Sample Date <u>6/2/21</u> <u>6/2/21</u> <u>6/2/21</u>	Sample Time <u>11:10</u> <u>10:00</u> <u>13:00</u>	Sample Type (C=Comp, G=grab) <u>G</u> <u>G</u> <u>G</u>	Matrix (W=water, S=solid, O=other) <u>Ag</u> <u>Ag</u> <u>Ag</u>	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) Special Instructions/Note: 480-185638 Chain of Custody
Note: Since laboratory accreditation is subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/res/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditation are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.						
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months				
Deliverable Requested: I, II, III, IV, Other (specify) <u>CAT & WSPU EWALS</u>						
Empty Kit Relinquished by:						
Relinquished by: <u>[Signature]</u> Date/Time: <u>6/4/21 11:15</u> Relinquished by: <u>[Signature]</u> Date/Time: <u>[Signature]</u> Relinquished by: <u>[Signature]</u> Date/Time: <u>[Signature]</u>		Method of Shipment: Received by: <u>[Signature]</u> Date/Time: <u>[Signature]</u> Received by: <u>[Signature]</u> Date/Time: <u>[Signature]</u> Received by: <u>[Signature]</u> Date/Time: <u>[Signature]</u>				
Custody Seals Intact: Δ Yes Δ No		Custody Seal No:				

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-185638-1

Login Number: 185638

List Source: Eurofins TestAmerica, Buffalo

List Number: 1

Creator: Yeager, Brian A

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.	True	
Chlorine Residual checked.	N/A	