



July 29, 2020

Reference No. 8614941.201

*Sent via E-mail*

Mr. Christopher Mannes III, P.E.  
Project Manager  
NYSDEC Region 7  
615 Erie Boulevard West  
Syracuse, NY 13204

Dear Mr. Mannes:

**Re: 110 Luther Avenue BCP Site (Site #C734118)  
Spring 2020 Groundwater Monitoring Results**

GHD Consulting Services Inc. (GHD) has completed the spring 2020 groundwater monitoring activities at the above-referenced Site. Monitoring activities included the sampling of five (5) Site monitoring wells (MW-1, MW-7, MW-8, MW-10, and MW-18) and the recording of field conditions at one (1) Site monitoring well (MW-19), as described in the Revised Site Management Plan (SMP) (S&W Redevelopment of North America, LLC, November 2011, Revised by GHD, February 2017 and May 2019). Groundwater samples taken from each of the groundwater monitoring wells during this monitoring event were analyzed for the reduced list of chlorinated volatile organic compounds (VOCs) of concern for the Site.

On behalf of Syracuse Label Company, Inc., GHD is submitting the attached figure, tables, laboratory analytical report, groundwater field sampling logs, and equipment calibration sheets for your reference. The spring 2020 groundwater monitoring data was submitted to the EQUIS database and is awaiting upload.

As reviewed with you during your Site visit while this monitoring event was occurring, off-site soil vapor monitoring well SVW-3 was destroyed. This soil vapor well was located on the southeastern side of Luther Avenue in the right-of-way, adjacent to groundwater monitoring well MW-18. Observed damage appears to be the result of demolition/construction activities occurring on the adjoining property owned by UniFirst.

We will contact you prior to the next round of groundwater monitoring, which is scheduled for November 2020, in accordance with the currently approved SMP.

Please contact me at 315-802-0312 if you have any questions or concerns.

Sincerely,

GHD Consulting Services Inc.

Ian E. McNamara  
Geologist – Environment

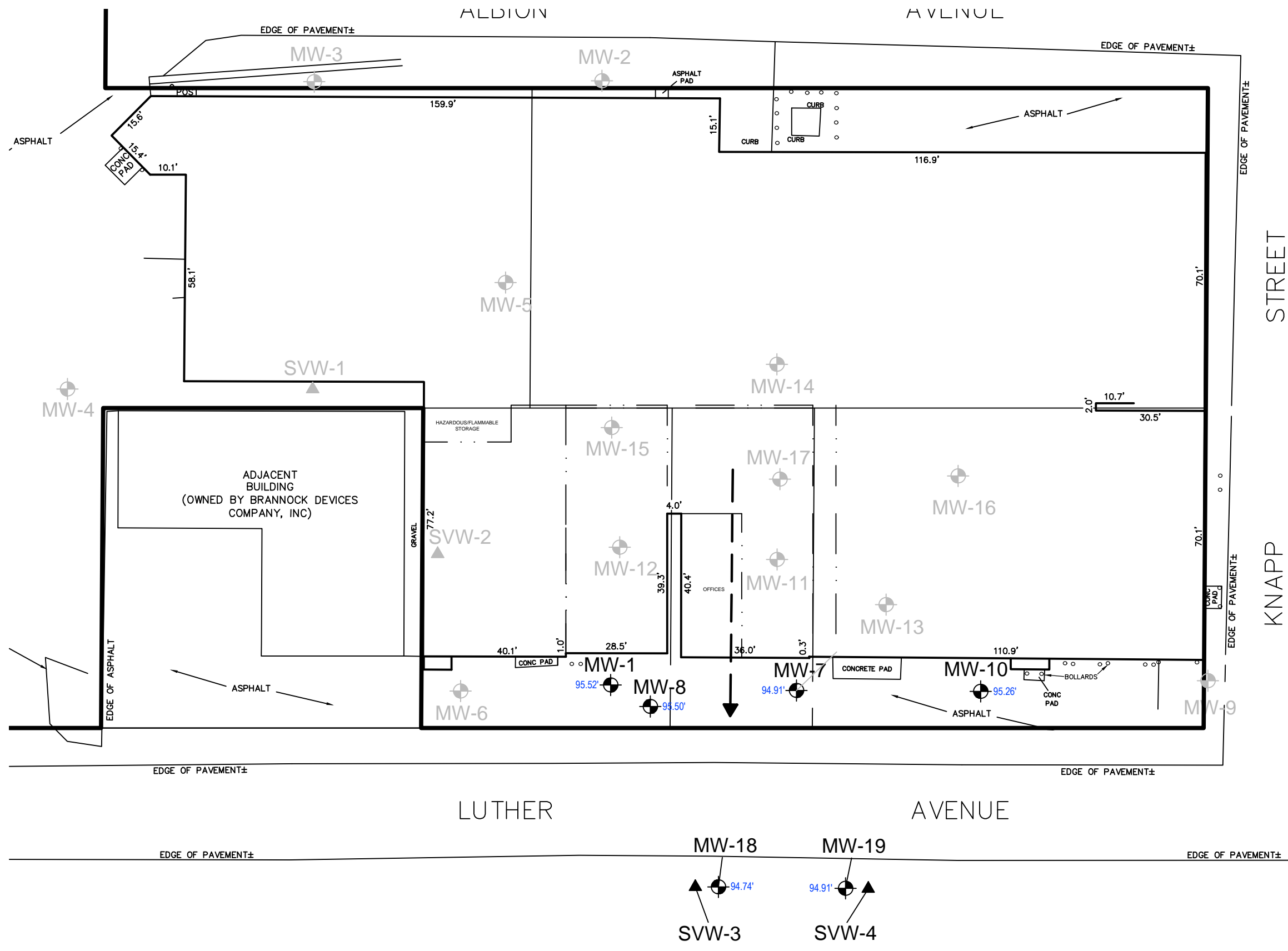
IEM/tac

Enclosures: As identified above.

cc: Mark Sergott, New York State Department of Health (w/encl.)  
Scarlett McLaughlin, New York State Department of Health (e/encl.)  
Paul Roux, Syracuse Label and Surround Printing (w/encl.)

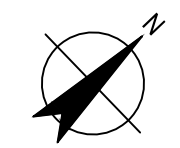
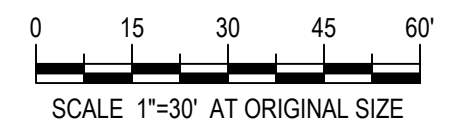


## Figures



**LEGEND:**

- MW-1
- SVW-3
- MW-2
- SVW-1
- 
- 
- 95.00'
- 



**NOTES:**

- SITE FEATURES BASED ON SITE SURVEY BY IANUZI & ROMANS, P.C. MARCH 2010 AND NOVEMBER 2010.



Syracuse Label Company, Inc.  
 110 Luther Avenue BCP Site (#C734118)  
 Spring 2020 Groundwater Monitoring  
**Site Layout and Presumed  
 Groundwater Flow Direction**

Job Number | 86-14941  
 Revision | A  
 Date | 06.08.2020  
**Figure 1**



## Tables



**Table 1  
Groundwater Elevations**

Syracuse Label Co. Inc.  
110 Luther Avenue BCP Site  
BCP Site #C734118

Monitoring Well I.D.	Date	Reference Point	Reference Elevation (feet)	DTW (feet)	DOW (feet)	Water Elevation (feet)	Volume (gal)
MW-1	9/22/2011	Top of PVC	97.75	2.10	11.11	95.65	0.36
	3/29/2012			2.32	11.11	95.43	0.35
	12/20/2012			2.41	11.11	95.34	0.35
	3/28/2013			2.45	11.11	95.30	0.35
	12/18/2013			2.55	11.11	95.20	0.34
	6/18/2014			2.31	11.20	95.44	0.36
	6/24/2015			2.01	11.20	95.74	0.37
	9/28/2015			2.35	11.20	95.40	0.35
	7/6/2016			2.65	11.25	95.10	0.34
	9/22/2016			1.66	11.25	96.09	0.38
	5/31/2017			1.64	11.48	96.11	0.39
	11/29/2017			1.55	11.50	96.20	0.40
	5/31/2018			1.75	11.45	96.00	0.39
	12/18/2018			1.70	11.48	96.05	0.39
	3/8/2019			1.62	11.48	96.13	0.39
	11/25/2019			2.66	11.30	95.09	0.35
5/29/2020	2.23	11.42	95.52	0.37			
MW-7	6/23/2011	Top of PVC	97.28	2.73	15.80	94.55	2.09
	8/30/2011			2.31	15.71	94.97	2.14
	9/22/2011			3.35	15.71	93.93	1.98
	3/29/2012			3.04	15.79	94.24	2.04
	6/28/2012			2.95	15.79	94.33	2.05
	9/13/2012			4.89	15.79	92.39	1.74
	12/21/2012			2.92	15.79	94.36	2.06
	3/28/2013			3.35	16.29	93.93	2.07
	6/27/2013			2.17	15.36	95.11	2.11
	9/26/2013			7.11	15.36	90.17	1.32
	12/18/2013			8.00	15.36	89.28	1.18
	3/26/2014			2.83	15.36	94.45	2.00
	6/18/2014			7.81	15.36	89.47	1.21
	9/29/2014			5.85	16.45	91.43	1.70
	12/29/2014			4.37	16.40	92.91	1.92
	3/30/2015			1.85	16.45	95.43	2.34
	6/24/2015			2.51	16.39	94.77	2.22
	9/28/2015			7.77	16.49	89.51	1.40
	12/28/2015			2.98	16.40	94.30	2.15
	3/30/2016			2.45	16.40	94.83	2.23
	7/6/2016			4.25	16.40	93.03	1.94
	9/22/2016			3.77	16.40	93.51	2.02
	12/20/2016			3.73	16.47	93.55	2.04
	5/31/2017			2.12	16.72	95.16	2.34
	11/29/2017			2.69	16.68	94.59	2.24
	5/31/2018			2.09	16.69	95.19	2.34
12/18/2018	2.26	16.65	95.02	2.30			
3/8/2019	2.00	16.69	95.28	2.35			
11/25/2019	2.42	16.59	94.86	2.27			
5/29/2020	2.37	16.72	94.91	2.30			



**Table 1  
Groundwater Elevations**

Syracuse Label Co. Inc.  
110 Luther Avenue BCP Site  
BCP Site #C734118

Monitoring Well I.D.	Date	Reference Point	Reference Elevation (feet)	DTW (feet)	DOW (feet)	Water Elevation (feet)	Volume (gal)
MW-8	6/23/2011	Top of PVC	97.38	2.50	17.05	94.88	2.33
	8/30/2011			2.50	17.05	94.88	2.33
	9/22/2011			2.46	17.05	94.92	2.33
	3/30/2012			2.51	17.06	94.87	2.33
	6/28/2012			2.76	17.06	94.62	2.29
	9/13/2012			2.90	17.06	94.48	2.27
	12/21/2012			2.41	17.06	94.97	2.34
	3/28/2013			2.37	17.26	95.01	2.38
	6/27/2013			2.42	16.55	94.96	2.26
	9/26/2013			2.95	16.55	94.43	2.18
	12/18/2013			2.95	16.55	94.43	2.18
	3/26/2014			2.86	16.55	94.52	2.19
	6/18/2014			2.61	16.55	94.77	2.23
	9/29/2014			2.86	16.50	94.52	2.18
	12/29/2014			2.59	16.27	94.79	2.19
	3/30/2015			2.35	16.51	95.03	2.27
	6/24/2015			2.78	16.50	94.60	2.20
	9/29/2015			3.42	16.49	93.96	2.09
	12/29/2015			NM	NM	NM	NM
	3/30/2016			2.14	16.70	95.24	2.33
	7/6/2016			3.62	16.75	93.76	2.10
	9/22/2016			6.04	16.75	91.34	1.71
	12/20/2016			2.25	16.81	95.13	2.33
5/31/2017	2.34	17.00	95.04	2.35			
11/29/2017	3.25	17.02	94.13	2.20			
5/31/2018	2.20	17.00	95.18	2.37			
12/18/2018	2.26	17.00	95.12	2.36			
3/8/2019	2.11	17.04	95.27	2.39			
11/25/2019	2.39	16.95	94.99	2.33			
5/29/2020	1.88	17.08	95.50	2.43			
MW-10	9/22/2011	Top of PVC	97.34	2.60	11.82	94.74	1.48
	3/29/2012			2.64	11.82	94.70	1.47
	12/21/2012			2.63	11.82	94.71	1.47
	3/28/2013			2.49	11.82	94.85	1.49
	12/18/2013			2.62	12.95	94.72	1.65
	6/18/2014			2.42	13.11	94.92	1.71
	6/24/2015			2.28	13.25	95.06	1.76
	7/6/2016			2.85	13.55	94.49	1.71
	11/29/2017			2.44	14.00	94.90	1.85
	5/31/2018			2.28	14.00	95.06	1.88
	12/18/2018			NM	NM	NM	NM
	3/8/2019			2.13	14.21	95.21	1.93
	11/25/2019			2.31	14.09	95.03	1.88
5/29/2020	2.08	14.18	95.26	1.94			

DTW - Depth to water  
DOW - Depth of well  
NM - Not measured



**Table 1  
Groundwater Elevations**

Syracuse Label Co. Inc.  
110 Luther Avenue BCP Site  
BCP Site #C734118

Monitoring Well I.D.	Date	Reference Point	Reference Elevation (feet)	DTW (feet)	DOW (feet)	Water Elevation (feet)	Volume (gal)
<b>MW-18</b>	9/22/2011	Top of PVC	96.86	4.19	12.61	92.67	1.35
	3/29/2012			2.44	12.61	94.42	1.63
	12/20/2012			2.36	12.58	94.50	1.64
	6/19/2014			2.57	12.64	94.29	1.61
	12/29/2014			2.99	12.59	93.87	1.54
	6/24/2015			2.46	12.55	94.40	1.61
	12/30/2015			2.25	12.58	94.61	1.65
	7/7/2016			2.78	12.60	94.08	1.57
	9/22/2016			2.48	12.60	94.38	1.62
	5/31/2017			2.05	12.80	94.81	1.72
	11/29/2017			2.42	12.80	94.44	1.66
	5/31/2018			2.26	12.78	94.60	1.68
	12/18/2018			2.21	12.78	94.65	1.69
	3/8/2019			2.20	12.79	94.66	1.69
	11/25/2019			2.24	12.70	94.62	1.67
5/29/2020	2.12	12.83	94.74	1.71			
<b>MW-19</b>	9/22/2011	Top of PVC	97.14	4.26	13.11	92.88	1.42
	3/29/2012			2.52	13.11	94.62	1.69
	12/20/2012			2.35	13.10	94.79	1.72
	6/19/2014			2.61	13.11	94.53	1.68
	12/29/2014			2.17	13.09	94.97	1.75
	6/24/2015			2.39	13.05	94.75	1.71
	12/30/2015			2.25	13.10	94.89	1.74
	7/7/2016			3.02	13.05	94.12	1.60
	9/22/2016			2.65	13.05	94.49	1.66
	11/29/2017			2.56	13.28	94.58	1.72
	5/31/2018			2.55	13.28	94.59	1.72
	12/18/2018			2.35	13.27	94.79	1.75
	3/8/2019			2.47	13.28	94.67	1.73
	11/25/2019			2.53	13.23	94.61	1.71
	5/29/2020			2.23	13.31	94.91	1.77



**Table 2**  
**Summary of Sample Field Parameters**

Syracuse Label Co. Inc.  
110 Luther Avenue  
BCP Site #C734118

Well ID	Date Sampled	Dissolved Oxygen	Electrical Conductivity	pH	Redox	Temp	Turbidity
		mg/L	mS/cm	S.U.	mV	oC	NTU
MW-01	9/22/2011	12.01	4.032	8.81	-156.2	16.07	1000
	3/29/2012	2.44	2.598	7.13	-106	11.1	689.4
	12/20/2012	3.49	1.428	7.6	96.7	11.56	398.6
	6/18/2014	0.78	3.149	6.94	-127.2	17.91	1053
	6/24/2015	0.98	3.845	6.99	-144.3	19.6	603.1
	9/28/2015	0.47	3.482	7.2	-130.1	19.82	282.1
	7/6/2016	0.96	3.105	7.05	-52	21.72	458.9
	9/22/2016	0.63	2.287	6.65	-144.7	23.63	330.1
	5/31/2017	2.61	1.94	7.44	-96.3	22.1	26.4
	11/29/2017	3.91	1.278	7.06	-103.9	13.62	57.4
	5/31/2018	2.21	2.514	6.62	-45.9	21.1	70.9
	12/18/2018	2.19	2.062	7.38	-80.2	9.1	43
	3/8/2019	4.98	2.812	7	-77.6	10.1	35.4
	11/25/2019	3.68	2.506	6.99	-130.7	14.9	59.61
5/29/2020	4.78	2.688	6.93	-44.7	20.5	25.67	
MW-07	2/16/2010	1.3	1.202	6.88	-77.6	10.73	550
	2/18/2011	5.9	1.073	6.75	5.5	12.05	7.7
	3/22/2011	2.37	1.511	6.18	-190.9	11.55	995.6
	4/18/2011	-15.82	1.356	6.24	-208.7	11.99	54.3
	6/22/2011	6.09	1.438	6.52	-126.2	15.45	24.6
	8/30/2011	20.64	2.073	6.57	-165.6	14.5	9.6
	9/22/2011	14.75	1.833	6.82	-152.7	12.91	410
	3/29/2012	0.5	1.188	6.88	-124.2	13.34	9.9
	6/28/2012	1.44	2.2	6.13	-232.5	16.42	3.9
	9/13/2012	0.42	2.785	6.03	-71.9	18.39	9.6
	12/21/2012	3.69	2.314	6.72	-101.2	15.63	1190
	3/28/2013	-4.72	1.532	6.83	-133.8	13.78	271.3
	6/27/2013	0.14	3.256	5.57	-127.9	16.52	1068
	9/26/2013	4.3	4.264	6.67	-107.6	18.76	174.3
	12/18/2013	0.4	3.696	7.15	-180.4	15.68	458.4
	3/26/2014	4.18	3.297	6.9	-162.1	11.72	20.3
	6/18/2014	0.31	2.852	6.99	-141.3	15.04	1344
	9/29/2014	0.61	3.02	7.16	-131.2	18.58	289.1
	12/29/2014	0.75	2.706	6.9	-152.9	13.98	213.8
	3/30/2015	0.87	1.816	7.05	-102.8	10.78	182.7
	6/24/2015	3.23	2.97	7.08	-142.8	16.12	66.9
	9/28/2015	1.21	2.524	7.08	-136.8	17.63	155.8
	12/28/2015	0.75	2.72	6.96	-128.7	14.02	73.2
	3/30/2016	4.53	1.152	7.1	-149.6	13.91	58.7
	7/6/2016	0.49	2.564	7.03	-94.6	17.66	360.9
	9/22/2016	0.33	2.859	6.48	-109.4	18.9	243.4
	12/20/2016	1.33	3.398	7.04	-148.8	15.48	175.1
	5/31/2017	2.48	2.797	6.8	-87.7	22.14	167
	11/29/2017	4.26	2.634	6.95	-100.5	15.89	142
	5/31/2018	0.87	2.788	6.71	-89.1	18.9	52.5
	12/18/2018	2.06	2.588	6.79	-80.8	12.9	10
	3/8/2019	3.82	2.753	6.77	-100.9	9.2	12.5
11/25/2019	3.07	2.716	6.93	-169	15.2	32.51	
5/29/2020	2.45	2.582	6.88	-95.2	17.9	23.2	





**Table 2  
Summary of Sample Field Parameters**

Syracuse Label Co. Inc.  
110 Luther Avenue  
BCP Site #C734118

Well ID	Date Sampled	Dissolved Oxygen	Electrical Conductivity	pH	Redox	Temp	Turbidity
		mg/L	mS/cm	S.U.	mV	oC	NTU
MW-08	6/22/2011	0.6	1.916	6.78	-39.6	14.68	970.2
	8/30/2011	28.42	2.358	6.42	-162.3	14.59	17
	9/22/2011	19.61	2.081	7.55	-147.8	13.46	30
	3/29/2012	1.11	1.854	6.7	-132.6	13	23.6
	6/28/2012	0.75	1.902	6.21	-76.3	16.64	0.9
	9/13/2012	0.43	1.55	6.57	-39.1	18.61	14.9
	12/21/2012	4.91	1.357	6.87	-43.7	14.92	4.8
	3/28/2013	-1.63	2.847	5.83	-117.6	11.88	516.6
	6/27/2013	0.15	3.944	5.11	-87	16.24	288.7
	9/26/2013	2.96	4.126	6.2	-117.3	18.38	28.3
	12/18/2013	0.2	4.235	6.94	-155.4	13.92	119.8
	3/26/2014	3.41	6.521	6.64	-121.8	9.28	30
	6/18/2014	0.22	3.205	6.79	-131.5	14.55	112.5
	9/29/2014	0.35	2.888	6.73	-119.6	17.92	19.4
	12/29/2014	0.73	2.577	6.48	-129.2	14.22	88.6
	3/30/2015	0.86	3.18	6.89	-105.9	10.64	22
	6/24/2015	0.51	2.502	6.74	-130	14.6	40
	9/29/2015	0.18	2.585	6.74	-112.5	17.77	8.1
	3/30/2016	3.41	1.186	6.95	-130.8	13.13	22.2
	7/6/2016	0.51	2.121	6.81	-64.3	15.32	99.3
	9/22/2016	0.25	2.469	6.39	-85.8	18.24	304.7
	12/20/2016	0.93	2.841	6.86	-136.3	14.98	185.4
	5/31/2017	6.69	1.437	6.87	-99.9	21.67	96.7
11/29/2017	28.4	2.269	6.86	-93.5	16.23	37.5	
5/31/2018	0.97	2.313	6.92	-68.1	21.4	37.7	
12/18/2018	1.89	2.535	7.04	-81	12.6	0.4	
3/8/2019	11.12	0.731	8.27	11.3	5.1	28.8	
11/25/2019	2.2	2.517	7.03	-150.8	14.3	11.33	
5/29/2020	2.17	2.449	6.95	-84.6	18.6	5.69	
MW-10	9/22/2011	5.14	1.066	8.93	-90.7	14.84	430
	3/29/2012	0.38	0.857	7.09	-98.6	12.04	256.7
	12/21/2012	4.24	0.906	7.23	-10.1	14.92	401.7
	6/18/2014	0.33	2.388	6.74	-68.4	16.86	1713
	6/24/2015	0.2	2.276	6.89	-148.1	15.23	250.2
	7/6/2016	0.46	0.973	7.02	-77.4	15.54	631.1
	11/29/2017	2.81	0.993	7.39	-123.9	16.54	197.6
	3/8/2019	2.89	1.282	7.19	-107.9	8.6	27.1
	11/25/2019	2.11	1.259	7.41	-180.8	14	48.47
5/29/2020	2.64	1.3	7.26	-121.7	17.4	46.5	



**Table 2  
Summary of Sample Field Parameters**

Syracuse Label Co. Inc.  
110 Luther Avenue  
BCP Site #C734118

Well ID	Date Sampled	Dissolved Oxygen	Electrical Conductivity	pH	Redox	Temp	Turbidity
		mg/L	mS/cm	S.U.	mV	oC	NTU
MW-18	10/14/2010	6.91	0.97	7.29	105.8	16.34	1000
	9/22/2011	0.62	1.504	6.89	-234.3	19.64	0.8
	3/29/2012	0.79	2.312	7.5	-100	9.6	198.5
	12/20/2012	0.54	1.562	7.2	44.7	10.75	29.3
	6/19/2014	0.61	1.741	7.35	-69.1	15.42	26.5
	12/29/2014	0.24	1.833	7.64	-108.6	10.81	35.4
	6/24/2015	2.69	3.617	7.14	-103.4	14.25	468.5
	12/30/2015	1.01	2.876	7.42	-63.2	11.94	74.6
	7/7/2016	0.81	3.015	7.32	8.6	14.96	21.6
	9/22/2016	0.38	3.84	6.86	-74.4	22.98	0.3
	5/31/2017	2.96	1.484	7.44	-89.7	17.67	360
	11/29/2017	4.49	1.899	7.71	-76.1	13.85	538.4
	5/31/2018	1.41	1.458	7.52	-87.7	20.2	22.8
	12/18/2018	1.95	1.741	7.6	-46.8	10.8	50.6
	3/8/2019	3.91	1.588	7.42	16.3	6	39.1
11/25/2019	3.57	1.757	7.54	-143.1	13.6	37.76	
5/29/2020	3.25	1.96	7.21	-80.1	18.6	17.73	
MW-19	10/14/2010	7.46	2.068	7.04	102.6	16.97	1000
	9/22/2011	1.34	2.098	6.75	-245	19.74	3
	3/29/2012	1.66	1.121	7.68	-98.2	10.17	228.4
	12/20/2012	4.04	0.653	7.9	92.6	13.24	94.8
	6/19/2014	1.43	1.765	7.24	-73.8	14.62	69.6
	12/29/2014	0.88	1.235	7.22	-57.3	11.49	164.2
	6/24/2015	8.25	1.48	7.11	-81	13.57	218.9
	12/30/2015	2.55	1.6	7.33	-27.3	12.64	133
	7/7/2016	1.72	1.796	7.31	-25.8	14.84	208.6
	9/22/2016	1.01	1.461	6.81	-18.7	22.63	43.5
	11/29/2017	4.77	1.208	7.9	-13.5	14.29	840.5
	12/18/2018	4.18	1.508	8.17	72.2	10.1	172
	3/8/2019	5.89	2.447	7.63	49.7	5.4	349
	11/25/2019	2.26	2.309	7.52	-34.2	10.8	31.17
	5/29/2020	3.71	2.105	7.36	8.4	15.6	358.2



**Table 3**  
**Summary of Groundwater Sample Analytical Results**

		VOCs by EPA Method 8260				
		Tetrachloroethene	Trichloroethene	cis-1,2-dichloroethene	trans-1,2-dichloroethene	Vinyl chloride
		µg/L	µg/L	µg/L	µg/L	µg/L
Regulatory Standard		5	5	5	5	2
Sample ID	Date Sampled					
MW-01	2/10/2010	60	39	150	0.91J	33
	9/11/2011	72	34	110	<0.76U	12
	3/30/2012	45	19	100	<1U	29
	12/20/2012	25	21	78	<1U	25
	6/19/2014	0.92J	1.9	59	<1U	17
	6/25/2015	<1U	0.59J	130	<1U	42
	9/29/2015	1.3J	2.4	220	<2U	94
	7/7/2016	1.1J	7.2	2,500	3.4	1,100
	9/23/2016	<0.36U	1.7	410	1.3	160
	5/31/2017	<3.6U	6.4J	910	<9U	250
	11/29/2017	<3.6U	<4.6U	440	<9U	290
	5/31/2018	<3.6U	<4.6U	1,000	<9U	580
	12/18/2018	<3.6U	<4.6U	550	<9U	380
	3/8/2019	1.7J	11	560	2	200
11/25/2019	<3.6U	<4.6U	430	<9U	550	
5/29/2020	<3.6U	<4.6U	470	<9U	570	

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 4. ( ) Not analyzed for  
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 7. Bold and highlighted result indicates an exceedance of applicable Regulatory Standard



**Table 3**  
**Summary of Groundwater Sample Analytical Results**

		VOCs by EPA Method 8260				
		Tetrachloroethene	Trichloroethene	cis-1,2-dichloroethene	trans-1,2-dichloroethene	Vinyl chloride
		µg/L	µg/L	µg/L	µg/L	µg/L
Regulatory Standard		5	5	5	5	2
Sample ID	Date Sampled					
MW-07	1/1/2008	14,000	1,700	2,600	<200U	560
	2/11/2010	27,000	4,300	2,600	<150U	260J
	2/11/2011	17,000	2,600	2,600	<150U	620J
	3/11/2011	6,900	3,600	14,000	<76U	460J
	4/11/2011	370J	150J	17,000	<150U	690J
	6/11/2011	1,600	3,300	19,000	<190U	1,100J
	8/11/2011	240J	520J	24,000	<190U	8,500
	9/11/2011	240J	380	7,400	<38U	4,300
	3/29/2012	34	170J	11,000	36	4,300
	6/28/2012	<200U	140J	26,000	<200U	8,400
	9/13/2012	<400U	<400U	27,000	<400U	8,900
	12/21/2012	<400U	<400U	16,000	<400U	8,100
	3/28/2013	<400U	<400U	18,000	<400U	7,900
	6/27/2013	<80U	<80U	4,300	<80U	3,300
	9/26/2013	<80U	<80U	6,300	<80U	3,000
	12/18/2013	<40U	<40U	2,300	<40U	2,400
	3/26/2014	<20U	<20U	1,400	<20U	1,500
	6/18/2014	<20U	<20U	510	<20U	720
	9/29/2014	<4U	<4U	32	<4U	88
	12/29/2014	<1.8U	<2.3U	39	<4.5U	31
	3/30/2015	<5U	<5U	22	<5U	38
	6/25/2015	<5U	<5U	6.5	<5U	24
	9/28/2015	<5U	<5U	21	<5U	46
	12/28/2015	<5U	<5U	<5U	<5U	9.9
	3/30/2016	<5U	<5U	4.9J	<5U	18
	7/6/2016	<0.36U	<0.46U	1.6	<0.9U	6.3
	9/22/2016	<1.4U	<1.8U	<3.2U	<3.6U	<3.6U
	12/20/2016	<0.36U	<0.46U	<0.81U	<0.9U	<0.9U
	5/31/2017	<0.36U	<0.46U	<0.81U	<0.9U	<0.9U
	11/29/2017	<1.4U	<1.8U	<3.2U	<3.6U	<3.6U
5/31/2018	<1.4U	<1.8U	<3.2U	<3.6U	<3.6U	
12/18/2018	<1.4U	<1.8U	<3.2U	<3.6U	<3.6U	
3/8/2019	<0.72U	<0.92U	<1.6U	<1.8U	<1.8U	
11/25/2019	<1.4U	<1.8U	<3.2U	<3.6U	<3.6U	
5/29/2020	<1.4U	<1.8U	26	<3.6U	67	

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**Table 3**  
**Summary of Groundwater Sample Analytical Results**

		VOCs by EPA Method 8260				
		Tetrachloroethene	Trichloroethene	cis-1,2-dichloroethene	trans-1,2-dichloroethene	Vinyl chloride
		µg/L	µg/L	µg/L	µg/L	µg/L
Regulatory Standard		5	5	5	5	2
Sample ID	Date Sampled					
MW-08	1/2/2008	6,200	920	1,600	<200U	290
	2/1/2010	3,900	860	2,500	<15U	250
	6/11/2011	1,500	540	1,700	<19U	200
	8/11/2011	380J	140J	5,100	100J	4,000
	9/11/2011	1,100J	420J	7,900	83J	2,800
	3/30/2012	82	22	140	1.1	66
	6/28/2012	1,000	460	4,000	21	1,300
	9/13/2012	9,500	1,900	8,000	34	2,100
	12/21/2012	1,800	470	6,600	<100U	2,700
	3/28/2013	800	380	9,400	<200U	4,300
	6/27/2013	17J	<40U	2,100	<40U	2,000
	9/26/2013	<40U	<40U	160	<40U	67
	12/18/2013	<40U	<40U	<40U	<40U	110
	3/26/2014	<5U	<5U	330	<5U	380
	6/18/2014	<5U	<5U	110	<5U	67
	9/29/2014	<1U	<1U	0.46J	<1U	<1U
	12/29/2014	<1.8U	<2.3U	<4.1U	<4.5U	<4.5U
	3/30/2015	<40U	<40U	2,100	<40U	1,300
	6/25/2015	<40U	<40U	1,500	<40U	430
	9/29/2015	<10U	<10U	310	<10U	160
	3/30/2016	<10U	<10U	610	<10U	310
	7/6/2016	<3.6U	<4.6U	810	<9U	460
	9/22/2016	<3.6U	<4.6U	430	<9U	760
	12/20/2016	<0.72U	<0.92U	96	<1.8U	63
5/31/2017	<3.6U	<4.6U	490	<9U	310	
11/29/2017	<0.36U	<0.46U	1	<0.9U	<0.9U	
5/31/2018	<3.6U	<4.6U	620	<9U	740	
12/18/2018	<1.4U	<1.8U	120	<3.6U	110	
3/8/2019	<0.72U	<0.92U	5.5	<1.8U	12U	
11/25/2019	<0.36U	<0.46U	21	<0.9U	28	
5/29/2020	<0.36U	<0.46U	48	<0.9U	130	

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**Table 3  
Summary of Groundwater Sample Analytical Results**

		VOCs by EPA Method 8260				
		Tetrachloroethene	Trichloroethene	cis-1,2-dichloroethene	trans-1,2-dichloroethene	Vinyl chloride
		µg/L	µg/L	µg/L	µg/L	µg/L
Regulatory Standard		5	5	5	5	2
Sample ID	Date Sampled					
MW-10	9/11/2011	<0.81U	<0.62U	<b>93</b>	<0.76U	<b>13</b>
	3/30/2012	<1U	<1U	<b>56</b>	<1U	<b>13</b>
	12/20/2012	<1U	<1U	<b>90</b>	<1U	<b>13</b>
	6/19/2014	<5U	<5U	<5U	<5U	<5U
	6/25/2015	<5U	<5U	<5U	<5U	<5U
	7/7/2016	<0.36U	<0.46U	<0.81U	<0.9U	<b>0.98J</b>
	11/29/2017	<0.36U	<0.46U	<0.81U	<0.9U	<0.9U
	12/18/2018	-	-	-	-	-
	3/8/2019	<0.72U	<0.92U	<1.6U	<1.8U	<1.8U
	11/25/2019	<0.36U	<0.46U	<b>1.8</b>	<0.9U	<0.9U
5/29/2020	<0.36U	<0.46U	<b>3.6</b>	<0.9U	<b>2.7</b>	

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**Table 3**  
**Summary of Groundwater Sample Analytical Results**

		VOCs by EPA Method 8260				
		Tetrachloroethene	Trichloroethene	cis-1,2-dichloroethene	trans-1,2-dichloroethene	Vinyl chloride
		µg/L	µg/L	µg/L	µg/L	µg/L
Regulatory Standard		5	5	5	5	2
Sample ID	Date Sampled					
MW-18	10/2/2010	<0.81U	<0.62U	<0.99U	<0.76U	<b>2.7J</b>
	9/11/2011	<0.81U	<0.62U	<b>13</b>	<0.76U	<b>17</b>
	3/30/2012	<1U	<1U	<b>29</b>	<1U	<b>9.2</b>
	12/20/2012	<1U	<1U	<b>5.5</b>	<1U	<1U
	6/19/2014	<1U	<1U	<b>230</b>	<1U	<b>30</b>
	12/29/2014	<1.8U	<2.3U	<b>75</b>	<4.5U	<b>9</b>
	6/25/2015	<5U	<5U	<b>350</b>	<5U	<b>31</b>
	12/30/2015	<5U	<5U	<b>160</b>	<5U	<b>15</b>
	7/7/2016	<1.8U	<2.3U	<b>460</b>	<4.5U	<b>58</b>
	9/22/2016	<1.8U	<2.3U	<b>65</b>	<4.5U	<4.5U
	5/31/2017	<1.8U	<2.3U	<b>610</b>	<4.5U	<b>86</b>
	11/29/2017	<1.8U	<2.3U	<b>470</b>	<4.5U	<b>92</b>
	5/31/2018	<1.8U	<2.3U	<b>670</b>	<4.5U	<b>96</b>
	12/18/2018	<1.8U	<2.3U	<b>940</b>	<4.5U	<b>140</b>
	3/8/2019	<0.72U	<0.92U	<b>970</b>	<1.8U	<b>130U</b>
11/25/2019	<7.2U	<9.2U	<b>1,700</b>	<18U	<b>280</b>	
5/29/2020	<1.8U	<2.3U	<b>1,700</b>	<4.5U	<b>270</b>	

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## **Attachments**





**Attachment A**  
Laboratory Analytical Report for Groundwater Samples

## ANALYTICAL REPORT

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

Laboratory Job ID: 480-170554-1  
Client Project/Site: 110 Luther Avenue

For:  
GHD Services Inc.  
One Remington Park Drive  
Cazenovia, New York 13035

Attn: Ian McNamara



Authorized for release by:  
6/7/2020 12:22:07 PM

Denise Heckler, Project Manager II  
(330)966-9477  
[denise.heckler@testamericainc.com](mailto:denise.heckler@testamericainc.com)

### LINKS

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*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: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.

## 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)
MQL	Method Quantitation Limit
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: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

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## Job ID: 480-170554-1

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Laboratory: Eurofins TestAmerica, Buffalo

### Narrative

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#### Job Narrative 480-170554-1

#### Receipt

The samples were received on 5/30/2020 8:00 AM; the samples arrived in good condition, properly preserved, and where required, on ice. The temperature of the cooler at receipt time was 3.7°C

#### GC/MS VOA

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-1 (480-170554-1) and MW-18 (480-170554-5). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-7 (480-170554-3). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-18 (480-170554-5). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-8 (480-170554-2). Elevated reporting limits (RLs) are provided.

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

# Detection Summary

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

## Client Sample ID: MW-1

## Lab Sample ID: 480-170554-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	470		10	8.1	ug/L	10		8260C	Total/NA
Vinyl chloride	570		10	9.0	ug/L	10		8260C	Total/NA

## Client Sample ID: MW-8

## Lab Sample ID: 480-170554-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	48		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	130	E	1.0	0.90	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - DL	49		2.0	1.6	ug/L	2		8260C	Total/NA
Vinyl chloride - DL	130		2.0	1.8	ug/L	2		8260C	Total/NA

## Client Sample ID: MW-7

## Lab Sample ID: 480-170554-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	26		4.0	3.2	ug/L	4		8260C	Total/NA
Vinyl chloride	67		4.0	3.6	ug/L	4		8260C	Total/NA

## Client Sample ID: MW-10

## Lab Sample ID: 480-170554-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.6		1.0	0.81	ug/L	1		8260C	Total/NA
Vinyl chloride	2.7		1.0	0.90	ug/L	1		8260C	Total/NA

## Client Sample ID: MW-18

## Lab Sample ID: 480-170554-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1900	E	5.0	4.1	ug/L	5		8260C	Total/NA
Vinyl chloride	270		5.0	4.5	ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene - DL	1700		40	32	ug/L	40		8260C	Total/NA
Vinyl chloride - DL	220		40	36	ug/L	40		8260C	Total/NA

## Client Sample ID: TRIP BLANK

## Lab Sample ID: 480-170554-6

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

**Client Sample ID: MW-1**

**Lab Sample ID: 480-170554-1**

**Date Collected: 05/29/20 10:00**

**Matrix: Water**

**Date Received: 05/30/20 08:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>470</b>		10	8.1	ug/L			06/01/20 02:32	10
Tetrachloroethene	ND		10	3.6	ug/L			06/01/20 02:32	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			06/01/20 02:32	10
Trichloroethene	ND		10	4.6	ug/L			06/01/20 02:32	10
<b>Vinyl chloride</b>	<b>570</b>		10	9.0	ug/L			06/01/20 02:32	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		06/01/20 02:32	10
4-Bromofluorobenzene (Surr)	96		73 - 120		06/01/20 02:32	10
Toluene-d8 (Surr)	97		80 - 120		06/01/20 02:32	10
Dibromofluoromethane (Surr)	110		75 - 123		06/01/20 02:32	10

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

**Client Sample ID: MW-8**  
**Date Collected: 05/29/20 10:10**  
**Date Received: 05/30/20 08:00**

**Lab Sample ID: 480-170554-2**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>48</b>		1.0	0.81	ug/L			06/01/20 10:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/01/20 10:43	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/01/20 10:43	1
Trichloroethene	ND		1.0	0.46	ug/L			06/01/20 10:43	1
<b>Vinyl chloride</b>	<b>130</b>	<b>E</b>	1.0	0.90	ug/L			06/01/20 10:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	104		77 - 120		06/01/20 10:43	1
<i>4-Bromofluorobenzene (Surr)</i>	90		73 - 120		06/01/20 10:43	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120		06/01/20 10:43	1
<i>Dibromofluoromethane (Surr)</i>	98		75 - 123		06/01/20 10:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>49</b>		2.0	1.6	ug/L			06/01/20 23:22	2
Tetrachloroethene	ND		2.0	0.72	ug/L			06/01/20 23:22	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			06/01/20 23:22	2
Trichloroethene	ND		2.0	0.92	ug/L			06/01/20 23:22	2
<b>Vinyl chloride</b>	<b>130</b>		2.0	1.8	ug/L			06/01/20 23:22	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	99		77 - 120		06/01/20 23:22	2
<i>4-Bromofluorobenzene (Surr)</i>	93		73 - 120		06/01/20 23:22	2
<i>Toluene-d8 (Surr)</i>	102		80 - 120		06/01/20 23:22	2
<i>Dibromofluoromethane (Surr)</i>	96		75 - 123		06/01/20 23:22	2



# Client Sample Results

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

**Client Sample ID: MW-7**  
**Date Collected: 05/29/20 10:25**  
**Date Received: 05/30/20 08:00**

**Lab Sample ID: 480-170554-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>26</b>		4.0	3.2	ug/L			06/01/20 03:19	4
Tetrachloroethene	ND		4.0	1.4	ug/L			06/01/20 03:19	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			06/01/20 03:19	4
Trichloroethene	ND		4.0	1.8	ug/L			06/01/20 03:19	4
<b>Vinyl chloride</b>	<b>67</b>		4.0	3.6	ug/L			06/01/20 03:19	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	104		77 - 120		06/01/20 03:19	4
<i>4-Bromofluorobenzene (Surr)</i>	97		73 - 120		06/01/20 03:19	4
<i>Toluene-d8 (Surr)</i>	99		80 - 120		06/01/20 03:19	4
<i>Dibromofluoromethane (Surr)</i>	108		75 - 123		06/01/20 03:19	4

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

**Client Sample ID: MW-10**  
**Date Collected: 05/29/20 10:45**  
**Date Received: 05/30/20 08:00**

**Lab Sample ID: 480-170554-4**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>3.6</b>		1.0	0.81	ug/L			06/01/20 22:57	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/01/20 22:57	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/01/20 22:57	1
Trichloroethene	ND		1.0	0.46	ug/L			06/01/20 22:57	1
<b>Vinyl chloride</b>	<b>2.7</b>		1.0	0.90	ug/L			06/01/20 22:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		06/01/20 22:57	1
4-Bromofluorobenzene (Surr)	95		73 - 120		06/01/20 22:57	1
Toluene-d8 (Surr)	100		80 - 120		06/01/20 22:57	1
Dibromofluoromethane (Surr)	97		75 - 123		06/01/20 22:57	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

**Client Sample ID: MW-18**  
**Date Collected: 05/29/20 11:10**  
**Date Received: 05/30/20 08:00**

**Lab Sample ID: 480-170554-5**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>1900</b>	<b>E</b>	5.0	4.1	ug/L			06/01/20 04:05	5
Tetrachloroethene	ND		5.0	1.8	ug/L			06/01/20 04:05	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			06/01/20 04:05	5
Trichloroethene	ND		5.0	2.3	ug/L			06/01/20 04:05	5
<b>Vinyl chloride</b>	<b>270</b>		5.0	4.5	ug/L			06/01/20 04:05	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	100		77 - 120		06/01/20 04:05	5
<i>4-Bromofluorobenzene (Surr)</i>	97		73 - 120		06/01/20 04:05	5
<i>Toluene-d8 (Surr)</i>	98		80 - 120		06/01/20 04:05	5
<i>Dibromofluoromethane (Surr)</i>	100		75 - 123		06/01/20 04:05	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>1700</b>		40	32	ug/L			06/01/20 11:32	40
Tetrachloroethene	ND		40	14	ug/L			06/01/20 11:32	40
trans-1,2-Dichloroethene	ND		40	36	ug/L			06/01/20 11:32	40
Trichloroethene	ND		40	18	ug/L			06/01/20 11:32	40
<b>Vinyl chloride</b>	<b>220</b>		40	36	ug/L			06/01/20 11:32	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	102		77 - 120		06/01/20 11:32	40
<i>4-Bromofluorobenzene (Surr)</i>	93		73 - 120		06/01/20 11:32	40
<i>Toluene-d8 (Surr)</i>	101		80 - 120		06/01/20 11:32	40
<i>Dibromofluoromethane (Surr)</i>	98		75 - 123		06/01/20 11:32	40

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 480-170554-6**

**Date Collected: 05/29/20 00:00**

**Matrix: Water**

**Date Received: 05/30/20 08:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/01/20 04:28	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/01/20 04:28	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/01/20 04:28	1
Trichloroethene	ND		1.0	0.46	ug/L			06/01/20 04:28	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/01/20 04:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		06/01/20 04:28	1
4-Bromofluorobenzene (Surr)	98		73 - 120		06/01/20 04:28	1
Toluene-d8 (Surr)	101		80 - 120		06/01/20 04:28	1
Dibromofluoromethane (Surr)	108		75 - 123		06/01/20 04:28	1



# Surrogate Summary

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

## 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	BFB	TOL	DBFM
		(77-120)	(73-120)	(80-120)	(75-123)
480-170554-1	MW-1	107	96	97	110
480-170554-2	MW-8	104	90	99	98
480-170554-2 - DL	MW-8	99	93	102	96
480-170554-3	MW-7	104	97	99	108
480-170554-4	MW-10	102	95	100	97
480-170554-5	MW-18	100	97	98	100
480-170554-5 - DL	MW-18	102	93	101	98
480-170554-6	TRIP BLANK	108	98	101	108
LCS 480-534128/6	Lab Control Sample	102	100	99	105
LCS 480-534158/5	Lab Control Sample	101	89	98	98
LCS 480-534295/4	Lab Control Sample	96	100	105	97
MB 480-534128/8	Method Blank	102	101	98	108
MB 480-534158/7	Method Blank	105	101	105	98
MB 480-534295/6	Method Blank	100	99	103	97

#### Surrogate Legend

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

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

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

**Lab Sample ID: MB 480-534128/8**  
**Matrix: Water**  
**Analysis Batch: 534128**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/31/20 21:32	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/31/20 21:32	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/31/20 21:32	1
Trichloroethene	ND		1.0	0.46	ug/L			05/31/20 21:32	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/31/20 21:32	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		05/31/20 21:32	1
4-Bromofluorobenzene (Surr)	101		73 - 120		05/31/20 21:32	1
Toluene-d8 (Surr)	98		80 - 120		05/31/20 21:32	1
Dibromofluoromethane (Surr)	108		75 - 123		05/31/20 21:32	1

**Lab Sample ID: LCS 480-534128/6**  
**Matrix: Water**  
**Analysis Batch: 534128**

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
cis-1,2-Dichloroethene	25.0	26.6		ug/L		106	74 - 124
Tetrachloroethene	25.0	24.3		ug/L		97	74 - 122
trans-1,2-Dichloroethene	25.0	26.7		ug/L		107	73 - 127
Trichloroethene	25.0	25.3		ug/L		101	74 - 123
Vinyl chloride	25.0	28.2		ug/L		113	65 - 133

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	100		73 - 120
Toluene-d8 (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	105		75 - 123

**Lab Sample ID: MB 480-534158/7**  
**Matrix: Water**  
**Analysis Batch: 534158**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/01/20 10:10	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/01/20 10:10	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/01/20 10:10	1
Trichloroethene	ND		1.0	0.46	ug/L			06/01/20 10:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/01/20 10:10	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		06/01/20 10:10	1
4-Bromofluorobenzene (Surr)	101		73 - 120		06/01/20 10:10	1
Toluene-d8 (Surr)	105		80 - 120		06/01/20 10:10	1
Dibromofluoromethane (Surr)	98		75 - 123		06/01/20 10:10	1

Eurofins TestAmerica, Buffalo

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

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

**Lab Sample ID: LCS 480-534158/5**  
**Matrix: Water**  
**Analysis Batch: 534158**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	25.0	25.8		ug/L		103	74 - 124
Tetrachloroethene	25.0	26.3		ug/L		105	74 - 122
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	73 - 127
Trichloroethene	25.0	25.9		ug/L		104	74 - 123
Vinyl chloride	25.0	25.6		ug/L		102	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		77 - 120
4-Bromofluorobenzene (Surr)	89		73 - 120
Toluene-d8 (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	98		75 - 123

**Lab Sample ID: MB 480-534295/6**  
**Matrix: Water**  
**Analysis Batch: 534295**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/01/20 22:12	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/01/20 22:12	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/01/20 22:12	1
Trichloroethene	ND		1.0	0.46	ug/L			06/01/20 22:12	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/01/20 22:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		06/01/20 22:12	1
4-Bromofluorobenzene (Surr)	99		73 - 120		06/01/20 22:12	1
Toluene-d8 (Surr)	103		80 - 120		06/01/20 22:12	1
Dibromofluoromethane (Surr)	97		75 - 123		06/01/20 22:12	1

**Lab Sample ID: LCS 480-534295/4**  
**Matrix: Water**  
**Analysis Batch: 534295**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	25.0	23.0		ug/L		92	74 - 124
Tetrachloroethene	25.0	25.2		ug/L		101	74 - 122
trans-1,2-Dichloroethene	25.0	22.0		ug/L		88	73 - 127
Trichloroethene	25.0	24.0		ug/L		96	74 - 123
Vinyl chloride	25.0	22.8		ug/L		91	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		77 - 120
4-Bromofluorobenzene (Surr)	100		73 - 120
Toluene-d8 (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	97		75 - 123

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

## GC/MS VOA

### Analysis Batch: 534128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-170554-1	MW-1	Total/NA	Water	8260C	
480-170554-3	MW-7	Total/NA	Water	8260C	
480-170554-5	MW-18	Total/NA	Water	8260C	
480-170554-6	TRIP BLANK	Total/NA	Water	8260C	
MB 480-534128/8	Method Blank	Total/NA	Water	8260C	
LCS 480-534128/6	Lab Control Sample	Total/NA	Water	8260C	

### Analysis Batch: 534158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-170554-2	MW-8	Total/NA	Water	8260C	
480-170554-5 - DL	MW-18	Total/NA	Water	8260C	
MB 480-534158/7	Method Blank	Total/NA	Water	8260C	
LCS 480-534158/5	Lab Control Sample	Total/NA	Water	8260C	

### Analysis Batch: 534295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-170554-2 - DL	MW-8	Total/NA	Water	8260C	
480-170554-4	MW-10	Total/NA	Water	8260C	
MB 480-534295/6	Method Blank	Total/NA	Water	8260C	
LCS 480-534295/4	Lab Control Sample	Total/NA	Water	8260C	



# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

**Client Sample ID: MW-1**  
**Date Collected: 05/29/20 10:00**  
**Date Received: 05/30/20 08:00**

**Lab Sample ID: 480-170554-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	534128	06/01/20 02:32	AMM	TAL BUF

**Client Sample ID: MW-8**  
**Date Collected: 05/29/20 10:10**  
**Date Received: 05/30/20 08:00**

**Lab Sample ID: 480-170554-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	534158	06/01/20 10:43	CDC	TAL BUF
Total/NA	Analysis	8260C	DL	2	534295	06/01/20 23:22	CRL	TAL BUF

**Client Sample ID: MW-7**  
**Date Collected: 05/29/20 10:25**  
**Date Received: 05/30/20 08:00**

**Lab Sample ID: 480-170554-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	534128	06/01/20 03:19	AMM	TAL BUF

**Client Sample ID: MW-10**  
**Date Collected: 05/29/20 10:45**  
**Date Received: 05/30/20 08:00**

**Lab Sample ID: 480-170554-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	534295	06/01/20 22:57	CRL	TAL BUF

**Client Sample ID: MW-18**  
**Date Collected: 05/29/20 11:10**  
**Date Received: 05/30/20 08:00**

**Lab Sample ID: 480-170554-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	534128	06/01/20 04:05	AMM	TAL BUF
Total/NA	Analysis	8260C	DL	40	534158	06/01/20 11:32	CDC	TAL BUF

**Client Sample ID: TRIP BLANK**  
**Date Collected: 05/29/20 00:00**  
**Date Received: 05/30/20 08:00**

**Lab Sample ID: 480-170554-6**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	534128	06/01/20 04:28	AMM	TAL BUF

**Laboratory References:**

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

# Accreditation/Certification Summary

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

## Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-02-21

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Method Summary

Client: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

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: GHD Services Inc.  
Project/Site: 110 Luther Avenue

Job ID: 480-170554-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-170554-1	MW-1	Water	05/29/20 10:00	05/30/20 08:00	
480-170554-2	MW-8	Water	05/29/20 10:10	05/30/20 08:00	
480-170554-3	MW-7	Water	05/29/20 10:25	05/30/20 08:00	
480-170554-4	MW-10	Water	05/29/20 10:45	05/30/20 08:00	
480-170554-5	MW-18	Water	05/29/20 11:10	05/30/20 08:00	
480-170554-6	TRIP BLANK	Water	05/29/20 00:00	05/30/20 08:00	

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**Eurofins TestAmerica, Buffalo**  
 10 Hazelwood Drive  
 Amherst, NY 14228-2298  
 Phone: 716-691-2800 Fax: 716-691-7991

**Chain of Custody Record**

eurofins Environment Testing America

**Syracuse**  
 (Client Trading Name)

Sampler: **IAN** Lab PM: **Heckler, Denise D**  
 Client Contact: **IAN McNAMARA** E-Mail: **denise.heckler@testamericainc.com**  
 Phone: **315-368-8332**

Company: **GHD Services Inc.**  
 Address: **One Remington Park Drive**  
 City: **Cazenovia**  
 State, Zip: **NY, 13035**  
 Phone: **315-422-1037(Tel)**  
 Email: **linda.waters@ghd.com**  
 Project Name: **110 Luther Avenue**  
 Site: **8614941-2018-02**

Due Date Requested:  
 TAT Requested (days): **STANDARD**  
 PO #: **Purchase Order not required**  
 WO #: **48005783**  
 Project #: **48005783**  
 SSOW#: **8614941-2018-02**

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Preservation Code:	Matrix (W=water, S=solid, O=oil/solvent, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - PCE, TCE, TCE, cis-DCE, trans-DCE, & VC only	Total Number of Containers	Special Instructions/Note:
MW-1	5-29-20	1000	G		Water	X	X		3	
MW-8	5-29-20	1010	G		Water	X	X		3	
MW-7	5-29-20	1025	G		Water	X	X		3	
MW-10	5-29-20	1045	G		Water	X	X		3	
MW-18	5-29-20	1110	G		Water	X	X		3	
TRIP BLANK	5-29-20	0000	G		Water	X	X		2	
					Water					
					Water					

Possible Hazard Identification  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Radiological

Deliverable Requested: I, II, III, IV, Other (specify) **IV**

Empty Kit Relinquished by:  
 Relinquished by: **IAN** Date: **5-29-20 1230** Company: **GMU**  
 Relinquished by: **REIGH/114** Date/Time: **5-29-20, 19:00** Company: **GMU**

Received by: **DAVID PAX** Date/Time: **5/29/20 17:55:10** Company: **Company**  
 Received by: **DBB** Date/Time: **5/29/20 0800** Company: **Company**

Cooler Temperature(s) °C and Other Remarks: **3.7 #1**

Special Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months  
 Special Instructions/OC Requirements: **EMERGE IN STAINING LABS CAT 8 AND 10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60**



# Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 480-170554-1

**Login Number: 170554**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Sabuda, Brendan 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	3.7 #1 ICE
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	GHD
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	



**Attachment B**  
Groundwater Field Sampling Logs



### Groundwater Field Sampling Log

Site Name: 110 Luther Avenue

Date: 5/29/2020

Project #: 86-14941

Sampler(s): IEM

Sample ID: MW-1

Sample Time: 10:00

#### Well Information:

Depth of Well (Top of PVC): 11.42 ft.  
Initial Static Water Level (Top of PVC): 2.23 ft.  
Depth to LNAPL/DNAPL (Top of PVC): \_\_\_\_\_  
LNAPL/DNAPL Thickness (inches): \_\_\_\_\_

#### Well Volume Calculation:

1 in. Casing: 9.19 ft. of water x .04 = 0.37 gallons  
2 in. Casing: \_\_\_\_\_ ft. of water x .16 = \_\_\_\_\_ gallons  
3 in. Casing: \_\_\_\_\_ ft. of water x .36 = \_\_\_\_\_ gallons  
4 in. Casing: \_\_\_\_\_ ft. of water x .64 = \_\_\_\_\_ gallons

#### Evacuation Method:

Submersible: \_\_\_\_\_ Centrifugal: \_\_\_\_\_  
Airlift: \_\_\_\_\_ Pos. Displ.: \_\_\_\_\_  
Bailer: X Ded. Pump: \_\_\_\_\_

#### Field Tests:

Temperature: 20.50 °C pH: 6.93 units  
Salinity: \_\_\_\_\_ % ORP: -44.7 mV  
Spec. Cond.: 2.688 uS/cm Turbidity: 25.7 NTU  
Diss. Oxygen: 4.78 mg/L

Volume of Water Removed: 0.5 gallons  
> 3 Volumes: 

yes	no
yes	no

  
Dry: 

yes	no
-----	----

#### Sampling Method:

Stainless Bailer: \_\_\_\_\_  
Teflon Bailer: \_\_\_\_\_  
Pos. Disp. Pump: \_\_\_\_\_  
Dis. Bailer: X  
Ded. Pump: \_\_\_\_\_  
Other: \_\_\_\_\_

#### Analysis:

Chlorinated VOCs - 8260  
\_\_\_\_\_  
\_\_\_\_\_

#### Observations:

Weather: 75 - 90° F, Mostly Sunny, Humid, Occassional Heavy Rain in Afternoon  
Physical Appearance and Odor of Sample: Water slight black tint, no odor, no sheen, no sediment

Additional Comments: Field parameters collected using a YSI ProDSS after sample collection  
Well was allowed to recover following purging and prior to sampling





### Groundwater Field Sampling Log

Site Name: 110 Luther Avenue

Date: 5/29/2020

Project #: 86-14941

Sampler(s): IEM

Sample ID: MW-7

Sample Time: 10:25

#### Well Information:

Depth of Well (Top of PVC): 16.72 ft.  
Initial Static Water Level (Top of PVC): 2.37 ft.  
Depth to LNAPL/DNAPL (Top of PVC): \_\_\_\_\_  
LNAPL/DNAPL Thickness (inches): \_\_\_\_\_

#### Well Volume Calculation:

1 in. Casing: \_\_\_\_\_ ft. of water x .04 = \_\_\_\_\_ gallons  
2 in. Casing: 14.35 ft. of water x .16 = 2.30 gallons  
3 in. Casing: \_\_\_\_\_ ft. of water x .36 = \_\_\_\_\_ gallons  
4 in. Casing: \_\_\_\_\_ ft. of water x .64 = \_\_\_\_\_ gallons

#### Evacuation Method:

Submersible: \_\_\_\_\_ Centrifugal: \_\_\_\_\_  
Airlift: \_\_\_\_\_ Pos. Displ.: \_\_\_\_\_  
Bailer: X Ded. Pump: \_\_\_\_\_

#### Field Tests:

Temperature: 17.9 °C pH: 6.88 units  
Salinity: \_\_\_\_\_ % ORP: -95.2 mV  
Spec. Cond.: 2.582 uS/cm Turbidity: 23.2 NTU  
Diss. Oxygen: 2.45 mg/L

Volume of Water Removed: 3 gallons  
> 3 Volumes: 

yes	no
-----	----

  
Dry: 

yes	no
-----	----

#### Sampling Method:

Stainless Bailer: \_\_\_\_\_  
Teflon Bailer: \_\_\_\_\_  
Pos. Disp. Pump: \_\_\_\_\_  
Dis. Bailer: X  
Ded. Pump: \_\_\_\_\_  
Other: \_\_\_\_\_

#### Analysis:

Chlorinated VOCs - 8260

#### Observations:

Weather: 75 - 90° F, Mostly Sunny, Humid, Occassional Heavy Rain in Afternoon  
Physical Appearance and Odor of Sample: Water clear, slight sewer-like odor, no sheen, no sediment

Additional Comments: Field parameters collected using a YSI ProDSS after sample collection  
Well was allowed to recover following purging and prior to sampling



### Groundwater Field Sampling Log

Site Name: 110 Luther Avenue

Date: 5/29/2020

Project #: 86-14941

Sampler(s): IEM

Sample ID: MW-8

Sample Time: 10:10

#### Well Information:

Depth of Well (Top of PVC): 17.08 ft.  
Initial Static Water Level (Top of PVC): 1.88 ft.  
Depth to LNAPL/DNAPL (Top of PVC): \_\_\_\_\_  
LNAPL/DNAPL Thickness (inches): \_\_\_\_\_

#### Well Volume Calculation:

1 in. Casing: \_\_\_\_\_ ft. of water x .04 = \_\_\_\_\_ gallons  
2 in. Casing: 15.20 ft. of water x .16 = 2.43 gallons  
3 in. Casing: \_\_\_\_\_ ft. of water x .36 = \_\_\_\_\_ gallons  
4 in. Casing: \_\_\_\_\_ ft. of water x .64 = \_\_\_\_\_ gallons

#### Evacuation Method:

Submersible: \_\_\_\_\_ Centrifugal: \_\_\_\_\_  
Airlift: \_\_\_\_\_ Pos. Displ.: \_\_\_\_\_  
Bailer: X Ded. Pump: \_\_\_\_\_

#### Field Tests:

Temperature: 18.6 °C  
Salinity: \_\_\_\_\_ %  
Spec. Cond.: 2.449 uS/cm  
Diss. Oxygen: 2.17 mg/L

#### Units:

pH: 6.95 units  
ORP: -84.6 mV  
Turbidity: 5.69 NTU

Volume of Water Removed: 6.5 gallons  
> 3 Volumes: 

yes	no
-----	----

  
Dry: 

yes	no
-----	----

#### Sampling Method:

Stainless Bailer: \_\_\_\_\_  
Teflon Bailer: \_\_\_\_\_  
Pos. Disp. Pump: \_\_\_\_\_  
Dis. Bailer: X  
Ded. Pump: \_\_\_\_\_  
Other: \_\_\_\_\_

#### Analysis:

Chlorinated VOCs - 8260  
\_\_\_\_\_  
\_\_\_\_\_

#### Observations:

Weather: 75 - 90° F, Mostly Sunny, Humid, Occassional Heavy Rain in Afternoon  
Physical Appearance and Odor of Sample: Water clear, slight odor, no sheen, no sediment

Additional Comments: Field parameters collected using a YSI ProDSS after sample collection  
Well was allowed to recover following purging and prior to sampling



### Groundwater Field Sampling Log

Site Name: 110 Luther Avenue

Date: 5/29/2020

Project #: 86-14941

Sampler(s): IEM

Sample ID: MW-10

Sample Time: 10:45

#### Well Information:

Depth of Well (Top of PVC): 14.18 ft.  
Initial Static Water Level (Top of PVC): 2.08 ft.  
Depth to LNAPL/DNAPL (Top of PVC): \_\_\_\_\_  
LNAPL/DNAPL Thickness (inches): \_\_\_\_\_

#### Well Volume Calculation:

1 in. Casing: \_\_\_\_\_ ft. of water x .04 = \_\_\_\_\_ gallons  
2 in. Casing: 12.10 ft. of water x .16 = 1.94 gallons  
3 in. Casing: \_\_\_\_\_ ft. of water x .36 = \_\_\_\_\_ gallons  
4 in. Casing: \_\_\_\_\_ ft. of water x .64 = \_\_\_\_\_ gallons

#### Evacuation Method:

Submersible: \_\_\_\_\_ Centrifugal: \_\_\_\_\_  
Airlift: \_\_\_\_\_ Pos. Displ.: \_\_\_\_\_  
Bailer: X Ded. Pump: \_\_\_\_\_

#### Field Tests:

	Units:		Units:
Temperature:	<u>17.40</u>	°C	pH: <u>7.26</u>
Salinity:	_____	%	ORP: <u>-121.7</u>
Spec. Cond.:	<u>1.300</u>	uS/cm	Turbidity: <u>46.5</u>
Diss. Oxygen:	<u>2.64</u>	mg/L	NTU

Volume of Water Removed: 3.5 gallons  
> 3 Volumes: 

yes	no
-----	----

  
Dry: 

yes	no
-----	----

#### Sampling Method:

Stainless Bailer: \_\_\_\_\_  
Teflon Bailer: \_\_\_\_\_  
Pos. Disp. Pump: \_\_\_\_\_  
Dis. Bailer: X  
Ded. Pump: \_\_\_\_\_  
Other: \_\_\_\_\_

#### Analysis:

Chlorinated VOCs - 8260  
\_\_\_\_\_  
\_\_\_\_\_

#### Observations:

Weather: 75 - 90° F, Mostly Sunny, Humid, Occassional Heavy Rain in Afternoon  
Physical Appearance and Odor of Sample: Water slightly turbid rusty brown, no odor, no sheen

Additional Comments: Field parameters collected using a YSI ProDSS after sample collection  
Well was allowed to recover following purging and prior to sampling



### Groundwater Field Sampling Log

Site Name: 110 Luther Avenue

Date: 5/29/2020

Project #: 86-14941

Sampler(s): IEM

Sample ID: MW-18

Sample Time: 11:10

#### Well Information:

Depth of Well (Top of PVC): 12.83 ft.  
Initial Static Water Level (Top of PVC): 2.12 ft.  
Depth to LNAPL/DNAPL (Top of PVC): \_\_\_\_\_  
LNAPL/DNAPL Thickness (inches): \_\_\_\_\_

#### Well Volume Calculation:

1 in. Casing: \_\_\_\_\_ ft. of water x .04 = \_\_\_\_\_ gallons  
2 in. Casing: 10.71 ft. of water x .16 = 1.71 gallons  
3 in. Casing: \_\_\_\_\_ ft. of water x .36 = \_\_\_\_\_ gallons  
4 in. Casing: \_\_\_\_\_ ft. of water x .64 = \_\_\_\_\_ gallons

#### Evacuation Method:

Submersible: \_\_\_\_\_ Centrifugal: \_\_\_\_\_  
Airlift: \_\_\_\_\_ Pos. Displ.: \_\_\_\_\_  
Bailer: X Ded. Pump: \_\_\_\_\_

#### Field Tests:

Temperature: 18.6 °C pH: 7.21 units  
Salinity: \_\_\_\_\_ % ORP: -80.1 mV  
Spec. Cond.: 1.960 uS/cm Turbidity: 17.73 NTU  
Diss. Oxygen: 3.25 mg/L

Volume of Water Removed: 3.25 gallons  
> 3 Volumes: 

yes	no
-----	----

  
Dry: 

yes	no
-----	----

#### Sampling Method:

Stainless Bailer: \_\_\_\_\_  
Teflon Bailer: \_\_\_\_\_  
Pos. Disp. Pump: \_\_\_\_\_  
Dis. Bailer: X  
Ded. Pump: \_\_\_\_\_  
Other: \_\_\_\_\_

#### Analysis:

Chlorinated VOCs - 8260

#### Observations:

Weather: 75 - 90° F, Mostly Sunny, Humid, Occassional Heavy Rain in Afternoon  
Physical Appearance and Odor of Sample: Water clear, no odor, no sheen

Additional Comments: Field parameters collected using a YSI ProDSS after sample collection  
Well was allowed to recover following purging and prior to sampling



### Groundwater Field Sampling Log

Site Name: 110 Luther Avenue

Date: 5/29/2020

Project #: 86-14941

Sampler(s): IEM

Sample ID: MW-19

Sample Time: 9:36

#### Well Information:

Depth of Well (Top of PVC): 13.31 ft.  
Initial Static Water Level (Top of PVC): 2.23 ft.  
Depth to LNAPL/DNAPL (Top of PVC): \_\_\_\_\_  
LNAPL/DNAPL Thickness (inches): \_\_\_\_\_

#### Well Volume Calculation:

1 in. Casing: \_\_\_\_\_ ft. of water x .04 = \_\_\_\_\_ gallons  
2 in. Casing: 11.08 ft. of water x .16 = 1.77 gallons  
3 in. Casing: \_\_\_\_\_ ft. of water x .36 = \_\_\_\_\_ gallons  
4 in. Casing: \_\_\_\_\_ ft. of water x .64 = \_\_\_\_\_ gallons

#### Evacuation Method:

Submersible: \_\_\_\_\_ Centrifugal: \_\_\_\_\_  
Airlift: \_\_\_\_\_ Pos. Displ.: \_\_\_\_\_  
Bailer: X Ded. Pump: \_\_\_\_\_

Volume of Water Removed: \_\_\_\_\_ gallons  
> 3 Volumes:   yes   no  
Dry:            yes   no

#### Field Tests:

Temperature: 15.6 °C  
Salinity: \_\_\_\_\_ %  
Spec. Cond.: 2.105 uS/cm  
Diss. Oxygen: 3.71 mg/L

#### Units:

pH: 7.36 units  
ORP: 8.4 mV  
Turbidity: 358.2 NTU

#### Sampling Method:

Stainless Bailer: \_\_\_\_\_  
Teflon Bailer: \_\_\_\_\_  
Pos. Disp. Pump: \_\_\_\_\_  
Dis. Bailer: \_\_\_\_\_  
Ded. Pump: \_\_\_\_\_  
Other: \_\_\_\_\_

#### Analysis:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

#### Observations:

Weather: 75 - 90° F, Mostly Sunny, Humid, Occassional Heavy Rain in Afternoon

Physical Appearance and Odor of Sample: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Additional Comments: Field parameters collected using a YSI ProDSS  
No purging or sampling of the well occurred, just grab of field parameters from water in well casing  
\_\_\_\_\_



**Attachment C**  
Field Equipment Calibration Sheets



# INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

405 Cambridge Ave  
Syracuse, NY 13208

Toll-free: (877) 903-PINE (7463)

## Pine Environmental Services, Inc.

Instrument ID 44728  
Description YSI Pro DSS  
Calibrated 5/28/2020 9:18:29AM

Manufacturer YSI State Certified  
Model Number Pro DSS Status Pass  
Serial Number/ Lot 17L101933 Number Temp °C 23  
Location New York Humidity % 49  
Department

### Calibration Specifications

Group # 1				Range Acc %	0.0000		
Group Name PH				Reading Acc %	3.0000		
Stated Accy Pct of Reading				Plus/Minus	0.00		
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
7.00 / 7.00	PH	7.00	PH	7.00	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	4.00	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.00	10.00	0.00%	Pass
Group # 2				Range Acc %	0.0000		
Group Name Turbidity				Reading Acc %	3.0000		
Stated Accy Pct of Reading				Plus/Minus	0.00		
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
0.00 / 0.00	NTU	0.00	NTU	0.00	0.00	0.00%	Pass
124.00 / 124.00	NTU	124.00	NTU	124.00	124.00	0.00%	Pass
Group # 3				Range Acc %	0.0000		
Group Name Conductivity				Reading Acc %	3.0000		
Stated Accy Pct of Reading				Plus/Minus	0.000		
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
1.413 / 1.413	ms/cm	1.413	ms/cm	1.413	1.413	0.00%	Pass
Group # 4				Range Acc %	0.0000		
Group Name Redox (ORP)				Reading Acc %	3.0000		
Stated Accy Pct of Reading				Plus/Minus	0.00		
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
240.00 / 240.00	mv	240.00	mv	240.00	240.00	0.00%	Pass
Group # 5				Range Acc %	0.0000		
Group Name Dissolved Oxygen Span				Reading Acc %	3.0000		
Stated Accy Pct of Reading				Plus/Minus	0.00		
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>

# INSTRUMENT CALIBRATION REPORT



**Pine Environmental Services LLC**

405 Cambridge Ave  
Syracuse, NY 13208  
Toll-free: (877) 903-PINE (7463)

## Pine Environmental Services, Inc.

**Instrument ID** 44728  
**Description** YSI Pro DSS  
**Calibrated** 5/28/2020 9:18:29AM

<b>Group #</b> 5				<b>Range Acc %</b> 0.0000			
<b>Group Name</b> Dissolved Oxygen Span				<b>Reading Acc %</b> 3.0000			
<b>Stated Accy</b> Pct of Reading				<b>Plus/Minus</b> 0.00			
<b>Nom In Val / In Val</b>	<b>In Type</b>	<b>Out Val</b>	<b>Out Type</b>	<b>Fnd As</b>	<b>Lft As</b>	<b>Dev%</b>	<b>Pass/Fail</b>
100.00 / 100.00	%	100.00	%	100.00	100.00	0.00%	Pass

<u>Test Instruments Used During the Calibration</u>					<u>(As Of Cal Entry Date)</u>	
<u>Test Standard ID</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Model Number</u>	<u>Serial Number / Lot Number</u>	<u>Last Cal Date / Opened Date</u>	<u>Next Cal Date / Expiration Date</u>
NYS COND 1.413 - 9GL816	NYS COND 1.413	Pine	31986	9GL816		12/31/2020
NYS ORP 240 - 0GB510	NYS ORP 240	Pine	Pine	0GB510		11/30/2020
NYS PH 10 - 9GL648	NYS PH 10	Pine Environmental Services, Inc.	32034	9GL648		12/31/2021
NYS PH 4 - 9GL804	NYS PH 4	Pine Environmental Services, Inc.	32017	9GL804		12/31/2021
NYS PH 7 - 9GL809	NYS PH 7	Pine Environmental Services, Inc.	32025	9GL809		12/31/2020
NYS TURB 0 NTU - 19440208	0 NTU TURBIDITY STANDARD	GFS	32101	19440208		1/31/2021
NYS TURB 124 NTU - 19E19150131	124 NTU TURBIDITY STANDARD	YSI	31963	19E191501131		5/31/2020

Notes about this calibration

**Calibration Result** Calibration Successful  
**Who Calibrated** Joe Filippi